PLANNING BOARD
PORTSMOUTH, NEW HAMPSHIRE

EILEEN DONDERO FOLEY COUNCIL CHAMBERS
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE

7:00 Public Hearings begin **May 21, 2026**

AGENDA

REGULAR MEETING 7:00pm

I. APPROVAL OF MINUTES

A. Approval of the April 16, 2026 meeting minutes.

II. DETERMINATIONS OF COMPLETENESS

SUBDIVISION REVIEW

A. The request of **Jeannette McDonald (Owner) Flipping Bergers, LLC (Applicant)**, for property located at **86 Farm Lane** requesting Preliminary and Final Subdivision approval.

SITE PLAN REVIEW

A. REQUEST TO POSPONE TO JUNE The request of Brora LLC (Owner), for property located at **150 Portsmouth Boulevard** requesting Site Plan Review approval. **REQUEST TO POSPONE TO JUNE**

B. The request of **Jeannette McDonald (Owner) Flipping Bergers, LLC (Applicant)**, for property located at **86 Farm Lane** requesting Site Plan Review approval.

C. The request of **304 Maplewood LLC (Owner)**, for property located at **304 Maplewood Avenue** requesting amended Site Plan Review approval.

D. The request of **Regan Electric CO INC (Owner)**, and **Chinburg Development (Applicant)**, for property located at **94 Langdon Street** and **98 Cornwall Street** requesting Site Plan Review approval.

III. PUBLIC HEARINGS -- OLD BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

A. The request of **Double MC LLC (Owner)**, for property located at **134 Pleasant Street** requesting Site Plan Review approval for redevelopment of the site to include reuse and expansion of the existing structure, and construction of a new structure, for residential and commercial uses with associated site improvements. Said property is located on Assessor Map 116 Lot 30 and lies within the Character District 4 (CD4) and Historic Districts. (LU-25-138)

B. **REQUEST TO POSPONE TO JUNE** The request of **Brora LLC (Owner),** for property located at **150 Portsmouth Boulevard** requesting Site Plan Review approval for the construction of three (3), six (6) story multifamily residential buildings with associated site work including parking, driveway access, utility, drainage, landscaping, and lighting improvements and reconstruction of Portsmouth Boulevard in front of the development. Said property is located on Assessor Map 213 Lot 12 and lies within the Office Research (OR) and Gateway Neighborhood Overlay (GNOD) Districts. **REQUEST TO POSPONE TO JUNE** (LU-25-114)

IV. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

A. The request of **Jeannette McDonald (Owner),** and **Flipping Bergers, LLC (Applicant)**, for property located at **86 Farm Lane** requesting Preliminary and Final Subdivision approval and Site Plan Review approval to subdivide one lot into three lots with associated site improvements. Said property is located on Assessor Map 236 Lot 74 and lies within the Single Residence B (SRB) District. (LU-26-16)

B. The request of **Double MC LLC (Applicant)**, and **The City of Portsmouth (Owner),** for property located at **0 Parrott Avenue** requesting a Wetland Conditional Use Permit from Section 10.1017.50 for the installation of a new treated stormwater pipe below the Parrott Avenue parking as part of the redevelopment at 134 Pleasant Street. There will be 601 square feet of disturbance within the wetland buffer area which is located beneath the existing parking lot. Said property is located on Assessor Map 115 Lot 4-1 and lies within the Municipal (M) and Historic Districts. (LU-26-60)

C. The request of **Regan Electric CO INC (Owner),** and **Chinburg Development (Applicant)**, for property located at **94 Langdon Street** and **98 Cornwall Street** requesting Site Plan Review approval to merge the two lots, demolish the existing buildings, and construct three (3) single-family dwellings with associated site

improvements. Said property is located on Assessor Map 139 Lots 1, 8 and lies within the Mixed Residential Business (MRB) District. (LU-25-175)

D. The request of **Society for the Protection of Forests (Owner)**, for property located at **400 Little Harbor Road** requesting a Wetland Conditional Use Permit from Section 10.1015.50 for the construction of two sections of existing shoreline trails at the Creek Farm Property. The project will rebuild 300 linear feet of eroded trail approximately 5 feet wide for a total of 1,500 square feet of permanent impact area. Said property is located on Assessor Map 203 Lot 8 and lies within the Rural (R) District. (LU-26-26)

E. The request of **304 Maplewood LLC (Owner)**, for property located at **304 Maplewood Avenue** requesting amended Site Plan approval for a 1,011 square foot addition to the existing office building. Said property is located on Assessor Map 140 Lot 7 and lies within the Character District 4-L2 (CD4-L2) and Historic District. (LU-26-5)

V. OTHER BUSINESS

A. The request of **Sea Level LLC (Owner)**, for property located at **185-187 Wentworth Roa**d requesting a one-year extension the Wetland Conditional Use Permit granted on June 18, 2025.

B. The request of **361 Hanover Steam Factory LLC (Owner)**, for property located at **361 Hanover Street** requesting a one-year extension the Site Plan approval granted on August 21, 2025.

C. Chairman updates and discussion items

D. Board discussion of Regulatory Amendments & other matters

VI. 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_scJEEVexTcWiqgjMAsXPaQ

City of Portsmouth
Planning Department
1 Junkins Ave, 3rd Floor
Portsmouth, NH
(603)610-7216

Memorandum

To: Planning Board

From: Peter Stith, AICP
Assistant Planning Director

Date: May 15, 2026

Re: Recommendations for the May 21, 2026 Planning Board Meeting

I. APPROVAL OF MINUTES

A. Approval of the April 16, 2026 meeting minutes.

Planning Department Recommendation

1) Board members should determine if the draft minutes include all relevant details for the decision-making process that occurred at the April 16, 2026 meeting and vote to approve meeting minutes with edits if needed.

II. DETERMINATIONS OF COMPLETENESS

SUBDIVISION REVIEW

A. The request of **Jeannette McDonald (Owner)** and **Flippin Bergers, LLC (Applicant)**, for property located at **86 Farm Lane** requesting Preliminary and Final Subdivision approval and Site Plan Review approval to subdivide one lot into three lots with associated site improvements. Said property is located on Assessor Map 236 Lot 74 and lies within the Single Residence B (SRB) District. (LU-26-16)

Planning Department Recommendation

Vote to determine that Item A is complete according to the Subdivision Review Regulations, (contingent on the granting of any required waivers under Section IV of the agenda) and to accept the applications for consideration.

SITE PLAN REVIEW

A. **REQUEST TO POSTPONE TO JUNE** The request of **Brora LLC (Owner),** for property located at **150 Portsmouth Boulevard** requesting Site Plan Review Approval for the construction of three (3), six (6) story multifamily residential buildings with associated site work including parking, driveway access, utility, drainage, landscaping, and lighting improvements. **REQUEST TO POSTPONE TO JUNE**

B. The request of **Jeannette McDonald (Owner)** and **Flippin Bergers, LLC (Applicant)**, for property located at **86 Farm Lane** requesting Preliminary and Final Subdivision approval and Site Plan Review approval to subdivide one lot into three lots with associated site improvements. Said property is located on Assessor Map 236 Lot 74 and lies within the Single Residence B (SRB) District. (LU-26-16)

C. The request of **304 Maplewood LLC (Owner)**, for property located at **304 Maplewood Avenue** requesting amended Site Plan approval for a 1,011 square foot addition to the existing office building. Said property is located on Assessor Map 140 Lot 7 and lies within the Character District 4-L2 (CD4-L2) and Historic District. (LU-26-5)

D. The request of **Regan Electric CO INC (Owner)**, and **Chinburg Development (Applicant)**, for property located at **94 Langdon Street** and **98 Cornwall Street** requesting Site Plan Review approval.

Planning Department Recommendation

Vote to determine that Items B, C & D are complete according to the Site Plan Review Regulations, (contingent on the granting of any required waivers under Section IV of the agenda) and to accept the applications for consideration.

III. PUBLIC HEARINGS – OLD BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

A. The request of **Double MC LLC (Owner)**, for property located at **134 Pleasant Street** requesting Site Plan Review approval for redevelopment of the site to include reuse and expansion of the existing structure, and construction of a new structure, for residential and commercial uses with associated site improvements.

Update since the April 16, Planning Board Meeting

As a result of the discussion at the April 16, 2026 meeting, the applicant filed a variance application to the Board of Adjustment for the changes to the existing drive through. Section VII (4) of the Board of Adjustment Rules & Regulations states the following:

> 4. The applicant shall be allowed to have only one active application before the Board at any time, including any application for a variance or Special Exception for a property with an application subject to appeal. Additional applications will be rejected by the staff at the time it is submitted for processing.

Because the applicant is currently appealing the October 28, 2025 decision of the Zoning Board, a new application would not be allowed to move forward under this rule and until such time as the appeal process is complete. The appeal was heard in Superior Court on Friday, May 8, 2026 and an order from the judge should be issued soon.

Given the lack of a decision from the Zoning Board of Adjustment, staff would recommend postponing the Site Plan Review application until the Board of Adjustment can hear the new application.

Under RSA 676:4, the Planning Board is required to act on a completed application within 65 days of acceptance, unless the applicant consents to an extension of that timeframe. Continuances of public hearings alone do not suspend this statutory period. The Planning Board has determined that variance relief from the Board of Adjustment is required prior to final action on the application. Given the pending appeal of a prior Board of Adjustment decision and the status of the newly filed application, it is unlikely that this relief will be obtained within the statutory 65-day period.

Staff recommends that the Planning Board seek the applicant's consent to waive the 65-day statutory decision period in accordance with RSA 676:4(f) and continue the application to a future meeting to allow resolution of the Board of Adjustment matter. If the applicant agrees to such a waiver, the Board may continue the application as needed without risk of constructive approval.

If the applicant does not consent to an extension, the Planning Board will be required to act on the application within the statutory timeframe. In that circumstance, and absent the required variance relief, staff recommends that the Board deny the application without prejudice to allow the applicant to resolve the zoning issues and resubmit.

Background

The applicant proposes an expansion at 134 Pleasant Street, including basement parking, a new street-facing building, site circulation changes, landscaping, and lighting. The accessory drive-though is not permitted under current zoning regulations but has been in existence since the 1980s. The applicant sought a variance to relocate the drive-though and that request was denied (See Board of Adjustment details below). The proposed site plan layout before the Board leaves the drive-through elements unchanged, although the banking operation will be located in the new building in the front.

The proposal requires vehicular egress across City-owned property associated with the Parrott Avenue municipal parking lot. Two alternative configurations have been presented; one that leaves existing conditions as they currently are, including vehicular egress for the property over the City-owned Parrott Ave parking lot, and the plan preferred by the Applicant, which reconfigures vehicular egress over the Parrott Avenue Parking Lot adjacent to the State Courthouse. The option preferred by the Applicant would eliminate parking currently used by the Courthouse and add additional parking on the Parrott Ave parking lot. The Applicant does not have any vested legal right for vehicular egress at either location.

Pursuant to Chapter 11, Article VI, Section 11.601, the intent of this Article is to ensure that municipal actions involving land acquisition, disposition or use, and changes affecting public streets, are considered in the context of the City's comprehensive planning. Section 11.602 requires that any acquisition or disposition of municipal real property, including easements, and any plan for the construction, alteration, relocation or discontinuance of a public way, be referred to the Planning Board in writing prior to final action by the City Council.

Both proposed egress options require either a license or easement across City-owned property and modifications to circulation within a municipal parking area and associated right-of-way. These actions therefore require City Council approval and a written recommendation from the Planning Board. As part of its Site Plan Review authority, the Planning Board evaluates circulation, safety, and land use impacts and should recommend a preferred option for City Council consideration. If neither option is approved by the City Council, the applicant will need to redesign the plan so traffic can enter and exit from Pleasant Street, which would require a site plan amendment if the application is approved in its current form. Therefore, it is staff's recommendation that the Planning Board consider all three options: (1) to reconfigure egress adjacent to the Courthouse; (2) continue egress in the current format; and (3) reject both proposals, requiring redesigning the project such that all vehicular ingress and egress would be located on Pleasant Street. Staff therefore requests that the Planning Board recommend a preferred option to the City Council.

Additionally, the project requires installation of a new drain line crossing the Parrott Ave parking lot to tie into existing City drainage infrastructure. City staff therefore requests the Planning Board recommend that the City Council grant the Applicant a revocable license for a drain line crossing the Parrott Ave lot, which can be relocated at the Applicant's expense if requested by the City.

ARTICLE VI: REFERRALS TO PLANNING BOARD (Added 12/21/2009)

Section 11.601: INTENT

The intent of this Article is to ensure that proposed municipal actions relating to land acquisition, disposition or use, and to the laying out, construction or discontinuance of public streets, are considered in the context of the City's comprehensive planning.

Section 11.602: REFERRAL AND REPORT

A. The following matters shall be referred to the Planning Board in writing at least thirty (30) days before final action is taken:

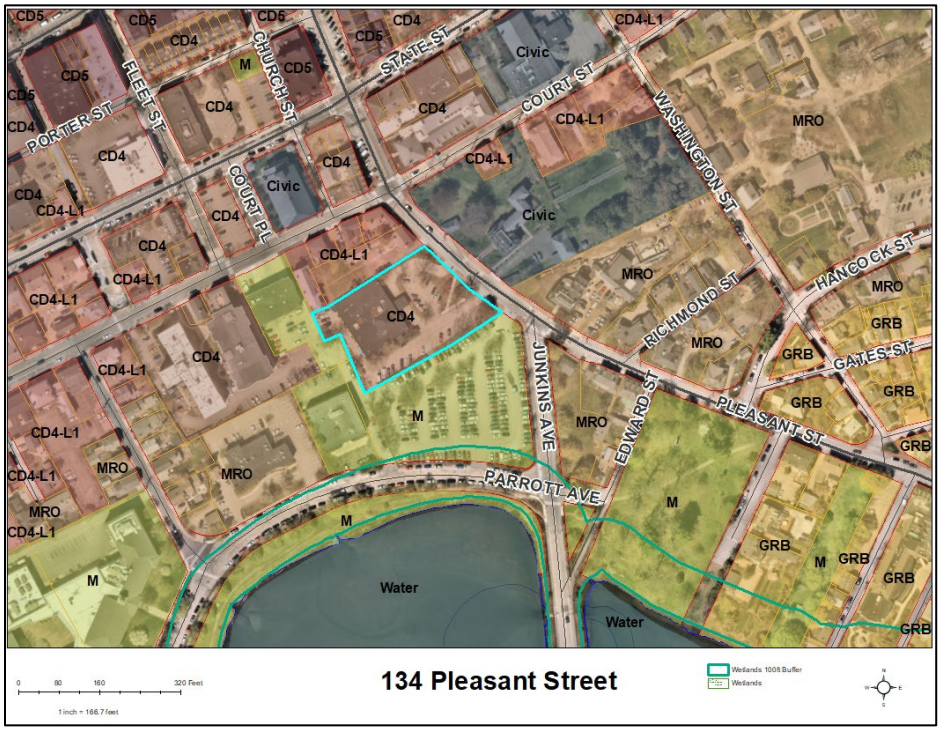
(1) Any acquisition or disposition of municipal real property, including fee transfers, easements and licenses;
(2) Any plan for the construction, alteration, relocation, acceptance or discontinuance of a public way.

B. No final action on a matter listed herein shall be taken until either the Planning Board has reported to the City Council thereon in writing or sixty (60) days have elapsed since the referral without such report.

C. The failure to refer a matter listed herein to the Planning Board shall not affect the legal validity or force of any action related thereto if the Planning Board waives such referral.

The applicant has requested the ability to obtain a building permit for a portion of the work prior to posting the required site bond. Under the Site Plan Review

Regulations, Site Plan approval is not effective until a Site Plan Review Agreement has been fully executed and all required performance security has been posted (Section 2.11(5)). The Planning Board does not have authority to waive these requirements. In addition, when a Construction Management Mitigation Plan (CMMP) is required, *"no site work is authorized nor shall work commence before the Plan has been accepted and approved as to content and form by the City"*(Section 2.15.3).



Project Review, Decisions, and Recommendations

The applicant was before the Zoning Board of Adjustment, Historic District Commission, and the Technical Advisory Committee. See below for details.

Board of Adjustment

The applicant was before the Board of Adjustment at its regularly scheduled meeting of Tuesday, October 28, 2025 to relocate the location of the accessory drive-through facility on the lot. The Board voted (6-1) to deny the request because it does not meet the public interest or the spirit of the Ordinance.

The applicant requested a rehearing of the above decision and at the December 16, 2025 meeting, the Board voted to deny the request for rehearing, because the applicant failed to identify an error in procedure or law in the decision by the Board.

The applicant has appealed the Board's decision and the matter is currently

pending to Superior Court.

Note that the application before you has been redesigned to keep the drive through in its current location. If the Board approves the current plan and the applicant prevails in court a site plan amendment will be required by the Planning Board.

Historic District Commission

After several work sessions with the HDC, the applicant was before the Historic District Commission at its regularly scheduled meeting of Wednesday, January 7, 2026 the Commission voted unanimously (7-0) to grant the Certificate of Approval with the following conditions:

1. *The masonry exterior cladding materials shall require further conversation, and*
2. *In-place on site samples shall show jointing and technique along with some alterations in the choice of materials.*

The applicant was before the Historic District Commission on April 1, 2026 and received administrative approval for the minor changes that were made since receiving a Certificate of Approval from the Commission in January.

Technical Advisory Committee

The applicant was before the Technical Advisory Committee at its regularly scheduled meeting of Tuesday, February 3, 2026 and the Committee voted unanimously to recommend approval to the Planning Board with the following conditions:

1. *City Council approval is needed for the proposed reconfiguration of traffic flow and parking spaces with easements.*
2. *Third party inspection required for utility work and work in the right-of-way and on City property.*
3. *Drainage system will require final approval from DPW before Planning Board submission.*
4. *Applicant must provide a license and easement plan.*
5. *Details of the foundation design will require DPW approval before a foundation permit can be issued.*
6. *Applicant must provide an updated truck turning template showing firetruck circulation layout and alternate circulation layout.*
7. *CMMP will be required.*

The TAC conditions have been addressed in the Planning Board submission or added as

conditions below.

Planning Department Recommendation
Site Plan Review Approval

1) Vote to find that the Site Plan Application meets the requirements set forth in the Site Plan Regulations Section 2.9 Evaluation Criteria and adopt the findings of fact as presented.

(Alt.) Vote to find that the Site Plan Application meets the requirements set forth in the Site Plan Regulations Section 2.9 Evaluation Criteria and adopt the findings of fact as amended.

2.) Vote to grant Site Plan Approval with the following conditions:

Conditions to be satisfied subsequent to final approval of site plan but prior to the issuance of a building permit or the commencement of any site work or construction activity:

2.1) If applicable, any easement plans and deeds for which the City is a grantor or grantee shall been reviewed and approved by the Planning and Legal Departments and accepted by City Council.

2.2) The site plan and any easement plans and deeds shall be recorded at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.

2.3) Any site development (new or redevelopment) resulting in 15,000 square feet or greater ground disturbance will require the submittal of a Land Use Development Tracking Form through the Pollutant Tracking and Accounting Program (PTAP) online portal. For more information visit https://www.cityofportsmouth.com/publicworks/stormwater/ptap

2.4) *The applicant shall prepare a Construction Management and Mitigation Plan (CMMP) for review and approval by the City's Legal and Planning Departments unless City staff determines that such plan is not needed.*

2.5) *The applicant shall agree to pay for the services of an oversight engineer, to be selected by the City, to monitor the construction of improvements within the public rights-of-way and on site.*

Conditions to be satisfied subsequent to commencement of site work and construction activity but prior to release of surety bond or certificate of occupancy.

2.6) *The Engineer of Record shall submit a written report (with photographs and engineer stamp) certifying that the stormwater infrastructure was constructed to the approved plans and specifications and will meet the design performance;*

2.7) A stormwater inspection and maintenance report shall be completed annually and copies shall be submitted for review to the City's Stormwater Division/ Public Works Department.

Planning Department Recommendation
Referral to City Council

1. *Vote to recommend that the City Council approve a license and/or easement for a private stormwater pipe and related drainage infrastructure to cross City-owned property within the Parrott Avenue municipal parking lot area, as shown on the off-site grading and drainage plans submitted for 134 Pleasant Street, with the condition that the City shall retain the authority to require the removal, modification, or relocation of the stormwater infrastructure at any time, at the sole expense of the property owner, should the City determine such action is necessary for municipal purposes, public improvements, or changes to City operations, and subject to final legal review by the City Attorney and the Department of Public Works.*

III. PUBLIC HEARINGS – OLD BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

B. REQUEST TO POSTPONE TO JUNE The request of **Brora LLC (Owner),** for property located at **150 Portsmouth Boulevard** requesting Site Plan Review Approval for the construction of three (3), six (6) story multifamily residential buildings with associated site work including parking, driveway access, utility, drainage, landscaping, and lighting improvements and reconstruction of Portsmouth Boulevard in front of the development. Said property is located on Assessor Map 213 Lot 12 and lies within the Office Research (OR) and Gateway Neighborhood Overlay (GNOD) Districts. (LU-25-114) **REQUEST TO POSTPONE TO JUNE**

IV. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

A. The request of **Jeannette McDonald (Owner)** and **Flippin Bergers, LLC (Applicant)**, for property located at **86 Farm Lane** requesting Preliminary and Final Subdivision approval and Site Plan Review approval to subdivide one lot into three lots with associated site improvements. Said property is located on Assessor Map 236 Lot 74 and lies within the Single Residence B (SRB) District.

Project Background

The application for subdivision and site plan approval proposes to subdivide the existing lot into three residential lots, one which retains the existing dwelling and the creation of two new buildable lots. The proposal includes construction of a new public roadway within the existing Longmeadow Lane right-of-way to provide access to the new lots.

Project Review, Decisions, and Recommendations

The applicant was before the Board of Adjustment and the Technical Advisory Committee. See below for details.

Board of Adjustment

The applicant was before the Board of Adjustment at its regularly scheduled meeting of Tuesday, May 27, 2025 seeking relief for the following:

1) Variance from Section 10.521 to allow a) 28-foot rear yard setback where 30 feet is required; and b) 23-foot secondary front yard where 30 feet is required. Proposed lot 1 requires the following: 2) Variance from Section 10.521 to allow a) 10,664 s.f. of lot area where 15,000 s.f. is required; b) 10,664 s.f. of lot area per dwelling unit where 15,000 s.f. is required; and c) 75 feet of continuous street frontage where 100 feet is required. Proposed lot 2 requires the following: 3) Variance from Section 10.521 to allow a) 11,250 s.f. of lot area where 15,000 s.f. is required; b) 11,250 s.f. of lot area per dwelling unit where 15,000 s.f. is required; and c) 75 feet of continuous street frontage where 100 feet is required.

The Board voted 5-1 to grant the variances with the following conditions:

1) The approval shall be contingent upon the Planning Board approval of the subdivision and City Council acceptance of fee simple ownership of the new right-of-area proposed; and
2) The subdivision layout may change as a result of TAC and Planning Board reviews if it does not increase the zoning relief required.

Technical Advisory Committee

The applicant was before the Technical Advisory Committee at its regularly scheduled meeting of Tuesday, April 7, 2026 and the Committee voted unanimously to recommend approval as presented.

Waiver Request

The applicant has requested two waivers from the Subdivision Ordinance and one from the Site Plan Review Regulations. The applicant provides appropriate rationale for the subdivision waivers in the request and staff supports granting the requested waivers.

The applicant has requested a waiver from the requirement to record an approved site plan based on the conceptual nature of the submitted plan. Staff finds that this request is not comparable to typical waiver requests involving dimensional or design standards found in the Site Plan Regulations. The requirement to record an approved site plan is a procedural and legal

requirement intended to ensure the enforceability of Planning Board approvals and to provide notice to future property owners. As such, it is fundamental to the administration and implementation of the Site Plan Regulations.

While the Planning Board is authorized to grant waivers where strict conformity would pose unnecessary hardship and where such waivers would be consistent with the purpose and intent of the regulations, staff find that waiving a requirement that ensures enforceability would be inconsistent with that purpose and intent.

Planning Department Recommendation
Subdivision Waiver

1) *Vote to grant the requested waivers from Section VI General Requirements, Subsection 9.A to allow overhead electrical services to each lot.* ***[NOTE: Motion maker must select one of the following options]:***

a) Strict conformity would pose an unnecessary hardship to the applicant and waiver would not be contrary to the spirit and intent of the regulations.

[OR]

b) Specific circumstances relative to the subdivision, or conditions of the land in such subdivision, indicate that the waiver will properly carry out the spirit and intent of the regulations.

Planning Department Recommendation
Subdivision

1) Vote to find that the Subdivision Application meets the requirements set forth in the Subdivision Rules and Regulations and to adopt the findings of fact as presented.

(Alt.) Vote to find that the Site Plan Application meets the requirements set forth in the Subdivision Rules and Regulations and to adopt the findings of fact as amended.

2) Vote to grant Preliminary and Final Subdivision Approval with the following conditions:

2.1) Property monuments shall be set as required by the Department of Public Works prior to the filing of the plat.

2.2) GIS data shall be provided to the Department of Public Works in the form as required by the City.

2.3) Any easement plans and deeds for which the City is a grantor or grantee shall been reviewed and approved by the Planning and Legal Departments and accepted by City Council.

2.4) The final plat and all easement plans and deeds shall be recorded concurrently at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.

Planning Department Recommendation
Site Plan Review Approval

1) Vote to find that the Site Plan Application meets the requirements set forth in the Site Plan Regulations Section 2.9 Evaluation Criteria and adopt the findings of fact as presented.

(Alt.) Vote to find that the Site Plan Application meets the requirements set forth in the Site Plan Regulations Section 2.9 Evaluation Criteria and adopt the findings of fact as amended.

2.) Vote to grant Site Plan Approval with the following conditions:

Conditions to be satisfied subsequent to final approval of site plan but prior to the issuance of a building permit or the commencement of any site work or construction activity:

2.1) If applicable, any easement plans and deeds for which the City is a grantor or grantee shall be reviewed and approved by the Planning and Legal Departments and accepted by City Council.

2.2) The site plan and any easement plans and deeds shall be recorded at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.

2.3) Applicant shall contact DPW prior to any work in the right of way and when working with the Municipally owned utilities.

2.4) Any site development (new or redevelopment) resulting in 15,000 square feet or greater ground disturbance will require the submittal of a Land Use Development Tracking Form through the Pollutant Tracking and Accounting Program (PTAP) online portal. For more information visit https://www.cityofportsmouth.com/publicworks/stormwater/ptap

Conditions to be satisfied subsequent to commencement of site work and construction activity but prior to release of surety bond or certificate of occupancy.

2.5) *The Engineer of Record shall submit a written report (with photographs and engineer stamp) certifying that the stormwater infrastructure was constructed to the approved plans and specifications and will meet the design performance;*

2.6) A stormwater inspection and maintenance report shall be completed annually and copies shall be submitted for review to the City's Stormwater Division/ Public Works Department.

IV. PUBLIC HEARINGS – NEW BUSINESS

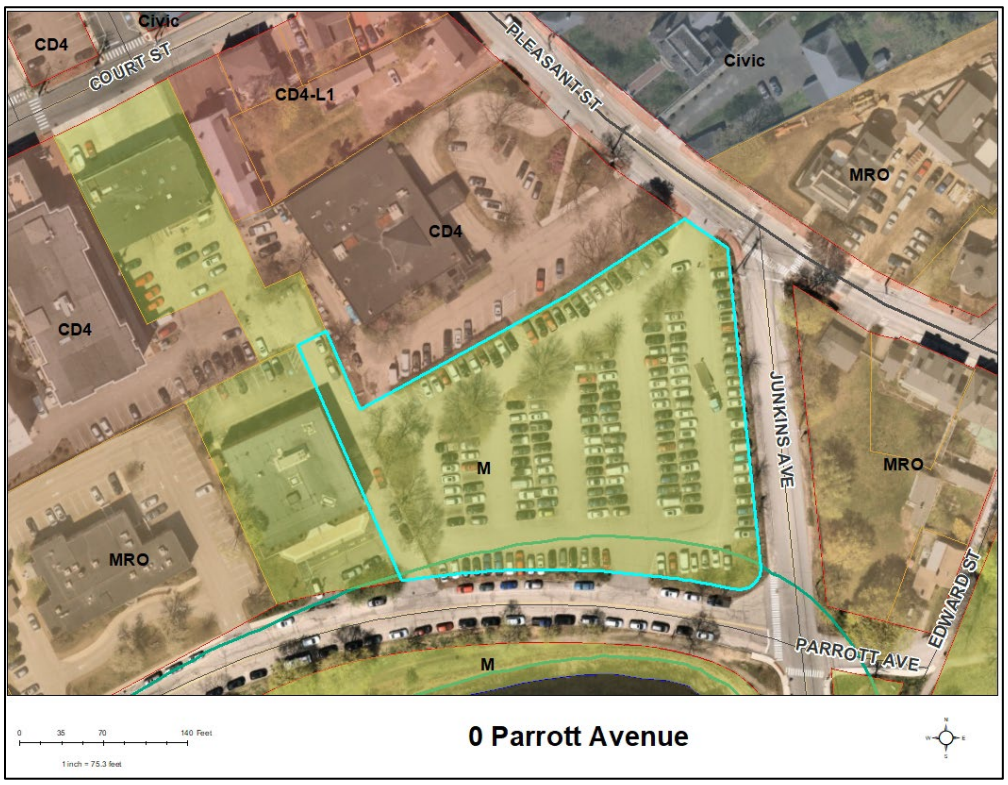
The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

B. The request of **Double MC LLC (Applicant)**, and **The City of Portsmouth (Owner),** for property located at **0 Parrott Avenue** requesting a Wetland Conditional Use Permit from Section 10.1017.50 for the installation of a new treated stormwater pipe below the Parrott Avenue parking as part of the redevelopment at 134 Pleasant Street. There will be 601 square feet of disturbance within the wetland buffer area which is located beneath the existing parking lot. Said property is located on Assessor Map 115 Lot 4-1 and lies within the Municipal (M) and Historic Districts.

Because this application is connected to the 134 Pleasant Street project, the Board may want to continue this application in order to act on both the site plan and wetland permit at the same meeting.

Project Background

The application is for a Wetland Conditional Use Permit to allow approximately 601 square feet of temporary disturbance within the 100-foot wetland buffer at the Parrott Avenue municipal parking lot. This work is associated with the 134 Pleasant Street and the proposal involves installation of a stormwater drainage connection to redirect runoff currently entering the municipal sewer system into a separated stormwater system. The work is located entirely within an existing paved area, with no permanent impacts to vegetated buffer areas. The applicant states that there are no feasible alternative locations outside the buffer, and that the project will improve stormwater management while minimizing impacts.



Staff Analysis – Wetland CUP

According to Article 10 Section 10.1017.50 the applicant must satisfy the following conditions for approval of this project.

1. The land is reasonably suited to the use activity or alteration.

This property is disturbed with pavement and the proposed activity would return the area of work back to pavement once the new piping is installed.

2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.

This project is a sewer separation project and in order to split the stormwater from the existing combined line, the stormwater pipe will have to be directed to an existing connection, the closest of which is in the Parrott Avenue lot and within the 100' wetland buffer. An alternative location for the pipe does not seem feasible.

3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.

The proposed work is within a very small section of the wetland buffer and will occur in mostly existing paved areas. The construction should not have an adverse impact on the South Mill Pond and the new stormwater line should create an improvement to existing conditions by having stormwater treated by a jellyfish filter before entering into the main stormwater system.

4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.
This project only appears to alter a very small portion of a landscaped area within the parking lot.

5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.

This project proposes impacting an area that is already impervious surface and the introduction of treated stormwater to this area of our stormwater system should create a positive impact on the water quality in the area.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.

This project does not propose impacts to the vegetated buffer strip (25' buffer).

Project Review, Decisions, and Recommendations
The project was before the Conservation Commission. See below for details.

Conservation Commission
The applicant was before the Conservation Commission at its regularly scheduled meeting of Wednesday, April 8, 2026 and the Commission unanimously (7-0) to recommend approval with following condition:

1) Plans must be stamped, signed and dated by the New Hampshire Certified Wetland Scientist who delineated the wetland resource.

The condition above has been addressed in the Planning Board submittal.

Planning Department Recommendation
Wetland Conditional Use Permit

1) Vote to find that the Conditional Use Permit Application meets the requirements set forth in Section 10.1017.50 of the Ordinance and adopt the findings of fact as presented.

(Alt.) Vote to find that the Conditional Use Permit Application meets the requirements set forth in Section 10.1017.50 of the Ordinance and adopt the findings of fact as amended.

2.) Vote to grant the Conditional Use Permit as presented.

V. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

C. The request of **Regan Electric CO INC (Owner),** and **Chinburg Development (Applicant)**, for property located at **94 Langdon Street** and **98 Cornwall Street** requesting Site Plan Review approval to merge the two lots, demolish the existing buildings, and construct three (3) single-family dwellings with associated site improvements. Said property is located on Assessor Map 139 Lots 1, 8 and lies within the Mixed Residential Business (MRB) District.

Background

The applicant is seeking Site Plan Review approval for redevelopment of 94 Langdon Street and 98 Cornwall Street involving the merger of two parcels totaling approximately 25,107 square feet and the demolition of existing commercial buildings in order to construct three single-family dwellings on the newly merged lot. The development will be served by a shared driveway with access from Langdon Street. The proposal represents a conversion from commercial to residential use within the MRB zoning district, which is consistent with the surrounding neighborhood.

Project Review, Decisions, and Recommendations

The applicant was before the Technical Advisory Committee. See below for details.

Technical Advisory Committee

The applicant was before the Technical Advisory Committee at its regularly scheduled meeting of Tuesday, April 7, 2026 and the Committee voted unanimously to recommend approval to the Planning Board with the following conditions:

1) An easement to the City is required for water metering, valve control, and leak detection. This easement shall have a provision to allow the City to upsize and/or connect the line to Cornwall Street in the future if determined to be necessary.

2) Show existing 10-12" sewer main crossing lot on Cornwall Street and consider sewer connection there. An easement to the City is required for the sewer main pipe crossing the lot on Cornwall Street.

3) Revise the landscaping plan.

4) The driveway will need to be named and approved by City Council.

5) A fire access turning template is required.

6) A 1" water line is insufficient for three single family dwellings, so a common line should be at least 2" in size and that size should be confirmed as large enough by the MEP engineer. All lines to homes must be 1" minimum. If fire suppression is required by the Fire Department, additional or larger water lines will be required.

7) Need air gap between stormwater system and foundation drains. Homes need to be mechanically drained via sumps. Watertight construction required.

8) City suggests slab on grade construction but in no case should there be more than a crawl space with no mechanicals due to high groundwater possible during storms in that area.

9) Sidewalk must be 5.5' in width, excluding curb.

10) Curb must be granite.

11) Brick inverts in sewer manholes are required.

The TAC conditions have been addressed in the Planning Board application or added as conditions below.

Planning Department Recommendation
Site Plan Review Approval

1) Vote to find that the Site Plan Application meets the requirements set forth in the Site Plan Regulations Section 2.9 Evaluation Criteria and adopt the findings of fact as presented.

(Alt.) Vote to find that the Site Plan Application meets the requirements set forth in the Site Plan Regulations Section 2.9 Evaluation Criteria and adopt the findings of fact as amended.

2.) Vote to grant Site Plan Approval with the following conditions:

Conditions to be satisfied subsequent to final approval of site plan but prior to the issuance of a building permit or the commencement of any site work or construction activity:

2.1) If applicable, any easement plans and deeds for which the City is a grantor or grantee shall been reviewed and approved by the Planning and Legal Departments and accepted by City Council.

2.2) The site plan and any easement plans and deeds shall be recorded at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.

2.3) The applicant shall provide an access easement to the City for water valve access and leak detection. The easement shall be reviewed and approved by the Planning and Legal Departments prior to acceptance by the City Council.

2.4) Applicant shall contact DPW prior to any work in the right of way and when working with the Municipally owned utilities.

2.5) Any site development (new or redevelopment) resulting in 15,000 square feet or greater ground disturbance will require the submittal of a Land Use Development Tracking Form through the Pollutant Tracking and Accounting Program (PTAP) online portal. For more information visit https://www.cityofportsmouth.com/publicworks/stormwater/ptap

Conditions to be satisfied subsequent to commencement of site work and construction activity but prior to release of surety bond or certificate of occupancy.

2.5) *The Engineer of Record shall submit a written report (with photographs and engineer stamp) certifying that the stormwater infrastructure was constructed to the approved plans and specifications and will meet the design performance;*

2.6) A stormwater inspection and maintenance report shall be completed annually and copies shall be submitted for review to the City's Stormwater Division/ Public Works Department.

IV. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

D. The request of **Society for the Protection of Forests (Owner**), for property located at **400 Little Harbor Road** requesting a Wetland Conditional Use Permit from Section 10.1015.50 for the construction of two sections of existing shoreline trails at the Creek Farm Property. The project will rebuild 300 linear feet of eroded trail approximately 5 feet wide for a total of 1,500 square feet of permanent impact area. Said property is located on Assessor Map 203 Lot 8 and lies within the Rural (R) District.

Project Background

This application is for the construction of two sections of currently eroded and degraded shoreline trails at the Creek Farm property. The construction methods propose using a turnpike trail construction method which imports fill material to establish a raised trail surface above the existing trail. In addition to multiple layers of fill and multiple fill types and drainage materials, a shallow ditch will also be constructed on each side of the new trail construction to drain water. This new construction will rebuild 300 linear feet of eroded trail at approximately 5 feet wide, resulting in an estimated 1,500 s.f. of permanent impact area.

Staff Analysis – Wetland CUP

According to Article 10 Section 10.1017.50 the applicant must satisfy the following conditions for approval of this project.

1. The land is reasonably suited to the use activity or alteration.

This property has existing trails and is heavily utilized by the public. The area of proposed construction is already being used as a trail. lot is already a developed lot and is suited to the use of exterior stairs.

2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.

This project is proposing to re-establish existing trail sections that are within the wetland buffer. These areas are already heavily trafficked by the public. This project aims to reduce the erosion, flooding and sediment transport that currently occurs which impacts the adjacent wetland resource.

3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.

The proposed work aims to reduce the erosion, flooding and sediment transport that currently occurs which impacts the adjacent wetland resource. Although

new fill is being brought in, it should help stabilize the trail areas which will prevent runoff and erosion issues in the future.

4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.
The applicant is proposing to remove invasives in some areas while also avoiding tree removal. In areas where impacts to tree roots cannot be avoided, the applicant is proposing to add new fill on top of roots.

5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.

This project proposes impacting an area that is already in trail use. While it involves bringing in additional materials and fill, this project should prevent further damage to the wetland buffer and wetland resource through the mitigation of flooding, erosion and sediment transport.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.

The applicant states that no vegetation clearing will be needed within the 40' vegetated buffer strip.

Project Review, Decisions, and Recommendations
The applicant was before the Conservation Commission. See below for details.

Conservation Commission
The applicant was before the Conservation Commission at its regularly scheduled meeting of Wednesday, April 8, 2026 and the Commission voted unanimously (7-0) to recommend approval with the following conditions:

1. Applicant shall consider mitigating the use of the existing trail along the shoreline in future planning efforts to reduce buffer impacts.

2. Applicant shall consider any opportunities to install or update signage where appropriate to include education on wetland systems and sensitivities.

Condition #2 has been revised and added to the recommendation below. Condition #1 is more of a suggestion by the Conservation Commission to improve other parts of the trail in the future and has not been added as a condition of approval.

Staff notes that the proposal reviewed by the Planning Board reflects a material increase in the extent of impact compared to the version considered by the Conservation Commission. The application before the Commission included 270 linear feet (≈1,350 SF) of impacts and the revised Planning Board application increased to 300 linear feet (≈1,500 SF) of turnpike

This increase results from the applicant's decision to extend the turnpike through an additional 30-foot section that was previously proposed to remain unimproved in order to create a continuous trail surface and avoid creation of a new low point. Staff feels this change does not warrant further review by the Conservation Commission, but if the Planning Board would like input, they can request the applicant return to the Conservation Commission.

Planning Department Recommendation
Wetland Conditional Use Permit

1) Vote to find that the Conditional Use Permit Application meets the requirements set forth in Section 10.1017.50 of the Ordinance and adopt the findings of fact as presented.

(Alt.) Vote to find that the Conditional Use Permit Application meets the requirements set forth in Section 10.1017.50 of the Ordinance and adopt the findings of fact as amended.

2.) Vote to grant the Conditional Use Permit with the following condition:

2.1) *Applicant shall work with Planning & Sustainability staff to install or update signage where appropriate to include education on wetland systems and sensitivities.*

IV. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

E. The request of **304 Maplewood LLC (Owner)**, for property located at **304 Maplewood Avenue** requesting amended Site Plan approval for a 1,011 square foot addition to the existing office building. Said property is located on Assessor Map 140 Lot 7 and lies within the Character District 4-L2 (CD4-L2) and Historic District.

Background

The applicant requests amended site plan approval to remove a portion of the existing rear building and construct an approximately 1,011 square foot one-story office addition at the rear of the structure. The existing one-story commercial building is currently used for office use and is located within the Character District 4-L2 (CD4-L2) and the Historic District. No changes are proposed to site access, circulation, or the number of parking spaces; however, the applicant proposes restriping the parking lot to better define parking spaces. A Shoreland Permit application was submitted to the New Hampshire Department of Environmental Services on April 27, 2026, and is pending approval.

Project Review, Decisions, and Recommendations

The applicant was before the Historic District Commission and the Technical Advisory Committee. See below for details.

Historic District Commission

The applicant was before the Historic District Commission at its regularly scheduled meeting of Wednesday, February 4, 2026 and the Commission voted unanimously to grant the Certificate of Approval as presented.

Technical Advisory Committee

The applicant was before the Technical Advisory Committee at its regularly scheduled meeting of Tuesday, April 7, 2026 and the Committee voted unanimously to recommend approval to the Planning Board with the following conditions:

1) Show new fence within property line on plans.

2) Handicapped parking spots and access aisle will be switched.

3) Confirm active waterline and remove inactive one from plans.

TAC conditions have been addressed in the Planning Board application.

Planning Department Recommendation
Site Plan Review Approval

1) Vote to find that the Site Plan Application meets the requirements set forth in the Site Plan Regulations Section 2.9 Evaluation Criteria and adopt the findings of fact as presented.

(Alt.) Vote to find that the Site Plan Application meets the requirements set forth in the Site Plan Regulations Section 2.9 Evaluation Criteria and adopt the findings of fact as amended.

2.) Vote to grant Site Plan Approval with the following conditions:

Conditions to be satisfied subsequent to final approval of site plan but prior to the issuance of a building permit or the commencement of any site work or construction activity:

2.1) If applicable, any easement plans and deeds for which the City is a grantor or grantee shall been reviewed and approved by the Planning and Legal Departments and accepted by City Council.

2.2) The site plan and any easement plans and deeds shall be recorded at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.

2.3) Applicant shall contact DPW prior to any work in the right of way and when working with the Municipally owned utilities.

2.4) Any site development (new or redevelopment) resulting in 15,000 square feet or greater ground disturbance will require the submittal of a Land Use Development Tracking Form through the Pollutant Tracking and Accounting Program (PTAP) online portal. For more information visit https://www.cityofportsmouth.com/publicworks/stormwater/ptap

V. OTHER BUSINESS

A. The request of **Sea Level LLC (Owner)**, for property located at **185-187 Wentworth Road** requesting a one-year extension the Wetland Conditional Use Permit granted on June 18, 2025.

The applicant is requesting a one-year extension for the Conditional Use Permit that was granted on June 18, 2025.

Conditional Use Permit approval may be extended for an additional one year as follows:

> 10.246 Expiration and Abandonment of Approvals
>
> 10.246.10 A conditional use permit shall expire unless a **building permit** is obtained within a period of one year from the date granted, unless otherwise stated in the conditions of approval. The **Board** may, for good cause shown, extend such period by as much as one year if such extension is requested and acted upon prior to the expiration date. No other extensions may be requested.

Planning Department Recommendation

1) *Vote to grant a one-year extension of the Wetland Conditional Use Permit to June 25, 2027.*

B. The request of **361 Hanover Steam Factory LLC (Owner)**, for property located at **361 Hanover Street** requesting a one-year extension the Site Plan approval granted on August 21, 2025.

Project Background

On August 21, 2025, the Planning Board granted Site Plan approval for the property referenced above. The applicant is working on post approval conditions in order to obtain a building permit. The applicant has yet to obtain a building permit and has requested the one-year extension per Section 2.14 of the Site Plan Regulations below.

Section 2.14 of the Site Plan regulations allows for an extension:

Section 2.14 Approval Expiration and Extension

1. Site plan approval by the Planning Board shall expire unless used (obtain a Building Permit) within a period of one (1) year from the date granted.

2. The Planning Board may, for good cause shown, extend such period by as much as one (1) year if requested and acted upon prior to the expiration date.

Planning Department Recommendation

1) *Vote to grant a one-year extension of the Site Plan Approval to August 21, 2027.*

C. Chairman's Updates and Discussion Items

D. Board Discussion of Regulatory Amendments and Other Matters

VI. ADJOURNMENT

PLANNING BOARD
PORTSMOUTH, NEW HAMPSHIRE

EILEEN DONDERO FOLEY COUNCIL CHAMBERS
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE

6:00 PM Non Public Session, Conference Room A
7:00 PM Public Hearings begin **April 16, 2026**

MEMBERS PRESENT: Rick Chellman, Chairman; Anthony Coviello**,** Vice-Chair; Karen Conard, City Manager; Joseph Almeida, Facilities Manager; Beth Moreau, City Councilor; Members Paul Giuliano, Andrew Samonas**,** William Bowen, Ryann Wolf; and Alternates Frank Perier and Logan Roy

ALSO PRESENT: Peter Britz, Planning & Sustainability Department Director

MEMBERS EXCUSED: None.

Chair Chellman called the regular meeting to order at 7:00 p.m.

I. APPROVAL OF MINUTES

A. Approval of the **March 26, 2026** meeting minutes.

Mr. Giuliano moved to approve the March 26 minutes as presented, seconded by Vice-Chair Coviello. The motion passed with all in favor, with Ms. Conard, Councilor Moreau, and Mr. Almeida abstaining.

II. DETERMINATIONS OF COMPLETENESS [Video timestamp 6:55]

SUBDIVISION REVIEW

A. The request of **Paul J. Griffin Family Trust (Owner)**, for property located at **0 South Street** and **Richards Avenue** requesting Preliminary and Final Subdivision approval to subdivide one lot into two conforming lots with associated improvements. Said property is located on Assessor Map 112 Lot 24A and lies within the General Residence A (GRA) District.

Mr. Giuliano moved that the Board determine that Item A is complete according to the Subdivision Review Regulations (contingent on the granting of any required waivers under Section IV of the agenda) and to accept the applications for consideration. Mr. Samonas seconded. The motion passed with all in favor.

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SITE PLAN REVIEW

A. The request of **1151 Sagamore Avenue CBC LLC (Owner),** for property located at **1151 Sagamore Avenue** requesting Site Plan Review approval for the demolition of the existing structure and construction of four (4) standalone condominium single family structures with associated site improvements. Said property is located on Assessor Map 224 Lot 19 and lies within the Mixed Residential Office (MRO) District.

Councilor Moreau noted that the address number 1151 was missing from the owner's company name in the petition and should be added so that it reads 1151 Sagamore Avenue CBC LLC.

Councilor Moreau moved that the Board determine that Item A is complete according to the Site Plan Review Regulations (contingent on the granting of any required waivers under Section IV of the agenda) and to accept the applications for consideration. Ms. Wolf seconded. The motion passed with all in favor.

B. REQUEST TO POSTPONE. The request of **Brora LLC (Owner),** for property located at **150 Portsmouth Boulevard** requesting Site Plan Review Approval for the construction of three (3), six (6) story multifamily residential buildings with associated site work including parking, driveway access, utility, drainage, landscaping, and lighting improvements and reconstruction of Portsmouth Boulevard in front of the development. Said property is located on Assessor Map 213 Lot 12 and lies within the Office Research (OR) and Gateway Neighborhood Overlay (GNOD) Districts. **REQUEST TO POSTPONE**

*At the applicant's request, Vice-Chair Coviello moved to **postpone** the petition to the May 21 meeting, seconded by Councilor Moreau.*

Councilor Moreau asked if the petitioner gave a reason for postponing, noting that the Board received emails from some abutters who did not get the postponement notice. Mr. Britz said the petitioner did not provide a reason and that there was no rule stating that the petitioner had to notify everyone. It was further discussed. [Timestamp 9:32]

The motion passed with all in favor.

III. PUBLIC HEARINGS -- OLD BUSINESS

A. The request of **Double MC LLC (Owner)**, for property located at **134 Pleasant Street** requesting Site Plan Review approval for redevelopment of the site to include reuse and expansion of the existing structure, and construction of a new structure, for residential and commercial uses with associated site improvements. Said property is located on Assessor Map 116 Lot 30 and lies within the Character District 4 (CD4) and Historic Districts. (LU-25-138)

Mr. Almeida recused himself from the petition, and Mr. Roy took a voting seat.

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SPEAKING TO THE PETITION [Timestamp 12:28]
Project engineer John Chagnon (via Zoom), owner Mark McNabb, civil engineer Shawn Tobey, architect Tracy Kozak, and transportation engineer Rebecca Brown were present. Mr. Chagnon noted that the project appeared before the Board at the March meeting but the petition was tabled for a City Council review relating to an easement and that the issue was ongoing. He said the team decided to rework the site to provide vehicular access from Pleasant Street only, so the plans were revised to place a vehicular turn around at the west that would maintain the garage access. He reviewed the site plan and said the changes were mostly in the west end of the access. He said some parking spaces were eliminated so that a driver could turn around if they could not find a parking space. He said the exiting access to the Parrott Avenue parking lot would be kept only for emergency access and would have a gate. He said the concerns of the abutters were addressed by adding the setback locations to the architectural plans. He said a Geotech report was submitted and that traffic studies were updated to show traffic only coming in and out of the entrances on Pleasant Street. He said the trip generation and bike issues were addressed. He said the driveway use was not changed and the proposed parking was increased from 48 to 86 spaces. He said TAC addressed the drainage connections.

[Timestamp 20:24] Ms. Brown reviewed the revised scope for traffic counts along Pleasant Street and the traffic operations analysis. Vice-Chair Coviello asked why the number of trips on the site was reduced when the square footage on the site was increased. Ms. Brown said there were two elements, 1) the residential use represented an increase but the existing office use would be more square footage than previously, and 2) there would be a 6400-sf bank, so the square footage would decrease by 3,000 square feet. She said there would still be two drive-thru windows and further explained why the trips would not increase. Vice-Chair Coviello asked if the applicant would use the amount of office space on the lot or would do it per building. Ms. Brown said it would be the entire site. Vice-Chair Coviello asked if a person walking into the building would gain access to the lobby that had access to the back office. Ms. Kozak said the office suite was accessed from Pleasant Street using a different entrance. Vice-Chair Coviello said it seemed to be multiple offices that were all less than 27,000 square feet and that the applicant was taking advantage of amenities that were not part of the building. Ms. Brown said it would still be a net reduction in trip generation because the bank portion created much of that reduction. Mr. Samonas said the square footage numbers on the plan did not match the ones that Ms. Brown cited. Ms. Kozak explained that the room tags on the plan were measured to the inside face of the outside walls, so there were a few dozen square feet of discrepancy in the wall's thickness. Ms. Brown said the 17,000 square feet was separate from the bank.

[Timestamp 33:50] Chair Chellman referred to the drive-thru and said the applicant was continuing to use a nonconforming use because they were not changing the outside where the cars parked to do bank business. Mr. Chagnon said the use was the same and the change was operational because the drive-thru was in the same place and accessed a type of delivery for the transaction that was in the same place. Chair Chellman asked if the existing building was associated with the use in the new building. Mr. Chagnon said the tube went to the new building or a different location but the point of use is the same. It was further discussed. Chair Chellman said it was a new nonconforming use on the property, which was not permitted, and he read the definition. After further discussion, he said the Board could not approve a site plan that did not

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conform to the zoning ordinance. Mr. McNabb said a bank is a permitted use in either building and was never a part of a definition of a building, noting that it was always a pneumatic tube and not an interaction between a person and a driver. Chair Chellman said if the banking stayed inside the existing building, it would be different. Mr. McNabb said his team would have done so if they had known. He asked to have the petition continued so they could try to keep the teller component in the existing building. It was further discussed.

[Timestamp 51:35] Mr. Bowen asked if the stormwater went under the Parrott Avenue parking lot. Mr. McNabb said the current sewer and drainage went to the Parrott Avenue lot and that he agreed to spend the money for a new separated drain that the City Council would have to approve, and if they did not approve it, it would just stay combined. Mr. Bowen asked about the upcoming wetlands Conditional Use Permit (CUP). Mr. Chagnon said they would apply for one but that the City would apply for the permit. He said the Department of Public Works (DPW) reviewed all the permits and the application and that the Conservation Commission did not believe it would impact South Mill Pond. He said the Parrott Avenue pavement would be the same. It was further discussed. The drive-thru lane and canopies were discussed.

[Timestamp 1:00:03] Mr. McNabb asked for a continuance. He said they could do a few things, including continuing to work with the Legal Department to see if there was a different interpretation that could be accepted, going before the Board of Adjustment (BOA) for a variance, or revising their floor plans with the bank and not changing that component.

There was no public hearing.

DECISION OF THE BOARD [Timestamp 1:02:35]

*Vice-Chair Coviello moved to **continue** the petition to the May 21 meeting. Councilor Moreau seconded.*

Vice-Chair Coviello said it was a good project but that the Board was just making sure that they were following the rules regarding the drive-thru tube in the new building. Councilor Moreau agreed and thanked the applicant for his patience.

The motion passed with all in favor, with Mr. Almeida recused.

IV. PUBLIC HEARINGS – NEW BUSINESS

A. The request of **J. Paul Griffin Family Trust (Owner)**, for property located at **0 South Street and Richards Avenue** requesting Preliminary and Final Subdivision approval to subdivide one lot into two conforming lots with associated improvements. Said property is located on Assessor Map 112 Lot 24A and lies within the General Residence A (GRA) District. (LU-26-19)

SPEAKING TO THE PETITION [Timestamp 1:04:07]

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Alexx Monastiero of Chinburg Properties and civil engineer Shawn Tobey were present. Ms. Monastiero said they wanted to divide the parcel into two residential lots, each with a single family home and a driveway. She said the driveways would be off South Street and the utilities, drainage and sewer would be in the back of the property. She said they would have more details as they went through the building permit process. She briefly explained the parcel's history.

Councilor Moreau said she appreciated the turnaround in the driveway because the cars would not have to back out onto South Street. Mr. Giuliano asked if the trees would remain. Ms. Monastiero explained which trees would be removed. Mr. Samonas said South Street had the largest conflict of traffic due to the school stop sign and crossing lanes and other traffic. He said he understood Lot 2 having access to the driveway but asked why Lot 1 could not exit onto Richards Avenue. Ms. Monastiero said DPW was not in favor of it due to the drainage lines, and the project could not meet the zoning requirements for the distance of the proposed driveway to the corner. Ms. Samonas said one driveway would be safer and thought Richards Avenue would be the superior access point. Mr. Tobey said they considered it but there was a sharp turn and a blind spot. He said the Technical Advisory Committee (TAC) agreed that the applicant's choice was the safer one because it was farther away from the Richards Avenue intersection and that the driveways were in the safest location. Chair Chellman asked if the applicant had considered just a Lot 2 driveway. Mr. Tobey agreed but said the problem was the turnarounds. He said if there was a shared driveway, the garage bays would face each other and create onsite turning movements. Chair Chellman suggested leaving the Lot 2 garage the way it was and not having the Lot 1 garage doors facing Lot 2. It was further discussed. Mr. Almeida said it seemed like the two houses would be mirror images of each other. Ms. Monastiero said the two custom homes would be unique from one another.

Chair Chellman opened the public hearing.

SPEAKING TO, FOR, OR AGAINST THE PETITION [Timestamp 1:19:45]

Michael Griffin of 579 Sagamore Avenue said his great-grandfather M. J. Griffin acquired the property from Elwyn Avenue all the way across South Street to Miller Avenue and created eight house lots that were now all occupied. He said his uncle Paul Griffin inherited the property in 1964 and placed animals on it, which became a part of Portsmouth's legacy.

Carol Milcher of 480 Richards Avenue said her driveway was the last one on Richards Avenue going up to South Street, so there was no space to put driveways on the other side of Richards Avenue. She said the driveways were dangerous because of all the schoolchildren.

No one else spoke, and Chair Chellman closed the public hearing.

DECISION OF THE BOARD [Timestamp 1:24:37]

1) *Mr. Giuliano moved that the Board find that the Subdivision Application meets the requirements set forth in the Subdivision Rules and Regulations and to adopt the findings of fact as presented. Vice-Chair Coviello seconded. The motion passed with all in favor.*

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*2) Mr. Giuliano moved that the Board grant Preliminary and Final Subdivision Approval with the following **conditions**:*

2.1) Property monuments shall be set as required by the Department of Public Works prior to the filing of the plat.

2.2) GIS data shall be provided to the Department of Public Works in the form as required by the City.

2.3) Any easement plans and deeds for which the City is a grantor or grantee shall be reviewed and approved by the Planning and Legal Departments and accepted by City Council.

2.4) The final plat and all easement plans and deeds shall be recorded concurrently at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.

Councilor Moreau seconded. The motion passed with all in favor.

B. The request of **Atlas Commons LLC (Owner)**, for property located at **581 Lafayette Road** requesting a second one-year extension of the Site Plan for two 4-story additions to the existing building that will total 72 residential units with associated site improvements including lighting, utilities, landscaping, and stormwater treatment/management and a Conditional Use Permit from Section 10.5B72 for increased density, building height and footprint. Said property is located on Assessor Map 229 Lot 8B and lies within the Gateway Corridor (G1) District. (LU-23-189)

SPEAKING TO THE PETITION [Timestamp 1:26:15]

Project engineer John Chagnon (via Zoom) reviewed the application and said the new CUP included density, building height, and footprint variances and had modifications to setbacks to Lafayette Road as well as public improvements in another lot and zone. He said the 72 units would have 7.6 percent community space and a building footprint of 42,434 square feet, noting that those items were a part of the May 2024 approval. He said the proposal was a mixed-use building, so the restaurants would remain. He said the parking was compliant, the parking use would be 165 spaces where 161 are required, and there would be no change in traffic or direction of drainage flow. He said the density bonus was being handled with public realm and a minor wetland fill was approved. He said the community space would have an outdoor café and a pocket park, but there would be a significant area of offsite open space that would be maintained by the applicant. He said the CUP modifications were all previously approved. He said the plan had minor parking and utility changes. He said the Trees and Greenery Committee approved the park component and TAC's three stipulations were met.

Mr. Bowen asked if there was still a provision for 15 affordable housing units. Mr. Chagnon agreed and said the workforce housing document was in the packet.

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Chair Chellman opened the public hearing.

SPEAKING TO, FOR, OR AGAINST THE PETITION [Timestamp 1:33:00]

Anna Kay Vorsteg, Executor Director of the Cross Roads House. said she wanted to hear more about what was meant by affordable. She said the site plan extension could consider whether there were in fact low-income folks who would want to access the bus stop across the street. She said there was a hazard in crossing Lafayette Road for people from Cross Roads and now possibly people from across the street. She said she tried to get extensions on the lights because people with disabilities could not safely cross the road.

No one else spoke, and Chair Chellman closed the public hearing.

DECISION OF THE BOARD [Timestamp 1:34:55]

Vice-Chair Coviello said low income housing and affordable housing were codified things and explained how affordable housing was different from low-income housing. He said the proposed low-income housing was really work force low market-rate housing. Mr. Samonas said none of the bus stops were on the existing site plan and that they fell on City property. Councilor Moreau said she would ask the City Council whether DPW could review the timing issues with the lights. Ms. Conard said City Engineer Eric Eby would have to coordinate with NHDOT.

1) *Mr. Giuliano moved that the Board finds that the Conditional Use Permit application meets the criteria set forth in Section 10.5B11 and 10.5B73 and to adopt the findings of fact as presented. Mr. Almeida seconded. The motion passed with all in favor.*

2) *Mr. Giuliano moved that the Board grant modifications of standards from Section 10.5B22.40 Special Setback Requirements on Lafayette Road, Section 10.5B73.20 to allow the public realm improvements to be located in a different zoning district, Section 10.5B34.80 to allow a building with 72 units, Section 10.5B41.80 to allow 7.6% community space where 10% is required, and to allow a building footprint of 42,434 square feet where 24,000 is allowed. Mr. Almeida seconded. The motion passed with all in favor.*

3) *Mr. Giuliano moved that the Board grant the Conditional Use Permit as presented. Mr. Almeida seconded. The motion passed with all in favor.*

4) *Mr. Giuliano moved that the Board grant a second one-year extension of the site plan to May 16, 2027, incorporating all of the conditions from the May 23, 2024 letter of decision and the **condition** below:*

   4. 1) Applicant must obtain final approval of the catch basin from DPW.

Mr. Almeida seconded. The motion passed with all in favor.

C. The request of **1151 Sagamore Avenue CBC LLC (Owner),** for property located at **1151 Sagamore Avenue** requesting Site Plan Review approval for the demolition

of the existing structure and construction of four (4) standalone condominium single family structures with associated site improvements. Said property is located on Assessor Map 224 Lot 19 and lies within the Mixed Residential Office (MRO) District. (LU-25-178)

Mr. Bowen recused himself from the petition, and Mr. Perier took a voting seat.

SPEAKING TO THE PETITION [Timestamp 1:39:39]

Alexx Monastiero of Chinburg Properties, Kevin Neville of CBC Financial, and Drew Olehowski of Haley Ward were present. Ms. Monastiero said they proposed four detached condos with a shared driveway access that would be served by public water and sewer and fire sprinkling systems. She said the drainage and stormwater would be designed by Haley Ward and there would be a landscaping plan. She said the project was reviewed and supported by TAC.

[Timestamp 1:42:30] Vice-Chair Coviello confirmed that the four homes would look like the renderings in the packet. Mr. Samonas asked what would happen if there was a trench next to the ledge and if more than 10 feet of ledge on the second home had to be removed. Mr. Olehowski said the trench behind the house would capture offsite runoff and that he did not expect that more ledge would be removed than shown on the plan. Vice-Chair Coviello asked if the applicant talked to TAC about having the driveway go more towards the north. Mr. Olehowski said TAC asked to have the driveway come off Wentworth Road but that it would require taking out most of the front yard of the first building and would also make it difficult for emergency vehicles. He said the proposed driveway's location was the best one and further explained it. Vice-Chair Coviello suggested moving all the structures south. Mr. Olehowski said they felt that the proposed plan would work. Mr. Samonas asked if guest parking was required on the site. Mr. Olehowski said the buildings had garages and driveways that would be available to guests.

Chair Chellman opened the public hearing.

SPEAKING TO, FOR, OR AGAINST THE PETITION

No one spoke, and Chair Chellman closed the public hearing.

DECISION OF THE BOARD [Timestamp 1:49:02]

1) *Mr. Giuliano moved that the Board find that the Site Plan Application meets the requirements set forth in the Site Plan Regulations Section 2.9 Evaluation Criteria and adopt the findings of fact as presented. Ms. Conard seconded. The motion passed with all in favor, with Mr. Bowen recused.*

*2) Mr. Guiliano moved that the Board grant Site Plan Approval with the following **conditions**:*

Conditions to be satisfied subsequent to final approval of site plan but prior to the issuance of a building permit or the commencement of any site work or construction activity:

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2.1) If applicable, any easement plans and deeds for which the City is a grantor or grantee shall be reviewed and approved by the Planning and Legal Departments and accepted by City Council.

2.2) The site plan and any easement plans and deeds shall be recorded at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.

2.3) The applicant shall provide an access easement to the City for water valve access and leak detection. The easement shall be reviewed and approved by the Planning and Legal Departments prior to acceptance by the City Council.

2.4) Any site development (new or redevelopment) resulting in 15,000 square feet or greater ground disturbance will require the submittal of a Land Use Development Tracking Form through the Pollutant Tracking and Accounting Program (PTAP) online portal. For more information visit https://www.cityofportsmouth.com/publicworks/stormwater/ptap

Conditions to be satisfied subsequent to commencement of site work and construction activity but prior to release of surety bond or certificate of occupancy:

2.5) The Engineer of Record shall submit a written report (with photographs and engineer stamp) certifying that the stormwater infrastructure was constructed to the approved plans and specifications and will meet the design performance.

2.6) A stormwater inspection and maintenance report shall be completed annually and copies shall be submitted for review to the City's Stormwater Division/ Public Works Department.

Mr. Almeida seconded. The motion passed with all in favor.

D. The request of **Peter Evans** and **Julie Myers Revocable Trust (Owner),** for property located at **323 Jones Ave** requesting a Wetland Conditional Use Permit from Section 10.1017.50 for the construction of a set of exterior stairs to access an ADU above an existing garage which is located within the wetland buffer area. The stairs will create approximately 96 s.f. of impact within the buffer. The stairs will create approximately 96 s.f. of impact within the buffer. Said property is located on Assessor Map 222 Lot 72 and lies within the Single Residence B (SRB) District. (LU-26-28)

SPEAKING TO THE PETITION [Timestamp 1:53:38]

The owner Peter Evans was present. He said he wanted to turn the upstairs apartment into a 750-ft ADU and that the stairs would be the main entry and exit to the ADU.

The Board had no questions, and Chair Chellman opened the public hearing.

SPEAKING TO, FOR, OR AGAINST THE PETITION

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No one spoke, and Chair Chellman closed the public hearing.

DECISION OF THE BOARD [Timestamp 1:54:58]

1) Mr. Samonas moved that the Board find that the Conditional Use Permit Application meets the requirements set forth in Section 10.1017.50 of the Ordinance and adopt the findings of fact as presented. Ms. Conard seconded. The motion passed with all in favor.

*2) Mr. Samonas moved that the Board grant the Conditional Use Permit with the following **conditions**:*

2.1) In accordance with Section 10.1018.40 of the Zoning Ordinance, applicant shall permanently install wetland boundary markers, which may be purchased through the City of Portsmouth Planning & Sustainability Department. It is recommended that markers be placed near the existing stone wall at the rear of the property at 50-foot intervals.

2.2) Applicant shall place crushed stone below the proposed staircase to help with infiltration of stormwater.

2.3) Applicant shall construct the staircase with at least ¼ - ½" spacing between any boards to allow for permeability.

Ms. Conard seconded. The motion passed with all in favor.

E. REQUEST TO POSTPONE The request of **Brora LLC (Owner),** for property located at **150 Portsmouth Boulevard** requesting Site Plan Review Approval for the construction of three (3), six (6) story multifamily residential buildings with associated site work including parking, driveway access, utility, drainage, landscaping, and lighting improvements and reconstruction of Portsmouth Boulevard in front of the development. Said property is located on Assessor Map 213 Lot 12 and lies within the Office Research (OR) and Gateway Neighborhood Overlay (GNOD) Districts. **REQUEST TO POSTPONE** (LU-25-114)

DECISION OF THE BOARD (**Note**: the vote was taken at the beginning of the meeting).

*At the applicant's request, Vice-Chair Coviello moved to **postpone** the petition to the May 21 meeting. Councilor Moreau seconded. The motion passed with all in favor.*

V. OTHER BUSINESS

A. Chairman Updates and Discussion Items [Timestamp 1:59:15]

Chair Chellman said the Master Plan was underway and a meeting was scheduled with the Historic District Commission (HDC) on May 28 but the Chambers room was not available, so another option would be found. He said the Community Campus Open House would be held the following week. He said Mayor McEachern wanted to have a session about Master Plan topics

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that would include ideas about having an expedited review process that tied in with having a fixed set of regulations so that simple projects could easily get through a less complicated path of review. He said it would also include discussion about having neighborhood centers and adding one to the Gateway Areas. He said there would be a joint meeting with the Conservation Commission to discuss wetlands and CUPS in the future.

B. Board Discussion of Regulatory Amendments and Other Matters

Councilor Moreau suggested that it clearly be stated at the beginning of a meeting that when something is postponed, the public hearing is also postponed so that any member of the public who was there to speak to it would be aware and not wait for hours. Mr. Samonas asked if TAC's comments or summary could be incorporated into the minutes.

VI. ADJOURNMENT

The meeting adjourned at 9:05 p.m.

Submitted,

Joann Breault
Planning Board Meeting Minutes Taker

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Findings of Fact | Site Plan Review
City of Portsmouth Planning Board

Date: 4-9-26 **REV by Applicant**
Property Address: 134 Pleasant Street
Application #: LU – 25-138
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:

Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of the all conditions necessary to obtain final approval.

Site Plan Regulations Section 2.9 Evaluation Criteria - in order to grant site plan review approval, the TAC and the Planning Board shall find that the application satisfies evaluation criteria pursuant to NH State Law and listed herein. In making a finding, the TAC and the Planning Board shall consider all standards provided in Articles 3 through 11 of these regulations.

	Site Plan Review Regulations Section 2.9 Evaluation Criteria	**Finding (Meets Standard/Criteria)**	**Supporting Information**
1	Compliance with all City Ordinances and Codes and these regulations.	**Meets** **Does Not Meet**	Applicable standards: In our opinion the Project complies with the intent and language of the Ordinance requirements; see the Zoning Development Standard Table for details. The project has received HDC Approval.
2	Provision for the safe development, change or expansion of use of the site.	**Meets** **Does Not Meet**	The site changes have been vetted as safe. Construction safety will be developed in the construction process.
3	Adequate erosion control and stormwater management practices and other mitigative measures, if needed, to prevent adverse effects on downstream water quality and flooding of the property or that of another.	**Meets** **Does Not Meet**	The site development plan introduces stormwater management that will include an advanced drainage treatment structure as well as stormwater separation form the combined stormwater / sewer flow.

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	Site Plan Review Regulations Section 2.9 Evaluation Criteria	Finding (Meets Standard/Criteria)	Supporting Information
4	Adequate protection for the quality of groundwater.	**Meets** **Does Not Meet**	Runoff is captured in city collection system. No groundwater withdrawal proposed as the water supply is city. No nearby production wells.
5	Adequate and reliable water supply sources.	**Meets** **Does Not Meet**	Water supply is Public - City. Supply confirmed by TAC review. Plumbing fixtures will be water conserving.
6	Adequate and reliable sewage disposal facilities, lines, and connections.	**Meets** **Does Not Meet**	Sewer connection is Public - City. Connection(s) reviewed by TAC. Sewer Separation project included.
7	Absence of undesirable and preventable elements of pollution such as smoke, soot, particulates, odor, wastewater, stormwater, sedimentation or any other discharge into the environment which might prove harmful to persons, structures, or adjacent properties.	**Meets** **Does Not Meet**	The proposed office and residential uses are similar to other adjacent uses and will not contribute in a significant manner to the types of impacts associated with the items listed. Proposal has been reviewed and approved by TAC.
8	Adequate provision for fire safety, prevention and control.	**Meets** **Does Not Meet**	Building locations and access reviewed by Portsmouth Fire Department at TAC and plans meet expectations.
9	Adequate protection of natural features such as, but not limited to, wetlands.	**Meets** **Does Not Meet**	The project is on a previously developed Urban site, so there are no wetland impacts. The off-site drainage connection will require a NHDES Shoreland Permit for the impact, which has been approved. A NHDES Wetland Permit, which is in submission, and a Portsmouth Wetland CUP, also in process.
10	Adequate protection of historical features on the site.	**Meets** **Does Not Meet**	The existing building footprint will be preserved, and the new building façades are HDC Approved.
11	Adequate management of the volume and flow of traffic on the site and adequate traffic controls to protect public safety and prevent traffic congestion.	**Meets** **Does Not Meet**	The development team has worked with TAC to address any potential issues. Traffic will use the Pleasant Street entrances exclusively.
12	Adequate traffic controls and traffic management measures to prevent an unacceptable increase in safety hazards and traffic congestion off-site.	**Meets** **Does Not Meet**	The City's Traffic Engineer has been involved in the review of the submission material.

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	Site Plan Review Regulations Section 2.9 Evaluation Criteria	Finding (Meets Standard/Criteria)	Supporting Information
13	Adequate insulation from external noise sources.	**Meets** **Does Not Meet**	Construction will match the required building code requirements.
14	Existing municipal solid waste disposal, police, emergency medical, and other municipal services and facilities adequate to handle any new demands on infrastructure or services created by the project.	**Meets** **Does Not Meet**	Trash will be collected in the basement trash collection area. TAC Review included Fire and Police Departments; all concerns addressed in design.
15	Provision of usable and functional open spaces of adequate proportions, including needed recreational facilities that can reasonably be provided on the site	**Meets** **Does Not Meet**	Site development proposal has conforming open space – calculations provided. Development includes landscape improvements to the site to create a potential public space along the westerly pedestrian corridor.
16	Adequate layout and coordination of on-site accessways and sidewalks in relationship to off-site existing or planned streets, accessways, bicycle paths, and sidewalks.	**Meets** **Does Not Meet**	Adequate access for the site development is provided from Pleasant Street. Bicycle storage provided on site.
17	Demonstration that the land indicated on plans submitted with the application shall be of such character that it can be used for building purposes without danger to health.	**Meets** **Does Not Meet**	Land is suitable for the intended purpose, currently used as a banking facility with offices. Development is adding residential use. The site is an urban building site, and plans follow ordinance and guidelines; see TAC approval.
18	Adequate quantities, type or arrangement of landscaping and open space for the provision of visual, noise and air pollution buffers.	**Meets** **Does Not Meet**	Significant Landscaping improvements proposed, meeting open space requirements and improving the property.
19	Compliance with applicable City approved design standards.	**Meets** **Does Not Meet**	See HDC and TAC approvals.
	Other Board Findings:		

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HALEY WARD

9 April 2026

Rick Chellman, Planning Board Chair
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

RE: Request for Site Plan Review at 134 Pleasant Street, Proposed Revision to Banking, Professional Office, and Apartments

Dear Mr. Chellman and Planning Board Members:

On behalf of Double MC, LLC, we are pleased to submit the attached **Site Plan Review Application Update** for the above-mentioned project and request that we be placed on the agenda for your **April 16, 2026,** Planning Board Meeting. The property is shown on the City of Portsmouth Assessors Map 116 as Lot 30. The project is within the City of Portsmouth Character District 4 (CD4) and Historic District Commission (HDC) Zoning Districts. The site is currently developed with an existing building and a surface parking lot. The project is located at 134 Pleasant Street, adjacent to a Right-of-Way which is a part of the city Parrott Avenue parking lot, which we believe the applicant has rights to use. The current use is a banking facility with drive-up, and offices. The Site Plan was reviewed at the March 26, 2026 Planning Board meeting. The application was tabled for a City Council review of the proposed off-site access across city property.

The Planning Board's Comment for the above-mentioned project, from the Planning Board meeting on March 26, 2026 is repeated below:

> *The Board voted to request that the City Council consider whether and how, by license or otherwise, the adjacent City property might be used for access and/or drainage purposes, in order to provide the Planning Board with guidance on those topics and to continue the application to the April 16th meeting. At the request of the applicant, and for the information of the City Council, the Board preferred the proposed site plan option for egress over the Parrott Avenue lot over the other option presented for consideration.*

The item was on the City Council agenda for the April 6, 2026 Council meeting. The City Council did not engage with a decision, but tabled the issue to a date in the future. Given the complexities of this issue, the applicant has engaged the design team to re-work the project to provide vehicular access from Pleasant Street, and abandon vehicular access over city property. The revised plans reflect a re-design to provide turn-around space at the west end of the parking area, maintain the garage access location, and move a loading zone, with the associated landscaping and drainage revisions. This re-alignment did result in the loss of site parking spaces, but the available site parking still meets the ordinance parking requirements.

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The Planning Board also received feedback from the public in regard to the application. This feedback is presented below, with our response in **bold** text:

Potential Noise Issues from the Rooftop Utilities: *Estimates of noise generation. The submission contains no noise estimates. The project includes rooftop HVAC equipment.* **The updated design plans show that the mechanical equipment is set-back approximately 12 feet from the lot line on the West Building; and the East Building is so far from the lot line there is no potential impact. Attached is a Specification Cut Sheet for the equipment being used. This equipment noise generation is at the *daytime permitted noise level* at the equipment. Being set-back twelve (12) feet from the lot line, the DBA will be under the 45 DBA *nighttime requirement*. Furthermore, measuring the noise at 4 feet above the ground level, as required by the noise ordinance, suggests that this equipment will not register anything above 45 DBA.**

Geotechnical Evaluation: *The submission contains no geotechnical report.* **The attached Geotechnical report shows that the applicant has engaged with this issue and understands the need for a study of the ground conditions prior to construction.**

City Council Licenses: *The submission will require a license for the off-site drainage connection.* **Every project has drain lines, electrical conduits lines, water lines, and sewer lines in public land and streets, some requiring a license. Getting a license prior to Planning Board approval is not a good procedure as a utility license request that went to the City Council prior to Planning Board approval would be pre-mature and something not yet approved and subject to change. The 134 Pleasant property has a combined sewer and drain line connection exiting the site and connecting through the Parrot Avenue parking lot. This development is providing much needed separation. If the City Council does not grant the license, then we won't separate sewer and drainage. The drainage connection portion of the project requires a review by the Portsmouth Conservation Commission. The Commission reviewed the plans on Wednesday April 8, 2026, and voted to recommend Planning Board approval. We request that the Planning Board approve the application with a condition that the drain line obtain the necessary City Council approval.**

Traffic Study Update: *Trip Generation calculations didn't seem to reflect the proposed site building expansion.* **The project team is re-working the trip assignment based on all traffic entering and existing from Peasant Street and will provide information to the Board after city scoping and review prior to the Planning Board meeting.**

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Project Overview

The project consists of the adaptive reuse of the existing structure, with horizontal and vertical building expansions, and below grade (*basement*) parking, shown as "*Building A*". A new building will be constructed in the area between the existing Citizens Bank building and Pleasant street, shown as "*Building B*". The construction of the new building will bring the site into conformance with the desire to enliven the street frontage. New exterior treatments and entrance locations are proposed, along with re-imaged pedestrian friendly sidewalks and landscaping improvements. The proposal is to increase the banking footprint, keeping the drive through in the same location, expanding the professional offices, and adding apartments. In addition to the banking facility and drive-up, the banking services will be expanded to include Financial Services and the Kennebunk Savings Bank headquarters.

Site Zoning and Parking

The project is within the City of Portsmouth Character District 4 (CD4) Zone. The proposed Bank, Professional Office and apartment uses are allowed in the zone. Proposed residential use at the site is proposed to be apartments, with a one space per unit parking requirement. The proposed redevelopment meets the required parking under the Portsmouth Zoning Ordinance (PZO), for the proposed uses, as detailed in the attached parking calculations, accounting for the shared use factors. The site will provide 58 parking spaces in the basement level and 28 exterior surface parking spaces for a total of 86 spaces provided. This is an increase of 48 spaces from the current site configuration. Based on the parking calculations the total parking required for the redevelopment including off-site parking commitments is 84 spaces, so there is a 2-space excess.

Site History

First National Stores, Inc. purchased and merged the Universalist Church's two lots in 1952: the empty lot of the burned church, and the parsonage house lot. They also purchased a vacant lot behind these two lots from the City of Portsmouth and merged it with the other two lots, creating one lot, large enough to support a modern grocery store with parking lot. First National Stores, Incorporated was formed in April 1925 as a merger of three New England grocers; the John. T. Connor Company, Ginter Company and O'Keefe's, Incorporated. The Economy Grocery Company (Connecticut) was acquired in 1929. The Nicholson-Thackray Company (Rhode Island), Davey Brothers Company (Connecticut) and Modern Grocery Company (also of Connecticut), were bought during 1929, as well. With these mergers, First National Stores operated 2,002 units. They developed a prototype architectural design in the 1950's, with large storefront windows, and a decorative trellis banding along the wide flat roof. This style was replicated across the nation and became the basis of design for the mid-century supermarket chain. First National's "private label" merchandise underwent a massive re-labeling program during 1968, with the new "Finast" branding used. In 1978, Pic-N-Pay acquired First National Stores. In 1982, they sold the Pleasant Avenue property to Portsmouth Trust Bank, preferring to focus on their existing Pic-N-Pay store on Islington Street. At this time the building underwent a major remodel, recladding the stone with brick and granite, and adding large canopies to the east and south.

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Portsmouth Trust sold to First NH Bank, who later sold to Citizens Bank. In 1998 it was purchased by a private landowner, and then was sold in 2023 to the current owner, Double MC, LLC.

Pedestrian and Vehicular Circulation

The proposed site pedestrian connections are the Building B east banking storefront from the Pleasant Street sidewalk, the Building B main banking entrance on the south side in the parking area, the Building A west entrance (adjacent to the vehicular ramp to the garage basement parking level), and the Building B residential entrance on the north side. Building A emergency pedestrian egress is also provided on the east side of Building A. The plan shows a revision to the west end of the site where the proposal to access city property has been eliminated in favor of access only from Pleasant Street with a turn-around at the westerly end of the parking area, adjacent to the lower-level parking access. A newly located loading zone is in the vicinity. The plan does not alter the Parrott Avenue parking lot connection, but provides a gate and would allow for emergency access for the Portsmouth Fire Department in that location.

Screening and Landscaping

The site landscaping consists of the preservation of significant trees on the south, west, east and sides, and the addition of landscaping along Pleasant Street, and on the west side along a pedestrian access corridor to Court Street, to include a seating area with benches. The design is detailed on the Landscape Plans.

Water and Sewage Systems

The municipal water and sewer systems should not be impacted by the change in the proposed use to residential, and the building expansion. The existing water services will be re-used for the expansion. The sewer system will be served by the removal of surface water flow, decreasing sewer flows during storm events.

Stormwater Management

The site drainage patterns will remain, with the addition of an off-site connection to the city separated drainage system, thereby removing storm water flow from sewer treatment. The re-design is in keeping with the city's stormwater management and treatment requirements. The storm water runoff Water Quality Volume (WQV) will be treated in a state-of-the-art Jellyfish stormwater treatment system, designed to meet Low Impact Development (LID) standards. Added treatment prior to the Jellyfish is provided in the Cascade pre-treatment device. This off-site work will require New Hampshire Department of Environmental Services (NHDES) permits for working within the Shoreland Protection Zone and the Tidal Buffer Zone, as well as a Portsmouth Wetland Conditional Use Permit. These permits are not anticipated to be an issue, given the benefits of the proposed removal of stormwater from sewer flow and the enhanced stormwater treatment. The Portsmouth Conservation Commission has already reviewed the impacts and recommends approval.

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Site Lighting

Building mounted site lighting will be introduced on pedestrian corridors and at building entrances to provide a welcoming and safe pedestrian experience. The plan set includes visual illumination of the building lighting levels. Parking lot lighting will be provided for the at-grade exterior parking spaces, and the lighting levels are shown on the Lighting Plans. Fixture cut sheets are provided.

Site Utilities and Solid Waste

Site utilities include natural gas, underground electric and communications services. Existing services will be updated and revised as needed to service the facility. Natural gas service(s) from Pleasant Street will serve each building. Electrical service will be an upgrade to the existing service, which does not meet code. Currently the service is a primary feed that goes to a transformer located *within* the existing building. The proposed service consists of the placement of a new pole with a drop to a proposed transformer, then secondary service to a newly located electrical room. Solid waste will be collected within the building basement and disposed privately. The trash room is shown on the basement plans.

Bicycle Parking

The submission includes bicycle parking locations, 38 spaces internally and 7 spaces externally. The parking calculations include the allowable 3 space parking deduction based on providing an excess of bicycle parking above the requirement.

The submission includes the following:

- ✓ Site Plan Application Checklist
- ✓ NHDES Shoreland PBN Permit 2026-00409
- ✓ Portsmouth HDC Approval (and Amendment) LU 25-138
- ✓ Zoning Development Standards Table
- ✓ Portsmouth Parking Demand Analysis
- ✓ Green Building Statement
- ✓ Utility Will Serve Letters
- ✓ HVAC Equipment Technical Specifications
- ✓ Parking Lot Lighting Specifications
- ✓ Geotechnical Report
- ✓ Typical Foundation Detail
- ✓ Property Deed
- ✓ Site Photographs
- ✓ Site History Timeline
- ✓ Existing Drive-up Location
- ✓ Average Grade Plane; Building A and Building B

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The following full-size plans are included in our submission:

- Cover Sheet: This shows the Development Team, Legend, Site Location, and Site Zoning.
- Proposed License Plan: This plan shows the location of the proposed Drainage License.
- Existing Conditions Plan V101: This plan shows the site boundary and the existing development area conditions in detail.
- Existing Utility Plan V102: This plan shows the location and elevations of the existing utilities.
- Site Orthophoto Plan V103: This plan shows the existing site, and the site relationship to the NHDES Shoreland Zone.
- Parrott Avenue Parking Lot Survey V105: This plan shows the result of a boundary survey of the Parrott Avenue parking lot, based on the city subdivision plan of record.
- Demolition Plan C101: This plan shows site demolition.
- Site Plan C102: This plan shows the proposed building expansion and site improvements.
- Landscape Plans L1-L2: These plan show the proposed site landscaping.
- PB 0.1 to 2.1 Architectural Plans - Floor Plans, Roof Plans, Elevations, and Vignettes showing the proposed building construction.
- Utility Plan C103: This plan shows the proposed utility connections.
- Basement Plan C103A: This plan shows the proposed basement drainage and utility connection locations, and the basement parking.
- On Site Grading and Drainage Plan C104: This plan shows the proposed grading and drainage on site.
- Off Site Grading and Drainage Plan / Profile C104A: This plan shows the proposed grading and drainage off site.
- Off Site Grading and Drainage Plan Orthophoto C104B: This plan shows the drainage off site.
- Drainage Area Plan C104C: This plan shows the site drainage contributing areas.
- Lighting Plan C105: This plan shows the proposed parking lot lighting.
- Nighttime Lighting Plan C105A: This plan shows the proposed building lighting.
- Truck Turning Plan C106: This plan shows the proposed delivery truck turning movements.
- Fire Truck Turning Plan C107: This plan shows the proposed fire truck turning movements.
- NHDES Permit Plan – City Property: This plan shows the location of the proposed buffer zone impact areas.
- Details D 501 to D 507: These plans shows the proposed construction details.

We look forward to Planning Board review of this submission and look forward to an in-person presentation at your meeting.

Sincerely,

John R. Chagnon, PE

P:\NH\5010156-McNabb_Properties\1532-134 Pleasant St., Portsmouth-JRC\03-WIP_Files\Applications\City of Portsmouth Site Plan\Planning Board Site Plan Submission Letter 4-8-2026.doc

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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: Double MC, LLC Date Submitted: 12/22/2025

_____ Application # (in City's online permitting): LU 25 - 138

Site Address: 134 Pleasant Street _____ Map: 116 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	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)**	Online	
☐	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)**	V101 Existing Conditions	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 Page	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)**	V101 Existing Conditions	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)**	Existing Conditions Plan	N/A
☐	List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)**	Cover Sheet	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)**	N/A	N/A
☐	Title (name of development project), north point, scale, legend. **(2.5.4.2A)**	Cover Sheet	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)**	V101 Existing Conditions Plan	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.	V101 Existing Conditions Plan	
☐	**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).	C102 Site Plan	
☐	**4. Parking and Loading: (2.5.4.3D)** • Location of off street parking/loading areas, landscaped areas/buffers; • Parking Calculations (# required and the # provided).	C102 Site Plan	
☐	**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).	C103 Utility Plan	
☐	**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.	C103 Utility Plan	

☐	**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.	C103 Utility Plan	
☐	**8. Solid Waste Facilities: (2.5.4.3H)**	Architectural Plan	
	• 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.	C 104 Grading Plan	
☐	**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.	C105 Lighting Plan	
☐	**11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)**	All Fixtures	
☐	**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.	L1 & L2 Landscape Plans	
☐	**13. Contours and Elevation: (2.5.4.3L)** • Existing/Proposed contours (2 foot minimum) and finished grade elevations.		
☐	**14. Open Space: (2.5.4.3M)** • Type, extent and location of all existing/proposed open space.	C102 Site Plan	
☐	**15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)**	C 104 Grading Plan	
☐	**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).	Cover Letter & Architectural Plans	
☐	**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)**	Supplemental Materials	
☐	Indicate where Low Impact Development Design practices have been incorporated. **(7.1)**	Detail Sheets	
☐	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)**	Supplemental Materials	
☐	Inspection and Maintenance Plan **(7.6.5)**	Supplemental Materials	

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)**	Online & On Plans	
☐	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)**	Supplemental Materials	

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)**	Cover	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)**	C102 Site Plan	N/A

Applicant's Signature: _____ **Date:** 12/19/2025

The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

SHORELAND PERMIT-BY-NOTIFICATION 2026-00409

NOTE CONDITIONS

PERMITTEE:	**DOUBLE MC LLC** **MARK A MCNABB** **10 PLEASANT ST STE 300** **PORTSMOUTH NH 03801**
PROJECT LOCATION:	**134 PLEASANT ST, PORTSMOUTH** **TAX MAP #116, LOT #30**
WATERBODY:	**SOUTH MILL POND**
APPROVAL DATE:	**MARCH 02, 2026**

EXPIRATION DATE: MARCH 02, 2031

Shoreland Permit by Notification 2026-00409 has been accepted as complete in accordance with RSA 483-B:5-b, I, (a). The New Hampshire Department of Environmental Services (NHDES) hereby issues this Shoreland Permit by Notification, with conditions pursuant to RSA 483-B:6, II that work may proceed pursuant to RSA 483-B:5-b, I, (a). The conduct of regulated activities other than those shown in the accepted Permit by Notification will invalidate this notice.

DESCRIPTION OF APROVED IMPACT:
Impact 824 SF of protected shoreland in order to redevelop a portion of parking lot, resulting in a net decrease in impervious area from 592 SF to 501 SF.

THE FOLLOWING STANDARD PROJECT CONDITIONS SHALL BE MET PURSUANT TO ENV-WQ 1406.20:

1. Erosion and siltation control measures shall be installed prior to the start of work, be maintained throughout the project, and remain in place until all disturbed surfaces are stabilized.
2. Erosion and siltation controls shall be appropriate to the size and nature of the project and to the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to wetlands or surface waters.
3. No person undertaking any activity in the protected shoreland shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards established in Env-Wq 1700, and the requirements in Env-Wq 1404.01(a) and(b).
4. Any fill used shall be clean sand, gravel, rock, or other suitable material.
5. For any project where mechanized equipment will be used, orange construction fence shall be installed prior to the start of work at the limits of the temporary impact area as shown on the accepted plans; be maintained throughout the project; and remain in place until all mechanized equipment has been removed from the site.

ANY INDIVIDUAL CONDUCTING WORK UNDER THIS PERMIT IS ADVISED OF THE FOLLOWING:

1. During construction, a copy of this permit should be posted on site in a prominent location visible to inspecting personnel.
2. This permit does not convey a property right, nor authorize any injury to property of others, nor invasion of rights of others.
3. Pursuant to Env-Wq 1406.21, transfer of this permit to a new owner requires notification to, and approval of, NHDES.
4. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding exemplary natural communities or protected species. This permit does not authorize in any way the take of

threatened or endangered species, as defined by RSA 212-A:2, or of any protected species or exemplary natural communities, as defined in RSA 217-A:3.

APPROVED:

Clara Cooper

Clara G. Cooper
Permitting Specialist, Shoreland Program
Wetlands Bureau, Land Resources Management
Water Division

THIS PERMIT IS NOT VALID UNTIL SIGNED BY THE PARTIES BELOW (Env-Wq 1406.21(c))

PERMITTEE SIGNATURE (required)

PRINCIPAL CONTRACTOR SIGNATURE (required, if any)

CITY OF PORTSMOUTH
Planning & Sustainability Department
1 Junkins Avenue
Portsmouth, New Hampshire 03801
(603) 610-7216

HISTORIC DISTRICT COMMISSION

March 3, 2026

Double Mc LLC
10 Pleasant Street, Suite 300
Portsmouth, New Hampshire 03801

RE: **Certificate of Approval for property located at 134 Pleasant Street, Portsmouth NH 03801 (LU-25-138)**

Dear Property Owner:

The Historic District Commission, at its regularly scheduled meeting of **Wednesday, January 07, 2026**, considered your application for new construction to an existing structure (construct additions and other exterior modifications) and the new construction of a multi-use building on the site as per plans on file in the Planning & Sustainability Department. Said property is shown on Assessor Map 116 Lot 30 and lies within the Character District 4 (CD4) and Historic District. As a result of said consideration, the Commission voted to **grant** the Certificate of Approval with the following stipulations:

1. The masonry exterior cladding materials shall require further conversation.

2. In-place on site samples shall show jointing and technique along with some alterations in the choice of materials.

Findings of Fact

A. Purpose and Intent

The proposed application meets the following objective(s) of the Historic District (as provided in Section 10.631.20 of the Zoning Ordinance):

-Maintain the integrity of the District.

B. Review Criteria

The proposed application also meets the following review criteria of the Historic District (as provided in Section 10.635.70 of the Zoning Ordinance):

-Consistent with special and defining character of surrounding properties.

The Commission's decision may be appealed up to thirty (30) days after the vote. Any action taken by the applicant pursuant to the Commission's decision during this appeal period shall be at the applicant's risk. Please contact the Planning & Sustainability Department for more details about the appeals process.

Approvals may also be required from other City Committees or Boards. Once all required approvals have been received, applicant is responsible for applying for and securing a building permit from the Inspection Department prior to starting any project work.

This approval shall expire unless a building permit is issued within a period of one (1) year from the date granted by the Historic District Commission unless an extension is granted by the Commission in accordance with Section 10.636.70 of the Zoning Ordinance.

Please note that any changes or modifications to this application require review and approval from the Commission prior to implementation and additional fees may apply.

The minutes and audio recording of this meeting are available by contacting the Planning & Sustainability Department.

Very truly yours,

Izak Gilbo, Planner 1
for Reagan Ruedig, Chair of the Historic District Commission

cc: Shanti Wolph, Chief Building Inspector
Rosann Maurice-Lentz, City Assessor

Francis X. Bruton, Esq., Attorney, Bruton & Berube, PLLC
Tracy Kozak, ARCove Architects
John Chagnon, Haley Ward
James J. Steinkrauss, Esq., Attorney, Rath, Young & Pignatelli, PC
Michael K. O'Neil, Esq., Attorney, Rath, Young & Pignatelli, PC

CITY OF PORTSMOUTH

Planning Department
1 Junkins Avenue
Portsmouth, New
Hampshire 03801

(603) 610-7216

HISTORIC DISTRICT COMMISSION

April 8, 2026

Double MC LLC
10 Pleasant Street, Suite 300
Portsmouth, NH 03801

RE: **Administrative Approval for property located at 134 Pleasant Street (LUHD-1017)**

Dear Owner:

The Historic District Commission, at its regularly scheduled meeting of **Wednesday, April 01, 2026**, considered your request for administrative approval for revisions to a previously approved design (widen the approved penthouse, add dormers to the hipped roof and add a cupola for stair/elevator overrun). As a result of said consideration, the Commission voted to **grant** the Administrative Approval with the following stipulation:

1. Option #2 shall be used with no stair/elevator overrun.

The minutes and audio recording of this meeting are available by contacting the Planning Department.

Very truly yours,

Izak Gilbo

Izak Gilbo, Planner 1
for Reagan Ruedig, Chair of the Historic District Commission

cc:

134 Pleasant Street, Portsmouth NH

ZONING DEVELOPMENT STANDARD 01/21/2026

CD4 (CD-4, HDC): CHARACTER DISTRICT 4

	REQUIRED	EXISTING	PROPOSED - Renovation	PROPOSED - New Building
Height	2 stories with short 3rd = **35' max**	2 stories, 19'-6"	2 STORIES, 19'-3"	2 STORIES, 28'-7"
Penthouses	may exceed bldg height by 2' (35+2=37'); max area 50% of roof	n/a	30'-3", 43%	n/a
Roof appurtenance	may exceed bldg height by 10' (35+10=45'), max area 30% roof	n/a	di	n/a
Façade Types	stoop, step, shopfront, officefront, recessed-entry, dooryard, gallery & arcade	n/a	SHOPFRONT	SHOPFRONT
Building Types	Rowhouse, Apartments, live/work, small or large commercial, mixed use, flex space & community.	commercial	large commercial & residential	large commercial & residential
Setback Front (principle) max	10	n/a	n/a	8'-6", principal façade
Setback Front (secondary) max	15	n/a	n/a	n/a
Side	NR	n/a	11" (north) and 62'-5" (south)	19'-3" (north) and 67'-2" (south)
Rear, min	>of: 5' from rear line or 10' from cl alley	n/a	19'-4"	150'
Front lotline buildout	50% min	n/a	n/a	52%
Lot area (sf)	NR	53,084		
LOT area per dwelling	NR	n/a		
Coverage, maximum	90%	21.2%	43.6%	
Footprint, max* 10.5a43.40	15,000	11,241	13,629	9,638
Ground floor area per use, max	15,000	11,241 (bank)	13,532	9,638
Open space, minimum	10%	> 10%	12.4%	
Permitted uses (cd4 & cd5)	multifamily, live/work, office, retail, restaurant (<500occ)	office (bank)	apartments & health club; physical therapy	apartments, bank, financial services
Block length, max (ft)	200	n/a	121'	104'-8"
Façade modulation length, max (ft)	80	n/a	n/a	27'-0"
Entrance spacing, max (ft)	50	n/a	50'	50'
Floor height above sidewalk, max	36"	4"	n/a	varies, max 4".
Ground floor height, min	12'	n/a	9'-11"	13'-8"
Second floor height, min	10'	n/a	8'-9"	11'-9"
Glazing, shopfront, min	70%	n/a	n/a	70%
Glazing, other	20%-50%	n/a	n/a	30%
Roof types(pitch)	flat, gable (6:12-12:12), hip(>3:12), gambrel/mansard(6:12-30:12)	flat	flat and hipped	flat and hipped
Parking, off-street	when >20 spaces, max spaces = 120% of min required is the max allowed. 10.1112.60 mixed used - some shared spaces allowed.	38	92	
Parking, Residential	1 per unit		21	
Parking, Bank & Financial Services	1 per 350 GFA		36	
Parking, Health Club / PT	1 per 250 GFA		29	

134 Pleasant Street

4/07/2026 revised

Parking Demand Analysis

Residential - dwelling units				parking
Level	**UNIT No.**	**QTY bedrooms**	**Area (sf)**	**spaces/unit**
2A	201	2	714	1
2A	202	2	817	1
2A	203	2	790	1
2A	204	2	789	1
2A	205	2	801	1
2A	206	1	665	1
2A	207	1	665	1
2A	208	2	765	1
2A	212	2	770	1
2A	213	1	665	1
2A	214	1	665	1
3A	301	1	605	1
3A	302	1	665	1
3A	303	2	943	1
3A	304	2	879	1
2A + 3A	209	2	1,056	1
2A + 3A	210	2	1,139	1
2A + 3A	211	2	1,058	1
2B + 3B	215	3	1,815	1
2B + 3B	216	4	1,778	1
2B + 3B	217	2	1,075	1
2B + 3B	218	2	1,345	1
subtotal, gross	**22**	**35**	**20,465**	**22**
Visitor Parking - 1 space per every 5 dwelling units (apartments) rounded up				5
total, gross				**27**
Bicycle Parking , Residential				
use	spaces required per use			TOTAL
multifamily dwellings	1 bicycle per 5 units where > 4 units			5
bicycle parking provided	outside			5
bicycle parking provided	inside			20
total bike parking provided - Residential				25
Car parking deduction = 1 car space for 6 excess bikes provided, max 5%:				
max deduction 5% allowed =	1.35	Rounded dn		(1)
Net Total Residential parking required				**26**

Commercial					
Building / Level	**Suite No.**	**Name**	**Gross Floor Area** (sf - measured to 6" out from inside face of exterior walls)	**sf/parking space**	**TOTAL spaces** (rounded up)
East 2B	221	OFFICE, FINANCIAL Services	3,423	350	10
East 1B	101	RETAIL BANKNG	6,339	350	19
East 1C	103	OFFICE, Professional/Business	1,687	350	5
West 1A	102	OFFICE, Professional/Business	12,311	350	36
subtotal, gross					**70**
Bicycle Parking , Commercial					
use	spaces required per use			TOTAL	
Commercial Use	1 bicycle per 10 spaces required			7	
bicycle parking provided	outside			5	
bicycle parking provided	inside			38	
total bike parking provided - Commercial				43	
Car parking deduction = 1 car space for 6 excess bikes provided, max 5%:					
max deduction 5% allowed =	3.5	parking spaces deduction		Rounded dn	(3)
Net Total Commercial parking required (round up)					**67**

Shared Parking 10.1112.60											
Total Parking Required	**Weekday**				**Weekend**				**Nighttime**		
Land Use	**daytime (8am-5pm)**	**spaces required (round up)**	**evening (6-12pm)**	**spaces required**	**daytime (8am-5pm)**	**spaces required (round up)**	**evening (6-midnight)**	**spaces required (round up)**	**(midnight-6am)**	**spaces required (round up)**	**Maximum TOTAL Required**
Apartments (Residential)	60%	16.0	100%	26.0	80%	21.0	100%	26.0	100%	26.0	
Retail Banking (Service)	60%	12.0	90%	33.0	100%	36.0	70%	26.0	5%	2.0	
Office (Professional, Business, Financial)	100%	51.0	20%	4.0	10%	2.0	5%	1.0	5%	1.0	
Shared Parking TOTAL Required		**79.0**		63.00		59.0		53.0		29.0	**79**
PARKING EASEMENT - 93 PLEASANT ST (HOTEL)											**5**
NET TOTAL PARKING REQUIRED (residential + commercial)											**84**

SUMMARY						
parking proposed - outside						28
parking proposed - inside		**26 tandems (*2) + 6 singles = 55**				**58**
Total parking proposed						**86**
EXCESS beyond Required *(Deficit)*						**2**
Existing total available onsite today						38
Proposed Net **Increase** (reduction) in parking						**48**

134 Pleasant Street

2025.12.22

Green Building Statement

WATER

- By reducing surface parking lot, water quality will be better protected.
- The project targets the use of low-flow fixtures to reduce indoor water consumption by at least 30% over current building code requirements, in alignment with EPAct 2005.

ENERGY

- By conducting early-phase energy study analysis, the basis of design for both the existing building with a deep energy retrofit and the new addition will target an Energy Use Intensity lower than code-compliant performance (IECC 2018), with a projected reduction of 30% (estimated EUI = 32). This will be validated by energy modeling in the next phase of design. The project will utilize a high-performance envelope (walls, roofs, floors, and fenestration). The project is also targeting an envelope design that reduces air infiltration and thermal bridging, paired with high-efficiency mechanical (HVAC) systems that include a heat-recovery ventilator (ERV) to recapture conditioned air and reduce overall energy consumption.
- The project will use LED lighting throughout with daylight sensors and other energy-management devices.
- Reduce Low level ozone (smog) -- Provide safe and secure bicycle storage. Use only low-VOC products for construction and operation.

MATERIALS & RESOURCES

- Minimize waste (during construction and operation)
- Use regional, renewable, low carbon footprint materials

INDOOR ENVIRONMENTAL QUALITY

- Thermal comfort -- Meet ASHRAE 55 Thermal Comfort Code. Address thermal envelope per above. Provide multiple zones of heating and cooling in each space.

- Indoor air quality (before and during occupancy) -- MEET ASHRAE 62 Ventilation Code in all occupied spaces.
- Views / connection to outdoors -- Provide views to outdoors for every regularly occupied space.
- Daylighting -- Achieve Daylight Factor of 2% minimum for every regularly occupied space.
- Individual controls (light, heat etc...) -- Provide individual controls for temperature and lighting.

EVERSOURCE ENERGY

January 12, 2026

1700 Lafayette Road
Portsmouth, NH 03801

Trevor S Emmons
603-332-7515
Trevor.emmons@eversource.com

134 Pleasant Street Site Redevelopment
Double Mc, LLC
10 Pleasant Street Suite 300
Portsmouth, NH 03801

Dear Mr. McNabb:

I am responding to your request to confirm the availability of electric service for the proposed 134 Pleasant Street Development project being constructed on your property. The Eversource Work Order Number is 22009732.

The proposed project consists of constructing a new 2-story building with an attic, and renovating and expanding an existing building with an additional floor and penthouse levels. Commercial Space and a total of 18 residential units are proposed. The proposed development will be constructed along Pleasant Street.

The developer will be responsible for the installation of all underground/overhead facilities and infrastructure required to service the new building. The service will be as shown on attached marked up Utility Plan C103 that shows the transformer location to service your proposed project. The proposed building service will be fed from locations to be determined by Eversource Engineering. The developer will work with Eversource to obtain all necessary easements and licenses for the proposed underground/overhead facilities listed above.

This letter serves as confirmation that Eversource has sufficient capacity in the area to provide service to this proposed development. The cost of extending service to the aforementioned location and any associated infrastructure improvements necessary to provide service will be borne by the developer unless otherwise agreed upon.

Eversource approves the locations shown; assuming the final installed locations meet all clearances, physical protection, and access requirements as outlined in Eversource's "Information & Requirements For Electric Supply" (https://www.eversource.com/content/docs/default-source/pdfs/requirements-for-electric-service-connections.pdf?sfvrsn=2). If you require additional information or I can be of further assistance please do not hesitate to contact me at our Portsmouth Office, 603-332-7515

Respectfully.

Trevor Emmons
NH Eastern Regional Engineer, Eversource

cc: (via e-mail)
Thomas Boulter, Eastern Region Operations Manager, Eversource
Nickolai Kosko, Field Supervisor, Electric Design, Eversource

Unitil
Northern Utilities, Inc.

January 29th, 2026

John Chagnon
Vice President/ Senior Project Manager
Haley Ward
200 Griffin Rd Unit 14
Portsmouth, NH 03801

Natural Gas to Mixed-Use Development at 134 Pleasant St. in Portsmouth, NH

Hello John.

Unitil/Northern Utilities Natural Gas Division has reviewed the requested site for two Natural Gas services.

Unitil hereby confirms that natural gas is available for both requested services for the proposed development at 134 Pleasant St in Portsmouth, NH.

If you have any questions, please contact me at 603-264-2033.

Sincerely,

Josh Wilk
Senior Business Development Rep
Unitil
T 603.227.4628
M 603.264.2033
F 603.294.5264
Email wilkj@unitil.com

MXZ-3D24NLHZ
23,600 BTU/H HYPER HEAT PUMP OUTDOOR UNIT

Job Name:

System Reference: Date:

GENERAL FEATURES

- INVERTER-driven compressor: An inverter-driven compressor generates the precise capacity needed to maintain a temperature set point.
- Thermal Differential 1°F
- Seacoast protection: Seacoast protection on heat exchanger and base panel (rated for 2,000 hrs. in accordance with ASTM B117 testing)
- Quiet operation: Outdoor units are as quiet as a typical conversation, and most indoor units are whisper quiet.
- Hyper-Heating INVERTER®: Hyper-heating performance offers 100% heating capacity at 5°F and 75% heating capacity at -13°F
- Fan motor overheating/voltage protection
- Compressor thermal protection
- Compressor overcurrent detection
- Built-in base pan heater
- High pressure protection

Specifications			System
Unit Type			MXZ-3D24NLHZ
Cooling at 95F[1] (Non-Ducted // Mixed // Ducted)	Maximum Capacity	Btu/h	23,600 // 23,600 // 23,600
	Rated Capacity	Btu/h	22,000 // 22,800 // 23,600
	Minimum Capacity	Btu/h	11,600 // 11,600 // 11,600
	Maximum Power Input	W	2,760 // 3,080 // 3,400
	Rated Power Input	W	1,693 // 2,027 // 2,360
	Power Factor (208V)	%	0.99 // 0.99 // 0.99
	Power Factor (230V)	%	0.99 // 0.99 // 0.99
Heating at 47F[2] (Non-Ducted // Mixed // Ducted)	Maximum Capacity	Btu/h	30,600 // 30,600 // 30,600
	Rated Capacity	Btu/h	25,000 // 24,800 // 24,600
	Minimum Capacity	Btu/h	12,800 // 12,800 // 12,800
	Maximum Power Input	W	2,890 // 3,715 // 4,540
	Rated Power Input	W	2,094 // 2,139 // 2,185
	Power Factor (208V)	%	0.99 // 0.99 // 0.99
	Power Factor (230V)	%	0.99 // 0.99 // 0.99
Heating at 17F[3] (Non-Ducted // Mixed // Ducted)	Maximum Capacity	Btu/h	25,000 // 24,800 // 24,600
	Rated Capacity	Btu/h	15,400 // 15,400 // 15,400
	Maximum Power Input	W	3,627 // 3,711 // 3,795
	Rated Power Input	W	1,590 // 1,776 // 2,015
Heating at 5F[4] (Non-Ducted // Mixed // Ducted)	Maximum Capacity	Btu/h	25,000 // 24,800 // 24,600
	Maximum Power Input	W	3,627 // 3,950 // 4,350
Heating at -13F[8] (Non-Ducted // Mixed // Ducted)	Maximum Capacity	Btu/h	20,400 // 20,200 // 20,000
	Maximum Power Input	W	2,955 // 3,317 // 3,678
Efficiency (Non-Ducted // Mixed // Ducted)	SEER2[1]		20 // 17.20 // 14.40
	EER2[1]		13 // 11.50 // 10
	HSPF2 (IV)[2]		10 // 9 // 8
	COP at 47°F[2]		3.50 // 3.40 // 3.30
	COP at 17°F at Maximum Capacity[3]		2.02 // 1.94 // 1.88
	COP at 5°F at Maximum Capacity[4]		2.02 // 1.84 // 1.66
	ENERGY STAR® Certified		Yes // Yes // No
Electrical	Electrical Power Requirements	V AC / V AC, ø, Hz	208 / 230, 1, 60
	Guaranteed Voltage Range	V AC	198 - 253
	Voltage: Indoor - Outdoor, S1-S2	V AC	208/230
	Voltage: Indoor - Outdoor, S2-S3	V DC	24
	Recommended Wire Size (Indoor - Outdoor)	AWG	14
	Short-circuit Current Rating (SCCR)	kA	5
	Recommended Fuse/Breaker Size	A	25
	MCA	A	29
	MOCP	A	49

NOTES
[1]Cooling at 95°F (Indoor: 80°F DB, 67°F WB // Outdoor: 95°F DB, 75°F WB)
[2]Heating at 47°F (Indoor: 70°F DB, 60°F WB // Outdoor: 47°F DB, 43°F WB)
[3]Heating at 17°F (Indoor: 70°F DB, 60°F WB // Outdoor: 17°F DB, 15°F WB)
[5]Heating at 5°F (Indoor: 70°F DB, 60°F WB // Outdoor: 5°F DB, 4°F WB)
[9]Heating at -13°F (Indoor: 70°F DB, 60°F WB // Outdoor: -13°F DB, -14°F WB)
Capacity varies based on the number of indoor units operating and the model of the Multi-zone Outdoor Unit. For reference to connected capacity charts, please refer to Multi-zone Outdoor Unit Operational Performance.
For actual capacity performance based on indoor unit type and number of indoor units connected, please refer to MXZ Operational Performance.
Although the maximum connectable capacity is 130%, the outdoor unit cannot provide more than 100% of the rated capacity.
Please utilize this over capacity capability for load shedding or applications where it is known that all connected units will NOT be operating at the same time.
* Indoor/Outdoor Unit Operating Temperature Range (Cooling Air Temp [Maximum / Minimum]):
• Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.
** Outdoor Unit Operating Temperature Range (Cooling Thermal Lock-out / Re-start Temperatures; Heating Thermal Lock-out / Re-start Temperatures):
• System cuts out in heating mode and automatically restarts at these temperatures.

Specifications are subject to change without notice.

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SPECIFICATIONS: MXZ-3D24NLHZ

Specifications			System
Unit Type			MXZ-3D24NLHZ
Outdoor Unit	Fan Motor Full Load Amperage	A	1.74
	Fan Motor Output	W	88
	Defrost Method		Reverse Cycle
	Blue Fin Heat Exchanger Coating		Yes
	Airflow Rate Cooling/Heating	CFM	2,239 / 2,378
	Sound Pressure Level, Cooling[1]	dB (A)	56
	Sound Pressure Level, Heating[2]	dB (A)	58
	Compressor Type		Twin Rotary
	Compressor Model		SRB280FDRMC
	Compressor Oil Type // Charge	Type // oz	RM68EH // 23.7
	External Finish Color		Munsell 3.0Y 7.8/1.1
	Base Pan Heater		Built-in
	Unit Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	37-13/32 x 13 x 31-11/32 [950 x 330 x 796]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	41-11/32 x 17-5/16 x 38-31/32 [1,050 x 440 x 990]
	Unit Weight	lbs [kg]	152 [69]
	Package Weight	lbs [kg]	178 [81]
ODU Operating Temp. Range	Cooling Intake Air Temp (Maximum / Minimum[C])	°FDB	115 / 14
	Cooling Thermal Lock-out / Re-start Temperatures	°FDB	10 / 14
	Heating Intake Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB	75, 65 / -13, -14
	Heating Thermal Lock-out / Re-start Temperatures**	°FDB	-22.5 / -14
Refrigerant	Type		R454B
	Pre-Charged Refrigerant Amount	lbs, oz	6, 3
	Maximum Pre-Charged Piping Length	ft	230
IDU Connection	Minimum Number of Connected IDU		2
	Maximum Number of Connected IDU		3
	Minimum Connected Capacity	Btu/h	12,000
	Maximum connected capacity	Btu/h	28,000
Piping	Liquid Pipe Size O.D. (Flared)	inch	A: 1/4 B: 1/4 C: 1/4
	Gas Pipe Size O.D. (Flared)	inch	A: 1/2 B: 3/8 C: 3/8
	Total Piping Length	ft [m]	230 [70]
	Farthest Piping Length	ft [m]	82 [25]
	Maximum Height Difference*[B], ODU above IDU	ft [m]	49 [15]
	Maximum Height Difference*[B], ODU below IDU	ft [m]	49 [15]
	Maximum Number of Bends for IDU		70

NOTES
[1]Cooling at 95°F (Indoor: 80°F DB, 67°F WB // Outdoor: 95°F DB, 75°F WB)
[2]Heating at 47°F (Indoor: 70°F DB, 60°F WB // Outdoor: 47°F DB, 43°F WB)
[3]Heating at 17°F (Indoor: 70°F DB, 60°F WB // Outdoor: 17°F DB, 15°F WB)
[5]Heating at 5°F (Indoor: 70°F DB, 60°F WB // Outdoor: 5°F DB, 4°F WB)
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** Outdoor Unit Operating Temperature Range (Cooling Thermal Lock-out / Re-start Temperatures; Heating Thermal Lock-out / Re-start Temperatures):
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OUTDOOR UNIT ACCESSORIES: MXZ-3D24NLHZ

Ball Valve	Refrigeration Ball Valve - 1/2	BV12FFSI2
	Refrigeration Ball Valve - 1/4	BV14FFSI2
	Refrigeration Ball Valve - 3/8	BV38FFSI2
	Refrigeration Ball Valve - 5/8	BV58FFSI2
Port Adaptor	Adaptor 1/2 x 3/8	PAC-SK88RJ-E
	Adaptor 1/2 x 5/8	PAC-SK89RJ-E
	Adaptor 1/4 x 3/8	PAC-493PI
	Adaptor 3/8 x 1/2	ADP3812
	Adaptor 3/8 x 5/8	PAC-SK90RJ-E
Control/Service Tool	Maintenance Tool Interface	PAC-USCMS-MN-1
Mini-Split Wire	14 Gauge 4 wire Armored MiniSplit Cable250 ft roll	SW144-250
	14 Gauge 4 wire Armored MiniSplit Cable50 ft roll	SW144-50
	14 Gauge 4 wire MiniSplit Cable250 ft roll	S144-250
	14 Gauge 4 wire MiniSplit Cable50 ft roll	S144-50
	16 Gauge 4 wire Armored MiniSplit Cable250 ft roll	SW164-250
	16 Gauge 4 wire Armored MiniSplit Cable50 ft roll	SW164-50
	16 Gauge 4 wire MiniSplit Cable250 ft roll	S164-250
	16 Gauge 4 wire MiniSplit Cable50 ft roll	S164-50
Stand	18 Single Fan Stand	QSMS1801M
	24 Single Fan Stand	QSMS2401M
	Condenser Wall Bracket	QSWB2000M-1
	Condenser Wall Bracket - Stainless Steel Finish	QSWBSS
	Outdoor Unit 3-14 inch Mounting Base Pair - Plastic	DSD-400P
	Outdoor Unit Stand 12 High	QSMS1201M
Mounting Pad	Condensing Unit Mounting Pad 16 x 36 x 3	ULTRILITE1
Air Outlet Guide	Air Outlet Guide 1 Piece	PAC-SH96SG-E
Snow/Rain Diverter	SnowRain Diverter	SRD-4
Control Interface	M-NET Interface for MXZ	PAC-IF01MNT-E
Hail Guards	Hail Guard	HG-A9
Drain Socket	Drain Socket	PAC-SG60DS-E
NOTES		

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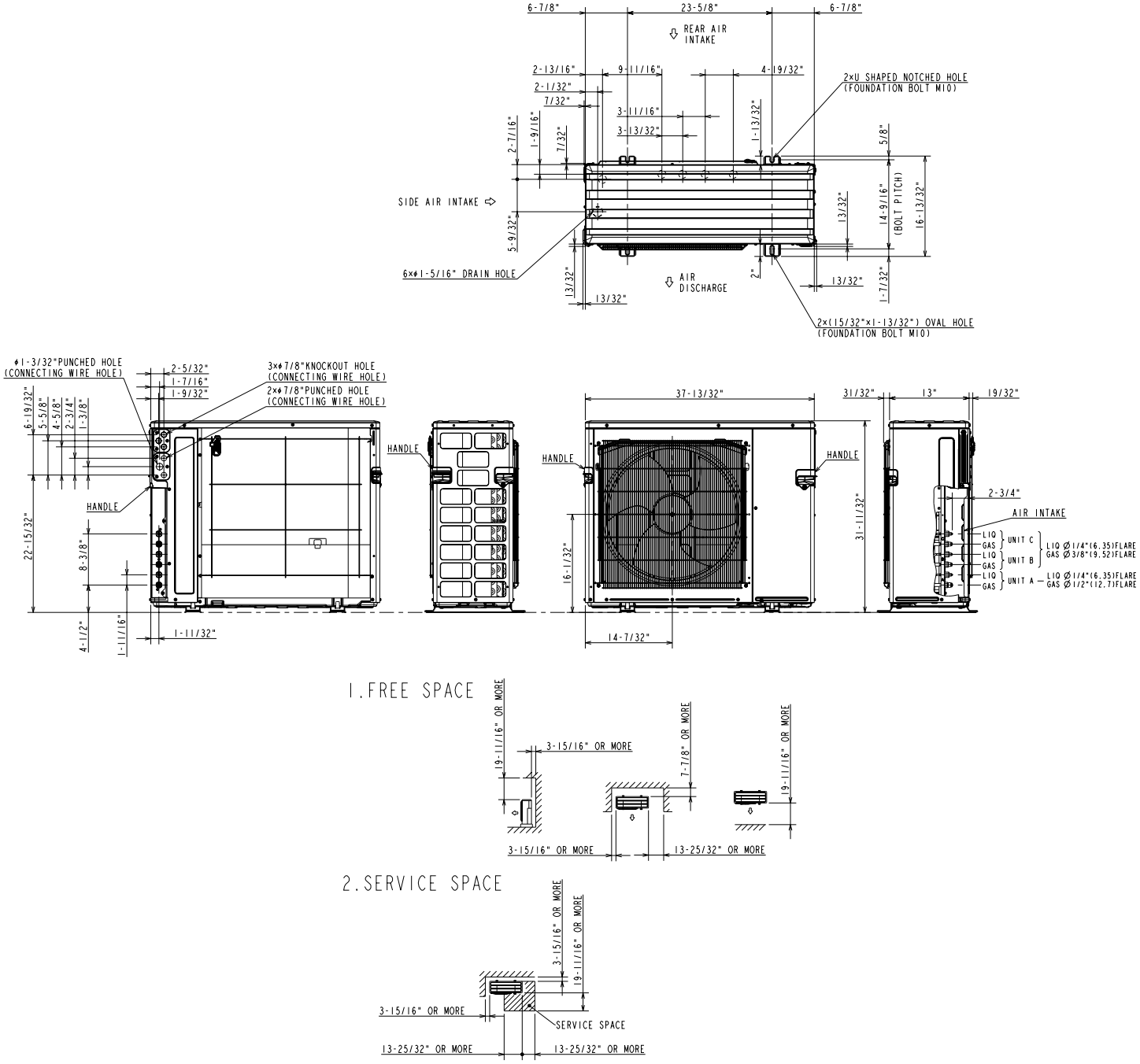
OUTDOOR UNIT DIMENSIONS: MXZ-3D24NLHZ

MXZ-3D24NLHZ-U1
MXZ-3D30NLHZ-U1



1.FREE SPACE

2.SERVICE SPACE

1340 Satellite Boulevard Suwanee, GA 30024
Toll Free: 800-433-4822 https://mitsubishicomfort.com

METUS_2025-07_PROPIN

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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 : _____

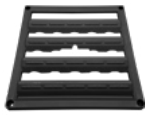
Have questions? Call us at (800) 436-7800

ACCESSORIES

MOUNTING ACCESSORIES

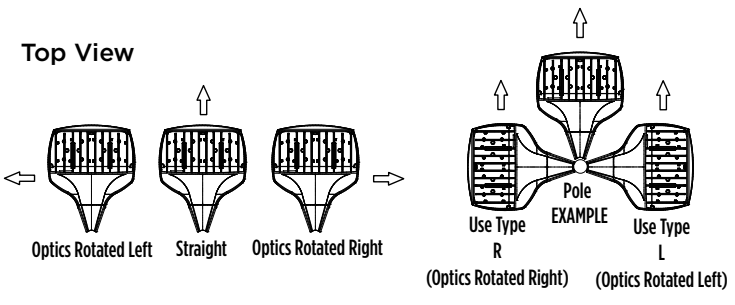
Side Arm	**Bullhorn Bracket** Mounts onto a 2" (51mm) IP, 2.375" (60mm) O.D. tenon and allows for mounting up to 4 adjustable slip fitter mount luminaires **Part Number: BKS PTB 2 CLR / BKS PTB 12 CLR (2 Luminaires)** **Part Number: BKS PTB 3-30 CLR / BKS PTB 13-30 CLR (3 Luminaires)** **Part Number: 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

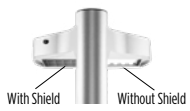


ACCESSORIES/OPTIONS

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 : _____

Have questions? Call us at (800) 436-7800

PHOTOMETRICS

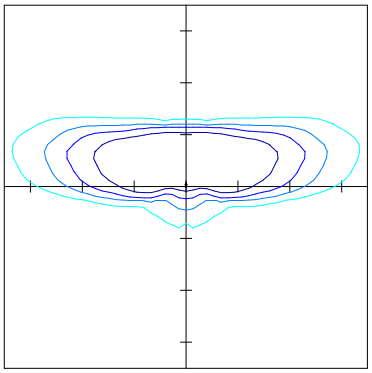
Back to Quick Links

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



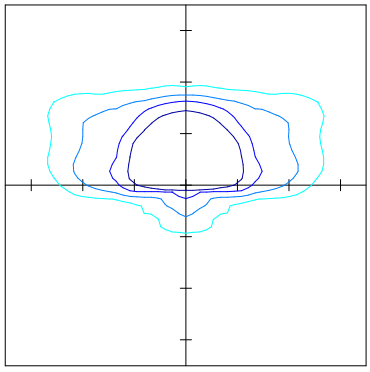
20' Mounting Height / 30' Grid Spacing

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



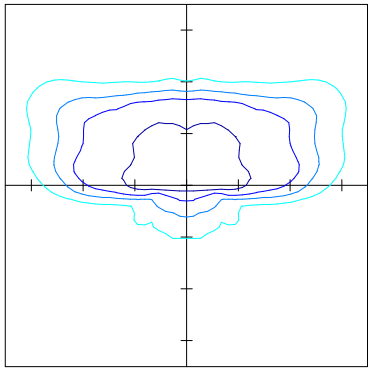
20' Mounting Height / 30' Grid Spacing

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



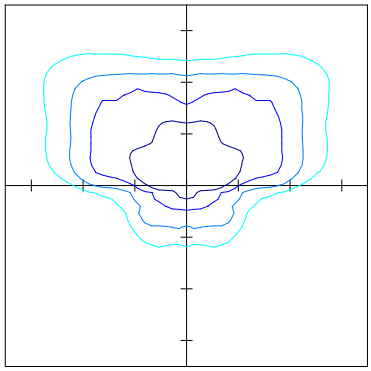
20' Mounting Height / 30' Grid Spacing

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



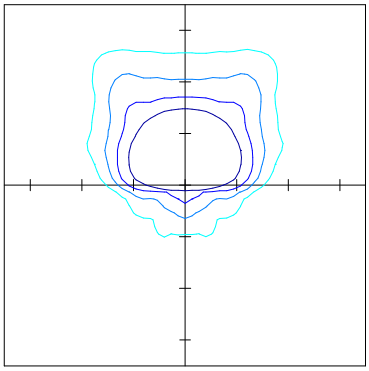
20' Mounting Height / 30' Grid Spacing

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



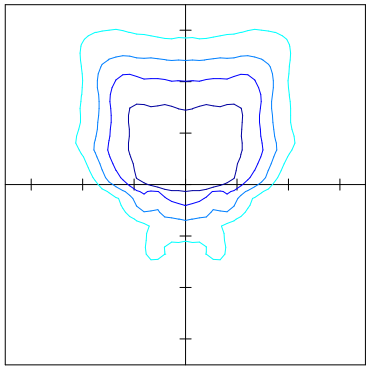
20' Mounting Height / 30' Grid Spacing

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



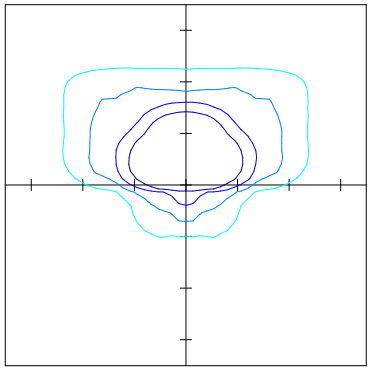
20' Mounting Height / 30' Grid Spacing

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



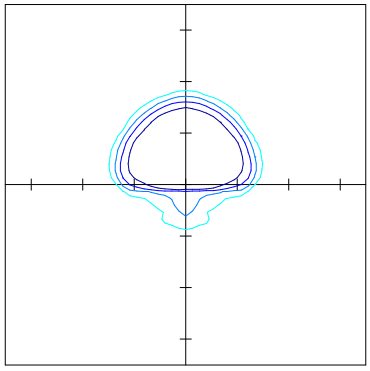
20' Mounting Height / 30' Grid Spacing

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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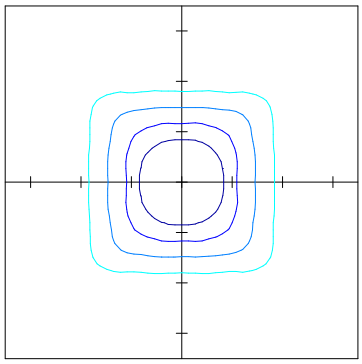
PHOTOMETRICS (CONTINUED)

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



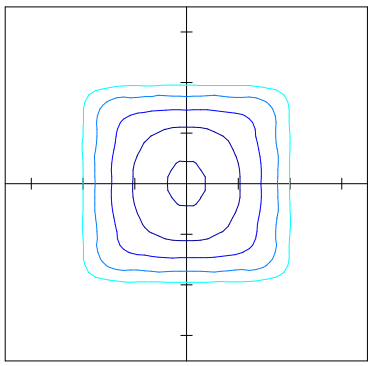
20' Mounting Height / 30' Grid Spacing

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



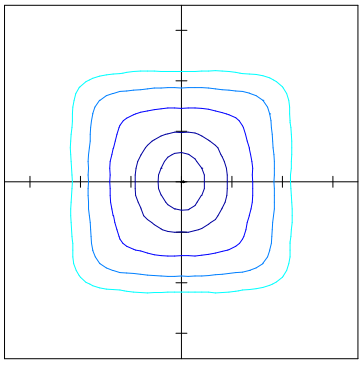
20' Mounting Height / 30' Grid Spacing

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



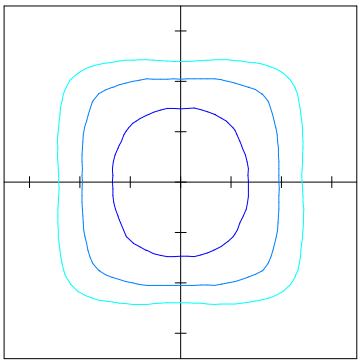
20' Mounting Height / 30' Grid Spacing

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



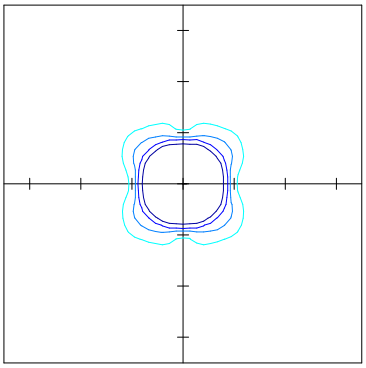
20' Mounting Height / 30' Grid Spacing

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



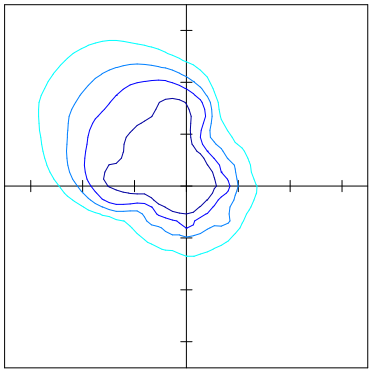
20' Mounting Height / 30' Grid Spacing

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



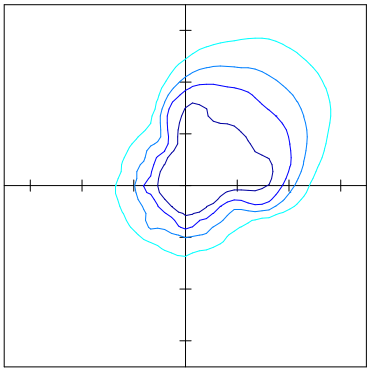
20' Mounting Height / 30' Grid Spacing

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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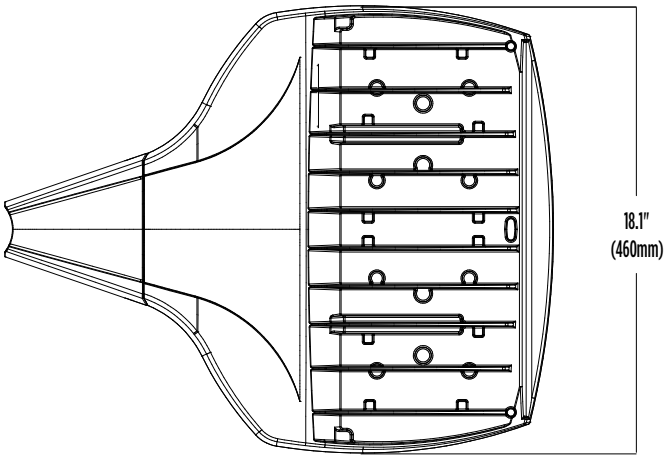


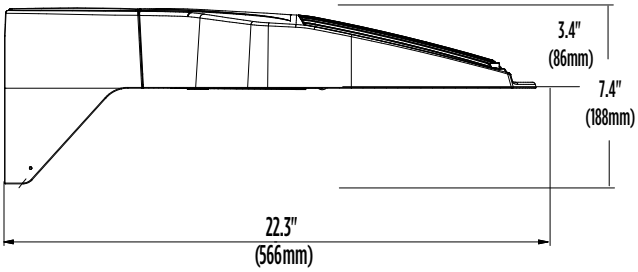
Luminaire EPA Chart - SA Side Arm		
Tilt Degree		0°
	Single	0.7
	D180°	1.3
	D90°	1.0
	T90°	1.4
	TN120°	1.5
	Q90°	1.4

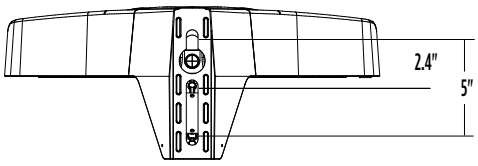
Luminaire EPA Chart - UA Universal Adjustable Arm						
Tilt Degree		0°	15°	30°	45°	60°
	Single	0.8	0.8	1.3	1.8	2.1
	D180°	1.5	1.9	2.5	3.2	3.8
	D90°	1.5	1.9	2.5	3.2	3.8
	T90°	1.8	2.1	2.7	3.2	3.8
	TN120°	1.8	2.3	3.4	4.3	5.0
	Q90°	1.8	2.1	2.7	3.2	3.8

Luminaire EPA Chart - MA Mast Arm		
Tilt Degree		0°
	Single	0.5

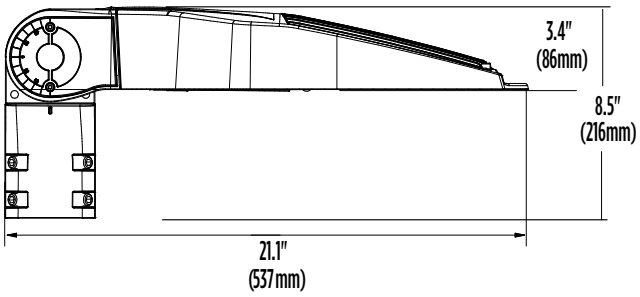
Luminaire EPA Chart - SF Adjustable Slip Fitter						
Tilt Degree		0°	15°	30°	45°	60°
	Single	0.7	1.3	1.4	1.8	2.2

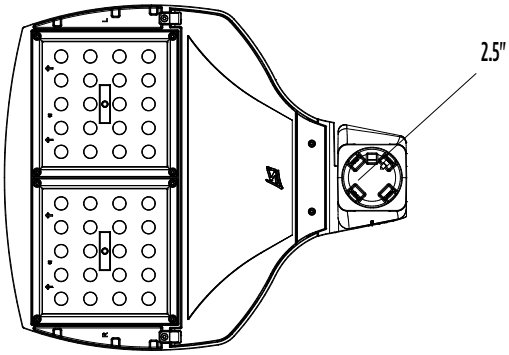
SA Universal Side Arm Mount



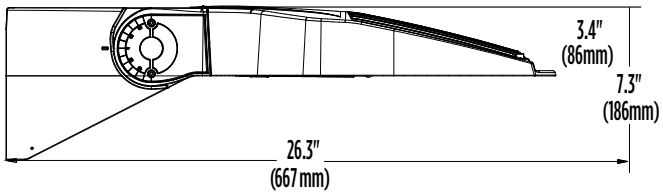


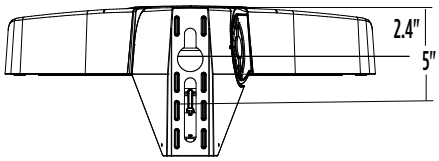
SF Adjustable Slipfitter



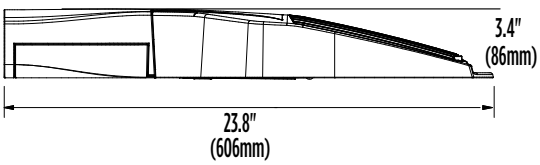


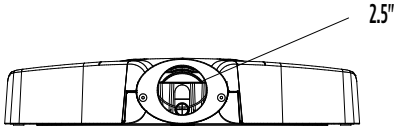
UA Universal Adjustable Arm





MA Mast Arm





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CONTROLS

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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 : _____

Have questions? Call us at (800) 436-7800

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]

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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

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DRILLING LOCATIONS

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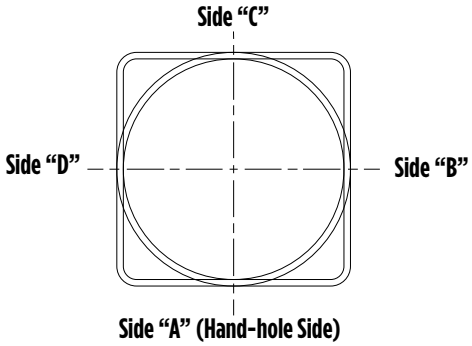
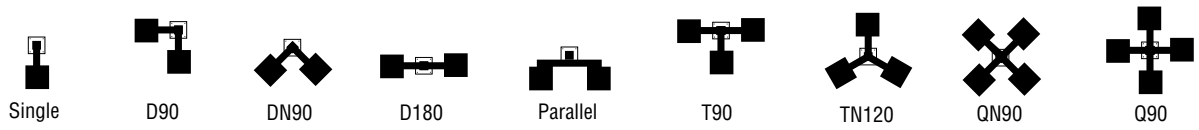
Sides	A	B	C	D
Hand-hole	X			
Single	X			
D180		X		X
D90	X			X
DN90[1]				
T90	X	X		X
TN120[2]				
Q90	X	X	X	X
QN90[3]				
Single FBO	X			
Double FBO		X		X



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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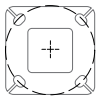
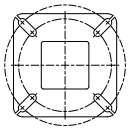
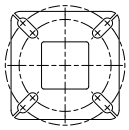
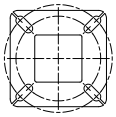
STANDARD BASEPLATE

	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

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PRODUCT DIMENSIONS

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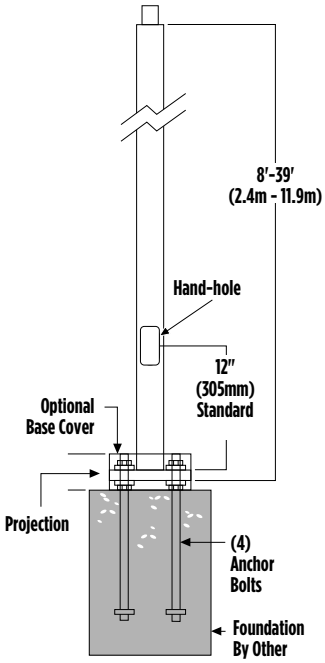
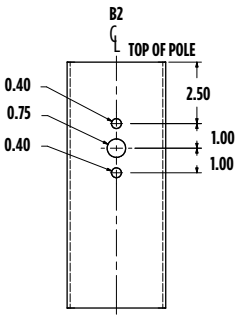
SQT –
N= 2-3/8" (60mm) O.D. x 4-3/4" (121mm) Tenon

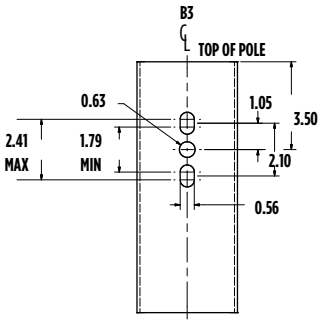


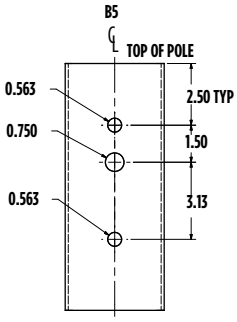
SF –
Single Flood
Pole Preparation

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

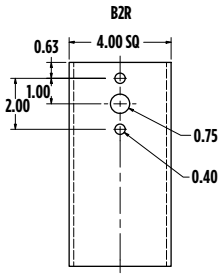
Bolt-On Mount 2-Bolt Pattern

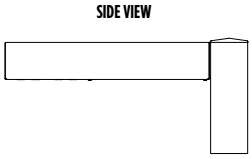






ONLY FOR USE WITH LAL4 PRODUCT
B2R- Raised 2" low profile drilling pattern





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Steel Poles Square Straight

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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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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 : _____

Have questions? Call us at (800) 436-7800

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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GEOTECHNICAL REPORT

CITIZENS BANK PORTSMOUTH
134 PLEASANT STREET
PORTSMOUTH, NEW HAMPSHIRE

April 1, 2025

GSI Project No. 225147

Prepared for:

Mark A. McNabb
McNabb Properties, LTD
3 Pleasant Street, Suite 400
Portsmouth, NH 03801

Prepared by:

Geotechnical Services, Inc.
55 North Stark Highway
Weare, NH 03281

Geotechnical Services Inc.
Geotechnical Engineering ◣ Environmental Studies ◣ Materials Testing ◣ Construction Monitoring

April 1, 2025

Mark A. McNabb
McNabb Properties, LTD
3 Pleasant Street, Suite 400
Portsmouth, NH 03801
Email: house@mcnabbgroup.com

RE: Engineering Services Proposal
Citizens Bank – Portsmouth
134 Pleasant Street
Portsmouth, New Hampshire

GSI Project No. 225147

Dear Mr. McNabb:

This report presents the results of a geotechnical investigation completed by Geotechnical Services, Inc. (GSI) for the construction of the proposed third floor addition at the Citizens Bank in Portsmouth, New Hampshire. The objective of the geotechnical investigation was to explore subsurface conditions within the proposed development area and formulate geotechnical engineering recommendations for the design and construction of foundations, and floor slabs. Included are the findings of our subsurface exploration program and an engineering evaluation of the subsurface conditions encountered. The contents of this report are subject to the Limitations included in Appendix A.

PURPOSE AND SCOPE

The scope of services performed by GSI to meet the above-stated objectives for geotechnical engineering services included the following:

1. Coordination and observation of two (2) test borings at the locations illustrated on the attached Figure 2;

2. Evaluation of appropriate foundation systems based on subsurface conditions encountered. Formulation of design parameters for spread footing foundation and slab on-grade construction, including allowable bearing pressure and prediction of long-term settlement values;

3. Formulation of earthwork and foundation construction procedures to be followed during the construction phase of this project;

4. Establishment of seismic design parameters and liquefaction potential based on the subsurface profile and the proposed structure;

5. Preparation of this geotechnical engineering report which summarizes our findings and recommendations.

SITE AND PROJECT INFORMATION

The project involves the construction of a third floor at the existing Citizen's Bank building at 134 Pleasant Street in Portsmouth, New Hampshire. Limited project information was provided, and it is assumed that the existing foundation will be retrofit with larger footings to accommodate the additional loading from the third floor. Site information was referenced from the Citizen's Bank ALTA Survey, dated June 9, 1996.

SUBSURFACE INVESTIGATION

GSI observed a series of two (2) test borings located outside the existing building area designated GSI-1 through GSI-2. Due to the building's mixed-use nature, which includes an active bank as well as other tenants, borings could not be performed on the front or sides of the building. As a result, the borings were limited to the rear of the building. The borings were advanced to depths of 14.5 and 27.5 feet below ground surface. The subsurface explorations classified the on-site soils according to their color, grain size, and other material properties. The test boring program was conducted by Miller Engineering and Testing, Inc. of Manchester, New Hampshire.

Soil explorations were performed in accordance with methods prescribed by ASTM D1586. Soil samples were obtained at the surface and at five-foot intervals with a 1⅜ inch diameter split-spoon sampler. Standard Penetration Tests (SPTs) were performed at the sampling intervals in accordance with ASTM D1586. Field descriptions of the soils encountered, observed depth to groundwater while drilling when observed, and other pertinent observations are contained in the attached test boring logs. The test boring locations are illustrated on Figure 2 of this report. GSI test boring logs are presented in Appendix B.

SUBSURFACE CONDITIONS

Bituminous Concrete

The test borings were advanced within paved areas. At ground surface, approximately 7 inches of bituminous asphalt concrete was observed.

Fill

Below the bituminous asphalt concrete, the test borings encountered a fill consisting of tan/brown, fine to coarse Sand, little Silt, little Gravel, with various amounts of concrete and brick as well. The fill was observed below the pavement and extended to depths of approximately 6 feet. It is assumed the fill was used to bring up the parking lot to its current elevation.

Silt

Silt was the predominate soil observed during the drilling operations. The silt was observed below the fill layer at depths around 4 to 6 feet below ground surface. The silt was visually classified as tan/ olive, Silt, little fine to medium sand, trace gravel.

Glacial Till

The silt transitioned into a Glacial Till at depths of approximately 14 feet, which extended to refusal. Glacial till is a non-sorted, non-stratified natural deposit consisting of sand, silt, gravel,

and boulders in varying proportions, deposited directly by glaciers in a non-aqueous depositional environment. The material predominantly contained gravel and fine to medium sand, along with significant amounts of silt. The gravel fraction was typically composed of durable, granitic aggregates

Refusal

Test boring refusal was encountered at depths of 14.5 and 27.5 feet. It is assumed the refusal is due to the presence of bedrock, but may also be caused by nested cobbles, very dense soils, boulders, or other obstructions. Refusal is defined as the inability of the augers to advance despite increasing torque and downward pressure applied by the drill rig. Split spoon refusal is defined as either 100 blows or more required to drive the split spoon sampler 12 inches with a 140-lb. hammer falling 30 inches; 50 blows for less than 6 inches of advancement; or 10 blows with no discernable vertical movement of the split spoon sampler

Groundwater

Groundwater was observed following the completion of the test borings at depths of 10 and 20 feet. Groundwater observations should not be considered long-term, equilibrated groundwater levels, but rather an approximate indication of the likely groundwater elevation during construction. Groundwater levels should be anticipated to fluctuate from those measured during drilling operations in response to differences in equilibrated time, rainfall, snowmelt, and seasonal changes.

FOUNDATION DESIGN RECOMMENDATIONS

GSI recommends that building walls, columns and other structural elements be supported by reinforced concrete spread or strip footings bearing directly upon the native Silt described above. An allowable bearing pressure of 1.5 tons per square foot (3,000psf) may then be assumed for design. With regards to footing geometry, the minimum footing width of column and strip footings should be 4 feet and 2 feet, respectively. The spread footings should be founded at least 4 feet below exterior grade to obviate frost action in the bearing strata. If the construction occurs during the winter months, it will be necessary to provide temporary insulation and/or heat application to the foundations.

At the recommended bearing pressures, we anticipate that the total settlement of individual footings under static loading conditions and constructed as recommended herein, will not exceed 1 in., with differential settlements between adjacent footings not exceeding ¾ in. Most of the settlement will likely occur elastically during construction as structure dead loads are placed on the foundations. The live load contribution to foundation settlement is expected to be less than 50% of the dead load thus post construction settlements are not expected to be problematic

ENGINEERING PARAMETER OF ON-SITE SOILS

Based on results of our subsurface exploration program, the following engineering properties of soils that will be supporting foundation elements are estimated as follows:

On-Site Soil Engineering Design Parameters (TABLE 1)

Soil Type	Friction Angle φ (Degrees)	Cohesion c (psf)	Unit Weight γ (pcf)	Coeff. Of Sliding Friction Soil to Concrete (tan δ)
Silt	32	0	110	0.40

SEISMIC DESIGN PARAMETERS

Seismic design parameters have been reviewed with respect to the 2021 Edition of the International Building Code. Upon review of the subsurface soils data, the site is to be associated with Site Class “D” and the design of structural elements should reflect this distinction. The subsurface conditions are also not deemed susceptible to earthquake induced “liquefaction.” A Summary of USGS Design Maps is included as Appendix D.

CONCRETE FLOOR SLAB

We recommend that ground floor slabs be designed as slabs-on-grade designed in accordance with ACI 360R-10. The slab should bear directly upon an 8-inch (minimum) layer of compacted Base Course Soil. The subgrade will consist of compacted structural fill or proof-compacted undisturbed soil. The floor slab may thus be designed following the ACI “elastic support” approach, using a modulus of subgrade reaction value, k = 200 pci.

Slabs should be designed to act independent of foundation walls and column footings with isolation joints. Shrinkage cracking may be controlled with welded wire fabric, reinforcing steel, or contraction joints. Contraction joints in plain concrete should not be spaced a distance greater than 30 times the slab thickness. Saw cuts should be made within 12 hours of slab finishing and penetrate at least ¼ the slab thickness or a minimum of 1 inch. Welded wire fabric or reinforcing steel may also be used to widen the control joint spacing.

For moisture sensitive environments, ACI indicates that a sub-slab vapor retarder may be used beneath the concrete slab. The vapor retarder should be at a minimum; 10-mil polyethylene with joints lapped a minimum of 12 inches. It is emphasized that these are recommendations and that the final decision on the use and location of the sub-slab vapor retarder whether in direct contact with the slab or beneath the layer of compacted Structural Fill should be made considering specific conditions for the project. Factors which may affect this decision include moisture sensitivity of the planned floor finishes, anticipated moisture conditions, including precipitation and exposure before the slab is constructed, and the potential effects of slab curling and cracking. Design guidance is provided in ACI 360R-10, Design of Slabs on Grade, Figure 3-7.

FOUNDATION DRAINAGE, ROOF DRAINAGE, AND SLAB-ON-GRADE DAMP PROOFING RECOMMENDATIONS

Foundation drains are not required as below grade space is not expected to be incorporated into the existing structure. The ground surface immediately adjacent to the foundation should be sloped away from the building to allow for positive drainage. It is recommended that the surficial materials adjacent to the building be relatively impermeable to reduce the volume of precipitation infiltrating into the subsurface. Such impermeable materials may include Portland cement concrete, bituminous concrete, or vegetated silty topsoil. Roof drainage is recommended for the collection of run off because of stormwater. It is recommended that roof drainage and stormwater feature not discharge into foundation drains as applicable.

CONCRETE SIDEWALKS

Where concrete exterior sidewalks are provided, they shall be formed upon a minimum of 12 inches of slab base course or structural fill, which shall be increased to a minimum of 18 inches in the vicinity of exterior doorways, ramps, or other openings for frost protection at building entry points.

EARTHWORK RECOMMENDATIONS

Foundation Subgrade Preparation

Prior to foundation construction, any topsoil, subsoil, or loose fill soils encountered within the building footprint and foundation zone of influence should be removed. Foundation and floor slab subgrades should be proof compacted using a heavy vibratory plate or drum roller prior to foundation construction or placing additional fill in order to densify disturbed soils resulting from excavation and preload the subgrade.

Recommended proof compaction should include 4 passes with a minimum of a 10-ton vibratory roller. During the proof rolling process, the subgrade should be observed by a qualified Geotechnical Engineer to identify areas exhibiting weaving or excessive reaction. Any soils exhibiting excessive reaction should be locally excavated and replaced with free draining structural fill or crushed stone. The foundation subgrade should be observed by a qualified Geotechnical Engineer to verify competency.

Protection of Foundation Subgrades

The contractor must maintain stable, dewatered subgrades for foundations, pavement areas, and utility trenches. Subgrades may be disturbed by improper excavation methods, moisture, precipitation, groundwater control, and construction activities. The contractor should take precautions to protect the bearing subgrade against disturbance from construction traffic and weathering. If necessary, dewatering can be accomplished via open pumping utilizing submersible pumps and temporary stone lined sump pits.

A lift of compacted crushed stone is recommended to protect the subgrade surface from wear and disturbance should water be present within the excavation. The subgrade must still be verified for competency prior to the placement of concrete or backfill materials within the building footprint. If construction activities are to take place during winter months, the contractor should protect the work area from freezing, which may necessitate the use of soil blankets or tents and heaters to protect the subgrade surface.

Construction Dewatering

The site contractor should be prepared to remove any standing water from foundation excavations. If the sumps are unable to control the development of groundwater within the excavation, supplemental dewatering in the form of deep wells or wellpoints may be required. Stormwater runoff developed from storm events should be diverted away from excavation areas to minimize any impoundment in the excavation or disturbance to the foundation subgrades. It is anticipated that groundwater and stormwater may be controlled by localized dewatering efforts employing sumps and pumps.

The groundwater elevation should be maintained at least 12 inches below the foundation grade until backfilling is complete. A lift of crushed stone or free draining structural fill at foundation grade may be utilized if required to facilitate dewatering and provide a dry and stable subgrade during construction.

Backfilling

Backfill in the building area should be placed and compacted in lifts immediately after final excavation to limit disturbance to the subgrade surface. Except for zones requiring special backfill such as directly beneath pavements or exterior slabs, the exterior of foundation walls and other site areas may be backfilled with Common Fill. Placement of compacted fills should not be conducted when air temperatures are low enough (approximately 30°F, or below) to cause freezing of the moisture in the fill during or before placement. Fill materials should not be placed on snow, ice, or uncompacted frozen soil. Compacted fill should not be placed on frozen soil.

No fill should be allowed to freeze prior to compaction. At the end of each day's operations, the last lift of fill, after compaction, should be rolled by a smooth-wheeled roller to eliminate ridges of uncompacted soil.

Minimum compaction requirements for all fill materials are as follows:

Minimum Compaction Requirements (TABLE 2)			
Location or Area	**Standard Proctor Density (ASTM D698)**	**Modified Proctor Density (ASTM D1557)**	**Testing Frequency One Test Per Lift Per**
Building and Slab Subgrades	100%	95%	1,000 ft^2 or 100 lineal feet
Retaining Walls	95%	92%	1,000 ft^2
Pavements (up to 3-ft below finished grade)	95%	92%	2,000 ft^2 or 50 lineal feet
Pavements (in the upper 3-ft)	100%	95%	2,000 ft^2 or 50 lineal feet
Trenches	95%	92%	150 lineal feet
Structures and Walkways	95%	92%	2,000 ft^2
Lawns and Unimproved Areas	92%	90%	20,000 ft^2

Structural Fill

Structural Fill, if required, should consist of clean sand and gravel free of organic material, snow, ice, or other objectionable materials and should be well-graded within the following limits:

Sieve Size	Percent Finer by Weight
4 in.	100
No. 4	30-70
No. 40	10-50
No. 200	0-12.

Other materials could be acceptable for Structural Fill and should be evaluated by the Geotechnical Engineer on a case-by-case basis if proposed by the Contractor.

Structural Fill should be placed in lift thickness not exceeding 12 in. loose measure. Cobbles and boulders having a size exceeding 2/3 of the loose lift thickness should be removed prior to compaction. Compaction in open areas should consist of self-propelled vibratory rollers such as a BoMag BW-60S or equivalent.

In confined areas, hand guided equipment such as a large vibratory plate compactor, should be used and the loose lift thickness should not exceed 6 in. A minimum of four systematic passes of the compaction equipment should be used to compact each lift. Compaction effort should be verified by field density testing.

Common Fill

Common fill may be used to raise grades in paved and landscaped areas, subject to pavement design criteria and landscape planting or drainage requirements. Common fill should be granular mineral soil free from organic materials, loam, wood, trash, snow, ice, frozen soil, and other compressible materials. Common fill should not contain stones larger than 2/3 of the placement lift thickness, and have a maximum 80 percent passing the No. 40 sieve, and a maximum of 30 percent passing the No. 200 sieve. These soils typically would require moisture control during placement and compaction.

Slab Base Course

Slab Base Course beneath building slabs should consist of bank-run sand and gravel, free of organic material, snow, ice, or other unsuitable materials and should be well-graded within the following limits:

Sieve Size	Percent Finer by Weight
2 in.	100
No. 4	40-70
No. 40	25-45
No. 200	0-10

Other materials could be acceptable for compacted Slab Base Course and should be evaluated by the Geotechnical Engineer on a case-by-case basis if proposed by the Contractor. Slab Base Course should be placed in lift thicknesses not exceeding 8-inches loose measure. In confined areas, hand-guided equipment such as a vibratory plate compactor should be used, and the loose lift thickness should not exceed 6 inches. A minimum of four systematic passes of the compaction equipment should be used to compact each lift.

CONSTRUCTION MONITORING

It is strongly recommended that GSI be retained to provide construction monitoring and testing services in conformance with the requirements of the International Building Code. GSI has the Geotechnical Engineers and Technicians trained and experienced in all facets of monitoring earthwork excavation and construction materials testing, as well as a full-service soils and materials laboratory. As a guide, we have enclosed a Recommended Program for Structural Tests and Inspections for Soils and Foundations, attached as Appendix E of this report.

These services may include:

- Construction Materials Testing of Soils, Aggregates, Concrete, Steel, and Asphalt.
- Design Phase engineering services including preparation of final earthwork specifications, review of contractor submittals, and plan review.
- Construction Phase engineering services on Geotechnical issues and/or differing conditions encountered during construction.

CLOSURE

We trust that you find this report consistent with your needs. Should you have any questions with regard to this report, please do not hesitate to contact our office.

Very truly yours,

GEOTECHNICAL SERVICES, INC.

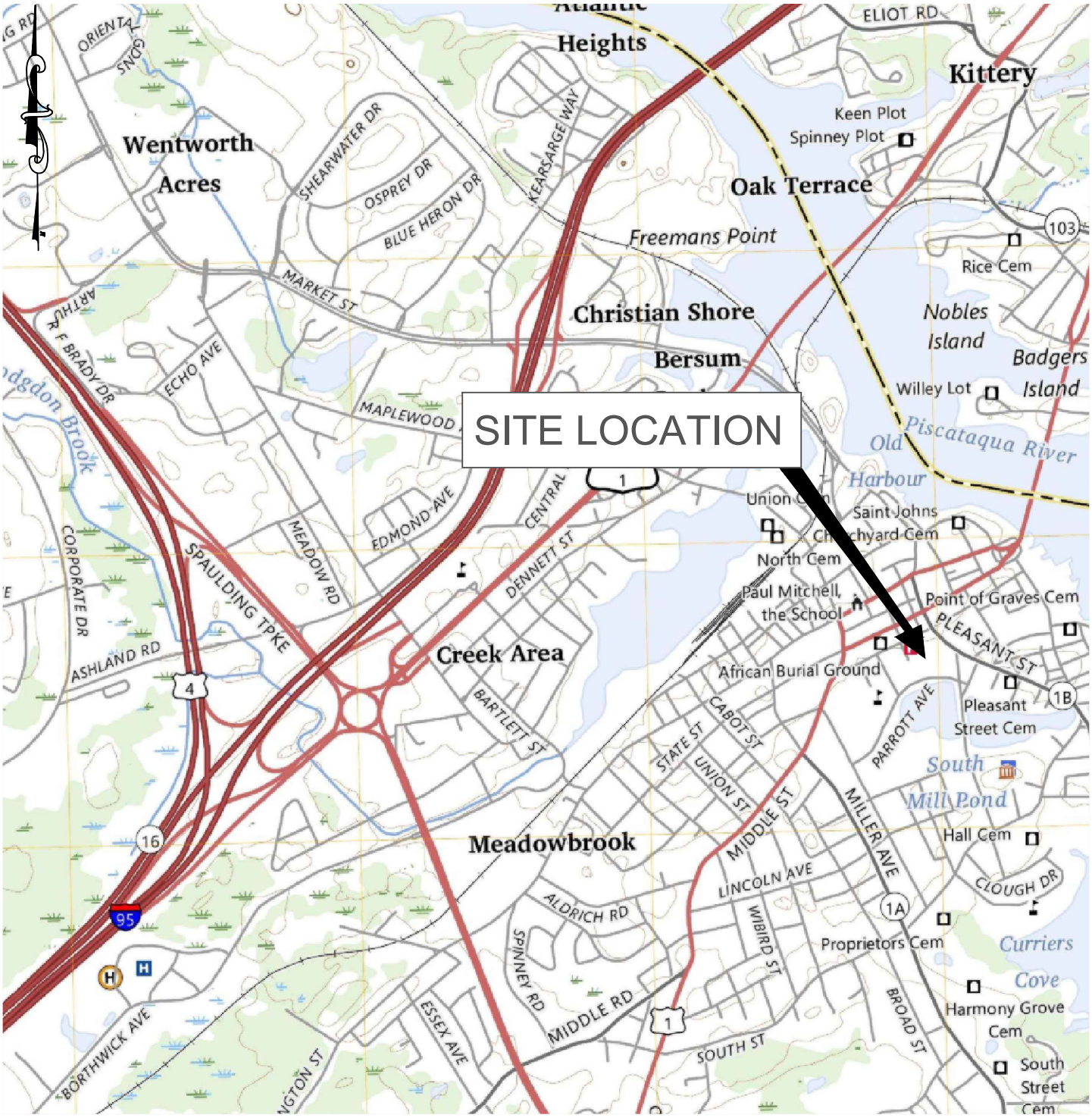
Charles A. Wetherbee, EIT
Staff Engineer

Harry K. Wetherbee, P.E.
Principal Engineer

Attachments:

Figure 1: Locus Map
Figure 2: Exploration Location Plan

Appendix A: Limitations
Appendix B: Exploration Logs
Appendix C: Subsurface Exploration Key
Appendix D: USGS Seismic Design Maps
Appendix E: Draft Earthwork Specifications



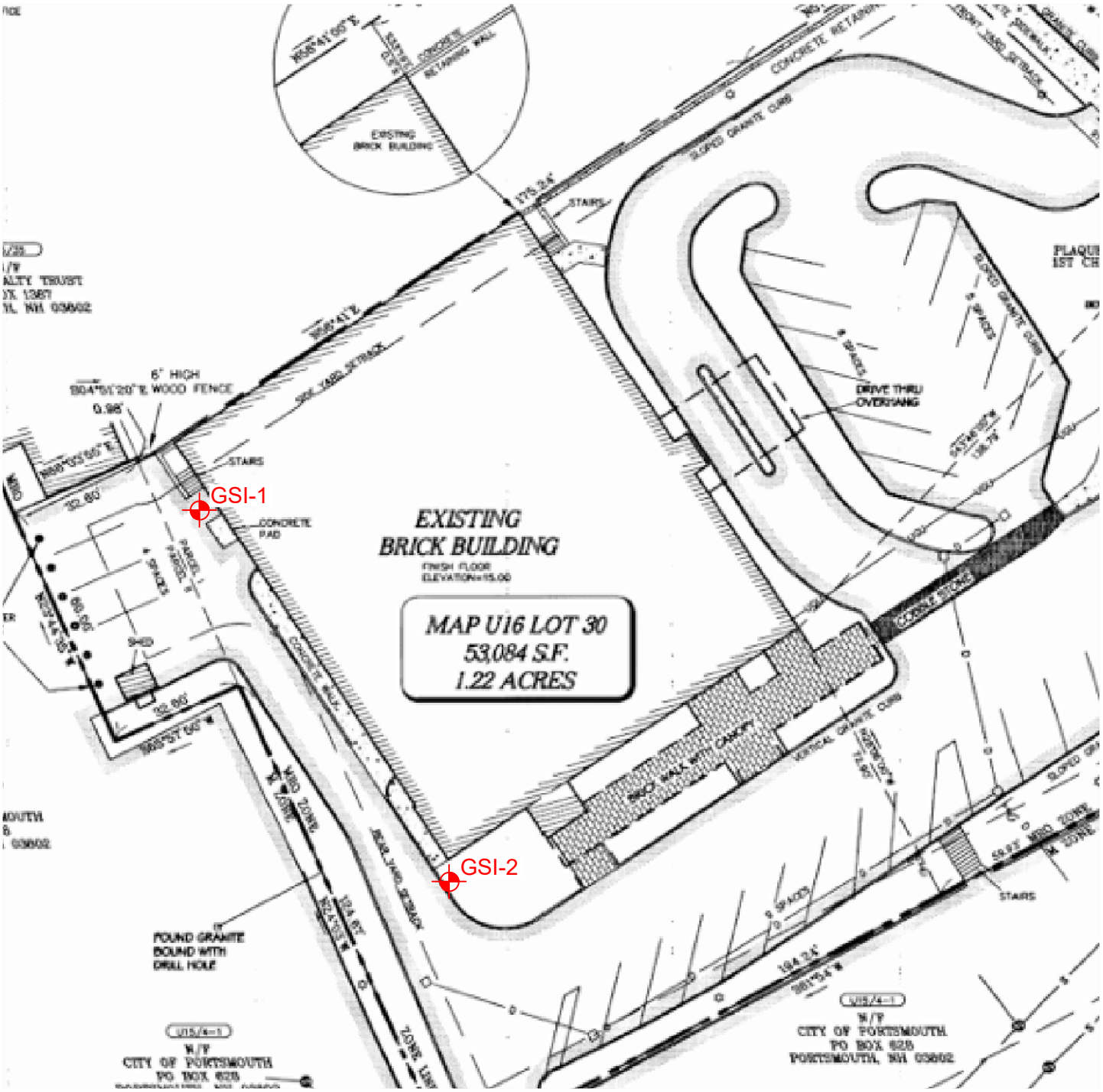
LOCUS MAP

GEOTECHNICAL SERVICES INC.
55 NORTH STARK HIGHWAY, WEARE, NH 03281
TEL. (603) 529-7766 FAX. (603) 529-7780

Citizens Bank Portsmouth
Portsmouth, New Hampshire

DRAWN BY: CAW	DATE: April 2025
CHECKED BY: HKW	SCALE: NTS
FILE NAME: Citizens Bank Portsmouth.dwg	PROJECT NO.: 225147

FIGURE NO. 1



GSI-1 Test Boring Location (Approximate)

TP-1 Test Pit Location (Approximate)

EXPLORATION LOCATION PLAN

GEOTECHNICAL SERVICES INC.
55 NORTH STARK HIGHWAY, WEARE, NH 03281
TEL. (603) 529-7766 FAX. (603) 529-7780

Citizens Bank Portsmouth
Portsmouth, New Hampshire

DRAWN BY: CAW	DATE: April 2025
CHECKED BY: HKW	SCALE: NTS
FILE NAME: Citizens Bank Portsmouth.dwg	PROJECT NO.: 225147

FIGURE NO. 2

APPENDIX A

LIMITATIONS

LIMITATIONS

Explorations

1. The analyses, recommendations, and designs submitted in this report are based in part upon the data obtained from preliminary subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, it will be necessary to re-evaluate the recommendations of this report.

2. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretation of widely spaced explorations and samples; actual soil transitions are probably more gradual. For specific information, refer to the individual test pit and/or boring logs.

3. Water level readings have been made in the test pits and/or test borings under conditions stated on the logs. These data have been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, and other factors differing from the time the measurements were made.

Review

4. It is recommended that this firm be given the opportunity to review final design drawings and specifications to evaluate the appropriate implementation of the recommendations provided herein.

5. In the event that any changes in the nature, design, or location of the proposed areas are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of the report modified or verified in writing by Geotechnical Services, Inc.

Construction

6. It is recommended that this firm be retained to provide geotechnical engineering services during the earthwork phases of the work. This is to observe compliance with the design concepts, specifications, and recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.

Use of Report

7. This report has been prepared for the exclusive use of the above and their assigns, in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.

8. This report has been prepared for this project by Geotechnical Services, Inc. This report was completed for preliminary design purposes and may be limited in its scope to complete an accurate bid. Contractors wishing a copy of the report may secure it with the understanding that its scope is limited to evaluation considerations only.

APPENDIX B

EXPLORATION LOGS

TEST BORING LOG

Boring No. GSI-1

Project	Citizens Bank Portsmouth	GSI Project No.	225147	Elevation	Existing Grade
Location	Portsmouth, NH	Project Mgr.	Charles Wetherbee	Datum	-
Client	McNabb Properties, LTD	Inspector	Charles Wetherbee	Date Started	3/21/2025
Contractor	Miller Engineering and Testing	Checked By	Harry Wetherbee	Date Finished	3/21/2025
Driller	Bob Marcoux	Rig Make & Model	Diedrich	Rig Model	D-50

Item:	Auger	Casing	Sampler	Core Barrel
Type	HS Aug		SS	
Inside Diameter (in.)	2.25"		1-3/8"	
Hammer Weight (lb)			140	
Hammer Fall (in.)			30"	

☑ Truck ☐ Skid
☐ Track ☐ ATV
☐ Bomb. ☐ Geoprobe
☐ Tripod ☐ Other
☐ Winch ☑ Cat Head

Hammer Type:
☑ Safety Hammer
☐ Doughnut
☐ Automatic

☐ Roller Bit ☑ Cutting Head

Depth (ft)	Casing (Blows/ft)	Sample No.	Sample Depth (ft)	Rec (in.)	SPT (Bl./ 6-in.)	"N" Value	PID Rdg. (ppm)	Stratum Change (ft)	Soil-Rock Visual Classification and Description (Soils - Burmister System) (Rock - U.S. Corps of Engineers System)
0		S-1	0-2	14	- 28 20 29	48			7" Asphalt Tan/ Brown, Sand and Gravel, Brick
5		S-2	4-6	20	2 5 9 17	14			Medium Dense, Tan/Olive Silt, trace Sand
10		S-3	9-11	15	7 3 5 14	8			Loose, Tan/ Olive, Silt, little Sand
15		S-4	14-16	12	40 29 31 -	60			Very Dense, Tan/ Olive/ Gray, Silt, Weathered Rock, little to trace Sand
20		S-5	19-21	15	1 7 35 36	42			Dense, Tan, fine to medium Sand, and Silt, little to trace Gravel, Weathered Rock

Water Level Data

Date	Time	Depth (ft) to: Bott. of Casing	Bott. of Hole	Water
3/21	E.O.D.	27.5'	27.5'	20'

Sample Identification
O = Open Ended Rod
U = Undisturbed
S = Split Spoon
C = Rock Core
G = Geoprobe

Cohesive Soils N-Value
0 to 2: Very Soft
2 to 4: Soft
4 to 8: Medium Stiff
8 to 15: Stiff
15 to 30 Very Stiff
Over 30: Hard

Granular Soils N- Value
0 to 4: Very Loose
4 to 10: Loose
11 to 30: Medium Dense
31 to 50: Dense
Over 50: Very Dense

Trace (0 to 5%), Little (10 to 20%), Some (20 to 35%), And (35 to 50%)

Notes: E.O.D. = End Of Drilling

GSI-1

Geotechnical Services, Inc. 55 North Stark Highway, Weare, NH 03281 Phone 603/529-7766 Fax 603/5297080 - 30 Newbury St. 3rd Floor, Boston, MA 02116 Phone 617/455-4248 Fax 617/745-4308

Geotechnical Services, Inc. 55 North Stark Highway, Weare, NH 03281 Phone 603/529-7766 Fax 603/5297080 - 30 Newbury St. 3rd Floor, Boston, MA 02116 Phone 617/455-4248 Fax 617/745-4308

TEST BORING LOG

Boring No. GSI-1

Project	Citizens Bank Portsmouth	GSI Project No.	225147	Elevation	Existing Grade
Location	Portsmouth, NH	Project Mgr.	Charles Wetherbee	Datum	-
Client	McNabb Properties, LTD	Inspector	Charles Wetherbee	Date Started	3/21/2025
Contractor	Miller Engineering and Testing	Checked By	Harry Wetherbee	Date Finished	3/21/2025
Driller	Bob Marcoux	Rig Make & Model	Diedrich	Rig Model	D-50

Item:	Auger	Casing	Sampler	Core Barrel
Type	HS Aug		SS	
Inside Diameter (in.)	2.25"		1-3/8"	
Hammer Weight (lb)			140	
Hammer Fall (in.)			30"	

☑ Truck ☐ Skid
☐ Track ☐ ATV
☐ Bomb. ☐ Geoprobe
☐ Tripod ☐ Other
☐ Winch ☑ Cat Head

Hammer Type:
☑ Safety Hammer
☐ Doughnut
☐ Automatic

☐ Roller Bit ☑ Cutting Head

Depth (ft)	Casing (Blows/ft)	Sample Data: No.	Depth (ft)	Rec (in.)	SPT (Bl./ 6-in.)	"N" Value	PID Rdg. (ppm)	Stratum Change (ft)	Soil-Rock Visual Classification and Description (Soils - Burmister System) (Rock - U.S. Corps of Engineers System)
25		S-6	24-26	14	20 60 50/1" -	-			Weathered Rock, little Silt and Sand Auger Refusal at 27.5 feet **Test Boring Terminated at 27.5 feet**

Water Level Data

Date	Time	Depth (ft) to: Bott. of Casing	Bott. of Hole	Water
3/21	E.O.D.	27.5'	27.5'	20'

Sample Identification
O = Open Ended Rod
U = Undisturbed
S = Split Spoon
C = Rock Core
G = Geoprobe

Cohesive Soils N-Value
0 to 2: Very Soft
2 to 4: Soft
4 to 8: Medium Stiff
8 to 15: Stiff
15 to 30 Very Stiff
Over 30: Hard

Granular Soils N- Value
0 to 4: Very Loose
4 to 10: Loose
11 to 30: Medium Dense
31 to 50: Dense
Over 50: Very Dense

Trace (0 to 5%), Little (10 to 20%), Some (20 to 35%), And (35 to 50%)

Notes: E.O.D. = End Of Drilling

Geotechnical Services, Inc. 55 North Stark Highway, Weare, NH 03281 Phone 603/529-7766 Fax 603/5297080 - 30 Newbury St. 3rd Floor, Boston, MA 02116 Phone 617/455-4248 Fax 617/745-4308

TEST BORING LOG

Boring No. GSI-1

Project	Citizens Bank Portsmouth	GSI Project No.	225147	Elevation	Existing Grade
Location	Portsmouth, NH	Project Mgr.	Charles Wetherbee	Datum	-
Client	McNabb Properties, LTD	Inspector	Charles Wetherbee	Date Started	3/21/2025
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Driller	Bob Marcoux	Rig Make & Model	Diedrich	Rig Model	D-50

Item:	Auger	Casing	Sampler	Core Barrel
Type	HS Aug		SS	
Inside Diameter (in.)	2.25"		1-3/8"	
Hammer Weight (lb)			140	
Hammer Fall (in.)			30"	

☑ Truck ☐ Skid ☐ Track ☐ ATV ☐ Bomb. ☐ Geoprobe ☐ Tripod ☐ Other

Hammer Type: ☑ Safety Hammer ☐ Doughnut ☐ Automatic

☐ Winch ☑ Cat Head ☐ Roller Bit ☑ Cutting Head

Depth (ft)	Casing (Blows/ft)	Sample No.	Sample Depth (ft)	Rec (in.)	SPT (Bl./ 6-in.)	"N" Value	PID Rdg. (ppm)	Stratum Change (ft)	Soil-Rock Visual Classification and Description (Soils - Burmister System) (Rock - U.S. Corps of Engineers System)
0		S-1	0-2	10	- 15 21 16	36			7" Asphalt Brown, Sand and Gravel, Brick
		S-2	2-4	12	36 17	30			Medium Dense, Brown, fine to coarse Sand, little Silt, little Gravel
5		S-3	4-6	4	13 11 5 10	20			Medium Dense, Brown, fine to coarse Sand, little Silt, little Gravel
		S-4	6-8	10	10 12 10 8	21			Medium Dense, Brown, fine to coarse Sand, little Silt, little Gravel
10		S-5	9-11	20	13 15 1 3	8			Loose, Olive, Silt, little Sand, trace Gravel
		S-6	14-16	6	5 3 80 - - -	-			Tan/Olive, Silt and Sand Sampler Refusal at 14.5 feet Auger Refusal at 14.5 feet **Test Boring Terminated at 14.5 feet**
15									
20									

Water Level Data

Date	Time	Depth (ft) to: Bott. of Casing	Bott. of Hole	Water
3/21	E.O.D.	14.5'	14.5'	10'

Sample Identification
O = Open Ended Rod
U = Undisturbed
S = Split Spoon
C = Rock Core
G = Geoprobe

Cohesive Soils N-Value
0 to 2: Very Soft
2 to 4: Soft
4 to 8: Medium Stiff
8 to 15: Stiff
15 to 30 Very Stiff
Over 30: Hard

Granular Soils N- Value
0 to 4: Very Loose
4 to 10: Loose
11 to 30: Medium Dense
31 to 50: Dense
Over 50: Very Dense

Trace (0 to 5%), Little (10 to 20%), Some (20 to 35%), And (35 to 50%)

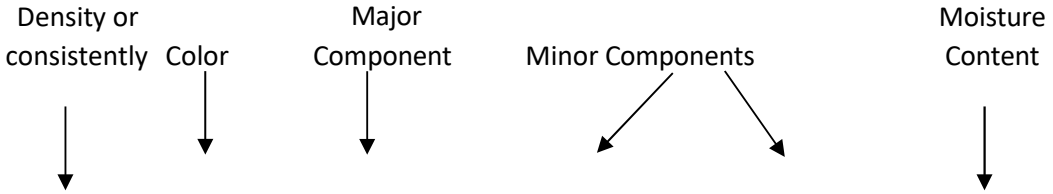
Notes: E.O.D. = End Of Drilling

APPENDIX C

SUBSURFACE EXPLORATION KEY

FIELD DESCRIPTION AND CLASSIFICATION OF SOIL - Burmister System

Soil descriptions indicated on the test boring logs are based on Standard Penetration Test (SPT) results and observation of the soil samples obtained. Soil samples generally described and classified as illustrated in the following example:



Dense, brown, f-m SAND, some Gravel, trace Silt, moist.

1.0 DENSITY OR CONSISTENCY – The density or consistency is determined from the Standard Penetration Test (ASTM 1586), which corresponds to the number of blows required to drive a standard 2-inch outside diameter split-spoon sampler from the 6 to 18-inch depth of a 24-inch sample using a 140-pound weight falling freely for 30 inches.

Density of Granular Soil	Penetration Resistance (N-blows/ft)		Consistency of Composite Clay Soil
Very Loose	0 - 4	< 2	Very soft
Loose	4 - 10	2 - 4	Soft
Medium Dense	10 - 30	4 - 8	Medium soft
Dense	30 - 50	8 - 15	Stiff
Very Dense	> 50	15 - 30	Very stiff
		> 30	Hard

2.0 COLOR – Visual

3.0 SOIL COMPONENTS – The description and classification is based on the following criteria.

3.1 DESCRIPTION – The components of a soil sample are described by visually estimating the percentage of each component by weight of the total sample.

Major Component – The major component (>50%) is written with upper case letters for granular soil (SAND, GRAVEL), and a combination of upper and lower case letters for composite soil (Silty CLAY, Clayey SILT).

Minor Component – The minor soil components (≤50%) are written with the first letter of each material in upper case, and the remaining letters in lower case (Gravel, Silt). The minor components are identified and prefaced in the description based on the following percentages:

Description	Percentage
and	35 - 50%
some	20 - 35%
little	10 - 20%
trace	0 - 10%

Other Components – The other components within the soil which may be encountered include glass, bricks, trash, etc. The other components are identified and follow the major and minor soil components.

3.2 CLASSIFICATION

Granular Soil by Sieve Size – A granular soil sample is classified by visually estimating the particle size as referenced to a Standard Sieve.

Material*		Standard Sieve Limit Upper	Lower
GRAVEL	- coarse	3-inch	3/4-inch
	- fine	3/4-inch	No. 4
SAND	- coarse	No. 4	No. 10
	- medium	No. 10	No. 40
	- fine	No. 40	No. 200
SILT		No. 200	

Granular Soil by Visual Identification

Material	Visual ID
Silts and Clays	Too small to see.
Fine Sand	Finest visible grain.
Medium Sand	1/64” to 1/16”
Coarse Sand	1/16” to 1/4”
Fine Gravel	1/4" to 3/4"
Coarse Gravel	3/4" to 3”
Cobbles	3” to 6”
Boulders	Greater than 6”

*The Gravel/Sand portions of a granular soil are further divided based on the following proportions:

Gravel/Sand	Proportion
fine to coarse	> 10% all factions
coarse	< 10% fine and medium
medium to coarse	< 10% fine
medium	< 10% fine and coarse
fine to medium	< 10% coarse
fine	< 10% medium and coarse

Composite Clay Soil – A composite clay soil sample is classified by determining the smallest diameter thread that can be rolled manually.

Material	Smallest Thread Diameter	Degree of Plasticity
SILT	None	Nonplastic
Clayey SILT	1/4-inch	Slight
SILT & CLAY	1/8-inch	Low
CLAY & SILT	1/16-inch	Medium
Silty CLAY	1/32-inch	High
CLAY	1/64-inch	Very High

Organic Soil – An organic soil sample is classified by observation of the sample structure.

Material		
Topsoil	-	surficial soils that support plant life and which contain a high percentage of organic matter.
Fibrous Peat	-	deposits of plant remains in which the original plant fibers are still visible.
Amorphous Peat	-	deposits of plant remains in which the original plant fibers have been destroyed. Usually found underlying fibrous peat.
Organic Silt	-	fine grained marine soils which have been transported due to erosion and deposited in still water below the zone of wave action. May contain shell fragments, organic odor, high sand content, nonplastic.
Clayey Organic Silt	-	similar to Organic Silt, low sand content, plastic.

4.0 ADDITIONAL DETAILS AND DISCRIPTIVE TERMS

SOIL STRUCTURE – produced by deposition of sediments.

Stratified	-	random soil deposits of varying components or color.
Varved	-	alternating soil deposits of varying thickness (i.e. clays or silts).
Stratum	-	soil deposit greater than 12 inches thick.
Layer	-	soil deposit 3 inches to 12 inches thick.
Seam	-	soil deposit 1/8 inch to 3 inches thick.
Parting/lens	-	soil deposit less than 1/8 inch thick.

MOISTURE CONTENT

Dry	-	moisture not apparent, dusty, dry to the touch.
Moist	-	damp, but no visible water.
Wet	-	visible free water.

5.0 UNIFIED SOIL CLASSIFICATION SYMBOL AND DISCRIPTION

CL	Lean Clay	GW	Well Graded Gravel
ML	Silt	GP	Poorly Graded Gravel
OL	Organic Silt/ Clay Low Plasticity	GM	Silty Gravel
CH	Fat Clay	GC	Clayey Gravel
MH	Plastic Silt	SW	Well Graded Sand
OH	Organic Silt/Clay High Plasticity	SP	Poorly Graded Sand
PT	Peat	SM	Silty Sand
		SC	Clayey Sand

GUIDELINES TO CLASSIFICATION AND IDENTIFICATION OF ROCK

A. WEATHERING

Fresh	Fresh rock, crystals bright, few joints, may show slight staining. Rock rings under hammer if crystalline.
Slightly Weathered	Rock generally fresh, joints stained and discoloration extends into rock up to 1 inch. Joints may contain clay or gouge. In granitoid rocks some occasional feldspar crystals are dull and discolored. Crystalline rocks ring under hammer.
Moderately Weathered	Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored; some look clayey. Rock has dull sound under hammer and shows significant loss of strength as compared with fresh rock.
Highly Weathered	All rock is discolored or stained. In granitoid rocks all feldspars are dull and discolored and majority shows kaolinization. Rock shows severe loss of strength and can be excavated with a geologists pick. A clunking sound when struck with a hammer.
Disintegrate Rock	Rock texture clear and evident, but reduced in strength to strong soil. Some fragments of strong rock usually left.

B. FRACTURING AND BEDDING

Spacing	Fracturing	Bedding and Foliation
More than 3 feet	Massive	Thick
1 foot – 3 feet	Slightly Fractured	Medium
2 inches – 1 foot	Moderately Fractured	Thin
Less than 2 inches	Highly fractured	Very Thin

C. GRAIN SIZE

Fine	Visible to naked eye to 1/16-inch diameter.
Medium	1/16-inch to 1/4-inch diameter.
Coarse	Greater than 1/4-inch diameter.

D. HARDNESS

Very Hard	Cannot be scratched with a knife or sharp pick. Breaking of hand specimens requires several hard blows with a geologists pick.
Hard	Can be scratched with a knife or pick only with difficulty. Hard blow of hammer required to detach hand specimen.
Moderately Hard	Can be scratched with a knife or pick. Gouges or grooves to ¼ inch deep can be excavated with hard blows of a geologists pick. Hand specimens can be detached by a moderate blow.
Medium	Can be grooved to a 1/16-inch deep by firm pressure on a knife or pick point. Can be excavated in small chips to pieces approximately 1-inch maximum size by hard blows of the point of a geologists pick.
Soft	Can be gouged or grooved easily with a knife or pick point. Can be excavated in chips to pieces several inches in size. Small thin pieces can be broken by finger pressure.
Very Soft	Can be carved with a knife. Can be excavated easily with the point of a pick. Pieces 1 inch or more in thickness can be broken with finger pressure.

E. ROCK QUALITY DESIGNATION (RQD)

RQD (Percent)	Diagnostic Description
Exceeding 90	Excellent
75 – 90	Good
50 – 75	Fair
25 – 50	Poor
0 – 25	Very Poor

Comments: RQD is applicable to NX core only. The diameter of an NX core is 2.16 inches. RQD is expressed as a percentage and is determined by dividing the length of the run by the total length of the recovered cores pieces measuring 4-inches or greater. Core recovery is reported as a percentage and is determined by dividing the length of the core recovered (all pieces) by the length of the run.

APPENDIX D

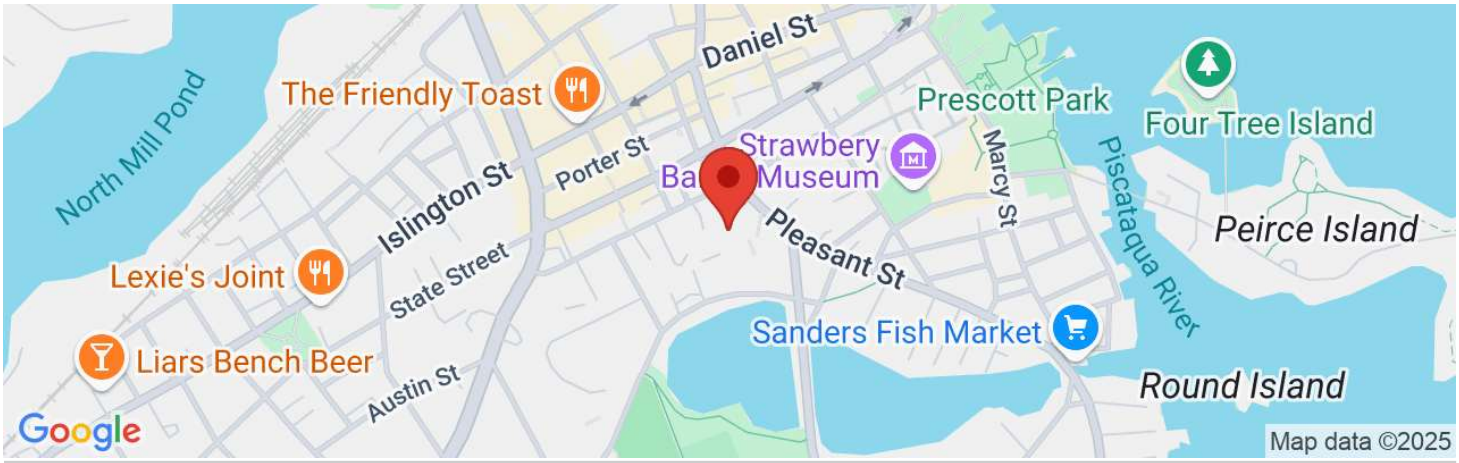
USGS SEISMIC DESIGN MAPS

USGS web services were down for some period of time and as a result this tool wasn't operational, resulting in *timeout* error.
USGS web services are now operational so this tool should work as expected.

Citizens Bank Portsmouth

134 Pleasant St, Portsmouth, NH 03801, USA

Latitude, Longitude: 43.0747514, -70.7569484



Date	4/1/2025, 1:40:55 PM
Design Code Reference Document	ASCE7-16
Risk Category	II
Site Class	D - Default (See Section 11.4.3)

Type	Value	Description
S_S	0.327	MCE_R ground motion. (for 0.2 second period)
S_1	0.075	MCE_R ground motion. (for 1.0s period)
S_{MS}	0.503	Site-modified spectral acceleration value
S_{M1}	0.179	Site-modified spectral acceleration value
S_{DS}	0.335	Numeric seismic design value at 0.2 second SA
S_{D1}	0.119	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	C	Seismic design category
F_a	1.539	Site amplification factor at 0.2 second
F_v	2.4	Site amplification factor at 1.0 second
PGA	0.201	MCE_G peak ground acceleration
F_{PGA}	1.399	Site amplification factor at PGA
PGA_M	0.281	Site modified peak ground acceleration
T_L	6	Long-period transition period in seconds
SsRT	0.327	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	0.352	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.5	Factored deterministic acceleration value. (0.2 second)
S1RT	0.075	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.08	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.6	Factored deterministic acceleration value. (1.0 second)

Type	Value	Description
PGAd	0.5	Factored deterministic acceleration value. (Peak Ground Acceleration)
PGA_{UH}	0.201	Uniform-hazard (2% probability of exceedance in 50 years) Peak Ground Acceleration
C_{RS}	0.929	Mapped value of the risk coefficient at short periods
C_{R1}	0.932	Mapped value of the risk coefficient at a period of 1 s
C_V	0.918	Vertical coefficient

DISCLAIMER

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APPENDIX E

DRAFT EARTHWORK SPECIFICATIONS

SECTION 02200
EARTHWORK

DRAFT

PART I- GENERAL

1.01 GENERAL REQUIREMENTS

1. Include GENERAL CONDITIONS and SUPPLEMENTARY CONDITIONS as part of this Section.

2. Examine all other Sections of the Specifications for requirements, which affect work of this Section whether or not such work is specifically mentioned in this Section.

3. Coordinate work with trades affecting, or affected by, work of this Section. Cooperate with such trades to assure the steady progress of all work under the Contract.

1.02 WORK INCLUDED

1. Perform all work required to complete the work of the Section, as indicated. Such work includes, but is not limited to, the following:

    1. Excavation, filling, grading and compaction
    2. Supplying of fill materials
    3. Construction Dewatering
    4. Sheeting, shoring and bracing
    5. Rock excavation/blasting

1.03 RELATED WORK UNDER OTHER SECTIONS

1. Erosion And Sediment Control
2. Site Preparation
3. Bituminous Concrete Paving
4. Site Water Lines
5. Storm Drainage System
6. Sanitary Sewer System
7. Site Furnishings
8. Site Irrigation
9. Lawns
10. Planting

1.04 SUBMITTALS

1. Issue submittals in accordance with Division 1. Submittals under this Section shall include manufacturer's specifications and installation instructions.

1.05 SAMPLES AND TESTING

1. A 50 lb. sample of each off-site material proposed for use, and of any on-site material when so requested by the Architect or Geotechnical Engineer, shall be submitted for

approval.

1. Samples shall be delivered to office of the Geotechnical Engineer, as directed.
2. Samples required in connection with compaction tests will be taken and transported by the Geotechnical Engineer.
3. Product Data: Submit location of pits for all borrow material.

1.06 COORDINATION

1. The work of this Section shall be coordinated with that of other trades affecting, or affected by, this work, as necessary to assure the steady progress of all work of the Contract.

2. Prior to the start of earthwork, the Contractor shall arrange an on-site meeting with the Architect and Geotechnical Engineer for the purpose of establishing Contractor's schedule of operations and scheduling inspection procedures and requirements.

3. As construction proceeds, the Contractor shall be responsible for notifying the Architect prior to start of earthwork operations requiring inspection and/or testing.

1.09 INFORMATION

1. It is hereby understood that the Contractor has carefully examined the site and all conditions affecting work under this Section. No claim for additional costs will be allowed because of lack of full knowledge of existing conditions.

2. Plans, surveys, measurements and dimensions under which the work is to be performed are believed to be correct to the best of the Architect's knowledge, but the Contractor shall have examined them for himself during the bidding period, as no allowance will be made for any errors or inaccuracies that may be found herein.

3. Information on the Drawings, Reference Drawings, and in the Specifications relating to subsurface conditions, natural phenomena, and existing utilities and structures is from the best sources presently available. Such information is furnished only for the information and convenience of the Contractor, and the accuracy or completeness of this information is not guaranteed.

1.10 EXISTING CONDITIONS

1. The Contractor shall become thoroughly familiar with the site, consult records and drawings of adjacent structures and of existing utilities, and note all conditions, which may influence the work of this Section.

2. By submitting a bid, the Contractor affirms that he has carefully examined the site and all conditions affecting work under this Section. No claim for additional costs will be allowed because of lack of full knowledge of existing conditions.

3. The Contractor may, at his own expense, conduct additional subsurface testing as required for his own information after approval by the Owner.

1.11 SUBSURFACE CONDITIONS AND SPECIAL SITE CONSIDERATIONS

1. Soil borings have been made by a qualified Contractor prior to this Contract. This information shall be made available to bidders as specified under other Sections. The final results of these subsurface explorations were prepared by Geotechnical Services, Inc., consulting geotechnical engineers, and are hereby attached to this specification for

information only. Procedures for dewatering, areas to receive special fill and other methods and procedures specified herein shall be supplemented by this information. For purposes of this specification, this information will be referred to as the report. Where procedures within the report vary from procedures as specified herein, this specification shall override. The results and recommendations are available in the geotechnical report prepared by Geotechnical Services. Copies of this report are available from the Architect. Soil samples may be examined at the office of the Geotechnical Engineer.

2. It is the responsibility of the Contractor under this Contract to do the excavation, filling, grading and rough grading to bring the existing grades to subgrade and parallel to finished grades as specified herein and as shown on the Drawings for this Work. The Contractor shall visit the site prior to submitting a bid to become familiar with the extent of the work to be done under this Contract. The Contractor shall be responsible for determining the quantities of earth materials necessary to complete the work under this Section. All earth materials shall be included in the Contractor's base bid.

3. Site Information - data on indicated subsurface conditions are not representations or warrants of continuity of such conditions between subsurface explorations. It is expressly understood that the Owner will not be responsible for interpretations or conclusions drawn there from by the Contractor. Data are made available for the convenience of the Contractor. Neither the Owner nor the Geotechnical Engineer assumes responsibility for accuracy of the data other than at the particular locations and at the time the explorations were made.

4. The subsurface data was gathered and report prepared by Geotechnical Services, Inc. The elevations indicated on the drill holes, borings and test pits refer to existing conditions. A copy of this report may be seen at the office of the Architect during normal working hours.

1.12 QUALITY ASSURANCE

1. The Owner will retain a Geotechnical Engineer to perform on-site observations and testing during the following phases of the construction operations. The services of the Geotechnical Engineer may include, but not be limited to the following:

    1. Observation during excavation and dewatering of building areas, parking areas and controlled fill areas.
    2. Observation and testing during placement and compaction of fills within the building area, parking area, and controlled fill areas.
    3. Laboratory testing and analysis of fill and bedding materials specified, as required.
    4. Observation, construction and performance of water content, gradation, and compaction tests at a frequency and at locations to assure conformance of this Specification. The results of these tests will be submitted to the Architect; copy to the Contractor, on a timely basis so that the Contractor can take such action as is required to remedy indicated deficiencies. During the course of construction, the Geotechnical Engineer will advise the Architect, in writing, with copy to Contractor if, at any time, in his opinion, the work is not in substantial conformity with the Contract Documents.

2. The Geotechnical Engineer's presence does not include supervision or direction of the actual work by the Contractor, his employees or agents. Neither the presence of the Geotechnical Engineer, nor any observations and testing performed by him, nor any notice or failure to give notice shall excuse the Contractor from defects discovered in his work.

3. The Owner reserves the right to modify or waive Geotechnical Engineer services.

1.13 PERMITS, CODES AND SAFETY REQUIREMENTS

1. All work shall conform to the Drawings and Specifications and shall comply with applicable codes and regulations.

2. Comply with the rules, regulations, laws and ordinances of town and state agencies and all other authorities having jurisdiction. Coordinate all work done within town and State rights of way with the appropriate agencies. Provide all required traffic control and safety measures, including uniformed police officers per town and State requirements. All labor, materials, equipment and services necessary to make the work comply with such requirements shall be provided without additional cost to the Owner.

3. Comply with the provisions of the Manual of Accident Prevention in Construction of the Associated General Contractors of America, Inc. and the requirements of the Occupational Safety and Health Administration (OSHA), United States Department of Labor.

4. The Contractor shall procure and pay for all permits and licenses required for the complete work specified herein and shown on the Drawings.

5. The Contractor shall not close or obstruct any street, sidewalk, or passageway unless authorized in writing by the Architect. The Contractor shall so conduct his operations as to interfere as little as possible with the use ordinarily made of roads, driveways, sidewalks or other facilities near enough to the work to be affected hereby. The Contractor shall comply with the time limits established by the terms for trucking onto and off of the site.

6. Any apparent conflict between the Drawings and Specifications and the applicable codes and regulations shall be referred to the Architect in writing, for resolution before the work is started.

1.14 LAYOUTS AND GRADES

1. All line and grade work not presently established at the site shall be laid out by a survey team under the supervision of a Registered Land Surveyor or Professional Engineer employed by the Contractor in accordance with Drawings and Specifications. The Contractor shall establish permanent benchmarks and replace as directed any which are destroyed or disturbed.

2. The words "finished grades" as used herein shall mean final grade elevations indicated on the Drawings. Spot elevations shall govern over proposed contours. Where not otherwise indicated, project site areas outside of the building shall be given uniform slopes between points for which finished grades are indicated or between such points and existing grades.

3. The word "subgrade" as used herein, means the required surface of excavated area, subsoil, borrow fill or compacted fill. This surface is immediately beneath the site improvements; fill materials as dimensioned on the Drawings, or other proposed surface material.

1.15 DISPOSITION OF EXISTING UTILITIES

1. Active utilities existing on the site and work areas shall be carefully protected from damage and relocated or removed as required by the work. When an active utility line is

exposed during construction, its location and elevation shall be plotted on the record drawings as described in this Section and both Architect and Utility Owner notified in writing.

2. Inactive or abandoned utilities encountered during construction shall be removed if within the building area or grouted, plugged or capped. The location of such utilities shall be noted on the record drawings and reported in writing to the Architect.

3. The Contractor shall notify "Dig Safe" and local utility companies prior to the start of construction. The "Dig Safe" number shall be submitted by the Contractor in writing to the Architect prior to construction.

1.16 SHORING, SHEETING, AND BRACING

1. Provide shoring, sheeting, and/or bracing at excavations, as required, to ensure complete safety against collapse of earth at sides of excavations.

2. If, at any place, sufficient or proper supports have not been provided, additional supports shall be placed at the expense of the Contractor. Care shall be taken to prevent voids outside of the sheeting, but if voids are formed, they shall be immediately filled and compacted.

3. All sheeting and bracing not ordered left in place shall be carefully removed in such a manner as not to endanger the construction of other structures, utilities or property whether public or private. All voids left after withdrawal of sheeting shall be immediately refilled with sand and rammed with tools adapted to that purpose or otherwise compacted as directed to achieve the required density.

4. Shoring or sheeting shall not constitute a condition for which an increase may be made in the contract price with the exception that if the Architect directs in writing that certain shoring or sheeting shall be left in place, the contract price will be adjusted in accordance with General Conditions.

5. Excavation support systems shall be designed to support the earth pressures, hydrostatic pressures, surcharge loads and other forces from existing site conditions, stored material and construction equipment.

6. Shoring and bracing of trenches and other excavations shall, at a minimum, be in accordance with the latest requirements of the Department of Labor and Industries Bulletin No. 12, Section 10, and all subsequent amendments.

7. Shoring and sheeting shall be designed by a Registered Professional Engineer and paid for by the Contractor. The contractor shall submit an earth shoring and bracing plan to the Architect for review by the Geotechnical Engineer at least 2 weeks prior to installation. The submittal shall include calculations and plans drawn to scale.

1.17 DRAINAGE

1. The Contractor shall control the grading in areas under construction on the site so that the surface of the ground will properly slope to prevent accumulation of water in excavated areas and adjacent properties.

2. The Contractor shall excavate interceptor swales and ditches where shown on the Drawings and as otherwise necessary prior to the start of major earthmoving operations to insure minimal erosion and to keep areas as free from surface water as possible.

3. Should surface, rain or ground water be encountered during the operations, the Contractor shall furnish and operate pumps or other equipment and provide all necessary piping to keep all excavations clear of water at all times and shall be responsible for any damage to work or adjacent properties for such water. All piping exposed above surface for this use, shall be properly covered to allow foot traffic and vehicles to pass without obstruction.

4. Presence of ground water in soil will not constitute a condition for which an increase in the contract price may be made. Under no circumstances place concrete fill, soil fill, lay piping or install appurtenances in excavation containing free water. Keep utility trenches free of water until pipe joint material has hardened and backfilled to prevent flotation.

1.18 FROST PROTECTION

1. Do not excavate to full-indicated depth when freezing temperatures may be expected, unless work can be completed to subgrade or piping can be installed and backfilled the same day. Protect the excavation from frost if placing of concrete or piping is delayed.

2. The Contractor shall keep the operations under this Contract clear and free of accumulation of snow within the limits of Contract Lines as required to carry out the work.

3. No work shall be installed on frozen ground.

4. Provide heat and/or insulation to slab, footings, foundation walls, and other elements during freezing conditions to prevent damage from frost heaving.

1.19 DISTURBANCE OF EXCAVATED AND FILLED AREAS DURING CONSTRUCTION

1. The Contractor shall take the necessary steps to avoid disturbance of subgrade and underlying natural soils/compacted fill during excavation and filling operations. Methods of excavation and filling operations shall be revised as necessary to avoid disturbance of the subgrade and underlying natural soils/compacted fill, including restricting the use of certain types of construction equipment and their movement over sensitive or unstable materials. The Contractor shall coordinate with the Architect or Geotechnical Engineer to modify his operations as necessary to minimize disturbance and protect bearing soils.

2. All excavated or filled areas disturbed during construction, all loose or saturated soil, and other areas that will not meet compaction requirements as specified herein shall be removed and replaced with compacted structural fill or crushed stone. Fill that cannot be compacted within 48 hours because of excess moisture shall be removed and replaced with compacted structural fill or crushed stone. Costs of removal of disturbed material and replacement with gravel fill or crushed stone shall be borne by the Contractor.

3. If requested by the Geotechnical Engineer, the Contractor shall place a six-inch layer of crushed stone or 4-inch concrete mud mat over natural underlying soil to stabilize the disturbed areas during construction. The placement of crushed stone layer or mud mat as well as material costs shall be borne by the Contractor.

1.20 PROTECTION OF BEARING SUBGRADES

1. The Contractor shall be required to maintain stable, dewatered, and frost fee subgrades for foundations, pavement areas, utility trenches, and other areas as directed by the Architect or Geotechnical Engineer.

2. The Contractor shall take precautions to reduce subgrade disturbance. Such precautions may include diverting storm water runoff away from construction areas, reducing traffic in

sensitive areas, thermal protection during cold weather periods, and maintaining an effective dewatering operation.

3. Soils exhibiting weaving/instability or which become frozen, as determined by the Geotechnical Engineer, shall be over-excavated (removed) to competent bearing material and replaced with compacted gravel fill or lean concrete at no additional cost to the Owner.

1.21 DEWATERING

1. Based on subsurface investigations conducted prior to this Contract, it is anticipated that excavation may be carried out below existing groundwater levels. The Contractor shall be required to implement ground water control measures to maintain the ground water level a minimum of one foot below all final excavation levels or to propose alternative methods for placement of fill over existing undisturbed material with ground water at or near the surface in such a manner that the existing materials will not be disturbed. The Contractor will be required to implement ground water control measures adequate to maintain the excavation sufficiently dry to allow efficient use of normal excavation equipment and to provide a borrow material suitable for placement and compaction as specified or as directed by the Geotechnical Engineer. The moisture content shall not exceed 3% above the optimum moisture content as determined by modified Proctor test (ASTM DI557). The Contractor shall furnish all labor, equipment and materials in connection with handling ground water and surface water encountered during construction and placement of compacted granular fill or other material as specified.

2. Not less than 14 days prior to the scheduled start of work, the Contractor shall submit his proposed method of dewatering and maintaining dry conditions to the Geotechnical Engineer for review. The submittal shall include calculations, plans, sketches, pump curves, method of sediment control, and disposal. The dewatering plan shall be prepared by a licensed Civil Engineer. Review by the Architect of the Contractor's proposed method of dewatering shall not relieve the Contractor of responsibility for the satisfactory performance of the dewatering system. The Contractor is responsible for correcting any disturbance of natural bearing soils or damage to structures caused by an inadequate dewatering system or by interruption of the continuous operation of the system as specified.

3. The Contractor shall make the entire excavation for this work in the dry. The water level is to be maintained continuously one foot below bottom of excavation for the length of time to complete the work. The Contractor shall place all fill materials and proposed improvements in the dry.

4. The Contractor shall, at all times during construction, provide and maintain proper equipment and facilities to remove promptly and dispose of properly, all water entering excavations and keep such excavations dry so as to obtain a satisfactory undisturbed bottom of excavation or subgrade condition. Dewatering shall be in operation until the fill, or the proposed surface condition has been completed to such extent that it will not be floated or otherwise damaged by allowing water levels to return to natural elevations.

5. In excavations below the ground water level, it is expected that dewatering trenches or deep sumps will be required for pre-drainage of the soils prior to final excavation, and for maintaining the lowered groundwater level until construction has been completed to such an extent that floating, slumping or damage to excavations or materials placed does not occur. Monitoring of adjacent ground water levels by observation wells or other satisfactory means may be required.

6. The Contractor shall discharge all pumped water away from the work area, and in

accordance with all applicable local codes and laws. Requirements specified herein for Erosion and Siltation Control shall be met during this process.

7. All fill material shall be placed and compacted in the dry. The Contractor shall dewater excavated areas as required to perform the work and in such a manner as to preserve the undisturbed Commonwealth of the natural inorganic or other subgrade soils.

8. The Contractor shall verify that the construction and/or operation of his dewatering system will not adversely affect any well, pond, stream structure, utility, etc., on or adjacent to the area being dewatered.

PART 2 - PRODUCTS

2.01 MATERIALS

1. Fill material shall be obtained from required on-site cut to the extent suitable material is available and off-site to the extent suitable material is not available from on-site cuts.

2. On-site material for use in compacted fill shall be natural inorganic granular soil taken from areas of cut after removal of pavement, topsoil, or other unsuitable materials.

3. Fill materials shall be well-graded within specified gradation limits. Gradation of backfill materials shall be determined in accordance with ASTM D-422.

4. Crushed Stone: Crushed stone processed from a stone quarry, washed, graded, free of organic materials. Gradation is as follows:

1. 1/2" Crushed Stone

U. S. SIEVE NO.	% PASSING BY WEIGHT
2"	100
1/2"	85-100
3/8"	15-45
#4	0-15
#8	0-5

2. 3/4" Crushed Stone

U.S. SIEVE NO.	% PASSING BY WEIGHT
1"	100
3/4"	90-100
1/2"	10-50
3/8"	0-20
# 4	0-5

3. 1-1/2" Crushed Stone

U.S. SIEVE NO.	% PASSING BY WEIGHT
2"	100
1-1/2"	95-100
1”	35-70
3/4"	0-25

4. Structural Fill: Well-graded, hard, durable, natural sand and gravel, free from ice and snow, roots, sod, rubbish, and other deleterious or organic matter. Material shall conform to the following gradation requirements:

U.S. SIEVE NO.	% PASSING BY WEIGHT
4"	100
#4	40-70
#40	25-45
#200	0-12

6. Ordinary/Common Fill: Well-graded, natural, inorganic soil approved by the Architect and meeting the following requirements:

    1. It shall have less than 3% organic matter, free from weak, compressible, or frozen materials, and of stones larger than eight inches in dimension. It shall not contain granite block, concrete, masonry rubble, roots, stumps or other similar materials.

    2. It shall be of such nature and character that it can be compacted to the specified densities.

    3. Topsoil and the zone directly below the topsoil indicated on the borings as "subsoil" shall not be considered Ordinary Fill nor shall topsoil, or subsoil stockpiled on the site. Where subsoil is encountered, it shall be stripped separately from the topsoil and the granular material directly beneath the subsoil. This excavated material shall only be utilized in lawn areas, playfield areas or other non-structural areas, and shall be placed in these areas at distances away from adjacent site improvements as specified herein or as directed by the Architect.

    4. Material from excavations on the site may be used as Ordinary Fill if it is deemed acceptable by the Geotechnical Engineer.

7. Unsuitable Material which is classified as "unsuitable" shall be material having at least one of the following properties:

    1. Material with a maximum unit dry weight per cubic foot less than 90 lbs., as determined by ASTM D1557.
    2. Material containing greater than 3% organic matter by weight, organic silt, peat, construction debris, roots and stumps.
    3. Material deemed unsuitable by the Geotechnical Engineer based on its inherent inability to perform satisfactorily as a bearing stratum.
    4. Soil, which is allowed to become frozen, saturated, or unstable because of the contractor’s failure to employ appropriate dewatering, excavation methods, or weather protection is not deemed unsuitable soil but rather represents a condition in which the subgrade was not adequately prepared and/or protected.

8. Blast Rock Fill: Shall be broadly graded blasted rock with a maximum size of 12 inches, 25% smaller than six inches and 10% finer than 3/4 inch. Occasional boulders up to 18 inches will be permitted near the base of the fill.

    1. General site rock fill (outside the building area) may be placed up to within 42 inches of finish grade in pavement areas and to within 18 inches of inverts of utility lines. First lift over the top of rock fill shall be a choke stone layer 18 inches thick. Compaction shall be by minimum of four coverages of a self-propelled vibratory drum roller in each direction (i.e. north-south and east-west). The minimum weight of the drum shall be 10,000 lbs. Compaction may also be by four coverages of heavy track equipment such as a CAT D8 Bulldozer or other heavy track equipment approved by the Geotechnical Engineer.
    2. Rock shall not be placed within a five-foot horizontal distance on either side of

any proposed utility line. The intent is to leave a zone of granular fill that can later be excavated for installation of utilities. Also, large rock fragments shall be kept away from utility pipes.

9. Choke Stone: Shall have a maximum rock size of nine inches and shall have 50% finer than 1-1/2 inch and 25% finer than 3/4 inch.

10. Sand Fill: Shall consist of well-graded natural sand, free from organic, other weak or compressible materials, or frozen materials, Conforming to the following gradation:

U.S. SIEVE NO.	% PASSING BY WEIGHT
#4	100
#50	15-40
#100	2-10
#200	0-5

11. Slab Base Course : Shall be hard, durable, natural sand and gravel, free from ice and snow, roots, sod, rubbish, or organic matter. Material shall conform to the following gradation requirements:

U.S. SIEVE NO.	% PASSING BY WEIGHT
2"	100
#4	40-70
#40	25-45
#200	0-10

PART 3 - EXECUTION

3.01 GENERAL EXCAVATION

1. Excavate all materials encountered to allow construction of the proposed building and structures, utilities and site work as shown on the Drawings and as hereinafter specified.

2. Excavate to levels shown for footings and structures, as required to provide working clearance and to allow adequate inspection and to subgrades outside of buildings and structures as specified herein and as shown on Drawings.

3. In planted areas, remove ledge, boulders and other obstructions to a depth of at least two feet below finished grade.

4. Remove from the site and legally dispose of all debris and other excavated material not needed for, or suitable for, fill except as otherwise specified herein. Remove all materials subject to rot or attack by termites.

5. In general, the Contractor will be permitted to use machine excavation to the bottom of fill under concrete slabs on grade. The final three inches under footings and foundations shall be excavated using a straight blade bucket. If the final three inches cannot be satisfactorily excavated using a straight blade bucket without disturbing subgrades, the Contractor shall use alternative methods, including hand excavations. Alternative methods shall be subject to approval by the Architect or Geotechnical Engineer.

6. Unsuitable Soil Conditions:

   a. If unsuitable bearing materials are encountered at the specified subgrade depths, the Contractor shall notify the Architect. The Contractor shall carry excavation

deeper and replace the excavated material with compacted fill or concrete as directed by the Architect or Geotechnical Engineer. Soil subgrades, which are unstable due to inadequate construction dewatering or excessive subgrade disturbance, are not deemed unsuitable soils.

b. Removal of such material and its replacement as directed will be paid for as extra compensation in quantity approved by the Architect. Only changes in the work authorized in advance by the Architect in writing shall constitute an adjustment in the Contract Price.

c. Material that is not within +\- 3% optimum moisture for compaction of the particular material in place as determined by the Architect or the Geotechnical Engineer and is disturbed by the Contractor during construction operations so that proper compaction cannot be reached shall not be construed as unsuitable bearing materials. This material shall be removed and replaced with lean concrete or structural fill as directed by the Architect or Geotechnical Engineer at no additional cost to the Owner.

d. The Contractor shall follow a construction procedure, which permits visual identification of firm natural ground.

e. The volume of unsuitable material shall be measured by profiling the in-place topography and calculation by the average-end-area method or other method deemed acceptable by the Geotechnical Engineer. The contractor's Licensed Surveyor or Professional Engineer shall prepare the calculations. Payment limits shall be for rock excavation.

7. Excessive Excavation: If any part of the general or trench excavation is carried, through error, beyond the depth and the dimensions indicated on the Drawings or called for in the Specifications, the Contractor at his own expense, shall furnish and install compacted gravel fill, concrete, or take other remedial measures as directed by the Architect to bring fill material up to the required level.

3.02 TRENCH EXCAVATION

1. Excavate as necessary for all footings, structures, pipes, storm and sanitary drainage, electrical, gas, water, related structures and appurtenances, and for any other trenching necessary to complete the work. Unless otherwise indicated, provide separate trench for each utility.

2. Definitions:

1. "Trench excavation" shall be defined as an excavation in which the bottom width does not exceed seven feet, and the top width does not exceed twice the depth or where footings are excavated by backhoe. Refer to Drawings for any special trenching conditions for utilities, structures, etc.

2. The words "invert" or "invert elevation" as used herein mean the elevation at the inside bottom of pipe or channel.

3. The words "bottom of the pipe" as used herein means the elevation at the base of the pipe at its outer surface.

3. In general, machine excavation of trenches will be permitted with the exception of preparation of pipe beds, which will be handwork. Excavate by hand or machine methods at least six inches below the bottom of all utilities.

4. Trench excavation shall include the removal of all materials encountered. During excavation, materials determined to be suitable for backfilling shall be piled in an orderly manner a sufficient distance from the banks of the trench to avoid overloading and to prevent slides or cave-ins. All excavated materials not required or unsuitable for backfill

shall be removed and legally disposed of off the site. The banks of trenches shall be cut as near vertical as practicable to the extent allowed by OSHA.

5. The Contractor shall provide, at his own expense, suitable bridges over trenches where required for accommodation and safety of the traveling public and as necessary to satisfy the required permits and codes.

6. Trenches shall be excavated to the necessary width and depth for proper laying of pipe or other utility and shall have vertical sides or slopes as required by codes. Minimum width of trenches shall provide clearance between the sides of the trench and the outside face of the utility. Maximum trench sizes are as shown on the Drawings or as specified herein. The depth of the trench shall be six inches below the bottom of the pipe barrel or respective utility. If the existing soil is not suitable, the Architect or Geotechnical Engineer may approve removal and replacement of material. Costs for removal and replacement materials will be based on Unit Prices.

7. Coordinate all utility and trench backfilling with the trades involved.

3.03 ROCK EXCAVATION

1. Definitions and Classifications: The following classifications of excavation will be made only when rock excavation is required.

    1. "Earth Excavation" consists of removal and disposal of pavement and other obstructions visible on ground surface; underground structures and utilities indicated to be demolished and removed; material of any classification indicated in data on subsurface conditions; and other materials encountered that are not classified as rock excavation.
    2. "Rock Excavation" consists of removal and disposal of materials encountered that cannot be excavated without continuous and systematic drilling and blasting or continuous use of a ripper or other special equipment, except such materials that are classed as earth excavation. Typical of materials classified as rock excavation are as follows:

        1. Consolidated Bedrock.

        2. Boulders on site, outside trench limits, exceeding two cubic yards in volume.
        3. Boulders within trench limits, exceeding one cubic yard in volume.

    3. Should highly fractured or weathered bedrock be encountered during excavation, the following shall apply:

        1. When the material is encountered in trenching operations or under footings, it shall be excavated or ripped with a hydraulic backhoe equal to or larger than a Caterpillar 235 excavator and will be classified as Earth Excavation. When it is demonstrated to the satisfaction of the Architect and the Geotechnical Engineer that this material can no longer be removed with a hydraulic backhoe and requires drilling and blasting, this material shall be classified as Rock Excavation. - For excavation procedures when this material is encountered under footings, refer to paragraph below.

    4. Intermittent drilling and ripping performed to increase production and not necessary to permit excavation of material encountered will be classified as Earth Excavation.

5. Allowance for Rock Excavation: The Contractor shall carry in the Base Bid an allowance for xxx cubic yards of rock encountered in trench excavation removed from the site. The Contractor shall also carry in the Base Bid an allowance of xxx cubic yards of open rock excavation removed from the site. The Base Bid shall cover all costs relating to such rock excavation, including blasting, removal and placement of the excavated material, overhead and profit. The Owner for excavation herein defined will pay no amount other than that herein specified.

    1. If the total quantity of Rock Excavation, open and/or trench, exceeds the amount of Rock Excavation included in the Contract as listed above, the Owner shall pay the excess excavation at the unit prices as indicated in the contract.
    2. If the total quantity of Rock Excavation, open and/or trench, is less than the amount of Rock Excavation included in the Contract as listed above, the Contract sum will be decreased by the difference in Rock Excavation multiplied by the unit prices listed in the contract.

2. Measurements:

    1. When, during the process of excavation, rock is encountered, such material shall be uncovered and exposed in such a manner that the unbroken ledge surface is clearly visible, and the Contractor shall notify the Architect, before proceeding further. The areas in question shall then be cross sectioned as hereinafter specified.
    2. Failure on the part of the Contractor to uncover such material and to notify the Architect and proceeding by the Contractor with the rock excavation before cross-sections are taken, will forfeit the Contractor's right of claim towards the stated allowance or additional payment over and above the stated allowance at the quoted unit price.
    3. The Contractor shall employ and pay for a licensed Registered Civil Engineer or Land Surveyor to take cross-sections of rock before removal and to make computations of volume of rock encountered within the Payment Lines. Cross-sections shall be taken in the presence of the Geotechnical Engineer and the computations approved by the Architect. The volume calculations shall be by the average end area method. The Owner has the option to perform independent cross-sections and computations of rock quantities.
    4. Where removal of boulder or ledge is required outside the established payment lines, the Architect shall determine the extent of this removal and basis of payment.

3. Blasting: Obtain written permission and approval of method from local authorities before proceeding with rock excavation. Explosives shall be stored, handled, and employed in accordance with state and local regulations or, in the absence of such, in accordance with the provisions of the "Manual of Accident Prevention of Construction" of the Associated General Contractors of America, Inc.

    1. Notify the Architect at least 48 hours before any intended blasting and do no blasting without his specific approval of each blasting operation.
    2. Contractor shall present evidence that his insurance includes coverage for blasting operations before doing any blasting work. A pre-blast survey shall be performed for all buildings and utilities within a radius of 150 feet from the blasting zone or conforming to the ordinance governing blasting and the Fire Department regulations.
    3. All rock blasting shall be well covered with heavy mats or timbers chained together and the Contractor shall take great care to do no damage to existing structures, utility lines and trees to remain.

4. Any damage caused by the work of this Contractor shall be repaired to the full satisfaction of the Architect at no additional cost to the Owner.
5. Any rock fragments or loose material from blasting operations shall be removed. All voids shall be filled with a leveling mat of structural fill or lean concrete as directed by the Geotechnical Engineer.
6. At least 2 weeks prior to blasting the contractor shall submit a blasting plan indicating blasting agents to be used, drill hole depths and spacing, powder factors, personnel, vibration limits and method of measurement, for review by the Geotechnical Engineer.

4. Complaints:

    1. Report all blasting complaints to the Architect within 24 hours of receipt thereof. Include the name, address, date, time received, date and time of blast complained about, and a brief description of the alleged damages or other circumstances upon which the complaint is predicated. Assign each complaint a number, and number all complaints consecutively in order of receipt.
    2. Submit a summary report to the Architect each month which indicates the date, time and name of person investigating the complaint, and the amount of settlement, if any.
    3. When settlement of a claim is made, furnish the Architect with a copy of the release of claim by the claimant.
    4. Immediately notify the Architect, throughout the statutory period of liability, of any formal claim or demands made by attorneys on behalf of claimants, or of serving of any notice, summons, subpoena, or other legal documents incidental to litigation, and of any out-of- court settlement or court verdict resulting from litigation.
    5. Immediately notify the Architect of any investigations, hearings, or orders received from any governmental agency, board or body claiming to have authority to regulate blasting operations.

5. If ledge is encountered within the limits of the Proposed Building Area, the Contractor shall excavate this material 18 inches below subgrade of footings and 12 inches below subgrade of slabs unless otherwise directed by the Architect or Geotechnical Engineer. All loose or shaken rock shall be removed and replaced with compacted gravel fill or lean concrete as specified herein.

6. Rock excavation for foundations outside of the Building Area: Remove rock to foundation or footing subgrade. All rock bottoms for foundations shall be carefully examined. Loose or shaken rock shall be removed to solid bearing, and the rock surface leveled, or shelved to a slope not exceeding one inch per two feet, or as directed.

7. Excavate rock encountered in grading under paved areas, lawns and plant beds to subgrade as specified herein and shown on the Drawings. All boulders or protruding rock outcrops shall remain undisturbed at lawns and plant beds when so directed by the Architect. Rock shall be fractured six inches below subgrade of paved areas, but this six-inch layer shall remain in place.

8. If any part of the rock excavation at footings be carried beyond the depth and the dimensions indicated on the Drawings or called for in the Specifications, the Contractor shall, at his own expense, furnish and install concrete of same strength as footings to the required subgrade level of the footings as shown on the Drawings. Doweling or other corrective structural measures as directed by the Architect may also be required to properly anchor or reinforce the concrete. If rock excavation is carried beyond the depth and dimensions to subgrade in other areas, the Contractor shall, at his own expense, furnish and install compacted gravel fill to subgrade as directed by the Architect.

9. Basis of Payment: The total amount of rock excavation will be based upon the volume of rock excavated within and/or above the lines referred to in the next paragraph as "Payment Lines". The payment lines are only to be used as a basis of payment and are not to be used as limits of excavation. Limits of excavation area as shown on the Drawings and as specified herein.

10. Payment Lines for Rock Excavation:

    1. Payment lines for columns and footings within the building shall be a vertical line one foot from the toe of the footings; the depth shall be measured at 24 inches below the bottom elevations shown on the Drawings. If rock is to remain directly below the bottom of the footings within the Building Area, payment lines shall be six inches below the bottom elevation of the footing as shown on the Drawings. Payment lines for walls to be damp- proofed shall be a vertical line two feet outside the walls. Payment lines for footings outside of the building shall be six inches below the bottom of footings. Vertical payment lines shall be as specified hereinafter.
    2. Payment lines for manholes and catch basins shall be one foot outside of the outer wall and six inches below subgrade beneath the structure.
    3. Payment lines for rock excavation under slabs on grade shall be six inches below the bottom elevation of the specified gravel base course outside of the building and 12 inches below subgrade for slabs within the building.
    4. Payment lines for rock excavation at paved areas and lawns shall be six inches below respective subgrades.
    5. Payment lines for rock excavation under pipes within the building and for utility trenches outside the building lines shall in no case be calculated as greater in width than the outside diameter of the pipe plus two feet for pipes up to 18 inches. For pipes 18 inches and larger payment lines shall in no case be calculated as greater in width than the outside diameter of the pipe plus three feet. Payment lines at bottom of all pipe and utility trenches shall be six inches below subgrade.

3.04 PROOF-ROLLING

1. Contractor shall be required to proof roll foundation and pavement subgrades prior to foundation construction or the placement and compaction of fill materials.

2. Proof rolling of foundation subgrades shall include at least ten passes of a small vibratory plate compactor for trench excavations or six passes of a heavy vibratory roller for open areas.

3. Proof rolling of pavement subgrades shall include four passes of a heavy vibratory roller.

4. If groundwater is located within two feet of foundation or pavement subgrade, proof rolling may be eliminated. However, the Contractor shall demonstrate care during excavation so as to minimize subgrade disturbance.

5. The Geotechnical Engineer shall visually observe Proof rolling. Foundation construction or replacement of fill materials shall not commence until the Geotechnical Engineer has witnessed subgrade conditions and proof rolling operations.

6. Soils which exhibit weaving or instability during the proof rolling operations as determined by the Geotechnical Engineer shall be removed and replaced with compacted Structural Fill or Crushed Stone at no additional cost to the Owner.

3.05 FILLING AND GRADING

1. Samples and Testing:

    1. All fill materials, and their placement shall be subject to quality control testing. The Owner shall pay for all testing except that the Contractor will bear cost of testing materials, which fail to conform to Specifications. Test results and laboratory recommendations will be available to Contractor. All sieve analyses for conformance of on-site and off-site fill materials to be used in the work shall be done by means of a mechanical wet sieve analysis and in accordance with ASTM D-422.
    2. The Owner will retain a Geotechnical Engineer to provide personnel, qualified by training and experience, to be at the site to observe preparation for the placement of compacted fills, to observe excavation and dewatering required for the work, and to observe earthwork operations and report on the conformity of operations with these Specifications. All service and approvals given by the Geotechnical Engineer shall not relieve the Contractor of his responsibility for performing the work in accordance with these Specifications. The Contractor agrees to accept as final the results of field and laboratory tests performed by the above representatives. As stated hereinbefore, the Owner reserves the right to modify or waive Geotechnical Engineer's services.
    3. Excavated material taken directly from on-site cuts that will meet these Specifications may be used as Ordinary Fill or Structural Fill provided the Contractor obtains written approval from the Architect. No such fill material shall be put in place until approved for use by the Architect in writing.
    4. Field density tests will be made by the Geotechnical Engineer in accordance with the Method of Test for ASTM Designation D1556 or D2944, to determine the adequacy of compaction; the location and frequency of such field tests shall be at the Geotechnical Engineer's discretion.
    5. The Contractor shall notify the Architect or the Geotechnical Engineer when an area is ready for compaction testing. This notification shall be 48 hours in advance of placing or final compaction so that the Geotechnical Engineer has adequate time to take compaction tests.
    6. The Architect or his designated representative shall have the right to observe the installation of all controlled compacted fills.
    7. Testing of materials as delivered may be made from time to time. Materials in question may not be used, pending test results. Tests of compacted materials will be made regularly. Remove rejected materials and replace them with new, whether in stockpiles or in place.
    8. Cooperate with the Geotechnical Engineer in obtaining field samples of in-place materials after compaction. Furnish incidental field labor in connection with these tests. The Contractor will be informed by the Geotechnical Engineer of areas of unsatisfactory density which may require improvement by removal and replacement, or by scarifying, aerating, sprinkling (as needed), and re-compaction prior to the placement of the new lift. No additional compensation shall be paid for work required to achieve proper compaction.
    9. The Geotechnical Engineer's presence does not include supervision or direction of the actual work by the Contractor, his employees, or agents. Neither the presence of the Geotechnical Engineer nor any observations and testing performed by him shall excuse the Contractor from defects discovered in his work.
    10. In no case will frozen material be allowed for use in fill, backfill, or rough grading material.
    11. Stones or rock fragments larger than four inches in their greatest dimension shall not be permitted within the top six inches of subgrade of any fills or embankments.

2. Placing, Spreading and Compacting Fill Material:

1. Fill materials are to be placed as designated herein and as indicated on the Contract Drawings.

1. Crushed Stone shall be placed as follows and compacted as specified herein:

1.) Under and around utility structures and around foundation drains and underdrains.
2.) Behind retaining walls, and under rip rap.
3.) Where otherwise shown on Drawings or as directed by the Architect.

2. Structural Fill shall be placed as follows and compacted in lifts to a minimum of 95% maximum dry density per the Modified Proctor Test (ASTM D 1557) as specified herein: (Refer to table specified herein for compaction methods and lift requirements.)

1.) Within building pad areas.
2.) As a subgrade fill for all material to be placed controlled compacted fills under exterior concrete slabs, foundations, on grade stairs, and other soil bearing situations.
3.) Wherever a structural fill is called for or shown on the Drawings.

3. Ordinary Fill shall be placed as follows and compacted as specified herein:
1.) In general, areas such as lawn or parking islands except where Structural Fill is shown.
2.) Wherever Ordinary Fill is called for and as specified hereinbefore.
3.) Wherever Structural Fill, Crushed Stone, Sand Fill or Topsoil is not required herein or on the Drawings.

4. Blast Rock Fill may be placed up to within three feet of finish grade in pavement areas and within two feet of finish grade in lawns, and to within 30 inches of inverts of utility lines and proposed utility routes. First lift over the top of rock fill shall be choked stone layer 18 inches thick which shall be a well-graded mixture of sand, gravel, and blasted rock with maximum stone size less than nine inches. Compaction shall be by minimum of six coverages of a self-propelled vibratory drum roller in each direction (i.e. north-south and east-west). The minimum weight of the drum shall be 1 0,000 lbs. Compaction may also be by four coverages of heavy track machinery such as a Caterpillar D8 or other track machinery approved by the Geotechnical Engineer.

1.) Blast Rock Fill shall not be placed within 30 inches vertically of exterior concrete slabs (i.e. sidewalks, loading docks, etc.
2.) Rock shall not be placed within a five-foot horizontal distance on either side of any proposed utility line. The intent is to leave a zone of granular fill that can later be excavated for installation of utilities. Also keep large rock fragments away from any utility lines.
3.) Place woven filter fabric (Mirafi 500X or equivalent) over Blast Rock Fill.

5. Sand Fill shall be placed as follows and compacted as specified for the particular item:

    1.) As a bedding material for PVC electrical conduit where concrete is not required, telephone-cable, primary electric service and gas pipe.
    2.) Where otherwise specified or shown on the Drawings.

6. Slab Base Fill shall be placed in minimum 6-inch lift under concrete floor slabs.

7. Subsoil shall be used only under lawn areas and athletic fields. This material shall not be placed closer to areas being otherwise prepared than a 1:1 angle of repose x depth of fill for the particular area. For instance, if a fill is four feet deep, subsoil may not be placed closer than four feet to the area being otherwise prepared.

    1.) Unsuitable Earth Materials shall be removed from the site.
    2.) The fill material shall be placed in uniform horizontal layers and compacted as specified herein.

8. Each layer shall be spread evenly and shall be thoroughly mixed during the spreading to obtain uniformity of material in each layer. So far as practicable, each layer of material shall extend the entire length and width of the area being filled plus two additional feet horizontally along each side for every one foot of fill required.

3. All fill material shall be placed and compacted in the dry. The Contractor shall dewater excavated areas as required to perform the work, and in such a manner as to preserve the undisturbed bearing capacity of the subgrade soils. In freezing weather, a layer of fill shall not be left in an uncompacted state at the close of a day's operation. Prior to terminating operations for the day, the final layer of fill, after compaction, shall be rolled with a smooth-wheeled roller to eliminate ridges of soil left by tractors, trucks and compaction equipment.
4. The Contractor shall not place a layer of compacted fill on soil that was permitted to freeze prior to compaction or on snow or ice. Removal of these unsatisfactory materials will be required as directed by the Owner.
5. When the moisture content of the fill material is below optimal moisture necessary for compaction as specified herein, water shall be added until the moisture content is as specified.
6. When the moisture content of the fill material is above the optimal moisture necessary for compaction as specified herein, the fill material shall be aerated by blending, mixing, or other satisfactory methods until the moisture content is as specified.
7. After each layer has been placed, mixed and spread evenly, it shall be thoroughly compacted to the specified density. Compaction shall be continuous over the entire area and the equipment shall make sufficient passes to ensure that the desired density is obtained. A minimum of four coverages with acceptable compaction equipment described hereinafter is a requirement. These coverages are to be provided as systematic compactive effort; incidental coverages due to construction vehicle traffic through the area will not be included.

3. Structural Fill: All fills within the building area shall be made with Structural Fill as defined herein and shown on the Footing Zone of Influence detail included herein. No excavated

on-site material will be acceptable as Structural Fill unless specifically approved by testing as specified herein.

4. Allowance for Unsuitable Materials and replacement with Structural Fill: The Contractor shall include in his base bid xxx cubic yards for the removal of Unsuitable Materials and Structural Fill in place and graded as specified herein to be used as directed by the Architect or the Geotechnical Engineer. This quantity of Structural Fill is in addition to the requirements for Structural Fill in areas as specified herein and as shown on the Contract Documents and is to be used at the discretion of the Architect or the Geotechnical Engineer.

5. Backfilling of Trenches, Structures and Foundations:

    1. Areas to be backfilled shall be free of construction debris, refuse, compressible or decayable materials and standing water. Do not place fill when temperature is below 30 degrees F and when fill materials or layers below it are frozen unless specifically approved by the Geotechnical Engineer.
    2. Requirement of description, placement, compaction and spreading of fill materials as specified herein shall be applicable to backfilling operations.
    3. Structural Fill shall be used as Backfill around manholes and other structures. Excavated material may be used if approved by the Architect or Geotechnical Engineer.
    4. Backfilling of foundations, structures and retaining walls shall not commence until construction finish grade has been approved, forms removed, and the excavation cleaned of trash and debris. Backfill shall not be placed against walls until they are braced or cured sufficiently to develop the strength necessary to withstand, without damage, the pressure that will result from backfilling and compacting operations. If fill is required on both sides of a wall, it shall be brought up simultaneously and evenly on both sides. Avoid damage to the walls and to damp-proofing and waterproofing and other work in place. Allow seven days from the date of application of waterproofing before backfilling. Stones larger than four inches maximum dimension shall not be permitted in the upper six inches of fill or horizontally within 12 inches of walls.
    5. Do not commence backfilling operations of utility trenches until all piping, conduits, etc. have been installed, tested and approved and the locations of all pipe and appurtenances have been recorded. Backfill carefully by hand around pipe to depth of one foot above top of pipe using material specified herein and tamping firmly in layers not exceeding six-inch layers, compacting by hand rammers or mechanical tampers. When a manufacturer of utility line materials suggests backfill materials and methods other than those specified herein, such requirements shall govern providing the finished work equals or exceeds the result obtained by the materials and methods specified herein. Water mains shall be hand backfilled to a minimum cover of 18 inches before mechanical equipment can be used to backfill trench.
    6. Sand Bedding will be required below all pipe unless otherwise shown on the Drawings or specified herein. Crushed Stone is required under utility structures where shown on the Drawings. Gravel Bedding, Sand Bedding or Crushed Stone shall be placed to the full width of the trench and under utility structure foundations as indicated on the Drawings. After a pipe is bedded, the trench shall be filled to the centerline of the pipe with Gravel Fill or Sand Bedding except at the joint. After the joint is inspected, that portion shall be filled in with Sand Bedding. Material under and around the pipe shall be carefully and thoroughly tamped.
    7. From the centerline of the pipe to a point 12 inches above the top of the pipe the backfill shall be Structural Fill or Sand Fill placed by hand and hand tamped. Above this point, backfill shall be placed in layers six inches deep and each layer

shall be compacted with mechanical tampers to not less than 95% of maximum density at optimum moisture of the material. This backfill shall be carried up to the bottom of materials specified to be placed for surfacing requirements.

8. Utilities shall not be laid directly on ledge, boulders or other hard material. This material shall be removed as specified herein within trench limits, and within vertical planes one foot outside of structure walls. Backfill will be placed in eight-inch lifts and thoroughly compacted. If hand guided compaction equipment is used, fill shall be placed in six-inch lifts. All rock excavation shall be considered unsuitable for backfill around utilities. Ordinary fill may be used as backfill in areas specified herein.
9. Coordinate all utility and trench backfilling with the trades involved.

6. Compaction Equipment:

    1. Compaction shall be accomplished by vibratory rollers, multiple wheel pneumatic tired rollers or other types of approved compacting equipment. Loaded trucks, low beds, water wagons and the like shall not be considered as acceptable compaction equipment unless specifically approved by the Architect or Geotechnical Engineer for a particular location. Equipment shall be of any such design that it will be able to compact the fill to the specified density in a reasonable length of time. All compaction equipment shall be subject to the approval of the Geotechnical Engineer.

7. Compaction Requirements:

    1. The following table lists minimum compactive efforts and lift weights which are required for all fill materials. Compaction of each lift shall be completed before compaction of the next lift is started. The compaction equipment shall make an equal number of transverse and longitudinal coverages of each lift. Allow the Geotechnical Engineer sufficient time to make necessary observations and tests. The degree of compaction for fill placed in various areas shall be as follows:

        <u>Relative Compaction</u>

        1. Within buildings and structures:
           -Under footings 95%
           -under slab 95%

        2. Outside building areas:
           -within paved areas 95%
           -within lawn areas and playing fields 85%

    - Percent of maximum dry density of the material at optimum moisture content as determined by methods or tests for ASTM designation D 1557.

8. Methods: The compaction alternatives given below are stated to provide minimum compaction standards only and in no way relieves the Contractor of his obligation to achieve the specified degree of compaction by whatever additional effort is necessary.

    1. All fill to be placed "in-the-dry" with the exception specified hereinafter. If, in the opinion of the Architect or the Geotechnical Engineer, the Contractor has followed a logical sequence of construction procedures, has employed the proper and necessary equipment, and has otherwise conducted himself in a workmanlike manner, but still cannot effectively dewater the excavation, the Architect or the Geotechnical Engineer may permit the Contractor to place a first

lift of Gravel or Crushed Stone fill "in-the-wet". Fill placed in-the-wet must meet the gradation and placement requirements specified herein. The quantity of fill placed in-the-wet must be no greater than deemed necessary by the Architect and must be limited to the lowermost lift.

9. Moisture Control:

1. Variation of moisture content in fill and backfill materials shall be limited to Optimum Moisture (-l% to +2%). Moisture content shall be as uniformly distributed as practicable within each lift and shall be adjusted as necessary to obtain the specified compaction.
2. Material which does not contain sufficient moisture to be compacted to the specified densities shall be moisture conditioned by sprinkling, discing, windrowing, or other method approved by the Geotechnical Engineer.

1. Material conditioned by sprinkling shall have water added before compaction. Uniformly apply water to surface of subgrade or layer of soil material to obtain sufficient moisture content. The Contractor shall maintain sufficient hoses and/or water distributing equipment at the site for this purpose.

3. Material containing excess moisture shall be dried to required Optimum Moisture before it is placed and compacted. Excessively moist soils shall be removed and replaced and shall be scarified by use of plows, discs, or other approved methods, and air-dried to meet the above requirements.
4. Materials, which are within the moisture requirements specified above, but which display pronounced elasticity or deformation under the action of earthmoving and compaction equipment, shall be reduced to Optimum Moisture Content, or below, to secure stability.
5. In the event of sudden downpours or other inclement weather, exposed subgrades and fills which, in the opinion of the Geotechnical Engineer, become inundated or excessively moistened shall have excess water removed and soil dried as specified above.

3.06 ROUGH GRADING

1. Rough grading shall include the shaping, trimming, rolling and finishing the surface of the sub- base, shoulders, and earth slopes, and the preparation of the sub-base for loam, seeding and paved surfaces. The grading of shoulders and sloped areas may be done by machine methods. Up to two inches in 100" tolerance will be permitted on slopes and one inch in 100" on lawn areas provided the slopes are uniform in appearance and without abrupt changes. All ruts shall be eliminated. Grading of subgrades for paved areas shall be finished at the required depth below and parallel to the proposed surface within 3/8 inch in 100" tolerance.

2. If, during the progress of rough grading work, water pipe, sewer conduit, drain, or other construction is damaged due to operations under this Contract, the Contractor shall repair all such damage at no additional cost to the Owner and restore damaged areas to their original condition.

3. Do all other cutting, filling and rough grading to the lines and grades indicated on the Drawings. Grade evenly to within the dimensions required for finished grades shown on the Drawings. No stone larger than three inches in largest dimension shall be placed in upper 12 inches of fill.

4. Grades shall be brought below finished grades in accordance with the various depths specified below:

1. Under slabs-on-grade, as specified herein and as shown on the Drawings.
2. Under paved areas, bottom of base course as shown on Drawings.
3. Under seeded areas, six inches.
4. Under cattail marsh area and pond bottom, 12 inches.

5. No rubbish of any description shall be allowed to enter fill material. Such material shall be removed from the site.

6. Complete the grading operations after the building has been finished, the utilities installed, site improvements constructed, and all materials, rubbish and debris removed from the site. Leave subgrade for lawns clean at required grades. There must be sufficient grade staking to provide correct lines and grades.

3.07 DEFICIENCY OF FILL MATERIAL

1. Provide required additional fill material from offsite sources to complete the work if a sufficient quantity of suitable material is not available from the required excavation on the project site.

3.08 SURPLUS OF FILL MATERIAL

1. Surplus fill which is not required to fulfill the requirements of the Contract shall be removed from the site and legally disposed of.

3.09 DUST AND EROSION CONTROL

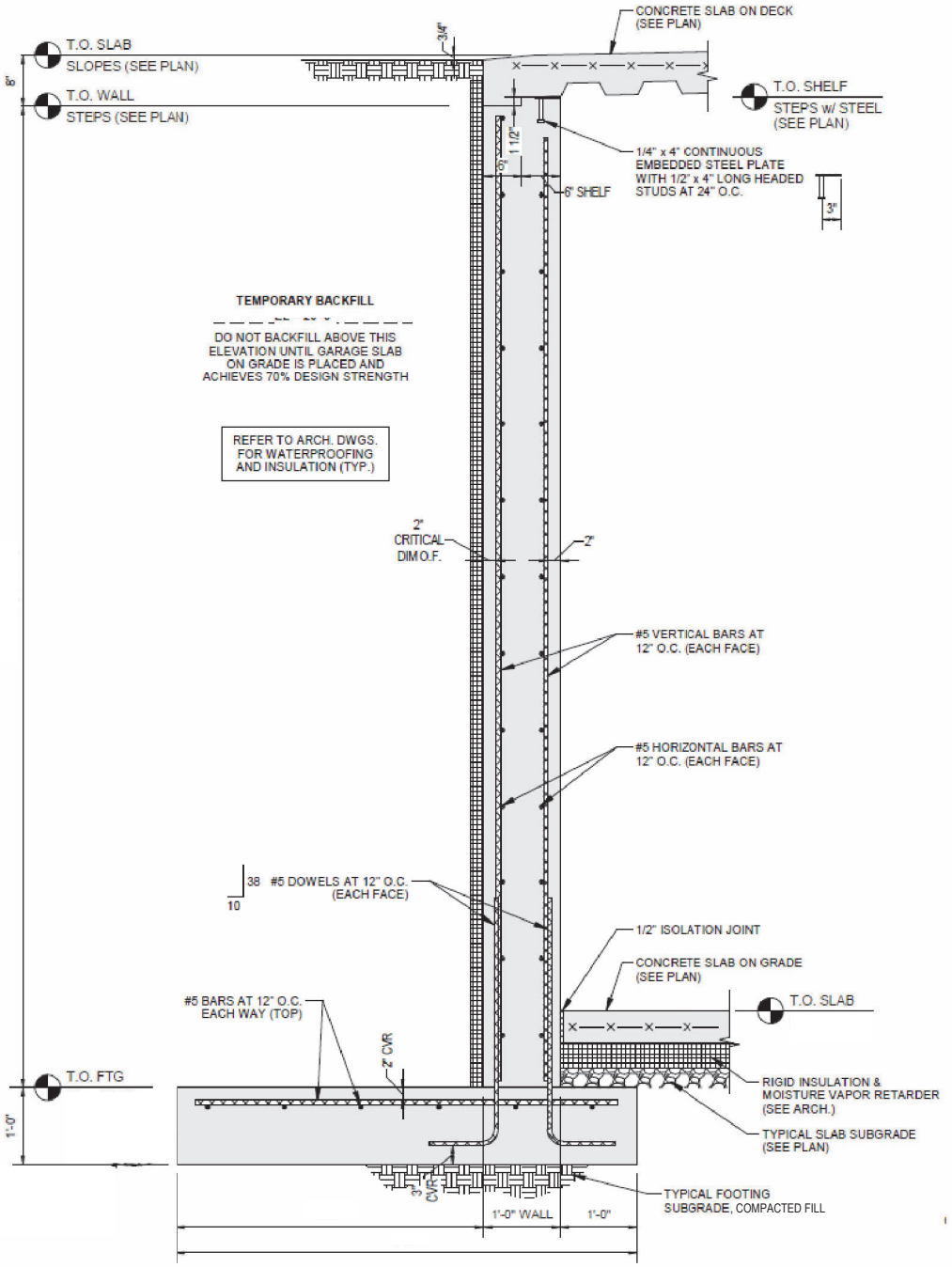
1. The Contractor shall take all necessary measures and provide equipment and/or materials to minimize dust from rising and blowing across the site and also to control surface water throughout the operation so that it does not run onto paved ways without being filtered. In addition, the Contractor shall control all dust created by construction operations and movement of construction vehicles, both on the site and on paved ways. Provide additional crushed stone where necessary to provide traps or pads for construction vehicles carrying sediment. Provide temporary swales and interceptor ditches to control surface runoff water where necessary.

2. If dust control is required off-site due to work under this Contract, in addition to watering, sweeping and other methods, the Contractor shall apply calcium chloride in the required amounts to properly control dust. These amounts shall be approved by the City Engineer prior to application.

3.10 RESTORATION OF SITE ITEMS

1. Wherever streets, lawns or other items within the Contract Limit Lines have been excavated in fulfilling the work required under the Contract, the Contractor shall furnish and install all material at no cost to the Owner to bring finish surface level with the existing adjacent conditions. All work shall be installed to match the existing conditions.

END OF SECTION 02200



1 S0.1 FOUNDATION WALL SECTION
3/4" = 1'-0"

NOTE: ALL FOOTINGS ARE TO REST ON CLEAN GRANULAR FILL COMPACTED IN LAYERS OF 12" OR LESS TO 95% COMPACTION.

ARCOVE ARCHITECTS

134 PLEASANT STREET

PORTSMOUTH, NH 03801

PROJECT NO:1028

ARCOVE ARCHITECTS
767 ISLINGTON ST, STE 2A
PORTSMOUTH NH 03801
603.731.5187
www.ARCove.com

DOUBLE MC, LLC
MCNABB PROPERTIES LTD
10 PLEASANT ST, STE 3
PORTSMOUTH NH 03801

REVISIONS:

REFERENCE:

REFERENCE SHEET:

DATE: 02/03/26

TYPICAL FOUNDATION DETAIL

SCALE:

SK-1

E # 23027044 09/08/2023 01:45:00 PM
Book 6505 Page 2411 Page 1 of 3
Register of Deeds, Rockingham County

Return to:

_____

_____

_____

LCHIP	ROA658982	25.00
TRANSFER TAX	RO125185	82,500.00
RECORDING		18.00
SURCHARGE		2.00

WARRANTY DEED

134 Pleasant Street, LLC, a New Hampshire limited liability company, with a principal place of business at 134 Pleasant Street, Portsmouth, New Hampshire 03801, FOR CONSIDERATION PAID, grants to **Double MC, LLC,** a New Hampshire limited liability company, with a principal place of business at 3 Pleasant Street, Suite 400, Portsmouth, New Hampshire 03801, with ***WARRANTY COVENANTS,*** the following described premises:

A certain tract or parcel of land with the buildings thereon situated on Pleasant Street, in the City of Portsmouth, County of Rockingham and State of New Hampshire as shown on a plan drawn by Millette, Sprague & Colwell, Inc. entitled "ALTA/ACSM Land Title Survey for Citizens Bank New Hampshire, 134 Pleasant Street, County of Rockingham, Portsmouth, NH" recorded in the Rockingham County Registry of Deeds as Plan D-26343, bounded and described as follows:

Beginning at a point on the southerly sideline of Pleasant Street at the southeasterly corner of land now or formerly of Strawbery Banke, Inc.; thence

South 46° 14' East along said Pleasant Street a distance of 122.39 feet, more or less, to a point; thence

South 57° 07' East still along Pleasant Street a distance of 79.29 feet, more or less, to a point at land now or formerly of the City of Portsmouth; thence

South 53° 45' West along land of the City of Portsmouth a distance of 121.33 feet, more or less, to a point; thence

South 61° 54' West along said City of Portsmouth land a distance of 194.24 feet, more or less, to a point; thence

North 24° 03' West along said City of Portsmouth land and other land of the City of Portsmouth a distance of 124.67 feet, more or less, to a point; thence

South 65° 57' 50" West along land of the City of Portsmouth a distance of 32.60 feet, more or less, to a point; thence

North 23° 44' 35" West along land of the City of Portsmouth a distance of 60.00 feet, more or less, to a point at land now or formerly of S & T Realty Trust; thence

North 66° 03' 55" East along said S & T Realty Trust land a distance of 32.60 feet, more or less, to a point at land now or formerly of Strawbery Banke, Inc.; thence

South 04° 51' 20" East along said Strawbery Banke, Inc. land a distance of 0.98 feet, more or less, to a point; thence

North 56° 41' East along said Strawbery Banke, Inc. land a distance of 175.24 feet, more or less, to a point; thence

North 57° 43' East continuing along said Strawbery Banke, Inc. land a distance of 50.44 feet, more or less, to the point of beginning.

TOGETHER WITH a right of way to Court Street as fully described in deed recorded at Book 1257, Page 466 of the Rockingham County Registry of Deeds.

Also conveying all right, title and interest in and to a right of way along a portion of the southerly bound of the premises described in Book 2975, Page 349.

Meaning and intending to describe and hereby convey the same premises in the deed of South Mill Pond, LLC to 134 Pleasant Street, LLC, dated February 23, 2005 and recorded with the Rockingham County Registry of Deeds at Book 4440, Page 2021.

This is not homestead property.

[Remainder of Page Intentionally Blank – Signature Page Follows]

DATED this 8 day of September, 2023.

134 PLEASANT STREET, LLC a New Hampshire limited liability company

Sharon Weston, Manager

STATE OF NEW HAMPSHIRE

COUNTY OF Rockingham, ss.

On September ___, 2023, before me, the undersigned notary public, personally appeared Sharon Weston, Manager of 134 Pleasant Street, LLC, a New Hampshire limited liability company, proved to me through satisfactory evidence of identification, which was her:

- ☐ photographic identification with signature issued by a federal or state governmental agency,
- ☐ oath or affirmation of a credible witness,
- ☒ personal knowledge of the undersigned,

to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily for its stated purpose, duly authorized, in her capacity as manager of 134 Pleasant Street, a New Hampshire limited liability company.

Notary Public
My Commission Expires: _____
[SEAL]

JOHN K. BOSEN
MY COMMISSION EXPIRES DEC. 2, 2025
NOTARY PUBLIC
NEW HAMPSHIRE

H0.2

EXISTING PHOTOS
134 PLEASANT STREET
PORTSMOUTH, NH 03801

07/25/2025

ARCOVE ARCHITECTS

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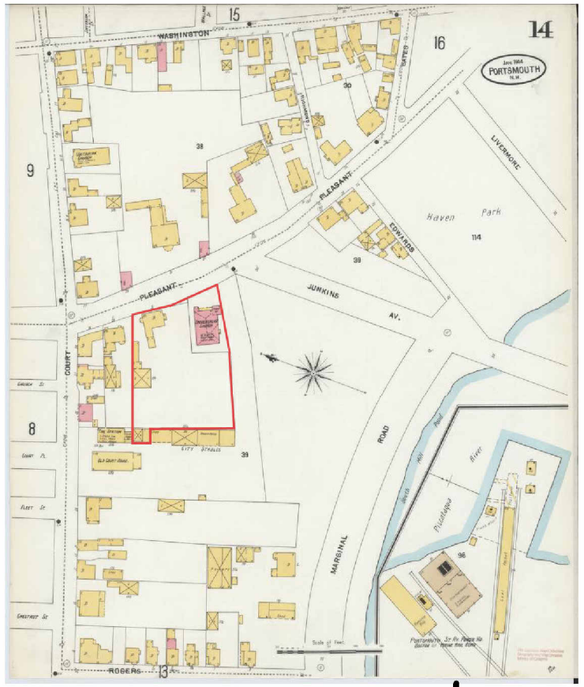
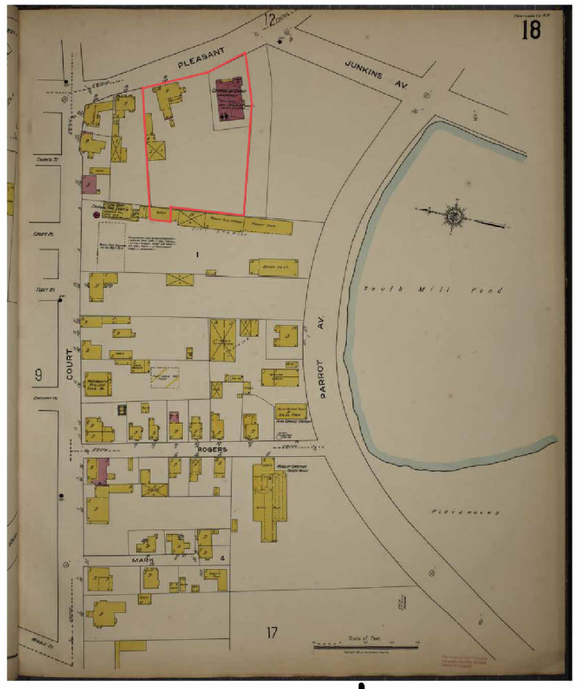
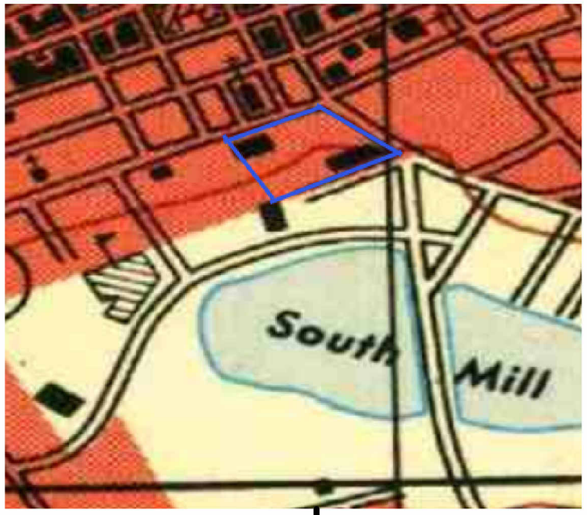
1813
UNIVERSALIST CHURCH & HOUSING



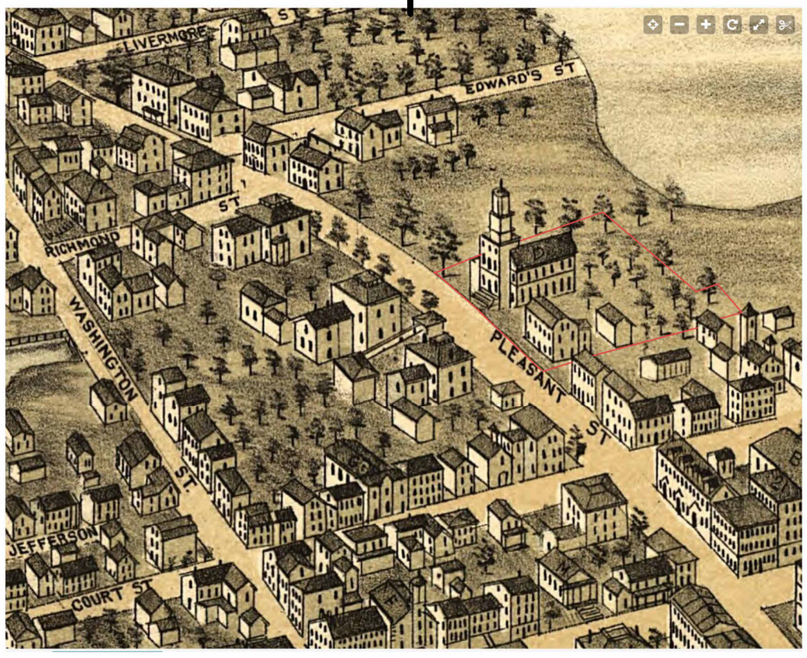
1904
UNIVERSALIST CHURCH & HOUSING



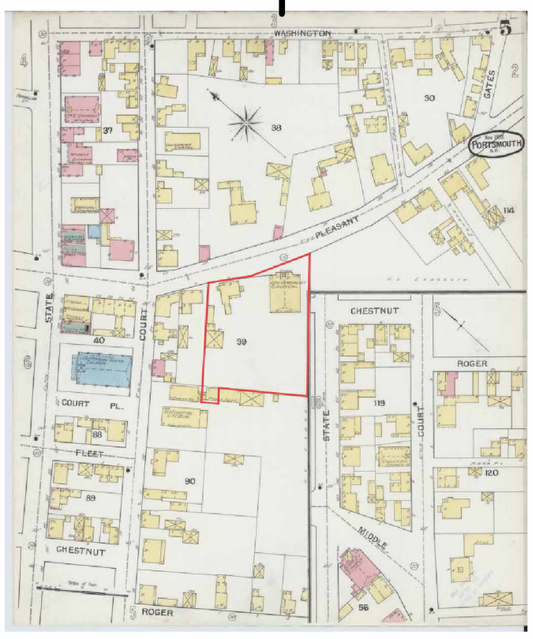
1920
UNIVERSALIST CHURCH & HOUSING



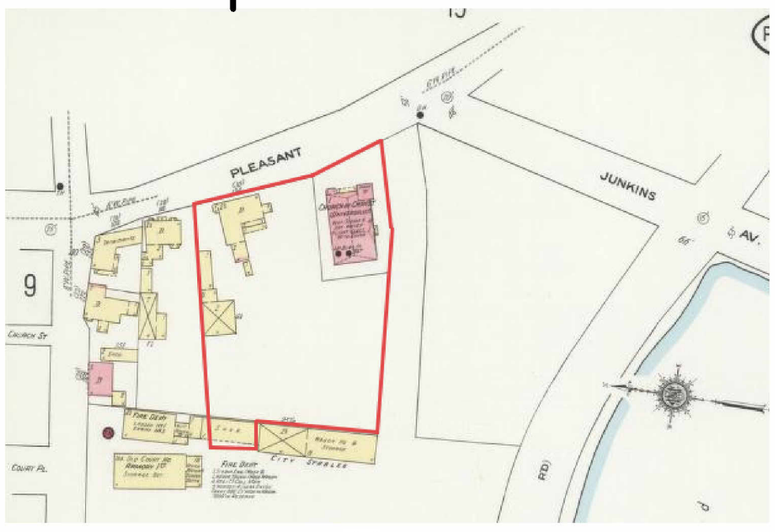
1952
GROCERY IN CONSTRUCTION TILL 1953
CHURCH DEMOLISHED AFTER



1877
UNIVERSALIST CHURCH & HOUSING



1892
UNIVERSALIST CHURCH & HOUSING



1910
UNIVERSALIST CHURCH & HOUSING

H0.4 **HISTORIC TIMELINE**
134 PLEASANT STREET
PORTSMOUTH, NH 03801

07/25/2025

ARCOVE ARCHITECTS

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EXISTING DRIVE UP WINDOW DIMENSION SKETCH

OWNER: DOUBLE MC, LLC
PROPERTY LOCATION: 134 PLEASANT STREET
CITY OF PORTSMOUTH
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

GRAPHIC SCALE

40 0 20 40 80 120

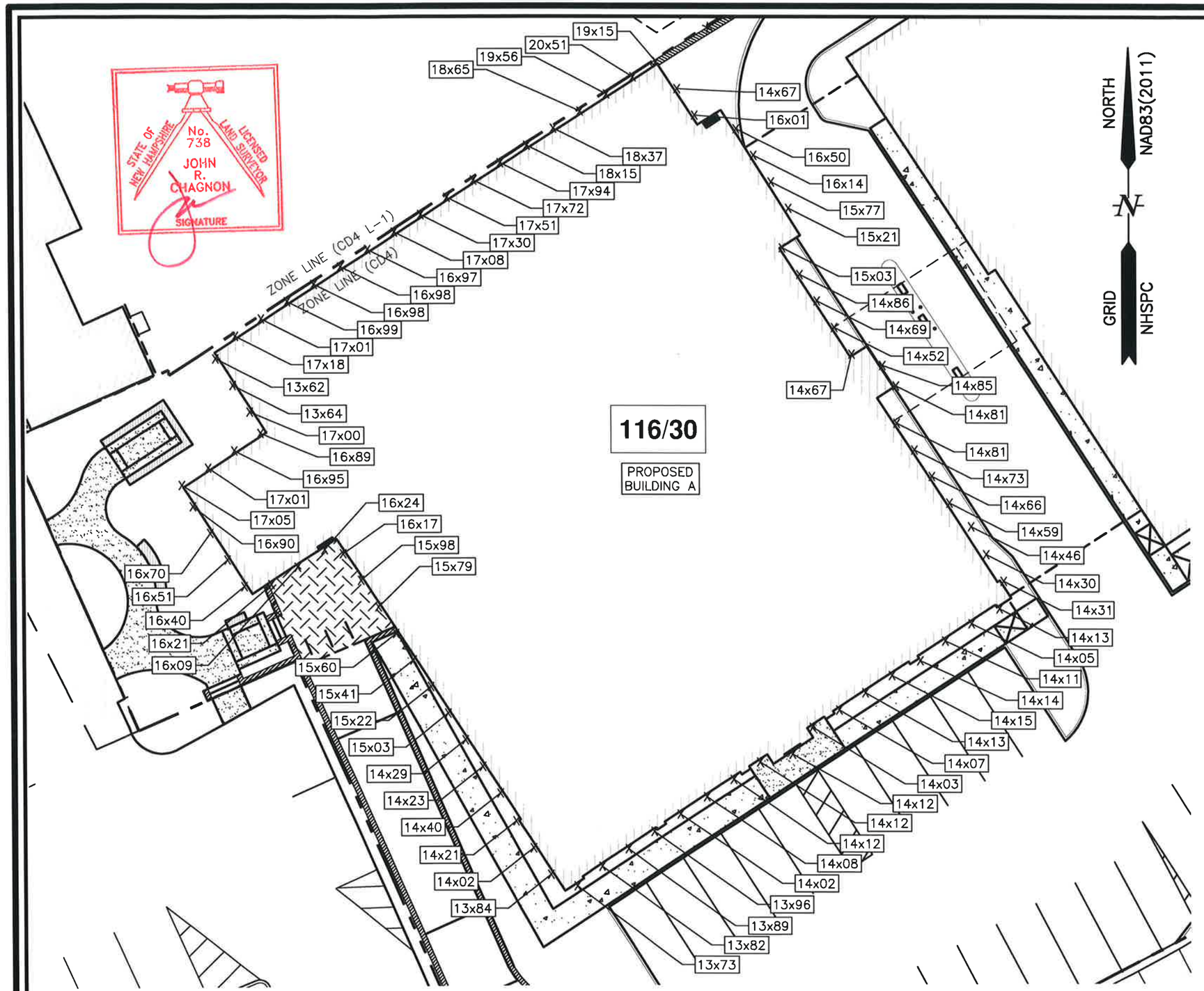
(IN FEET)
1 inch = 40 ft.

SCALE: 1"=40' DATE: AUGUST 4, 2025

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

FB 276 PG 60 JOB # 5010156.1532

P:\NH\5010156-McNabb_Properties\1532-134 Pleasant St., Portsmouth-JRC\02-CAD_Files\5010156.1532-V-EC.dwg, 8/6/2025 12:43:31 PM



EXISTING AVERAGE GRADE				
	NORTH	EAST	SOUTH	WEST
	17.05	14.67	14.13	13.84
	17.01	16.01	14.05	14.02
	16.95	16.50	14.11	14.21
	16.89	16.14	14.14	14.40
	17.00	15.77	14.15	14.23
	13.64	15.21	14.13	14.29
	13.62	15.03	14.07	15.03
	17.18	14.86	14.03	15.22
	17.01	14.69	14.12	15.41
	16.99	14.52	14.12	15.60
	16.98	14.67	14.12	15.79
	16.98	14.85	14.08	15.98
	16.97	14.81	14.02	16.17
	17.08	14.81	13.96	16.24
	17.30	14.73	13.89	16.09
	17.51	14.66	13.82	16.21
	17.72	14.59	13.73	16.40
	17.94	14.46		16.51
	18.15	14.30		16.70
	18.37	14.31		
	18.65			
	19.56			
	20.51			
	19.15			
TOTAL	416.21	299.59	238.67	292.34
/# GRADES	416.21/24	299.59/20	238.67/17	292.34/19
AVG. GRADE	17.34	14.98	18.36	15.39
*SPOT GRADES TAKEN AT POINTS 6' ON CENTER ALONG PROPOSED BUILDING FOOTPRINT.				

EXISTING AVERAGE GRADE: 16.52

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

SITE REDEVELOPMENT
134 PLEASANT STREET
PORTSMOUTH, N.H.

EXISTING AVERAGE GRADE PLANE–BUILDING A

SCALE: 1"=20'

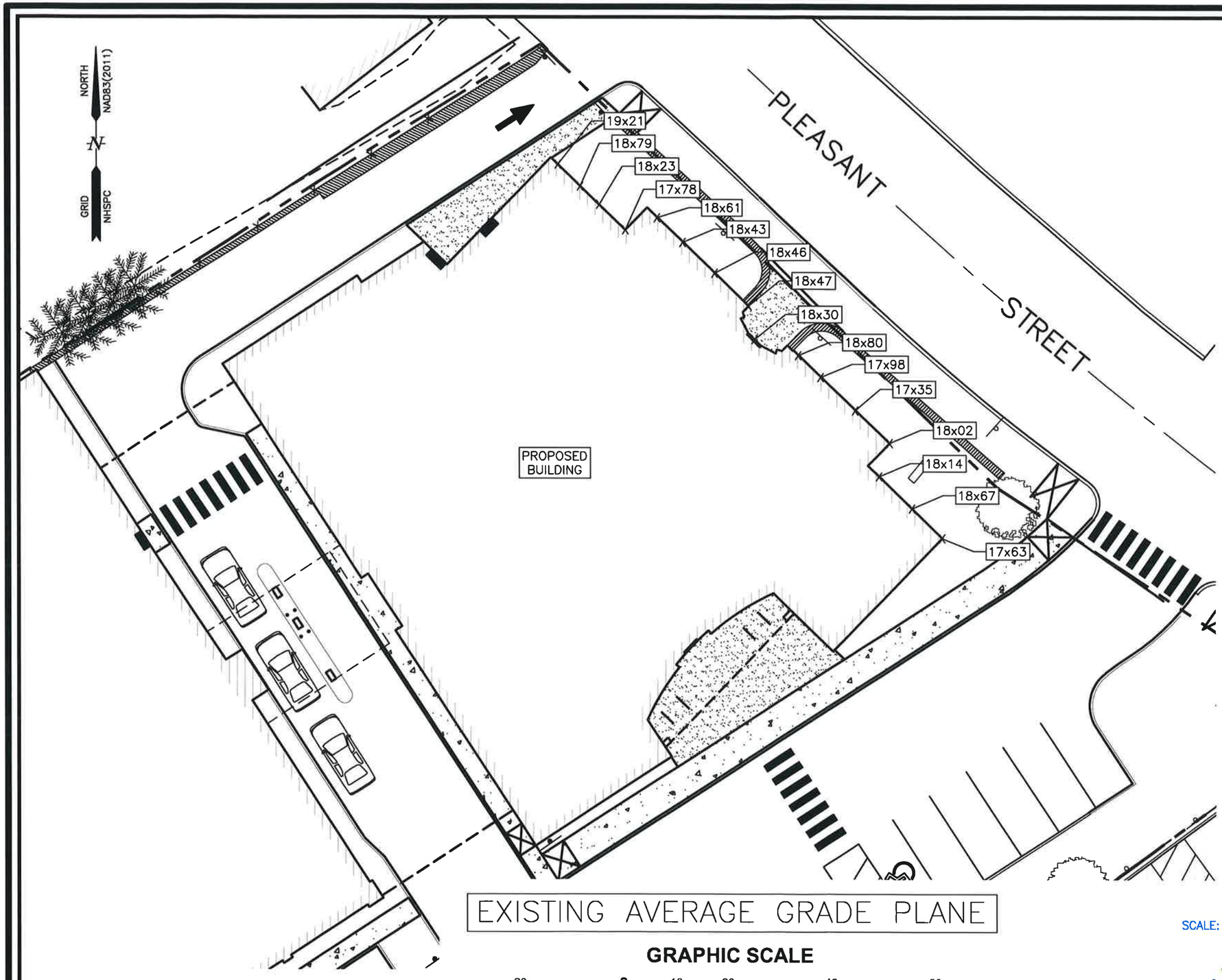
JANUARY 2026

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

FB 276 PG 60

5010156.1532

P:\NH\5010156 McNabb_Properties\1532 134 Pleasant St, Portsmouth\RC\02 CAD_Files\Civil\5010156.1532 Site 2025.dwg, 1/20/2026 1:06:11 PM



EXISTING AVERAGE GRADE

	SOUTH	WEST	NORTH	EAST
	N/A	N/A	N/A	19.21
				18.79
				18.23
				17.78
				18.61
				18.43
				18.46
				18.47
				18.30
				18.80
				17.98
				17.35
				18.02
				18.14
				18.67
				17.63
TOTAL	**N/A**	**N/A**	**N/A**	**292.87**
/# GRADES	**N/A**	**N/A**	**N/A**	**292.87/16**
AVG. GRAD	**N/A**	**N/A**	**N/A**	**18.30**

***SPOT GRADES TAKEN AT POINTS 6' ON CENTER ALONG PROPOSED BUILDING FOOTPRINT.**

EXISTING AVERAGE GRADE: 18.30

EXISTING AVERAGE GRADE PLANE

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

SITE REDEVELOPMENT
134 PLEASANT STREET
PORTSMOUTH, N.H.

STATE OF NEW HAMPSHIRE
No. 738
JOHN R. CHAGNON
LICENSED LAND SURVEYOR
SIGNATURE

SCALE: 1"=20'

SEPTEMBER 2025
REVISED 12-22-2025

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

FB 276 PG 60

5010156.1532

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PROPOSED MIXED USE DEVELOPMENT

134 PLEASANT STREET, PORTSMOUTH, NEW HAMPSHIRE

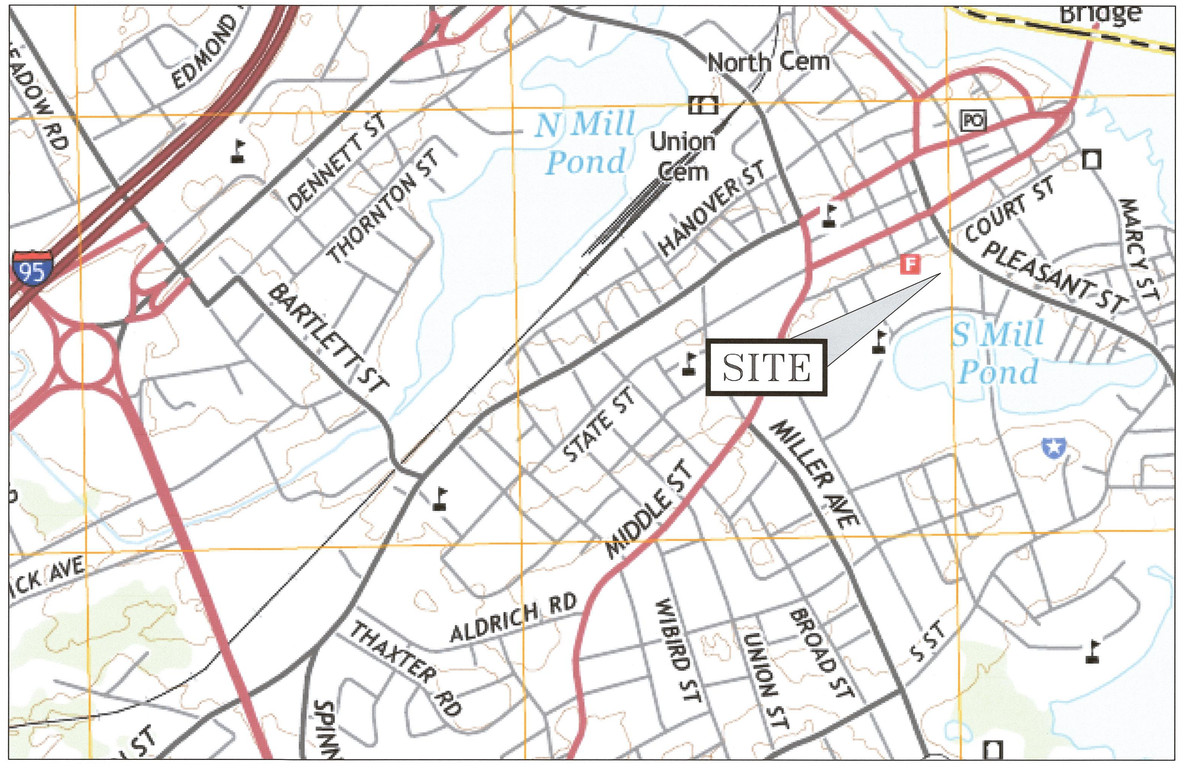
PERMIT PLANS

OWNER/APPLICANT
DOUBLE MC, LLC
10 PLEASANT STREET SUITE 300
PORTSMOUTH, N.H. 03801
TEL. (603) 427–0725

CIVIL ENGINEER & LAND SURVEYOR:
HALEY WARD, INC.
200 GRIFFIN ROAD, UNIT 14
PORTSMOUTH, N.H. 03801
TEL. (603) 430–9282

ARCHITECT:
ARCOVE LLC
767 ISLINGTON STREET
PORTSMOUTH, NH 03801
TEL. (603) 731–5187

LANDSCAPE ARCHITECT:
TERRA FIRMA LANDSCAPE ARCHITECTURE
163A COURT STREET
PORTSMOUTH, NH 03801
TEL. (603) 430–8388



SCALE: NTS

PERMIT LIST:

PORTSMOUTH WETLAND CUP:	LU 25–138
PORTSMOUTH SITE PLAN:	LU 25–138
PORTSMOUTH HISTORIC DISTRICT:	LU 25–138
NHDES SHORELAND:	PBN 2026–00409
NHDES WETLAND:	PENDING

PORTSMOUTH APPROVAL CONDITIONS NOTE:
ALL CONDITIONS ON THIS PLAN SET SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE CITY OF PORTSMOUTH SITE PLAN REVIEW REGULATIONS.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

INDEX OF SHEETS

–	PROPOSED LICENSE PLAN
V101	EXISTING CONDITIONS PLAN
V102	EXISTING UTILITY PLAN
V103	ORTHOPHOTO PLAN
V105	PARROT AVENUE PARKING LOT
C101	DEMOLITION PLAN
C102	SITE PLAN
L1–L2	LANDSCAPE PLANS
PB0.1–2.1	ARCHITECTURAL PLANS
C103	UTILITY PLAN
C103A	BASEMENT PLAN
C104	ON SITE GRADING & DRAINAGE PLAN
C104A	OFF SITE GRADING & DRAINAGE PLAN/PROFILE
C104B	OFF SITE GRADING & DRAINAGE PLAN ORTHOPHOTO
C104C	DRAINAGE AREA PLAN
C105	LIGHTING PLAN
C105A	NIGHT TIME LIGHTING PLAN
C106	TRUCK TURNING PLAN
C107	FIRE TRUCK TURNING PLAN
C108	NHDES PERMIT PLAN– CITY PROPERTY
D501–D507	DETAILS

UTILITY CONTACTS

ELECTRIC:
EVERSOURCE
1700 LAFAYETTE ROAD
PORTSMOUTH, N.H. 03801
Tel. (603) 436–7708
ATTN: NICHOLAS KOSKO X3327565

NATURAL GAS:
UNITIL
325 WEST ROAD
PORTSMOUTH, N.H. 03801
TEL. (603) 294–5144
ATTN: DAVE BEAULIEU

CABLE:
XFINITY BY COMCAST
180 GREENLEAF AVE.
PORTSMOUTH, N.H. 03801
Tel. (603) 266–2278
ATTN: MIKE COLLINS

SEWER & WATER:
PORTSMOUTH DEPARTMENT OF PUBLIC WORKS
680 PEVERLY HILL ROAD
PORTSMOUTH, N.H. 03801
TEL. (603) 427–1530
ATTN: DOUG SPARKS

COMMUNICATIONS:
CONSOLIDATED COMMUNICATIONS
1575 GREENLAND ROAD
GREENLAND, N.H. 03840
Tel. (603) 427–5525
ATTN: BENJAMIN WILLS

DIG SAFE – ME – NH – RI – VT 1–888–344–7233 CALL TOLL FREE

LEGEND:

N/F	NOW OR FORMERLY
RP	RECORD OF PROBATE
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
11/21	MAP 11/LOT 21
IR FND	IRON ROD FOUND
IP FND	IRON PIPE FOUND
IR SET	IRON ROD SET
DH FND	DRILL HOLE FOUND
DH SET	DRILL HOLE SET
	GRANITE BOUND w/IRON ROD FOUND

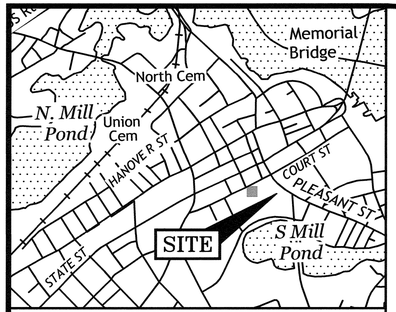
EXISTING	PROPOSED	
FM	FM	FORCE MAIN
S	S	SEWER PIPE
SL	SL	SEWER LATERAL
G	PG	GAS LINE
D	D	STORM DRAIN
FD	FD	FOUNDATION DRAIN
W	W	WATER LINE
FS	FS	FIRE SERVICE LINE
UE	UGE	UNDERGROUND ELECTRIC SUPPLY
		UNDERGROUND ELECTRIC SERVICE
OHW	OHW	OVERHEAD ELECTRIC/WIRES
		RETAINING WALL
		EDGE OF PAVEMENT (EP)
100	100	CONTOUR
97x3	98x0	SPOT ELEVATION
		UTILITY POLE
E	E	ELECTRIC METER
		TRANSFORMER ON CONCRETE PAD
W C.O.		WATER SHUT OFF/CURB STOP
C.O.	C.O.	PIPE CLEANOUT
	GV	GATE VALVE
	HYD	HYDRANT
CB	CB	CATCH BASIN
S	SMH	SEWER MANHOLE
D	DMH	DRAIN MANHOLE
W	WMH	WATER METER MANHOLE
#5		TEST BORING
TP 1		TEST PIT
LA		LANDSCAPED AREA
CI	CI	CAST IRON PIPE
COP	COP	COPPER PIPE
CMP	CMP	CORRUGATED METAL PIPE
DI	DI	DUCTILE IRON PIPE
PVC	PVC	POLYVINYL CHLORIDE PIPE
RCP	RCP	REINFORCED CONCRETE PIPE
HYD	HYD	HYDRANT
℄	℄	CENTERLINE
EP	EP	EDGE OF PAVEMENT
EL.	EL.	ELEVATION
FF	FF	FINISHED FLOOR
INV	INV	INVERT
TBM	TBM	TEMPORARY BENCH MARK
TYP	TYP	TYPICAL
TBR	TBR	TO BE REMOVED

PROPOSED MIXED USE DEVELOPMENT
134 PLEASANT STREET
PORTSMOUTH, N.H.
PERMIT PLANS

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

PLAN SET SUBMITTAL DATE: 7 APRIL 2026

5010156.1532



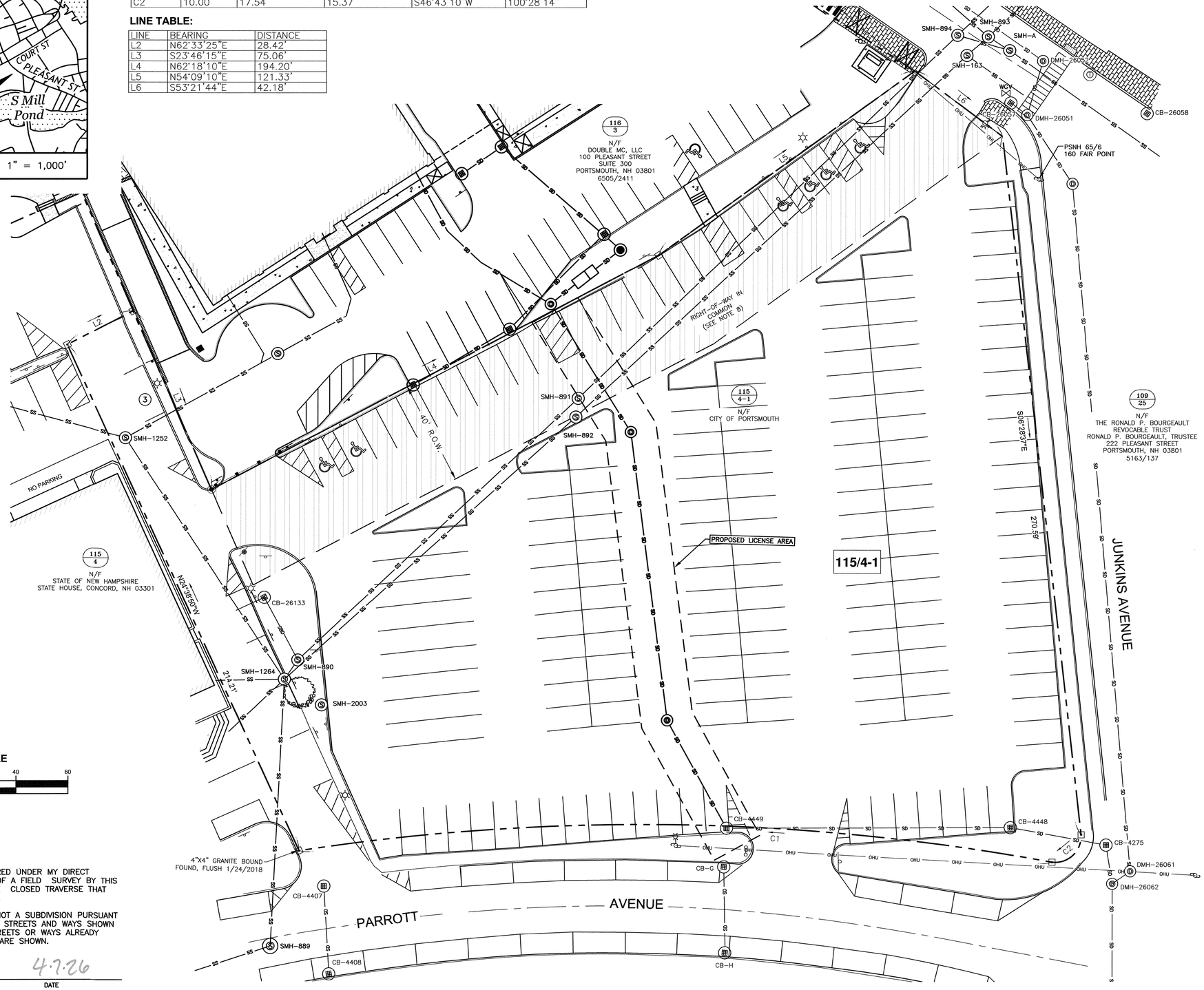
LOCATION MAP SCALE: 1" = 1,000'

CURVE TABLE:

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	872.00'	290.98'	289.64'	N89°10'46"W	19°07'10"
C2	10.00'	17.54'	15.37'	S46°43'10"W	100°28'14"

LINE TABLE:

LINE	BEARING	DISTANCE
L2	N62°33'25"E	28.42'
L3	S23°46'15"E	75.06'
L4	N62°18'10"E	194.20'
L5	N54°09'10"E	121.33'
L6	S53°21'44"E	42.18'



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.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

4.7.26

JOHN R. CHAGNON, LLS 738 DATE

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 TAX MAP 115 AS LOT 4-1.

2) OWNERS OF RECORD:
CITY OF PORTSMOUTH
1 JUNKINS AVENUE
PORTSMOUTH, N.H. 03801
RCRD 1093/64

3) EXISTING LOT AREA:
71,682 S.F.
1.65 ACRES

4) THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED LICENSE AREA ON ASSESSOR'S MAP 115, LOT 4-1 IN THE CITY OF PORTSMOUTH.

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

6) PARCEL IS BENEFITED BY A RIGHT OF WAY AS DESCRIBED IN RCRD 2975/349 AND SHOWN ON RCRD D-18880 AND RCRD D-26343.

REV.	DATE	DESCRIPTION	BY	CHK.
1	04/07/26	EMERGENCY ACCESS ONLY	SJR	JRC
0	02/25/26	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

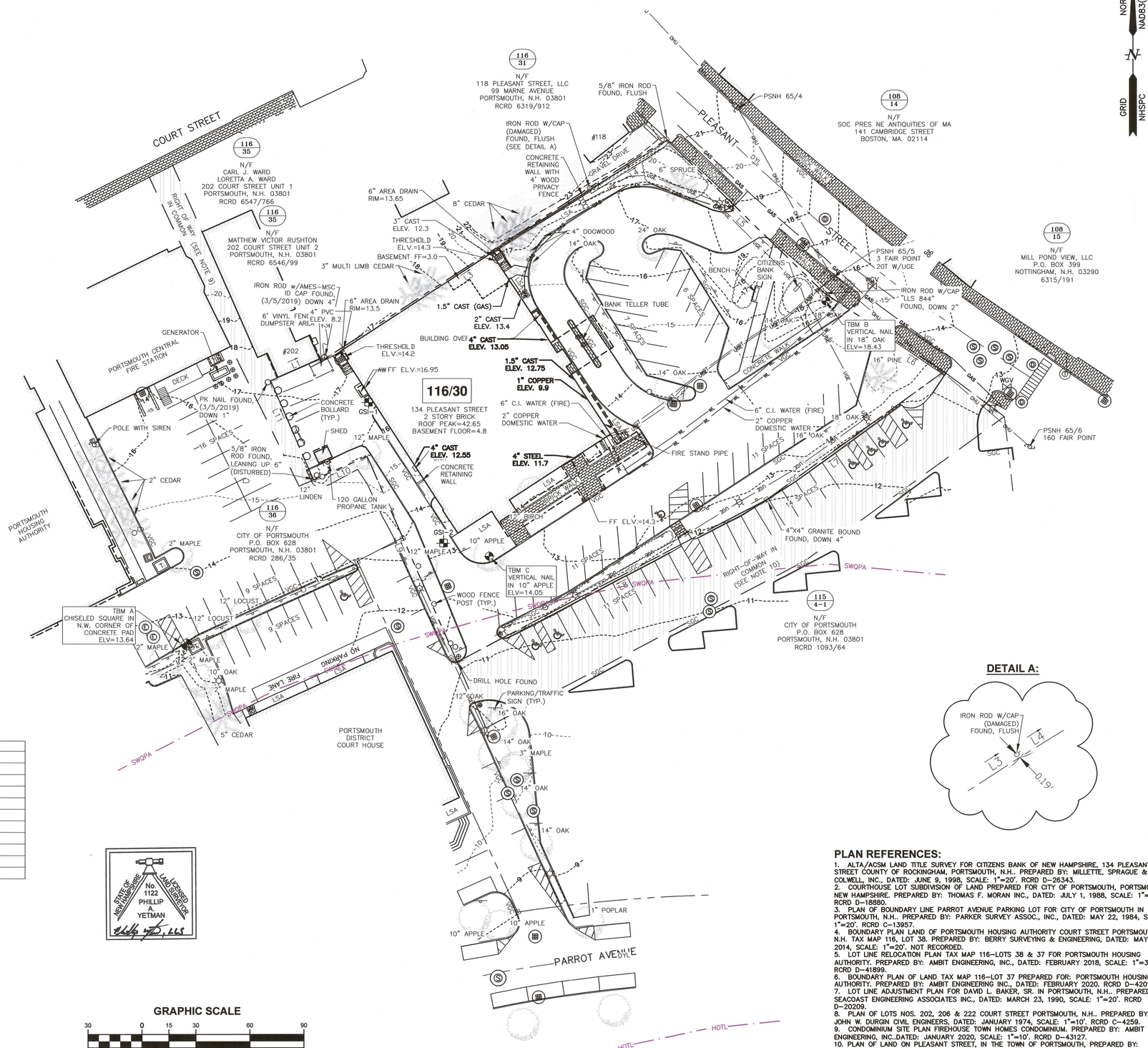
PROPOSED LICENSE PLAN
TAX MAP 115 - LOT 4-1
CITY OF PORTSMOUTH
TO:
DOUBLE MC, LLC
134 PLEASANT STREET
CITY OF PORTSMOUTH
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

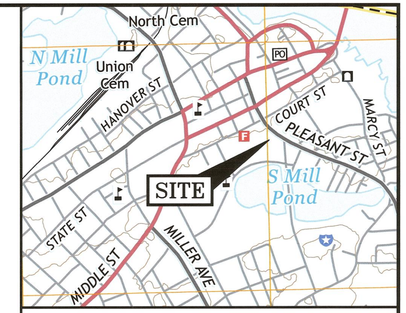
SCALE 1"=20' FEBRUARY 2026

FB 276 & PG 60 5010156.1532

LEGEND:

DESCRIPTION	EXISTING
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
1234/123	DEED BOOK/PAGE
N/F	NOW OR FORMALLY
TYP.	TYPICAL
TBS	TO BE SET
LSA	LANDSCAPE AREA
INV.	INVERT
ELV.	ELEVATION
FF	FINISHED FLOOR
DYL	DOUBLE YELLOW LINE
SGC	SLOPED GRANITE CURB
VGC	VERTICAL GRANITE CURB
MAP 21 LOT 8	(21-8)
BENCHMARK	
RAILROAD SPIKE	
BOUND	
IRON ROD/PIPE FOUND	
SET 5/8" REBAR WITH SURVEYOR'S CAP	
SEWER MANHOLE	(S)
DRAIN MANHOLE	(D)
COMMUNICATIONS MANHOLE	(D)
ELECTRIC MANHOLE	(E)
UTILITY POLE	
CATCH BASIN	
HYDRANT	
GATE VALVE	GGV WGV SGV
GAS/WATER SHUTOFF	
BOLLARD	
BORING	GSI-1
TREES	
GAS/ELECTRIC METER	E G
LIGHT POLE	
MAIL BOX	
AIR CONDITIONER	A
SIGN	
SPOT GRADE	12x1
ELECTRIC PEDESTAL	E
ELECTRIC HANDHOLD	
PROPERTY LINE	
APPROXIMATE EXTERIOR PROPERTY LINE	
EDGE OF PAVEMENT	
EDGE OF GRAVEL	
STONE WALL	
FENCE	X
SHRUBLINE	
MINOR FOOT CONTOUR	98
MAJOR FOOT CONTOUR	100
GAS LINE	GAS GAS
WATER LINE	WL WL
STORM DRAIN LINE	SD SD
SANITARY SEWER LINE	SS SS
OVERHEAD UTILITY LINE	OHU OHU
UNDERGROUND ELECTRICAL LINE	UGE UGE
UNDERGROUND COMMUNICATIONS LINE	UGT UGT
SHORELAND SETBACK LINE	SWQPA





LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S TAX MAP 116 AS LOT 30.

2) OWNERS OF RECORD:
DOUBLE MC, LLC
10 PLEASANT STREET SUITE 400
PORTSMOUTH, N.H. 03801
RCRD 6505/2411

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

4) EXISTING LOT AREA:
53,084 S.F.
1.22 ACRES

5) PARCEL IS LOCATED IN THE CHARACTER DISTRICT 4 (CD4) DISTRICT.

6) DIMENSIONAL REQUIREMENTS: SEE PORTSMOUTH ORDINANCE FOR REQUIREMENTS.

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE RESULTS OF AN EXISTING CONDITIONS SURVEY OF ASSESSOR'S MAP 116, LOT 30 IN THE CITY OF PORTSMOUTH.

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

9) PARCEL IS BENEFITED BY A RIGHT OF WAY TO COURT STREET AS DESCRIBED IN RCRD 1257/466.

10) PARCEL IS BENEFITED BY A RIGHT OF WAY AS DESCRIBED IN RCRD 2975/349 AND SHOWN ON RCRD D-18880 AND RCRD D-26343.

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

12) 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.

LINE TABLE:

LINE	BEARING	DISTANCE
L1	N66°28'05"E	32.60'
L2	S04°27'10"E	0.98'
L3	N57°05'10"E	175.24'
L4	N58°07'10"E	50.44'
L5	S45°49'50"E	122.39'
L6	S56°42'50"E	79.29'
L7	S54°09'10"W	121.33'
L8	S62°18'10"W	194.24'
L9	N23°38'50"W	124.67'
L10	S66°22'00"W	32.60'
L11	N23°20'25"W	60.00'

DETAIL A:

PLAN REFERENCES:

1. ALTA/ACSM LAND TITLE SURVEY FOR CITIZENS BANK OF NEW HAMPSHIRE, 134 PLEASANT STREET COUNTY OF ROCKINGHAM, PORTSMOUTH, N.H.. PREPARED BY: MILLETTE, SPRAGUE & COLWELL, INC., DATED: JUNE 9, 1998, SCALE: 1"=20'. RCRD D-26343.
2. COURTHOUSE LOT SUBDIVISION OF LAND PREPARED FOR CITY OF PORTSMOUTH, PORTSMOUTH NEW HAMPSHIRE. PREPARED BY: THOMAS F. MORAN INC., DATED: JULY 1, 1988, SCALE: 1"=40'. RCRD D-18880.
3. PLAN OF BOUNDARY LINE PARROT AVENUE PARKING LOT FOR CITY OF PORTSMOUTH IN PORTSMOUTH, N.H.. PREPARED BY: PARKER SURVEY ASSOC., INC., DATED: MAY 22, 1984, SCALE: 1"=20'. RCRD C-13957.
4. BOUNDARY PLAN LAND OF PORTSMOUTH HOUSING AUTHORITY COURT STREET PORTSMOUTH, N.H. TAX MAP 116, LOT 38. PREPARED BY: BERRY SURVEYING & ENGINEERING, DATED: MAY 30, 2014, SCALE: 1"=20'. NOT RECORDED.
5. LOT LINE RELOCATION PLAN TAX MAP 116-LOTS 38 & 37 FOR PORTSMOUTH HOUSING AUTHORITY. PREPARED BY: AMBIT ENGINEERING, INC., DATED: FEBRUARY 2018, SCALE: 1"=30'. RCRD D-41899.
6. BOUNDARY PLAN OF LAND TAX MAP 116-LOT 37 PREPARED FOR: PORTSMOUTH HOUSING AUTHORITY. PREPARED BY: AMBIT ENGINEERING INC., DATED: FEBRUARY 2020. RCRD D-42016.
7. LOT LINE ADJUSTMENT PLAN FOR DAVID L. BAKER, SR. IN PORTSMOUTH, N.H.. PREPARED BY: SEACOAST ENGINEERING ASSOCIATES INC., DATED: MARCH 23, 1990, SCALE: 1"=20'. RCRD D-20209.
8. PLAN OF LOTS NOS. 202, 206 & 222 COURT STREET PORTSMOUTH, N.H.. PREPARED BY: JOHN W. DURGIN CIVIL ENGINEERS, DATED: JANUARY 1974, SCALE: 1"=10'. RCRD C-4259.
9. CONDOMINIUM SITE PLAN FIREHOUSE TOWN HOMES CONDOMINIUM. PREPARED BY: AMBIT ENGINEERING, INC..DATED: JANUARY 2020, SCALE: 1"=10'. RCRD D-43127.
10. PLAN OF LAND ON PLEASANT STREET, IN THE TOWN OF PORTSMOUTH, PREPARED BY: BENJAMIN SHERMAN, DATED 1822 AND REVISED MAY 6, 1842, SCALE: 1"=50', RCRD #00537.
11. PLAN OF LAND FOR SUSAN J. WENTWORTH EST., PORTSMOUTH, N.H., PREPARED BY: JOHN W. DURGIN, DATED: APRIL 22, 1940, SCALE: 1"=50'. RCRD #0937.

GRAPHIC SCALE
30 0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

STATE OF NEW HAMPSHIRE No. 1122 PHILLIP A. YETMAN LICENSED LAND SURVEYOR

"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."

PHILIP A. YETMAN, LLS 1122 — DATE 1/20/2026

REV.	DATE	DESCRIPTION	BY	CHK
1	01-21-26	UPDATE EXISTING BLDG. UTILITIES	SJR	JRC
0	07-18-2025	ISSUED FOR COMMENT	RJB	PAY

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

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

EXISTING CONDITIONS PLAN

DATE	SCALE
MARCH 2025	1"=30'

DRAWN BY	DESIGNED BY	CHECKED BY
RJB	---	PAY

PROJECT No. 5010156.1532 — FIELD BOOK/PAGE FB 276 PG 60

DRAWING No. **V101** — REV. **1**

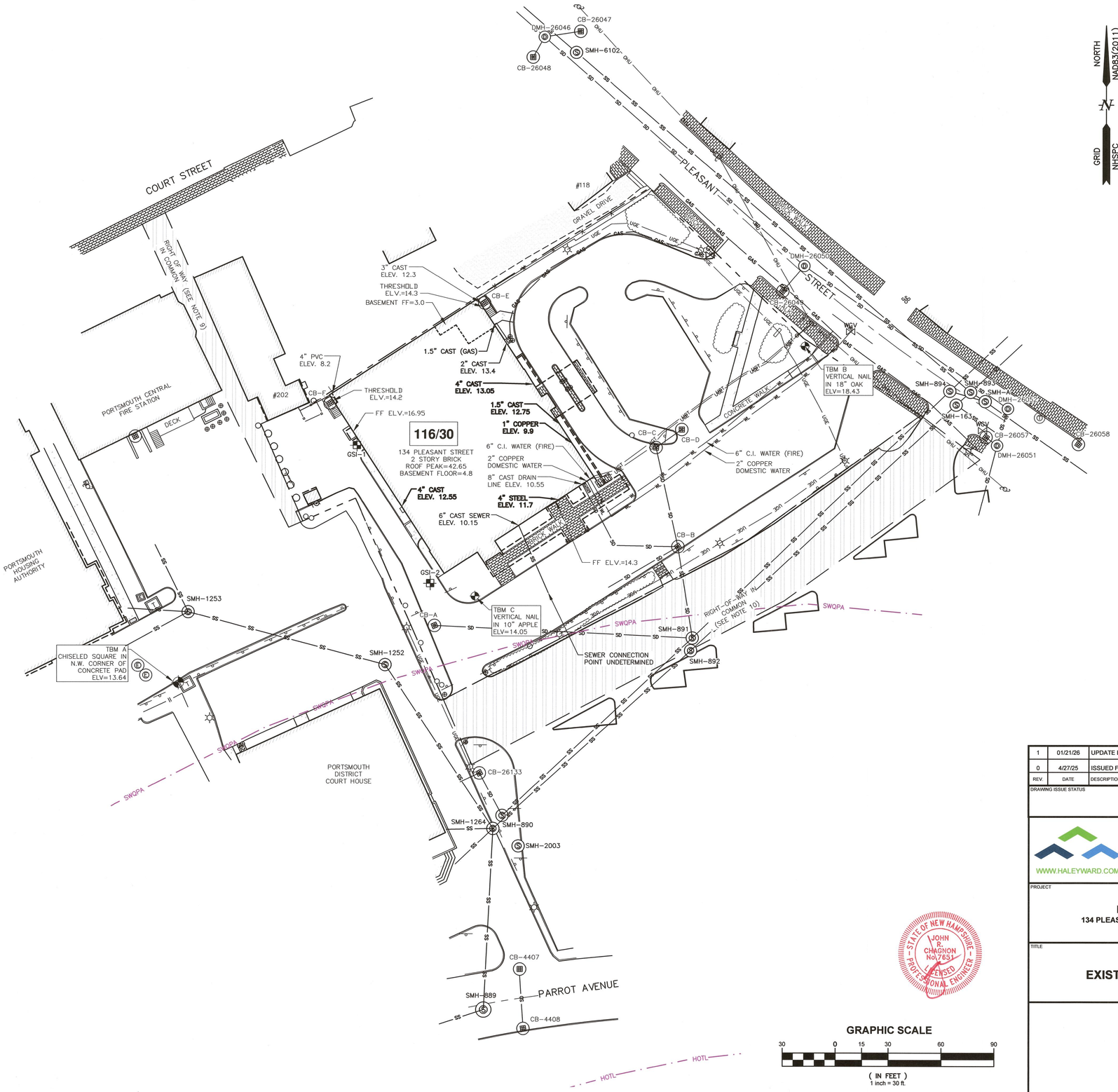
P:\Jobs\5010156.1532\ALTA\EXISTING CONDITIONS\5010156.1532-V-EC.DWG, 2026 01 20, 9:33 AM

SEWER MANHOLE STRUCTURE TABLE

STRUCTURE	PROP/EX	RIM	PIPE SIZE/TYPE	INVERT IN	INVERT OUT	DIRECTION
SMH-889	EX	8.96	30" AC	0.30		SW
			30" AC		-0.14	N
SMH-1264	EX	9.90	18" VCP	-0.55		SE
			30" RCP	-0.15		SW
			18" AC	COULD NOT	MEASURE	NW
			30" CAST		-0.65	NE
SMH-890	EX	10.48	12" RCP	3.88		NW
			30" CAST		0.13	NE
SMH-2003	EX	9.96	18" VCP	-0.54		NW
					N/A	
SMH-851	EX	9.96				
SMH-1252	EX	11.79	18" CLAY	3.19		NW
			18" CLAY		3.14	SE
SMH-1253	EX	13.98	8" CLAY	6.98		SW
			6" CLAY	6.68		W
			18" CLAY	6.68		NW
			18" CLAY		6.63	SE
SMH-891	EX	11.00	30" CAST	-0.05		SW
			12" AC	6.25		NW
			18" AC	6.30		NE
			30" CAST		-0.05	NE
SMH-892	EX	10.91	30" CAST	-0.29		SW
			30" CAST		-0.29	NE
SMH-163	EX	13.13	36" CAST	-0.87		SW
			6" PVC	1.43		SE
			36" CAST		-0.87	NE
SMH-893	EX	13.24	36" CAST	-0.86		SW
			12" PVC	4.54		NW
			12" CLAY	4.54		SE
			36" CAST		-0.86	NE
SMH-A	EX	13.12	12" RCP (ENCLOSED)	3.57		NW
			12" RCP (ENCLOSED)		3.57	SE
			12" CLAY	4.57		NW
SMH-894	EX	13.43	36" CAST	-0.27		SW
			12" CLAY	4.33		SE
			36" CAST		-0.32	NE
SMH-6102	EX	22.87	8" PVC	14.27		NW
			8" PVC		14.22	SE

DRAINAGE STRUCTURE TABLE

STRUCTURE	PROP/EX	RIM	PIPE SIZE/TYPE	INVERT IN	INVERT OUT	DIRECTION
CB-4407	EX	8.30	NO VISIBLE PIPES			
			WATER ELEVATION: 5.30			
			SUMP ELEVATION: 4.20			
CB-26133	EX	10.86	12" CLAY	4.31		SW
			12" CLAY		4.31	SE
CB-A	EX	12.22	12" AC		8.42	SE
CB-B	EX	12.80	8" CLAY	7.10		NW
			12" AC	7.10		NE
			12" AC	7.00		SW
			18" AC		7.00	S
CB-C	EX	13.47	12" AC	8.87		NE
			12" AC		8.82	S
CB-D	EX	13.54	4" AC	9.34		NW
			12" AC		9.34	SW
CB-E	EX	13.67	SILTED/LOCKED			
CB-F	EX	13.48	SILTED/LOCKED			
CB-26057	EX	12.53	12" CPP W/OIL SEPERATOR		8.33	SE
DMH-26046	EX	22.99	12" CPP	18.49		SW
			12" CPP	18.49		NE
			12" CPP	19.79		NW
			12" CPP		18.44	SE
CB-26048	EX	22.70				
CB-26047	EX	22.89				
DMH-26050	EX	17.45	12" PVC	12.80		NW
			12" PVC	12.80		SW
			12" PVC		12.80	SE
CB-26049	EX	17.08	12"PVC W/OIL SEPERATOR		11.78	NE
DMH-26052	EX	12.93	12" CPP	8.18		NW
			12" CPP		8.13	S
DMH-26051	EX	12.61	12" CPP	7.86		N
			12" CPP	8.11		NW
			12" CPP		7.81	S



REV.	DATE	DESCRIPTION	BY	CHK
1	01/21/26	UPDATE EXISTING UTILITIES	SJR	JRC
0	4/27/25	ISSUED FOR COMMENT	RJB	PAY

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

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

EXISTING UTILITIES PLAN

DATE: JUNE 2025	SCALE: 1"=30'
DRAWN BY: RJB	DESIGNED BY: ---
CHECKED BY: PAY	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: V102	REV.: 1

STATE OF NEW HAMPSHIRE – JOHN R. CHAGNON No. 7651 LICENSED PROFESSIONAL ENGINEER

P:\5010156.1532\FILES\DESIGN\SURVEY\5010156.1532-V-EC.DWG, 2026.01.20, 10:34 AM

GRAPHIC SCALE

40 0 20 40 80 120

(IN FEET)
1 inch = 40 ft.

REV.	DATE	DESCRIPTION	BY	CHK.
0	7/25/25	ISSUED FOR COMMENT	RJB	JRC

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

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

ORTHOPHOTO PLAN

DATE	SCALE
JULY 2025	1"=40'

DRAWN BY	DESIGNED BY	CHECKED BY
RJB	---	PAY

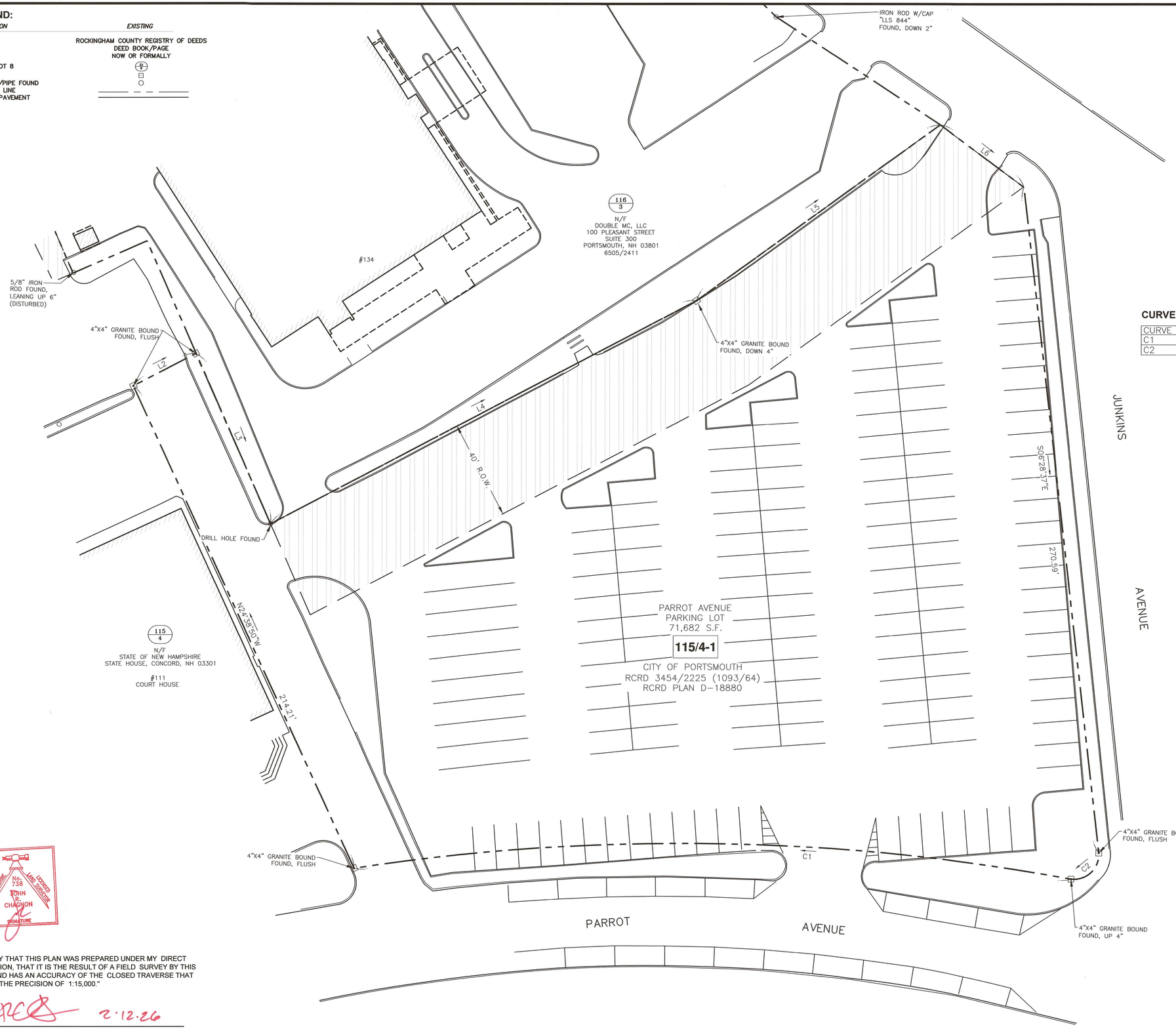
PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

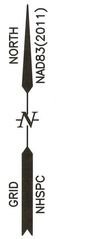
DRAWING No.	REV.
V103	0

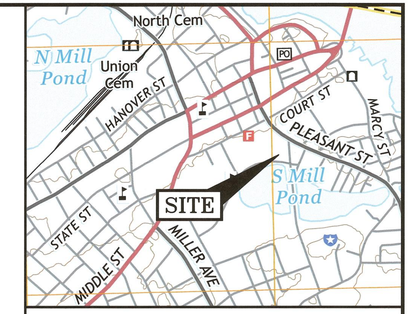
FILE LOCATION: P:\NH\5010156-MCHABB_PROPERTIES\1532-134 PLEASANT ST., PORTSMOUTH-JRC\02-CAD_FILES\5010156.1532-V-EC.DWG, 2025.07.25, 10:09 AM

LEGEND:

DESCRIPTION	EXISTING
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
1234/123	DEED BOOK/PAGE
N/F	NOW OR FORMALLY
MAP 21 LOT 8	(8)
BOUND	□
IRON ROD/PIPE FOUND	○
PROPERTY LINE	———
EDGE OF PAVEMENT	———







LOCATION MAP SCALE: 1" = 1,000'

CURVE TABLE:

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	872.00'	290.98'	289.64'	N89°10'46"W	19°07'10"
C2	10.00'	17.54'	15.37'	S46°43'10"W	100°28'14"

LINE TABLE:

LINE	BEARING	DISTANCE
L2	N62°33'25"E	28.42'
L3	S23°46'15"E	75.06'
L4	N62°18'10"E	194.20'
L5	N54°09'10"E	121.33'
L6	S53°21'44"E	42.18'

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 738 JOHN R. CHAGNON SIGNATURE

``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."

2.12.26

JOHN R. CHAGNON, LLS 738 DATE

REV.	DATE	DESCRIPTION	BY	CHK.
0	2/12/26	ISSUED FOR COMMENT	RJB	JRC

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

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

PARROT AVENUE PARKING LOT

DATE: FEBRUARY 2026	SCALE: 1"=20'
DRAWN BY: RJB	DESIGNED BY: ---
CHECKED BY: JRC	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: V105	REV.: 0

FILE LOCATION: P:\NH\5010156.MCHABB_PROPERTIES\1532-134 PLEASANT ST., PORTSMOUTH-JRC\02-CAD_FILES\5010156.1532-V-EC.DWG, 2026.02.13, 7:29 AM

DEMOLITION NOTES:

A) THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE DESIGNER. IT IS THE CONTRACTORS' RESPONSIBILITY TO LOCATE UTILITIES AND ANTICIPATE CONFLICTS. CONTRACTOR SHALL REPAIR EXISTING UTILITIES DAMAGED BY THEIR WORK AND RELOCATE EXISTING UTILITIES THAT ARE REQUIRED TO BE RELOCATED PRIOR TO COMMENCING ANY WORK IN THE IMPACTED AREA OF THE PROJECT.

B) ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTORS UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES. THE CONTRACTOR SHALL COORDINATE REMOVAL, RELOCATION, DISPOSAL, OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.

C) ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/ DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO THE ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

D) THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.

E) SAWCUT AND REMOVE PAVEMENT ONE FOOT OFF PROPOSED EDGE OF PAVEMENT TRENCH IN AREAS WHERE PAVEMENT IS TO BE REMOVED.

F) IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE CONDITIONS OF ALL THE PERMIT APPROVALS.

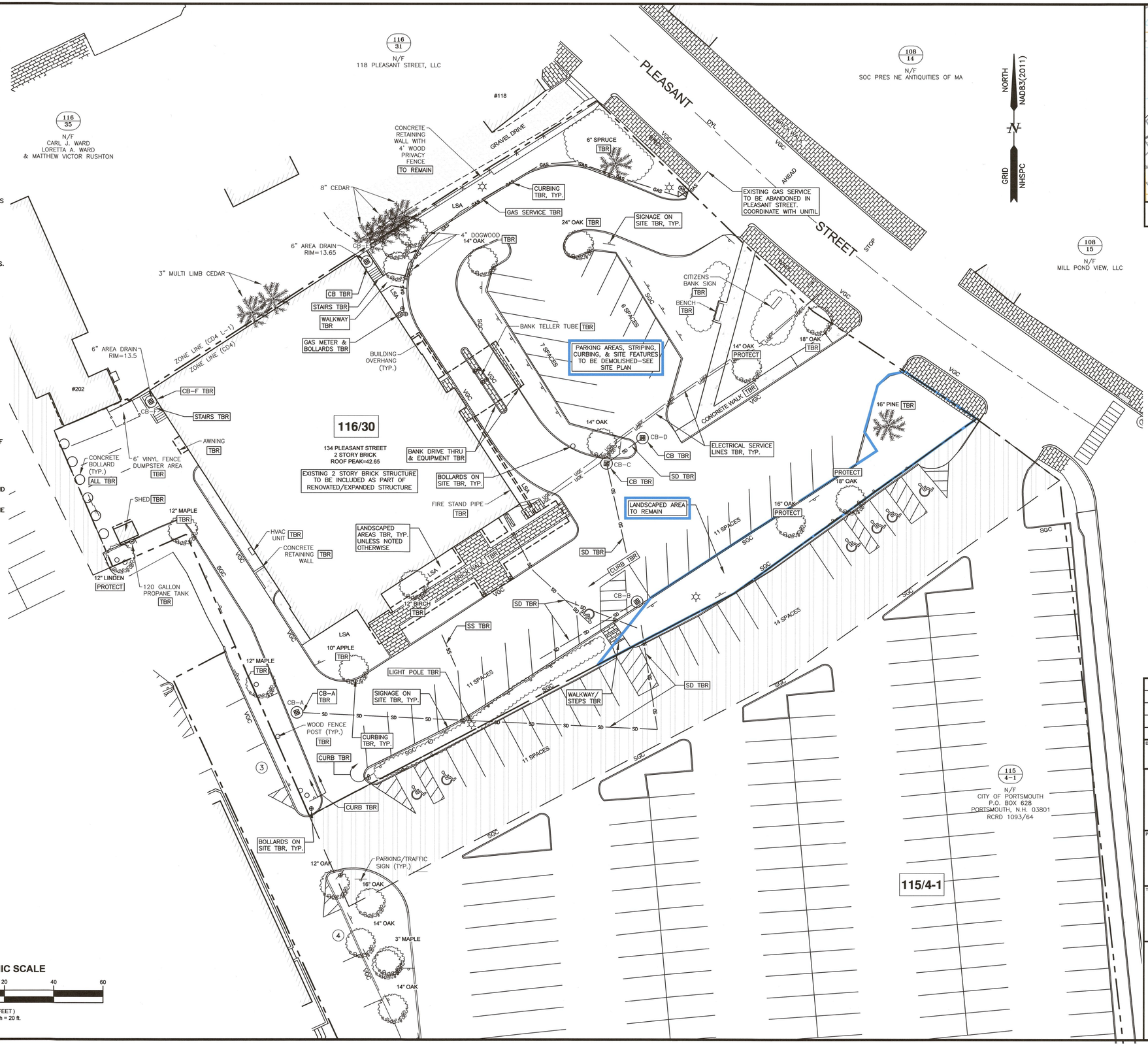
G) THE CONTRACTOR SHALL OBTAIN AND PAY FOR ADDITIONAL CONSTRUCTION PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR ANY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK.

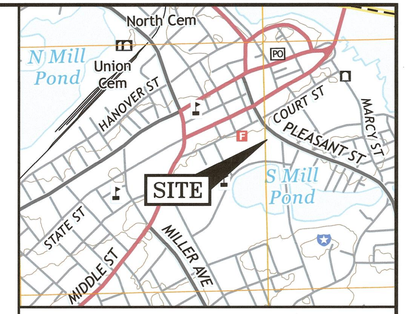
H) THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE, UTILITIES, VEGETATION, PAVEMENT, AND CONTAMINATED SOIL WITHIN THE WORK LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ANY EXISTING DOMESTIC / IRRIGATION SERVICE WELLS IN THE PROJECT AREA IDENTIFIED DURING THE CONSTRUCTION AND NOT CALLED OUT ON THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER FOR PROPER CAPPING / RE-USE.

I) PROVIDE INLET PROTECTION BARRIERS AT ALL CATCH BASINS WITHIN CONSTRUCTION LIMITS AND MAINTAIN FOR THE DURATION OF THE PROJECT. INLET PROTECTION BARRIERS SHALL BE HIGH FLOW SILT SACK BY ACF ENVIRONMENTAL OR APPROVED EQUAL. INSPECT BARRIERS WEEKLY AND AFTER EACH RAIN OF 0.25 INCHES OR GREATER. CONTRACTOR SHALL COMPLETE A MAINTENANCE INSPECTION REPORT AFTER EACH INSPECTION. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT OR MORE OFTEN IF WARRANTED OR FABRIC BECOMES CLOGGED. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.

J) THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY AND SAFELY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.

K) ANY CONTAMINATED MATERIAL REMOVED DURING THE COURSE OF THE WORK WILL REQUIRE HANDLING IN ACCORDANCE WITH NHDES REGULATIONS. CONTRACTOR SHALL HAVE A HEALTH AND SAFETY PLAN IN PLACE, AND COMPLY WITH ALL APPLICABLE PERMITS, APPROVALS, AUTHORIZATIONS, AND REGULATIONS





LOCATION MAP SCALE: 1" = 1,000'

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.

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).

4) COORDINATE ACCESS IN STREET/ROW AREAS ADJACENT TO DEMOLITION TO INSURE SAFE PASSAGE. UTILIZE DETOURS IF NEEDED.

5) EXISTING UTILITIES TO BE ABANDONED SHALL BE REMOVED TO THE UTILITY MAIN AND CAPPED PER THE UTILITY COMPANY REQUIREMENT.

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

REV.	DATE	DESCRIPTION	BY	CHK
3	04-07-26	EMERGENCY ACCESS ONLY	SJR	JRC
2	02-25-26	CB-A, SD PIPES	SJR	JRC
1	01-21-2026	UTILITY DEMO	SJR	JRC
0	07-18-2025	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

DEMOLITION PLAN

STATE OF NEW HAMPSHIRE JOHN R. CHAGNON No. 9651 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
JULY 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	---	JRC

PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

DRAWING No. **C101** REV. **3**

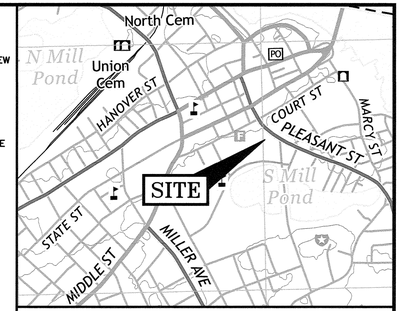
FILE LOCATION: P:\NH\5010156-MCNABB_PROPERTIES\1532-134 PLEASANT ST - PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.06 1:51 PM

PORTSMOUTH 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.



LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S TAX MAP 116 AS LOT 30.

2) OWNERS OF RECORD:
DOUBLE MC, LLC
10 PLEASANT STREET SUITE 400
PORTSMOUTH, N.H. 03801
RCRD 6505/2411

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

4) EXISTING LOT AREA:
53,084 S.F.
1.22 ACRES

5) PARCEL IS LOCATED IN THE CHARACTER DISTRICT 4 (CD4) DISTRICT.

6) DIMENSIONAL REQUIREMENTS: SEE PORTSMOUTH ORDINANCE FOR REQUIREMENTS.

7) THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED MIXED USE DEVELOPMENT ON ASSESSOR'S MAP 116, LOT 30 IN THE CITY OF PORTSMOUTH.

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

9) PARCEL IS BENEFITED BY A RIGHT OF WAY TO COURT STREET AS DESCRIBED IN RCRD 1257/466.

10) PARCEL IS BENEFITED BY A RIGHT OF WAY AS DESCRIBED IN RCRD 2975/349 AND SHOWN ON RCRD D-18880 AND RCRD D-26343.

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

12) PROPOSED USES:
–RETAIL BANKING
–BANK HEADQUARTERS
–APARTMENTS
–PROFESSIONAL OFFICE

13) CITY COUNCIL APPROVAL REQUIRED FOR WORK ON CITY PROPERTY. COORDINATION AND INSPECTIONS OF CONSTRUCTION REQUIRED.

IMPERVIOUS SURFACE AREAS
(TO PROPERTY LINE)

STRUCTURE	PRE–CONSTRUCTION IMPERVIOUS (S.F.)	POST–CONSTRUCTION IMPERVIOUS (S.F.)
MAIN STRUCTURES	12219	21967
ROOF DECK	0	287
SHED	51	0
PAVEMENT	24,004	17,704
CONCRETE	186	942
SIDEWALKS, WALKWAYS	2,262	3,982
STEPS/STOOPS	153	60
CURBING	775	462
RETAINING WALLS	196	426
TOTAL	39846	45830
LOT SIZE	53,084	53,084
% LOT COVERAGE	75.1%	86.3%

OPEN SPACE: LANDSCAPE AREAS GREATER THAN 6' WIDE
6,409 S.F./53,084 = 12.1% OPEN SPACE

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

REV.	DATE	DESCRIPTION	BY	CHK
8	04-07-2026	EMERGENCY ACCESS ONLY	SJR	JRC
7	02-03-2026	STOP, ONE-WAY SIGNS, USE	SJR	JRC
6	01-21-2026	TIP DOWNS, EXIT DOOR, PARKING, NOTE 13	SJR	JRC
5	12-30-2025	LANDSCAPE DETAIL	SJR	JRC
4	12-22-2025	BUILDING & SITE LAYOUT	SJR	JRC
3	10-08-2025	PLAN NOTES	SJR	JRC
2	09-22-2025	REVISED DRIVE THROUGH	SJR	JRC
1	09-05-2025	REVISED LAYOUT	SJR	JRC
0	07-18-2025	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

SITE PLAN

DATE	SCALE
JULY 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	—	JRC

PROJECT No. 5010156.1532
FIELD BOOK / PAGE FB 276 PG 60

DRAWING No. **C102** REV. **8**

STATE OF NEW HAMPSHIRE – JOHN R. CHAGNON No. 7651 – LICENSED PROFESSIONAL ENGINEER

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

STATE OF NEW HAMPSHIRE – No. 738 – JOHN R. CHAGNON – LICENSED LAND SURVEYOR – SIGNATURE

FILE LOCATION: P:\NH\5010156-MCNABB_PROPERTIES\1532-134 PLEASANT ST - PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.09, 2:30 PM

Plant List - Perennials

ID	Qty	Botanical Name	Common Name	Scheduled Size
ABI	36	Amsonia 'Blue Ice'	Blue Star Flower	1 Gal.
ACT	6	Actaea racemosa	Black Cohosh	1 Gal.
AJM	22	Ajuga reptans 'Mahogany'	Bugleweed	2 QT
AMH	33	Amsonia hubrichtii	Arkansas Amsonia	1 Gal.
AMT	64	Amsonia tabernaemontana	Blue Star Flower	1 Gal.
ARU	4	Aruncus dioicus	Goat's Beard	1 Gal.
ASD	25	Astilbe 'Deutschland'	Early White Astilbe	1 Gal.
AU	48	Arctostaphylos uva-ursi	Bearberry	2 QT
BAP	15	Baptisia australis	False Indigo	1 Gal.
CARY	4	Caryopteris x clandonensis 'First Choice'	First Choice Blue Beard	1 Gal.
CBZ	220	Carex flacca 'Blue Zinger'	Blue Zinger Sedge	1 Gal.
EPI	128	Epimedium rubrum	Barrenwort	2 QT
ERA	70	Eragrostis spectabilis	Purple Lovegrass	1 Gal.
GMB	21	Geranium macrorrhizum 'Bevan's Variety'	Bevan's Variety Geranium	1 Gal.
HMT	71	Hemerocallis 'Mary Todd'	Daylily	1 Gal.
ISP	71	Iberis sempervirons 'Purity'	Candytuft	1 Gal.
PVS	10	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	2 Gal.
RBK	80	Rudbeckia 'Goldsturm'	Goldsturm Blackeyed Susan	1 Gal.
SEDK	35	Sedum kamtschaticum	Orange Stonecrop	2 QT
SEDS	235	Sedum sexangulare	Stonecrop	2 QT
SEDW	235	Sedum 'Weihenstephaner Gold'	Weihenstephaner Gold Stonecrop	1 Gal.
SS	425	Scilla siberica	Siberian Squill	Bulb
SSD	235	Sedum Sunsparkler 'Dazzleberry'	Dazzleberry Stonecrop	2 QT

Plant List - Trees and Shrubs

ID	Qty	Botanical Name	Common Name	Scheduled Size
ARB	3	Acer rubrum 'Bowhall'	Bowhall Maple	3 1/2" Cal.
COGN	1	Chamaecyparis obtusa 'Nana Gracilis'	Hinoki Cypress	2 1/2' Ht.
FG	13	Fothergilla gardenii	Dwarf Fothergilla	5 Gal.
GTH	2	Gleditsia triacanthos inermis 'Halka'	Halka Honeylocust	2" Cal.
HYP	36	Hypericum x 'Hidcote'	Hidcote St. John's Wort	2 Gal.
ICS	7	Ilex crenata 'Steeds'	Steeds Japanese Holly	5 Gal.
IGG	33	Ilex glabra 'Gem Box'	Gem Box Inkberry	1-2'
IGS	12	Ilex glabra 'Shamrock'	Shamrock Inkberry Holly	5 Gal.
IST	29	Ilex crenata 'Soft Touch'	Soft Touch Japanese Holly	2-3' Ht.
JBD	45	Juniperus communis depressa 'Blueberry Delight'	Blueberry Delight Juniper	2 Gal.
JPN	15	Juniperus procumbens 'Nana'	Dwarf Japanese Garden Juniper	3-4'
LT	1	Liriodendron tulipifera	Tulip Tree	2 1/2" Cal.
PHC	5	Pinus sylvestris 'Hillside Creeper'	Hillside Creeper Pine	2 Gal.
PJC	11	Pieris japonica 'Cavatine'	Cavatine Andromeda	3-4'
PLH	12	Pieris japonica 'Little Heath'	Little Heath Andromeda	3-4'
RCW	14	Rhododendron catawba 'White'	White CatawbaRhododendron	3-4'
RGL	242	Rhus aromatica 'Grow Low'	Grow Low Sumac	18"+ Ht.
RYP	23	Rhododendron yaku 'Princess'	Yaku Princess Rhody	2 GAL
SAW	7	Spiraea x bumalda 'Anthony Waterer'	Anthony Waterer Spirea	3-4'
TCG	7	Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden	2 1/2" Cal.
VMR	3	Viburnum plicatum tomentosum 'Mariesii'	Marie's Doublefile Viburnum	3-4'

PLEASE NOTE: SHEET SIZE IS SCALED FOR ASME D . DO NOT REDUCE OR ENLARGE.

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134 PLEASANT

134 PLEASANT STREET
PORTSMOUTH, NH

Project Title

TERRENCE PARKER — 00254 — LICENSED LANDSCAPE ARCHITECT — STATE OF NEW HAMPSHIRE

Landscape Architect

Scale
1:240

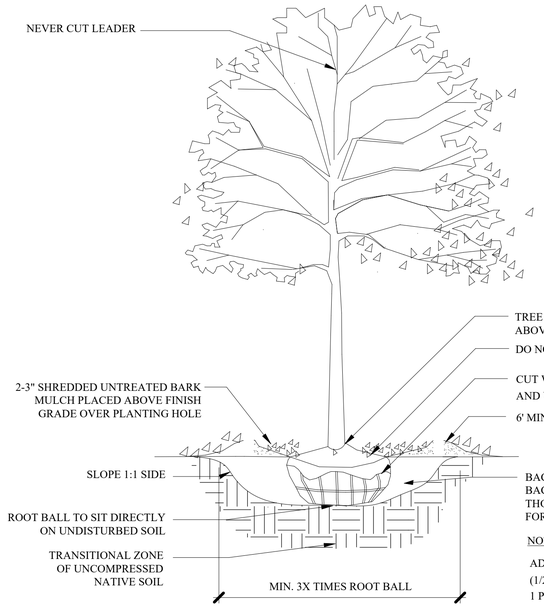
REV.	DATE	DESCRIPTION
C	4/7/2026	Site Layout Update
B	2/25/2026	PB Submission
A	1/21/2026	TAC Submission

NO.	DATE	ISSUE NOTE

Project Manager
Drawn By
Date 9/18/2025
Reviewed By
Project ID 134 PLEASANT

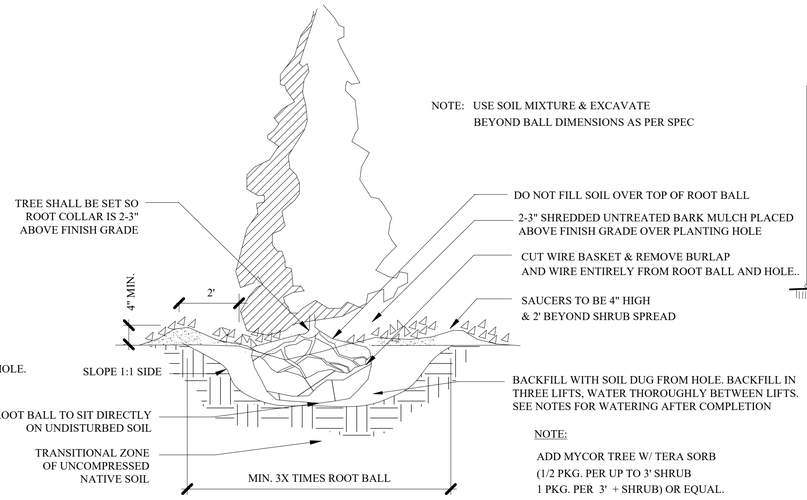
Sheet Title
LANDSCAPE PLAN

Sheet No.
L-1



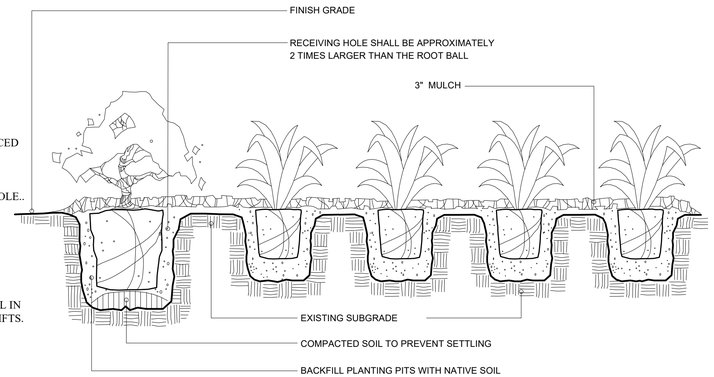
1 L-2

TREE PLANTING - 2"+ CAL.
SCALE: NTS



2 L-2

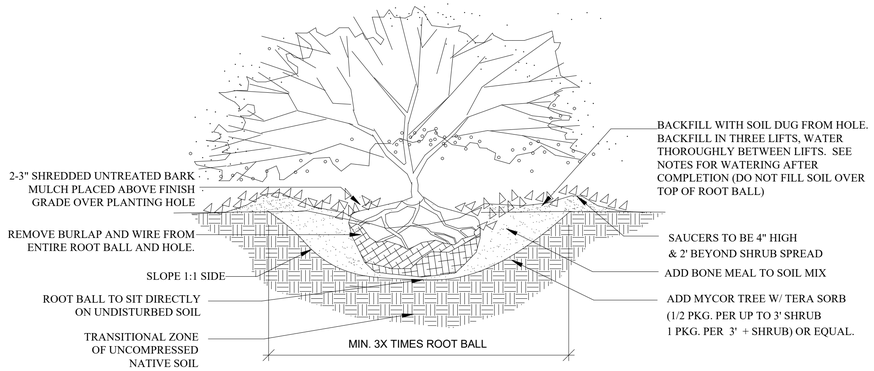
PYRAMIDAL EVERGREEN TREE PLANTING
SCALE: NTS



NOTE: SHRUBS SHALL BE PLANTED A MINIMUM OF 1" & NO MORE THAN 2" ABOVE FINISH GRADE, DEPENDING UPON SITE CONDITIONS.

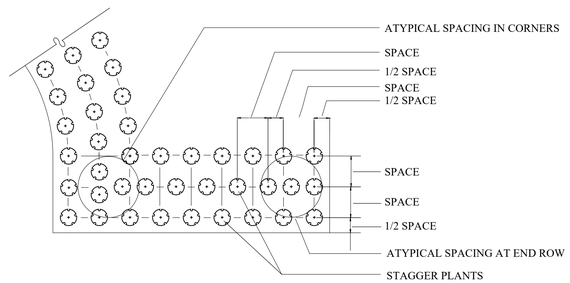
3 L-2

SHRUB/GROUND COVER PLANTING DETAIL
SCALE: NTS



4 L-2

B&B SHRUB PLANTING
SCALE: NTS



NOTES:

1. PLACE PLANTS IN BED AS SHOWN, SPACING AS SPECIFIED IN PLANT SCHEDULE.
2. GROUNDCOVER SHALL BE TRIANGULAR SPACED IN ROWS PARALLEL TO STRAIGHT EDGES AND SHALL BE EVENLY SPACED IN ROWS PARALLEL TO CURVE EDGES.

5 L-2

GROUND COVER SPACING DETAIL
SCALE: NTS

CITY OF PORTSMOUTH PLANTING REQUIREMENTS

1. All planting holes shall be dug by hand- NO MACHINES. The only exceptions are new construction where new planting pits, planting beds with granite curbing, and planting sites with Silva Cells are being created. If a machine is used to dig in any of these situations and planting depth needs to be raised the material in the bottom of the planting hole MUST be firmed with machine to prevent sinking of the root ball.
2. ALL Wire and Burlap shall be removed from the root ball AND planting hole.
3. The root ball of the tree shall be worked so that the root collar of the tree is visible and no girdling roots are present.
4. The root collar of the tree shall be 2"-3" above grade of planting hole for finished depth.
5. All plantings shall be backfilled with soil from the site and amended no more than 20% with Organic Compost. The only exceptions are new construction where engineered soil is being used in conjunction with Silva Cells and where new planting beds are being created.
6. All plantings shall be backfilled in three lifts and ALL lifts shall be watered so the planting will be set and free of air pockets- NO EXCEPTIONS.
7. An earth berm shall be placed around the perimeter of the planting hole except where curbed planting beds or pits are being used.
8. 2"-3" of mulch shall be placed over the planting area.
9. At the time the planting is complete the planting shall receive additional water to ensure complete hydration of the roots, backfill material and mulch layer.
10. Stakes and guys shall be used where appropriate and/or necessary. Guy material shall be nondamaging to the tree.
11. All planting stock shall be specimen quality, free of defects, and disease or injury. The City of Portsmouth, NH reserves the right to refuse/reject any plant material or planting action that fails to meet the standards set forth in the ANSI A300 Part 6 Standard Practices for Planting and Transplanting and/or The City of Portsmouth, NH Planting Requirements.

LANDSCAPE NOTES:

1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THE DRAWINGS.
3. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. ALL PLANT SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
5. ALL PLANT MATERIALS SHALL BE EXACTLY AS SPECIFIED BY THE LANDSCAPE ARCHITECT. IF PLANT SPECIES CULTIVARS ARE FOUND TO VARY FROM THAT SPECIFIED AT ANY TIME DURING THE GUARANTEE PERIOD, THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO HAVE THE CONTRACTOR REPLACE THAT PLANT MATERIAL. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT DELIVERED TO THE SITE FOR AESTHETIC REASONS BEFORE PLANTING. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE QUALITY FOR ALL THE PLANTS.
6. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, UPON DELIVERY OR AT THE JOB SITE WHILE WORK IS ON-GOING TO CONFORMITY TO SPECIFIED QUALITY, SIZE AND VARIETY.
7. PLANTS FURNISHED IN CONTAINERS SHALL HAVE THE ROOTS WELL ESTABLISHED IN THE SOIL MASS AND SHALL HAVE AT LEAST ONE (1) GROWING SEASON. ROOT-BOUND PLANTS OR INADEQUATELY SIZED CONTAINERS TO SUPPORT THE PLANT MAY BE DEEMED UNACCEPTABLE.
8. NO PLANT SHALL BE PUT IN THE GROUND BEFORE GRADING HAS BEEN FINISHED AND APPROVED BY THE LANDSCAPE ARCHITECT.
9. ALL PLANTS SHALL BE INSTALLED AND DETAILED PER PROJECT SPECIFICATIONS.
10. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN IF NECESSARY, DURING THE FIRST GROWING SEASON.
11. ALL PLANTS SHALL BE GUARANTEED BY THE CONTRACTOR FOR NOT LESS THAN ONE FULL YEAR FROM THE TIME OF PROVISIONAL ACCEPTANCE. DURING THIS TIME, THE OWNER SHALL MAINTAIN ALL PLANT MATERIALS IN THE ABOVE MANNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE PLANTS TO ENSURE PROPER CARE. IF THE CONTRACTOR IS DISSATISFIED WITH THE CARE GIVEN, HE SHALL IMMEDIATELY, AND IN SUFFICIENT TIME TO PERMIT THE CONDITION TO BE RECTIFIED, NOTIFY THE LANDSCAPE ARCHITECT IN WRITING OR OTHERWISE FORFEIT HIS CLAIM. LANDSCAPE CONTRACTOR SHALL PRUNE PLANTINGS OF DEAD LIMBS OR TWIGS DURING THE FIRST YEAR OF GROWTH.
12. FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT WILL BE MADE UPON THE CONTRACTOR'S REQUEST AFTER ALL CORRECTIVE WORK HAS BEEN COMPLETED.
13. LANDSCAPE CONTRACTOR SHOULD REPLACE DEAD PLANTINGS IMMEDIATELY UPON OWNER DIRECTION WITHIN THE WARRANTY PERIOD AND AGAIN AT THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL HAVE REPLACED ANY PLANT MATERIAL THAT IS MISSING, NOT TRUE TO SIZE AS SPECIFIED, THAT HAVE DIED, THAT HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESSIVE PRUNING OR INADEQUATE OR IMPROPER CARE, OR THAT ARE, IN THE OPINION OF THE LANDSCAPE ARCHITECT, IN UNHEALTHY OR UNSIGHTLY CONDITION.
14. ALL LANDSCAPE AREAS TO BE GRASS COMMON TO REGION EXCEPT FOR INTERIOR LANDSCAPED ISLANDS OR WHERE OTHER PLANT MATERIAL IS CALLED FOR.
15. ALL TREES AND SHRUBS TO BE PLANTED IN MULCH BEDS WITH DEFINED AND CUT EDGES TO SEPARATE TURF GRASS AREAS.
16. FOR ANY LANDSCAPE AREA SO DESIGNATED TO REMAIN, WHETHER ON OR OFF-SITE, REMOVE WEEDS, ROCKS, CONSTRUCTION ITEMS, ETC., THEN APPLY GRASS SEED OR PINE BARK MULCH AS DEPICTED ON PLANS.
17. LANDSCAPE CONTRACTOR SHALL FEED AND PRUNE EX. TREES, ON OR JUST OFF SITE, THAT HAVE EXPERIENCED ROOT BASE INTRUSION OR DAMAGE DURING CONSTRUCTION IMMEDIATELY AND FOR THE DURATION OF THE WARRANTY PERIOD AT THE DIRECTION OF THE LANDSCAPE ARCHITECT.
18. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY SNOW FENCING AT THE EDGE OF THE EX. TREE CANOPY THE CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS WITHIN THE LANDSCAPED AREAS. ANY DAMAGE TO EXISTING TREES, SHRUBS OR LAWN SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
19. ALL MULCH AREAS SHALL RECEIVE A 3" LAYER OF SHREDDED PINE BARK MULCH.
20. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.

NOTE: 6 INCHES OF TOPSOIL WITH 25% COMPOST TO BE ADDED TO ALL PLANTING AREAS

PLEASE NOTE: SHEET SIZE IS SCALED FOR ASME D . DO NOT REDUCE OR ENLARGE.

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Project Title
134 PLEASANT
134 PLEASANT STREET
PORTSMOUTH, NH

TERRENCE PARKER — 00254 — NEW HAMPSHIRE — REGISTERED LANDSCAPE ARCHITECT

Landscape Architect

Scale
SEE DETAILS

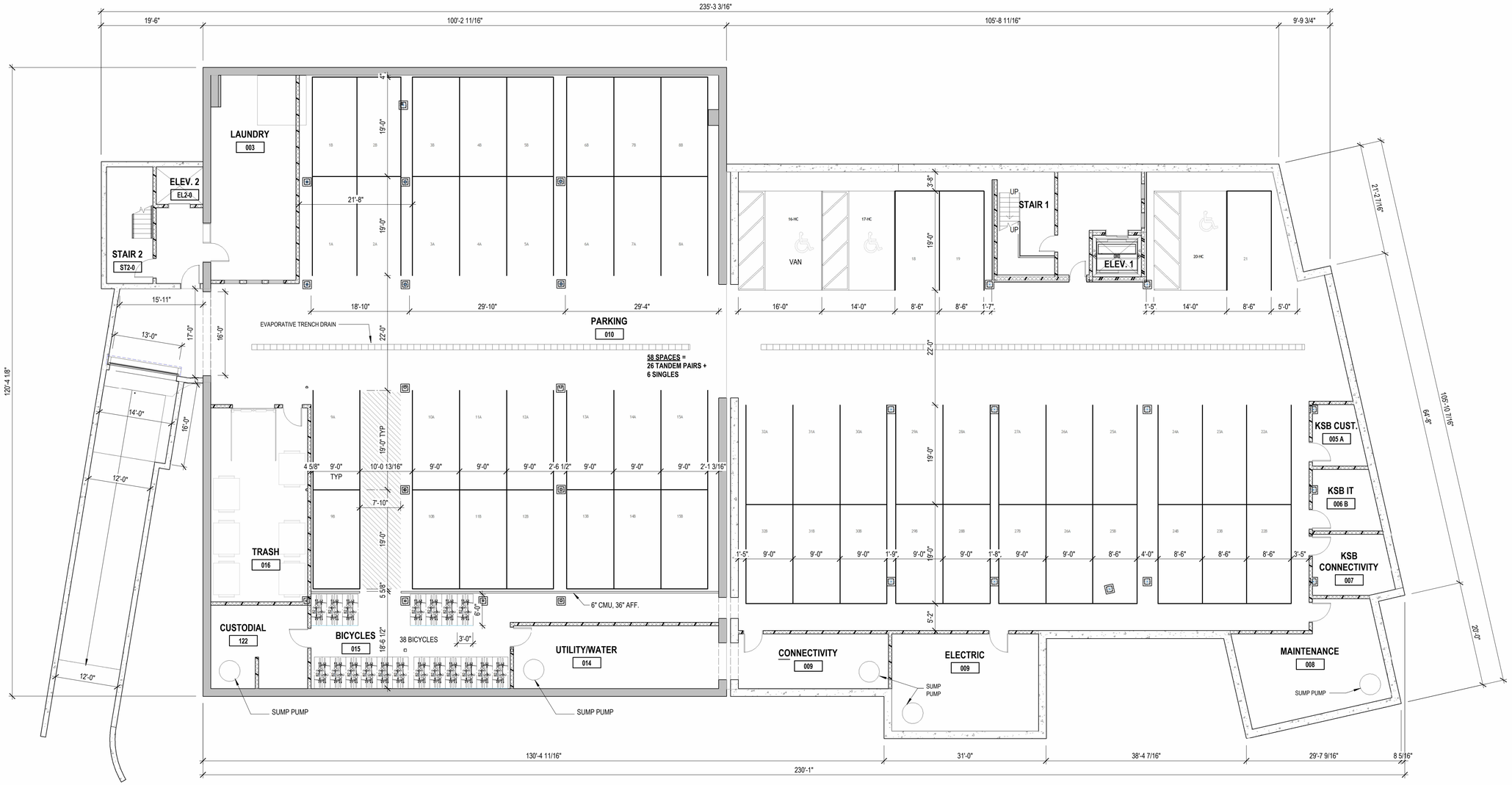
REV.	DATE	DESCRIPTION
C	4/7/2026	Site Layout Update
B	2/25/2026	PB Submission
A	1/21/2026	TAC Submission

NO.	DATE	ISSUE NOTE

Project Manager | Drawn By
Date: 9/18/2025 | Reviewed By
Project ID: 134 PLEASANT

Sheet Title
LANDSCAPE PLAN

Sheet No.
L-2



1 **PB BASEMENT**
3/32" = 1'-0"

ARCOVE ARCHITECTS
767 ISLINGTON ST, STE 2A
PORTSMOUTH NH 03801
603.988.0042
www.ARCove.com

134 PLEASANT STREET

PORTSMOUTH, NH 03801

PROJECT NO: 1028

OWNER

Double Mc, LLC
134 Pleasant Street
Portsmouth, New Hampshire 03801

CIVIL ENGINEERING

Haley Ward
200 Griffin Road, Unit
Portsmouth, NH 03801
(603) 430-9282

LANDSCAPE ARCHITECT

Terra Firma Landscape Architecture
163a Court St
Portsmouth, NH 03801
(603) 531-9109

BASEMENT FLOOR PLAN

SCALE: 3/32" = 1'-0"
DATE: 04/06/2026
DRAWN: HA
CHECKED: TK

PB0.1

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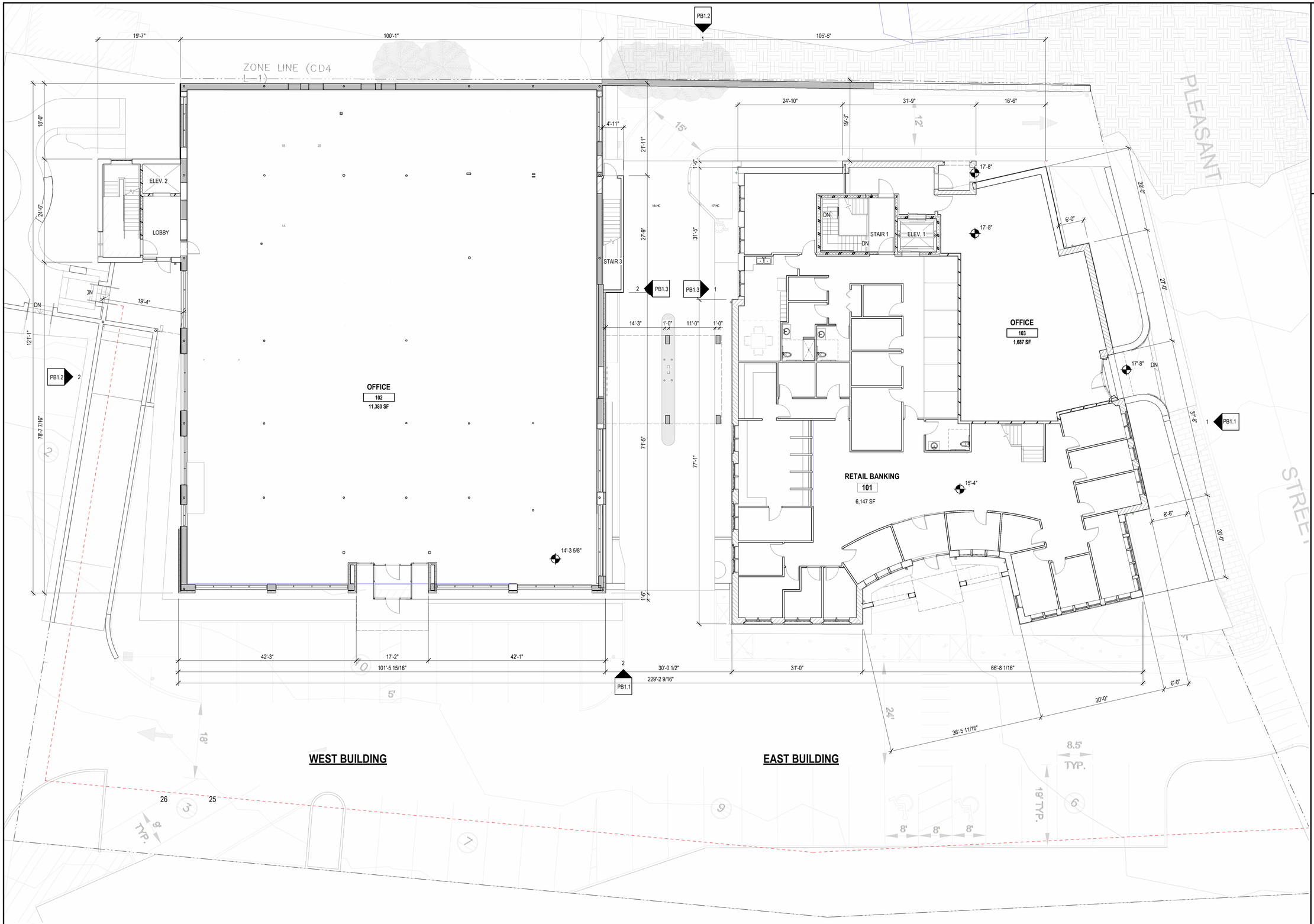

1 PB LEVEL 1
3/32" = 1'-0"

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134 PLEASANT STREET

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Portsmouth, NH 03801
(603) 531-9109

LEVEL 1 FLOOR PLANS

SCALE: 3/32" = 1'-0"
DATE: 04/06/2026
DRAWN: HA
CHECKED: TK

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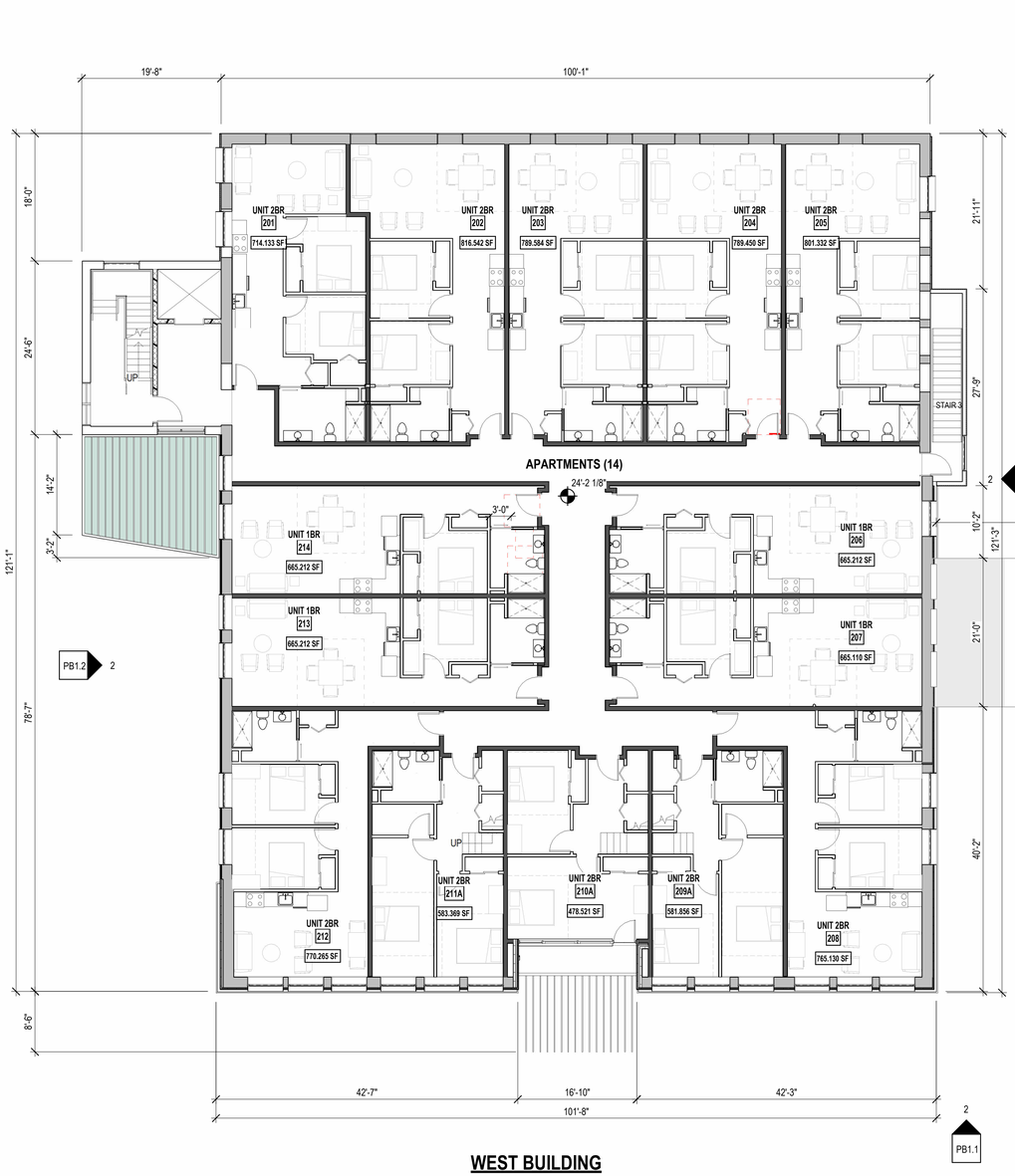
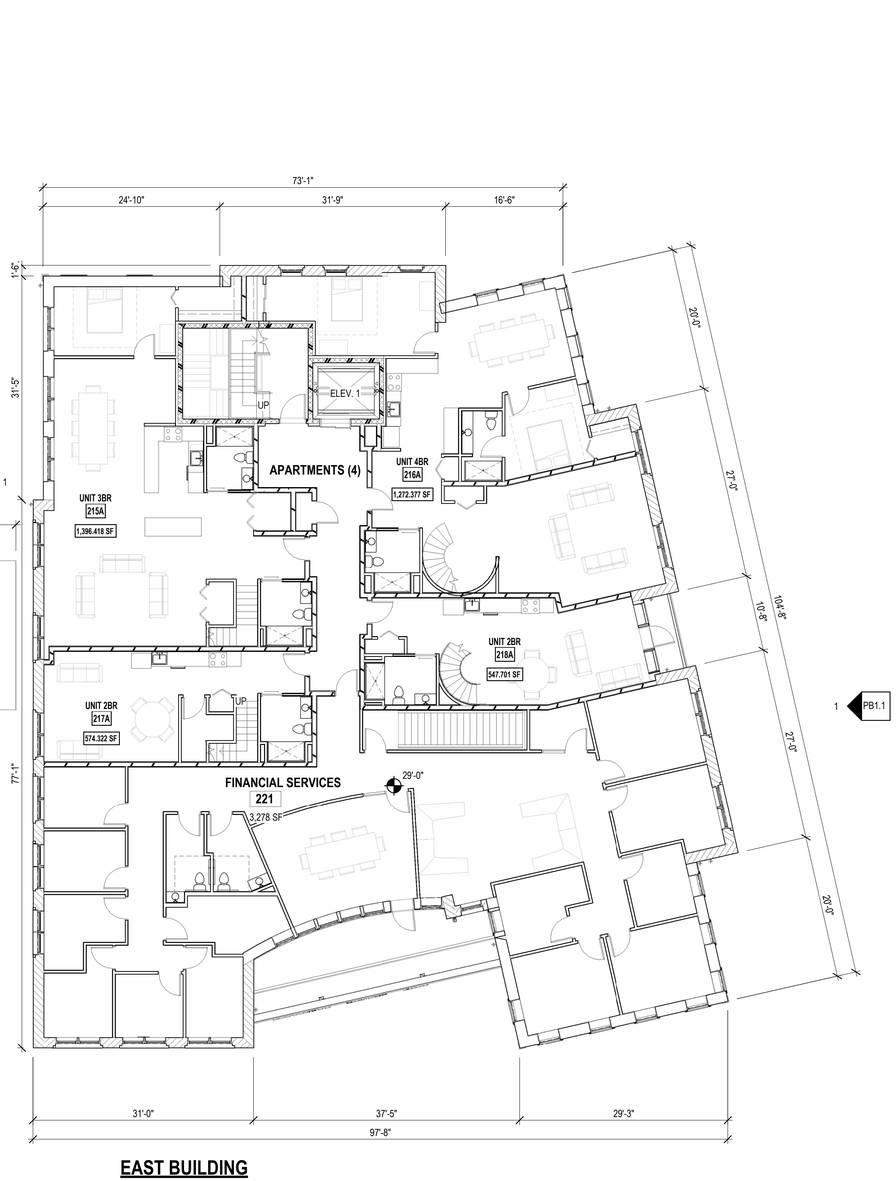


WEST BUILDING



EAST BUILDING

ARCOVE ARCHITECTS

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134 PLEASANT STREET

PORTSMOUTH, NH 03801

PROJECT NO: 1028

OWNER

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LEVEL 2 FLOOR PLANS

SCALE: 3/32" = 1'-0"
DATE: 04/06/2026
DRAWN: HA
CHECKED: TK

PB0.3

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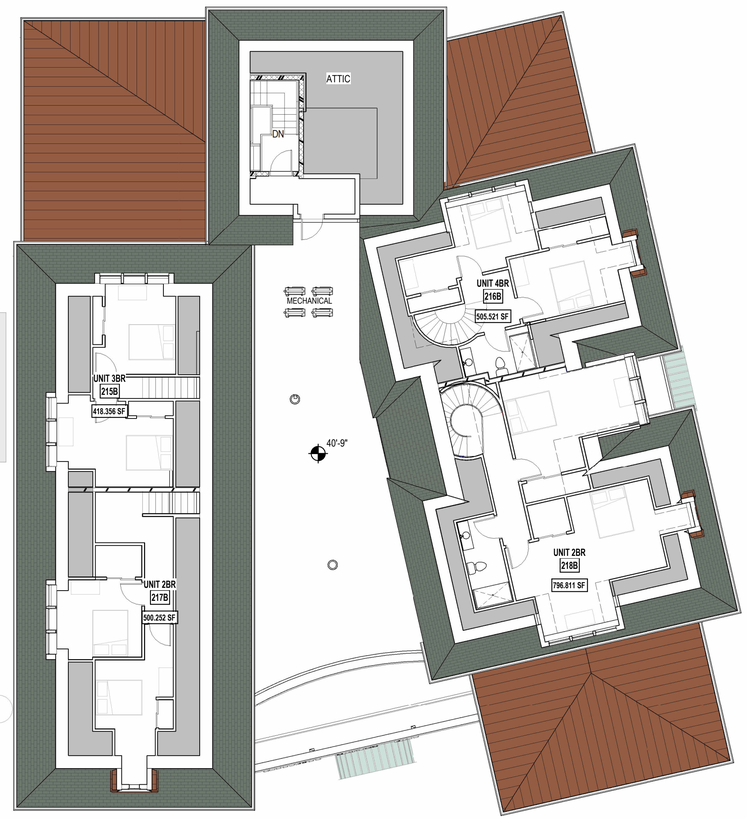
AREA OF PENTHOUSE : 5,329 SF
AREA OF FLOOR BELOW: 12,675 SF

PENTHOUSE TO FLOOR BELOW: 42%

WEST BUILDING

2 PB1.3 PB1.3 1



EAST BUILDING

ARCOVE ARCHITECTS

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134 PLEASANT STREET

PORTSMOUTH, NH 03801

PROJECT NO: 1028

OWNER

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CIVIL ENGINEERING

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LANDSCAPE ARCHITECT

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PENTHOUSE / ATTIC FLOOR PLANS

SCALE: 3/32" = 1'-0"
DATE: 04/06/2026
DRAWN: HA
CHECKED: TK

PB0.4

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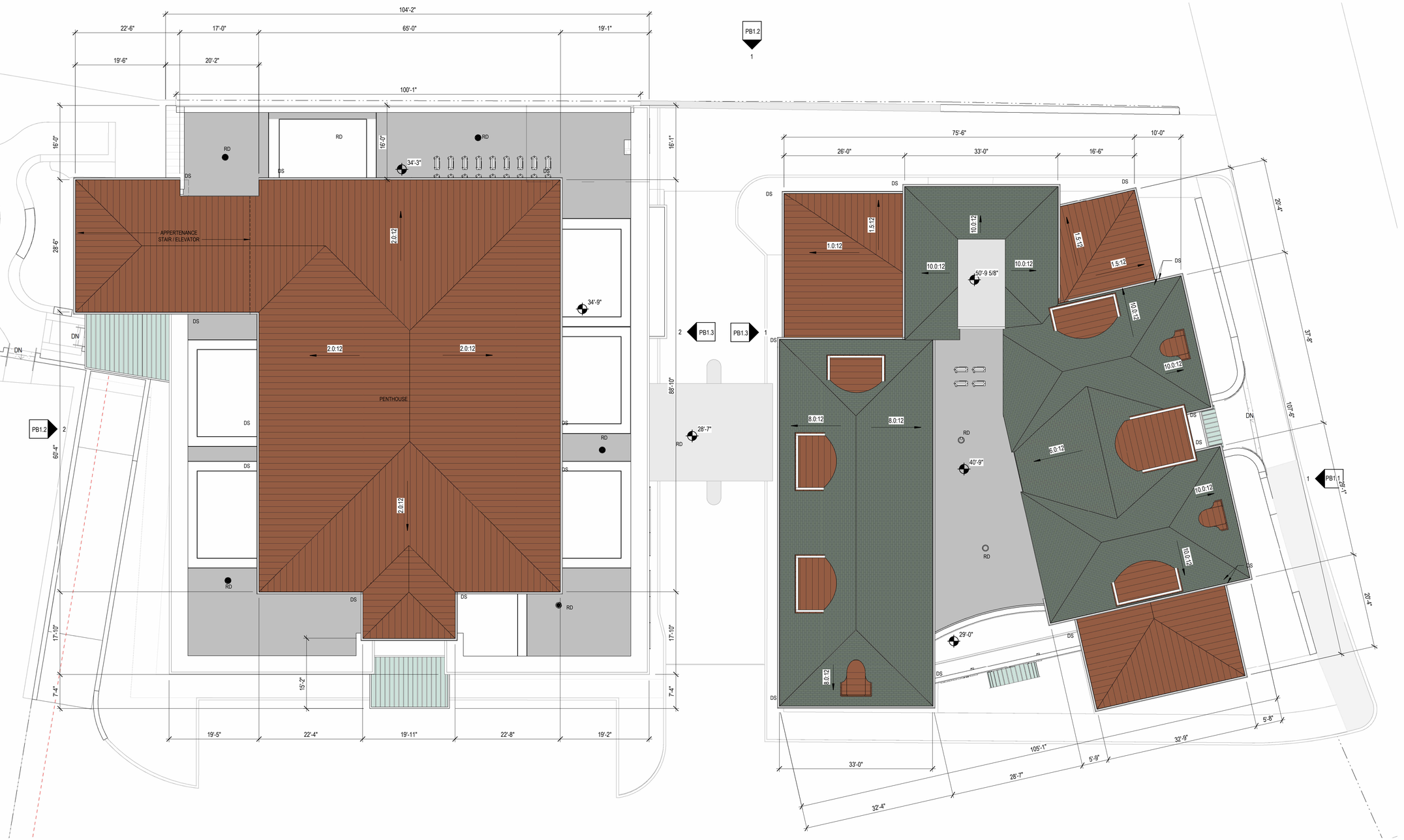

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134 PLEASANT STREET

PORTSMOUTH, NH 03801

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LANDSCAPE ARCHITECT

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ROOF PLAN

SCALE: 3/32" = 1'-0"
DATE: 04/06/2026
DRAWN: HA
CHECKED: TSK

PB0.5

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1 **PB EAST ELEVATION**
3/32" = 1'-0"

2 **PB SOUTH ELEVATION**
3/32" = 1'-0"

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ARCHITECTS

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134 PLEASANT STREET

PORTSMOUTH, NH 03801

PROJECT NO: 1028

OWNER

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(603) 531-9109

SOUTH - EAST ELEVATIONS

SCALE: 3/32" = 1'-0"
DATE: 04/06/2026
DRAWN: HA
CHECKED: TK

PB1.1

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1 **PB NORTH ELEVATION**
3/32" = 1'-0"

2 **PB WEST ELEVATION**
3/32" = 1'-0"

ARCOVE
ARCHITECTS

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134 PLEASANT STREET

PORTSMOUTH, NH 03801

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NORTH - WEST ELEVATIONS

SCALE: 3/32" = 1'-0"
DATE: 04/06/2026
DRAWN: HA
CHECKED: TK

PB1.2

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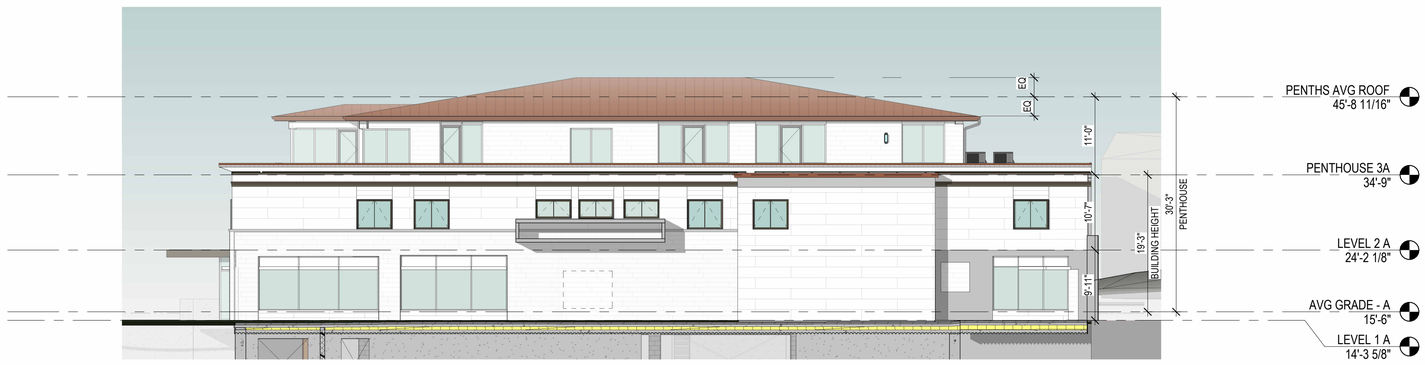
1 **DRIVE-THROUGH: EAST ELEVATION OF WEST BUILDING**
3/32" = 1'-0"



2 **DRIVE-THROUGH: WEST ELEVATION OF EAST BUILDING**
3/32" = 1'-0"

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767 ISLINGTON ST, STE 2A
PORTSMOUTH NH 03801
603.988.0042
www.ARCove.com

134 PLEASANT STREET

PORTSMOUTH, NH 03801

PROJECT NO: 1028

OWNER

Double Mc, LLC
134 Pleasant Street
Portsmouth, New Hampshire 03801

CIVIL ENGINEERING

HALEY WARD
Haley Ward
200 Griffin Road, Unit
Portsmouth, NH 03801
(603) 430-9282

LANDSCAPE ARCHITECT

Terra Firma Landscape Architecture
163a Court St
Portsmouth, NH 03801
(603) 531-9109

SIDE ELEVATIONS

SCALE: 3/32" = 1'-0"
DATE: 04/06/2026
DRAWN: HA
CHECKED: TK

PB1.3

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VIEW FROM LANGDON HOUSE PB

VIEW FROM PLEASANT STREET AT TREADWELL HOUSE PB

VIEW FROM JUNKINS AVENUE AT CITY HALL PB

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VIGNETTES

SCALE:

DATE: 04/06/2026
DRAWN: HA
CHECKED: TK

PB2.1

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VIEW FROM PLEASANT STREET

3D View SW

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134 PLEASANT STREET

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(603) 430-9282

LANDSCAPE ARCHITECT

Terra Firma Landscape Architecture
163a Court St
Portsmouth, NH 03801
(603) 531-9109

VIGNETTES

0' 4' 8' 16'
SCALE:

DATE: 04/06/2026
DRAWN: HA
CHECKED: Checker

PB2.2

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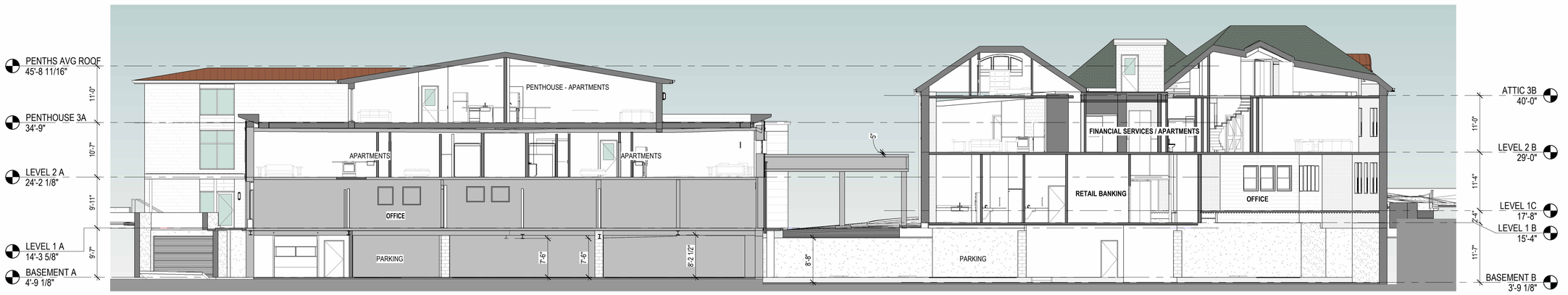
VIEW FROM JUNKINS AVENUE AT CITY HALL PB

VIEW FROM JUNKINS AVENUE AT CITY HALL PB



2 LONGITUDINAL SECTION EW
3/32" = 1'-0"

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PORTSMOUTH NH 03801
603.988.0042
www.ARCove.com

134 PLEASANT STREET

PORTSMOUTH, NH 03801

PROJECT NO: 1028

OWNER

Double Mc, LLC
134 Pleasant Street
Portsmouth, New Hampshire 03801

CIVIL ENGINEERING

Haley Ward
200 Griffin Road, Unit
Portsmouth, NH 03801
(603) 430-9282

LANDSCAPE ARCHITECT

Terra Firma Landscape Architecture
163a Court St
Portsmouth, NH 03801
(603) 531-9109

BUILDING SECTION & VIGNETTES

0' 4' 8' 16'

SCALE: 3/32" = 1'-0"

DATE: 04/06/2026
DRAWN: HA
CHECKED: TK

PB3.1

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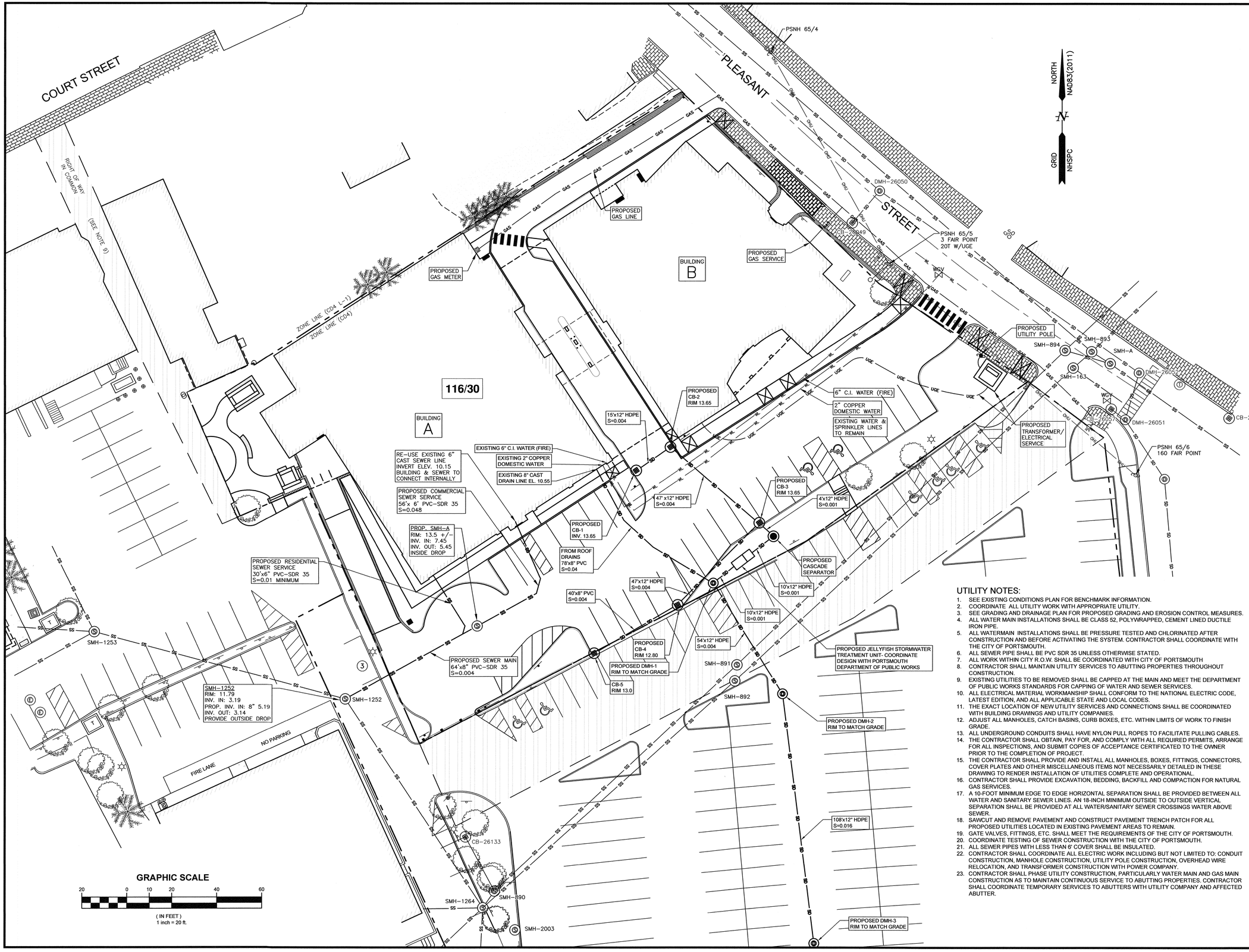
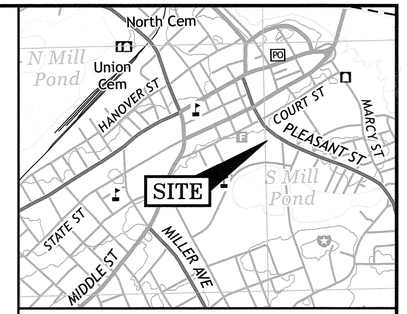




LOCATION MAP SCALE: 1" = 1,000'

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).

4) PROVIDE TEMPORARY WATER AND SEWER SERVICES TO ALL IMPACTED PROPERTIES DURING NEW WATER AND SEWER MAIN INSTALLATION.

5) PROPOSED SEWER FLOW:

PROFESSIONAL OFFICE: 13,956 S.F. X 2.5 GPD/100 S.F.
= 349 GPD

BANK AND BANK OFFICE: 10,358 S.F. X 2.5 GPD/100 S.F.
= 259 GPD

22 APARTMENTS X 216 GPD/APARTMENT
= 4,752 GPD

TOTAL FLOW 5,360 GPD.

6) APPLICANT, AND AUTHORIZED AGENTS, SHALL WORK WITH THE CITY OF PORTSMOUTH AND UTILITY PROVIDERS TO CONSTRUCT NEW, PERMANENT SERVICE CONNECTIONS TO PROPOSED WATER, SEWER, STORMDRAIN, POWER , AND COMMUNICATIONS.

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 WATER MAIN INSTALLATIONS SHALL BE CLASS 52, POLYWRAPPED, CEMENT LINED DUCTILE IRON PIPE.
5. ALL WATERMAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION AND BEFORE ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH.
6. ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.
7. ALL WORK WITHIN CITY R.O.W. SHALL BE COORDINATED WITH CITY OF PORTSMOUTH
8. CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT CONSTRUCTION.
9. 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.
10. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
11. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH BUILDING DRAWINGS AND UTILITY COMPANIES.
12. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
13. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
14. 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.
15. 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.
16. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES.
17. 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.
18. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
19. GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF PORTSMOUTH.
20. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF PORTSMOUTH.
21. ALL SEWER PIPES WITH LESS THAN 6' COVER SHALL BE INSULATED.
22. 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.
23. 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 UTILITY COMPANY AND AFFECTED ABUTTER.

REV.	DATE	DESCRIPTION	BY	CHK
5	04-07-2026	EMERGENCY ACCESS ONLY	SJR	JRC
4	02-25-2026	CATCH BASINS, DRAINAGE	SJR	JRC
3	02-03-2026	JELLYFISH, DRAINAGE	SJR	JRC
2	01-21-2026	UPDATE PROPOSED UTILITIES	SJR	JRC
1	12-22-2025	ISSUED FOR APPROVAL	SJR	JRC
0	09-05-2025	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

UTILITY PLAN

STATE OF NEW HAMPSHIRE – JOHN R. CHAGNON – NO. 7854 – LICENSED PROFESSIONAL ENGINEER

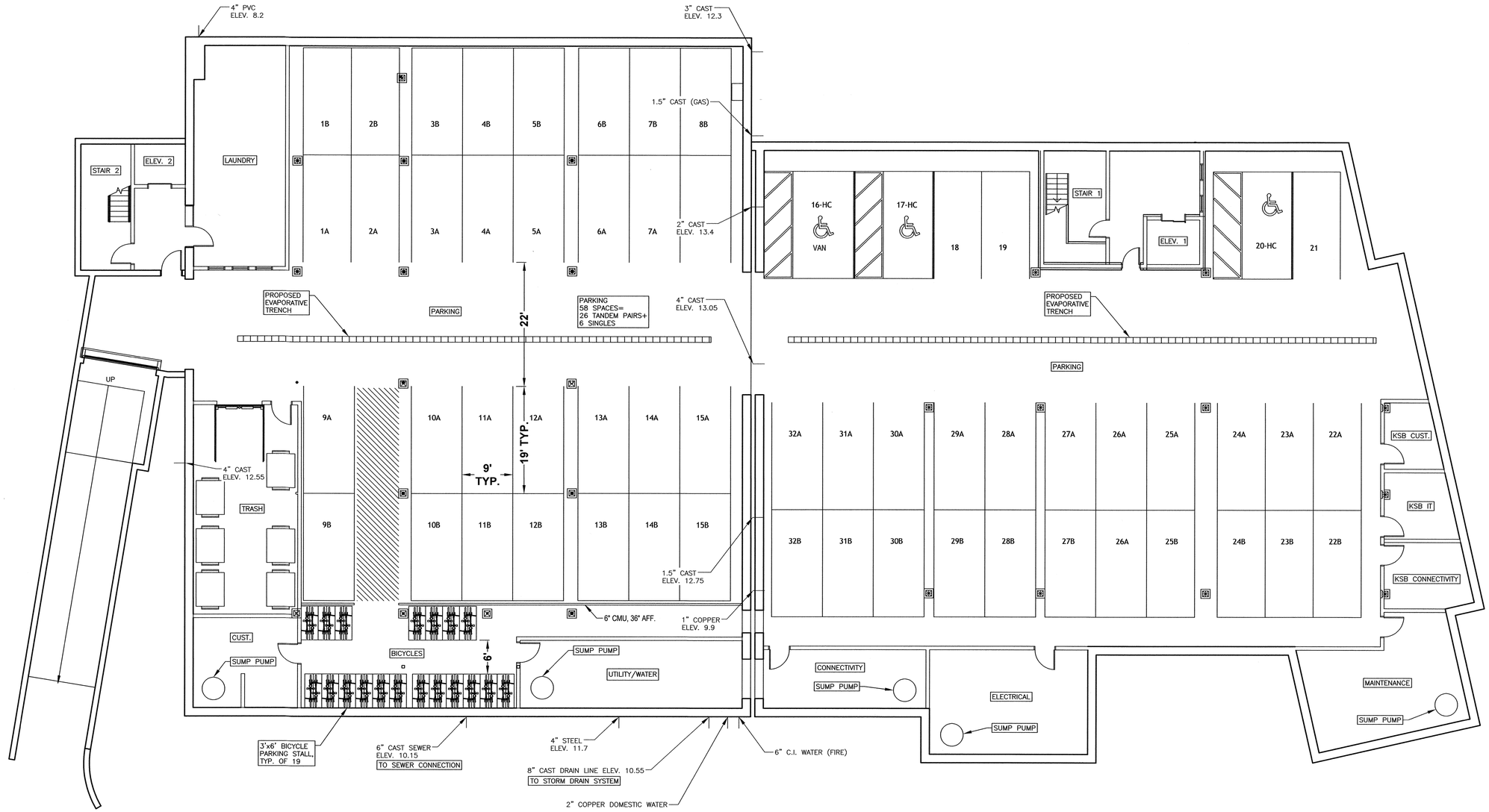
DATE	SCALE
JULY 2025	1"=20'

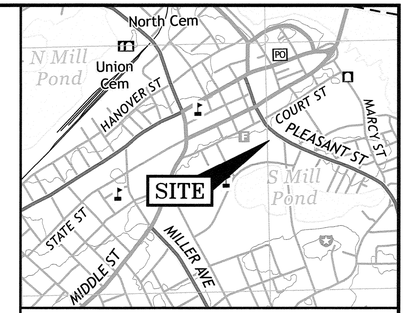
DRAWN BY	DESIGNED BY	CHECKED BY
SJR	---	JRC

PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

DRAWING No. **C103** REV. **5**

FILE LOCATION: P:\NH\5010156.MCNABB_PROPERTIES\1532-134 PLEASANT ST - PORTSMOUTH-JRC\2D-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.06, 1:31 PM





LOCATION MAP SCALE: 1" = 1,000'

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).

4) PROVIDE TEMPORARY CONSTRUCTION DEWATERING. COORDINATE WITH PORTSMOUTH DPW.

BASEMENT NOTES:

1. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
2. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY.
3. EXISTING BASEMENT DEWATERING SYSTEM (SUMP PUMPS) AND ANY NEW SUMP PUMPS SHALL BE CONNECTED TO THE EXTERIOR STORM DRAINAGE SYSTEM.

GRAPHIC SCALE

10 0 5 10 20 30

(IN FEET)
1 inch = 10 ft.

REV.	DATE	DESCRIPTION	BY	CHK
2	04-07-26	BICYCLE RACKS	SJR	JRC
1	02-25-26	LAYOUT	SJR	JRC
0	01-21-26	ISSUED FOR APPROVAL	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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200 Griffin Road, Unit 14
Portsmouth, NH 03801
603-430-9282
WWW.HALEYWARD.COM

PROJECT

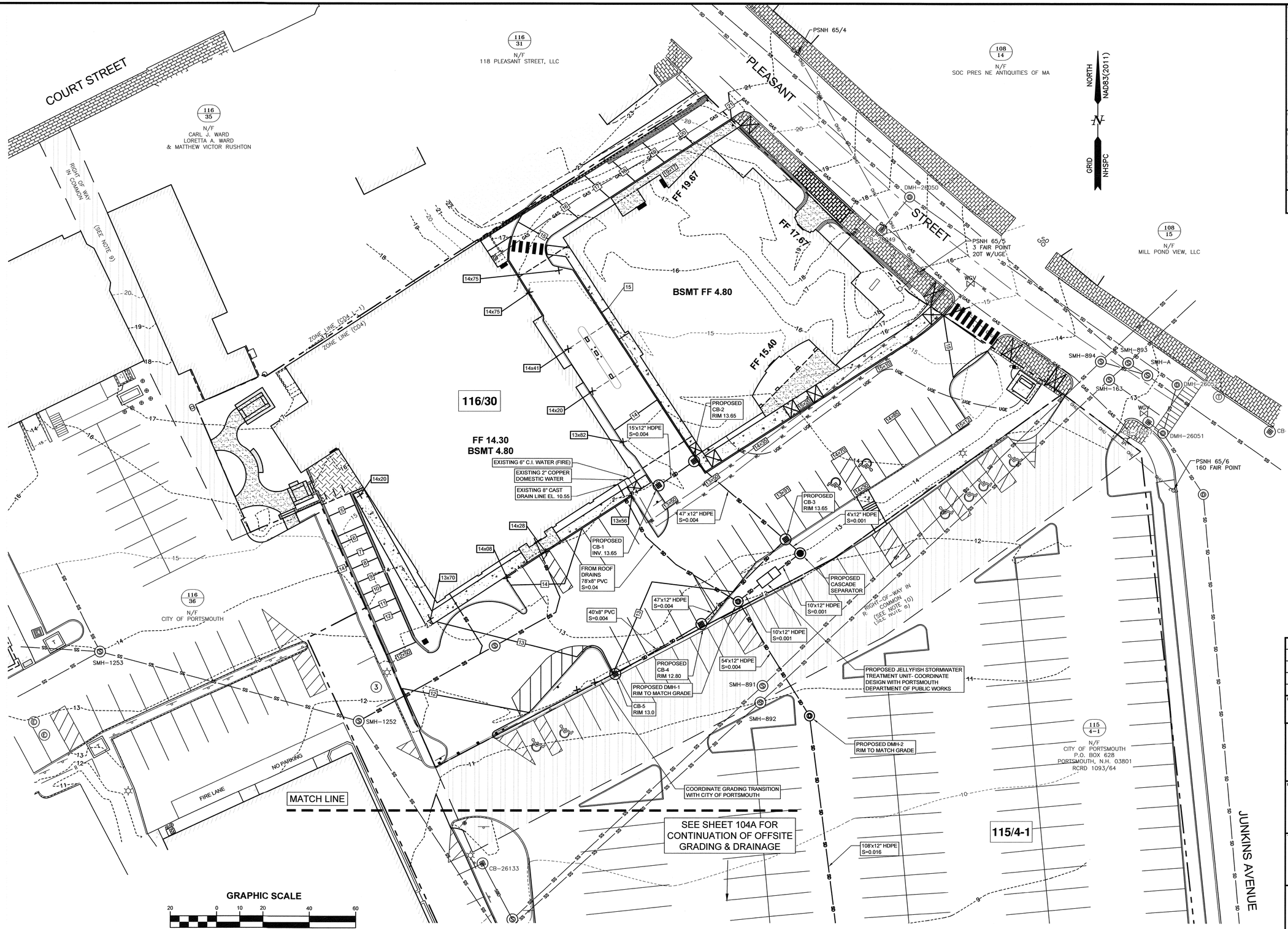
DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

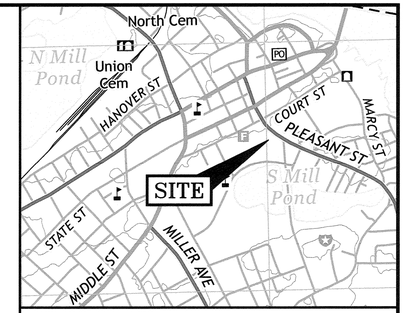
TITLE

BASEMENT PLAN

DATE: JULY 2025	SCALE: 1"=10'
DRAWN BY: SJR	DESIGNED BY: ---
CHECKED BY: JRC	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: C103A	REV.: 2

FILE LOCATION: P:\NH\5010156-MCHABB_PROPERTIES\1532-134 PLEASANT ST., PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.03.31, 11:49 AM





LOCATION MAP SCALE: 1" = 1,000'

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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).

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

5) CITY OF PORTSMOUTH STORMWATER CONNECTION PERMIT REQUIRED.

REV.	DATE	DESCRIPTION	BY	CHK.
3	04-07-26	EMERGENCY ACCESS ONLY	SJR	JRC
2	02-25-26	DRAINAGE LAYOUT, GRADES	SJR	JRC
1	01-21-26	DRAINAGE & GRADING UPDATES	SJR	JRC
0	12-22-25	ISSUED FOR APPROVAL	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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200 Griffin Road, Unit 14
Portsmouth, NH 03801
603-430-9282

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

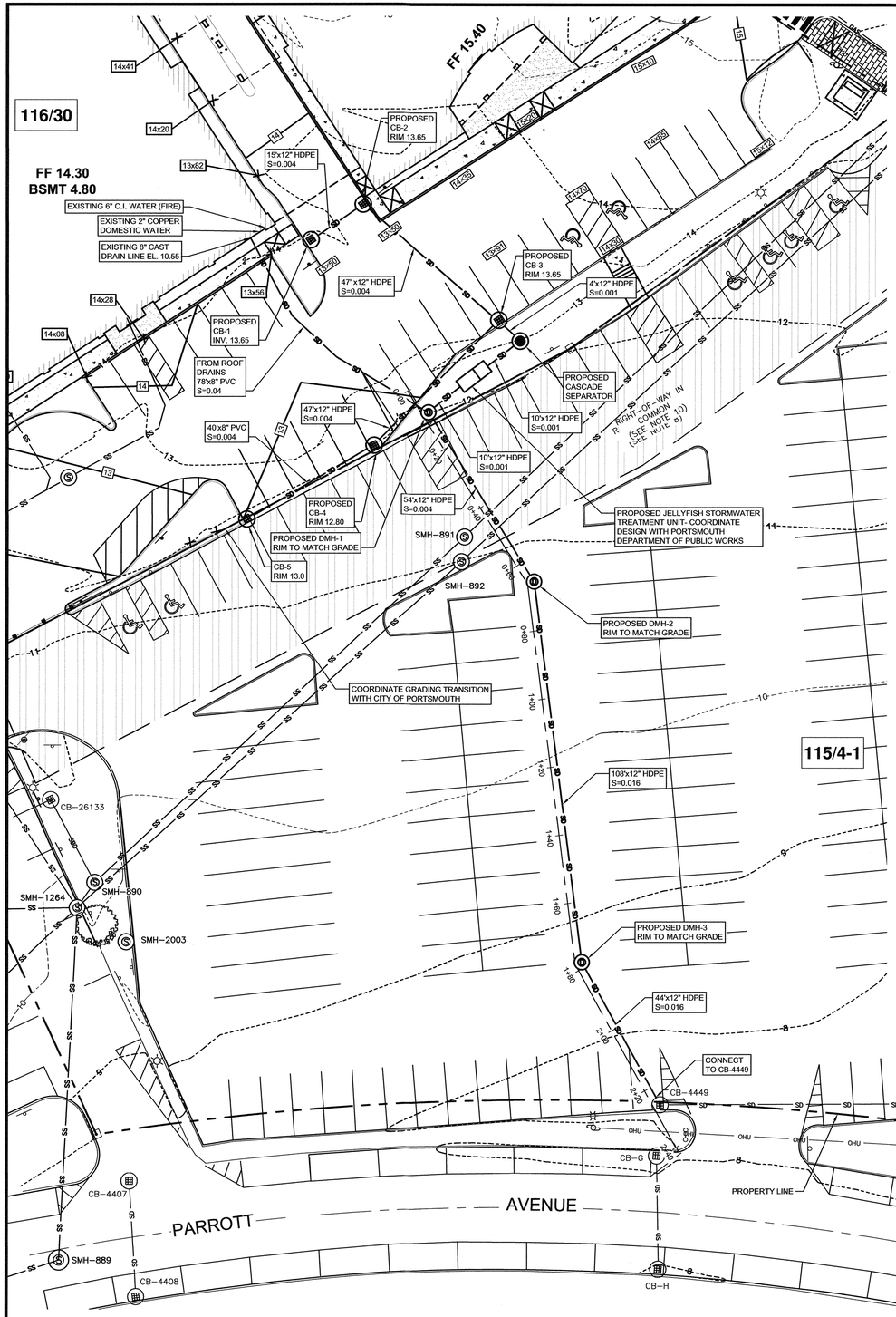
TITLE

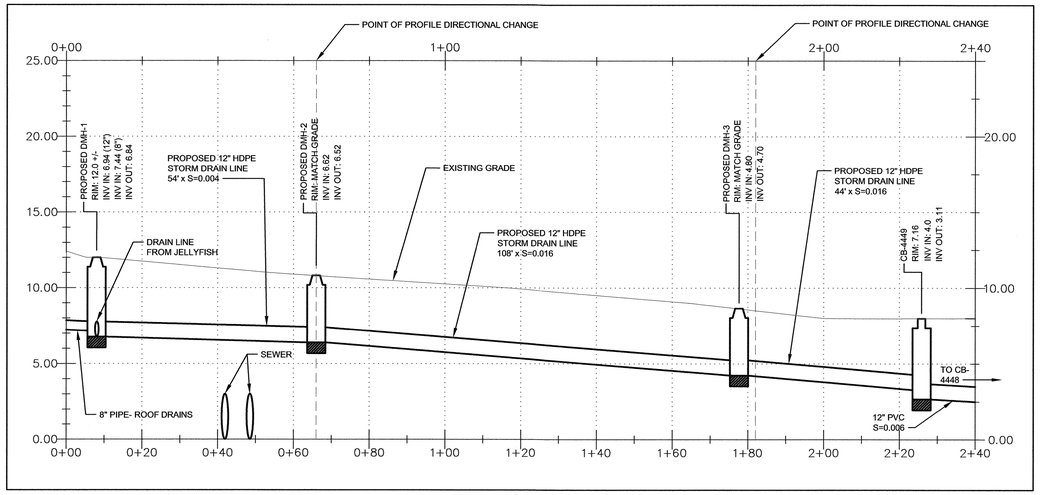
ON SITE GRADING & DRAINAGE PLAN

STATE OF NEW HAMPSHIRE JOHN R. CHAGNON No. 14651 LICENSED PROFESSIONAL ENGINEER

DATE: JULY 2025		SCALE: 1"=20'	
DRAWN BY: SJR	DESIGNED BY: ---	CHECKED BY: JRC	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60		
DRAWING No.: C104		REV.: 3	

FILE LOCATION: P:\NH\5010156-MCNABB_PROPERTIES\1533-134 PLEASANT ST - PORTSMOUTH\~IRC\CD-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.06, 1:39 PM





PROFILE VIEW OF PROPOSED SITE DRAINAGE TO PARROTT AVE. - STA 0+00 TO 2+40

SCALE: H: 1"=20' / V: 1"=5'

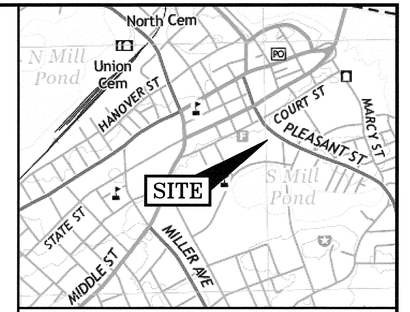
GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

NORTH NAD83(2011)

GRID NHSPC



LOCATION MAP SCALE: 1" = 1,000'

NOTES:

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

5) CITY OF PORTSMOUTH STORMWATER CONNECTION PERMIT REQUIRED.

EXISTING DRAINAGE STRUCTURE TABLE

STRUCTURE	PROP/EX	RIM	PIPE SIZE/TYPE	INV. IN	INV. OUT	DIRECTION
CB-4407	EX	8.30	NO VISIBLE PIPES			
			WATER ELEVATION: 5.30			
			SUMP ELEVATION: 4.20			
CB-26133	EX	10.86	12" CLAY	4.31		SW
			12" CLAY		4.31	SE
CB-A	EX	12.22	12" AC		8.42	SE
CB-B	EX	12.80	8" CLAY	7.10		NW
			12" AC	7.10		NE
			12" AC	7.00		SW
			18" AC		7.00	S
CB-C	EX	13.47	12" AC	8.87		NE
			12" AC		8.82	S
CB-D	EX	13.54	4" AC	9.34		NW
			12" AC		9.34	SW
CB-E	EX	13.67	SILTED/LOCKED			
CB-F	EX	13.48	SILTED/LOCKED			
CB-G	EX	7.76	4" CLAY		4.76	
CB-H	EX	7.94	6" CLAY	4.24		
CB 26057	EX	12.53	12" CPP W/OIL SEPERATOR		8.33	SE
CB 26048	EX	22.70				
CB 26047	EX	22.89				
CB-26049	EX	17.08	12"PVC W/OIL SEPERATOR		11.78	NE
CB-4275	EX	7.46		2.56		NW
					2.56	S
CB-4448	EX	6.73	12" PVC	2.53		E
			12" PVC		2.53	SE
CB-4449	EX	7.16	12" PVC		3.11	E
DMH 26046	EX	22.99	12" CPP	18.49		SW
			12" CPP	18.49		NE
			12" CPP	19.79		NW
			12" CPP		18.44	SE
DMH 26050	EX	17.45	12" PVC	12.80		NW
			12" PVC	12.80		SW
			12" PVC		12.80	SE
DMH-26052	EX	12.93	12" CPP	8.18		NW
			12" CPP		8.13	S
DMH-26051	EX	12.61	12" CPP	7.86		N
			12" CPP	8.11		NW
			12" CPP		7.81	S
DMH-26061	EX	8.02				
DMH-26062	EX	7.84				

PROPOSED DRAINAGE STRUCTURE TABLE

STRUCTURE	PROP/EX	RIM	PIPE SIZE/TYPE	INV. IN	INV. OUT	DIRECTION
CB-1	PROP	13.65			10.90	E
CB-2	PROP	13.65		10.84		W
					10.74	E
CB-3	PROP	13.65		10.55		N&W
CB-4	PROP	12.80		10.84		W
					10.74	E
CB-5	PROP	13.00		11.00		E
SEPARATOR	PROP	13.00		10.41		N
					10.41	W
JELLYFISH	PROP	12.50	12" HDPE	10.31		E
			12" HDPE		7.04	W
DMH 1	PROP	XGD	12" HDPE	6.94		E
			12" HDPE		6.84	S
			8" PVC	7.44		N
DMH 2	PROP	XGD	12" HDPE	6.62		N
			12" HDPE		6.52	S
DMH 3	PROP	XGD	12" HDPE	4.70		N
			12" HDPE		4.80	S

XGD = EXISTING GRADE

REV.	DATE	DESCRIPTION	BY	CHK.
1	04-07-26	EMERGENCY ACCESS ONLY	SJR	JRC
0	02-25-26	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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603-430-9282

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

OFF SITE GRADING & DRAINAGE/PROFILE

STATE OF NEW HAMPSHIRE – JOHN CHAGNON No. 7855 LICENSED PROFESSIONAL ENGINEER

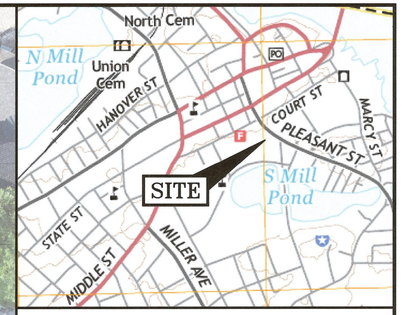
DATE	SCALE
JULY 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	---	JRC

PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

DRAWING No. **C104A** REV. **1**

FILE LOCATION: P:\M\5010156.MCHABLI_PROPERTIES\1532-134 PLEASANT ST., PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026-04-01, 8:28 AM



LOCATION MAP SCALE: 1" = 1,000'

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.

REV.	DATE	DESCRIPTION	BY	CHK.
2	04-07-26	EMERGENCY ACCESS ONLY	SJR	JRC
1	02-25-26	DRAINAGE LAYOUT	SJR	JRC
0	02-03-26	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

OFF SITE GRADING & DRAINAGE PLAN ORTHOPHOTO

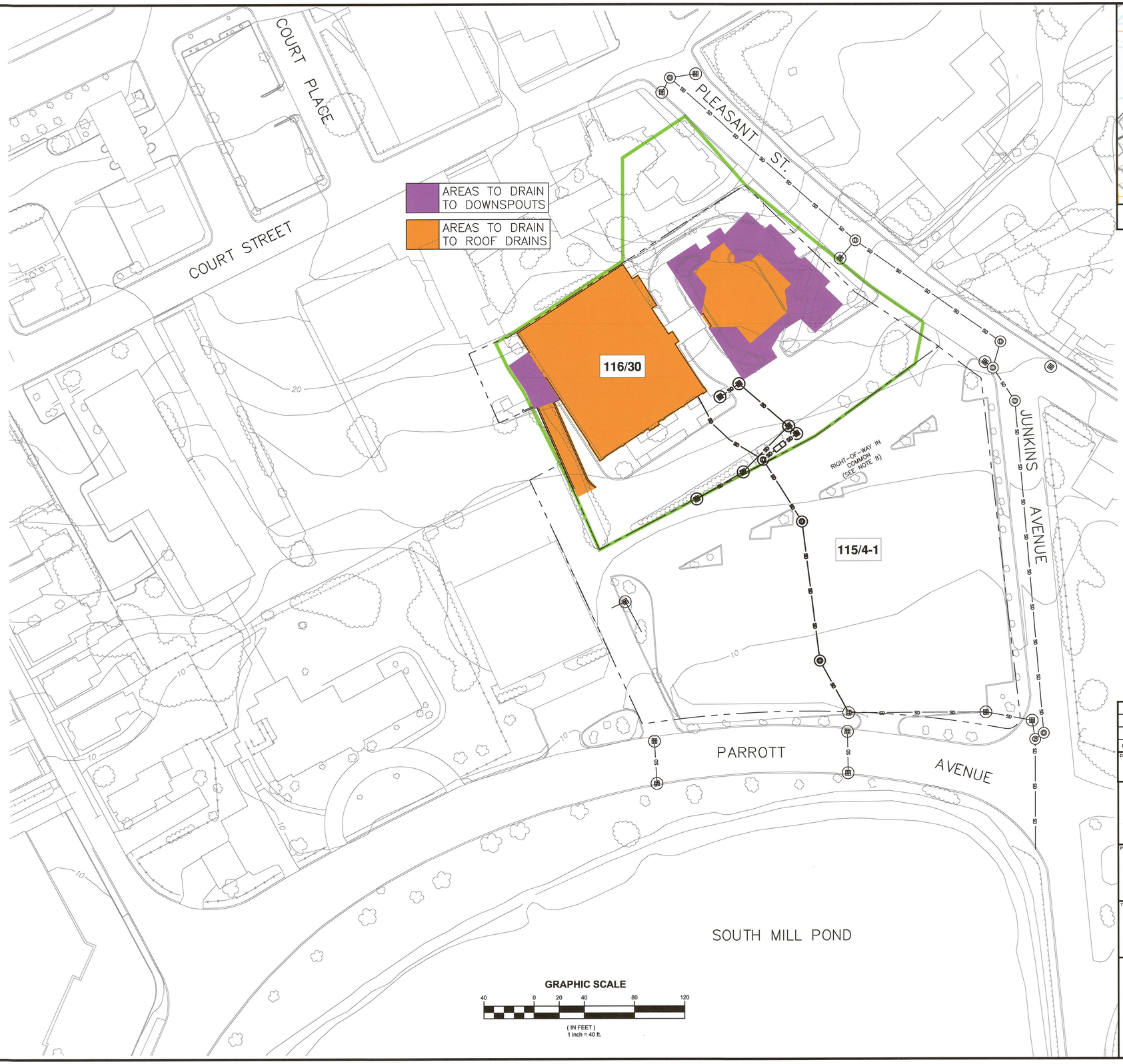
DATE: JULY 2025	SCALE: 1"=20'
DRAWN BY: SJR	DESIGNED BY: ---
CHECKED BY: JRC	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: **C104B**	REV.: **2**

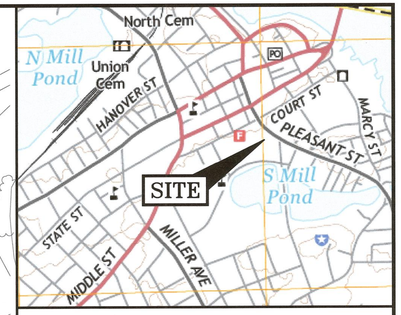
FILE LOCATION: P:\M\5010156.MCHAB_PROPERTIES\1532-134 PLEASANT ST - PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.06, 2:13 PM

DRAINAGE AREAS

TOTAL SUBCATCHMENT AREA		59,274 S.F.
BUILDINGS & RAMP EXCLUSION (ROOF DRAINS)		16,963 S.F.
TOTAL DRAINAGE CONTRIBUTING AREA		42,311 S.F.

NOTE: ROOF DRAINS WILL NOT BE CONNECTED TO THE STORMWATER TREATMENT SYSTEM.





LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1) PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 116 AS LOT 30, AND MAP 115 AS LOT 4–1.

2) THE PURPOSE OF THIS PLAN IS TO SHOW THE SITE DEVELOPMENT DRAINAGE AREA FOR THE 134 PLEASANT STREET PROJECT.

NORTH (NAD83(2011))
GRID NHSPC

REV.	DATE	DESCRIPTION	BY	CHK.
2	04-07-26	EMERGENCY ACCESS ONLY	SJR	JRC
1	02-25-26	REVISED DRAINAGE AREAS	SJR	JRC
0	02-10-26	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

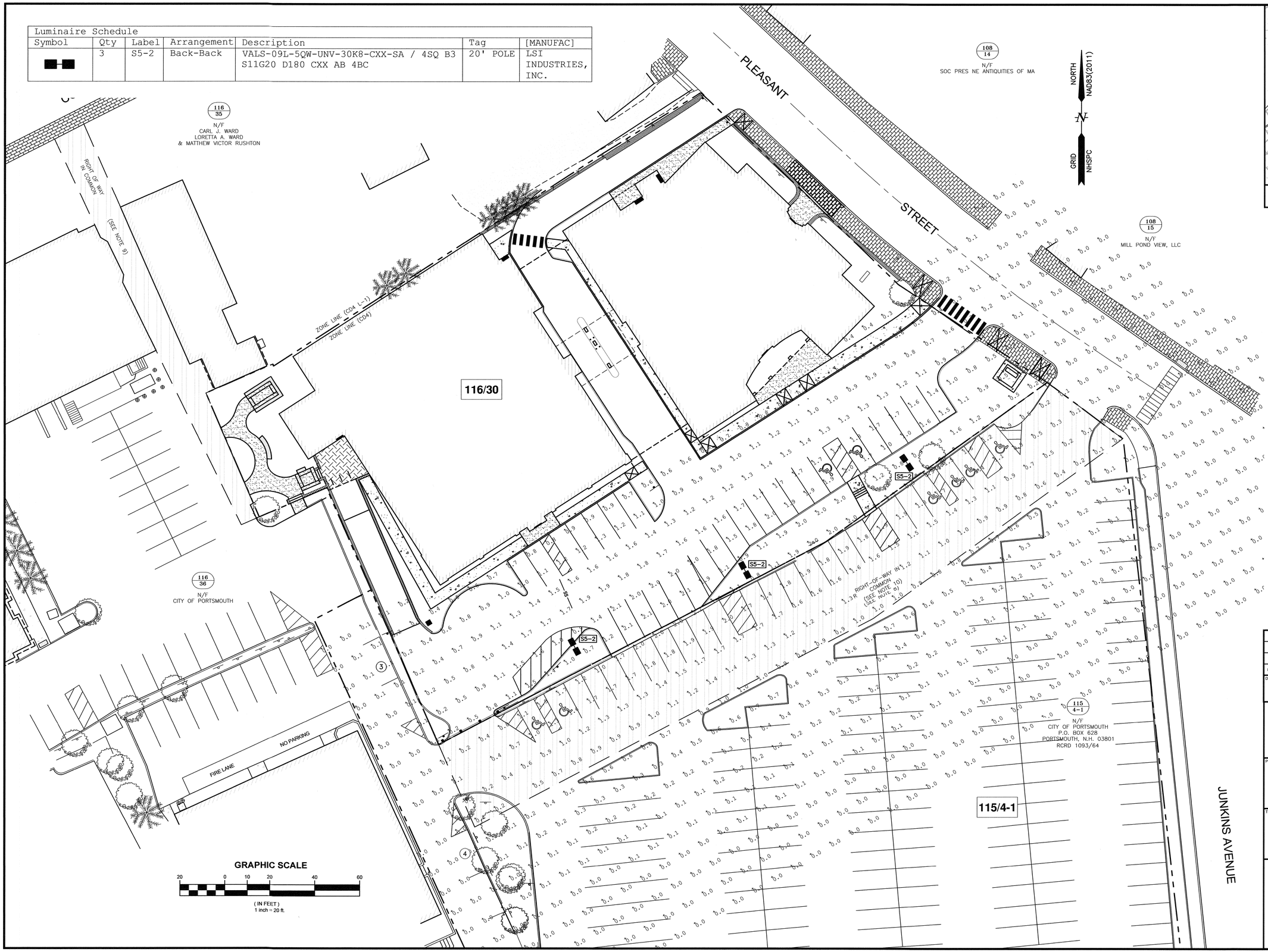
DRAINAGE AREA PLAN

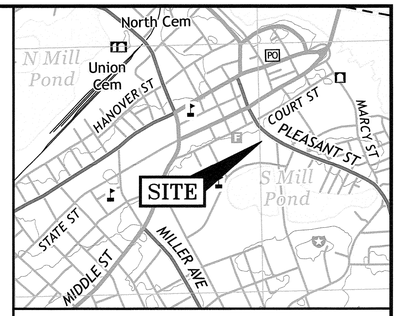
STATE OF NEW HAMPSHIRE – JOHN R. CHAGNON No. 7651 – PROFESSIONAL ENGINEER – SEALED

DATE: JULY 2025	SCALE: 1"=40'
DRAWN BY: SJR	DESIGNED BY: ---
CHECKED BY: JRC	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: C104C	REV.: 2

FILE LOCATION: P:\NH\5010156-MCHABB_PROPERTIES\5152-134 PLEASANT ST., PORTSMOUTH\IRCAD-CAD_FILES\CIVIL\5010156.1532-SITE 2026.DWG, 2026.04.03, 7:25 AM

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Description	Tag	[MANUFAC]
	3	S5-2	Back-Back	VALS-09L-5QW-UNV-30K8-CXX-SA / 4SQ B3 S11G20 D180 CXX AB 4BC	20' POLE	LSI INDUSTRIES, INC.





LOCATION MAP SCALE: 1" = 1,000'

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).

4) ALL LIGHTING SHALL BE SHIELDED TO MINIMIZE LIGHT TRESPASS AND DIRECT GLARE BEYOND THE PROPERTY.

5) ALL LIGHTS SHALL BE DARK SKY COMPLIANT AND DIRECTED DOWNWARD.

6) LIGHTING LAYOUT & FIXTURE SPECIFICATIONS DESIGNED/PROVIDED BY: EXPOSURE 2 LIGHTING. CONTACT: KEN SWEENEY 603-601-8080.

7) POLE MOUNTED LIGHTS SHALL HAVE A MAXIMUM FIXTURE HEIGHT OF 20'.

8) LIGHTS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

9) NUMBERS ON PLAN REPRESENT INITIAL FOOT CANDLE VALUES AT 3 FEET ABOVE GRADE.

REV.	DATE	DESCRIPTION	BY	CHK
2	04-07-26	EMERGENCY ACCESS ONLY	SJR	JRC
1	01-21-26	SITE & BUILDING LAYOUTS	SJR	JRC
0	12-22-25	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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WWW.HALEYWARD.COM
200 Griffin Road, Unit 14
Portsmouth, NH 03801
603-430-9282

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

LIGHTING PLAN

DATE	SCALE
JULY 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	---	JRC

PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

DRAWING No.	REV.
C105	2

FILE LOCATION: P:\NH\5010156-MCNABB_PROPERTIES\1532-134 PLEASANT ST., PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.03.31, 12:28 PM

ARCOVE ARCHITECTS

767 ISLINGTON ST, STE 2A
PORTSMOUTH NH 03801
603.988.0042
www.ARCove.com

134 PLEASANT STREET

PORTSMOUTH, NH 03801

PROJECT NO: 1028

OWNER

Double Mc, LLC
134 Pleasant Street
Portsmouth, New Hampshire 03801

CIVIL ENGINEERING

HALEY WARD
Haley Ward
200 Griffin Road, Unit
Portsmouth, NH 03801
(603) 430-9282

LANDSCAPE ARCHITECT

Terra Firma Landscape Architecture
163a Court St
Portsmouth, NH 03801
(603) 531-9109

NIGHT TIME LIGHTING VIEWS

0' 4' 8' 16'
SCALE:

DATE: 04/06/2026
DRAWN: HA
CHECKED: Checker

C105A

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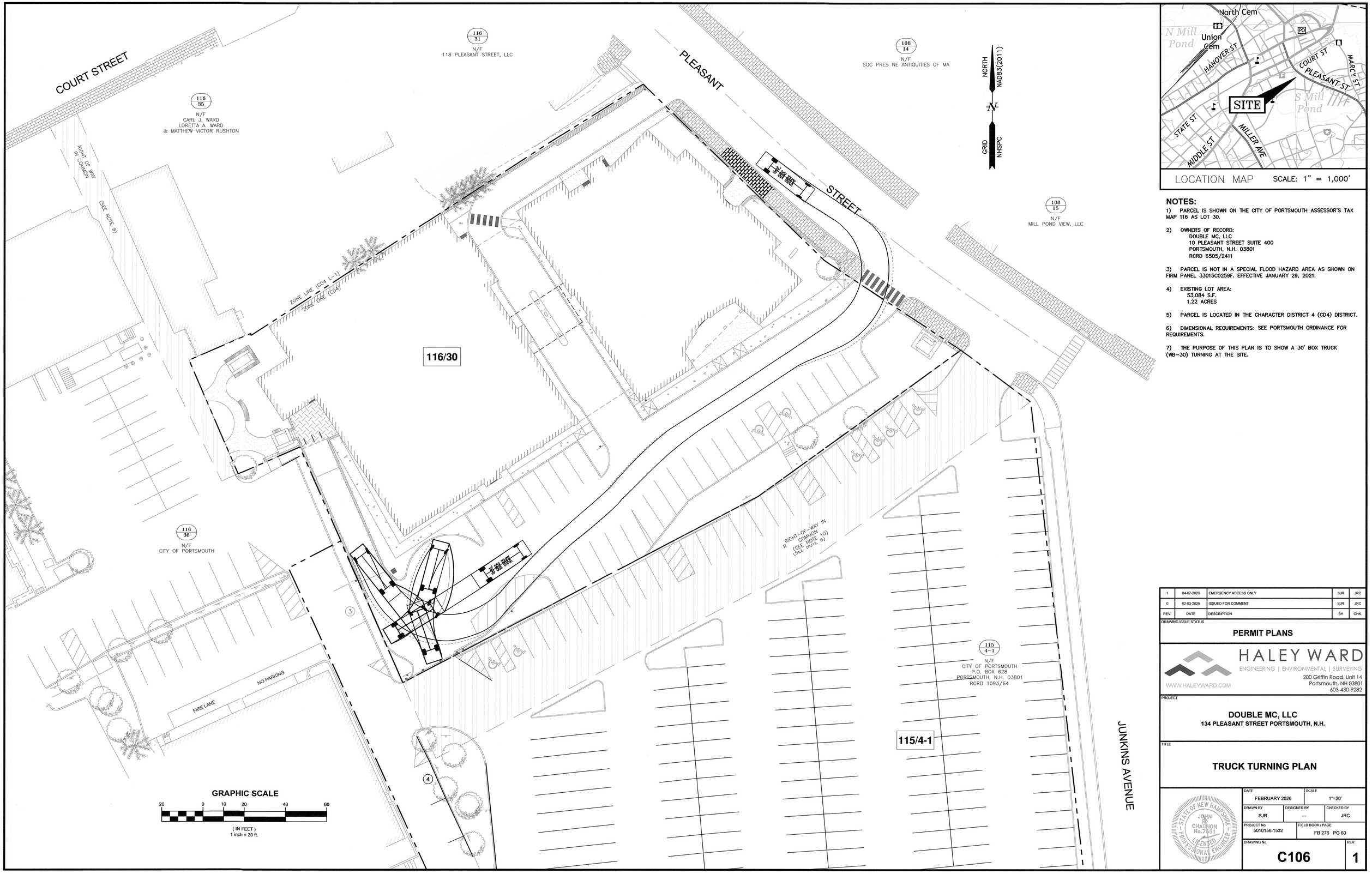


LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S TAX MAP 116 AS LOT 30.

2) OWNERS OF RECORD:
DOUBLE MC, LLC
10 PLEASANT STREET SUITE 400
PORTSMOUTH, N.H. 03801
RCRD 6505/2411

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

4) EXISTING LOT AREA:
53,084 S.F.
1.22 ACRES

5) PARCEL IS LOCATED IN THE CHARACTER DISTRICT 4 (CD4) DISTRICT.

6) DIMENSIONAL REQUIREMENTS: SEE PORTSMOUTH ORDINANCE FOR REQUIREMENTS.

7) THE PURPOSE OF THIS PLAN IS TO SHOW A 30' BOX TRUCK (WB-30) TURNING AT THE SITE.

REV.	DATE	DESCRIPTION	BY	CHK
1	04-07-2026	EMERGENCY ACCESS ONLY	SJR	JRC
0	02-03-2026	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

TRUCK TURNING PLAN

JOHN R. CHAGNON No. 7851 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE –

DATE: FEBRUARY 2026	SCALE: 1"=20'
DRAWN BY: SJR	DESIGNED BY: —
CHECKED BY: JRC	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: C106	REV.: 1

FILE LOCATION: P:\NH\5010156-MCNABB_PROPERTIES\1532-134 PLEASANT ST., PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.03, 12:25 PM

COURT STREET

116/35
N/F
CARL J. WARD
LORETTA A. WARD
& MATTHEW VICTOR RUSHTON

RIGHT OF WAY IN COMMON (SEE NOTE 9)

116/31
N/F
118 PLEASANT STREET, LLC

108/14
N/F
SOC PRES NE ANTIQUITIES OF MA

PLEASANT STREET

48' AERIAL FIRE TRUCK

NORTH NAD83(2011)

GRID NHSPC

108/15
N/F
MILL POND VIEW, LLC

ZONE LINE (CD4 L-1)

ZONE LINE (CD4)

116/30

116/36
N/F
CITY OF PORTSMOUTH

RIGHT-OF-WAY IN COMMON (SEE NOTE 10) (SEE NOTE 6)

115/4-1
N/F
CITY OF PORTSMOUTH
P.O. BOX 628
PORTSMOUTH, N.H. 03801
RCRD 1093/64

JUNKINS AVENUE

NO PARKING

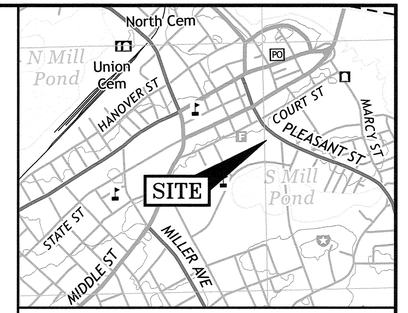
FIRE LANE

48' AERIAL FIRE TRUCK

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.



LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S TAX MAP 116 AS LOT 30.

2) OWNERS OF RECORD:
DOUBLE MC, LLC
10 PLEASANT STREET SUITE 400
PORTSMOUTH, N.H. 03801
RCRD 6505/2411

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

4) EXISTING LOT AREA:
53,084 S.F.
1.22 ACRES

5) PARCEL IS LOCATED IN THE CHARACTER DISTRICT 4 (CD4) DISTRICT.

6) DIMENSIONAL REQUIREMENTS: SEE PORTSMOUTH ORDINANCE FOR REQUIREMENTS.

7) THE PURPOSE OF THIS PLAN IS TO SHOW A 48' AERIAL FIRE TRUCK (INFERNO) TURNING AT THE SITE.

REV.	DATE	DESCRIPTION	BY	CHK
1	04-07-2026	EMERGENCY ACCESS ONLY	SJR	JRC
0	02-03-2026	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

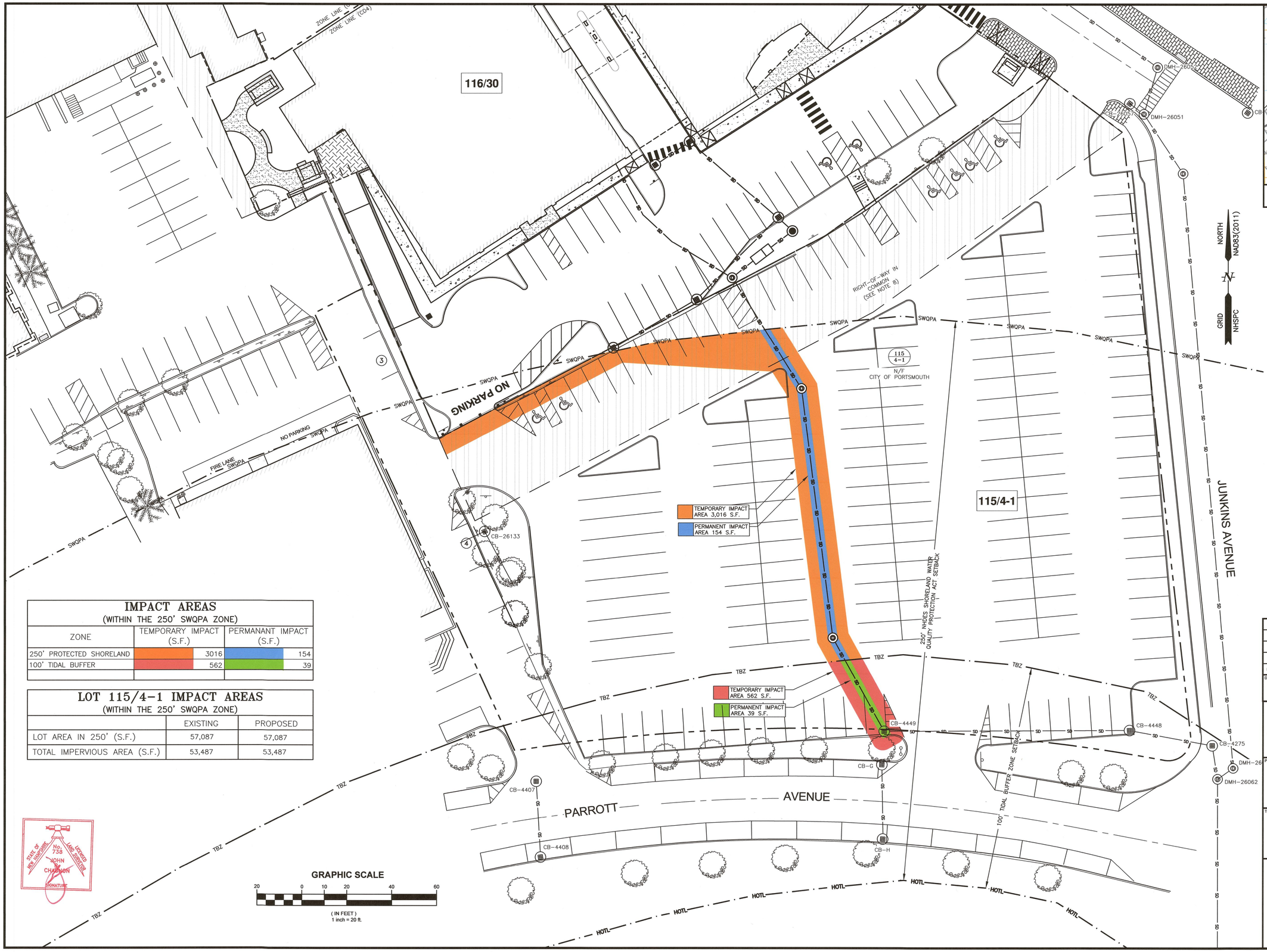
TITLE

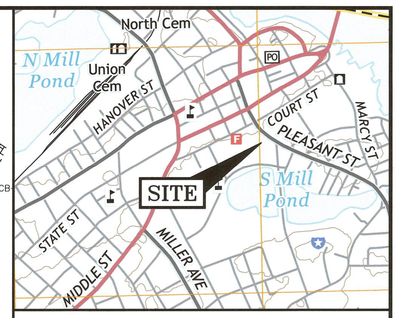
FIRE TRUCK TURNING PLAN

STATE OF NEW HAMPSHIRE JOHN R. CHAGNON No. 7651 LICENSED PROFESSIONAL ENGINEER

DATE: FEBRUARY 2026	SCALE: 1"=20'
DRAWN BY: SJR	DESIGNED BY: — / CHECKED BY: JRC
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: C107	REV.: 1

FILE LOCATION: P:\NH\5010156-MCNABB_PROPERTIES\1532-134 PLEASANT ST., PORTSMOUTH-NH\CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.03, 12:17 PM





LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S TAX MAP 115 AS LOT 4-1.

2) OWNERS OF RECORD:
CITY OF PORTSMOUTH
1 JUNKINS AVENUE
PORTSMOUTH, N.H. 03801
RCRD 1093/64

3) PARCEL IS PARTIALLY IN SPECIAL FLOOD HAZARD AREA ZONE AE AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE JANUARY 29, 2021.

4) EXISTING LOT AREA:
71,740 S.F.
1.65 ACRES

5) PARCEL IS LOCATED IN THE MUNICIPAL (M) DISTRICT.

6) DIMENSIONAL REQUIREMENTS: SEE PORTSMOUTH ORDINANCE FOR REQUIREMENTS.

7) THE PURPOSE OF THIS PLAN IS TO SHOW SHORELAND AND TIDAL BUFFER ZONE IMPACTS ON ASSESSOR'S MAP 115, LOT 4-1 IN THE CITY OF PORTSMOUTH.

8) PARCEL IS BENEFITED BY A RIGHT OF WAY AS DESCRIBED IN RCRD 2975/349 AND SHOWN ON RCRD D-18880 AND RCRD D-26343.

IMPACT AREAS
(WITHIN THE 250' SWQPA ZONE)

ZONE	TEMPORARY IMPACT (S.F.)	PERMANANT IMPACT (S.F.)
250' PROTECTED SHORELAND	3016	154
100' TIDAL BUFFER	562	39

LOT 115/4-1 IMPACT AREAS
(WITHIN THE 250' SWQPA ZONE)

	EXISTING	PROPOSED
LOT AREA IN 250' (S.F.)	57,087	57,087
TOTAL IMPERVIOUS AREA (S.F.)	53,487	53,487

REV.	DATE	DESCRIPTION	BY	CHK.
3	04-07-26	EMERGENCY ACCESS ONLY	SJR	JRC
2	03-11-2026	ADDED IMPACT AREA	SJR	JRC
1	02-25-2026	REVISED LAYOUT	SJR	JRC
0	02-09-2026	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

HALEY WARD
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200 Griffin Road, Unit 14
Portsmouth, NH 03801
603-430-9282

PROJECT

CITY OF PORTSMOUTH
P.O. BOX 628 PORTSMOUTH, N.H.

TITLE

NHDES PERMIT PLAN-
CITY PROPERTY

STATE OF NEW HAMPSHIRE JOHN R. CHAGNON No. 7351 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
JULY 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	---	JRC

PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

DRAWING No.	REV.
C108	3

FILE LOCATION: P:\NH\5010156-MCNABB_PROPERTIES\1532-134 PLEASANT ST., PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.06, 2:01 PM

EROSION CONTROL NOTES

CONSTRUCTION SEQUENCE

DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.

THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT:

1. OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE CITY OF PORTSMOUTH CMMP SHALL BE MADE BY THE CONTRACTOR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER;
2. AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR;
3. A REPRESENTATIVE OF THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES;
4. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

INSTALL PERIMETER CONTROLS, i.e., SILTSOXX AND CATCH BASIN PROTECTION AROUND THE LIMITS OF DISTURBANCE BEFORE ANY EARTH MOVING OPERATIONS. THE USE OF HAYBALES IS NOT ALLOWED.

THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE(S) PRIOR TO ANY EXCAVATION ACTIVITIES. PLACE FODS AS NEEDED.

CUT AND GRUB ALL TREES, SHRUBS, SAPLINGS, BRUSH, VINES AND REMOVE OTHER DEBRIS AND RUBBISH AS REQUIRED. DEMOLISH BUILDINGS AND FENCES AS NEEDED. CONSTRUCT FOUNDATIONS.

ROUGH GRADE SITE.

LAYOUT AND INSTALL ALL BURIED UTILITIES TO THE PROPOSED BUILDING FOUNDATIONS. CAP AND MARK TERMINATIONS OR LOG SWING TIES.

CONSTRUCT BUILDING.

CONNECT UTILITIES.

PLACE BINDER LAYER OF PAVEMENT FOR SIDEWALKS.

AFTER BUILDINGS ARE COMPLETED, FINISH ALL REMAINING SIDEWALK WORK.

REMOVE TRAPPED SEDIMENTS FROM COLLECTION DEVICES AS APPROPRIATE, AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF FINAL STABILIZATION OF THE SITE.

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF A BUILDING REDEVELOPMENT WITH ASSOCIATED UTILITIES AND PARKING.

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 0.94 ACRES.

BASED ON THE USCS WEB SOIL SURVEY THE SOILS ON SITE CONSIST OF URBAN LAND WHICH HAS AN UNSPECIFIED HYDROLOGIC SOIL GROUP RATING, ASSUMED D.

THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA A CLOSED DRAINAGE SYSTEM TO THE CITY OF PORTSMOUTH CLOSED DRAINAGE SYSTEM WHICH ULTIMATELY FLOWS TO THE PISCATAQUA RIVER.

GENERAL CONSTRUCTION NOTES

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.

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.

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.

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.

DUST CONTROL: 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.

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.

ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.

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.

FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIAL, TRASH, WOODY DEBRIS, LEAVES, BRUSH OR ANY DELETERIOUS MATTER SHALL NOT BE INCORPORATED INTO FILLS.

FILL MATERIAL SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.

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.

THE CONTRACTOR SHALL MODIFY OR ADD EROSION CONTROL MEASURES AS NECESSARY TO ACCOMMODATE PROJECT CONSTRUCTION.

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.

STABILIZATION SHALL BE INITIATED ON ALL 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:
- TEMPORARY SEEDING;
- MULCHING.

MAINTENANCE AND PROTECTION

THE SILTSOXX BARRIER AND CATCH BASIN FILTERS SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

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

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.

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;

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.

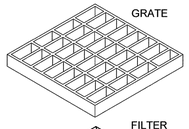
ALLOWABLE NON-STORMWATER DISCHARGES
1. FIRE-FIGHTING ACTIVITIES;
2. FIRE HYDRANT FLUSHING;
3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
4. WATER USED TO CONTROL DUST;
5. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING;
6. ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS 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.

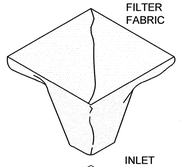
WASTE DISPOSAL

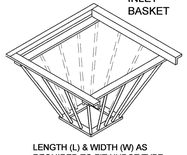
1. WASTE MATERIAL
   - ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER;
   - NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE;
   - ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE 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

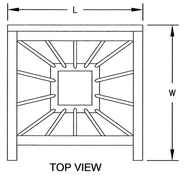
1. CONTRACTOR SHALL CONTACT THE NHDES AND/OR LOCAL JURISDICTION PRIOR TO
2. COMMENCING ANY BLASTING ACTIVITIES.
3. FOR ANY PROJECT FOR WHICH BLASTING OF BEDROCK IS ANTICIPATED, THE APPLICANT
4. SHALL SUBMIT A BLASTING PLAN THAT IDENTIFIES:
   - WHERE THE BLASTING ACTIVITIES ARE ANTICIPATED TO OCCUR;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



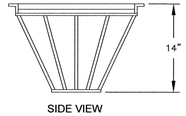




LENGTH (L) & WIDTH (W) AS REQUIRED TO FIT NHDOT TYPE GRATE & FRAME.



TOP VIEW



SIDE VIEW

1) INLET BASKETS SHALL BE INSTALLED IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION IS COMPLETE AND SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL PAVEMENT BINDER COURSE IS COMPLETE.

2) FILTER FABRIC SHALL BE PUSHED DOWN AND FORMED TO THE SHAPE OF THE BASKET. THE SHEET OF FABRIC SHALL BE LARGE ENOUGH TO BE SUPPORTED BY THE BASKET FRAME WHEN HOLDING SEDIMENT AND, SHALL EXTEND AT LEAST 6" PAST THE FRAME. THE INLET GRATE SHALL BE PLACED OVER THE BASKET/FRAME AND WILL SERVE AS THE FABRIC ANCHOR.

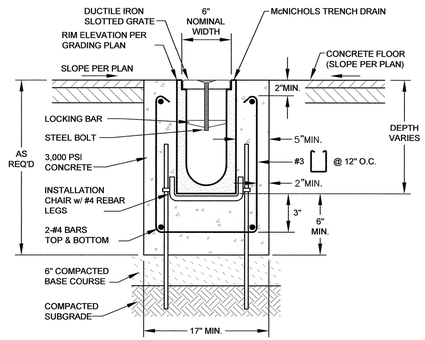
3) THE FILTER FABRIC SHALL BE A GEOTEXTILE FABRIC; POLYESTER, POLYPROPYLENE, STABILIZED NYLON, POLYETHYLENE, OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:
- -RAB STRENGTH: 45 LB. MIN. IN ANY PRINCIPAL DIRECTION (ASTM D1682)
- -MULLEN BURST STRENGTH: MIN. 60 psi (ASTM D774)

4) THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 20 U.S. STANDARD SIEVE AND A MINIMUM PERMEABILITY OF 120 gpm/s.f. (MULTIPLY THE PERMITTIVITY IN SEC.-1 FROM ASTM 54491-85 CONSTANT HEAD TEST USING THE CONVERSION FACTOR OF 74.)

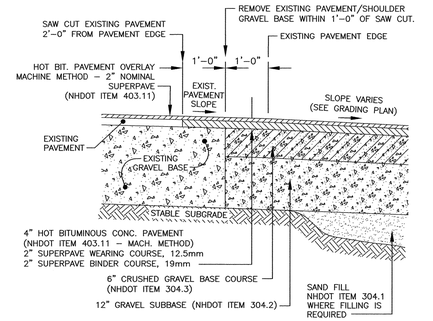
5) THE INLET BASKET SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM REACHING THE DRAINAGE SYSTEM AND/OR CAUSING SURFACE FLOODING.

6) SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.

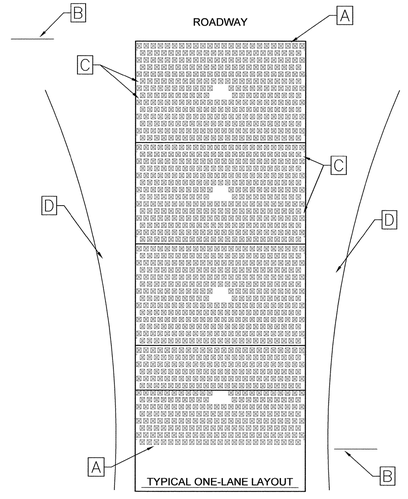
A C104 CATCH BASIN INLET BASKET
NTS



B C102 EVAPORATOR TRENCH DETAIL
COORDINATE WITH BUILDING PLANS
NTS



D C102 TYPICAL PAVEMENT CROSS SECTION
OFF SITE REPAIR AS NEEDED
NTS



INSTALLATION:
THE PURPOSE AND DESIGN OF THE FODS TRACKOUT CONTROL SYSTEM IS TO EFFECTIVELY REMOVE MOST SEDIMENT FROM VEHICLE TIRES AS THEY EXIT A DISTURBED LAND AREA ONTO A PAVED STREET. THIS MANUAL IS A PLATFORM FROM WHICH TO INSTALL A FODS TRACKOUT CONTROL SYSTEM. (NOTE: THIS IS NOT A ONE SIZE FITS ALL GUIDE.) THE INSTALLATION MAY NEED TO BE MODIFIED TO MEET THE EXISTING CONDITIONS, EXPECTATIONS, OR DEMANDS OF A PARTICULAR SITE. THIS IS A GUIDELINE. ULTIMATELY THE FODS TRACKOUT CONTROL SYSTEM SHOULD BE INSTALLED SAFELY WITH PROPER ANCHORING AND SIGNS PLACED AT THE ENTRANCE AND EXIT TO CAUTION USERS AND OTHERS.

KEY NOTES:

A. FODS TRACKOUT CONTROL SYSTEM MAT.
B. FODS SAFETY SIGN.
C. ANCHOR POINT.
D. SILT OR ORANGE CONSTRUCTION FENCE.

INSTALLATION:
1. THE SITE WHERE THE FODS TRACKOUT CONTROL SYSTEM IS TO BE PLACED SHOULD CORRESPOND TO BEST MANAGEMENT PRACTICES AS MUCH AS POSSIBLE. THE SITE WHERE FODS TRACKOUT CONTROL SYSTEM IS PLACED SHOULD ALSO MEET OR EXCEED THE LOCAL JURISDICTION OR STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS.
2. CALL FOR UTILITY LOCATES 3 BUSINESS DAYS IN ADVANCE OF THE OF FODS TRACKOUT CONTROL SYSTEM INSTALLATION FOR THE MARKING OF UNDERGROUND UTILITIES. CALL THE UTILITY NOTIFICATION CENTER AT 811.
3. ONCE THE SITE IS ESTABLISHED WHERE FODS TRACKOUT CONTROL SYSTEM IS TO BE PLACED, ANY EXCESSIVE UNEVEN TERRAIN SHOULD BE LEVELED OUT OR REMOVED SUCH AS LARGE ROCKS, LANDSCAPING MATERIALS, OR SUDDEN ABRUPT CHANGES IN ELEVATION.
4. THE INDIVIDUAL MATS CAN START TO BE PLACED INTO POSITION. THE FIRST MAT SHOULD BE PLACED NEXT TO THE CLOSEST POINT OF EGRESS. THIS WILL ENSURE THAT THE VEHICLE WILL EXIT STRAIGHT FROM THE SITE ONTO THE PAVED SURFACE.
8. AFTER THE FIRST MAT IS PLACED DOWN IN THE PROPER LOCATION, MATS SHOULD BE ANCHORED TO PREVENT THE POTENTIAL MOVEMENT WHILE THE ADJOINING MATS ARE INSTALLED. ANCHORS SHOULD BE PLACED AT EVERY ANCHOR POINT (IF FEASIBLE) TO HELP MAINTAIN THE MAT IN ITS CURRENT POSITION.
9. AFTER THE FIRST MAT IS ANCHORED IN ITS PROPER PLACE, AN H BRACKET SHOULD BE PLACED AT THE END OF THE FIRST MAT BEFORE ANOTHER MAT IS PLACED ADJACENT TO THE FIRST MAT.
10. ONCE THE SECOND MAT IS PLACED ADJACENT TO THE FIRST MAT, MAKE SURE THE H BRACKET IS CORRECTLY SITUATED BETWEEN THE TWO MATS, AND SLIDE MATS TOGETHER.
11. NEXT THE CONNECTOR STRAPS SHOULD BE INSTALLED TO CONNECT THE TWO MATS TOGETHER.
12. UPON PLACEMENT OF EACH NEW MAT IN THE SYSTEM, THAT MAT SHOULD BE ANCHORED AT EVERY ANCHOR POINT TO HELP STABILIZE THE MAT AND ENSURE THE SYSTEM IS CONTINUOUS WITH NO GAPS IN BETWEEN THE MATS.
13. SUCCESSIVE MATS CAN THEN BE PLACED TO CREATE THE FODS TRACKOUT CONTROL SYSTEM REPEATING THE ABOVE STEPS.

USE AND MAINTENANCE
1. VEHICLES SHOULD TRAVEL DOWN THE LENGTH OF THE TRACKOUT CONTROL SYSTEM AND NOT CUT ACROSS THE MATS.
2. DRIVERS SHOULD TURN THE WHEEL OF THEIR VEHICLES SUCH THAT THE VEHICLE WILL MAKE A SHALLOW S-TURN ROUTE DOWN THE LENGTH OF THE FODS TRACKOUT CONTROL SYSTEM.
3. MATS SHOULD BE CLEANED ONCE THE VOIDS BETWEEN THE PYRAMIDS BECOME FULL OF SEDIMENT. TYPICALLY THIS WILL NEED TO BE PERFORMED WITHIN TWO WEEKS AFTER A STORM EVENT. BRUSHING IS THE PREFERRED METHOD OF CLEANING, EITHER MANUALLY OR MECHANICALLY.
4. THE USE OF ICE MELT, ROCK SALT, SNOW MELT, DE-ICER, ETC. SHOULD BE UTILIZED AS NECESSARY DURING THE WINTER MONTHS AND AFTER A SNOW EVENT TO PREVENT ICE BUILDUP.

REMOVAL
1. REMOVAL OF FODS TRACKOUT CONTROL SYSTEM IS REVERSE ORDER OF INSTALLATION.
2. STARTING WITH THE LAST MAT, THE MAT THAT IS PLACED AT THE INNERMOST POINT OF THE SITE OR THE MAT FURTHEST FROM THE EXIT OR PAVED SURFACE SHOULD BE REMOVED FIRST.
3. THE ANCHORS SHOULD BE REMOVED.
4. THE CONNECTOR STRAPS SHOULD BE UNBOLTED AT ALL LOCATIONS IN THE FODS TRACKOUT CONTROL SYSTEM.
5. STARTING WITH THE LAST MAT IN THE SYSTEM, EACH SUCCESSIVE MAT SHOULD THEN BE MOVED AND STACKED FOR LOADING BY FORKLIFT OR EXCAVATOR ONTO A TRUCK FOR REMOVAL FROM THE SITE.

C C102 FODS SEDIMENT TRACKING SYSTEM
NTS

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).

REV.	DATE	DESCRIPTION	BY	CHK.
0	10/21/25	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

DETAILS

JOHN R. CHAGNON No. 7651 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

DATE	SCALE
SEPTEMBER 2025	1"=20'
DRAWN BY: SJR	DESIGNED BY: ---	CHECKED BY: JRC
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: C501	REV.: 0

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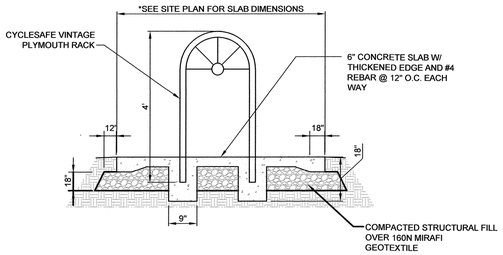
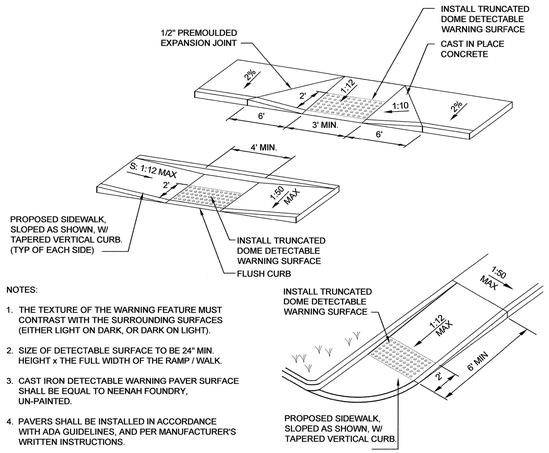


E C102 BIKE RACK DETAIL

BIKE RACK SUBSTITUTIONS UPON APPROVAL NTS

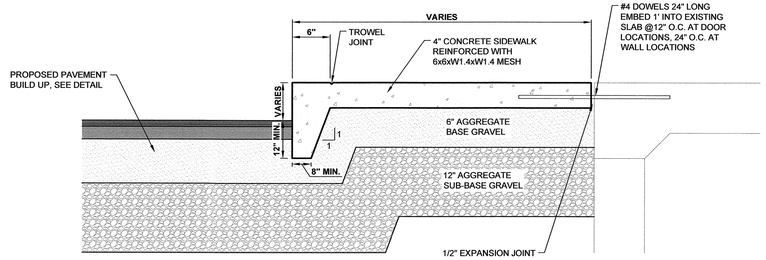


NOTES:

1. THE TEXTURE OF THE WARNING FEATURE MUST CONTRAST WITH THE SURROUNDING SURFACES (EITHER LIGHT ON DARK, OR DARK ON LIGHT).
2. SIZE OF DETECTABLE SURFACE TO BE 24" MIN. HEIGHT x THE FULL WIDTH OF THE RAMP / WALK.
3. CAST IRON DETECTABLE WARNING PAVER SURFACE SHALL BE EQUAL TO NEENAH FOUNDRY, UN-PAINTED.
4. PAVERS SHALL BE INSTALLED IN ACCORDANCE WITH ADA GUIDELINES, AND PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

H C102 TYPICAL HANDICAP CURB RAMP DETAILS

NTS



NOTE:
EXPANSION JOINTS SHALL BE INSTALLED EVERY 20' WITH SCORE JOINTS EVERY 5'. EXPANSION JOINTS SHALL ALSO BE PLACED WHERE THE SIDEWALK ABUTS THE BUILDING, BETWEEN ADJACENT SLABS, CURBS OR AT PENETRATION STRUCTURES. EXPANSION JOINTS ARE TO BE 1/2" WIDE.

K C102 CONCRETE SIDEWALK W/ INTEGRAL CURB DETAIL

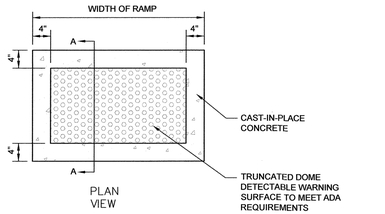
NTS

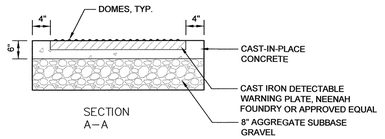
NOTES:

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).



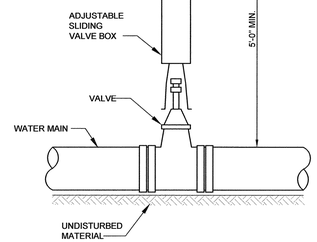


NOTES:

1. DETECTABLE WARNINGS SHALL BE AN INTEGRAL PART OF THE RAMP AND COMPLY WITH ALL SECTIONS OF THE ADA ACCESSIBILITY GUIDELINES AND ALL SECTIONS OF THE ADA STANDARDS FOR ACCESSIBLE DESIGN.
2. ALL DETECTABLE WARNING AREAS SHALL START 6-10" FROM THE FLOW LINE OF THE CURB, BE 24" IN DEPTH AND COVER THE COMPLETE WIDTH OF THE RAMP AREA ONLY. MATCH ROADWAY RADIUS, TYP.

F C102 TYPICAL DETECTABLE WARNING SURFACE DETAIL

NTS



NOTES:
1. GATE VALVE TO BE LOCATED WITHIN ROADWAY PAVEMENT WHERE POSSIBLE.

2. PROPER SIZE VALVE BOX SHALL BE INSTALLED WHERE GATE VALVES ARE SHOWN ON PLANS.

I C103 TYPICAL VALVE AND BOX DETAIL

NTS

BRICK PAVEMENT NOTES

SCOPE OF WORK:

1) THE WORK SHALL CONSIST OF CONSTRUCTING/RECONSTRUCTING THE SUB-BASE AND CONSTRUCTING A NEW BRICK SIDEWALK AS DIRECTED IN THE FIELD BY THE ENGINEER AND COORDINATED WITH PORTSMOUTH DPW.
2) REVEAL SHALL BE COORDINATED WITH PORTSMOUTH DPW.

METHODS OF CONSTRUCTION:

A) ALL LABOR AND MATERIALS SHALL CONFORM TO THE STATE OF NEW HAMPSHIRE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 608, AND CITY OF PORTSMOUTH SPECIFICATIONS FOR NEW BRICK SIDEWALK, SECTION 6.

B) EXCAVATION FOR SIDEWALKS SHALL BE AT A DEPTH OF 10 INCHES BELOW FINISH GRADE. IN AREAS NOT BUTTING CURBING OR BUILDINGS, THE EXCAVATION SHALL BE 6 INCHES WIDER THAN THE FINISHED SIDEWALK WIDTH. AT ALL DRIVE CROSSINGS, THE DEPTH OF EXCAVATION SHALL BE INCREASED ACCORDINGLY. THE CONTRACTOR SHALL PROVIDE NEAT AND SQUARE CUTTING OF EXISTING ASPHALT ROAD SURFACE AS NEEDED. ALL UNSUITABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF OFF-SITE AT THE CONTRACTOR'S OWN EXPENSE.

C) THE BASE MATERIAL SHALL CONSIST OF A MIXTURE OF STONES OR ROCK FRAGMENTS AND PARTICLES WITH 100% PASSING THE 3 INCH SIEVE, 95% TO 100% PASSING THE 2 INCH SIEVE, 55% TO 85% PASSING THE 1 INCH SIEVE, AND 27% TO 52% PASSING THE NO. 4 SIEVE. AT LEAST 50% OF THE MATERIALS RETAINED ON THE 1 INCH SIEVE SHALL HAVE A FRACTURED FACE. THE BASE MATERIAL SHALL BE THOROUGHLY COMPACTED TO THE DEPTH SPECIFIED OR DIRECTED. IN THE WAY OF ALL DRIVE CROSSINGS THE BASE WILL BE INCREASED TO A COMPACTED DEPTH OF 12 INCHES. GRAVEL REQUIREMENTS FOR RECONSTRUCTION WILL BE AS DIRECTED, BASED ON SITE CONDITIONS. THE WORK INCLUDES BACKING UP ANY AND ALL CURB BEING INSTALLED BY OTHERS ON BOTH SIDES.

D) THE CLAY BRICK PAVERS SHALL BE LAID IN A 1 INCH BED OF A SAND MIXTURE COMPRISED OF: 3 PARTS SAND MIXED WITH 1 PART PORTLAND CEMENT.

E) THE CONTRACTOR SHALL LAY THE BRICKS SO THAT APPROXIMATELY 4.5 BRICKS SHALL COVER ONE SQUARE FOOT.

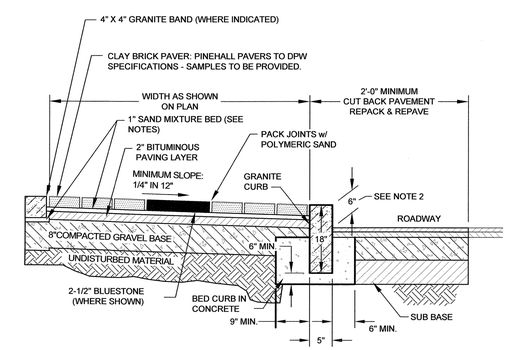
F) THE SIDEWALK SHALL PITCH TOWARDS THE STREET AS SHOWN ON THE GRADING PLAN.

G) IN AREAS WHERE THE FRONT OF THE BRICK SIDEWALK IS NOT ADJACENT TO GRANITE CURBING, THE CONTRACTOR SHALL INSTALL EDGING TO HOLD THE BRICKS IN PLACE. SUCH EDGING SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

H) THE CONTRACTOR SHALL SUBMIT A SAMPLE OF THE BRICKS FOR APPROVAL BY THE CITY BEFORE BRICKS ARE INSTALLED.

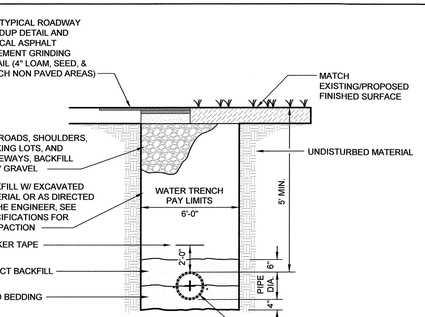
CONSTRUCTION NOTE:

EXISTING GRANITE CURB DISTURBED BY CONSTRUCTION SHALL BE REUSED AND ANY MISSING CURB SHALL BE REPLACED WITH NEW CURB MATCHING EXISTING CURB SIZE. NO CURB LESS THAN 3' IN LENGTH WILL BE ALLOWED.



L C102 BRICK SIDEWALK W/ VERTICAL GRANITE CURB DETAIL

(STONE DUST BEDDING OVER BITUMINOUS PAVING) NTS



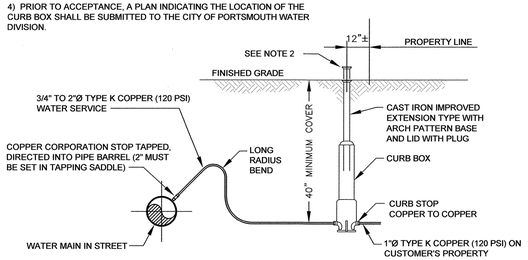
NOTE:

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

G C103 TYPICAL TRENCH DETAIL-DUCTILE IRON WATER MAIN

NTS

NOTE:
1) INSTALLATION OF WATER MAIN TAP & CURB STOP & BOX SHALL ONLY BE PERFORMED BY THOSE AUTHORIZED BY THE PUBLIC WORKS DEPARTMENT.
2) IN AREAS OF HEAVY GROWTH THE CURB BOX COVER SHALL BE SET 6" ABOVE FINISH GRADE AND A WITNESS STAKE SET.
3) CURB BOX SHALL BE SET APPROXIMATELY 12" OUTSIDE PROPERTY LINE AS SHOWN.
4) PRIOR TO ACCEPTANCE, A PLAN INDICATING THE LOCATION OF THE CURB BOX SHALL BE SUBMITTED TO THE CITY OF PORTSMOUTH WATER DIVISION.



J C103 TYPICAL WATER SERVICE CONNECTION DETAIL

NTS

REV	DATE	DESCRIPTION	BY	CHK
1	01/21/26	DETAIL H	SJR	JRC
0	10/21/25	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

DETAILS

JOHN R. CHAGNON NO. 7651 STATE OF NEW HAMPSHIRE PROFESSIONAL ENGINEER

DATE: SEPTEMBER 2025	SCALE: 1"=20'
DRAWN BY: SJR	DESIGNED BY: ---
CHECKED BY: JRC	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: C502	REV.: 1

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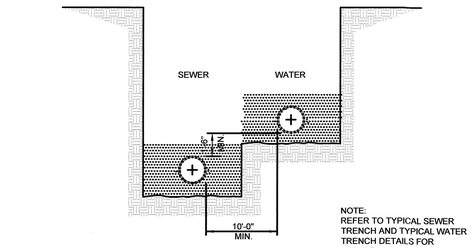
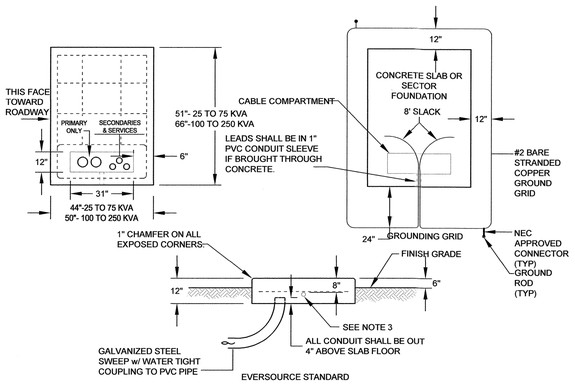
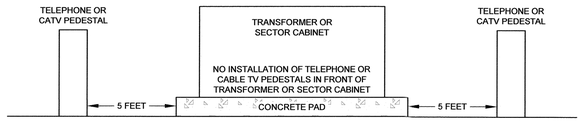


NOTE:
REFER TO TYPICAL SEWER TRENCH AND TYPICAL WATER TRENCH DETAILS FOR ADDITIONAL INFORMATION.

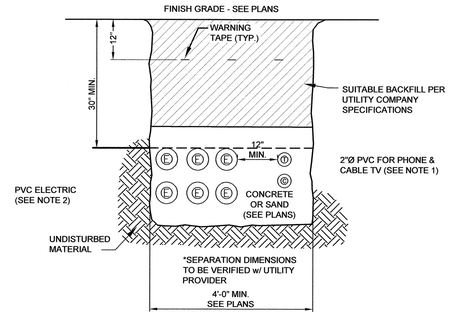
M C103 TYPICAL SEWER/WATER SEPARATION DETAIL
NTS





NOTES
1. ALL REINFORCING TO BE #6 BARS.
2. 1" PVC CONDUIT SLEEVE FOR GROUND GRID LEADS.
3. THE GROUND GRID SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR AND IS TO BE BURIED AT LEAST 12" BELOW GRADE. EIGHT FEET OF EXTRA WIRE FOR EACH GROUND GRID LEG SHALL BE LEFT EXPOSED IN THE CABLE COMPARTMENT TO ALLOW FOR THE CONNECTION TO THE TRANSFOMER. THE TWO 8' GROUND RODS MAY BE EITHER GALVANIZED STEEL OR COPPERWELD AND THEY SHALL BE CONNECTED TO THE GRID WITH NEC APPROVED CONNECTORS.
4. NO SHRUBS, FENCES, OR PERMANENT STRUCTURES CAN BE PLACED WITHIN 10 FEET OF THE FRONT AND 5 FEET OF THE SIDES AND BACK OF PAD-MOUNTED EQUIPMENT. THE COMPANY HAS THE RIGHT TO REMOVE THESE OBJECTS WITHOUT NOTICE TO THE OWNER.

N C103 TRANSFORMER PAD DETAIL
COORDINATE WITH EVERSOURCE
NTS



NOTES:
1) ALL CONDUIT TO BE U.L. LISTED, SCH. 80 UNDER ALL TRAVEL WAYS, & SCHED. 40 FOR THE REMAINDER.

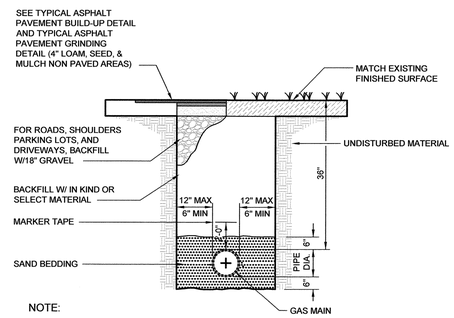
2) NORMAL CONDUIT SIZES FOR PSNH ARE 3 INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4 INCH FOR THREE PHASE SECONDARY, AND 5 INCH FOR THREE PHASE PRIMARY.

3) ALL WORK TO CONFORM TO THE NATIONAL ELECTRICAL CODE (LATEST REVISION)

4) INSTALL A 200# PULL ROPE FOR EACH CONDUIT

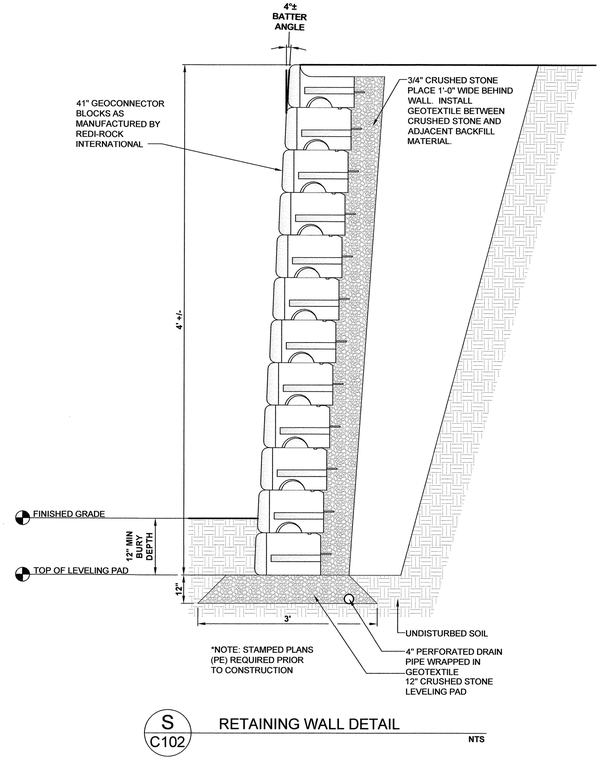
5) VERIFY ALL CONDUIT SPECIFICATIONS WITH UTILITY COMPANY'S PRIOR TO ANY CONSTRUCTION.

P C103 TYPICAL UNDERGROUND UTILITY TRENCH DETAIL
NTS

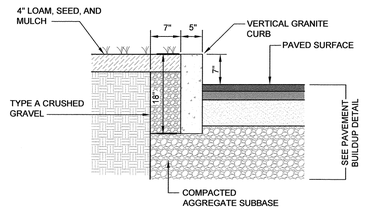


NOTE:
1. COMPACT ALL GRANULAR MATERIAL AND BACKFILL TO 95%.
2. SIDE CLEARANCE APPLICABLE TO BACKHOE OPERATIONS.

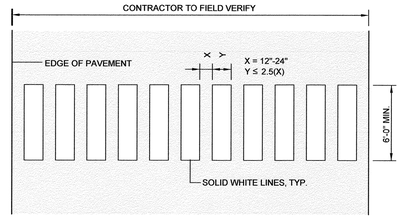
Q C103 TYPICAL GAS TRENCH DETAIL
NTS



S C102 RETAINING WALL DETAIL
NTS

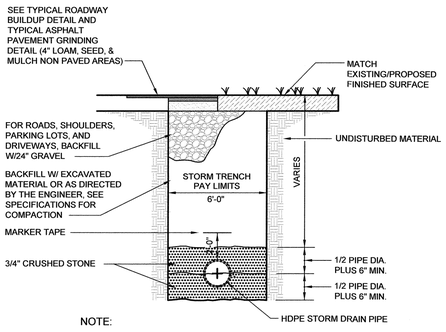


T C102 TYPICAL GRANITE CURB DETAIL
NTS



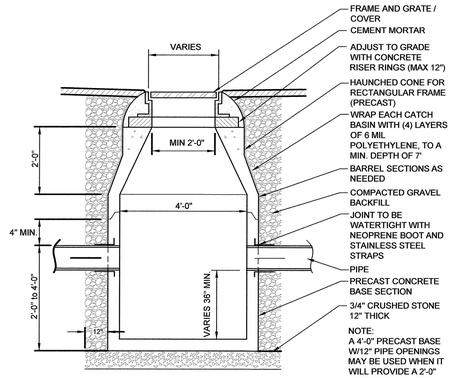
NOTE:
1. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE CURRENT EDITION OF THE MUTCD

U C102 TYPICAL CROSSWALK DETAIL
NTS



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

O C104 TYPICAL STORM DRAIN TRENCH DETAIL
NTS



NOTE:
A 4'-0" PRECAST BASE W/12" PIPE OPENINGS MAY BE USED WHEN IT WILL PROVIDE A 2'-0" SUMP AND 12"± RING ABOVE ALL OPENINGS INTO THE BASE.

R C104 TYPICAL CATCH BASIN DETAIL
NTS

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).

REV.	DATE	DESCRIPTION	BY	CHK
0	10/21/25	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS
PERMIT PLANS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
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Portsmouth, NH 03801
603-430-9282

PROJECT
DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE
DETAILS

JOHN R. CHAGNON — 10/21/25 — STATE OF NEW HAMPSHIRE — PROFESSIONAL ENGINEER — LICENSED

DATE	SCALE
SEPTEMBER 2025	1"=20'
DRAWN BY: SJR	DESIGNED BY: ---	CHECKED BY: JRC
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: C503	REV.: 0

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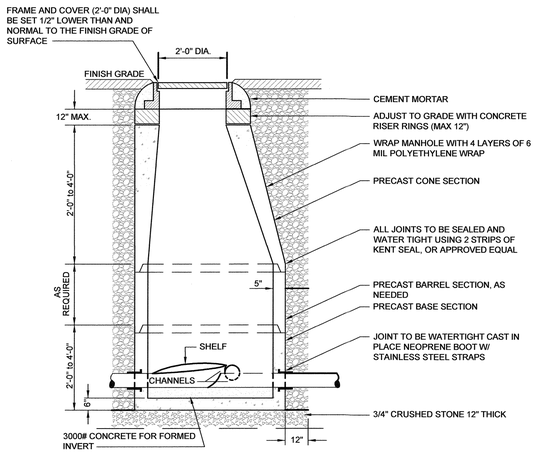
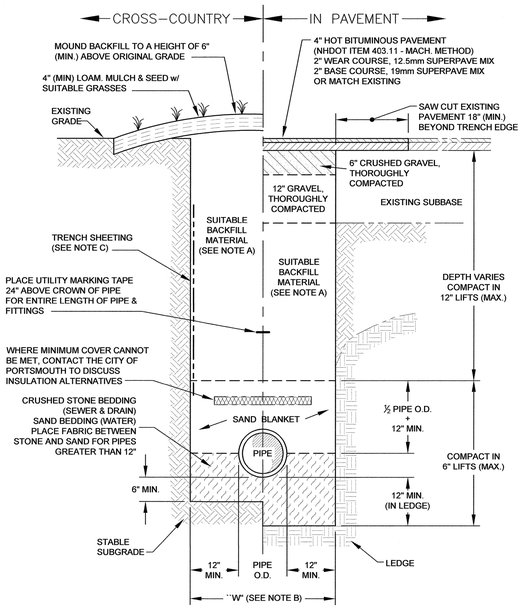


V C103 TYPICAL SEWER MANHOLE DETAIL

NTS



TRENCH NOTES:
A) TRENCH BACKFILL:
- IN PAVED AREAS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIALS DEEMED TO BE UNACCEPTABLE BY THE ENGINEER.

- IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE.

B) "W" = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D..

C) TRENCH SHEETING:
IF REQUIRED. WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.

D) MINIMUM PIPE COVER FOR UTILITY MAINS (UNLESS GOVERNED BY OTHER CODES):
6' MINIMUM FOR SEWER (IN PAVEMENT)
4' MINIMUM FOR SEWER (CROSS COUNTRY)
3' MINIMUM FOR STORMWATER DRAINS
5' MINIMUM FOR WATER MAINS

E) ALL PAVEMENT CUTS SHALL BE REPAIRED BY THE INFRARED HEAT METHOD.

W C103 TYPICAL PIPE TRENCH DETAIL

NTS

SEWER UTILITY GENERAL NOTES:

1) MINIMUM PIPE SIZE FOR COMMERCIAL SERVICE SHALL BE SIX INCHES.

2) PIPE AND JOINT MATERIALS:
A. PLASTIC SEWER PIPE

1. PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

ASTM STANDARDS	GENERIC PIPE MATERIAL	SIZES APPROVED
D3034	*PVC (SOLID WALL)	8" THROUGH 15" (SDR 35)
F679	PVC (SOLID WALL)	18" THROUGH 27" (T-1 & T-2)
F789	PVC (SOLID WALL)	4" THROUGH 18" (T-1 To T-3)
F794	PVC (RIBBED WALL)	8" THROUGH 36"
AWWA C900	PVC (SOLID WALL)	8" THROUGH 18"

*PVC: POLYVINYL CHLORIDE

2. JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON BELL AND SPIGOT TYPE.

B. DUCTILE IRON PIPE, FITTINGS AND JOINTS.

1. DUCTILE IRON PIPE AND FITTINGS FOR SEWERS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE UNITED STATES OF AMERICA STANDARDS INSTITUTE:

A21.50 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A-536 DUCTILE IRON CASTINGS.

A21.51 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOULDS OR SAND LINED MOULDS FOR SEWER APPLICATIONS.

2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO:

A21.11 RUBBER GASKET JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS.

3) DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.

4) JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.

5) TEES AND WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE DEPENDING ON THE PIPE ENCOUNTERED, FOR PVC PIPE, OR CUT IN A SANITARY TEE. FOR CLAY PIPE, USE INSERT-A-TEE OR CUT IN A SANITARY TEE. ALL WORK TO BE APPROVED BY GOVERNING BODY.

6) HOUSE SEWER INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND REFILL FOR DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES.

THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE FOUNDATION AT A GRADE OF NOT LESS THAN 1/4 INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.

7) TESTING: WHEN REQUIRED BY THE GOVERNING AUTHORITY, TESTING SHALL CONFORM TO ENV-WQ 704.07.

8) ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM DWELLING TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR OTHER SIMILAR CONNECTIONS CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.

9) WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE, UNLESS IT IS ON A SHELF 12" HIGHER, AND 18" APART.

10) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE, FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33 STONE SIZE NO. 67.

100% PASSING	1 INCH SCREEN
90%-100% PASSING	3/4 INCH SCREEN
20%- 55% PASSING	3/8 INCH SCREEN
0%- 10% PASSING	#4 SIEVE
0%- 5% PASSING	#8 SIEVE

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED.

11) LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPE FINDER.

12) CAST-IN-PLACE CONCRETE: SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 PSI) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS:
CEMENT: 6.0 BAGS PER CUBIC YARD
WATER: 5.75 GALLONS PER BAG OF CEMENT
MAXIMUM AGGREGATE SIZE: 3/4 INCH

13) CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.

14) BACKFILL UP TO SUBBASE GRAVEL SHALL BE WITH EXCAVATED SOIL FROM TRENCHING OPERATIONS. COMPACT IN 8" LIFTS WITH VIBRATORY PLATE COMPACTORS TO 90% OF MODIFIED PROCTOR DENSITY. IF FINE-GRAINED, COMPACT WITH POGO STICKS OR SHEEPSFOOT ROLLERS. PLACE NO LARGE ROCKS WITHIN 24" OF PIPE. TRENCHES THAT ARE NOT ADEQUATELY COMPACTED SHALL BE RE-EXCAVATED AND BACKFILLED UNDER THE SUPERVISION OF THE DESIGN ENGINEER OR GOVERNING BODY. UNSUITABLE BACKFILL MATERIAL INCLUDES CHUNKS OF PAVEMENT, TOPSOIL, ROCKS OVER 6" IN SIZE, MUCK, PEAT OR PIECES OF PAVEMENT.

15) THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB-SITE SAFETY AND COMPLIANCE WITH GOVERNING REGULATIONS.

16) ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. FOR TRENCH WIDTH SEE TRENCH DETAIL.

17) SAND BLANKET: CLEAN SAND, FREE FROM ORGANIC MATTER, SO GRADED THAT 90% - 100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE. BLANKET MAY BE OMITTED FOR DUCTILE IRON AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2 INCHES IS IN CONTACT WITH THE PIPE.

18) BASE COURSE GRAVEL, IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE:
"STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION".

19) FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

20) IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MIN.) BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.

21) 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).

22) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION.

23) THE PURPOSE OF THIS PLAN IS TO SHOW STANDARDS FOR SEWER CONSTRUCTION.

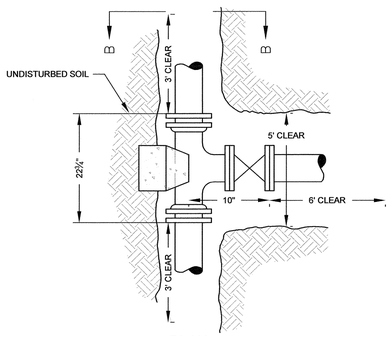
24) ALL WORK SHALL BE IN COMPLIANCE WITH NHDES CODE OF ADMINISTRATIVE RULES PART ENV-WQ 704 DESIGN OF SEWERS.

NOTES:

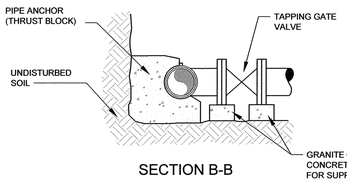
1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.

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).



PLAN

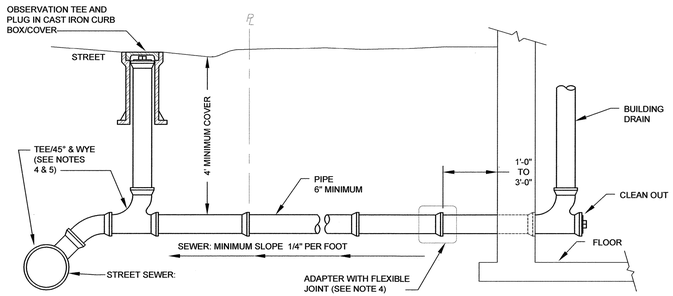


SECTION B-B

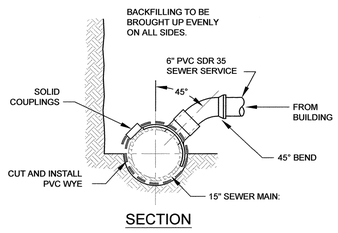
NOTES:
1) ALL MATERIALS SHALL BE APPROVED BY THE PORTSMOUTH WATER DEPARTMENT PRIOR TO INSTALLATION AND USE.
2) ALL JOINTS SHALL BE MECHANICAL.
3) "CLEAR" DIMENSIONS SHOWN ATE REQUIRED FOR WORKSPACE. NO JOINTS ON PIPE BEING TAPPED WITHIN "CLEAR" AREA.
4) FORD TYPE STAINLESS STEEL TAPPING SADDLES OR APPROVED EQUAL ARE ALSO ACCEPTABLE.

X C103 TAPPING SLEEVE & GATE DETAILS

INSTALL PER PORTSMOUTH REQUIREMENTS NTS

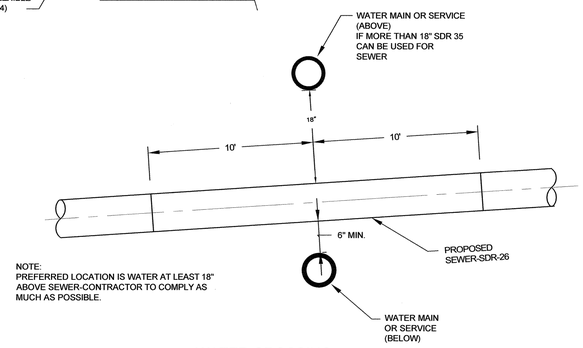


SEWER SERVICE



SECTION

SEWER SERVICE CONNECTION



NOTE:
PREFERRED LOCATION IS WATER AT LEAST 18" ABOVE SEWER-CONTRACTOR TO COMPLY AS MUCH AS POSSIBLE.

WATER CROSSING

Y C103 SEWER SERVICE DETAILS

INSTALL PER PORTSMOUTH REQUIREMENTS NTS

REV.	DATE	DESCRIPTION	BY	CHK
0	10/21/25	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

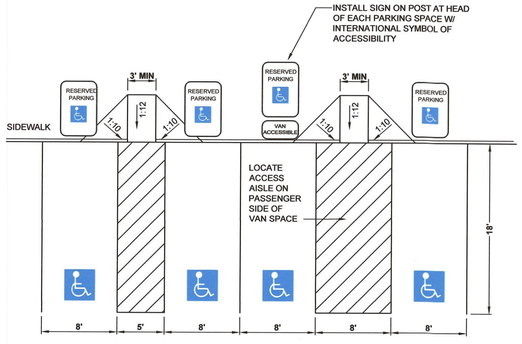
TITLE

DETAILS

JOHN R. CHANNON No. 9651 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

DATE: SEPTEMBER 2025		SCALE: 1"=20'
DRAWN BY: SJR	DESIGNED BY: ---	CHECKED BY: JRC
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60	
DRAWING No.: C504		REV.: 0

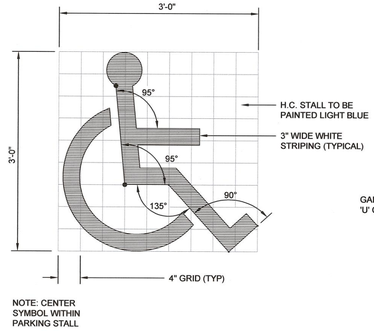
P:\Active\5010156.1532 - DOUBLE MC, LLC - 134 PLEASANT STREET PORTSMOUTH, N.H\2-DESIGN\2-CAD_FILES\CIVIL\5010156.1532 SITE 2025.DWG, 2026.01.19, 1:34 PM



NOTES:

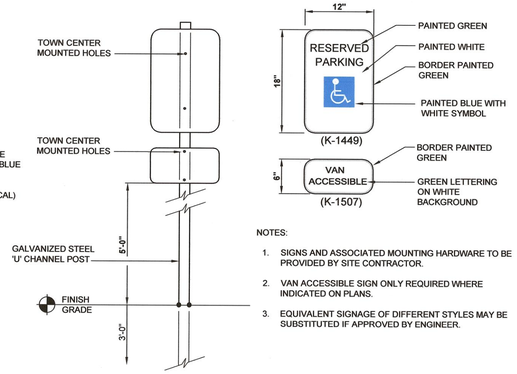
1. CAR PARKING SPACE: 8' WIDE MINIMUM W/ ACCESS AISLE 5' WIDE MINIMUM.
2. VAN PARKING SPACE 8' WIDE MINIMUM W/ ACCESS AISLE 8' WIDE MINIMUM.
3. SLOPES ACROSS PARKING SPACES IN EACH DIRECTION SHALL BE 2% MAX.

TYPICAL HANDICAP PARKING STALL LAYOUT



NOTE: CENTER SYMBOL WITHIN PARKING STALL

TYPICAL HANDICAP PARKING STALL SYMBOL



NOTES:

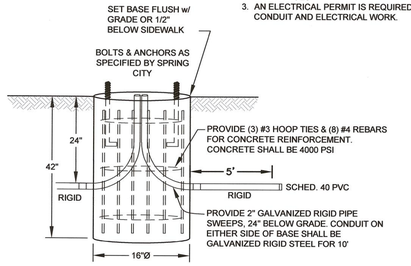
1. SIGNS AND ASSOCIATED MOUNTING HARDWARE TO BE PROVIDED BY SITE CONTRACTOR.
2. VAN ACCESSIBLE SIGN ONLY REQUIRED WHERE INDICATED ON PLANS.
3. EQUIVALENT SIGNAGE OF DIFFERENT STYLES MAY BE SUBSTITUTED IF APPROVED BY ENGINEER.

TYPICAL HANDICAP PARKING SIGNS

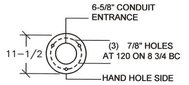
Z / C102 — TYPICAL HANDICAP PARKING DETAILS — NTS

NOTES:

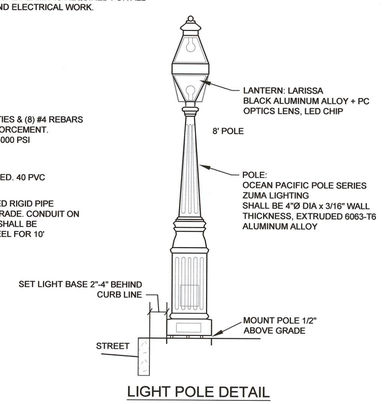
1. ELECTRICAL INSTALLATION SHALL BE BY A LICENSED ELECTRICIAN.
2. LIGHTS SHALL BE WIRED IN ACCORDANCE WITH NEC AND CITY OR PORTSMOUTH ORDINANCES
3. AN ELECTRICAL PERMIT IS REQUIRED FOR ALL CONDUIT AND ELECTRICAL WORK.



LIGHT POLE BASE DETAIL



BOLT PATTERN



LIGHT POLE DETAIL

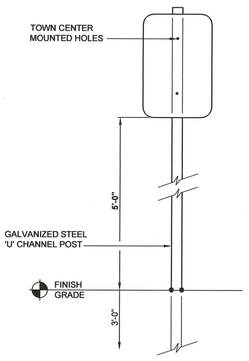
AA / C102 — CITY STREET LIGHT DETAIL — IF NEEDED — NTS

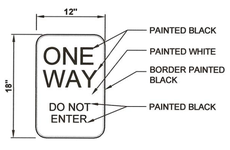
NOTES:

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).

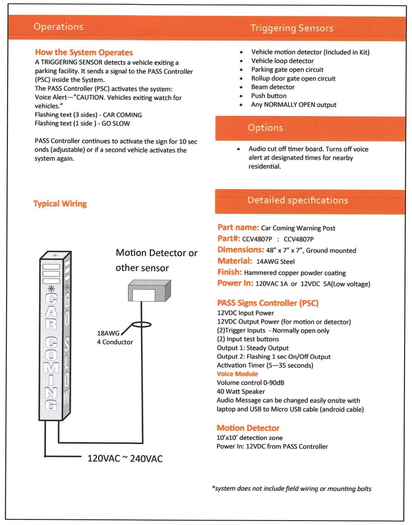




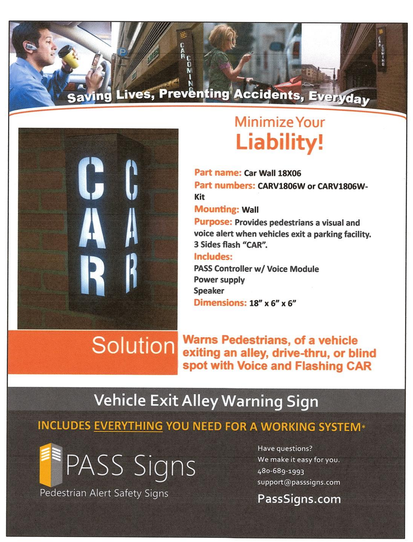
NOTES:

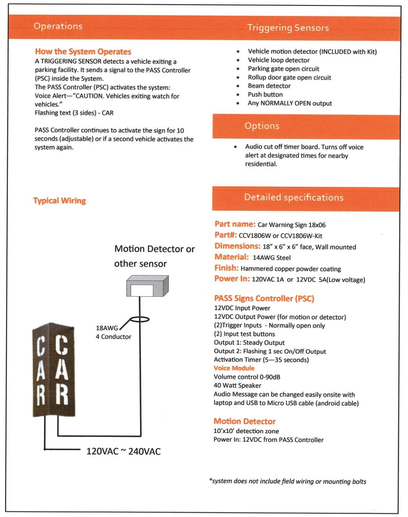
1. ALL SIGNAGE MUST BE MUTCD COMPLIANT.
2. SIGNS AND ASSOCIATED MOUNTING HARDWARE TO BE PROVIDED BY SITE CONTRACTOR.

BB / C102 — "EXIT ONLY" & "ONE-WAY" SIGN DETAIL — NTS



WARNING POST SIGN





WARNING WALL MOUNTED SIGN

CC / C102 — ALERT WARNING SIGNS BY PARKING ALERT SIGNS — NTS

REV.	DATE	DESCRIPTION	BY	CHK
1	01/21/26	DETAIL BB, CC	SJR	JRC
0	10/21/25	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

DETAILS

JOHN R. CHANNON No. 9651 LICENSED PROFESSIONAL ENGINEER — STATE OF NEW HAMPSHIRE

DATE	SCALE
SEPTEMBER 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	---	JRC

PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

DRAWING No. **C505** REV. **1**

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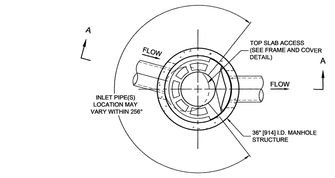
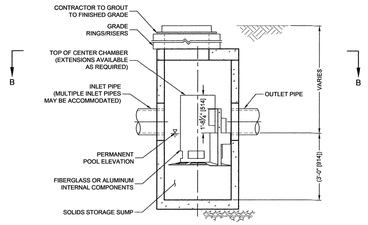


PLAN VIEW B-B
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

CASCADE
separator™

CASCADE SEPARATOR DESIGN NOTES

THE STANDARD CS-3 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION

CURB INLET ONLY (NO INLET PIPE)

CURB INLET WITH INLET PIPE OR PIPES

FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (cfs [L/s])			
PEAK FLOW RATE (cfs [L/s])			
RETURN PERIOD OF PEAK FLOW (yrs)			
RIM ELEVATION			
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			

NOTES / SPECIAL REQUIREMENTS:

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CS-3
CASCADE SEPARATOR
STANDARD DETAIL

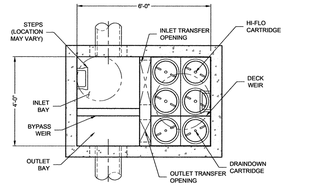
I:\COMMON\CAD\TREATMENT\2 CASCADE\HD STANDARD DRAWINGS\BROWN PROCESS\BROWN PROCESS\CS-3.DWG 6/29/2023 2:40 PM

JELLYFISH DESIGN NOTES

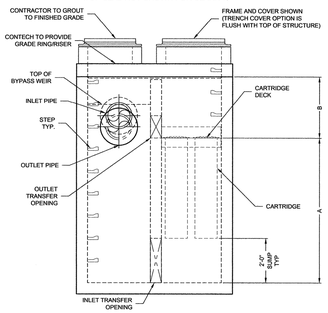
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT, CURB INLET OR SHALLOW PIPE INLET OPTIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD.

CARTRIDGE SELECTION

CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HIGH-FLO / DRAINDOWN (CFS) (PER CART.)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	0.89	0.67	0.45	0.25
DECK TO INSIDE TOP (MIN) (B)	5'-0"	4'-0"	4'-0"	4'-0"

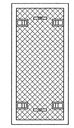


PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW

FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



24" TRENCH COVER
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID					*
WATER QUALITY FLOW RATE (cfs)					*
PEAK FLOW RATE (cfs)					*
RETURN PERIOD OF PEAK FLOW (yrs)					*
# OF CARTRIDGES REQUIRED (HF / DD)					*
CARTRIDGE LENGTH					*
PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION		*
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION AND SITE SPECIFIC EARTH COVER REQUIREMENT. TYPICAL CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-978, AND AASHTO LOAD FACTOR DESIGN METHOD.
6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE (WHERE APPLICABLE) AT EQUAL OR GREATER SLOPE.
8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

Jellyfish Filter
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NO. 8,287,728; 8,277,818; US & CA/EP; OTHER INTERNATIONAL PATENTS PENDING

C:\USERS\JOHN.WRIGHT\ONEDRIVE - THE QUANTE COMPANY\ENGINEERING\CONTECH\STANDARD DETAILS\JFPD0406-DTL.DWG 11/10/2022 3:01 PM

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

JELLYFISH JFPD0406
STANDARD DETAIL
PEAK DIVERSION CONFIGURATION

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.

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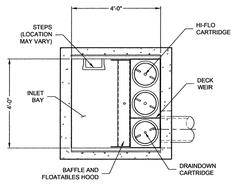
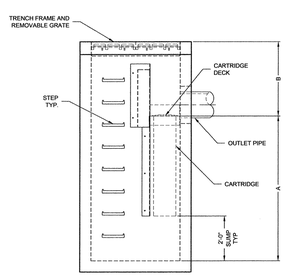


PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



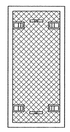
ELEVATION VIEW

JELLYFISH DESIGN NOTES

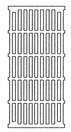
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD SURFACE INLET STYLE WITH TRENCH GRATE AND COVER IS SHOWN. ALTERNATE CURB INLET OR PIPE INLET OPTIONS ARE AVAILABLE. MAXIMUM 5.0 CFS PEAK FLOW CAPACITY.

CARTRIDGE SELECTION

CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HIGH-FLO / DRAINDOWN (CFS) (PER CART.)	0.179 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	0.45	0.33	0.22	0.12
OUTLET INVERT TO RIM (MIN) (B)	3'-4"	3'-4"	3'-4"	3'-4"



24" TRENCH COVER
N.T.S.



24" TRENCH GRATE
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID					*
WATER QUALITY FLOW RATE (cfs)					*
PEAK FLOW RATE (cfs)					*
RETURN PERIOD OF PEAK FLOW (yrs)					*
# OF CARTRIDGES REQUIRED (HF / DD)					*
CARTRIDGE LENGTH					*
PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION		*
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION AND SITE SPECIFIC EARTH COVER REQUIREMENT. TYPICAL CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-978, AND AASHTO LOAD FACTOR DESIGN METHOD.
6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE (WHERE APPLICABLE) AT EQUAL OR GREATER SLOPE.
8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

Jellyfish Filter
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NO. 8,287,728; 8,277,818; US & CA/EP; OTHER INTERNATIONAL PATENTS PENDING

I:\COMMON\COMMONSTORMWATER TICKETS IN PROGRESS\BROCHURE\JFSI0404-DTL.DWG 7/16/2025 2:48 PM

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

JELLYFISH JFSI0404
STANDARD DETAIL
SURFACE INLET CONFIGURATION

DD
C104A
JELLYFISH FILTRATION SYSTEM
BY CONTECH ENGINEERED SOLUTIONS, LLC
NTS

SEE INSPECTION & MAINTENANCE ON SHEET C507

REV.	DATE	DESCRIPTION	BY	CHK
1	02/25/26	JELLYFISH DETAILS	SJR	JRC
0	10/21/25	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

DETAILS

DATE: SEPTEMBER 2025	SCALE: 1"=20'
DRAWN BY: SJR	DESIGNED BY: ---
CHECKED BY: JRC	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: C506	REV.: 1

FILE LOCATION: P:\NH\5010156-MCNABB_PROPERTIES\1532-134 PLEASANT ST - PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156 1532 SITE 2025.DWG, 2026.02.24, 7:58 AM

1.0 Inspection and Maintenance Overview

The primary purpose of the Jellyfish® Filter is to capture and remove pollutants from stormwater runoff. As with any filtration system, these pollutants must be removed to maintain the filter's maximum treatment performance. Regular inspection and maintenance are required to insure proper functioning of the system.

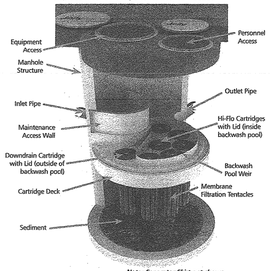
Maintenance frequencies and requirements are site specific and vary depending on pollutant loading. Additional maintenance activities may be required in the event of non-storm event runoff, such as base-flow or seasonal flow, an upstream chemical spill or due to excessive sediment loading from site erosion or extreme runoff events. It is a good practice to inspect the system after major storm events.

Inspection activities are typically conducted from surface observations and include:

- Observe if standing water is present
- Observe if there is any physical damage to the deck or cartridge lids
- Observe the amount of debris in the Maintenance Access Wall (MAW) or inlet bay for vault systems

Maintenance activities include:

- Removal of oil, floatable trash and debris
- Removal of collected sediments
- Rinsing and re-installing the filter cartridges
- Replace filter cartridge tentacles, as needed



Note: Separator Skirt not shown

2.0 Inspection Timing

Inspection of the Jellyfish Filter is key in determining the maintenance requirements for, and to develop a history of, the site's pollutant loading characteristics. In general, inspections should be performed at the times indicated below; *or per the approved project stormwater quality documents (if applicable), whichever is more frequent.*

1. A minimum of quarterly inspections during the first year of operation to assess the sediment and floatable pollutant accumulation, and to ensure proper functioning of the system.
2. Inspection frequency in subsequent years is based on the inspection and maintenance plan developed in the first year of operation. Minimum frequency should be once per year.
3. Inspection is recommended after each major storm event.
4. Inspection is required immediately after an upstream oil, fuel or other chemical spill.

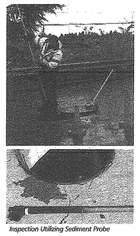
3.0 Inspection Procedure

The following procedure is recommended when performing inspections:

1. Provide traffic control measures as necessary.
2. Inspect the MAW or inlet bay for floatable pollutants such as trash, debris, and oil sheen.
3. Measure oil and sediment depth in several locations, by lowering a sediment probe until contact is made with the floor of the structure. Record sediment depth, and presences of any oil layers.
4. Inspect cartridge lids. Missing or damaged cartridge lids to be replaced.
5. Inspect the MAW (where appropriate), cartridge deck and receptacles, and backwash pool weir, for damaged or broken components.

3.1 Dry weather inspections

- Inspect the cartridge deck for standing water, and/or sediment on the deck.
- No standing water under normal operating conditions.
- Standing water inside the backwash pool, but not outside the backwash pool indicates, that the filter cartridges need to be rinsed.



Inspection Utilizing Sediment Probe

- Standing water outside the backwash pool is not anticipated and may indicate a backwater condition caused by high water elevation in the receiving water body, or possibly a blockage in downstream infrastructure.
- Any appreciable sediment (≥1/16") accumulated on the deck surface should be removed.

3.2 Wet weather inspections

- Observe the rate and movement of water in the unit. Note the depth of water above deck elevation within the MAW or inlet bay.
- Less than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges (i.e. cartridges located outside the backwash pool).
- Greater than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges and each of the hi-flo cartridges (i.e. cartridges located inside the backwash pool), and water should be overflowing the backwash pool weir.
- 18 inches or greater and relatively little flow is exiting the cartridge lids and outlet pipe, this condition indicates that the filter cartridges need to be rinsed.

4.0 Maintenance Requirements

Required maintenance for the Jellyfish Filter is based upon results of the most recent inspection, historical maintenance records, or the site specific water quality management plan; whichever is more frequent. In general, maintenance requires some combination of the following:

1. Sediment removal for depths reaching 12 inches or greater, or within 3 years of the most recent sediment cleaning, whichever occurs sooner.
2. Floatable trash, debris, and oil removal.
3. Deck cleaned and free from sediment.
4. Filter cartridges rinsed and re-installed as required by the most recent inspection results, or within 12 months of the most recent filter rinsing, whichever occurs sooner.
5. Replace tentacles if rinsing does not restore adequate hydraulic capacity, remove accumulated sediment, or if damaged or missing. It is recommended that tentacles should remain in service no longer than 5 years before replacement.
6. Damaged or missing cartridge deck components must be repaired or replaced as indicated by results of the most recent inspection.
7. The unit must be cleaned out and filter cartridges inspected immediately after an upstream oil, fuel, or chemical spill. Filter cartridge tentacles should be replaced if damaged or compromised by the spill.

5.0 Maintenance Procedure

The following procedures are recommended when maintaining the Jellyfish Filter:

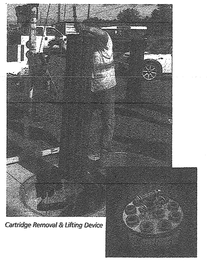
1. Provide traffic control measures as necessary.
2. Open all covers and hatches. Use ventilation equipment as required, according to confined space entry procedures. ***Caution: Dropping objects onto the cartridge deck may cause damage.***
3. Perform Inspection Procedure prior to maintenance activity.
4. To access the cartridge deck for filter cartridge service, descend into the structure and step directly onto the deck. Caution: Do not step onto the maintenance access wall (MAW) or backwash pool weir, as damage may result. Note that the cartridge deck may be slippery.
5. Maximum weight of maintenance crew and equipment on the cartridge deck not to exceed 450 lbs.

5.1 Filter Cartridge Removal

1. Remove a cartridge lid.
2. Remove cartridges from the deck using the lifting loops in the cartridge head plate. Rope or a lifting device (available from Contech) should be used. ***Caution: Should a snag occur, do not force the cartridge upward as damage to the tentacles may result. Wet cartridges typically weigh between 100 and 125 lbs.***
3. Replace and secure the cartridge lid on the exposed empty receptacle as a safety precaution. Contech does not recommend exposing more than one empty cartridge receptacle at a time.

5.2 Filter Cartridge Rinsing

1. Remove all 11 tentacles from the cartridge head plate. Take care not to lose or damage the O-ring seal as well as the plastic threaded nut and connector.

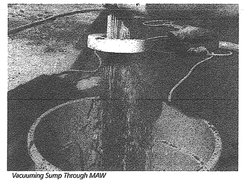


Cartridge Removal & Lifting Device

2. Position tentacles in a container (or over the MAW), with the threaded connector (open end) facing down, so rinse water is flushed through the membrane and captured in the container.
3. Using the Jellyfish rinse tool (available from Contech) or a low-pressure garden hose sprayer, direct water spray onto the tentacle membrane, sweeping from top to bottom along the length of the tentacle. Rinse until all sediment is removed from the membrane. ***Caution: Do not use a high pressure sprayer or focused stream of water on the membrane. Excessive water pressure may damage the membrane.***
4. Collected rinse water is typically removed by vacuum hose.
5. Reassemble cartridges as detailed later in this document. Reuse O-rings and nuts, ensuring proper placement on each tentacle.

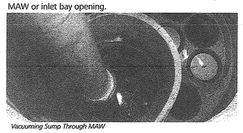
5.3 Sediment and Flotables Extraction

1. Perform vacuum cleaning of the Jellyfish Filter only after filter cartridges have been removed from the system. Access the lower chamber for vacuum cleaning only through the maintenance access wall (MAW) opening. Be careful not to damage the flexible plastic separator skirt that is attached to the underside of the deck on manhole systems. Do not lower the vacuum wand through a cartridge receptacle, as damage to the receptacle will result.
2. Vacuum floatable trash, debris, and oil, from the MAW opening or inlet bay. Alternatively, floatable solids may be removed by a net or skimmer.



Vacuuming Sump Through MAW

3. Pressure wash cartridge deck and receptacles to remove all sediment and debris. Sediment should be rinsed into the sump area. Take care not to flush rinse water into the outlet pipe.
4. Remove water from the sump area. Vacuum or pump equipment should only be introduced through the MAW or inlet bay.
5. Remove the sediment from the bottom of the unit through the MAW or inlet bay opening.



Vacuuming Sump Through MAW

6. For larger diameter Jellyfish Filter manholes (≥8-ft) and some vaults complete sediment removal may be facilitated by removing a cartridge lid from an empty receptacle and inserting a jetting wand (not a vacuum wand) through the receptacle. Use the sprayer to rinse loosened sediment toward the vacuum hose in the MAW opening, being careful not to damage the receptacle.

5.4 Filter Cartridge Reinstallation and Replacement

1. Cartridges should be installed after the deck has been cleaned. It is important that the receptacle surfaces be free from grit and debris.
2. Remove cartridge lid from deck and carefully lower the filter cartridge into the receptacle until head plate gasket is seated squarely in receptacle. ***Caution: Do not force the cartridge downward; damage may occur.***
3. Replace the cartridge lid and check to see that both male threads are properly seated before rotating approximately 1/3 of a full rotation until firmly seated. Use of an approved rim gasket lubricant may facilitate installation. See next page for additional details.
4. If rinsing is ineffective in removing sediment from the tentacles, or if tentacles are damaged, provisions must be made to replace the spent or damaged tentacles with new tentacles. Contact Contech to order replacement tentacles.

5.5 Chemical Spills

Caution: If a chemical spill has been captured, do not attempt maintenance. Immediately contact the local hazard response agency and contact Contech.

5.6 Material Disposal

The accumulated sediment found in stormwater treatment and conveyance systems must be handled and disposed of in accordance with regulatory protocols. It is possible for sediments to contain measurable concentrations of heavy metals and organic chemicals (such as pesticides and petroleum products). Areas with the greatest potential for high pollutant loading include industrial areas and heavily traveled roads. Sediments and water must be disposed of in accordance with all applicable waste disposal regulations. When scheduling maintenance, consideration must be made for the disposal of solid and liquid wastes. This typically requires coordination with a local landfill for solid waste disposal. For liquid waste disposal a number of options are available including a municipal vacuum truck decant facility, local waste water treatment plant or on-site treatment and discharge.

Jellyfish Filter Components & Filter Cartridge Assembly and Installation

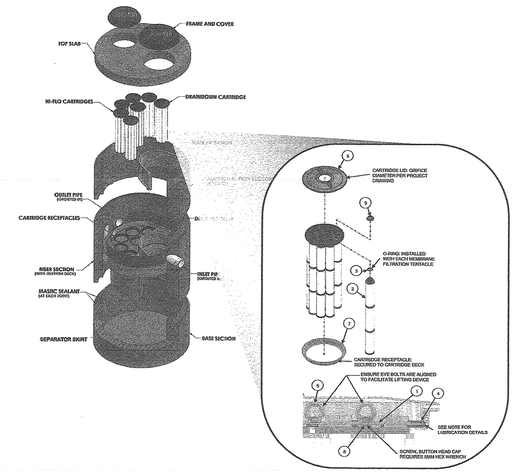


TABLE 1: BOM

ITEM NO.	DESCRIPTION
1	JF HEAD PLATE
2	JF TENTACLE
3	JF O-RING
4	JF HEAD PLATE GASKET
5	JF CARTRIDGE EYELET
6	JF 14IN COVER
7	JF RECEPTACLE
8	BUTTON HEAD CAP SCREW M6X14MM SS
9	JF CARTRIDGE NUT

TABLE 2: APPROVED GASKET LUBRICANTS

PART NO.	MFR	DESCRIPTION
78713	LA-CO	LUBRI-JOINT
40501	HERCULES	DUCK BUTTER
30603	OATEY	PIPE LUBRICANT
PSLUBXL1Q	PROSELECT	PIPE JOINT LUBRICANT

NOTES:

Head Plate Gasket Installation:
Install Head Plate Gasket (Item 4) onto the Head Plate (Item 1) and liberally apply a lubricant from Table 2: Approved Gasket Lubricants onto the gasket where it contacts the Receptacle (Item 7) and Cartridge Lide (ITem 6). Follow Lubricant manufacturer's instructions.

Lid Assembly:
Rotate Cartridge Lid counter-clockwise until both male threads drop down and properly seat. Then rotate Cartridge Lid clock-wise approximately one-third of a full rotation until Cartridge Lid is firmly secured, creating a watertight seal.

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).

REV.	DATE	DESCRIPTION	BY	CHK.
0	02/25/26	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

DETAILS

DATE	SCALE
SEPTEMBER 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	---	JRC

PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

DRAWING No.	REV.
C507	0

FILE LOCATION: P:\HHS\0150\MCNABB_PROPERTIES\1532-134 PLEASANT ST - PORTSMOUTH-JR\CSD-CAD_FILES\CIVIL\0010158.1532 SITE 2025.DWG, 2026.02.24, 8:39 AM

TECHNICAL MEMORANDUM

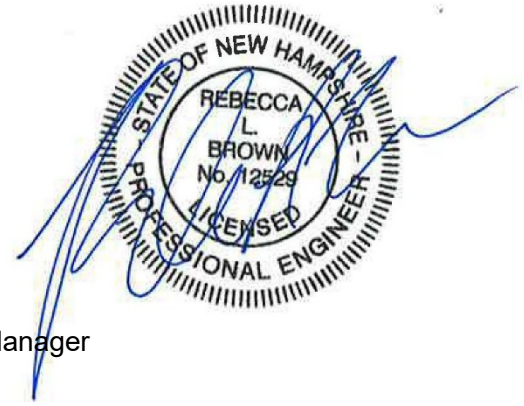
REF: NEX-2500268.00

DATE: April 14, 2026

TO: Mr. Mark A. McNabb
McNabb Properties
3 Pleasant Street, Suite 400
Portsmouth, New Hampshire 03801

FROM: Ms. Rebecca L. Brown, P.E., Senior Project Manager
Ms. Cecilia Donaldson, EIT, Designer

RE: Trip Generation Supplemental
134 Pleasant Street – Portsmouth, New Hampshire



Introduction

Greenman-Pedersen, Inc. (GPI) previously prepared a *Traffic Impact Assessment* (TIA) for a proposed mixed-use development to be located at 134 Pleasant Street in Portsmouth, New Hampshire, which was updated on April 13, 2026. The site currently contains a 9,400 square foot (SF) Citizens Bank headquarters with two drive-through lanes and office space totaling 7,175 SF. The project consists of renovating the existing structures on site and constructing a new mixed-use building. Upon completion, the project will provide a ±6,339 SF retail banking office for Kennebunk Savings Bank, ±3,423 SF financial services offices, ±13,998 SF of professional office space, and 22 apartment units. The TIA included a detailed estimate of the trips to be generated by the proposed development, as well as a comparison to the trips generated by the former use of the site. The results of the analysis indicated that the redevelopment would result in an overall reduction in trips generated by the proposed development. During a Planning Board meeting held on March 26, 2026, Vice Chair Anthony Coviello questioned how the project could be resulting in a reduction in trips when the overall commercial square footage of the development is increasing by over 7,000 SF. This memorandum has been prepared to explain the causes reduction in trips despite the increase in overall square footage. This memorandum compares the trips generated under existing and proposed conditions by the type of use and explains the reasons for the change in trips related to each type of use.

Residential Trips

There are currently no residential units on the site and the site is proposed to provide 22 apartment units under build conditions. GPI utilized Institute of Transportation Engineers (ITE) trip rates for Land Use Code (LUC) 220 (Multi-Family Low-Rise Housing) in dense urban areas to estimate the trips to be generated by the proposed residential units. With the availability of walking, biking, and transit services in a downtown setting, along with close proximity to opportunities for employment, dining, shopping, and entertainment, the proposed residential units with generate a limited number of trips as demonstrated in Table 1.

Office Trips

The existing site contains a total of 7,175 SF of office space, while the proposed site will provide a total of 17,421 SF of office space. GPI utilized ITE trip rates for office buildings in dense multi-use urban settings for the estimate of both existing and proposed office spaces. However, ITE provides separate trip rates for offices of less than 10,000 SF in size (LUC 712 – Small Office Building) and offices over 10,000 SF in size (LUC 710 – General Office Building). Therefore, LUC 712 was utilized to estimate trips generated by the existing office space, while LUC 710 was utilized to estimate the trips generated by the proposed office space. Offices under 10,000 SF typically generate a higher number of trips on a per SF basis than larger offices as hallway, storage, restroom, lobby, breakroom and other ancillary spaces are limited in an office building under 10,000 SF. Larger offices tend to have a much higher percentage of ancillary spaces that do not generate new employee trips to the site. As a result, larger offices have a lower trip rate per SF than offices under 10,000 SF. Therefore, even though the size of the office space is increasing, the total number of trips generated by the office space is not resulting in a significant increase in trips over the existing office space, although some increase will occur.

The other item to note is that smaller office buildings tend to have more condensed peak periods. Because they are often operated by a single tenant, commuter trips tend to be concentrated around the tenant's hours of operation, resulting in a high percentage of the daily trips occurring in the weekday AM and PM peak hours. Larger office buildings may be operated by multiple tenants with varying schedules or have a broader range of types of employees that work varying schedules. As a result, the daily trips become more spread throughout the day and less concentrated on the weekday AM and PM peak hours. Due to this spreading of the peak hours, the proposed office space is estimated to result in a net decrease in vehicle trips during the weekday AM peak hour as compared to the existing office space, but a slight increase in trips during all other time periods. The comparison of existing and proposed office trips is summarized in Table 1.

Bank Trips

The site currently contains a 9,400 SF Citizens Bank with two drive-through lanes. The proposed site will contain a 6,339 SF Kennebunk Savings Bank with two drive-through lanes. GPI utilized ITE trip rates for LUC 912 (Drive-In Bank) to estimate the trips generated by both the existing Citizens Bank and the proposed Kennebunk Savings Bank. As demonstrated in Table 1, the reduction in banking square footage results in a reduction in trips generated by the bank use on the site as compared to the existing use.

During the March 26, 2026 Planning Board Meeting, Vice Chair Coviello questioned how a reduction in banking square footage could result in such a substantial decrease in trips since both the existing and proposed banks both provide two drive-through lane. Mr. Coviello stated a belief that a similar number of drive-through lanes should result in a similar number of trips. While Mr. Coviello is correct that the drive-through portion of the site is likely to generate a similar number of trips under existing and future conditions, the drive-through only accounts for a portion of the total trips generated by the banking use.

Years ago, the drive-through lanes generated a high volume of traffic as a significant portion of banking activities occurred at drive-up tellers. As a result, it was not unusual for branch banks to provide as many as 10-12 drive-up teller lanes. At that time, the volumes of traffic generated by a bank was largely dependent on the number of drive-through lanes provided, as evidenced by trip rates contained in older versions of the ITE *Trip Generation Manual* that demonstrated a high correlation between number of lanes and trips generated. Modern banking practices have resulted in far fewer patron trips to banks for simple transactions like deposits and withdrawals. The implementation of direct-deposit of paychecks, mobile banking and check deposit, and cash exchange applications like Venmo and CashApp have reduced the need for bank patrons to visit the bank for these services. The majority of patron trips to the bank are for the application for loans and mortgages or the initial opening or closing of an account. As a result, most banks now only provide one to two drive-through lanes, with one often being dedicated to ATM service. Empirical trip

generation data in recent versions of the ITE *Trip Generation Manual* no longer demonstrate a strong correlation between number of drive-through lanes and the number of trips generated by a bank. Instead, there is a strong correlation between the size of the bank and the trips it generates, as many more of the trips generated by banks are now from employees than from patrons as compared to banks even just 10 years ago.

As the proposed bank will represent a reduction in the banking square footage on the site, it will also result in a reduction in the number of trips generated by the banking use. This occurs largely because the smaller bank size accommodates fewer employees than the existing bank space, and fewer employees results in fewer patron appointments for loan applications and other complex banking services.

TABLE 1 – Trip Generation Comparison by Use

Time Period/Direction	Residential Trips (LUC 221)	Office Trips			Bank Trips (LUC 912)		
	Proposed [a]	Existing (LUC 712) [b]	Proposed (LUC 710) [c]	Net Change [d]	Existing [e]	Proposed [f]	Net Change [g]
Weekday Daily	**64**	72	162	**90**	930	626	**-304**
Weekday AM Peak Hour:							
Enter	**1**	20	13	**-7**	55	37	**-18**
Exit	**14**	4	2	**-2**	39	26	**-13**
Total	**15**	24	15	**-9**	94	67	**-27**
Weekday PM Peak Hour:							
Enter	**8**	4	2	**-2**	99	67	**-32**
Exit	**1**	7	13	**6**	99	66	**-33**
Total	**9**	11	15	**4**	198	133	**-65**
Saturday Daily	**58**	6	24	**18**	812	548	**-264**
Saturday Midday Peak Hour:							
Enter	**2**	0	0	**0**	126	85	**-41**
Exit	**4**	1	3	**2**	121	81	**-40**
Total	**6**	1	3	**2**	247	166	**-81**

[a] ITE LUC 220 (Multi-family Housing (Low-Rise)) in Dense Multi-Use Urban setting for 22 units.
[b] ITE LUC 712 (Small Office Building) in Dense Multi-Use Urban setting for 7.175 ksf.
[c] ITE LUC 710 (General Office Building) in Dense Multi-Use Urban setting for 17.421 ksf.
[d] Proposed Office Trips minus Existing Office Trips
[e] ITE LUC 912 (Drive-In Bank) in Dense Multi-Use Urban setting for 9.40 ksf.
[f] ITE LUC 912 (Drive-In Bank) in Dense Multi-Use Urban setting for 6.339 ksf.
[g] Proposed Bank Trips minus Existing Bank Trip

From: Kimberli Kienia
To: Kimberli Kienia
Subject: FW: 150 Portsmouth Boulevard- Abutter Notice
Date: Thursday, May 7, 2026 8:52:00 AM

-----Original Message-----
From: Joe Geoghegan <Joe@tdmrk.com>
Sent: Wednesday, May 6, 2026 4:57 PM
To: Peter M. Stith <pmstith@portsmouthnh.gov>
Cc: Peter L. Britz <plbritz@portsmouthnh.gov>; Kimberli Kienia <kkienia@portsmouthnh.gov>
Subject: Re: 150 Portsmouth Boulevard- Abutter Notice

Thanks Peter - sure thing. Please see below:

Given the scale and complexity of the project, we believe additional time is warranted to further refine several important aspects of the proposal, including feedback and comments from Technical Advisory Committee, abutter concerns, unique zoning requirements of the GNOD, and residential programming. At the end of the day, we want to ensure we come forward with a version of the project that is financially feasible, that will positively impact Portsmouth, and that future residents will be proud to call home. We also appreciate the Planning Board's limited time and would prefer to return with the most complete and carefully considered version of the project possible.

Thank you again.

Best,

Joe

Joe Geoghegan
Tidemark | Director of Development
(207) 650-0907

JOE GEOGHEGAN
Director of Development

207.650.0907

joe@tdmrk.com

www.tdmrk.com <https://www.tdmrk.com/>

<https://www.linkedin.com/company/tdmrk>
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On May 6, 2026, at 8:02 AM, Peter M. Stith <pmstith@portsmouthnh.gov> wrote:

Joe,

An email is fine, but if you can provide more detail on what you are working on or the reason for the postponement, that would be helpful for the Board.

Thanks,

Peter Stith, AICP
Assistant Planning Director
Planning & Sustainability Department
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801
603.610.4188
www.portsmouthnh.gov

-----Original Message-----
From: Joe Geoghegan <Joe@tdmrk.com>
Sent: Tuesday, May 5, 2026 6:52 PM
To: Peter L. Britz <plbritz@portsmouthnh.gov>
Cc: Peter M. Stith <pmstith@portsmouthnh.gov>; Kimberli Kienia <kkienia@portsmouthnh.gov>
Subject: Re: 150 Portsmouth Boulevard- Abutter Notice

Peter -

I was able to connect with our full team, and, as discussed, we would like to postpone until June.

We greatly appreciate your flexibility as we've shifted our dates a few times throughout this process.

Will you still need an official postponement letter from our team, or does this email suffice?

Thanks again,
Joe

Joe Geoghegan
Tidemark | Director of Development
(207) 650-0907

JOE GEOGHEGAN
Director of Development

207.650.0907

joe@tdmrk.com

www.tdmrk.com <https://www.tdmrk.com/>

<https://www.linkedin.com/company/tdmrk>

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On May 5, 2026, at 2:24 PM, Peter L. Britz <plbritz@portsmouthnh.gov> wrote:

Hi Joe:

Just following up on the 150 Portsmouth Boulevard application. Could you let me know as soon as possible when you plan to come back to the Planning Board? If you plan to postpone from May you will need to request to postpone to the June meeting and once we receive that request we can notify the abutters.

If you have questions, please let me know.

Thanks,

Peter

ALTUS ENGINEERING

Civil
Site Planning
Environmental
Engineering

133 Court Street
Portsmouth, NH
03801-4413

April 24, 2026

Rick Chellman, Chairman
City of Portsmouth Municipal Complex
1 Junkins Avenue
Portsmouth, New Hampshire 03801

Re: Application for Planning Board Review
Assessor's Map 236, Lot 74
86 Farm Lane
Altus Project No. 5719

Hard copy delivered to City Hall and digital copy uploaded to viewpoint

Dear Rick,

At the April 7, 2026 meeting, the Technical Advisory Committee voted to recommend approval of the three-lot residential subdivision without any stipulations. On behalf of Brett Berger and Flipping Burgers, LLC, Altus Engineering, LLC (Altus) is pleased to submit the following plans and documents for consideration at the May 21st Planning Board hearing:

- Viewpoint application (filed on-line only)
- Letters of Authorization
- Zoning Board of Adjustment Notice of Decision
- Subdivision Application Checklist
- Site Plan Review Application Checklist
- Waiver requests
- Green Statement
- Drainage Study
- Stormwater Inspection and Maintenance Manual
- Subdivision Plans and Details

As always, Altus looks forward to working with the Planning Board. Please feel free to call or email me directly should you have any questions or need any additional information in advance of the meeting.

Sincerely,

Enclosures

eCopy: Jeanette McMaster
Brett Berger

edw/5719.00-pb cvr ltr

Findings of Fact | Subdivision Rules and Regulations
City of Portsmouth Planning Board

Date: May 21, 2026
Property Address: 86 Farm Lane
Application #: LU-26-16
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:
Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of the all conditions necessary to obtain final approval.

	Subdivision Review Criteria	Finding (Meets Standards/ Requirements)	Supporting Information
1	Subdivision Rules and Regulations III. D. 1 The Board shall act to deny any application which is not in compliance with Section IV or V as appropriate. **SECTION IV - REQUIREMENTS FOR PRELIMINARY PLAT**	**Meets** **Does Not Meet**	The project meets all the standards and requirements of Section IV, requirements for a preliminary plat.
2	**SECTION V - REQUIREMENTS FOR FINAL PLAT**	**Meets** **Does Not Meet**	The project meets all the standards and requirements of Section V, requirements for a final plat.
3	**SECTION VI - GENERAL REQUIREMENTS**	**Meets** **Does Not Meet**	The application has been reviewed by the Technical Advisory Committee (TAC) for conformance with the General Requirements. • The application was recommended for approval on April 7, 2026 at the Technical Advisory Committee Meeting.

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	Subdivision Review Criteria	Finding (Meets Standards/ Requirements)	Supporting Information
4	**SECTION VII - DESIGN STANDARDS**	**Meets** **Does Not Meet**	The application has been reviewed by the Technical Advisory Committee (TAC) for conformance with these minimum requirements. • The application was recommended for approval on April 7, 2026 at the Technical Advisory Committee Meeting.
5	**Other Board Findings:**		

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Findings of Fact | Site Plan Review
City of Portsmouth Planning Board

Date: May 21, 2026
Property Address: 86 Farm Lane
Application #: LU-26-16
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:

Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of the all conditions necessary to obtain final approval.

Site Plan Regulations Section 2.9 Evaluation Criteria - in order to grant site plan review approval, the TAC and the Planning Board shall find that the application satisfies evaluation criteria pursuant to NH State Law and listed herein. In making a finding, the TAC and the Planning Board shall consider all standards provided in Articles 3 through 11 of these regulations.

	Site Plan Review Regulations Section 2.9 Evaluation Criteria	**Finding (Meets Standard/Criteria)**	**Supporting Information**
1	Compliance with all City Ordinances and Codes and these regulations. Applicable standards:	**Meets** **Does Not Meet**	Applicable standards: The project meets all the applicable Ordinances, Codes, and Regulations with the exception of requesting 3 waivers from the subdivision and site plan review regulations.
2	Provision for the safe development, change or expansion of use of the site.	**Meets** **Does Not Meet**	The project has been vetted by the TAC which found no unsafe elements on the design proposal.
3	Adequate erosion control and stormwater management practices and other mitigative measures, if needed, to prevent adverse effects on downstream water quality and flooding of the property or that of another.	**Meets** **Does Not Meet**	The project includes provisions for adequate temporary and permanent erosion control measures for use during and post construction. The stormwater management design treats the new hard scape areas and discharges into the right-of-way and eventually into a drainage swale.

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	Site Plan Review Regulations Section 2.9 Evaluation Criteria	Finding (Meets Standard/Criteria)	Supporting Information
4	Adequate protection for the quality of groundwater.	**Meets** **Does Not Meet**	The project does not propose any uses with high pollutant loads that could impact the groundwater supply.
5	Adequate and reliable water supply sources.	**Meets** **Does Not Meet**	The project does not new wells and utilizes the existing municipal public water supply.
6	Adequate and reliable sewage disposal facilities, lines, and connections.	**Meets** **Does Not Meet**	The project will be connected to the municipal sanitary sewage collection system.
7	Absence of undesirable and preventable elements of pollution such as smoke, soot, particulates, odor, wastewater, stormwater, sedimentation or any other discharge into the environment which might prove harmful to persons, structures, or adjacent properties.	**Meets** **Does Not Meet**	Two new residential homes will be created. The development will not create any undesirable and preventable elements of pollution such as smoke, soot, particulates, odor, wastewater, stormwater, sedimentation or any other discharge into the environment which might prove harmful to persons, structures, or adjacent properties.
8	Adequate provision for fire safety, prevention and control.	**Meets** **Does Not Meet**	As part of the TAC review, the Portsmouth Fire Department supported the project including the request to reduce the roadway width and the alternative vehicular turnaround design.
9	Adequate protection of natural features such as, but not limited to, wetlands.	**Meets** **Does Not Meet**	No wetlands or wetland buffers will be impacted with the development.
10	Adequate protection of historical features on the site.	**Meets** **Does Not Meet**	The project will not impact any known historical resources.
11	Adequate management of the volume and flow of traffic on the site and adequate traffic controls to protect public safety and prevent traffic congestion.	**Meets** **Does Not Meet**	The project will generate a minimal amount of new traffic from the addition of 2 new homes. All traffic will safely access the site from Farm Lane. TAC did not have any issues with traffic generation or public safety.
12	Adequate traffic controls and traffic management measures to prevent an unacceptable increase in safety hazards and traffic congestion off-site.	**Meets** **Does Not Meet**	TAC did not have any issues with traffic generation or public safety for new single family residences.
13	Adequate insulation from		The proposed residential development will

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	Site Plan Review Regulations Section 2.9 Evaluation Criteria	Finding (Meets Standard/Criteria)	Supporting Information
	external noise sources.	**Meets** **Does Not Meet**	meet all applicable codes relating to noise during and post construction.
14	Existing municipal solid waste disposal, police, emergency medical, and other municipal services and facilities adequate to handle any new demands on infrastructure or services created by the project.	**Meets** **Does Not Meet**	The project has been reviewed and approved by TAC which found that the project will not create an unreasonable demand on City infrastructure or services.
15	Provision of usable and functional open spaces of adequate proportions, including needed recreational facilities that can reasonably be provided on the site	**Meets** **Does Not Meet**	No community open space will be provided for the 3-lot subdivision. Vegetated buffers and setbacks meeting the zoning ordinances will be provided with the exception of the existing home.
16	Adequate layout and coordination of on-site accessways and sidewalks in relationship to off-site existing or planned streets, accessways, bicycle paths, and sidewalks.	**Meets** **Does Not Meet**	The project is of such a diminutive scale that it does not require a sidewalk connection to the street. Farm Lane and the surrounding neighborhood does not have a sidewalk system.
17	Demonstration that the land indicated on plans submitted with the application shall be of such character that it can be used for building purposes without danger to health.	**Meets** **Does Not Meet**	Zoning relief was granted to allow lots with less than the minimum frontage and lot area. The lot sizes are consistent with the neighborhood. The conceptual site plan and drainage computations demonstrate that the construction of adequately sized homes will not create a danger to abutters or public health.
18	Adequate quantities, type or arrangement of landscaping and open space for the provision of visual, noise and air pollution buffers.	**Meets** **Does Not Meet**	The lot development will meet the required zoning regulations for setbacks, open space and building coverage except where zoning relief was granted. No commercial noise or air pollution will be generated.
19	Compliance with applicable City approved design standards.	**Meets** **Does Not Meet**	The project meets or exceeds all applicable City design standards except where zoning relief was granted or waivers requested.
	Other Board Findings:		

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Letter_of_Authorization_Jeanette_MacDonald_v2

Final Audit Report 2026-02-11

Created:	2026-02-11
By:	Brett Berger (brett@flippinbergers.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAXK_MtchkaepdF1uGj67REO-kdRt0GR4x

"Letter_of_Authorization_Jeanette_MacDonald_v2" History

Document created by Brett Berger (brett@flippinbergers.com)
2026-02-11 - 5:25:30 PM GMT

Document emailed to Jeannette McMaster (jemac86@gmail.com) for signature
2026-02-11 - 5:25:33 PM GMT

Email viewed by Jeannette McMaster (jemac86@gmail.com)
2026-02-11 - 5:58:27 PM GMT

Signer Jeannette McMaster (jemac86@gmail.com) entered name at signing as Jeannette McMaster(MacDonald)
2026-02-11 - 5:59:41 PM GMT

Document e-signed by Jeannette McMaster(MacDonald) (jemac86@gmail.com)
Signature Date: 2026-02-11 - 5:59:43 PM GMT - Time Source: server

Agreement completed.
2026-02-11 - 5:59:43 PM GMT

Letter of Authorization: 86 Farm Lane

I, Jeannette McMaster (MacDonald), as the owner of the property located at 86 Farm Lane, Portsmouth, NH (assessors Map 236, Lot 74), hereby grant limited authorization to Brett Berger/Flippin Bergers LLC, to communicate and appear before the Technical Advisory Committee, Planning Board, and other municipal or regulatory bodies for purposes related to any application, engineering, subdivision review, and project discussion concerning the Property.

Such authorization includes the ability to present plans, respond to questions, and coordinate with Altus Engineering, LLC and other consultants involved in the subdivision process.

Name: Jeannette McMaster (MacDonald)

Signature: Jeannette McMaster(MacDonald)
Jeannette McMaster(MacDonald) (Feb 11, 2026 12:59:43 EST)

Date: 02/11/2026

Letter of Authorization

Flipping Bergers LLC and Brett Berger, hereby authorize Altus Engineering, LLC to represent us as the Applicant in all matters concerning engineering and related permitting for Assessors Map 236, Lot 74 located at 86 Farm Lane in Portsmouth, New Hampshire. This authorization shall include representation at public hearings and other project-related meetings in addition to any signatures required for Federal, State and Municipal permit applications.

Signature	Brett Berger Print Name	2/10/26 Date
Witness	Print Name	Date

CITY OF PORTSMOUTH
Planning & Sustainability Department
1 Junkins Avenue
Portsmouth, New Hampshire 03801
(603) 610-7216

ZONING BOARD OF ADJUSTMENT

May 29, 2025

Jeannette MacDonald
86 Farm Lane
Portsmouth, New Hampshire 03801

RE: **Board of Adjustment Request for property located at 86 Farm Lane, Portsmouth NH 03801 (LU-25-67)**

Dear Property Owner:

The Zoning Board of Adjustment, at its regularly scheduled meeting of **May 27, 2025**, considered your application for the property located at 86 Farm Lane whereas relief is needed to subdivide the existing property into 3 separate lots. The proposed parent lot requires the following: 1) Variance from Section 10.521 to allow a) 28-foot rear yard setback where 30 feet is required; and b) 23-foot secondary front yard where 30 feet is required. Proposed lot 1 requires the following: 2) Variance from Section 10.521 to allow a) 10,664 s.f. of lot area where 15,000 s.f. is required; b) 10,664 s.f. of lot area per dwelling unit where 15,000 s.f. is required; and c) 75 feet of continuous street frontage where 100 feet is required. Proposed lot 2 requires the following: 3) Variance from Section 10.521 to allow a) 11,250 s.f. of lot area where 15,000 s.f. is required; b) 11,250 s.f. of lot area per dwelling unit where 15,000 s.f. is required; and c) 75 feet of continuous street frontage where 100 feet is required. Said property is shown on Assessor Map 236 Lot 74 and lies within the Single Residence B (SRB) District. As a result of said consideration, the Board voted to **grant** the request as presented with the following **conditions:**

1) The approval shall be contingent upon the Planning Board approval of the subdivision and City Council acceptance of fee simple ownership of the new right-of-area proposed; and

2) The subdivision layout may change as a result of TAC and Planning Board reviews if it does not increase the zoning relief required.

The Board's decision may be appealed up to thirty (30) days after the vote. Any action taken by the applicant pursuant to the Board's decision during this appeal period shall be at the applicant's risk. Please contact the Planning & SustainabilityDepartment for more details about the appeals process.

Approvals may also be required from other City Commissions or Boards. Once all required approvals have been received, applicant is responsible for applying for and securing a building permit from the Inspection Department prior to starting any project work.

This approval shall expire unless a building permit is issued within a period of two (2) years from the date granted unless an extension is granted in accordance with Section 10.236 of the Zoning Ordinance.

The Findings of Fact associated with this decision are available: attached here or as an attachment in the Viewpoint project record associated with this application and on the Zoning Board of Adjustment Meeting website:

https://www.cityofportsmouth.com/planportsmouth/zoning-board-adjustment/zoning-board-adjustment-archived-meetings-and-material

The minutes and audio recording of this meeting are available by contacting the Planning & Sustainability Department.

Very truly yours,

Phyllis Eldridge, Chair of the Zoning Board of Adjustment

cc: Shanti Wolph, Chief Building Inspector

Rosann Maurice-Lentz, City Assessor
Derek Durbin, Attorney, Durbin Law Offices PLLC

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: Jeanette McDonald AKA Jeanette McMaster Date Submitted: 2-13-26

Applicant: Flipping Bergers LLC

Phone Number: 9142994438 E-mail: brett@flippingbergers.com

Site Address 1: 86 Farm Lane Map: 236 Lot: 74

Site Address 2: _____ Map: _____ Lot: 74

Application Requirements			
☑	**Required Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**	**Waiver Requested**
✔	Completed Application form. **(III.C.2-3)**	in Submission package, filed on line	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)**	Submission package, filed on line	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, title block all sheets	☑ 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)**	Existing conditions survey and 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)**	Existing conditions survey and 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)**	Existing conditions survey and 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)**	Existing conditions survey and 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)**	Existing conditions survey and 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)**	Existing conditions survey and 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)**	Existing conditions survey 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)**	Subdivision plan, Roadway Plan Utilities Plan Grading, Drainage & Erosion Control 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)**	Roadway Plan Grading, Drainage & Erosion Control Plan	☑ Preliminary Plat ☑ Final Plat	
✔	Base flood elevation (BFE) for subdivisions involving greater than five (5) acres or fifty (50) lots. **(Section IV.11)**	NA - Subdivision plan	☑ 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)**	NA - Existing Conditions Plan Grading, Drainage & Erosion Control 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)**	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)**	NA	☐ 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)**	Subdivision Plan	
☑	a. Conformity to Official Plan or Map	a. meets with zoning relief	
☑	b. Hazards	b.no in a hazard zone	
☑	c. Relation to Topography	c. Grading plan	
☑	d. Planned Unit Development	d. NA	
☐	**2. Lots: (VI.2)**	a. conforming to neighborhood subdivision plan	
☐	a. Lot Arrangement	b. variance granted	
☐	b. Lot sizes		
☐	c. Commercial and Industrial Lots		
☐	**3. Streets: (VI.3)**	a. new road is within an existing ROW	
☑	a. Relation to adjoining Street System	b. ROW is existing and meets 50-foot requirement	
☑	b. Street Rights-of-Way	c. no reserve strips proposed	
☑	c. Access	d. NA	
☑	d. Parallel Service Roads	e. existing ROW is nearly perpendicular	
☑	e. Street Intersection Angles	f. no new ROW proposed	
☑	f. Merging Streets	g.NA h. NA	
☑	g. Street Deflections and Vertical Alignment	i. NA - turnaround proposed - waiver requested	
☑	h. Marginal Access Streets	j. 25' radius - complies	
☑	i. Cul-de-Sacs	k. Roadway plan	
☑	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)**	Complies	
☑	**5. Driveways: (VI.5)**	NA	
☑	**6. Drainage Improvements: (VI.6)**	Grad., Drain. & Erosion Control Plan	
☑	**7. Municipal Water Service: (VI.7)**	Utilities Plan	
☑	**8. Municipal Sewer Service: (VI.8)**	only house services required	
☑	**9. Installation of Utilities: (VI.9)**	Detail sheets	
☑	a. All Districts		
☑	b. Indicator Tape		
☑	**10. On-Site Water Supply: (VI.10)**	NA	
☑	**11. On-Site Sewage Disposal Systems: (VI.11)**	NA	
☑	**12. Open Space: (VI.12)**	NA	
☑	a. Natural Features		
☑	b. Buffer Strips		
☑	c. Parks		
☑	d. Tree Planting		
☑	**13. Flood Hazard Areas: (VI.13)**	NA - not in a flood hazard zone	
☑	a. Permits		
☑	b. Minimization of Flood Damage		
☑	c. Elevation and Flood-Proofing Records		
☑	d. Alteration of Watercourses		
☑	**14. Erosion and Sedimentation Control (VI.14)**	Grad., Drain. & Erosion Control 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)**	Existing conditions plan	
✔	**18. House Numbers (VI.18)**	to be provided	

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	Conforms	
✔	**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	Conforms	
✔	**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	infrastructure in place. House services 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	Per discussion with DPW Conforms	

Applicant's/Representative's Signature: Eric D. Weinrieb PE **Date:** 2-13-26

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

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: Flipping Berger's LLC Date Submitted: 3-23-26

Application # (in City's online permitting): LU-26-16

Site Address: 86 Farm Lane Map: 236 Lot: 74

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)**	Completed	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)**	Completed	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)**	Submittal materials	
☒	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)**	Potential building envelopes on site plan	N/A
☒	Tax map and lot number, and current zoning of all parcels under Site Plan Review. **(2.5.3.1D)**	Cover sheet and title block of all sheets	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)**	Letter of Authorization in submittal package, cover sheet	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 Survey, sheet V-1	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)**	Existing Conditions Plan, subdivision & Easement Plan	N/A
☒	List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)**	Utilities Plan, Sheet C-6	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)**	Note 5 existing conditions plan	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)**	N/A	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)**	Title block 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)**	Existing Conditions and Subdivision plan	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.	Sheets V-1 & V-2 Sheet C-1 N/A - ex. house sheet C-1 Sheet C-1, Subdivision notes Sheet C-1, Subdivision notes Sheet C-1, Lot areas & coverage summary NA Sheet V-1, note 7	
☒	**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.	Conceptual site Plan, Sheet C-2 shows potential home locations. Elevations, height, massing, materials, lighting and arch. details have not been determined. Gross floor area has not been determined.	
☒	**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).	Conceptual Site Plan, sheet C-2, Roadway Plan, Sheet C-4 Fire truck turning templates on Vehicular Access Plan, sheet 1 of 1	
☒	**4. Parking and Loading: (2.5.4.3D)** • Location of off street parking/loading areas, landscaped areas/buffers; • Parking Calculations (# required and the # provided).	NA - residential subdivision. all lot development will occur on individual house lots	
☒	**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).	Sheet C-6, utilities Plan	
☒	**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.	Sheet C-6, Utilities Plan	

☒	**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.	Sheet C-6, Utilities Plan	
☒	**8. Solid Waste Facilities: (2.5.4.3H)**	NA, individual single family homes	
	• 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.	Sheet C-5, Grading, Drainage & Erosion Control Plan No salt storage to occur on site temporary stockpile areas shown on Sheet C-3 - Demolition & Site Preparation Plan	
☒	**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.	Single Family homes on individual lots. No street lighting proposed. Modest residential lighting will be associated with lot development	
☒	**11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)**	NA - no lighting is proposed	
☒	**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.	Limits of site work activities are depicted on the Demolition & Site Preparation Plan, Sheet C-3. No irrigation is proposed.	
☒	**13. Contours and Elevation: (2.5.4.3L)** • Existing/Proposed contours (2 foot minimum) and finished grade elevations.	Existing contours are shown on Sheets V-1 and V-2. Proposed grading on Sheet C-5 Grading, Drainage & Erosion Control Plan	
☒	**14. Open Space: (2.5.4.3M)** • Type, extent and location of all existing/proposed open space.	NA - no public open space is proposed	
☒	**15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)**	sheet C-1, Subdivision & Easement Plan	
☒	**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).	NA	
☒	**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.	Site is not in a flood hazard zone as noted on sheet V-1, note 7.	

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)**	2 new lots proposed, trip generation report not warranted	
☒	Indicate where Low Impact Development Design practices have been incorporated. **(7.1)**	Green statement, submittal documents	
☒	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)**	Development is not within a wellhead protection or aquifer protection zone	
☒	Stormwater Management and Erosion Control Plan. **(7.4)**	Sheet C-5, Design information, Sheet D-1, erosion control notes	
☒	Inspection and Maintenance Plan **(7.6.5)**	Submittal documents	

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)**	Waivers submitted Driveway permits not required Special Exception not required Variances granted 5-27-25, noted on C-1 Easements shown on Sheet C-1 Licenses not required	
☒	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)**	Stormwater computations provided in submittal documents air, water, and land pollutants - NA Traffic generation - 2 new homes proposed. NA Residential development - noise. NA Stormwater managment and Erosion control plan provided in narrative, C-4 and Erosion control detail sheet Wetlands NA	
☒	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)**	Discussions with Eversource - pending	

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)**	No State or Federal permits required	
☒	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)**	Note added to both the Subdivision and Site Plan	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)**	NA - not in a flood hazard zone	
☒	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)**	NA - site plan is conceptual in nature. Waiver requested Note B added to the subdivision plan	N/A

Applicant's Signature: Eric D. Weinrieb PE **Date:** 3-18-26

ALTUS ENGINEERING

Civil
Site Planning
Environmental
Engineering

133 Court Street
Portsmouth, NH
03801-4413

REVISED
WAIVER REQUESTS

March 23, 2026

Re: Assessor's Map 236, Lot 74
86 Farm Lane
Altus Project No. 5719

On behalf of Flipping Bergers, LLC, Applicant and Jeanette McMaster, Owner, Altus Engineering, LLC respectfully requests the following waivers from the City of Portsmouth Subdivision Rules and Regulations.

Section VI GENERAL REQUIREMENTS

3. Streets
I. Cul-de-Sacs

Requirement:
Cul-de-sacs shall be provided at the closed end with a drive-around roadway having a minimum radius for the outside curbs of at least fifty (50) feet, and a street property line radius of sixty (60) feet. The maximum length of a cul-de-sac shall generally be five hundred (500) feet unless otherwise approved by the Board. The Planning Board may require the dedication of an easement of twenty (20) feet in width from the cul-de sac to the next adjoining street to provide for utilities. No water lines serving the street shall be dead ended, where feasible.

Provided: Hammer head provided in lieu of a cul-de-sac

Requirement: From Exhibit Residential Street Minimum Standards (32-foot paved surface with a 5-foot wide sidewalk

Provided: 22-feet of pavement along roadway.

Both waivers are interconnected. The development will service only two single family homes, generating very little traffic, approximately 19 vehicle trips per day on a weekday. A 22-foot-wide roadway can adequately support the expected traffic. A hammer head turnaround has been provided to allow emergency vehicles to safely turnaround and exit the development. The site is unique as the new roadway is within an existing right-of-way. The roadway has been shifted to avoid disturbance to the abutting property that is utilizing a portion of the City right-of-way. The right-of-way extends to the north into a private development. It is doubtful that the roadway will ever be extended as a continuous road. A fire truck turning template plan is included in the application package that supports the narrower widths proposed. No parking signs along the road are proposed to ensure that vehicles do not block the roadway preventing

emergency vehicle access. Each lot will have ample space for a garage and visitor parking for small gatherings at each home.

Narrower roadways reduce the carbon footprint on the development, reduce stormwater runoff and pollutant loading and reduces the heat island effect on stormwater.

Servicing only 2 single family homes, constructing a sidewalk is necessary to protect pedestrians. Farm Lane and the entire neighborhood does not have a sidewalk system.

At the direction of Public Works, the water line provided to the development will be only 4-inches diameter to avoid stagnation of the potable water and is terminated at the end of the road.

Altus Engineering, LLC also respectfully requests the following waivers from the City of Portsmouth Site Plan review Regulations.

Section 2.13 Recording of Site Plans

Requirement:

1. An approved site plan shall be signed by the Planning Board Chairperson (or designee) and shall be recorded at the Rockingham County Registry of Deeds (RCRD). Site Plans are not valid until recorded at the Registry of Deeds.

Provided: Conceptual Site Plan.

Conceptual Site Plan demonstrates how the two new house lots will be constructed. The intent of subdivision approval is to create two new building lots. The people who purchase the lots and build the homes are not yet identified. The subdivision plans depict the buildable area and identify the maximum lot and building coverage. The concept plan shows a possible development scenario. It does not and should not commit the developer or the further homeowner to a specific house configuration or size. All relevant requirements are included on the recording subdivision and easement plan.

Respectfully submitted by,

ALTUS ENGINEERING, LLC

wde/5719 waiver.docx

ALTUS ENGINEERING

Civil
Site Planning
Environmental
Engineering

133 Court Street
Portsmouth, NH
03801-4413

"Green" Statement
3 Lot Residential Subdivision
Assessor's Map 236, Lot 74
86 Farm Lane
Altus Project 5719
March 2026

Pursuant to Section 2.5.3.1(a) of the Site Plan Review Regulations, Altus Engineering, LLC respectfully submits the following list of the project's "green" components for the construction of a new three lot residential subdivision off Longmeadow Lane.

- The project is infill in a suburban area. The additional density in a developed landscape that does impact wetlands or wetland buffer is a green site design approach.
- The proposed roadway serving only two homes will be reduced in width to minimize impervious surfaces, reducing the heat island.
- Rain garden/bioretention basins will mitigate any runoff impacts and will provide treatment and promote groundwater recharge.
- The new homes will be code compliant building with components that will meet or exceed all applicable energy codes.

wde/5719 green statment

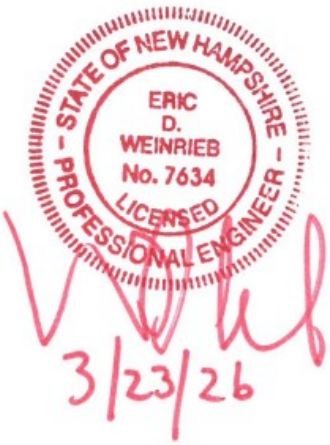
DRAINAGE ANALYSIS

FOR

86 FARM LANE SUBDIVISION

86 Farm Lane
Portsmouth, NH 03801

February 13, 2026
Revised March 23, 2026



Prepared For:
Flipping Berger's, LLC
71 Bracket Road
Portsmouth, NH 03801

Prepared By:
Altus Engineering, LLC
133 Court Street
Portsmouth, NH 03801
Phone: (603) 433-2335

ALTUS ENGINEERING

Altus Project 5719

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ALTUS ENGINEERING

Section 1

Narrative

ALTUS ENGINEERING

PROJECT DESCRIPTION

Flipping Berger's, LLC is proposing to construct a new subdivision behind an existing single-family residence at 86 Farm Lane in Portsmouth. The ±0.914-acre parcel is identified as Tax Map 236, Lot 74 and is located in the Single Residence B zone. The lot is located on Farm Lane between the Spaulding Turnpike and Woodbury Avenue and hosts a two-story residential home, pool, deck and patio.

The proposal includes the construction of a new 265'-long and 22'-wide public roadway and two new lots. The existing single-family residence is to remain. The existing pool, deck and patio will be removed to allow for the area behind the existing house to be subdivided. The new roadway will be located on City owned property currently identified as *Longmeadow Lane;* which is a paper street. Additional improvements to the site also include new water, electric and stormwater infrastructure.

Stormwater infrastructure will consist of one infiltration pond, one bioretention cell, one drain manhole and one deep sump catch basin. The infiltration pond and bioretention cell are utilizing infiltration to treat stormwater and control flows and each also includes a yard drain to be connected into the City's drainage system to handle flows during large storms. Additionally, the bioretention cell includes a perforated underdrain to collect stormwater after it has been treated. All stormwater runoff from new impervious surfaces will be directed to the infiltration pond, bioretention cell or deep sump catch basin. The proposed buildings will also utilize a stone drip edge to capture runoff from the roof. This proposed stormwater management system will provide adequate stormwater treatment and will meet or reduce peak flows leaving the site for each point of analysis except for at the City owned drainage system analysis point (POA #4), more information is provided under the Post-Development section of this report.

Site Soils

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) web soil survey indicates that soil on this parcel is a mix of Udorthents, Smooth (299) and Urban Land – Canton (799). The Urban Land – Canton is certified as Hydraulic Soil Group A (HSG-A). Udorthents, Smooth, do not have a HSG provided by the NRCS, due to the lack of information regarding this soil type it has been assumed that this soil type is consistent with surrounding soil types and thus is modeled as HSG-A.

Two test pits were completed on the property for the design of the stormwater infrastructure. The test pits logged for the stormwater infrastructure design consisted of dark brown grass matt ranging from 0" to 9" below existing grade, a mix of red/brown loam and sand ranging from 9" to 33", and red/brown clayey loam ranging from 33" to 60". No ledge was observed in either of them. Groundwater was observed between 40" and 50" below existing grade and estimated seasonal high-water table was observed between 24" and 43" below existing grade.

Pre-Development (Existing Conditions)

The property is bounded by other residential properties to the northeast, Longmeadow Lane paper street to the southwest, woods to the northwest, and Farm Lane to south-southeast. Of the ±0.914-acre parcel, less than a half-acre has been disturbed by the existing building, pool, patio, deck and associated pavement; the remainder of the lot is a mix of lawn and some woods. There is no stormwater infrastructure currently located on the property or on Farm Lane.

Longmeadow Lane is a 50'-wide paper street is located between 86 & 88 Farm Lane; it extends approx. 800' to the northwest toward the intersection with Woodlawn Circle and Hillcrest Drive. The paper street has been partially developed by abutting residents near Farm Lane, consisting of a grave driveway, fencing, landscaping, a portion of a shed and a portion of driveway. Development of the paper street ends approx. 200' from Farm Lane and transitions into undeveloped woodland. There is an existing drain manhole located within the paper street right-of-way approx. 425' from Farm Lane. There is also an existing sewer system located within the right-of-way that is active.

The existing site hydrology is characterized by three sub-catchments as delineated on the accompanying "Pre-Development Watershed and Soils Plan". Site runoff was analyzed at three Point of Analysis (POA). The analysis area for the site expands beyond the limits of the existing lot and City paper street based on contours obtained by James Verra & Associates, Inc. from the Existing Conditions Plan and from contours provided by City of Portsmouth GIS showing off lot flows contributing to POA's on this site.

POA #1 is located in the southern corner of the analysis area near the intersection of Farm Lane and Clover Lane. The catchment that contributes to POA #1 consists of half of the existing house, the front yard of the existing house, part of Farm Lane and some areas of the adjacent properties. POA #2 is located along the northwest boundary of the analysis area along the 88 Farm Lane property line. The catchment that contributes to POA #2 consists a small portion of the side yard of the existing house and portion of the City's paper street. POA #3 is located in the northwest corner of the existing lot shared with the paper street at a large depression located on the property line that appears to be storing and infiltrating stormwater runoff. This existing natural depression in the land is modeled as Pond #3 in the pre-analysis. The catchment that contributes to POA #3 consists of half of the existing house, the entire backyard including the pool/patio area, a portion of the City's paper street, and the yards/roofs of abutting properties to the northeast that are fronted on Meadow Road. POA #4 is located at the City owned drain manhole located in the paper street right-of-way, no flows from the existing site discharge to the City drainage system.

Post-Development (Proposed Conditions)

The post-development conditions were analyzed at the same discharge points as the pre-development conditions. The post-development watersheds are delineated on the accompanying "Post-Development Watershed and Soils Plan". Modifications to the delineated areas and associated ground cover were made to sub-catchments to account for the improvements to the property.

The purpose of this project is to subdivide the existing lot at 86 Farm Lane into three lots and install a new road for the two newly created lots behind the existing home. The existing home is to remain and access is provided by Farm Lane. This project includes the design of the new road but does not include design for the development of the two new lots. Stormwater management areas will be installed on both of the new lots to control stormwater flows from the new lots and road. A drainage easement will granted to the City for maintenance of the stormwater infrastructure.

Impervious areas for the three lots was estimated/assumed to properly size the stormwater infrastructure. The impervious area for Lot 1, which includes the existing home, patio and driveway, is estimated to be 5,685 S.F.

For the two undeveloped lots, conceptual homes and driveways are shown. Conceptual house footprints were determined by sizing the home close to the maximum allowable building footprint (20%) for the lot. Both homes are assumed to have a footprint of 2,000 S.F. which is less than 20% for each lot. Conceptual driveways are designed to meet City of Portsmouth driveway standards and provide access to the conceptual homes.

Based on these assumptions, if the impervious area for any of the lots exceeds the impervious area assumed than an individual stormwater management plan for the lot will be required. Total impervious area assumed for Lot 2 is 2,710 S.F. and for Lot 3 it is 3,220 S.F.

As shown on the attached Post-Development Watershed and Soils Plan, the site was divided into five post-development sub-catchment areas. The catchment (1) that contributes to POA #1 in the pre-development conditions was reduced in size and remains the only catchment contributing to this POA. The catchment (2) that contributes to POA #2 in the pre-development conditions was reduced in size and remains the only catchment contributing to this POA.

The catchment (3) that contributes to POA #3 in the pre-development conditions was reduced in size and remains the only catchment contributing to this POA. This catchment includes the existing natural depression identified in the pre-development conditions that is POA #3. The natural depression will be expanded within the limits of the existing lot and yard drain connected

to the City's drainage system will be installed. No changes to the natural depression shall occur on abutting property. Furthermore, **Table 2** below shows the difference in water elevation in the natural depression from pre to post conditions. This table demonstrates that the water level in the depression will not be adversely affected in post-development conditions.

In the pre-development conditions, no existing flows from the lot are contributing to POA #4, however, post-development conditions redirect a considerable amount of the analysis area to this POA. Catchments 4.1 and 4.2 contribute directly to POA #4 in post-development conditions; these catchments include the majority of the proposed roadway, the bioretention cell and deep sump catch basin. POA #3 indirectly contributes to POA #4 as well, through the utilization of the yard drain to be installed in the natural depression and connected into the closed drainage system discharging to the City's drain manhole (POA #4). No flows from POA #3 are expected to discharge to the City's drainage system up to the 25-year storm. The yard drain is being utilized as an emergency backup to protect abutting properties. Stormwater treatment is being achieved through the use of an infiltration pond, bioretention cell and deep sump catch basins. Stone drip edges may be installed around the homes for Lots 2 and 3 to provide additional stormwater management and treatment but are not required as part of the designed stormwater management.

Site topography, existing features, proposed site improvements, proposed grading, drainage and erosion control measures are shown on the accompanying plan set. Recommended erosion control measures are based upon the latest edition of the "*New Hampshire Stormwater Manual* prepared by NHDES and Comprehensive Environmental, Inc. as amended.

CALCULATION METHODS

The drainage study was completed using the USDA SCS TR-20 Method within the HydroCAD Stormwater Modeling System. Reservoir routing was performed with the Dynamic Storage Indication method with automated calculation of tailwater conditions. A Type III 24-hour rainfall distribution was utilized in analyzing the data for the 2, 10, & 25 - 24-hour storm events using rainfall data provided by the Northeast Regional Climate Center (NRCC). As the project site lies within a Coastal and Great Bay Community identified by NHDES Alteration of Terrain, all rainfall amounts were increased by 15% to account for potential future increases in rainfall due to climate change. A time span of 0 to 48 hours was analyzed at 0.01-hour increments.

Disclaimer

Altus Engineering notes that stormwater modeling is limited in its capacity to precisely predict peak rates of runoff and flood elevations. Results should not be considered to represent actual storm events due to the number of variables and assumptions involved in the modeling effort. Surface roughness coefficients (n), entrance loss coefficients (ke), velocity factors (kv) and times of concentration (Tc) are based on subjective field observations and engineering judgment using available data. For design purposes, curve numbers (Cn) describe the average conditions. However, curve numbers will vary from storm to storm depending on the antecedent runoff conditions (ARC) including saturation and frozen ground. Also, higher water elevations than predicted by modeling could occur if drainage channels, closed drain systems or culverts are not maintained and/or become blocked by debris before and/or during a storm event as this will impact flow capacity of the structures. Structures should be re-evaluated if future changes occur within relevant drainage areas in order to assess any required design modifications.

Drainage Analysis

A complete summary of the drainage model is included in the appendix of this report. **Table 1** below compares pre- and post-development peak rates at the Points of Analysis identified on the plans for the 2, 10 & 25-year storm events. **Table 2** below compares the water elevation in the existing natural depression from pre- to post-development conditions for the 2, 10 & 25-year storm events.

Table 1 - Stormwater Modeling Summary
Peak Q (cfs) for Type III 24-Hour Storm Events

	2-Year Storm (3.06-inch)	10-Year Storm (5.59-inch)	25-Year Storm (7.08-inch)
POA 1			
PRE	0.17	0.93	1.49
POST	0.02	0.07	0.11
CHANGE	-0.15	-0.86	-1.38
POA 2			
PRE	0.00	0.05	0.18
POST	0.00	0.02	0.08
CHANGE	0.00	-0.03	-0.10
POA 3			
PRE	0.00	0.00	0.00
POST	0.00	0.00	0.00
CHANGE	0.00	0.00	0.00
POA 4			
PRE	0.00	0.00	0.00
POST	0.18	1.86	3.44
CHANGE	0.18	1.86	3.44

As the above **Table 1** demonstrates, the proposed peak rates of runoff at all points of analysis will match or be decreased from the existing conditions for POA's #1, 2 & 3. POA #4 will have an increased peak rate of runoff as no runoff contributed to this area in the pre-development conditions. The City drainage system that is receiving the flow at POA #4 is a culvert that is located perpendicular to the paper street and connects a low-lying area on the northeast side of the paper street to the southwest side of the street. Based on the City's GIS layers, this drainage system appears to collect several other upstream catchments, consisting of both closed and open drainage systems. Altus Engineering believes that the City drainage system can handled the minor increase in flow rate at POA #4.

Table 2 – Stormwater Elevation Comparison
Natural Depression Water Elevation for Type III 24-Hour Storm Events

Storm Size	Pre-Development Peak Elevation (ft)	Post-Development Peak Elevation (ft)	Change in Elevation (ft)
2-Year	38.04	38.00	-0.04
10-Year	39.00	38.48	-0.52
25-Year	39.69	38.96	-0.73

Table 2 above demonstrates that the water elevation in the modified natural depression will not be adversely affected by the proposed improvements and that water levels will remain close to or less than pre-development conditions.

CONCLUSION

This proposed development of the property located at 86 Farm Lane in Portsmouth, New Hampshire will not have adverse effect on abutting properties and infrastructure as a result of stormwater runoff or siltation. Additionally, runoff from impervious surfaces will be treated using the infiltration pond, bioretention cell and deep sump catch basin to improve the quality of runoff leaving the site. Appropriate steps will be taken to properly mitigate erosion and sedimentation through the use of temporary and permanent Best Management Practices for sediment and erosion control.

Section 2

Aerial Photo and USGS Map

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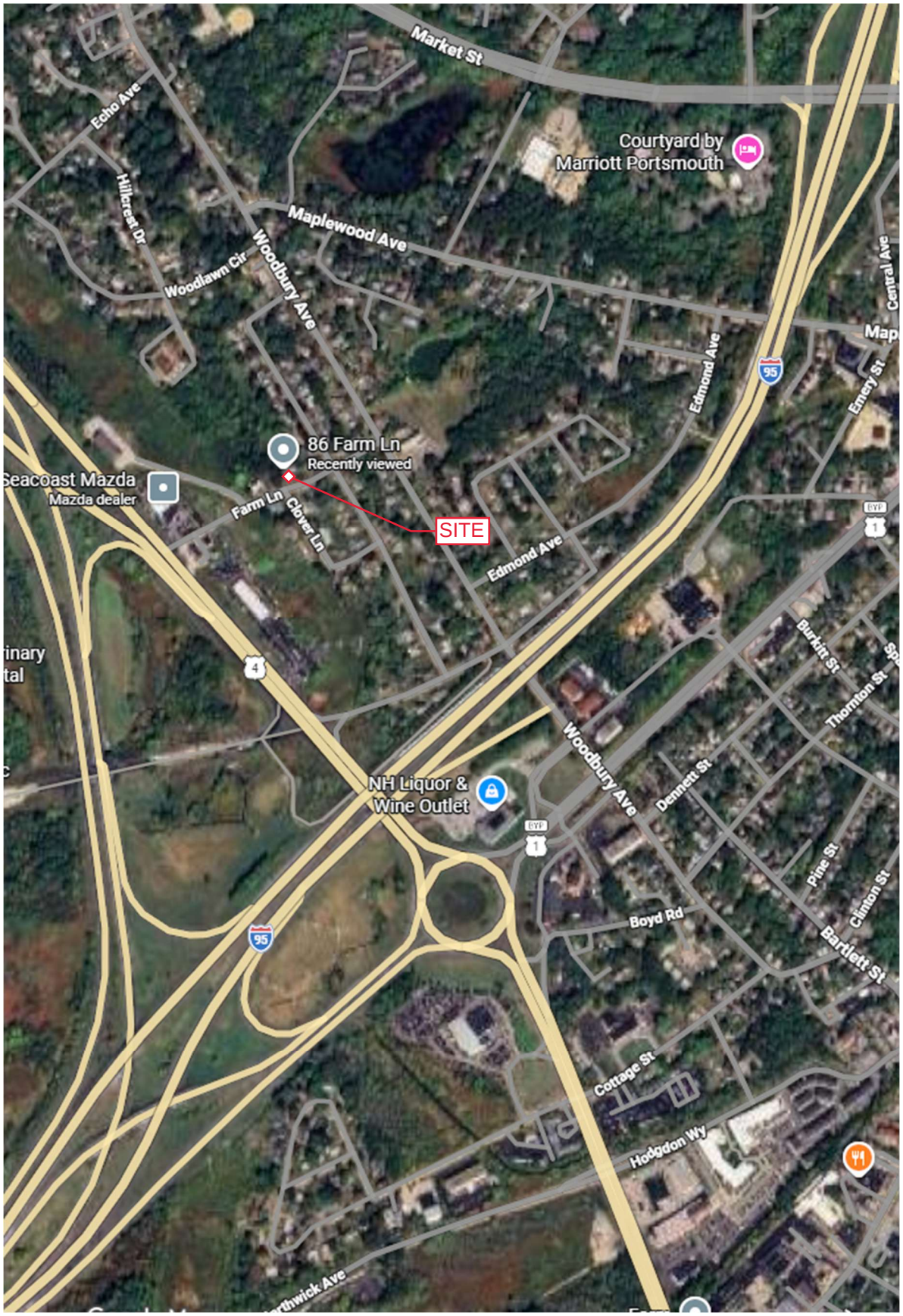
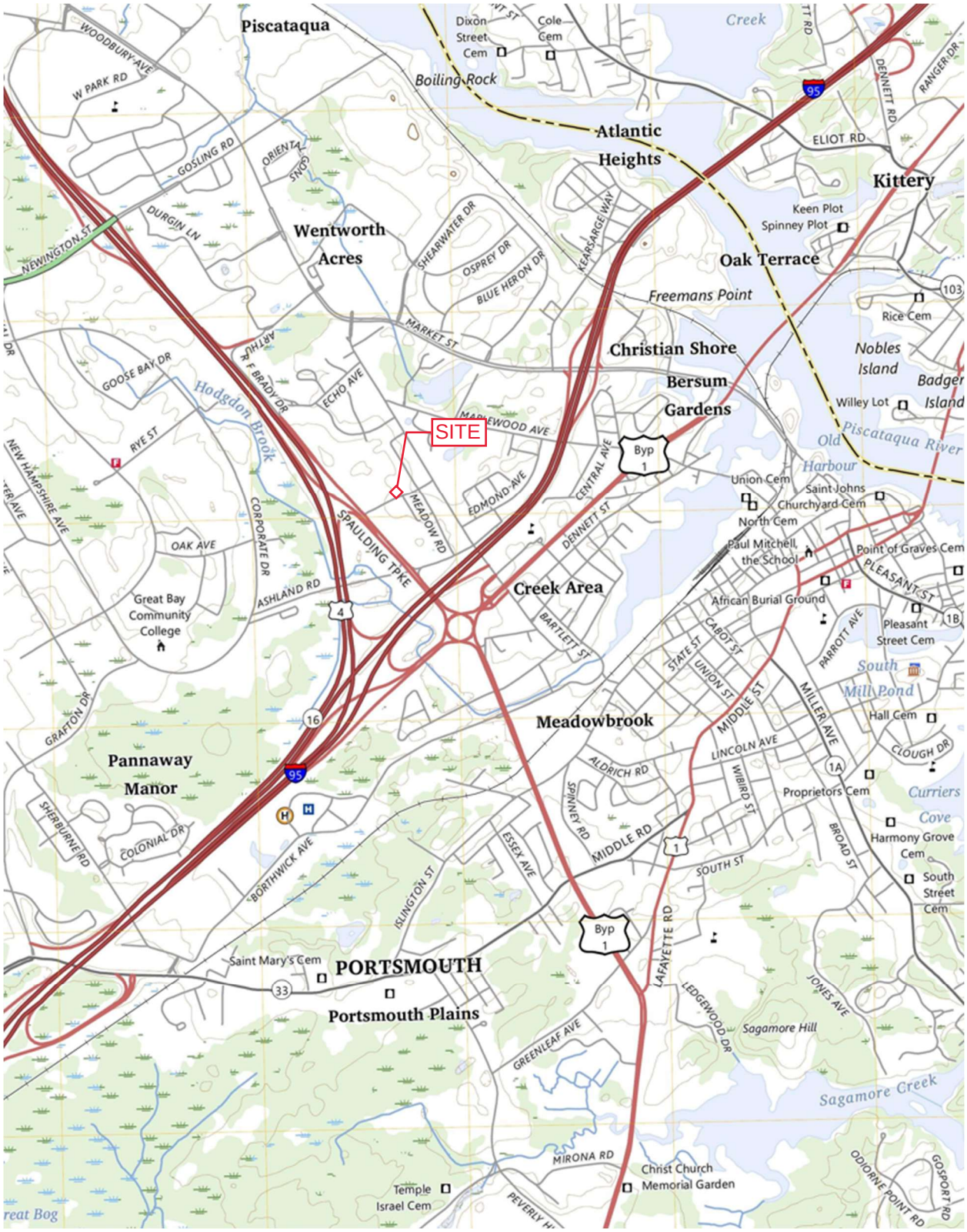

Market St
Echo Ave
Hillcrest Dr
Woodlawn Cir
Woodbury Ave
Maplewood Ave
Courtyard by
Marriott Portsmouth
Edmond Ave
Central Ave
Emery St
95
86 Farm Ln
Recently viewed
Seacoast Mazda
Mazda dealer
Farm Ln
Clover Ln
SITE
Edmond Ave
BYP
1
4
Burkitt St
Thornton St
Woodbury Ave
NH Liquor &
Wine Outlet
Dennett St
Pine St
Clinton St
Boyd Rd
Bartlett St
Cottage St
Hodgdon Wy


SITE
Piscataqua
Boiling Rock
Atlantic Heights
Kittery
Wentworth Acres
Oak Terrace
Freemans Point
Christian Shore
Bersum Gardens
Nobles Island
Badger Island
Old Piscataqua River
Harbour
Creek Area
Meadowbrook
Pannaway Manor
PORTSMOUTH
Portsmouth Plains
Great Bay Community College
Hodgdon Brook
South Mill Pond
Curriers Cove
Sagamore Hill
Sagamore Creek
Dixon Street Cem
Cole Cem
Keen Plot
Spinney Plot
Rice Cem
Willey Lot
Union Cem
Saint Johns Churchyard Cem
North Cem
Paul Mitchell, the School
Point of Graves Cem
African Burial Ground
Pleasant Street Cem
Hall Cem
Proprietors Cem
Harmony Grove Cem
South Street Cem
Saint Mary's Cem
Temple Israel Cem
Christ Church Memorial Garden
Byp 1
WOODBURY AVE
W PARK RD
GOSLING RD
DURGIN LN
NEWINGTON ST
ORIENTAL GDNS
SHEARWATER DR
OSPREY DR
BLUE HERON DR
KEARSARGE WAY
MARKET ST
ARTHUR R F BRADY DR
ECHO AVE
GOOSE BAY DR
RYE ST
NEW HAMPSHIRE AVE
OAK AVE
CORPORATE DR
ASHLAND RD
SPAULDING TPKE
MEADOW RD
EDMOND AVE
CENTRAL AVE
DENNETT ST
BARTLETT ST
STATE ST
CABOT ST
UNION ST
MIDDLE ST
MILLER AVE
PARROTT AVE
PLEASANT ST
LINCOLN AVE
WIBIRD ST
ALDRICH RD
SPINNEY RD
MIDDLE RD
SOUTH ST
BROAD ST
CLOUGH DR
GRAFTON DR
SHERBURNE RD
COLONIAL DR
BORTHWICK AVE
ISLINGTON ST
ESSEX AVE
LAFAYETTE RD
LEDGEWOOD DR
JONES AVE
GREENLEAF AVE
MIRONA RD
PEVERLY HILL
ODIORNE POINT RD
GOSPORT RD
ELIOT RD
DENNETT RD
RANGER DR
95
103
4
16
1
1A
1B
33

Section 3

Drainage Calculations

Pre-Development:
2-Year, 24-Hour Summary
10-Year, 24-Hour Complete
25-Year, 24-Hour Summary

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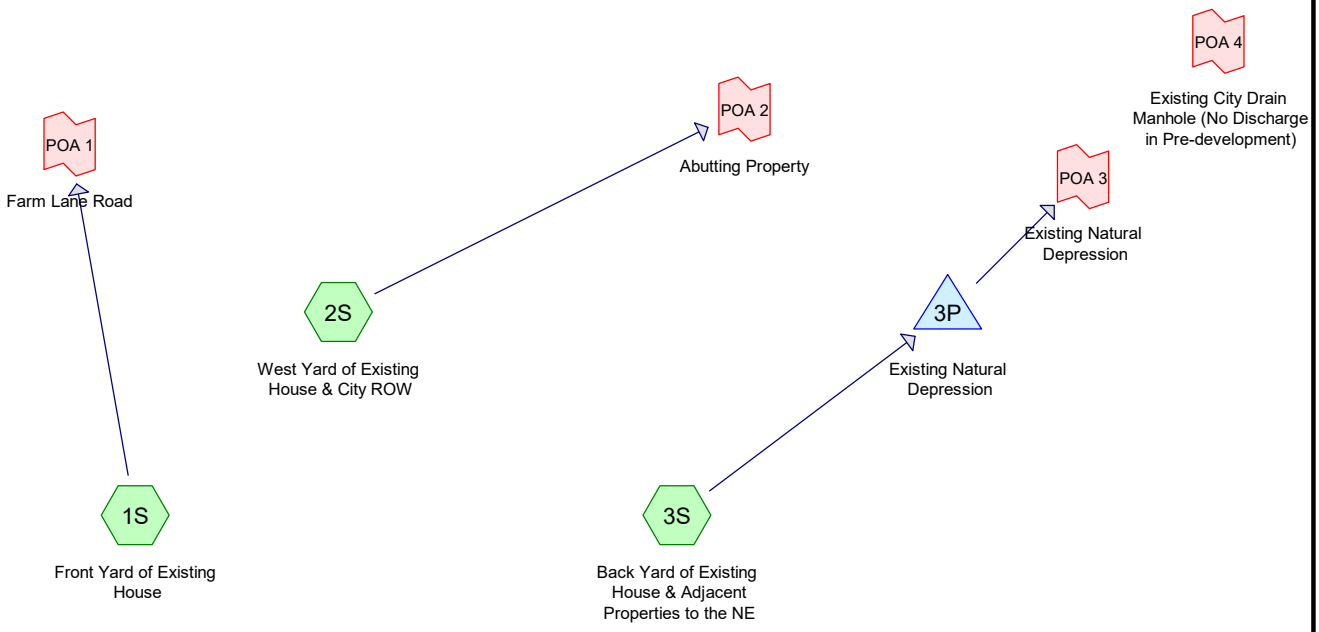


Subcat Reach Pond Link

Routing Diagram for 5719-PRE
Prepared by Altus Engineering, Printed 2/10/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Front Yard of Existing Runoff Area=18,227 sf 43.70% Impervious Runoff Depth=0.50"
Flow Length=296' Tc=6.0 min CN=64 Runoff=0.17 cfs 0.017 af

Subcatchment 2S: West Yard of Existing Runoff Area=10,114 sf 11.00% Impervious Runoff Depth=0.01"
Flow Length=215' Tc=6.0 min CN=42 Runoff=0.00 cfs 0.000 af

Subcatchment 3S: Back Yard of Existing Runoff Area=69,276 sf 11.36% Impervious Runoff Depth=0.01"
Flow Length=407' Tc=6.0 min CN=43 Runoff=0.00 cfs 0.002 af

Pond 3P: Existing Natural Depression Peak Elev=38.04' Storage=19 cf Inflow=0.00 cfs 0.002 af
Outflow=0.00 cfs 0.002 af

Link POA 1: Farm Lane Road Inflow=0.17 cfs 0.017 af
Primary=0.17 cfs 0.017 af

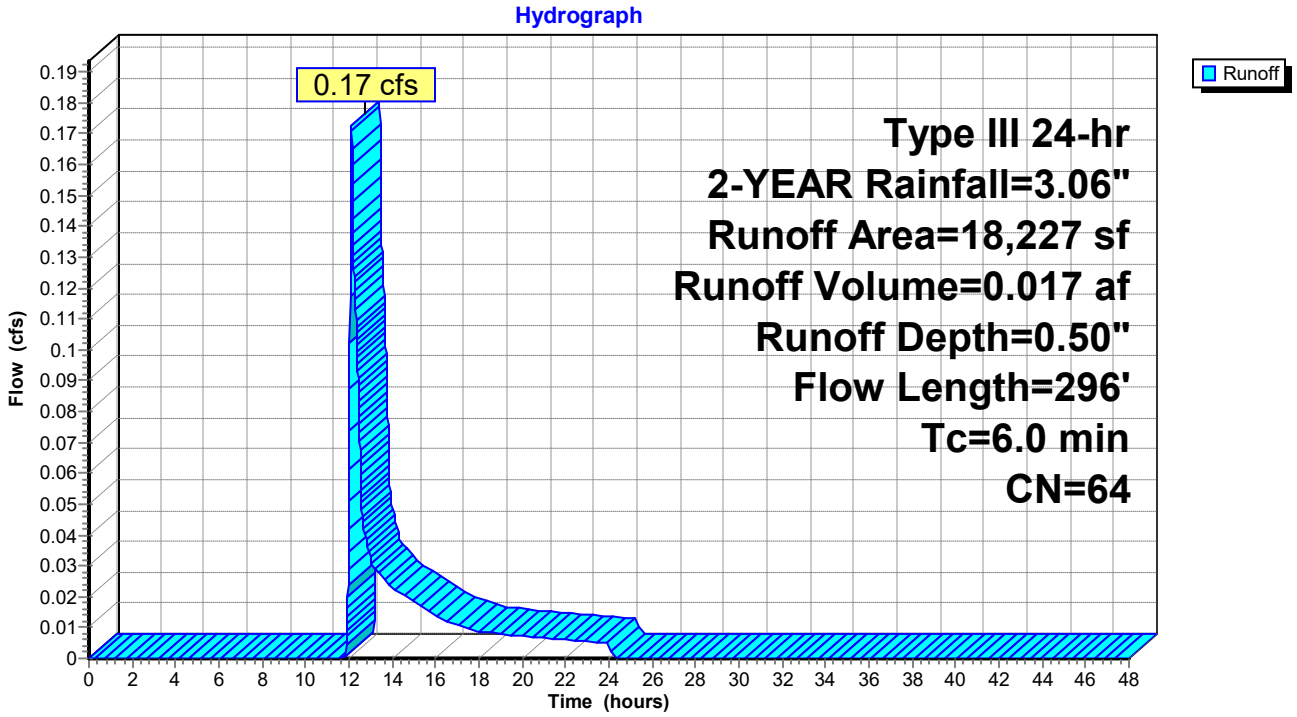
Link POA 2: Abutting Property Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link POA 3: Existing Natural Depression Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

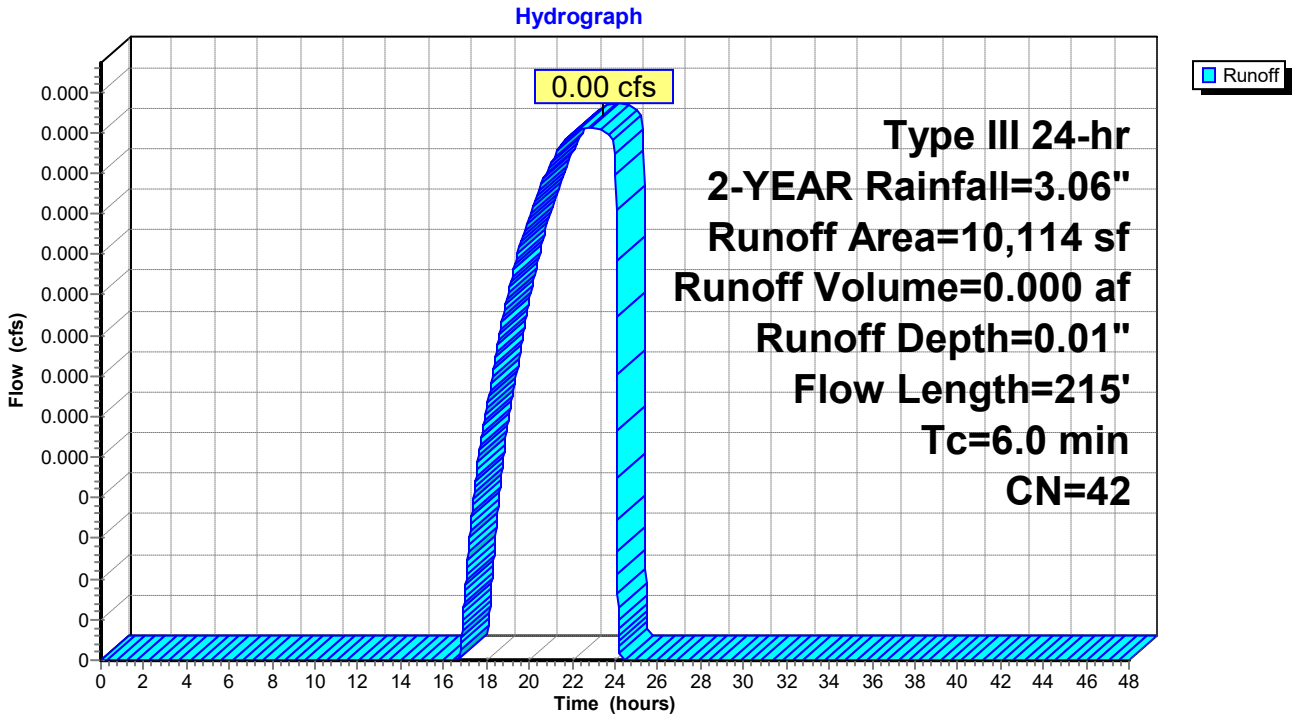
Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)
Primary=0.00 cfs 0.000 af

Total Runoff Area = 2.241 ac Runoff Volume = 0.019 af Average Runoff Depth = 0.10"
82.64% Pervious = 1.852 ac 17.36% Impervious = 0.389 ac

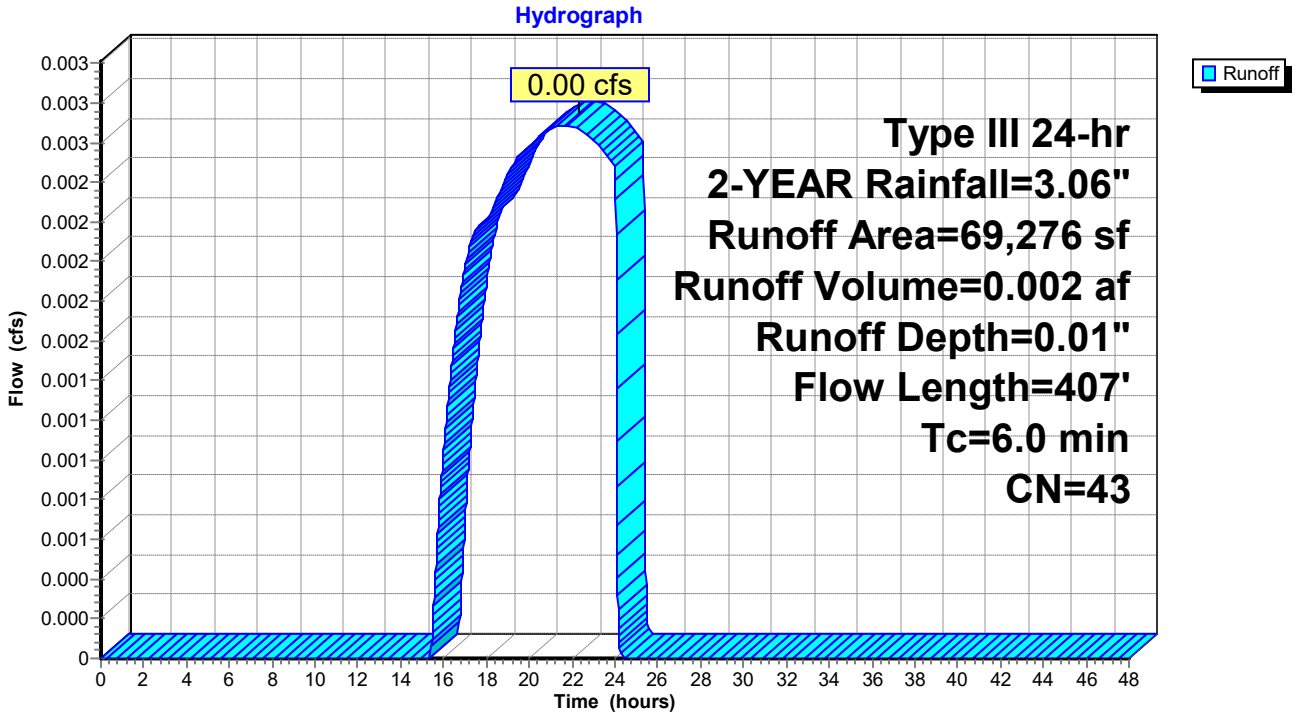
Subcatchment 1S: Front Yard of Existing House



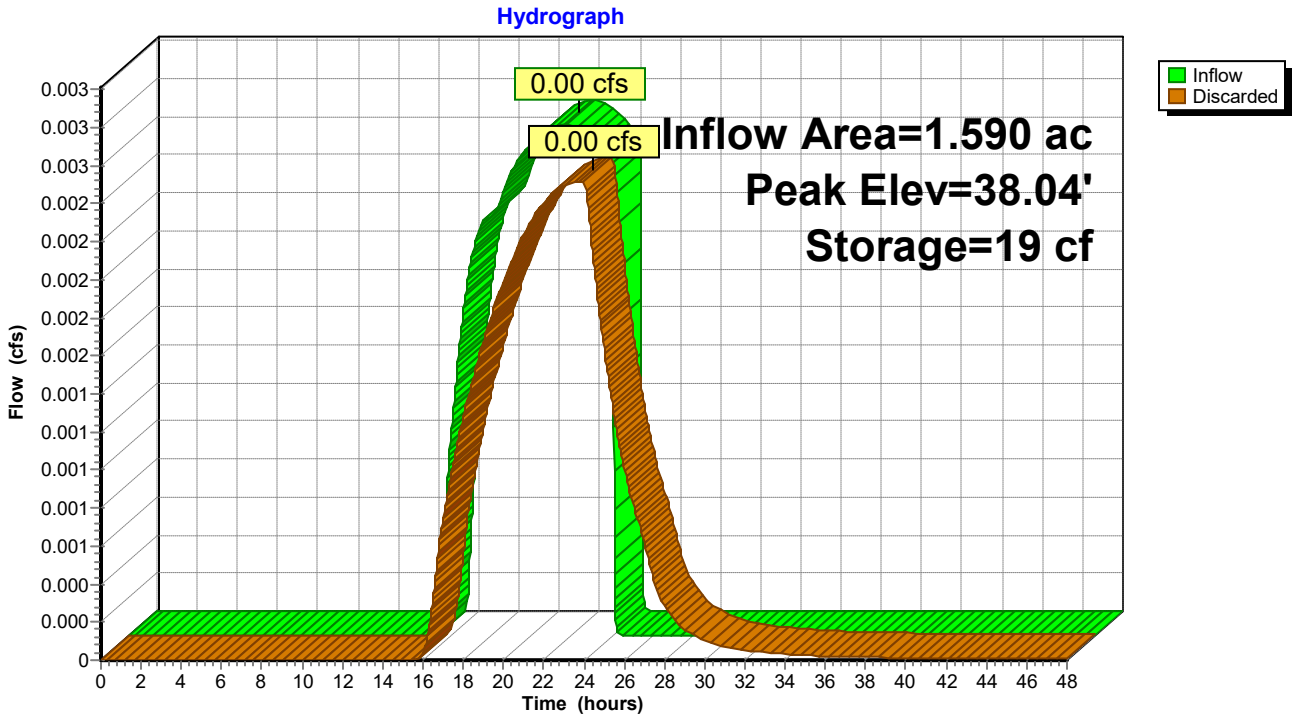
Subcatchment 2S: West Yard of Existing House & City ROW



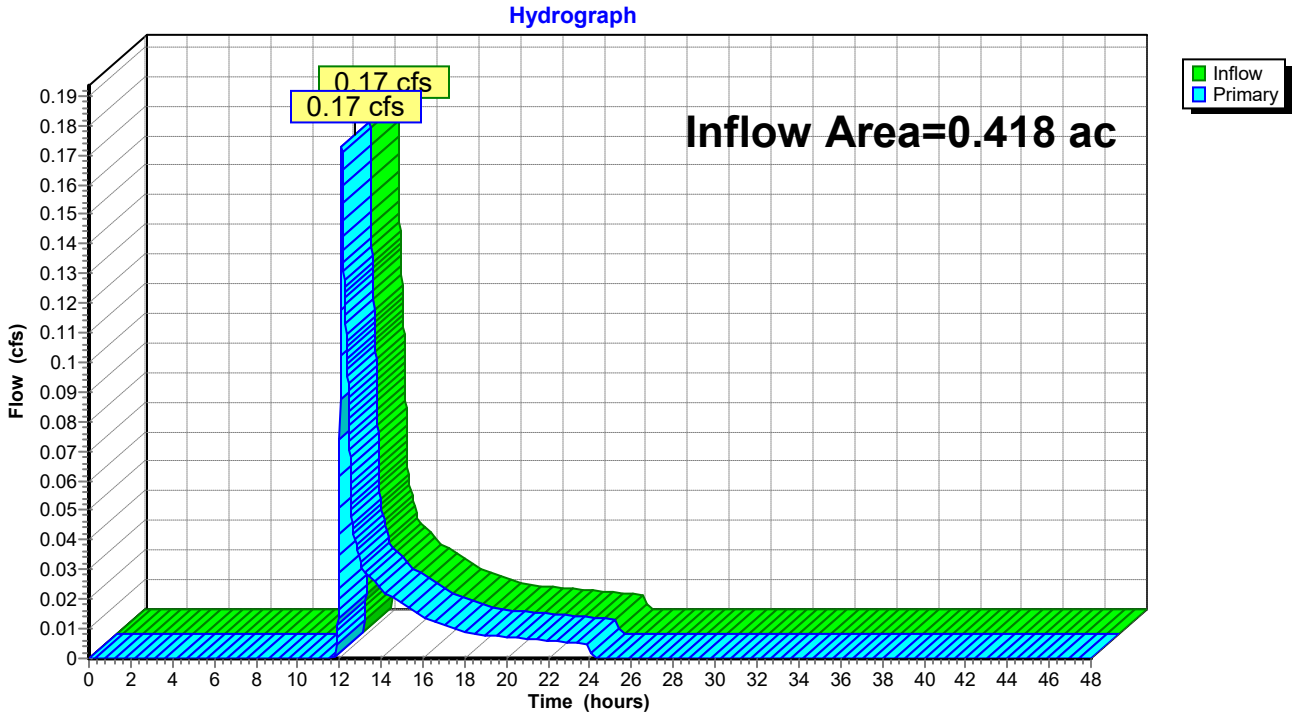
Subcatchment 3S: Back Yard of Existing House & Adjacent Properties to the NE



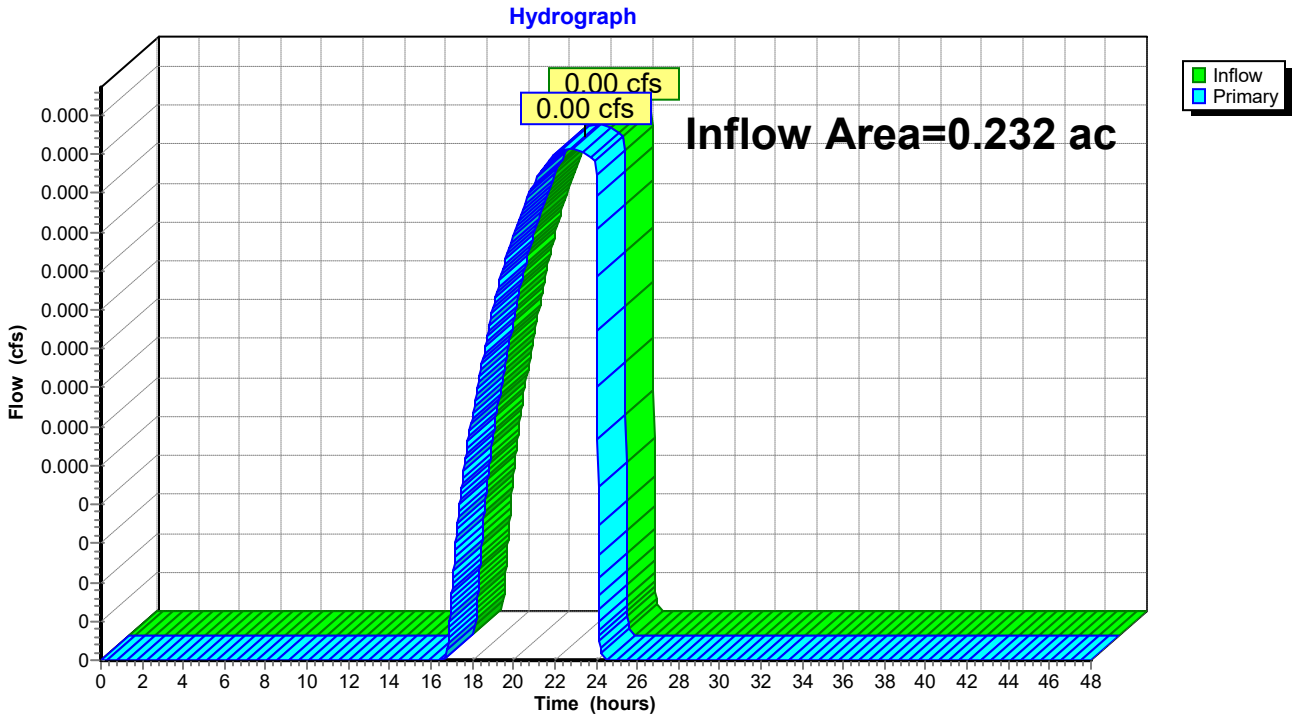
Pond 3P: Existing Natural Depression



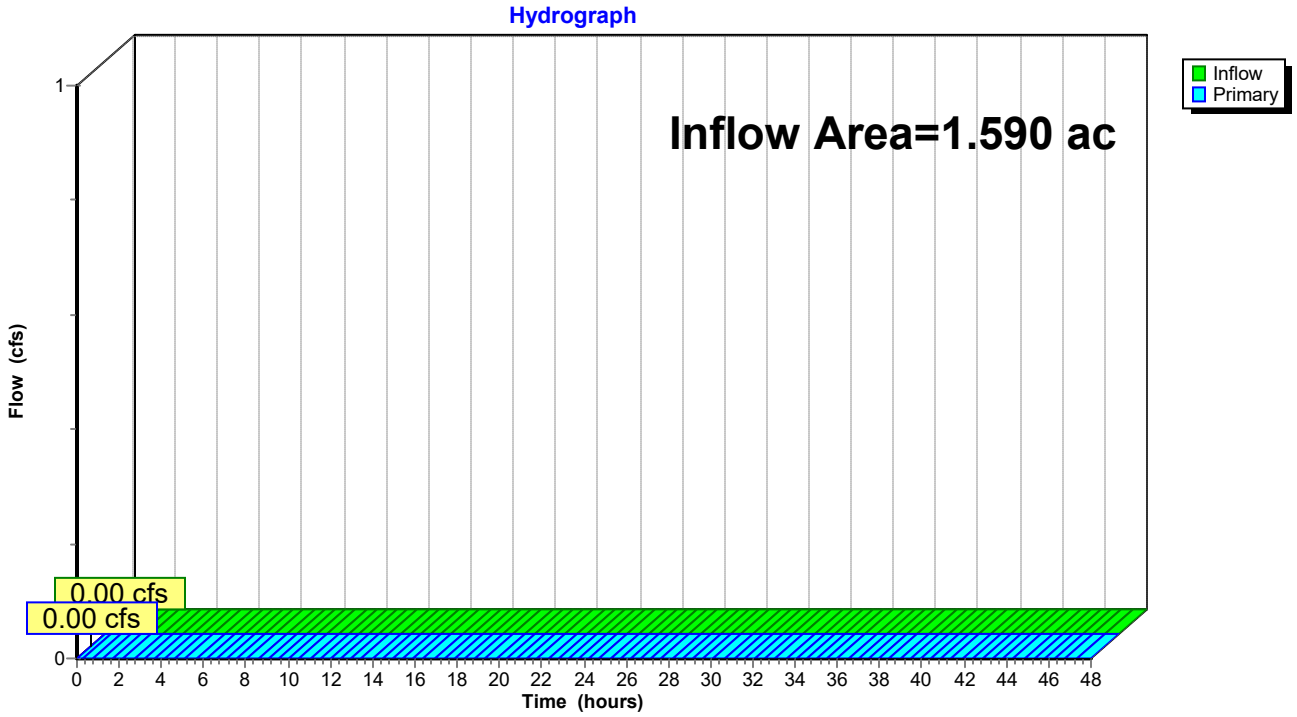
Link POA 1: Farm Lane Road



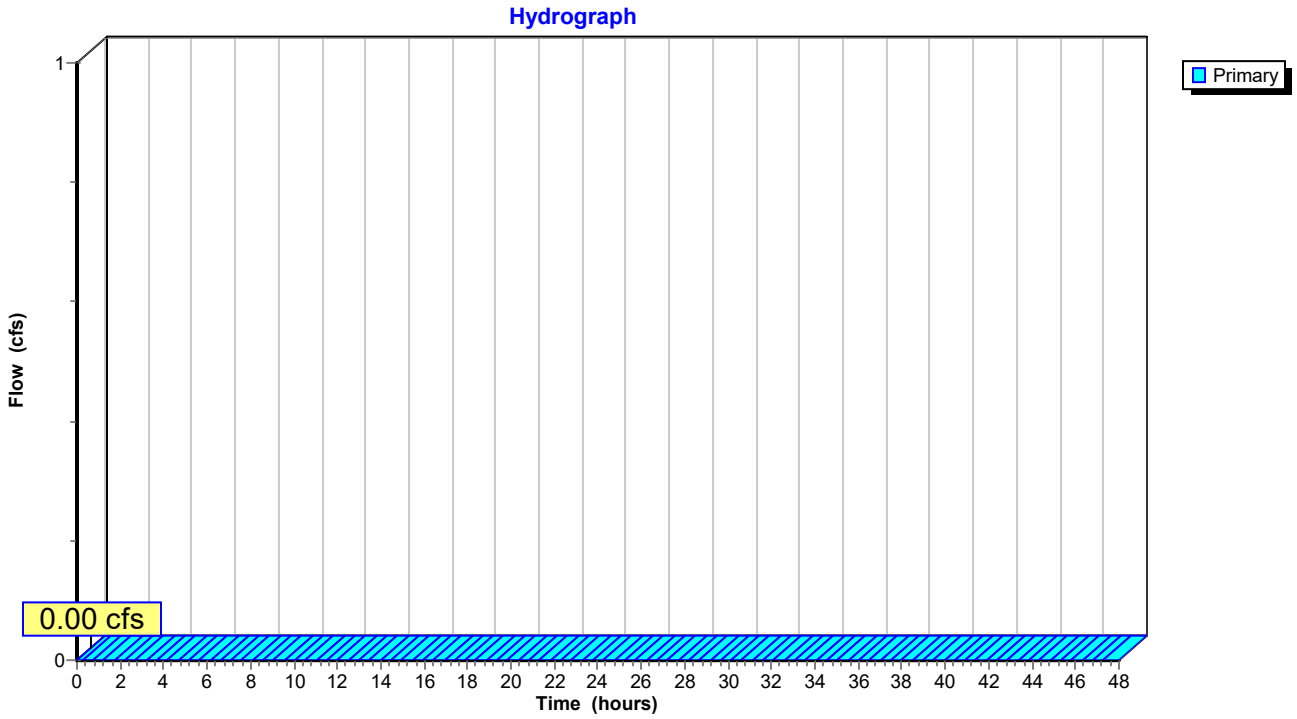
Link POA 2: Abutting Property

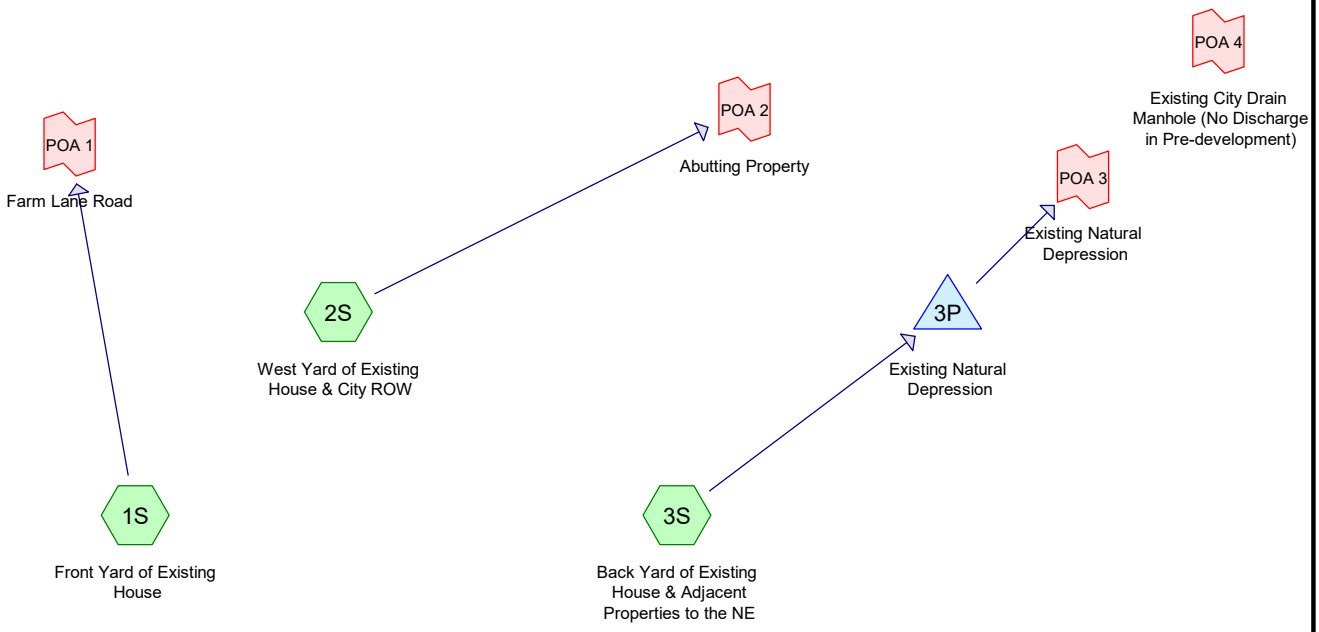


Link POA 3: Existing Natural Depression



Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)





Subcat Reach Pond Link

Routing Diagram for 5719-PRE
Prepared by Altus Engineering, Printed 2/10/2026
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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.201	39	>75% Grass cover, Good, HSG A (1S, 2S, 3S)
0.253	98	Paved parking, HSG A (1S, 2S, 3S)
0.136	98	Roofs, HSG A (1S, 2S, 3S)
0.651	30	Woods, Good, HSG A (1S, 2S, 3S)
2.241	**47**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
2.241	HSG A	1S, 2S, 3S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
2.241		**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Front Yard of Existing Runoff Area=18,227 sf 43.70% Impervious Runoff Depth=1.98"
Flow Length=296' Tc=6.0 min CN=64 Runoff=0.93 cfs 0.069 af

Subcatchment 2S: West Yard of Existing Runoff Area=10,114 sf 11.00% Impervious Runoff Depth=0.48"
Flow Length=215' Tc=6.0 min CN=42 Runoff=0.05 cfs 0.009 af

Subcatchment 3S: Back Yard of Existing Runoff Area=69,276 sf 11.36% Impervious Runoff Depth=0.53"
Flow Length=407' Tc=6.0 min CN=43 Runoff=0.40 cfs 0.071 af

Pond 3P: Existing Natural Depression Peak Elev=39.00' Storage=913 cf Inflow=0.40 cfs 0.071 af
Outflow=0.09 cfs 0.071 af

Link POA 1: Farm Lane Road Inflow=0.93 cfs 0.069 af
Primary=0.93 cfs 0.069 af

Link POA 2: Abutting Property Inflow=0.05 cfs 0.009 af
Primary=0.05 cfs 0.009 af

Link POA 3: Existing Natural Depression Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)
Primary=0.00 cfs 0.000 af

Total Runoff Area = 2.241 ac Runoff Volume = 0.149 af Average Runoff Depth = 0.80"
82.64% Pervious = 1.852 ac 17.36% Impervious = 0.389 ac

Summary for Subcatchment 1S: Front Yard of Existing House

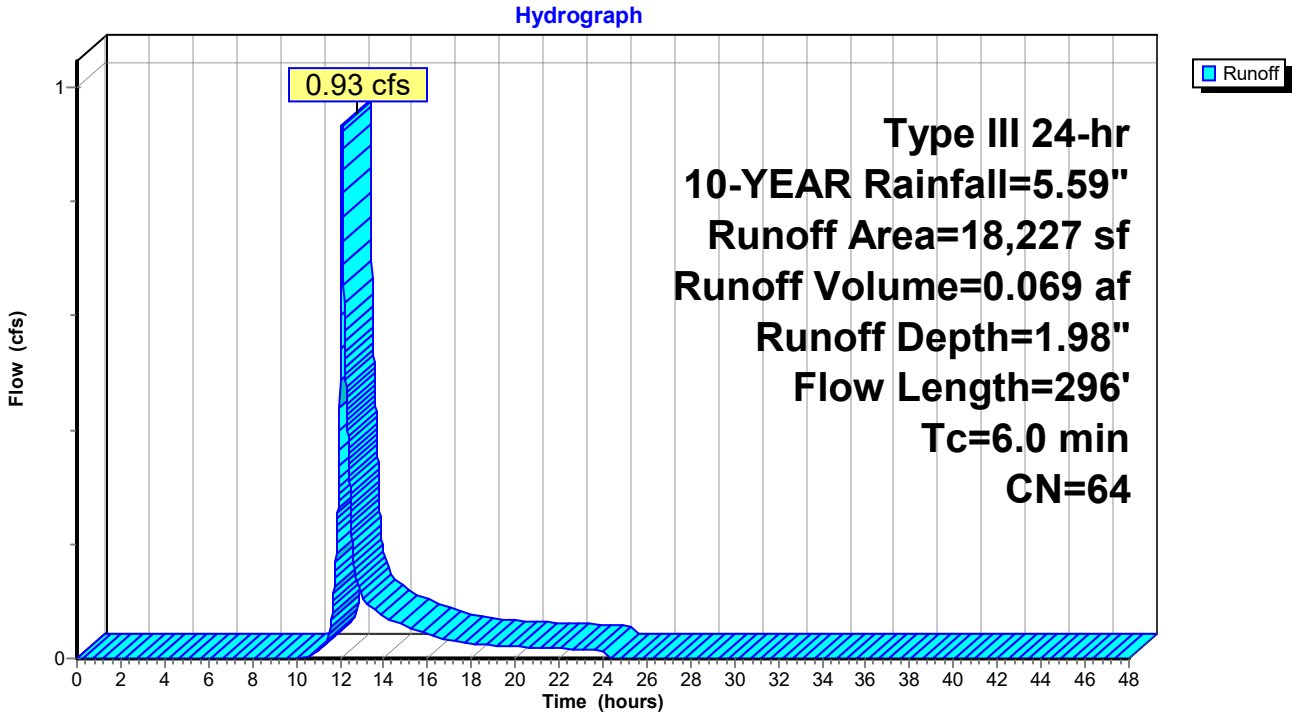
Runoff = 0.93 cfs @ 12.09 hrs, Volume= 0.069 af, Depth= 1.98"
Routed to Link POA 1 : Farm Lane Road

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

Area (sf)	CN	Description
1,635	98	Roofs, HSG A
6,330	98	Paved parking, HSG A
8,838	39	>75% Grass cover, Good, HSG A
1,424	30	Woods, Good, HSG A
18,227	64	Weighted Average
10,262		56.30% Pervious Area
7,965		43.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	13	0.5000	3.24		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06"
0.4	62	0.1130	2.35		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.2	15	0.1000	1.58		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	30	0.0580	1.69		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.5	110	0.0340	3.74		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.4	25	0.0200	0.99		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	12	0.0210	2.33		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.2	21	0.0600	1.71		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	8	0.0130	2.31		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
2.3	296	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 1S: Front Yard of Existing House



Summary for Subcatchment 2S: West Yard of Existing House & City ROW

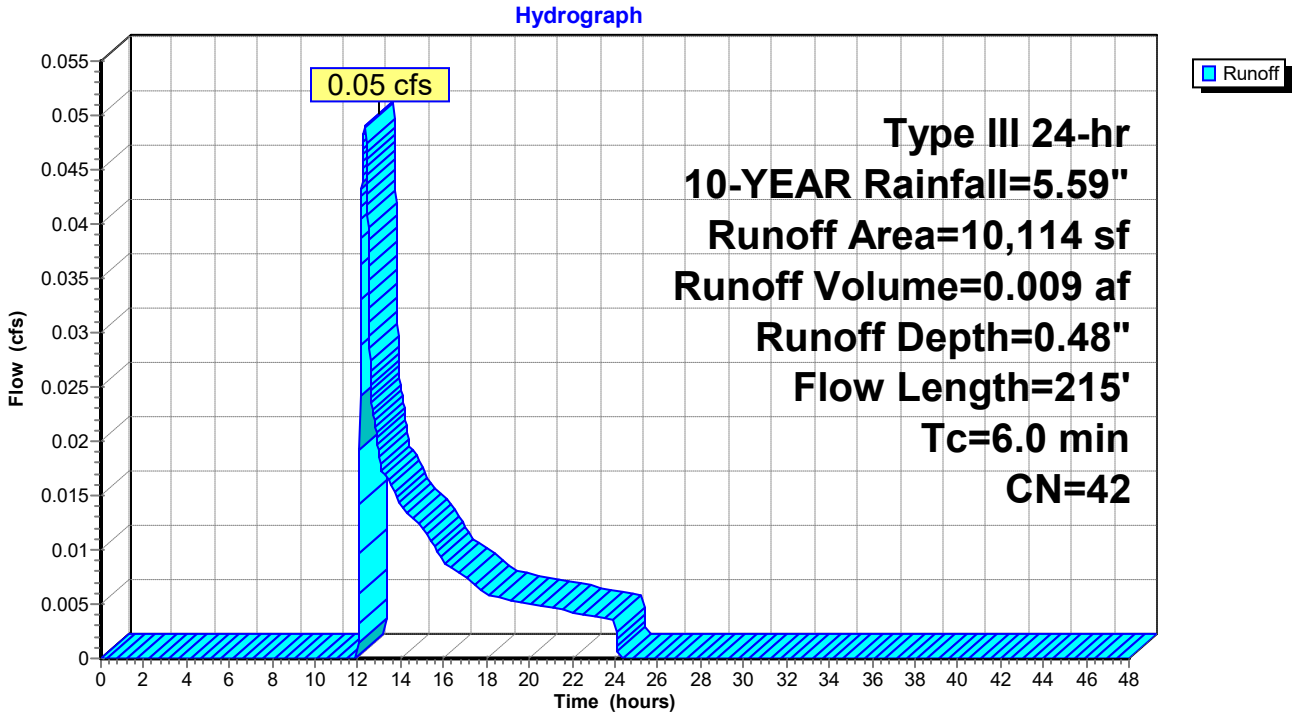
Runoff = 0.05 cfs @ 12.31 hrs, Volume= 0.009 af, Depth= 0.48"
Routed to Link POA 2 : Abutting Property

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

Area (sf)	CN	Description
184	98	Roofs, HSG A
929	98	Paved parking, HSG A
5,516	39	>75% Grass cover, Good, HSG A
3,485	30	Woods, Good, HSG A
10,114	42	Weighted Average
9,001		89.00% Pervious Area
1,113		11.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	13	0.5000	3.24		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06"
0.5	56	0.0850	2.04		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	12	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.1	12	0.0420	1.43		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	11	0.0680	1.30		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.8	100	0.0880	2.08		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	11	0.1590	1.99		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.8	215	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 2S: West Yard of Existing House & City ROW



Summary for Subcatchment 3S: Back Yard of Existing House & Adjacent Properties to the NE

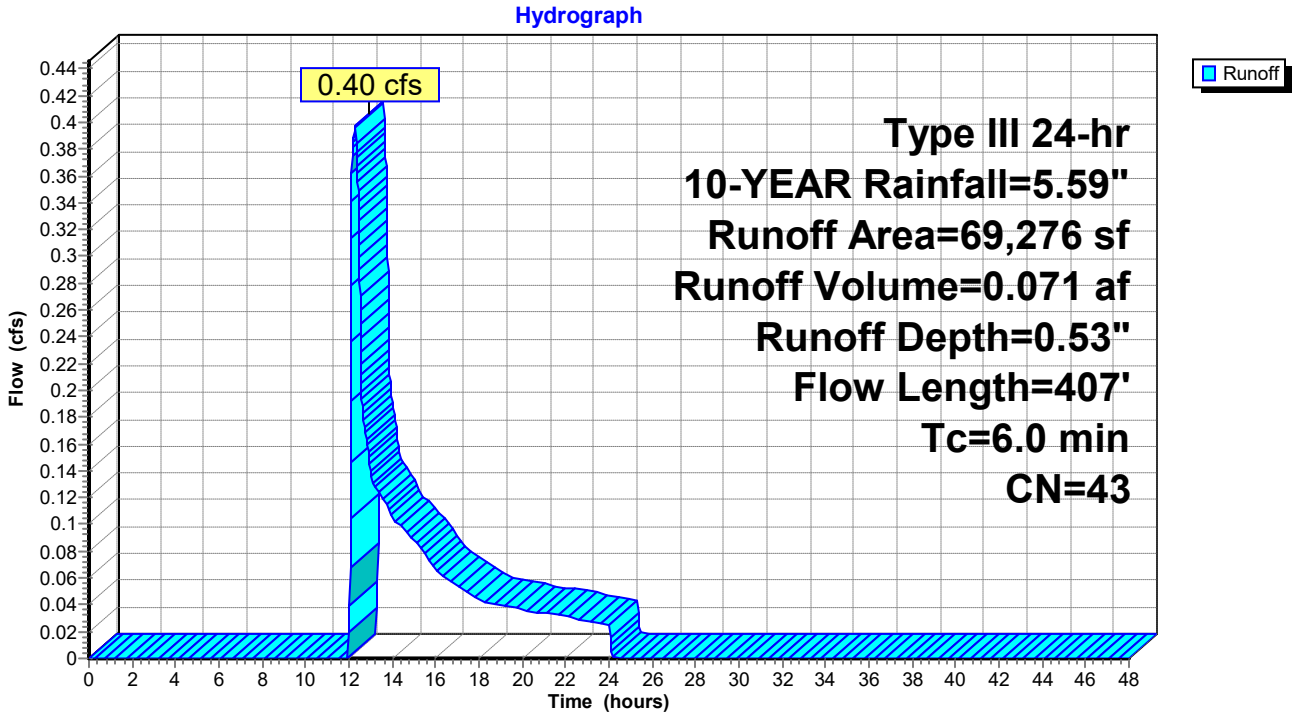
Runoff = 0.40 cfs @ 12.29 hrs, Volume= 0.071 af, Depth= 0.53"
Routed to Pond 3P : Existing Natural Depression

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

Area (sf)	CN	Description
4,095	98	Roofs, HSG A
3,772	98	Paved parking, HSG A
37,970	39	>75% Grass cover, Good, HSG A
23,439	30	Woods, Good, HSG A
69,276	43	Weighted Average
61,409		88.64% Pervious Area
7,867		11.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	10	0.5000	3.08		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06"
0.5	63	0.0990	2.20		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.5	42	0.0650	1.27		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.4	50	0.0800	1.98		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.8	48	0.0420	1.02		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	30	0.1170	2.39		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.0	108	0.0670	1.81		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.9	56	0.0450	1.06		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
4.4	407	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 3S: Back Yard of Existing House & Adjacent Properties to the NE



Summary for Pond 3P: Existing Natural Depression

Inflow Area = 1.590 ac, 11.36% Impervious, Inflow Depth = 0.53" for 10-YEAR event
Inflow = 0.40 cfs @ 12.29 hrs, Volume= 0.071 af
Outflow = 0.09 cfs @ 15.09 hrs, Volume= 0.071 af, Atten= 78%, Lag= 168.2 min
Discarded = 0.09 cfs @ 15.09 hrs, Volume= 0.071 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 39.00' @ 15.09 hrs Surf.Area= 1,452 sf Storage= 913 cf

Plug-Flow detention time= 163.4 min calculated for 0.071 af (100% of inflow)
Center-of-Mass det. time= 163.3 min (1,104.0 - 940.8)

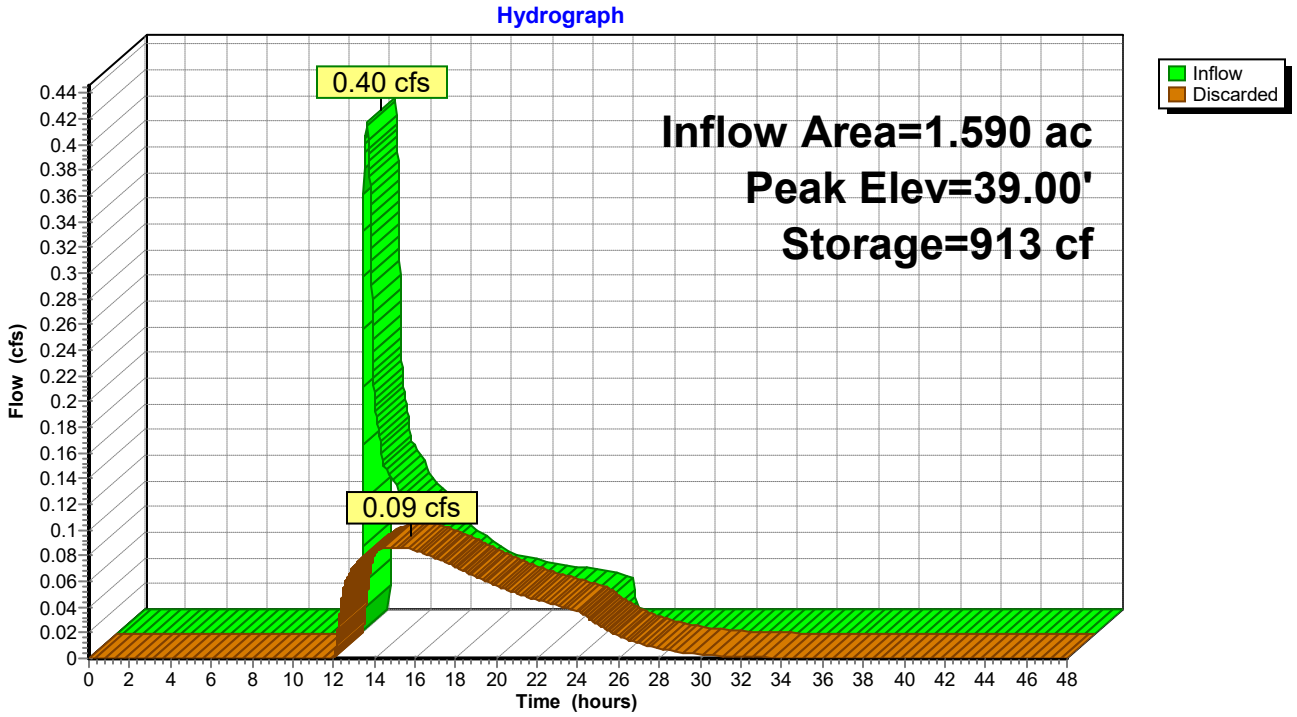
Volume	Invert	Avail.Storage	Storage Description
#1	38.00'	3,129 cf	**Existing Natural Depression (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
38.00	461	0	0	461
39.00	1,447	908	908	1,453
40.00	3,097	2,220	3,129	3,111

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.00'	**3.750 in/hr Exfiltration over Wetted area above 38.00'** Excluded Wetted area = 461 sf Phase-In= 0.01'

Discarded OutFlow Max=0.09 cfs @ 15.09 hrs HW=39.00' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.09 cfs)

Pond 3P: Existing Natural Depression

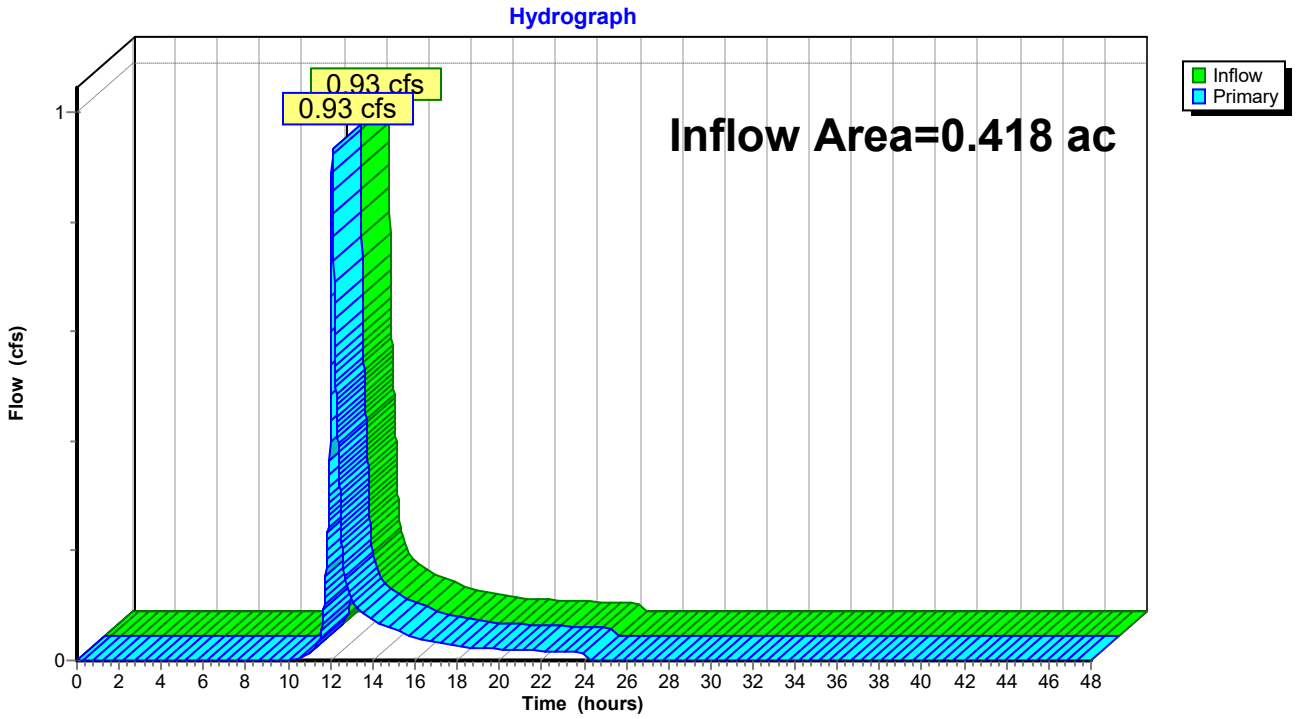


Summary for Link POA 1: Farm Lane Road

Inflow Area = 0.418 ac, 43.70% Impervious, Inflow Depth = 1.98" for 10-YEAR event
Inflow = 0.93 cfs @ 12.09 hrs, Volume= 0.069 af
Primary = 0.93 cfs @ 12.09 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link POA 1: Farm Lane Road

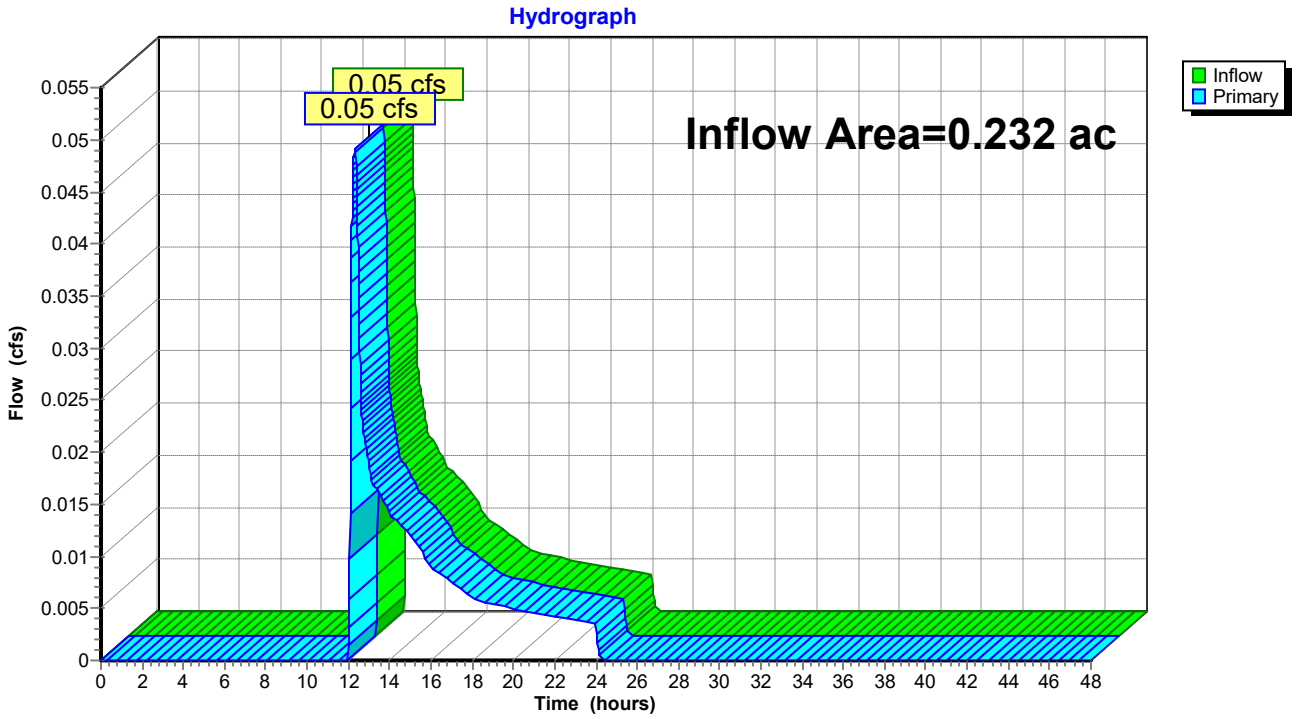


Summary for Link POA 2: Abutting Property

Inflow Area = 0.232 ac, 11.00% Impervious, Inflow Depth = 0.48" for 10-YEAR event
Inflow = 0.05 cfs @ 12.31 hrs, Volume= 0.009 af
Primary = 0.05 cfs @ 12.31 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link POA 2: Abutting Property

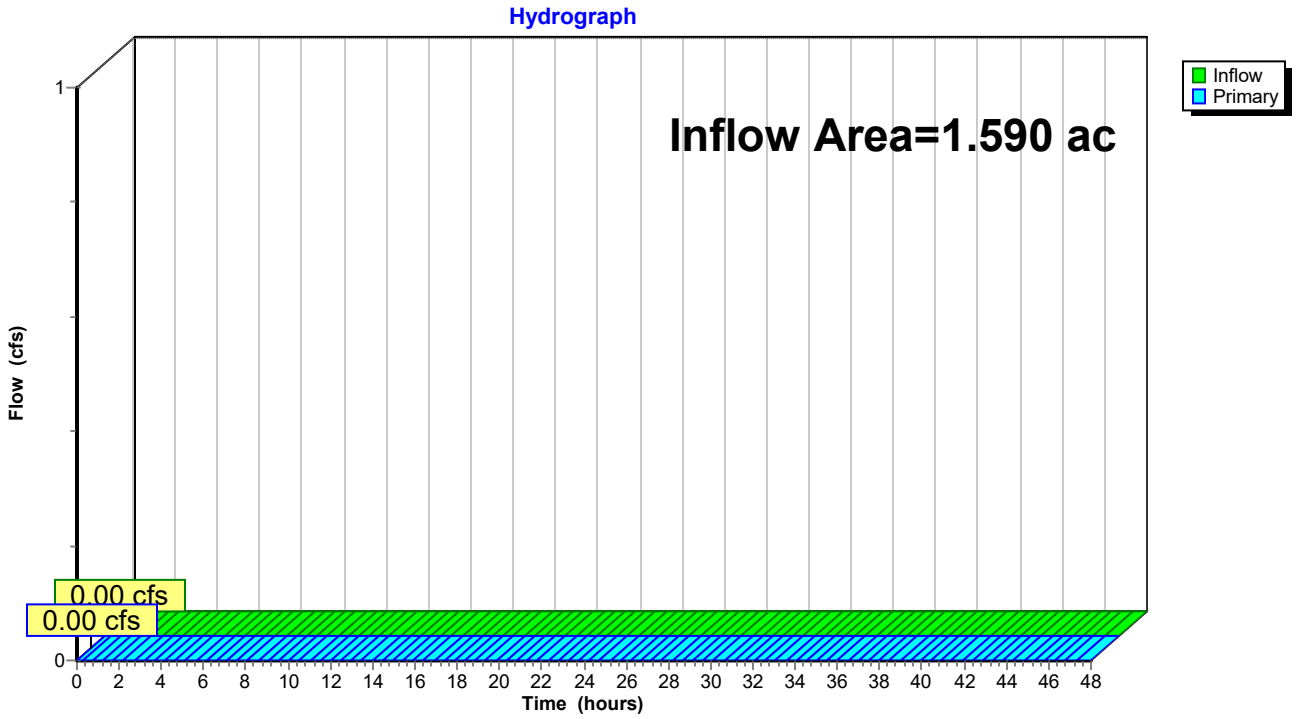


Summary for Link POA 3: Existing Natural Depression

Inflow Area = 1.590 ac, 11.36% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link POA 3: Existing Natural Depression

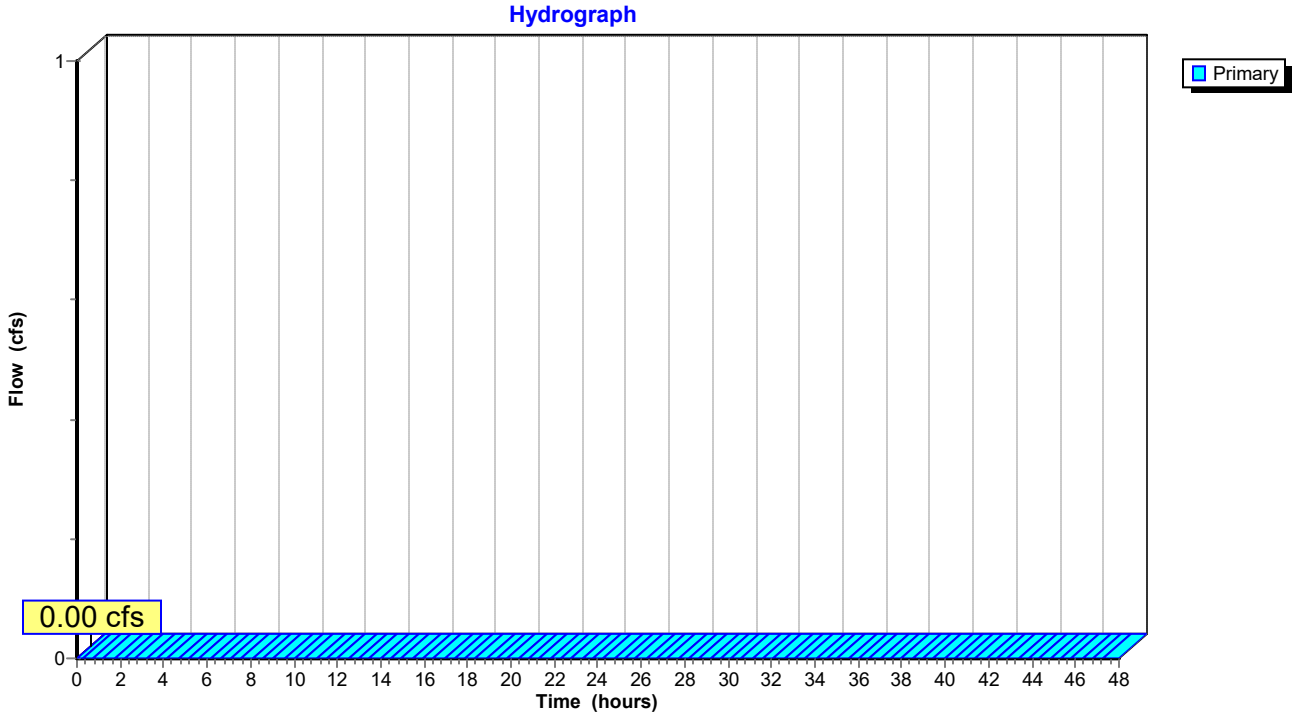


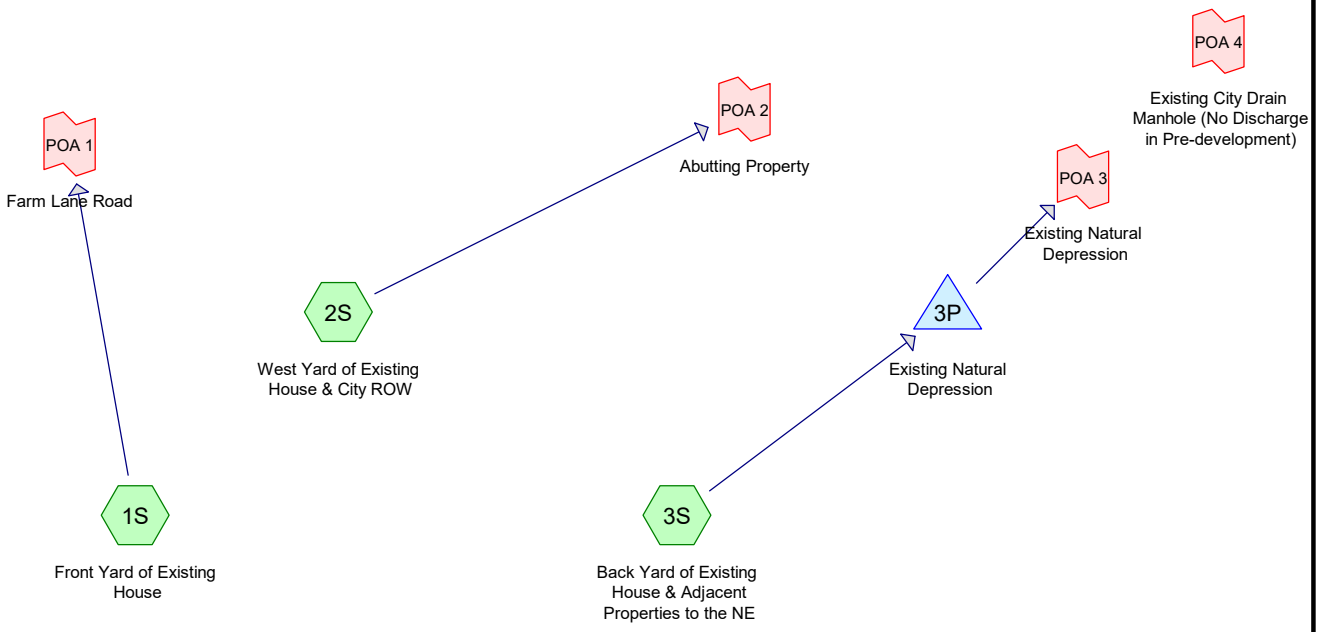
Summary for Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)





Subcat Reach Pond Link

Routing Diagram for 5719-PRE
Prepared by Altus Engineering, Printed 2/10/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Front Yard of Existing Runoff Area=18,227 sf 43.70% Impervious Runoff Depth=3.06"
Flow Length=296' Tc=6.0 min CN=64 Runoff=1.49 cfs 0.107 af

Subcatchment 2S: West Yard of Existing Runoff Area=10,114 sf 11.00% Impervious Runoff Depth=1.03"
Flow Length=215' Tc=6.0 min CN=42 Runoff=0.18 cfs 0.020 af

Subcatchment 3S: Back Yard of Existing Runoff Area=69,276 sf 11.36% Impervious Runoff Depth=1.11"
Flow Length=407' Tc=6.0 min CN=43 Runoff=1.43 cfs 0.147 af

Pond 3P: Existing Natural Depression Peak Elev=39.69' Storage=2,257 cf Inflow=1.43 cfs 0.147 af
Outflow=0.18 cfs 0.147 af

Link POA 1: Farm Lane Road Inflow=1.49 cfs 0.107 af
Primary=1.49 cfs 0.107 af

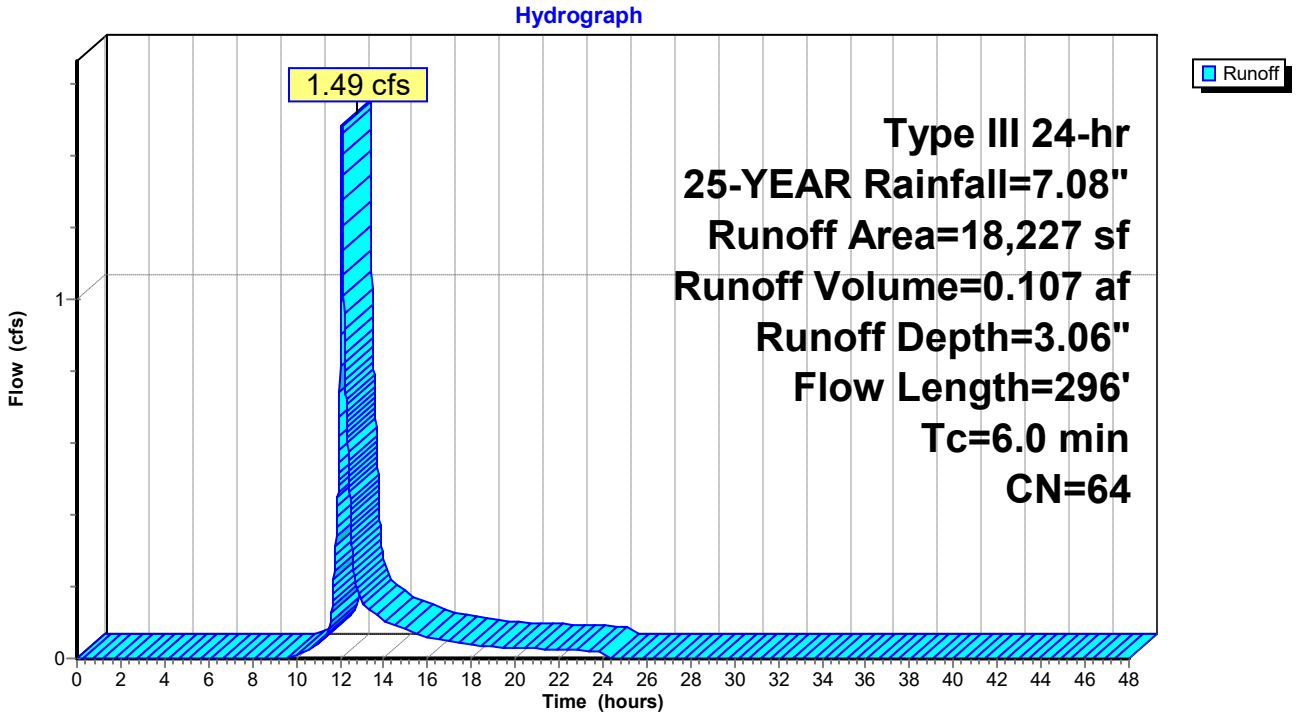
Link POA 2: Abutting Property Inflow=0.18 cfs 0.020 af
Primary=0.18 cfs 0.020 af

Link POA 3: Existing Natural Depression Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

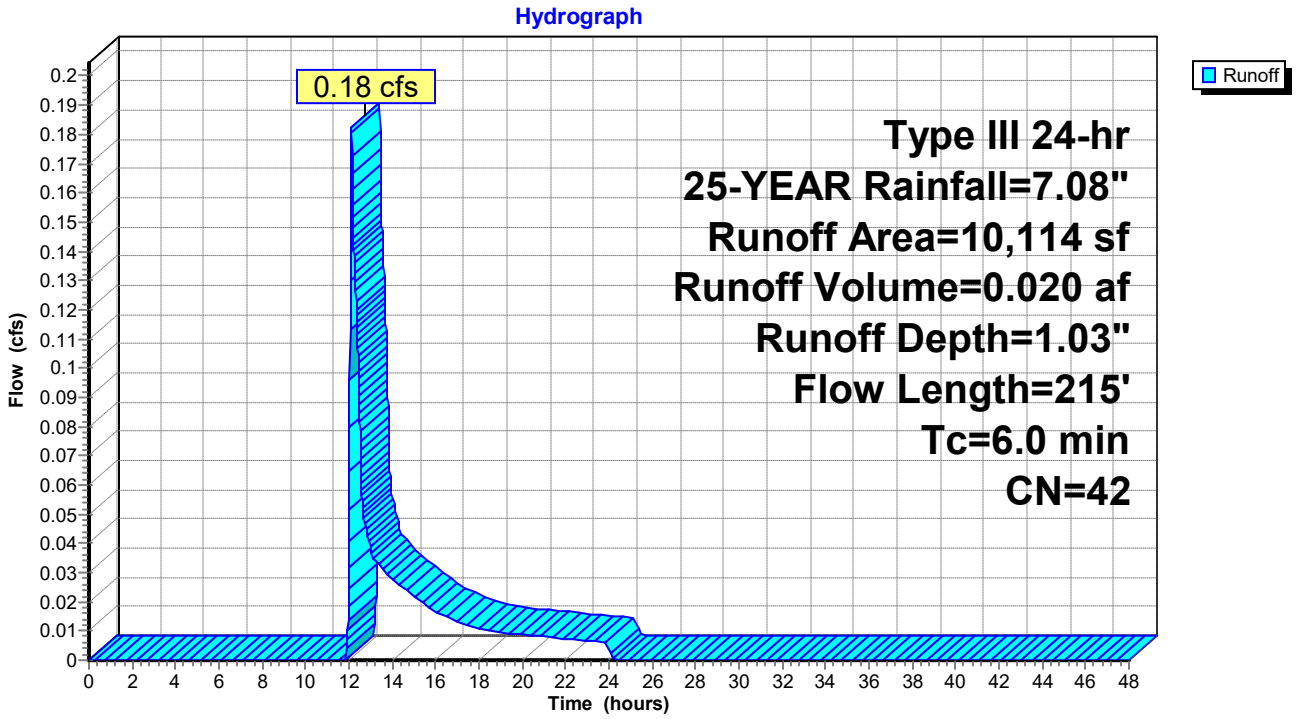
Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)
Primary=0.00 cfs 0.000 af

Total Runoff Area = 2.241 ac Runoff Volume = 0.274 af Average Runoff Depth = 1.47"
82.64% Pervious = 1.852 ac 17.36% Impervious = 0.389 ac

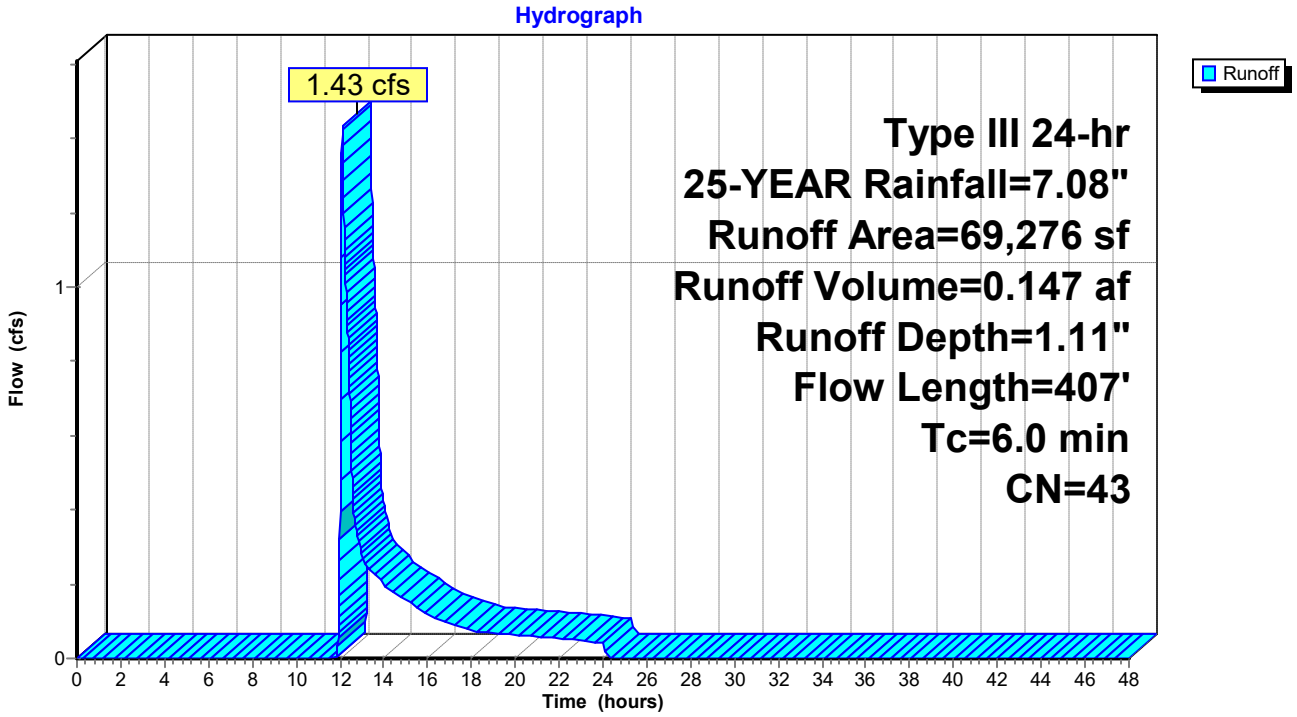
Subcatchment 1S: Front Yard of Existing House



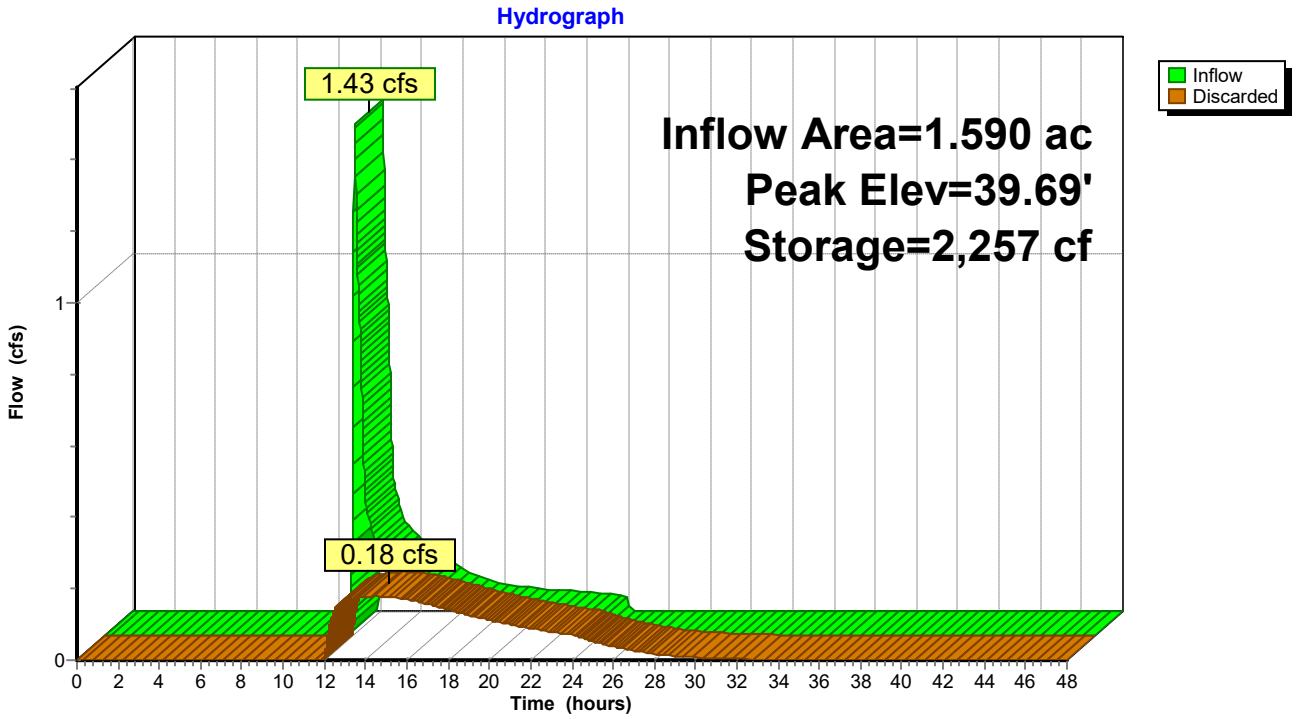
Subcatchment 2S: West Yard of Existing House & City ROW



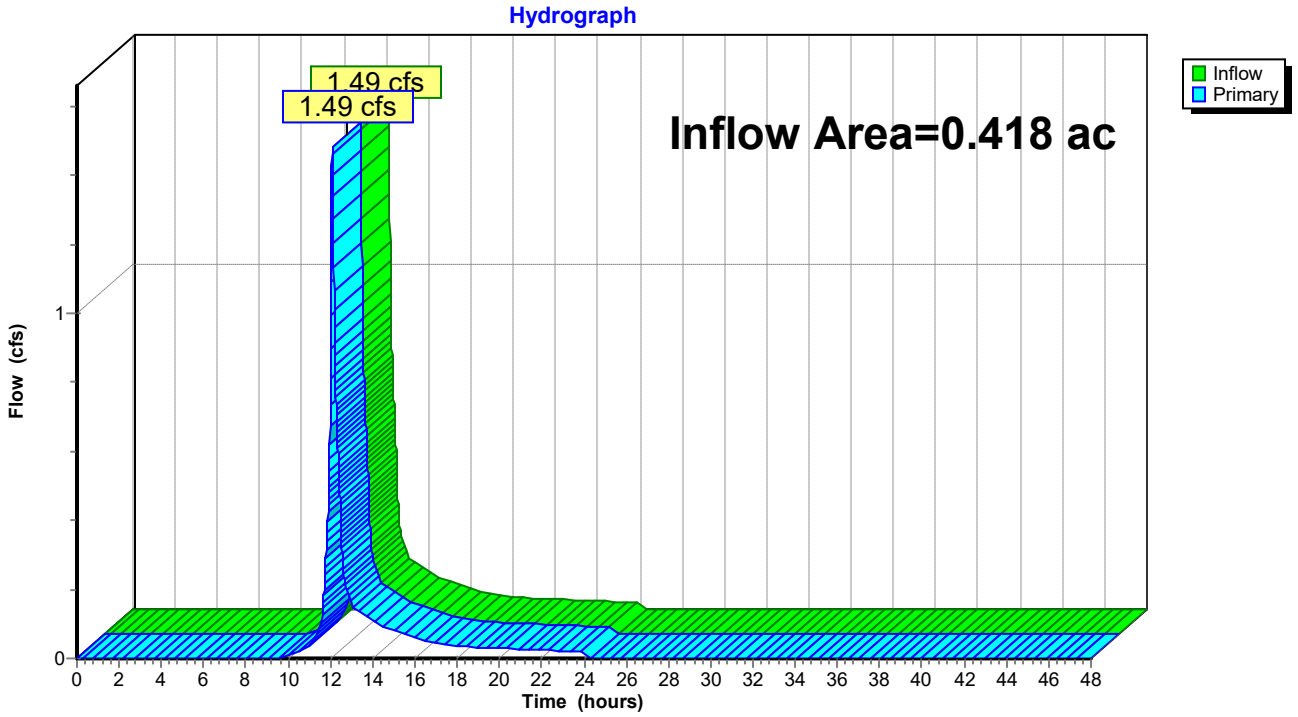
Subcatchment 3S: Back Yard of Existing House & Adjacent Properties to the NE



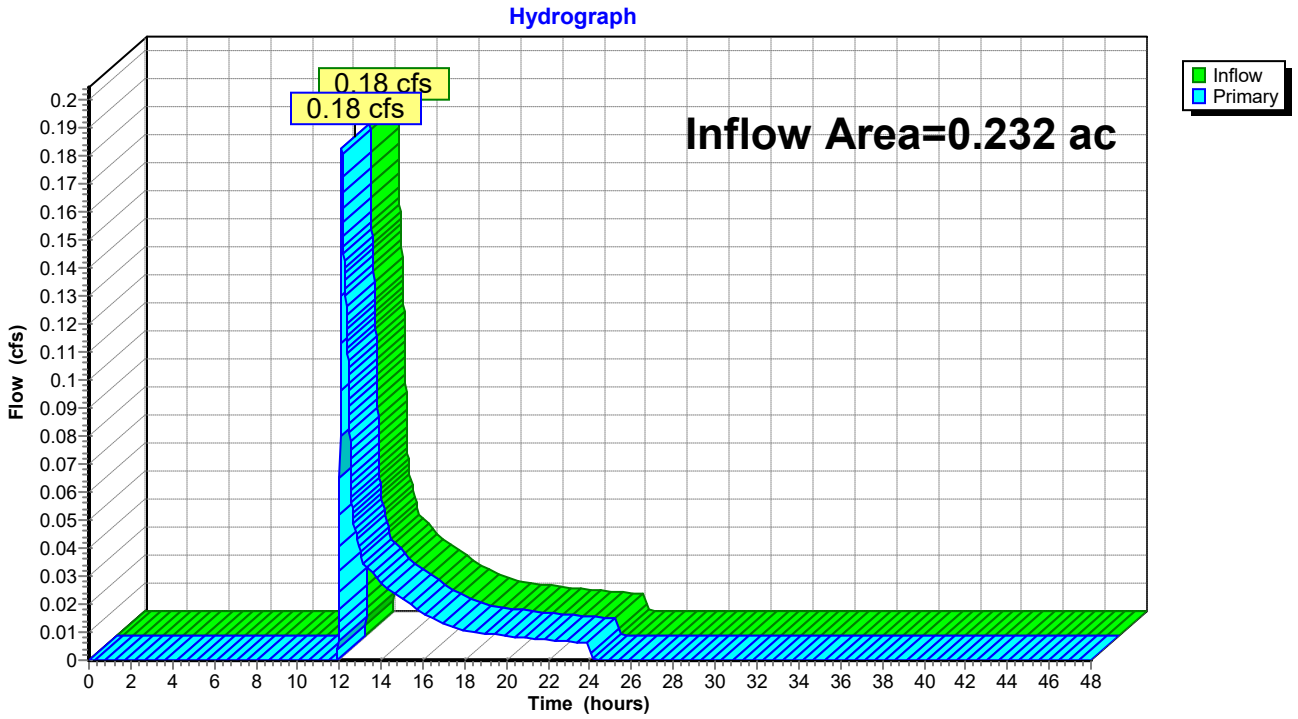
Pond 3P: Existing Natural Depression



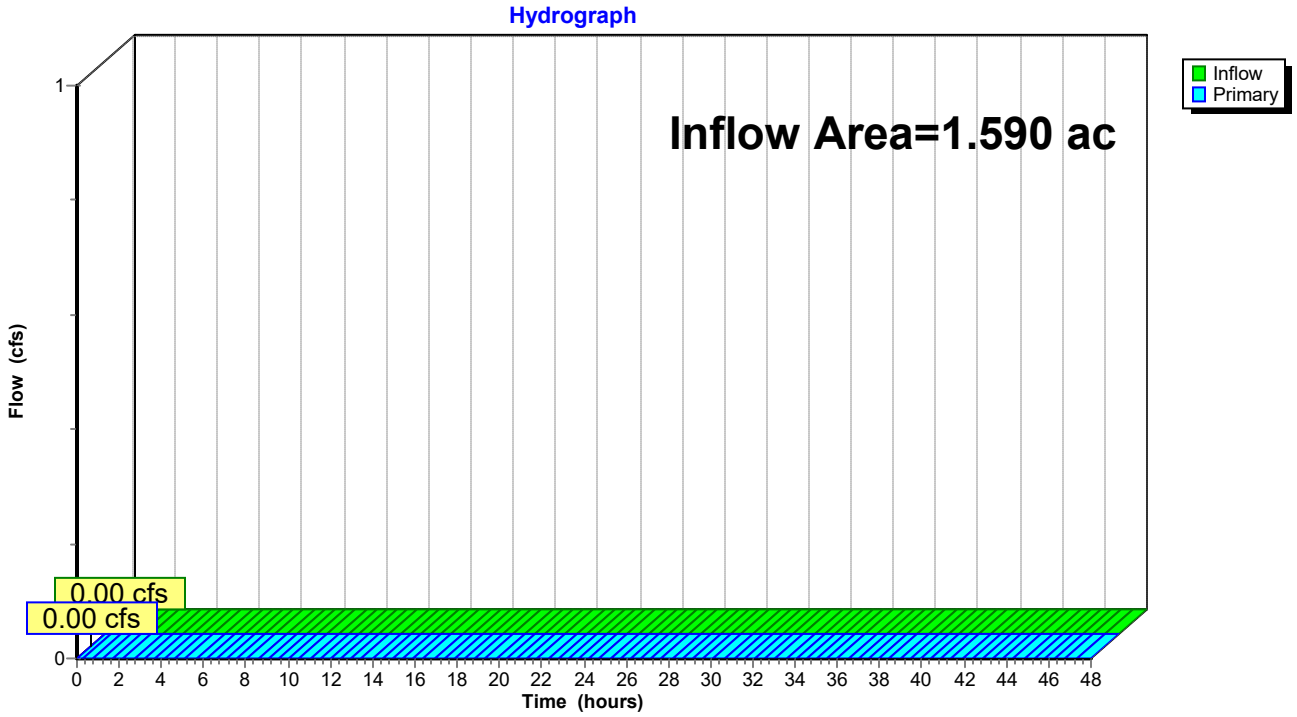
Link POA 1: Farm Lane Road



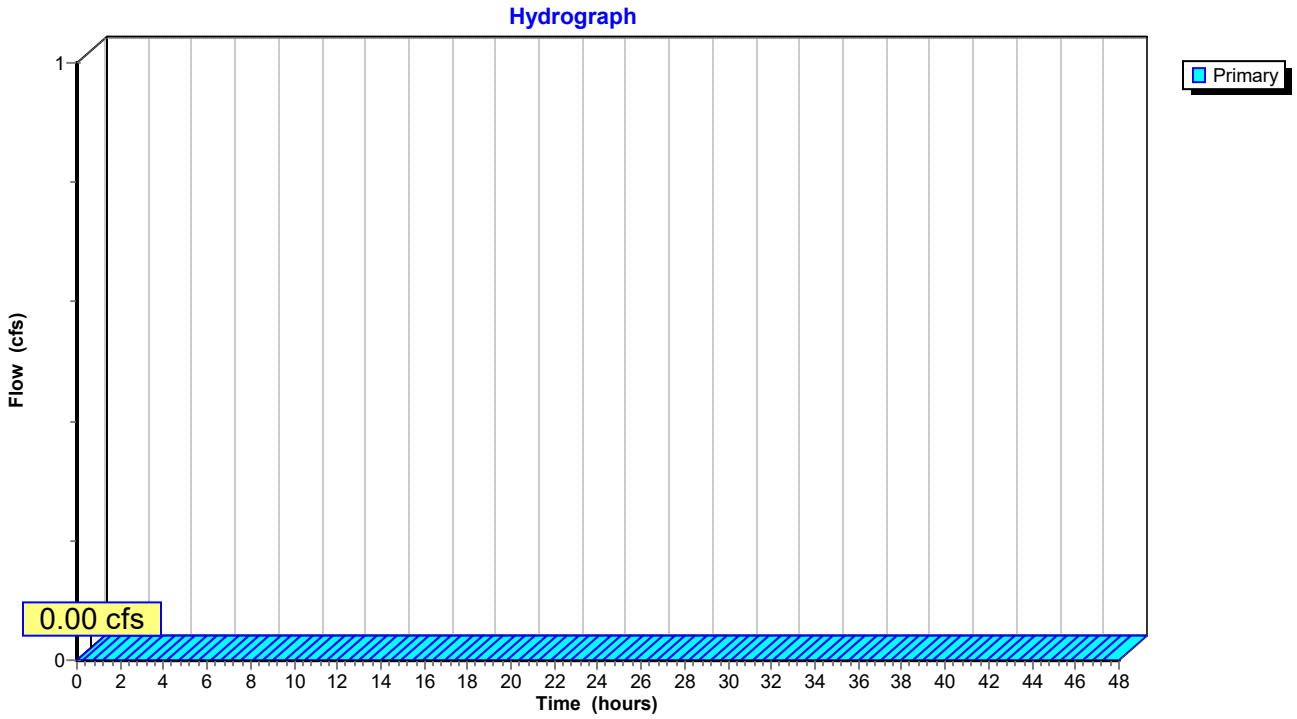
Link POA 2: Abutting Property



Link POA 3: Existing Natural Depression



Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)

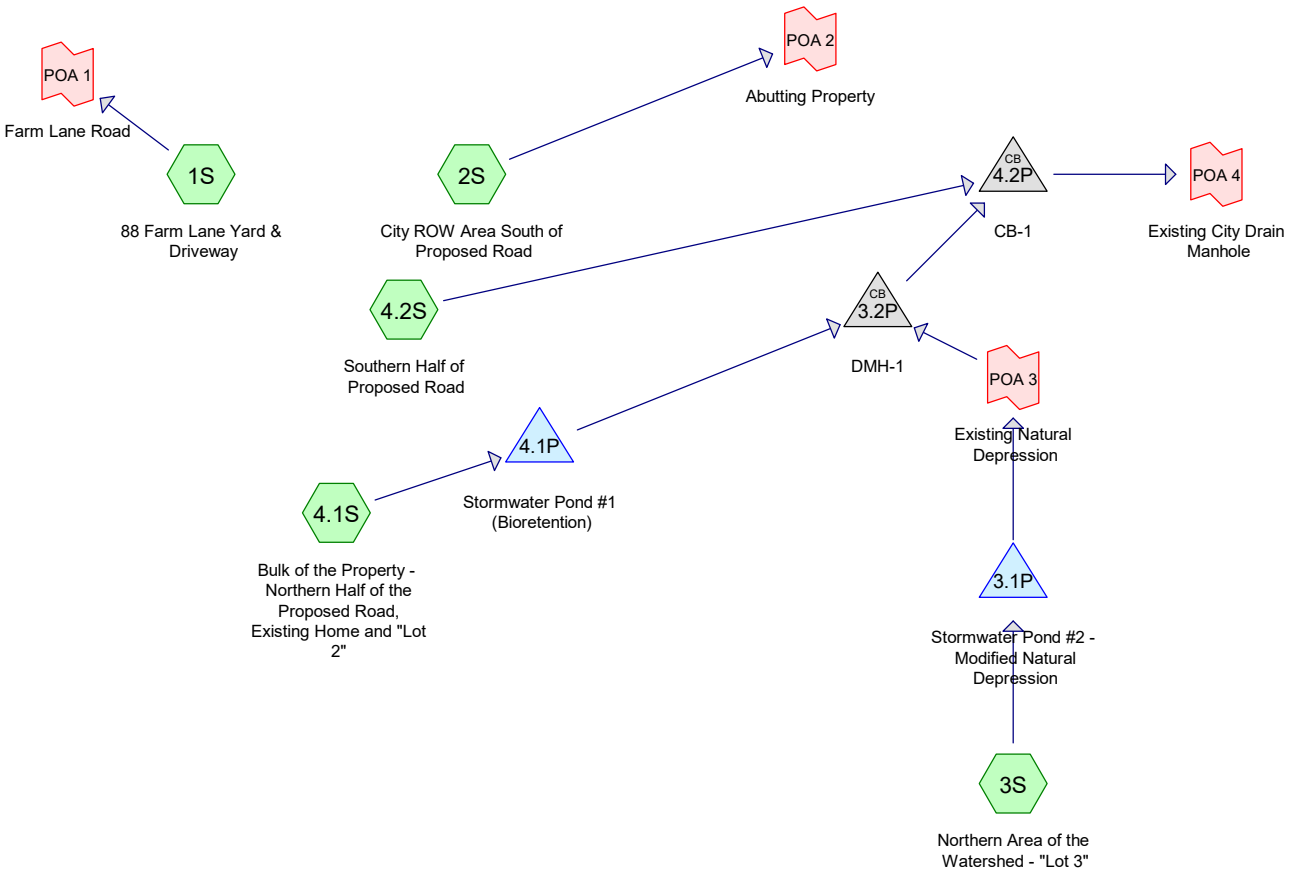


Section 4

Drainage Calculations

Post-Development:
2-Year, 24-Hour Summary
10-Year, 24-Hour Complete
25-Year, 24-Hour Summary

ALTUS
ENGINEERING



Subcat Reach Pond Link

Routing Diagram for 5719-POST
Prepared by Altus Engineering, Printed 3/23/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: 88 Farm Lane Yard & Runoff Area=1,046 sf 57.07% Impervious Runoff Depth=0.80"
Flow Length=25' Tc=6.0 min CN=71 Runoff=0.02 cfs 0.002 af

Subcatchment 2S: City ROW Area South of Runoff Area=5,093 sf 6.11% Impervious Runoff Depth=0.00"
Flow Length=136' Tc=6.4 min CN=41 Runoff=0.00 cfs 0.000 af

Subcatchment 3S: Northern Area of the Runoff Area=31,903 sf 14.85% Impervious Runoff Depth=0.02"
Flow Length=251' Tc=6.0 min CN=44 Runoff=0.00 cfs 0.001 af

Subcatchment 4.1S: Bulk of the Property - Runoff Area=55,097 sf 29.76% Impervious Runoff Depth=0.21"
Flow Length=370' Tc=6.0 min CN=55 Runoff=0.10 cfs 0.022 af

Subcatchment 4.2S: Southern Half of Runoff Area=4,478 sf 74.39% Impervious Runoff Depth=1.50"
Flow Length=283' Tc=6.0 min CN=83 Runoff=0.18 cfs 0.013 af

Pond 3.1P: Stormwater Pond #2 - Modified Peak Elev=38.00' Storage=34 cf Inflow=0.00 cfs 0.001 af
Discarded=0.00 cfs 0.002 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.002 af

Pond 3.2P: DMH-1 Peak Elev=34.79' Inflow=0.03 cfs 0.022 af
12.0" Round Culvert n=0.012 L=32.0' S=0.0063 '/' Outflow=0.03 cfs 0.022 af

Pond 4.1P: Stormwater Pond #1 (Bioretention) Peak Elev=41.51' Storage=439 cf Inflow=0.10 cfs 0.022 af
Outflow=0.03 cfs 0.022 af

Pond 4.2P: CB-1 Peak Elev=34.63' Inflow=0.18 cfs 0.035 af
12.0" Round Culvert n=0.012 L=160.0' S=0.0050 '/' Outflow=0.18 cfs 0.035 af

Link POA 1: Farm Lane Road Inflow=0.02 cfs 0.002 af
Primary=0.02 cfs 0.002 af

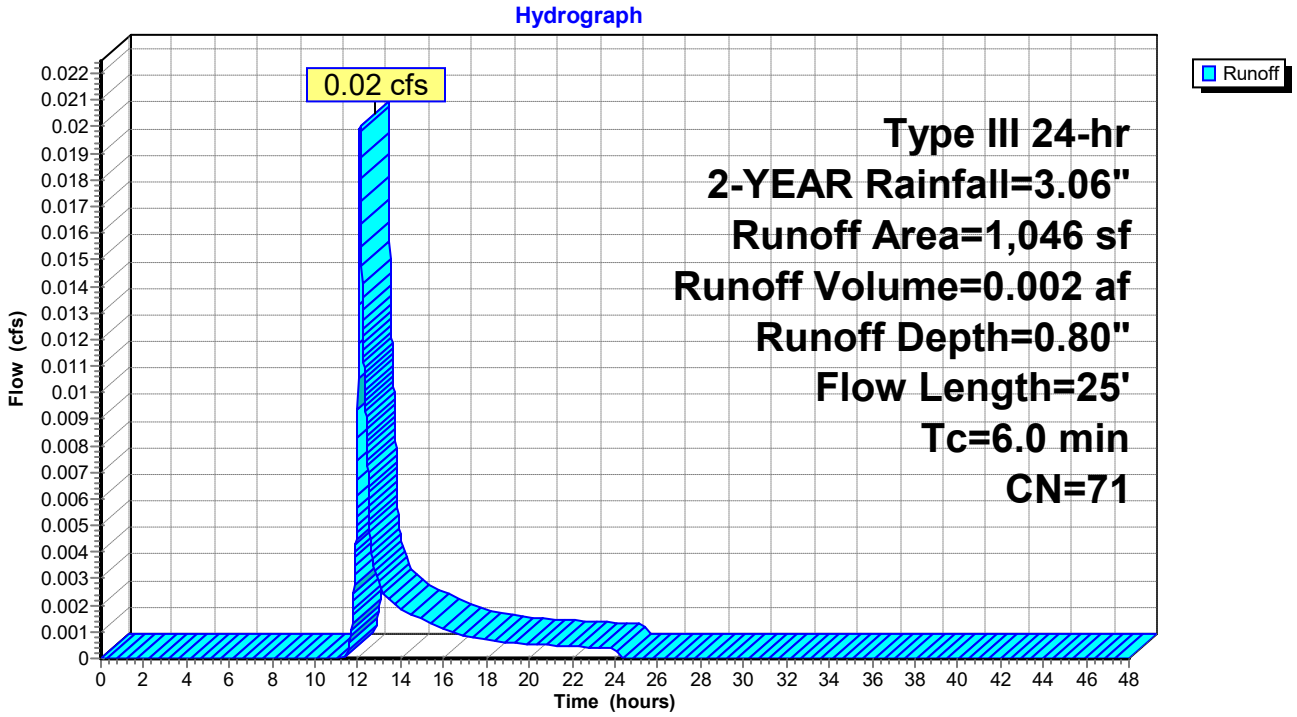
Link POA 2: Abutting Property Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link POA 3: Existing Natural Depression Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

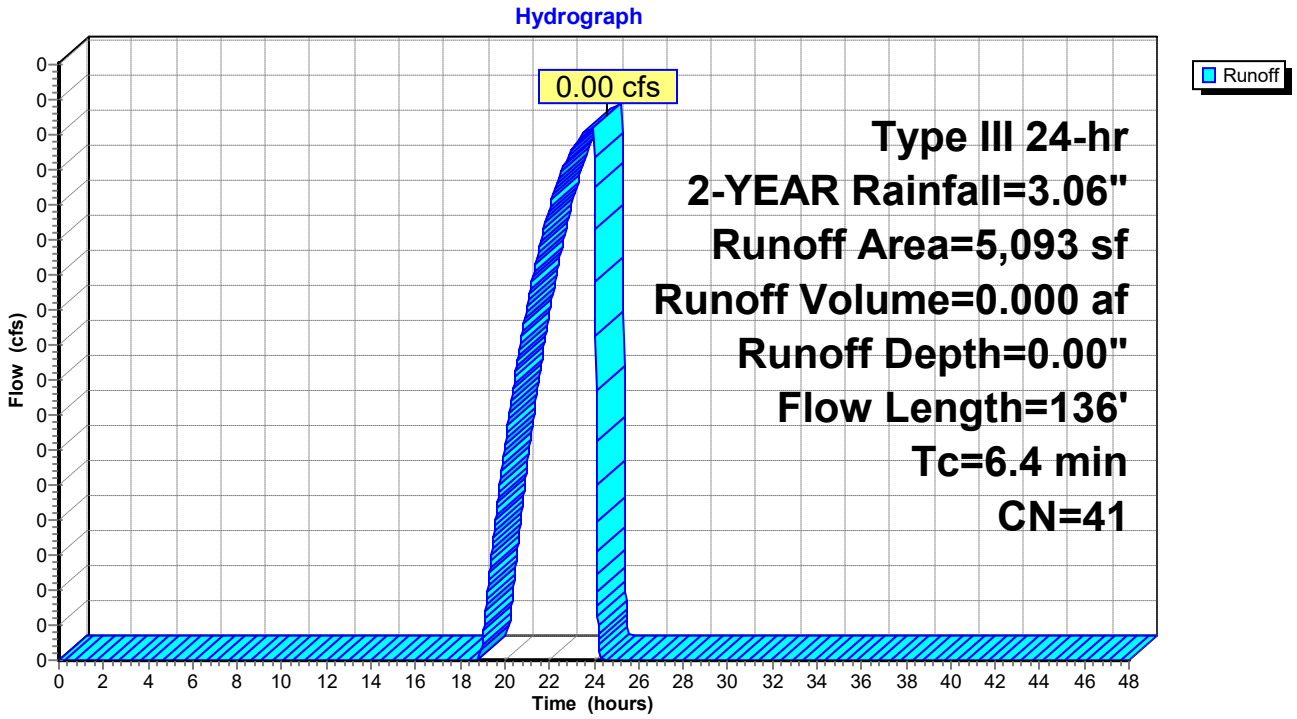
Link POA 4: Existing City Drain Manhole Inflow=0.18 cfs 0.035 af
Primary=0.18 cfs 0.035 af

Total Runoff Area = 2.241 ac Runoff Volume = 0.038 af Average Runoff Depth = 0.20"
74.01% Pervious = 1.658 ac 25.99% Impervious = 0.583 ac

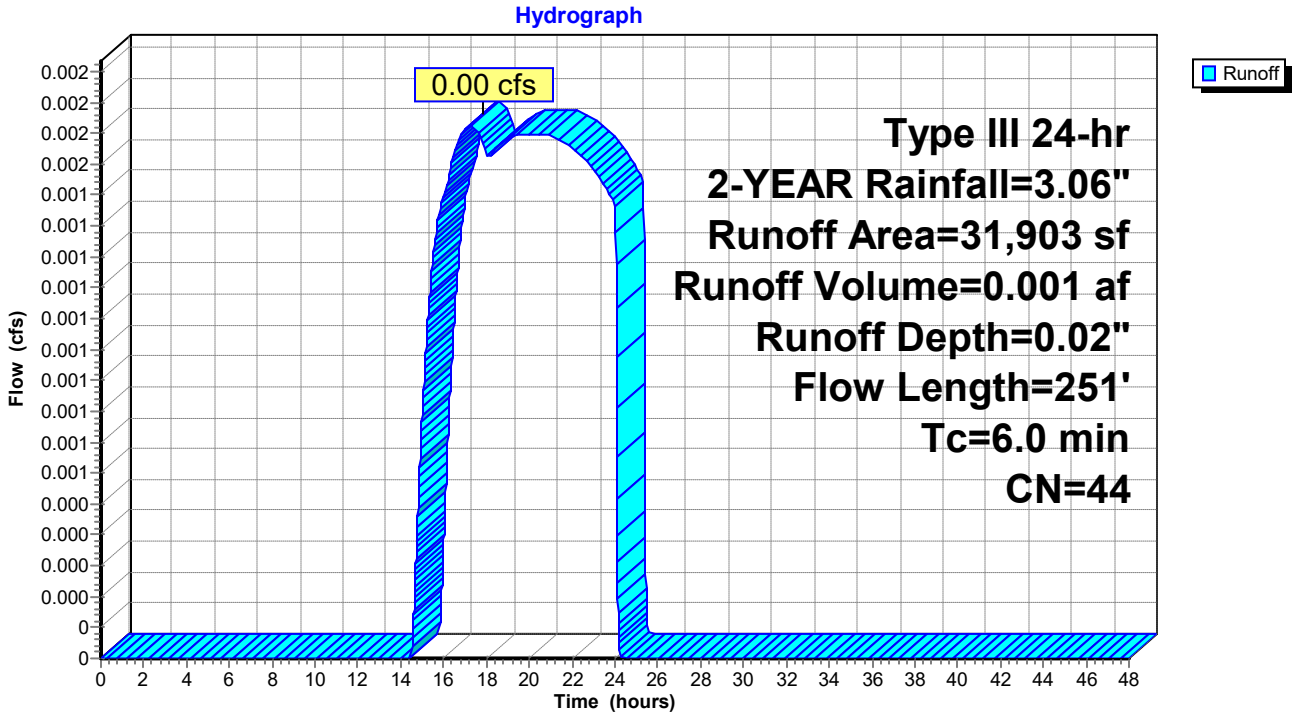
Subcatchment 1S: 88 Farm Lane Yard & Driveway



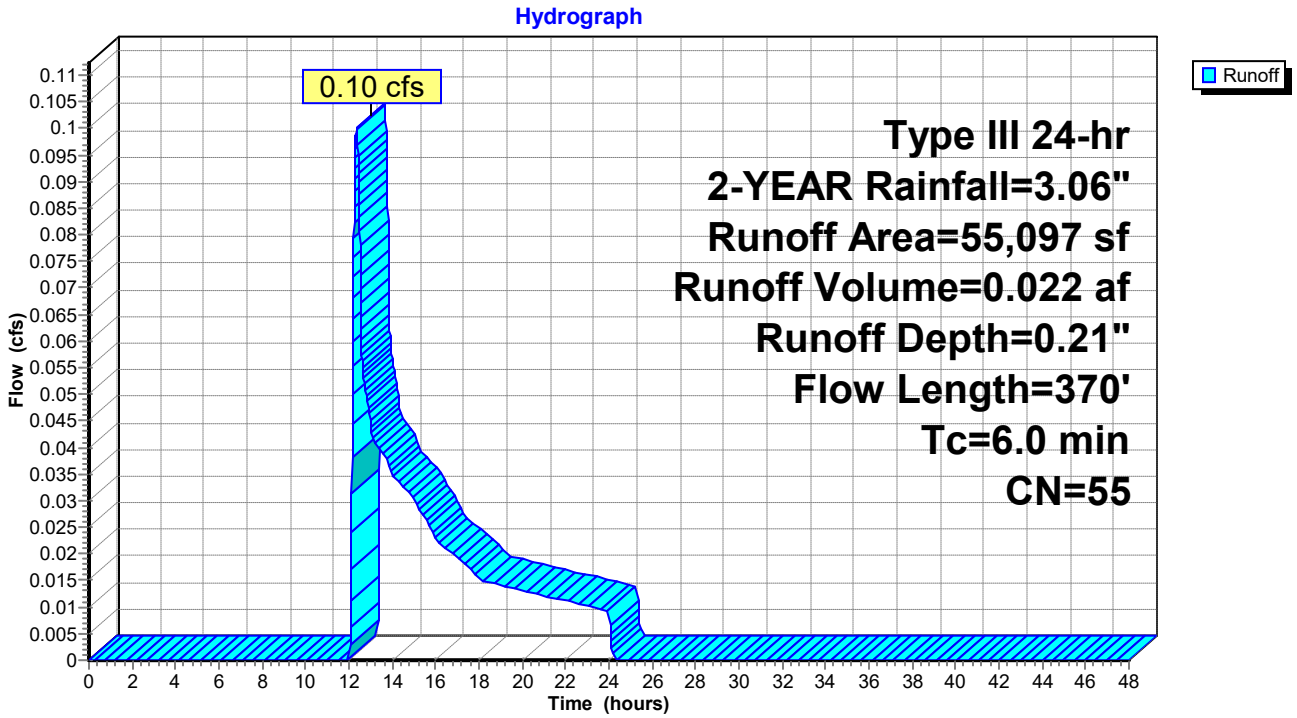
Subcatchment 2S: City ROW Area South of Proposed Road



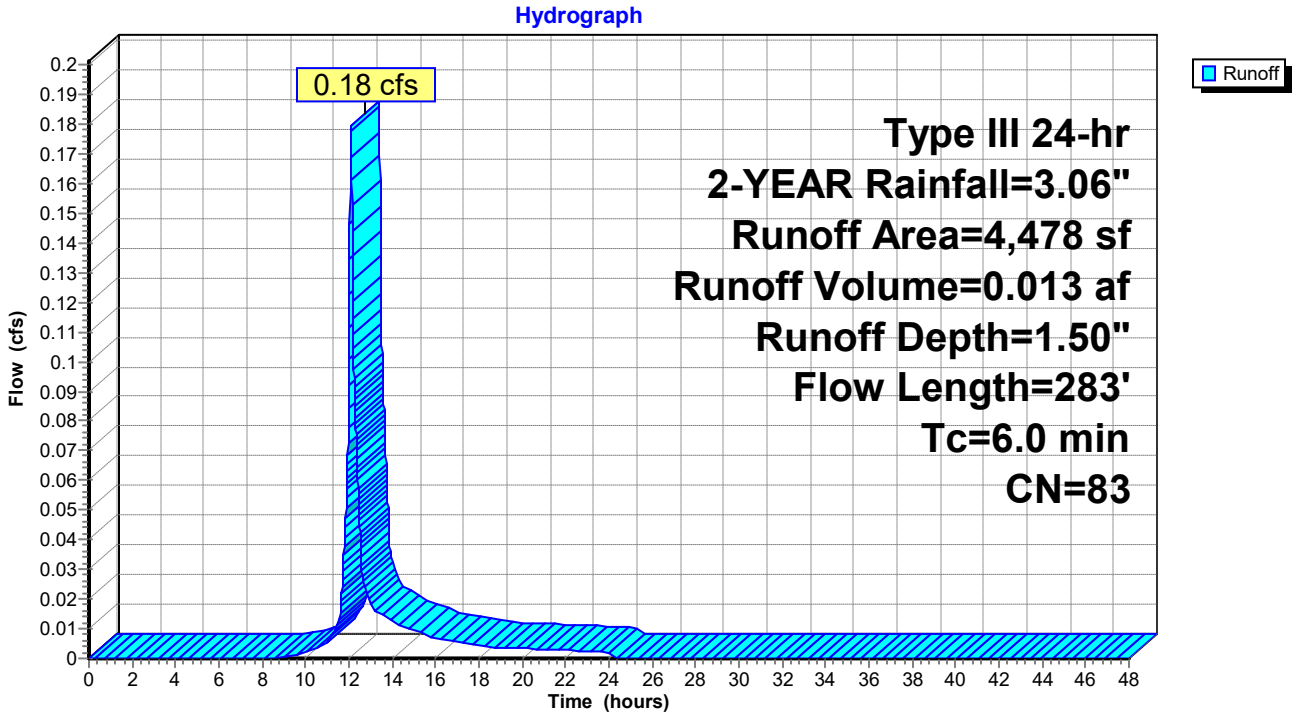
Subcatchment 3S: Northern Area of the Watershed - "Lot 3"



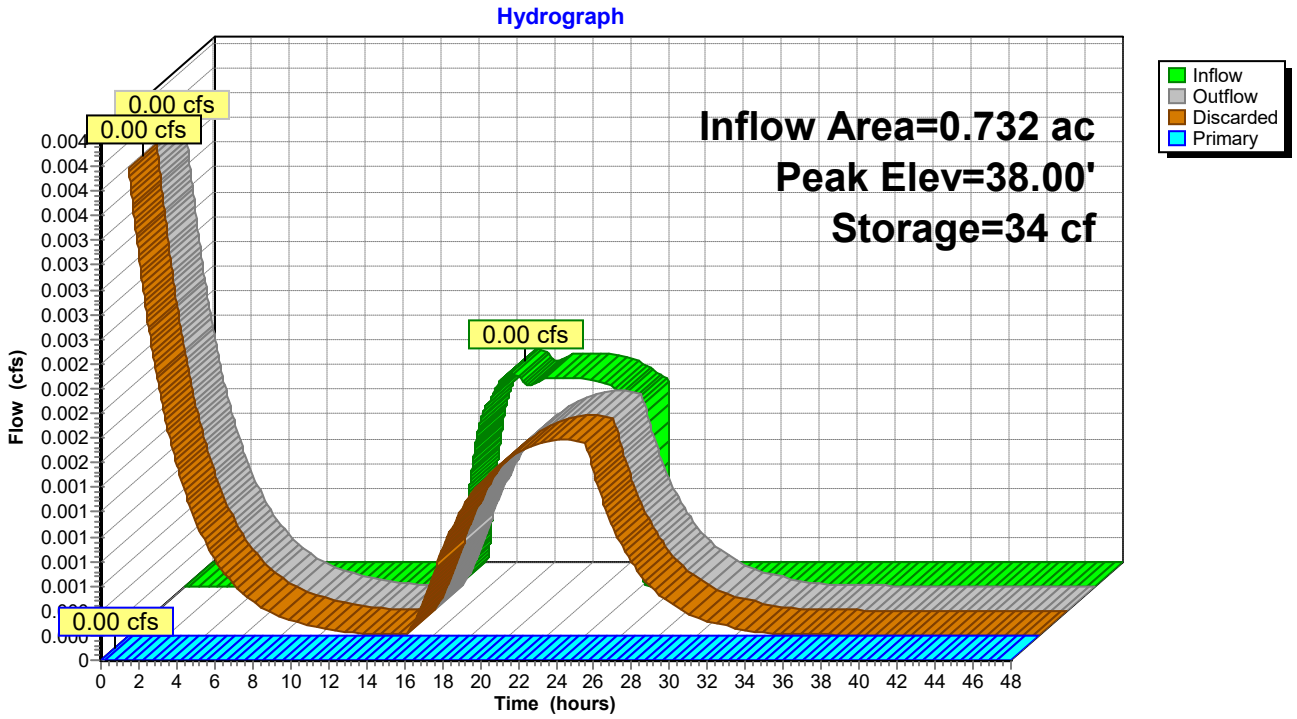
Subcatchment 4.1S: Bulk of the Property - Northern Half of the Proposed Road, Existing Home and "Lot 2"



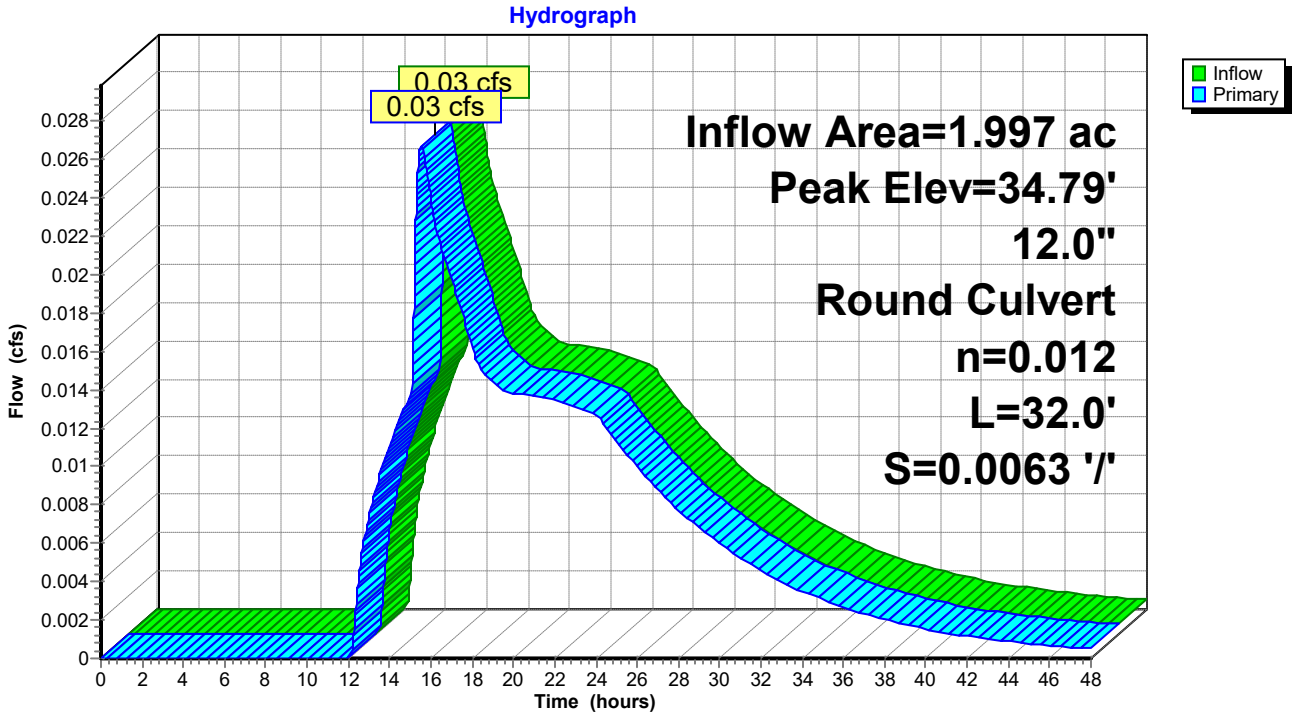
Subcatchment 4.2S: Southern Half of Proposed Road



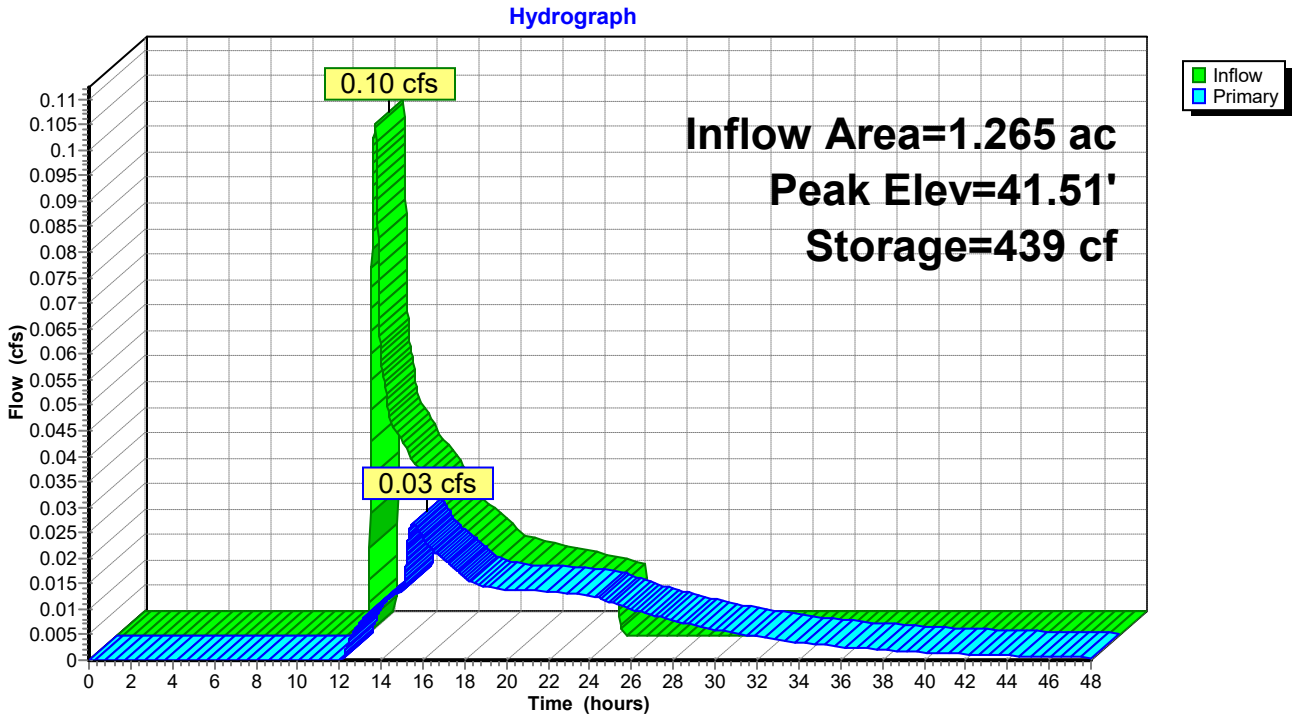
Pond 3.1P: Stormwater Pond #2 - Modified Natural Depression



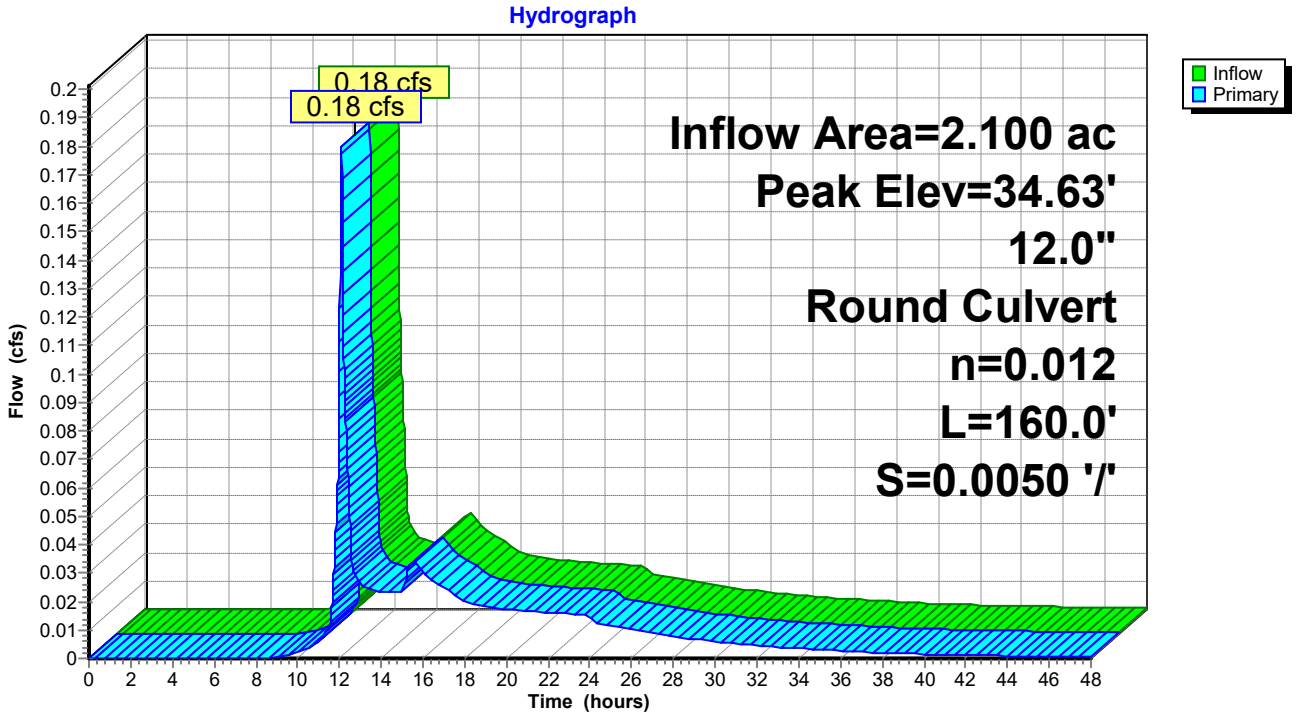
Pond 3.2P: DMH-1



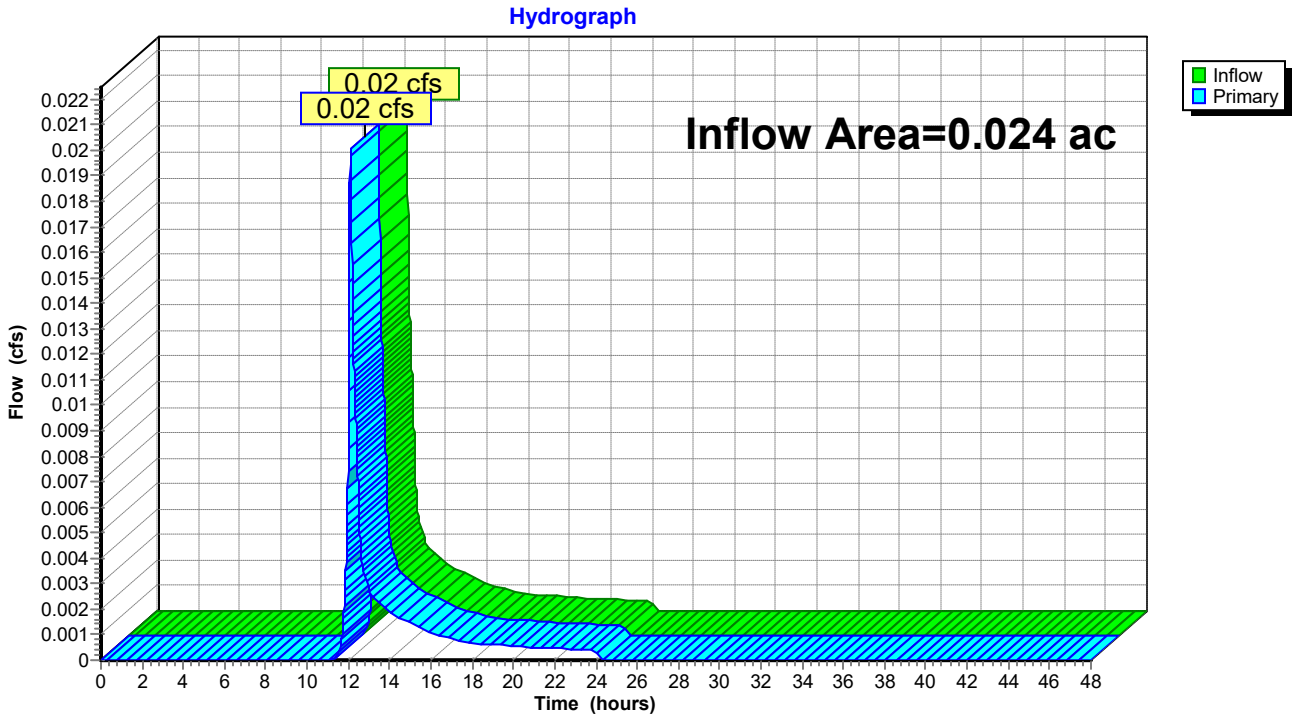
Pond 4.1P: Stormwater Pond #1 (Bioretention)



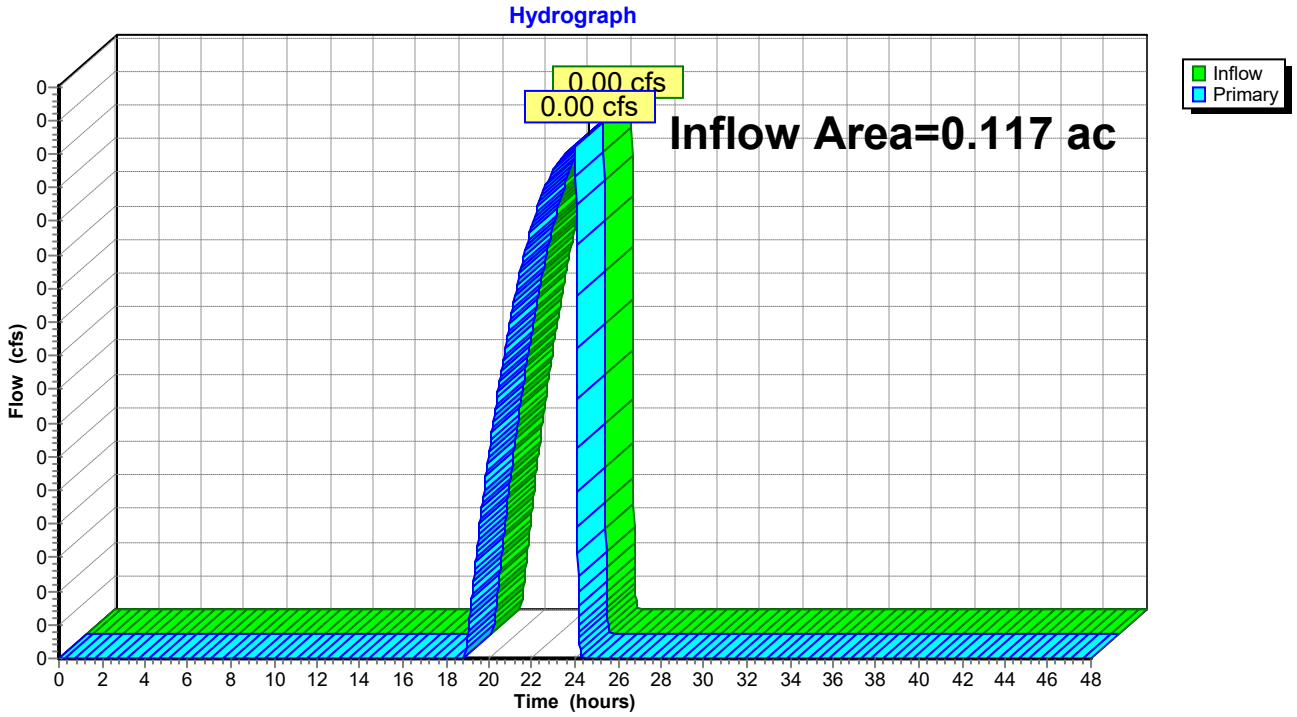
Pond 4.2P: CB-1



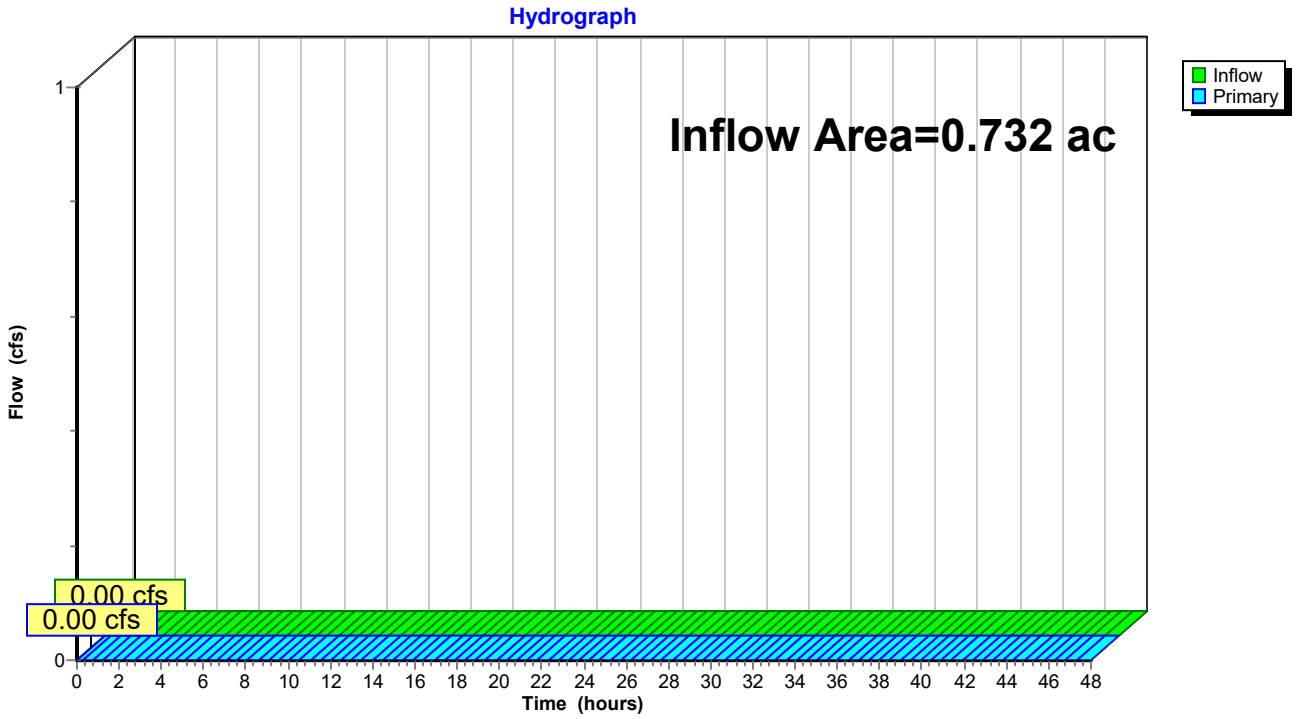
Link POA 1: Farm Lane Road



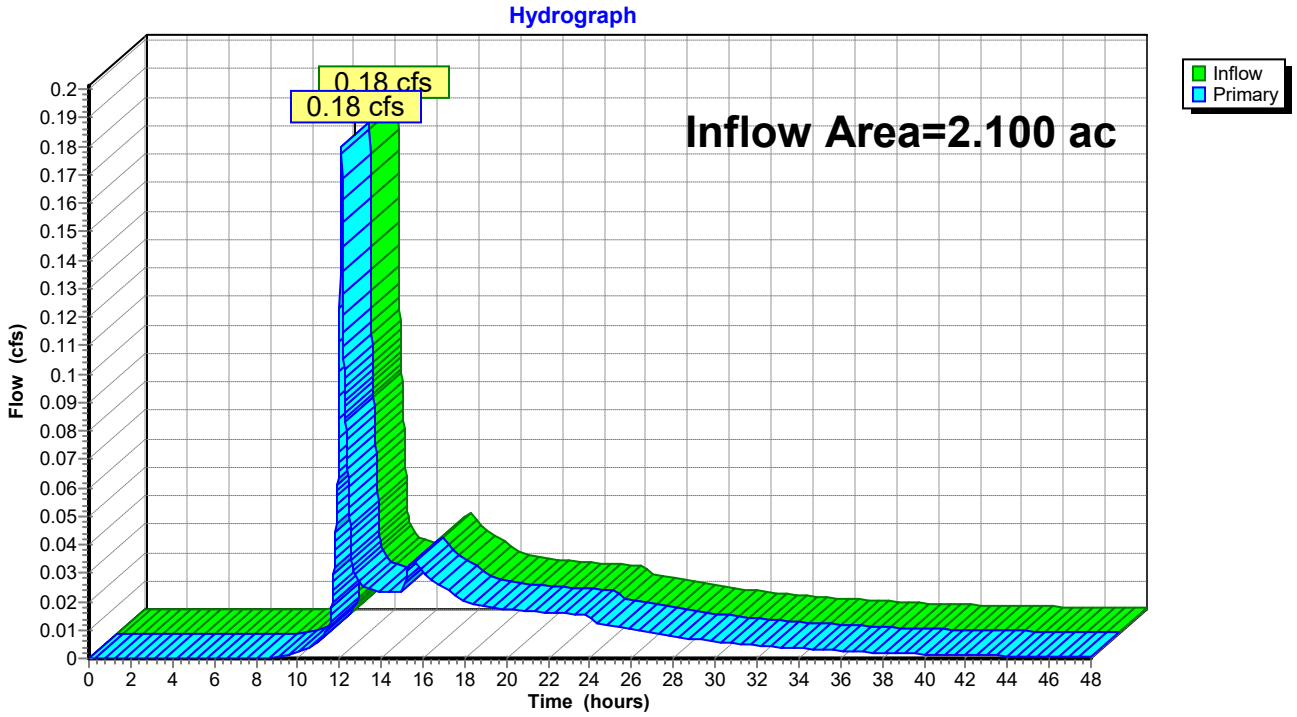
Link POA 2: Abutting Property

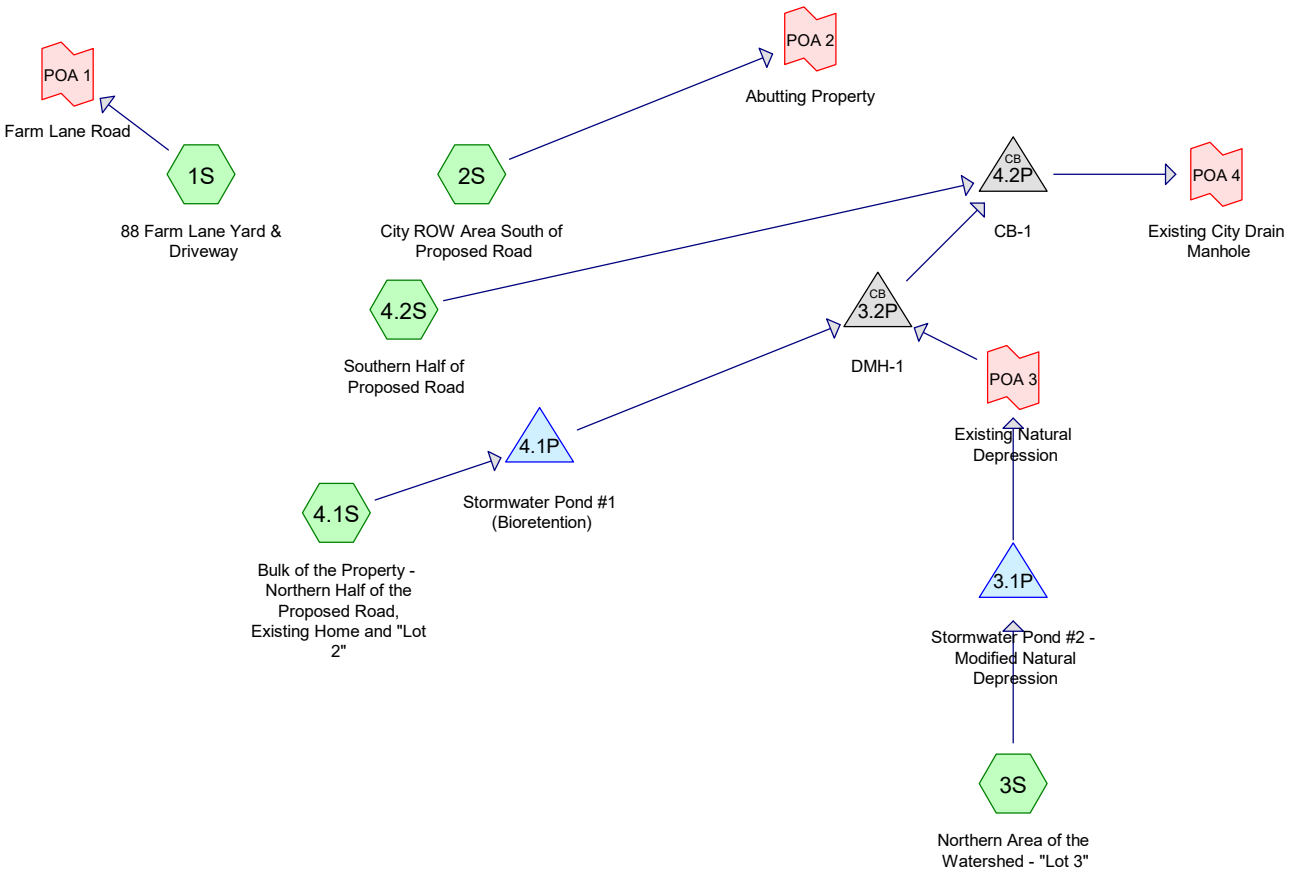


Link POA 3: Existing Natural Depression



Link POA 4: Existing City Drain Manhole





Subcat Reach Pond Link

Routing Diagram for 5719-POST
Prepared by Altus Engineering, Printed 3/23/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.163	39	>75% Grass cover, Good, HSG A (1S, 2S, 3S, 4.1S, 4.2S)
0.355	98	Paved parking, HSG A (1S, 2S, 3S, 4.1S, 4.2S)
0.228	98	Roofs, HSG A (2S, 3S, 4.1S)
0.495	30	Woods, Good, HSG A (1S, 2S, 3S, 4.1S)
2.241	**52**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
2.241	HSG A	1S, 2S, 3S, 4.1S, 4.2S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
2.241		**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: 88 Farm Lane Yard & Runoff Area=1,046 sf 57.07% Impervious Runoff Depth=2.57"
Flow Length=25' Tc=6.0 min CN=71 Runoff=0.07 cfs 0.005 af

Subcatchment 2S: City ROW Area South of Runoff Area=5,093 sf 6.11% Impervious Runoff Depth=0.43"
Flow Length=136' Tc=6.4 min CN=41 Runoff=0.02 cfs 0.004 af

Subcatchment 3S: Northern Area of the Runoff Area=31,903 sf 14.85% Impervious Runoff Depth=0.59"
Flow Length=251' Tc=6.0 min CN=44 Runoff=0.23 cfs 0.036 af

Subcatchment 4.1S: Bulk of the Property - Runoff Area=55,097 sf 29.76% Impervious Runoff Depth=1.29"
Flow Length=370' Tc=6.0 min CN=55 Runoff=1.64 cfs 0.136 af

Subcatchment 4.2S: Southern Half of Runoff Area=4,478 sf 74.39% Impervious Runoff Depth=3.71"
Flow Length=283' Tc=6.0 min CN=83 Runoff=0.44 cfs 0.032 af

Pond 3.1P: Stormwater Pond #2 - Modified Peak Elev=38.48' Storage=767 cf Inflow=0.23 cfs 0.036 af
Discarded=0.02 cfs 0.037 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.037 af

Pond 3.2P: DMH-1 Peak Elev=35.53' Inflow=1.49 cfs 0.135 af
12.0" Round Culvert n=0.012 L=32.0' S=0.0063 '/' Outflow=1.49 cfs 0.135 af

Pond 4.1P: Stormwater Pond #1 (Bioretention) Peak Elev=41.74' Storage=653 cf Inflow=1.64 cfs 0.136 af
Outflow=1.49 cfs 0.135 af

Pond 4.2P: CB-1 Peak Elev=35.24' Inflow=1.86 cfs 0.167 af
12.0" Round Culvert n=0.012 L=160.0' S=0.0050 '/' Outflow=1.86 cfs 0.167 af

Link POA 1: Farm Lane Road Inflow=0.07 cfs 0.005 af
Primary=0.07 cfs 0.005 af

Link POA 2: Abutting Property Inflow=0.02 cfs 0.004 af
Primary=0.02 cfs 0.004 af

Link POA 3: Existing Natural Depression Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link POA 4: Existing City Drain Manhole Inflow=1.86 cfs 0.167 af
Primary=1.86 cfs 0.167 af

Total Runoff Area = 2.241 ac Runoff Volume = 0.213 af Average Runoff Depth = 1.14"
74.01% Pervious = 1.658 ac 25.99% Impervious = 0.583 ac

Summary for Subcatchment 1S: 88 Farm Lane Yard & Driveway

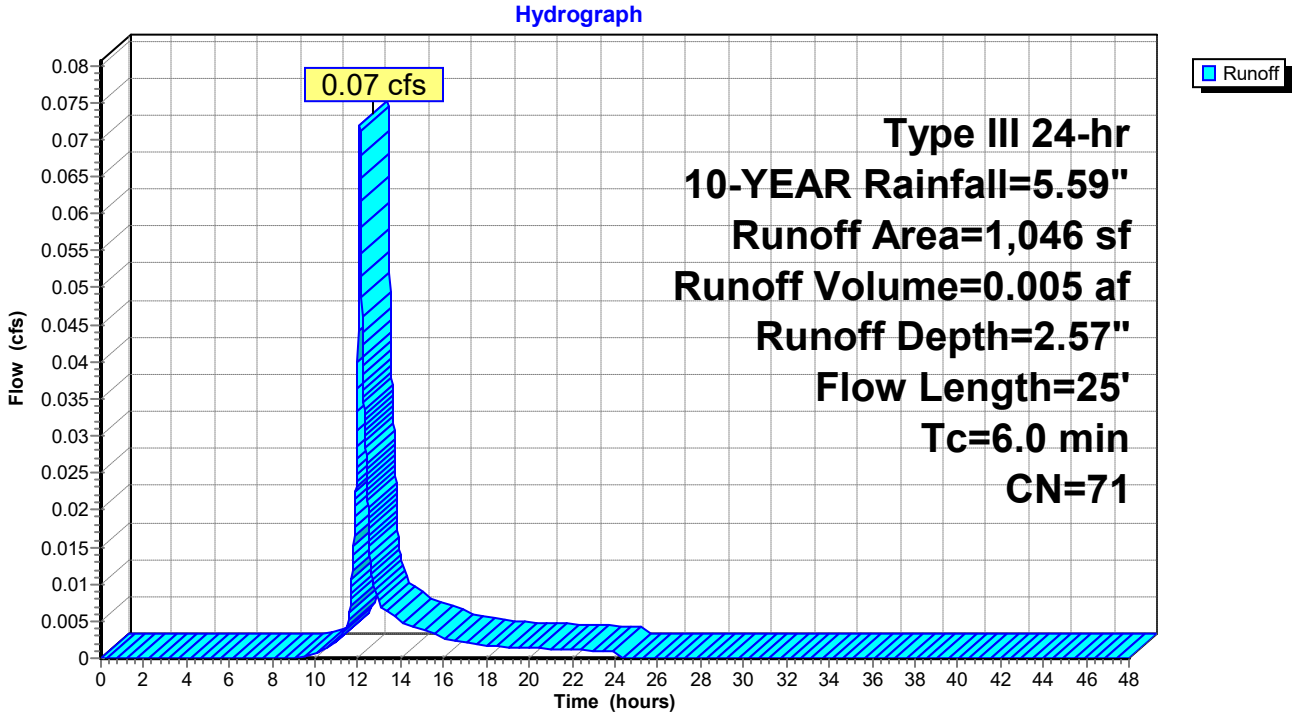
Runoff = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af, Depth= 2.57"
Routed to Link POA 1 : Farm Lane Road

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

Area (sf)	CN	Description
0	98	Roofs, HSG A
597	98	Paved parking, HSG A
274	39	>75% Grass cover, Good, HSG A
175	30	Woods, Good, HSG A
1,046	71	Weighted Average
449		42.93% Pervious Area
597		57.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	14	0.0710	0.09		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.06"
0.1	11	0.0680	1.41		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06"
2.8	25	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 1S: 88 Farm Lane Yard & Driveway



Summary for Subcatchment 2S: City ROW Area South of Proposed Road

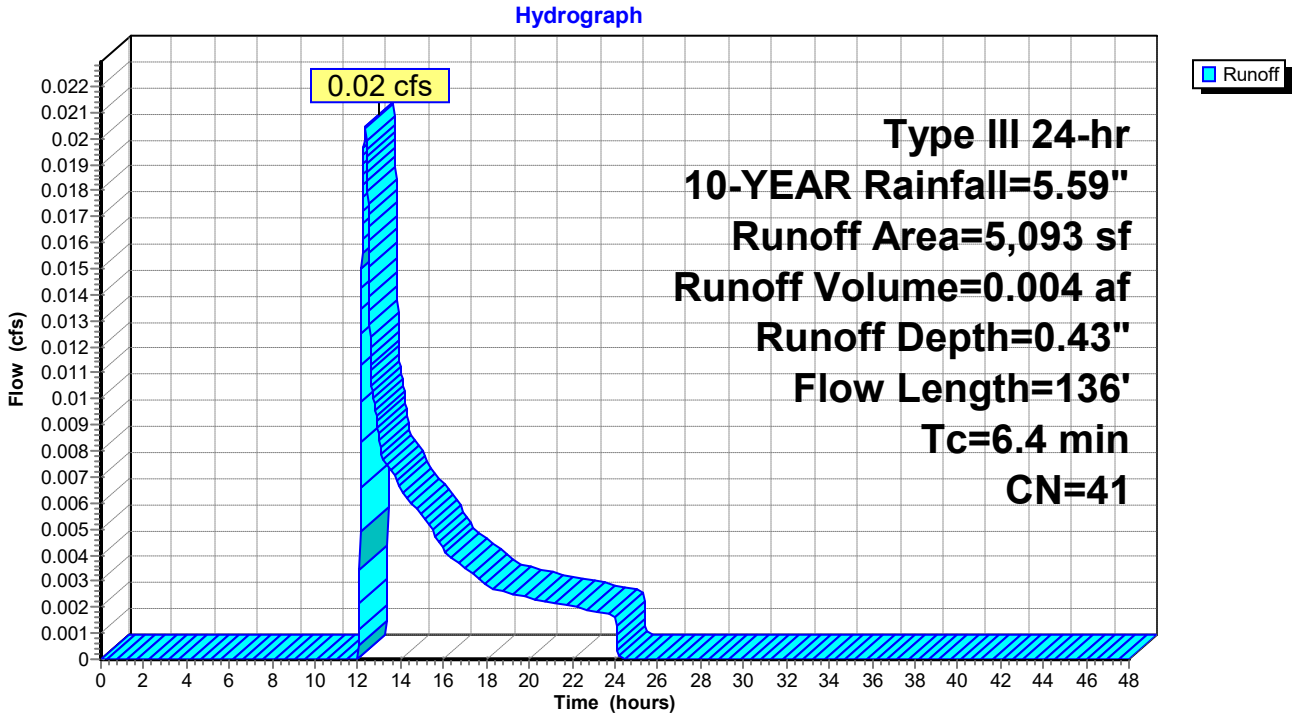
Runoff = 0.02 cfs @ 12.34 hrs, Volume= 0.004 af, Depth= 0.43"
Routed to Link POA 2 : Abutting Property

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

Area (sf)	CN	Description
53	98	Roofs, HSG A
258	98	Paved parking, HSG A
4,029	39	>75% Grass cover, Good, HSG A
753	30	Woods, Good, HSG A
5,093	41	Weighted Average
4,782		93.89% Pervious Area
311		6.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	25	0.0400	0.08		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.06"
0.8	100	0.0880	2.08		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	11	0.1590	1.99		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
6.4	136	Total			

Subcatchment 2S: City ROW Area South of Proposed Road



Summary for Subcatchment 3S: Northern Area of the Watershed - "Lot 3"

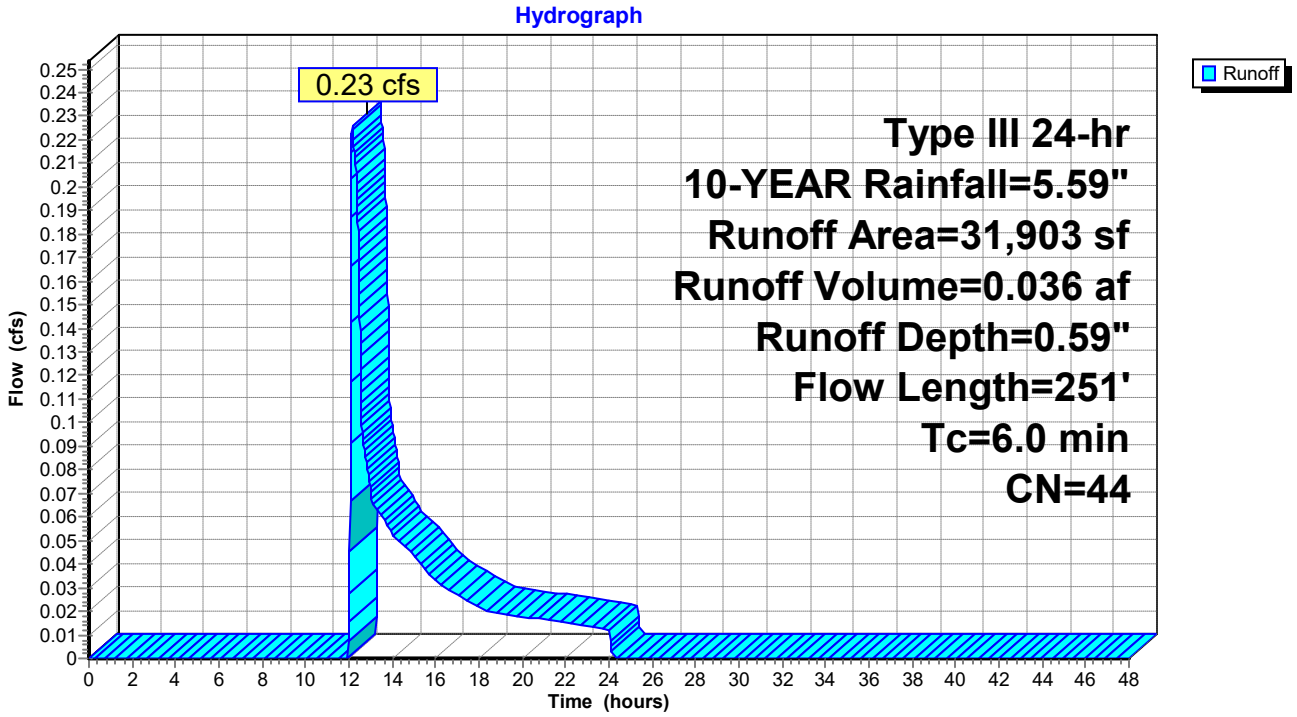
Runoff = 0.23 cfs @ 12.15 hrs, Volume= 0.036 af, Depth= 0.59"
Routed to Pond 3.1P : Stormwater Pond #2 - Modified Natural Depression

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

Area (sf)	CN	Description
3,001	98	Roofs, HSG A
1,736	98	Paved parking, HSG A
14,393	39	>75% Grass cover, Good, HSG A
12,773	30	Woods, Good, HSG A
31,903	44	Weighted Average
27,166		85.15% Pervious Area
4,737		14.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	23	0.1740	0.29		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.06"
0.6	73	0.0750	1.92		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.3	32	0.1330	1.82		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.6	60	0.0630	1.76		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.0	63	0.0440	1.05		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
3.8	251	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 3S: Northern Area of the Watershed - "Lot 3"



ary for Subcatchment 4.1S: Bulk of the Property - Northern Half of the Proposed Road, Existing Home and

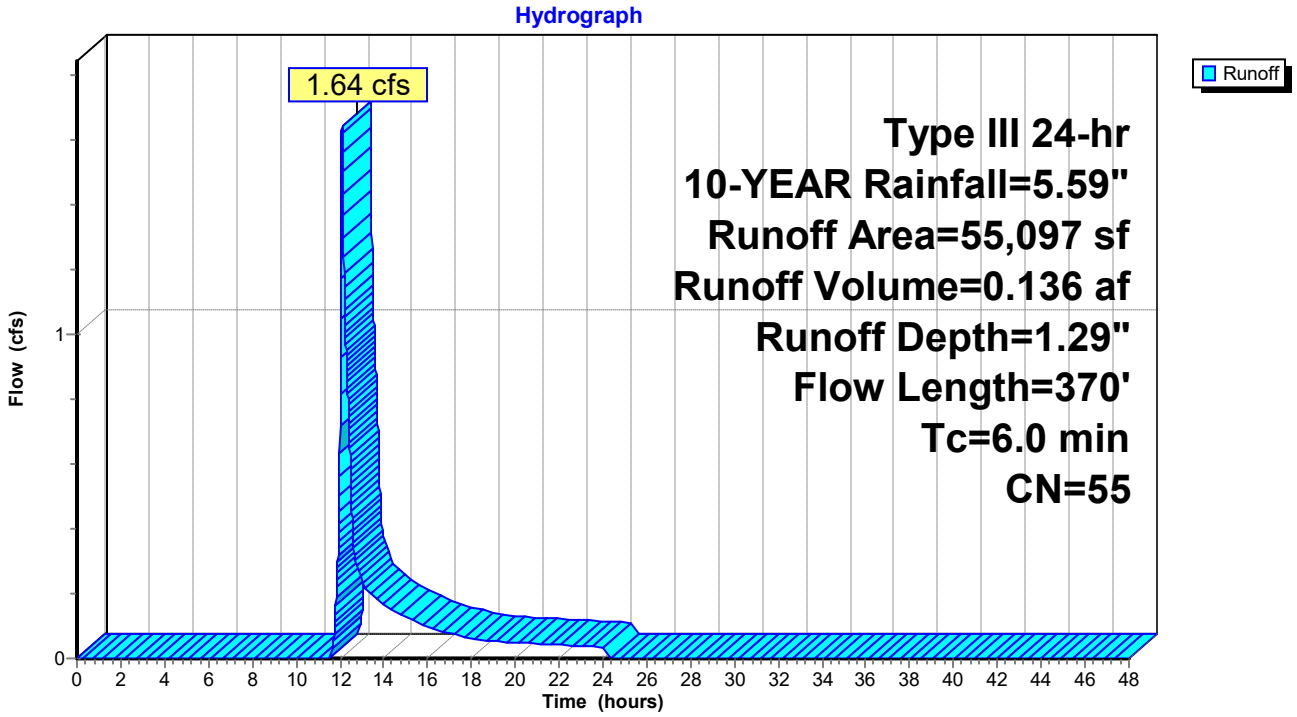
Runoff = 1.64 cfs @ 12.10 hrs, Volume= 0.136 af, Depth= 1.29"
Routed to Pond 4.1P : Stormwater Pond #1 (Bioretention)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

Area (sf)	CN	Description
6,858	98	Roofs, HSG A
9,541	98	Paved parking, HSG A
30,832	39	>75% Grass cover, Good, HSG A
7,866	30	Woods, Good, HSG A
55,097	55	Weighted Average
38,698		70.24% Pervious Area
16,399		29.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	10	0.5000	3.08		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06"
0.5	63	0.0990	2.20		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.5	42	0.0650	1.27		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.4	50	0.0800	1.98		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.3	25	0.0400	1.40		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.4	36	0.0560	1.66		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.3	31	0.0810	1.99		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.1	113	0.0580	1.69		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.6	370	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 4.1S: Bulk of the Property - Northern Half of the Proposed Road, Existing Home and "Lot 2"



Summary for Subcatchment 4.2S: Southern Half of Proposed Road

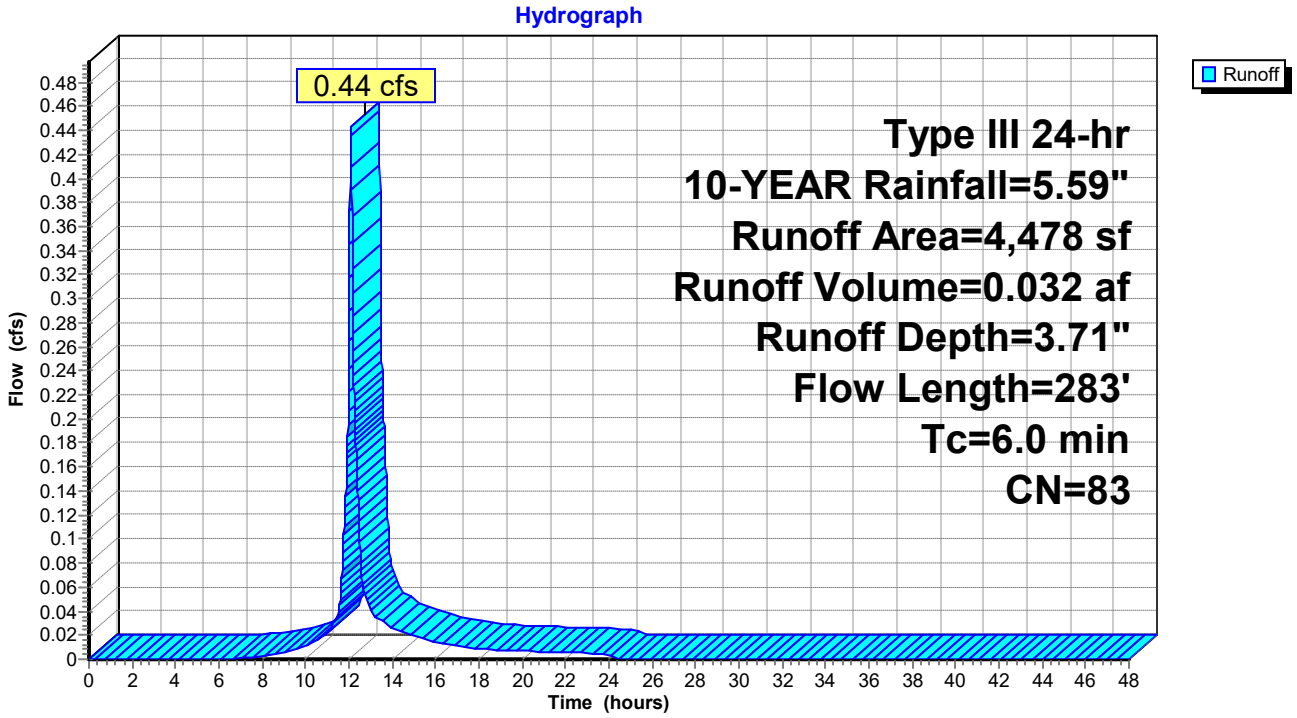
Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.032 af, Depth= 3.71"
Routed to Pond 4.2P : CB-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

Area (sf)	CN	Description
0	98	Roofs, HSG A
3,331	98	Paved parking, HSG A
1,147	39	>75% Grass cover, Good, HSG A
0	30	Woods, Good, HSG A
4,478	83	Weighted Average
1,147		25.61% Pervious Area
3,331		74.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	33	0.0300	1.27		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06"
0.6	163	0.0490	4.49		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.5	87	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
1.5	283	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 4.2S: Southern Half of Proposed Road



Summary for Pond 3.1P: Stormwater Pond #2 - Modified Natural Depression

Inflow Area = 0.732 ac, 14.85% Impervious, Inflow Depth = 0.59" for 10-YEAR event
Inflow = 0.23 cfs @ 12.15 hrs, Volume= 0.036 af
Outflow = 0.02 cfs @ 17.45 hrs, Volume= 0.037 af, Atten= 89%, Lag= 317.9 min
Discarded = 0.02 cfs @ 17.45 hrs, Volume= 0.037 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link POA 3 : Existing Natural Depression

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Starting Elev= 38.00' Surf.Area= 1,364 sf Storage= 34 cf
Peak Elev= 38.48' @ 17.45 hrs Surf.Area= 1,716 sf Storage= 767 cf (733 cf above start)
Flood Elev= 41.00' Surf.Area= 4,608 sf Storage= 8,345 cf (8,311 cf above start)

Plug-Flow detention time= 464.5 min calculated for 0.036 af (100% of inflow)
Center-of-Mass det. time= 437.2 min (1,371.0 - 933.8)

Volume	Invert	Avail.Storage	Storage Description
#1	37.50'	8,345 cf	**Modified Existing Depression (Conic)** Listed below (Recalc)

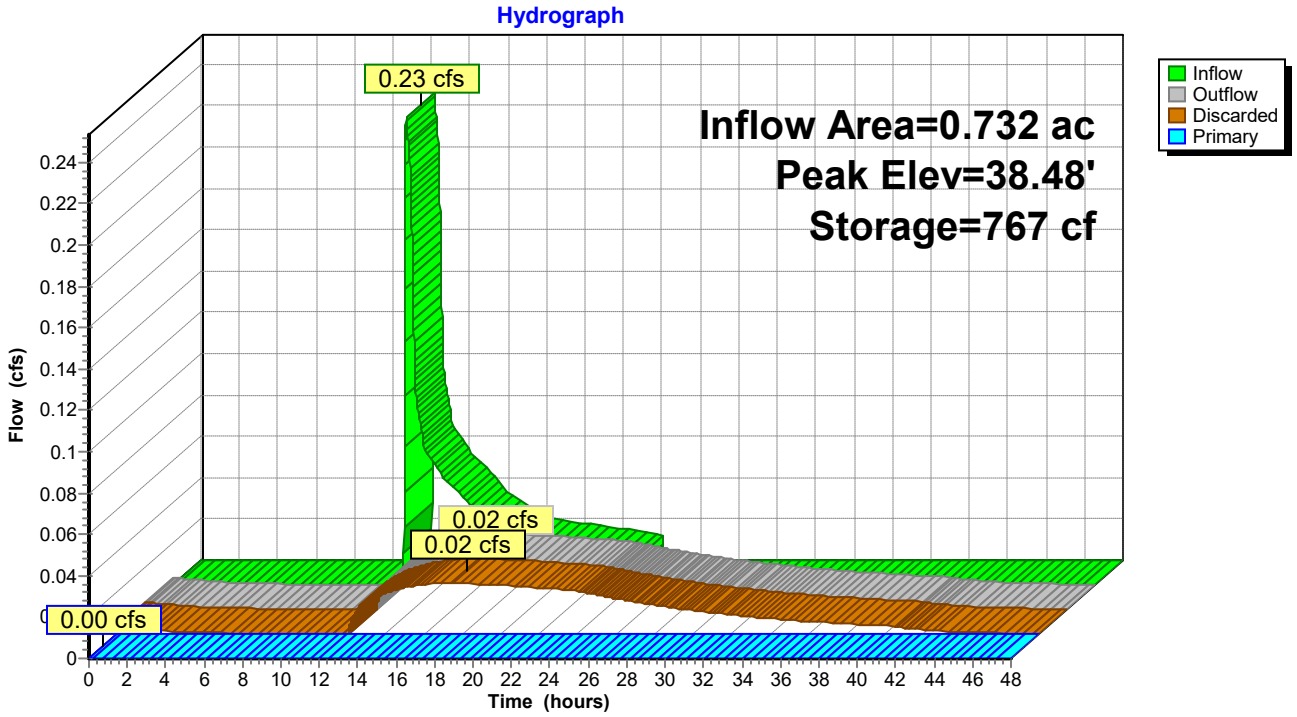
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
37.50	1,364	0.0	0	0	1,364
38.00	1,364	5.0	34	34	1,429
39.00	2,148	100.0	1,741	1,775	2,227
40.00	3,230	100.0	2,671	4,446	3,325
41.00	4,608	100.0	3,899	8,345	4,720

Device	Routing	Invert	Outlet Devices
#1	Discarded	37.50'	**2.500 in/hr Exfiltration through Media to Ground over Wetted area above 37.50'** Excluded Wetted area = 1,364 sf Phase-In= 0.01'
#2	Primary	37.50'	**12.0" Round Outlet to DMH-1 (Culvert)** L= 9.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 37.50' / 37.40' S= 0.0111 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#3	Device 2	39.50'	**15.0" Horiz. 15" Yard Drain Rim (Orifice)** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.02 cfs @ 17.45 hrs HW=38.48' (Free Discharge)
↑—**1=Exfiltration through Media to Ground** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=38.00' TW=0.00' (Dynamic Tailwater)
↑—**2=Outlet to DMH-1 (Culvert)** (Passes 0.00 cfs of 0.76 cfs potential flow)
↑—**3=15" Yard Drain Rim (Orifice)** (Controls 0.00 cfs)

Pond 3.1P: Stormwater Pond #2 - Modified Natural Depression



Summary for Pond 3.2P: DMH-1

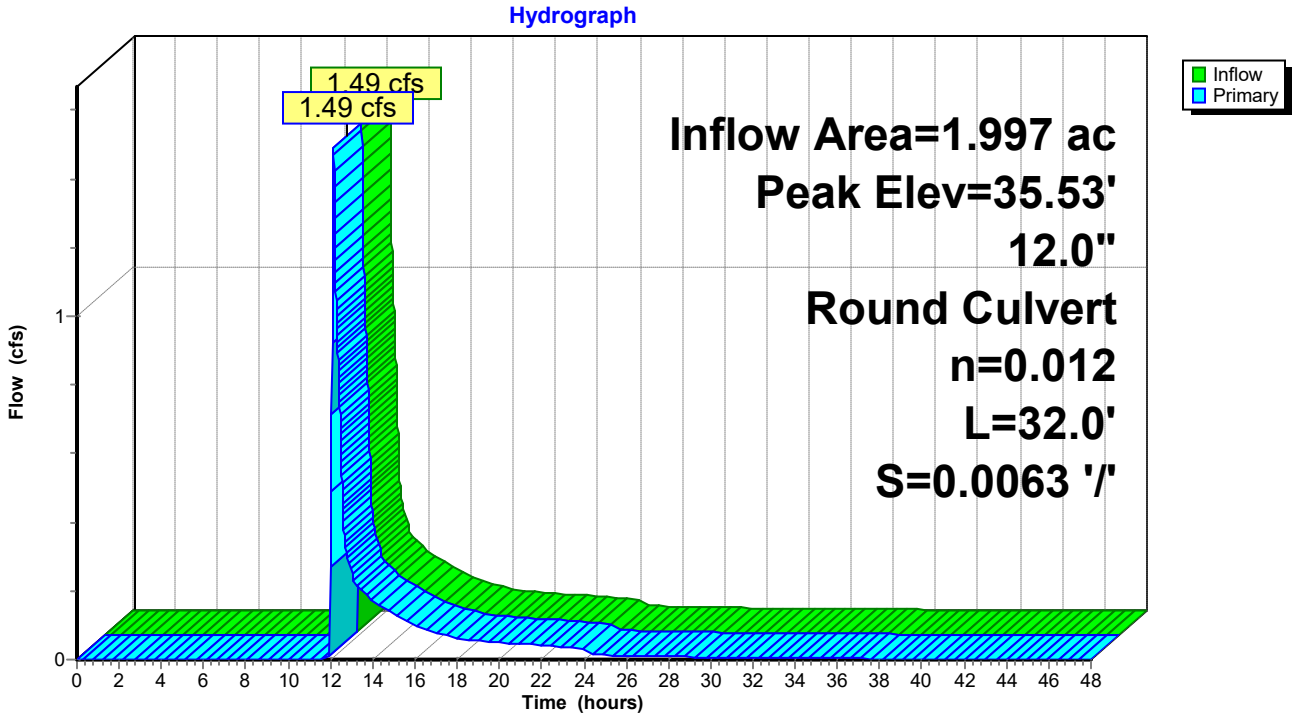
Inflow Area = 1.997 ac, 24.29% Impervious, Inflow Depth > 0.81" for 10-YEAR event
Inflow = 1.49 cfs @ 12.14 hrs, Volume= 0.135 af
Outflow = 1.49 cfs @ 12.14 hrs, Volume= 0.135 af, Atten= 0%, Lag= 0.0 min
Primary = 1.49 cfs @ 12.14 hrs, Volume= 0.135 af
Routed to Pond 4.2P : CB-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 35.53' @ 12.14 hrs
Flood Elev= 42.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	34.70'	**12.0" Round Outlet to CB (Culvert)** L= 32.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 34.70' / 34.50' S= 0.0063 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.49 cfs @ 12.14 hrs HW=35.53' TW=35.24' (Dynamic Tailwater)
1=Outlet to CB (Culvert) (Outlet Controls 1.49 cfs @ 2.90 fps)

Pond 3.2P: DMH-1



Summary for Pond 4.1P: Stormwater Pond #1 (Bioretention)

Inflow Area = 1.265 ac, 29.76% Impervious, Inflow Depth = 1.29" for 10-YEAR event
Inflow = 1.64 cfs @ 12.10 hrs, Volume= 0.136 af
Outflow = 1.49 cfs @ 12.14 hrs, Volume= 0.135 af, Atten= 9%, Lag= 2.4 min
Primary = 1.49 cfs @ 12.14 hrs, Volume= 0.135 af
Routed to Pond 3.2P : DMH-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Starting Elev= 41.00' Surf.Area= 650 sf Storage= 49 cf
Peak Elev= 41.74' @ 12.14 hrs Surf.Area= 1,007 sf Storage= 653 cf (605 cf above start)
Flood Elev= 42.00' Surf.Area= 1,154 sf Storage= 939 cf (890 cf above start)

Plug-Flow detention time= 82.3 min calculated for 0.134 af (99% of inflow)
Center-of-Mass det. time= 74.7 min (957.4 - 882.7)

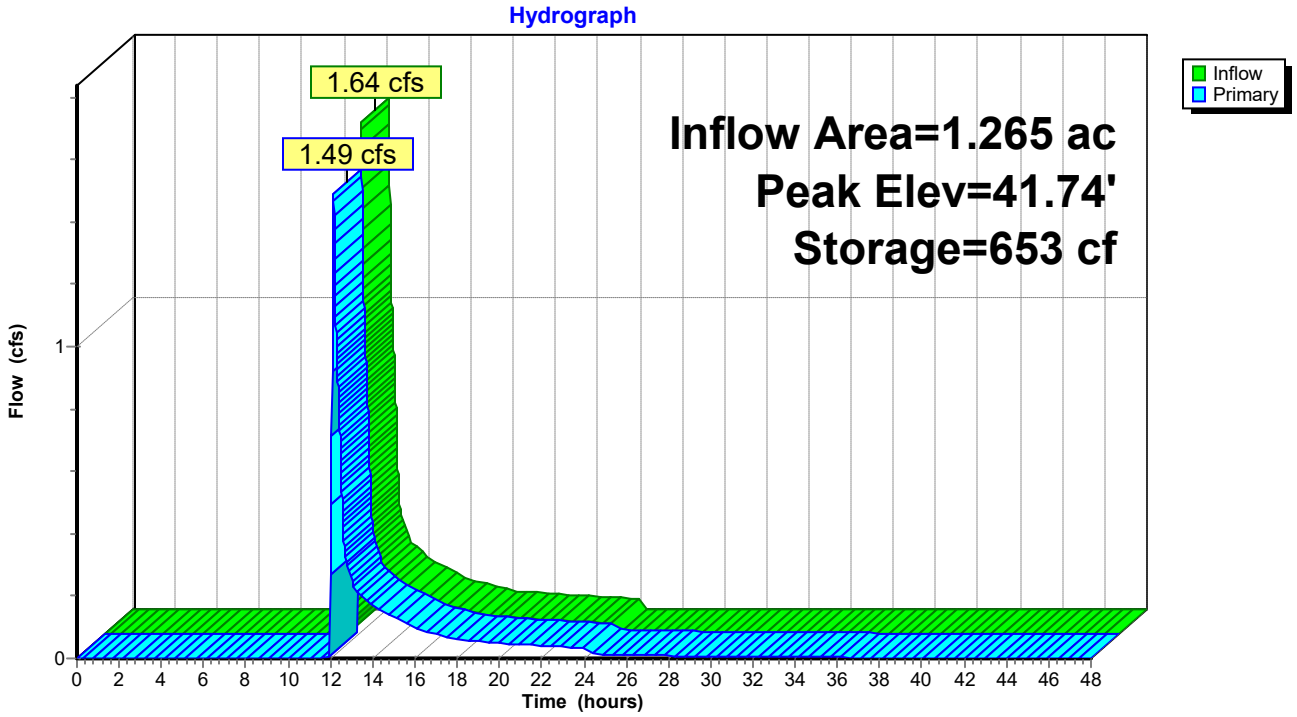
Volume	Invert	Avail.Storage	Storage Description
#1	39.50'	939 cf	**Bioretention Cell (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
39.50	650	0.0	0	0	650
41.00	650	5.0	49	49	786
42.00	1,154	100.0	890	939	1,300

Device	Routing	Invert	Outlet Devices
#1	Primary	38.00'	**12.0" Round Outlet to DMH (Culvert)** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 38.00' / 37.70' S= 0.0060 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	38.30'	**6.0" Vert. Underdrain (Orifice)** C= 0.600 Limited to weir flow at low heads
#3	Device 2	41.00'	**2.500 in/hr Exfiltration through Media over Wetted area above 41.00'** Excluded Wetted area = 786 sf Phase-In= 0.01'
#4	Device 1	41.50'	**15.0" Horiz. 15" Yard Drain Rim (Orifice)** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.49 cfs @ 12.14 hrs HW=41.74' TW=35.53' (Dynamic Tailwater)
- **1=Outlet to DMH (Culvert)** (Passes 1.49 cfs of 6.52 cfs potential flow)
- **2=Underdrain (Orifice)** (Passes 0.02 cfs of 1.69 cfs potential flow)
  - **3=Exfiltration through Media** (Exfiltration Controls 0.02 cfs)
- **4=15" Yard Drain Rim (Orifice)** (Weir Controls 1.47 cfs @ 1.59 fps)

Pond 4.1P: Stormwater Pond #1 (Bioretention)



Summary for Pond 4.2P: CB-1

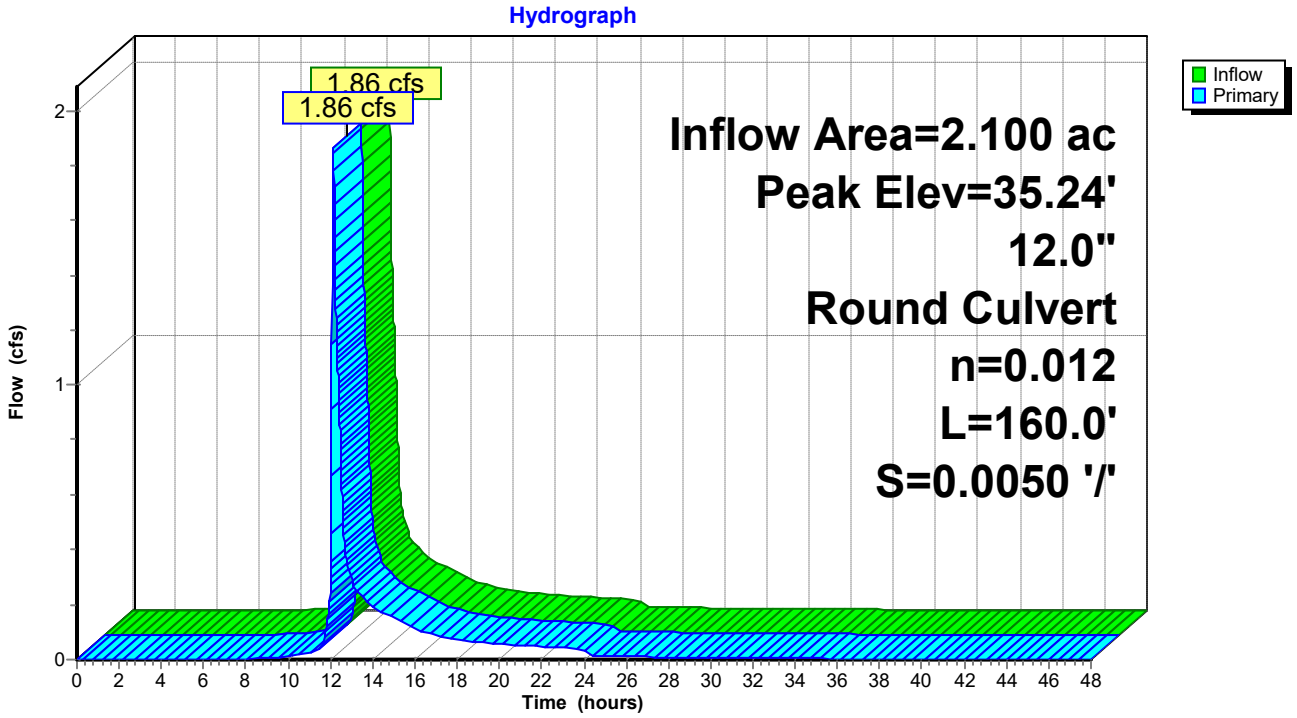
Inflow Area = 2.100 ac, 26.75% Impervious, Inflow Depth > 0.96" for 10-YEAR event
Inflow = 1.86 cfs @ 12.13 hrs, Volume= 0.167 af
Outflow = 1.86 cfs @ 12.13 hrs, Volume= 0.167 af, Atten= 0%, Lag= 0.0 min
Primary = 1.86 cfs @ 12.13 hrs, Volume= 0.167 af
Routed to Link POA 4 : Existing City Drain Manhole

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 35.24' @ 12.13 hrs
Flood Elev= 41.75'

Device	Routing	Invert	Outlet Devices
#1	Primary	34.40'	**12.0" Round Outlet Pipe to City DMH (Culvert)** L= 160.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 34.40' / 33.60' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.86 cfs @ 12.13 hrs HW=35.24' TW=0.00' (Dynamic Tailwater)
1=Outlet Pipe to City DMH (Culvert) (Barrel Controls 1.86 cfs @ 3.57 fps)

Pond 4.2P: CB-1

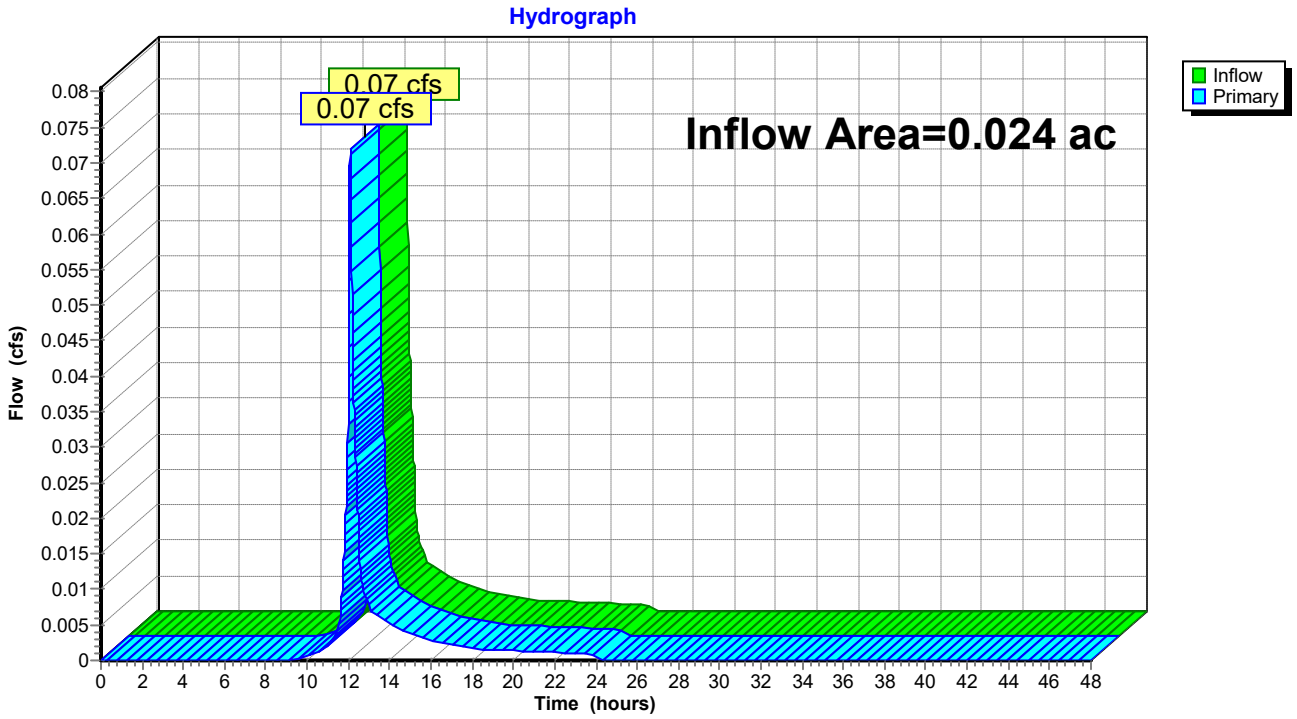


Summary for Link POA 1: Farm Lane Road

Inflow Area = 0.024 ac, 57.07% Impervious, Inflow Depth = 2.57" for 10-YEAR event
Inflow = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af
Primary = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link POA 1: Farm Lane Road

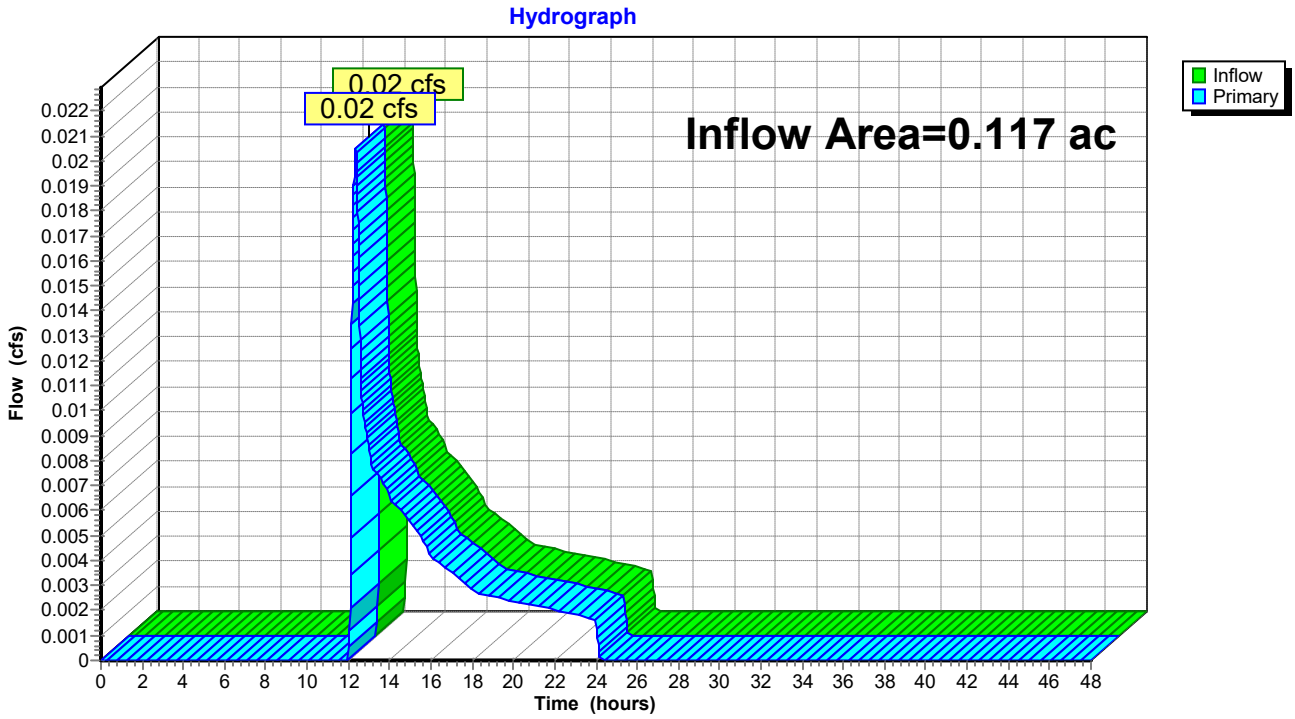


Summary for Link POA 2: Abutting Property

Inflow Area = 0.117 ac, 6.11% Impervious, Inflow Depth = 0.43" for 10-YEAR event
Inflow = 0.02 cfs @ 12.34 hrs, Volume= 0.004 af
Primary = 0.02 cfs @ 12.34 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link POA 2: Abutting Property

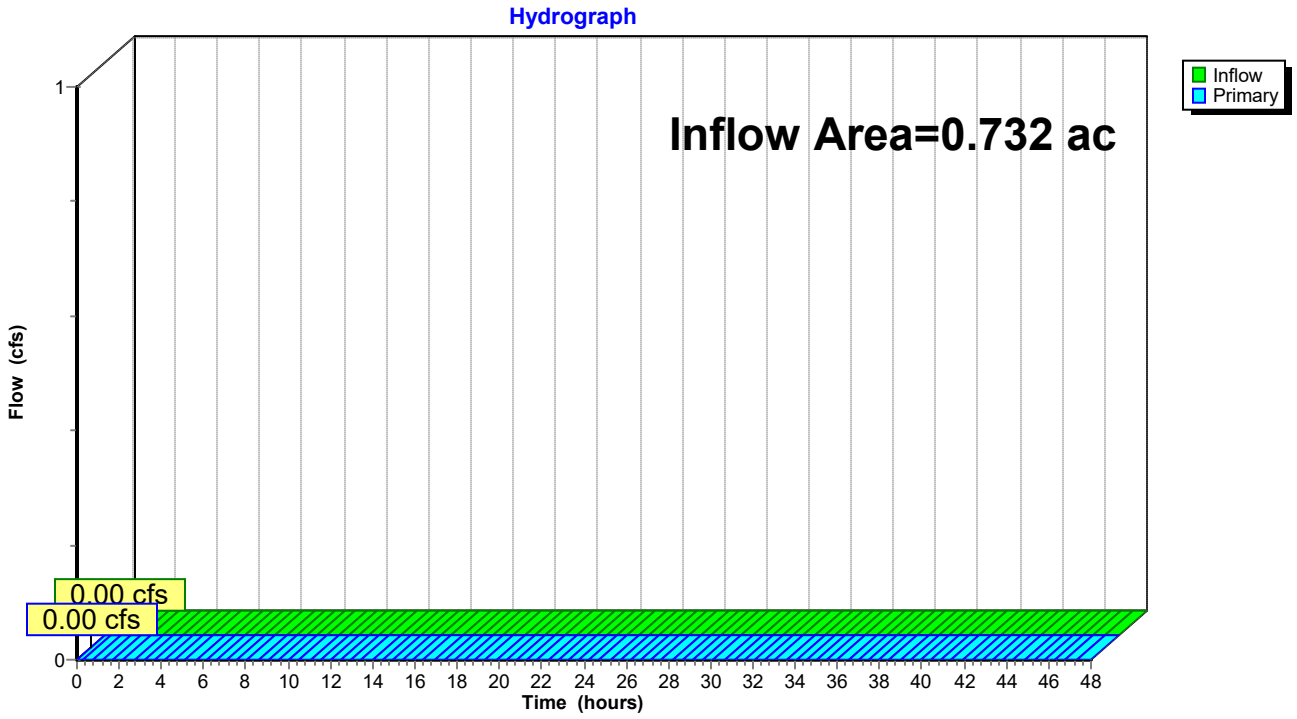


Summary for Link POA 3: Existing Natural Depression

Inflow Area = 0.732 ac, 14.85% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Routed to Pond 3.2P : DMH-1

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link POA 3: Existing Natural Depression

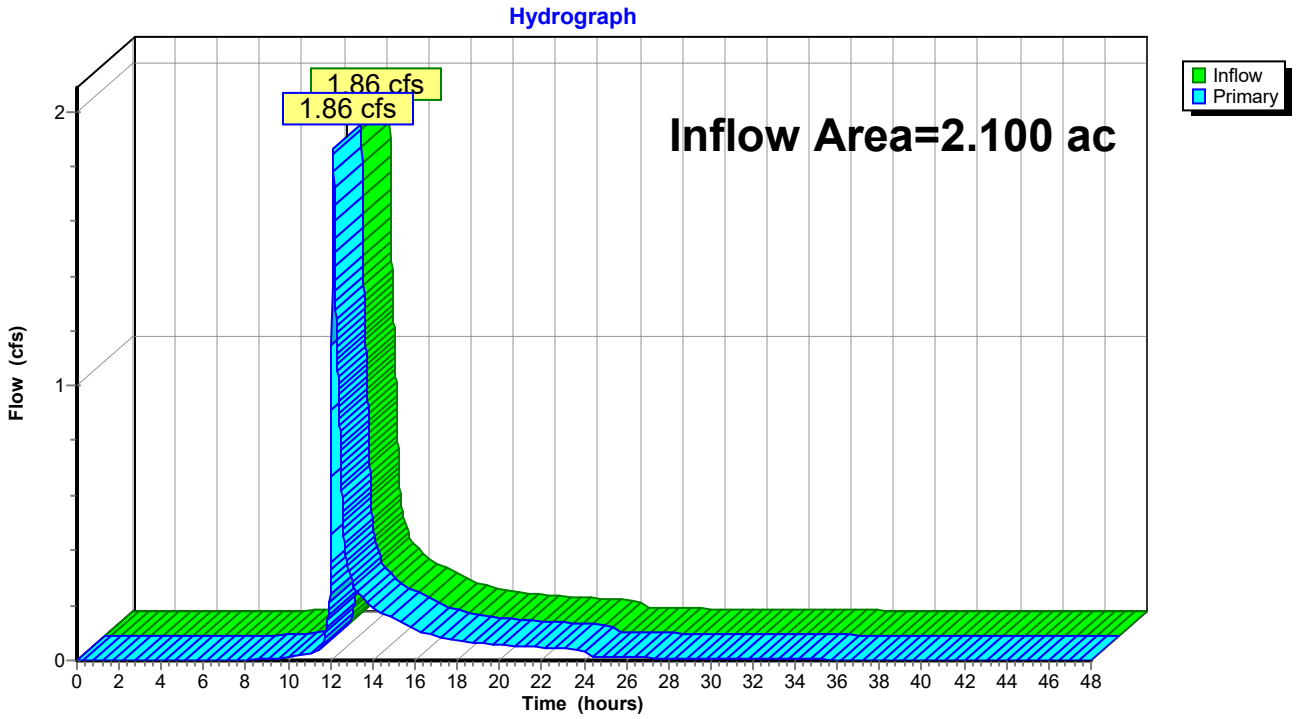


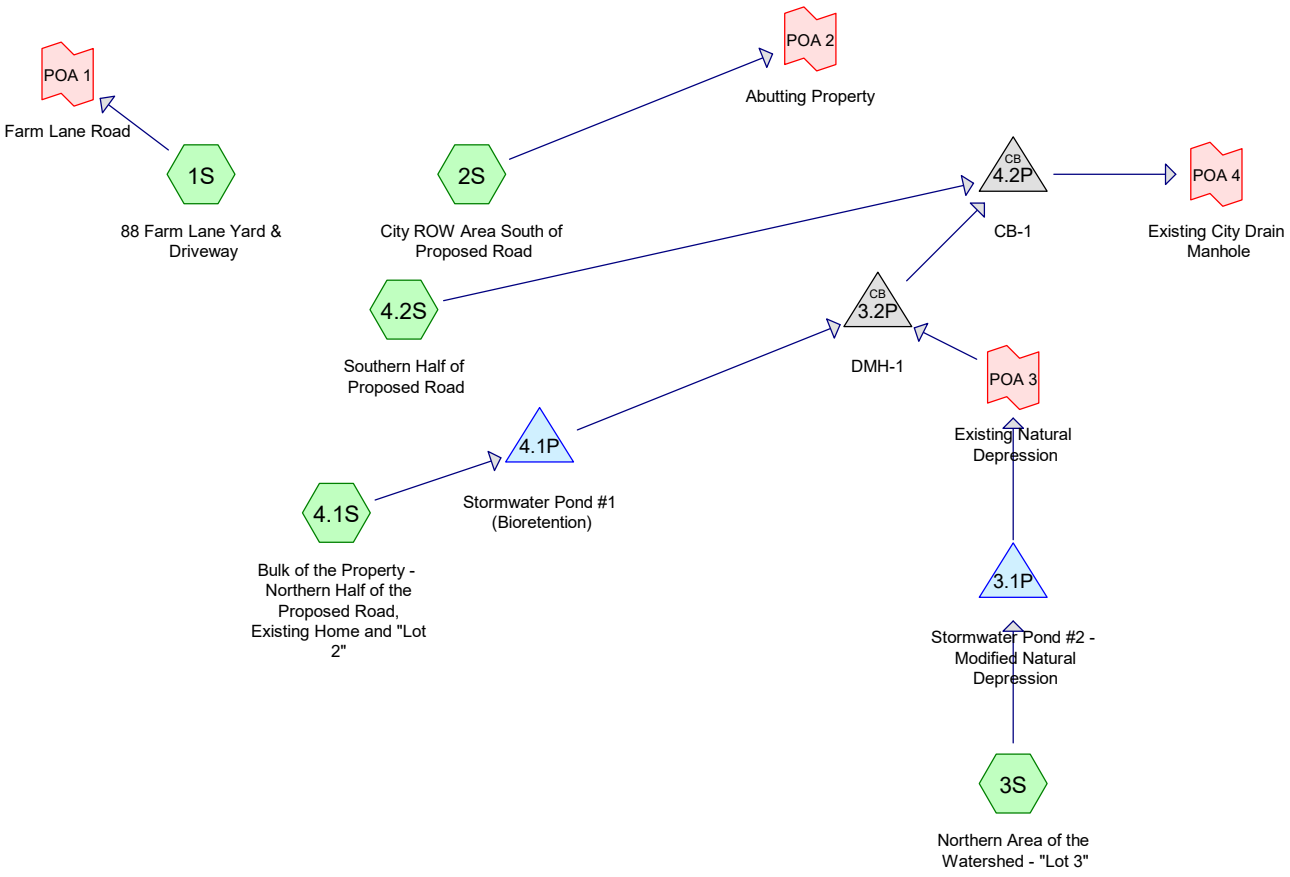
Summary for Link POA 4: Existing City Drain Manhole

Inflow Area = 2.100 ac, 26.75% Impervious, Inflow Depth > 0.96" for 10-YEAR event
Inflow = 1.86 cfs @ 12.13 hrs, Volume= 0.167 af
Primary = 1.86 cfs @ 12.13 hrs, Volume= 0.167 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link POA 4: Existing City Drain Manhole





Subcat Reach Pond Link

Routing Diagram for 5719-POST
Prepared by Altus Engineering, Printed 3/23/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: 88 Farm Lane Yard & Runoff Area=1,046 sf 57.07% Impervious Runoff Depth=3.79"
Flow Length=25' Tc=6.0 min CN=71 Runoff=0.11 cfs 0.008 af

Subcatchment 2S: City ROW Area South of Runoff Area=5,093 sf 6.11% Impervious Runoff Depth=0.95"
Flow Length=136' Tc=6.4 min CN=41 Runoff=0.08 cfs 0.009 af

Subcatchment 3S: Northern Area of the Runoff Area=31,903 sf 14.85% Impervious Runoff Depth=1.19"
Flow Length=251' Tc=6.0 min CN=44 Runoff=0.75 cfs 0.073 af

Subcatchment 4.1S: Bulk of the Property - Runoff Area=55,097 sf 29.76% Impervious Runoff Depth=2.17"
Flow Length=370' Tc=6.0 min CN=55 Runoff=3.02 cfs 0.229 af

Subcatchment 4.2S: Southern Half of Runoff Area=4,478 sf 74.39% Impervious Runoff Depth=5.10"
Flow Length=283' Tc=6.0 min CN=83 Runoff=0.60 cfs 0.044 af

Pond 3.1P: Stormwater Pond #2 - Modified Peak Elev=38.96' Storage=1,682 cf Inflow=0.75 cfs 0.073 af
Discarded=0.05 cfs 0.073 af Primary=0.00 cfs 0.000 af Outflow=0.05 cfs 0.073 af

Pond 3.2P: DMH-1 Peak Elev=36.90' Inflow=2.89 cfs 0.229 af
12.0" Round Culvert n=0.012 L=32.0' S=0.0063 '/' Outflow=2.89 cfs 0.229 af

Pond 4.1P: Stormwater Pond #1 (Bioretention) Peak Elev=41.87' Storage=791 cf Inflow=3.02 cfs 0.229 af
Outflow=2.89 cfs 0.229 af

Pond 4.2P: CB-1 Peak Elev=36.32' Inflow=3.44 cfs 0.273 af
12.0" Round Culvert n=0.012 L=160.0' S=0.0050 '/' Outflow=3.44 cfs 0.273 af

Link POA 1: Farm Lane Road Inflow=0.11 cfs 0.008 af
Primary=0.11 cfs 0.008 af

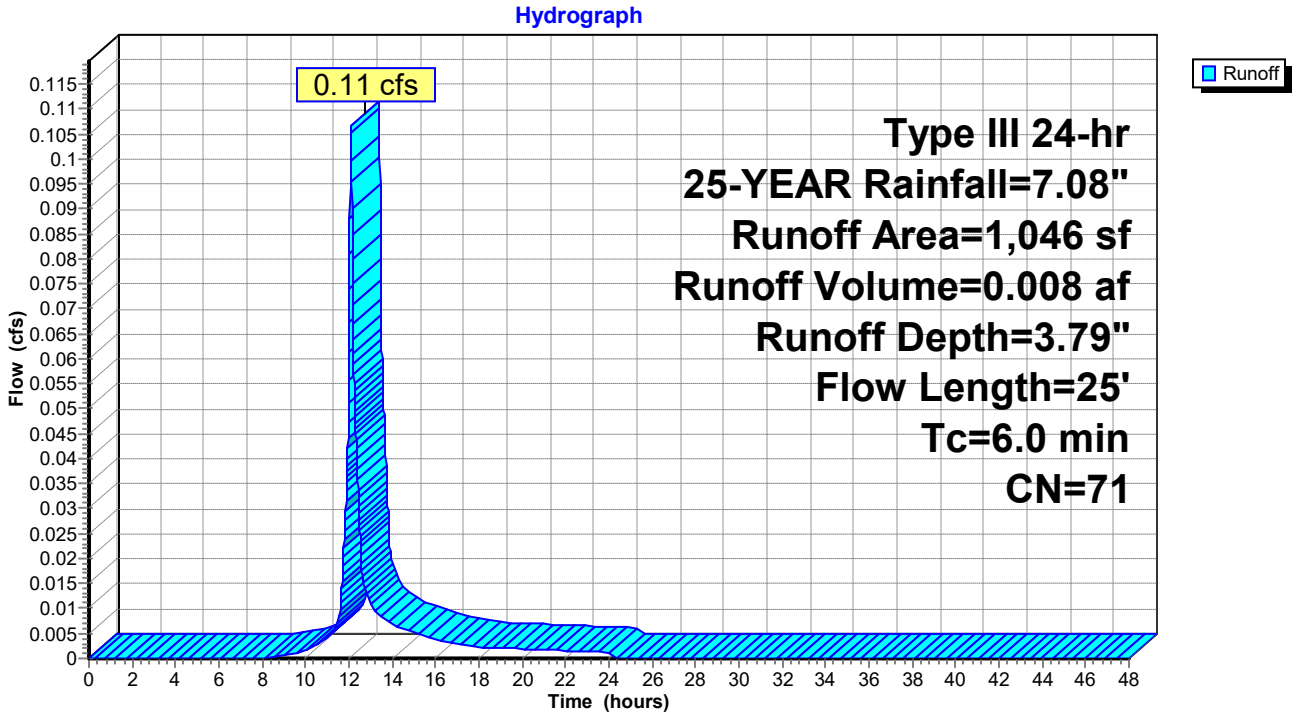
Link POA 2: Abutting Property Inflow=0.08 cfs 0.009 af
Primary=0.08 cfs 0.009 af

Link POA 3: Existing Natural Depression Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

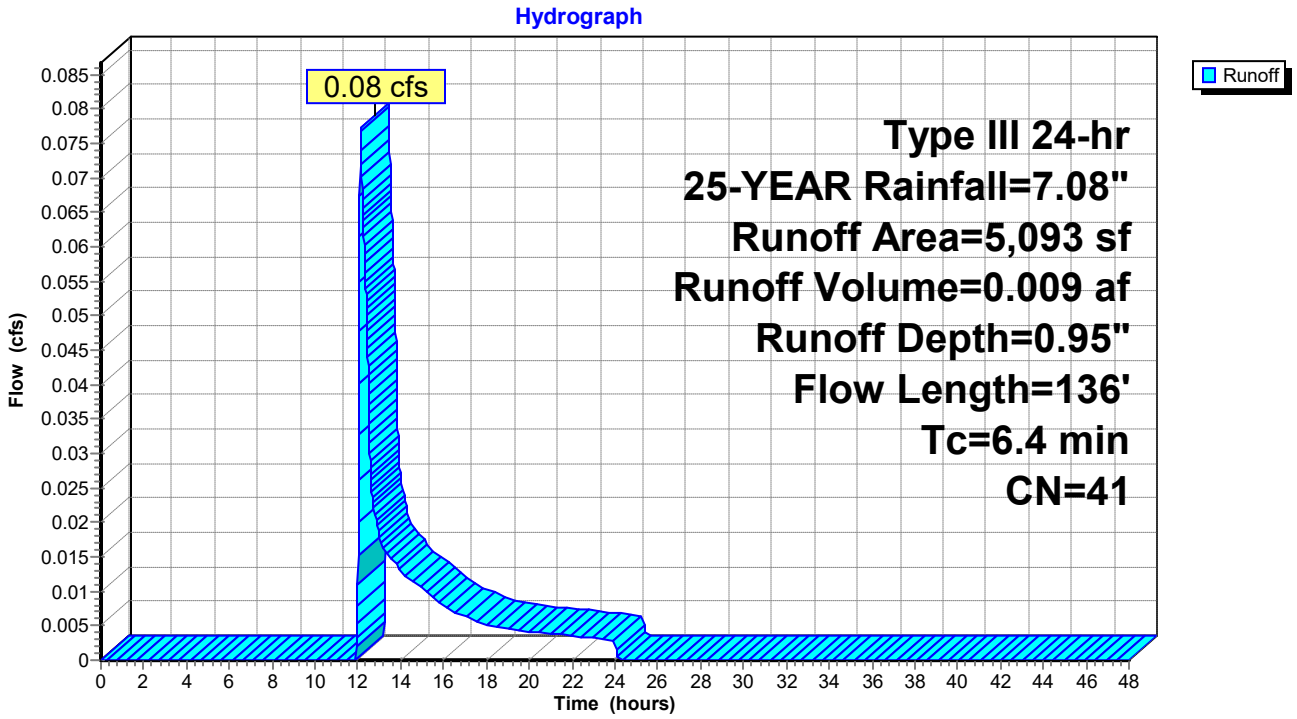
Link POA 4: Existing City Drain Manhole Inflow=3.44 cfs 0.273 af
Primary=3.44 cfs 0.273 af

Total Runoff Area = 2.241 ac Runoff Volume = 0.362 af Average Runoff Depth = 1.94"
74.01% Pervious = 1.658 ac 25.99% Impervious = 0.583 ac

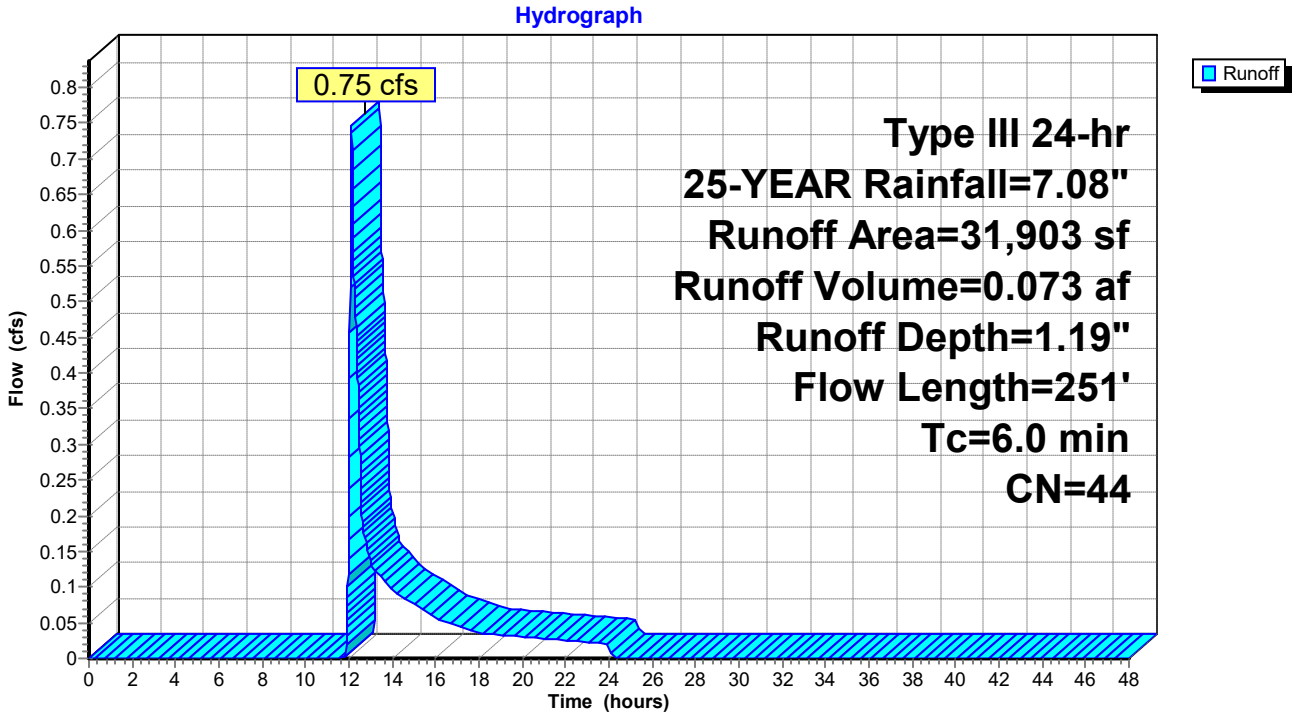
Subcatchment 1S: 88 Farm Lane Yard & Driveway



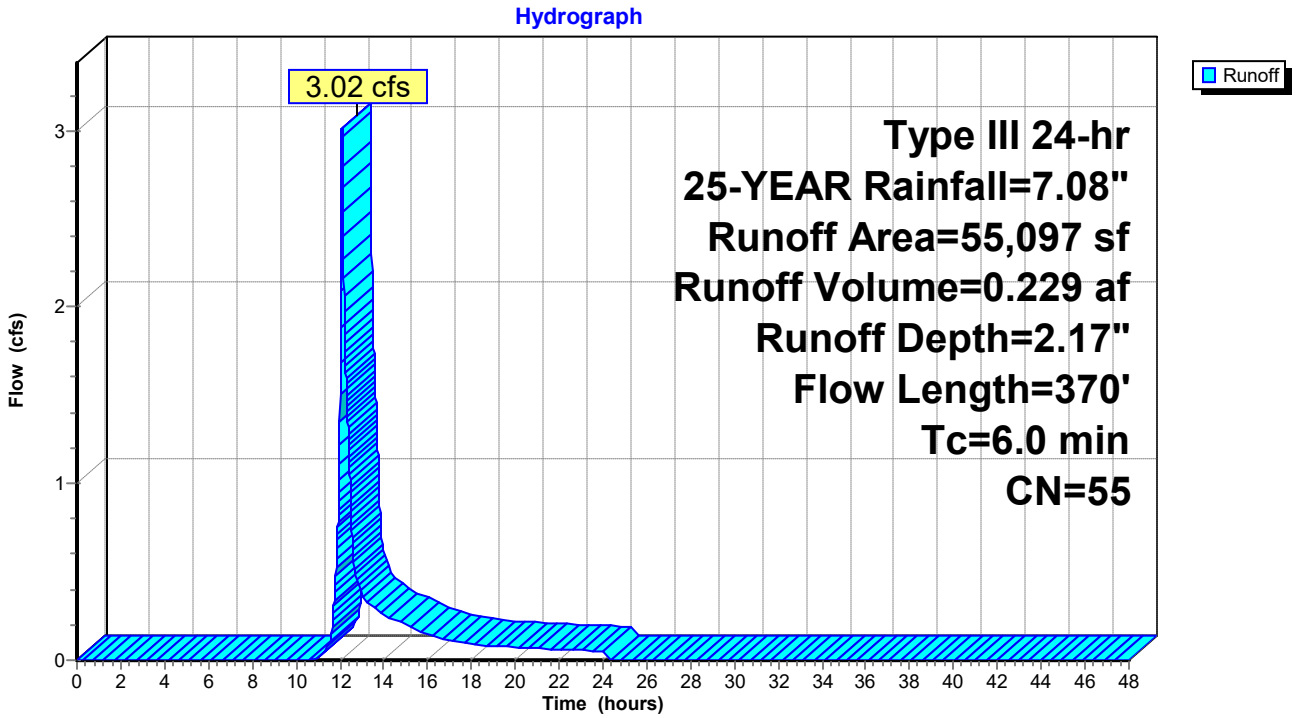
Subcatchment 2S: City ROW Area South of Proposed Road



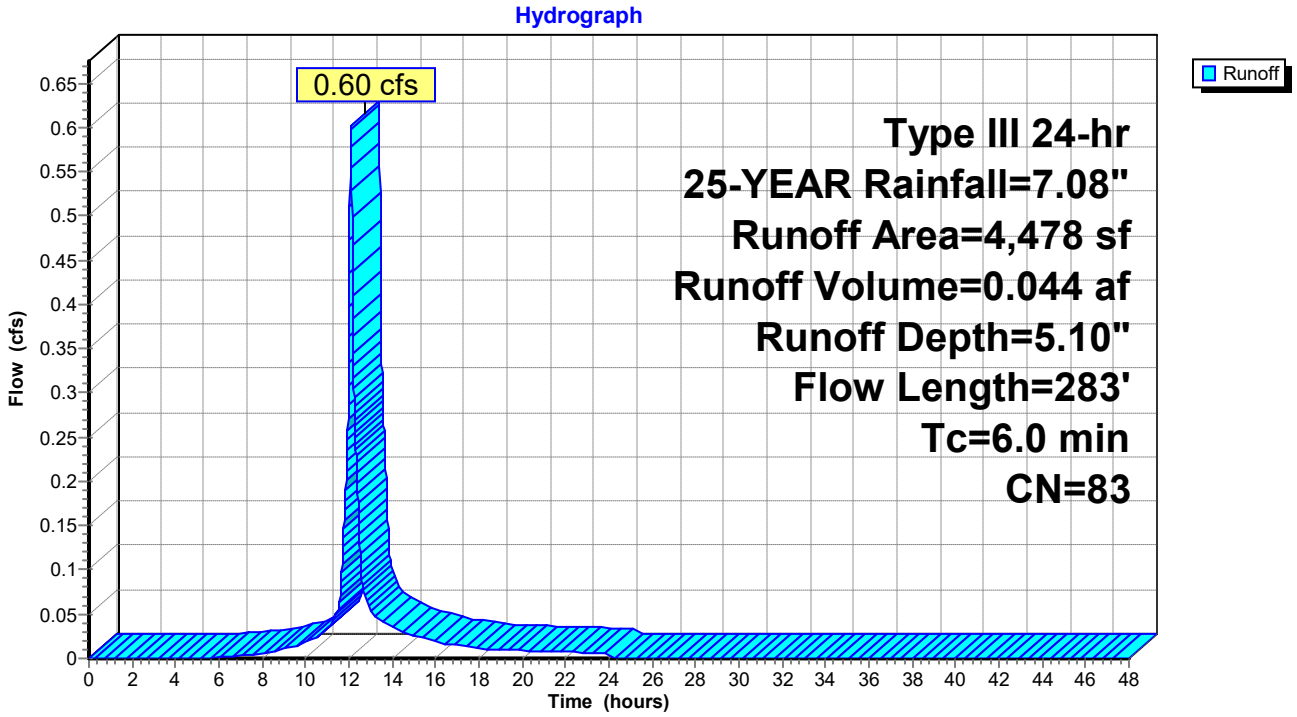
Subcatchment 3S: Northern Area of the Watershed - "Lot 3"



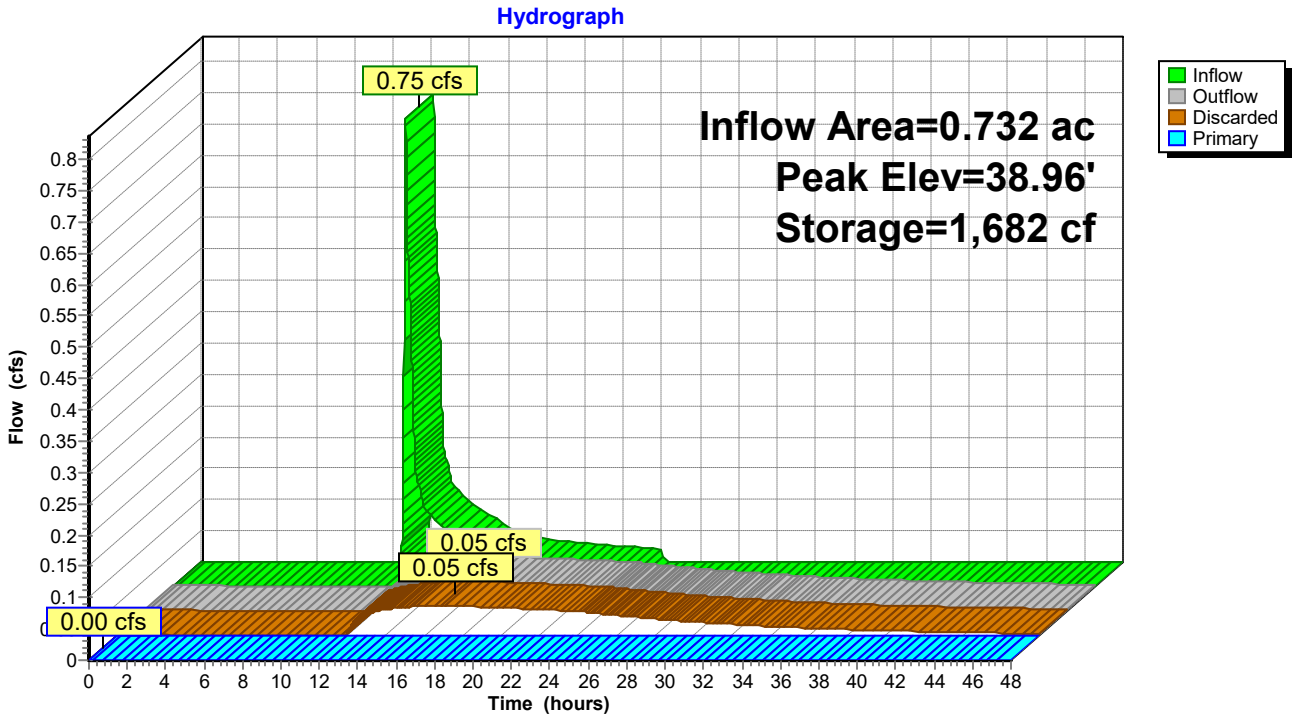
Subcatchment 4.1S: Bulk of the Property - Northern Half of the Proposed Road, Existing Home and "Lot 2"



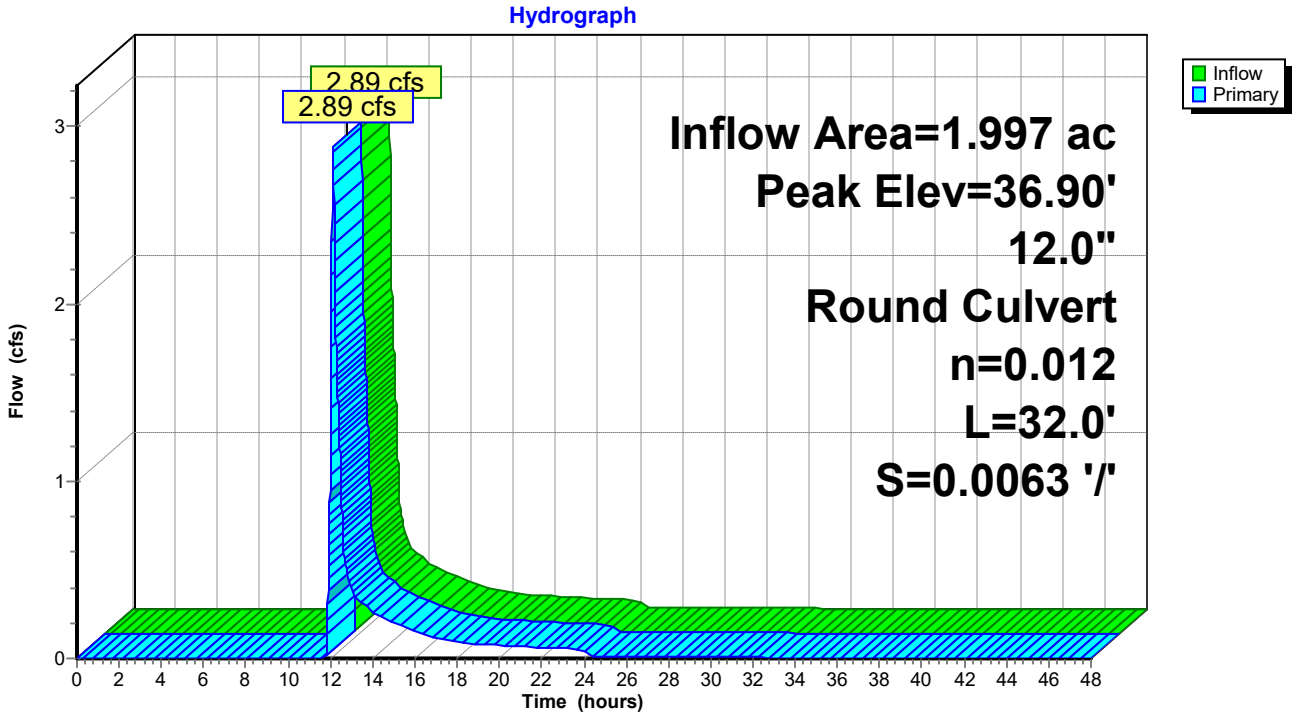
Subcatchment 4.2S: Southern Half of Proposed Road



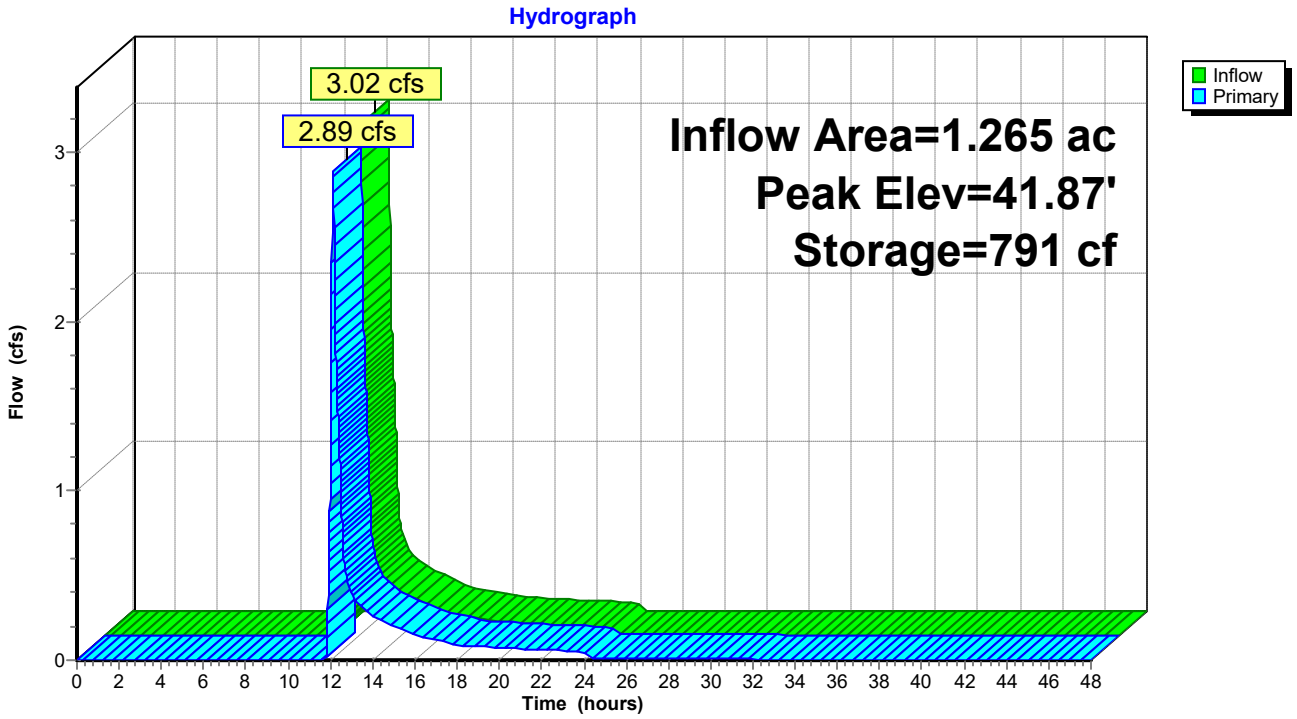
Pond 3.1P: Stormwater Pond #2 - Modified Natural Depression



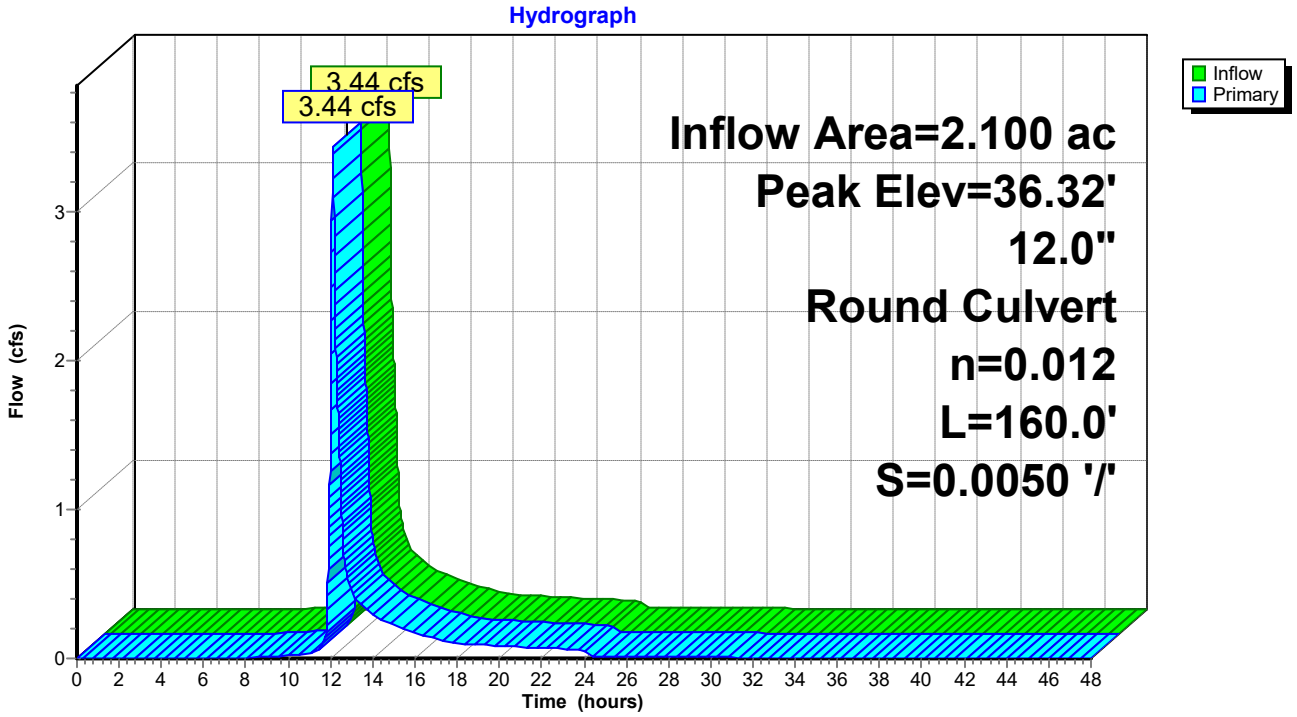
Pond 3.2P: DMH-1



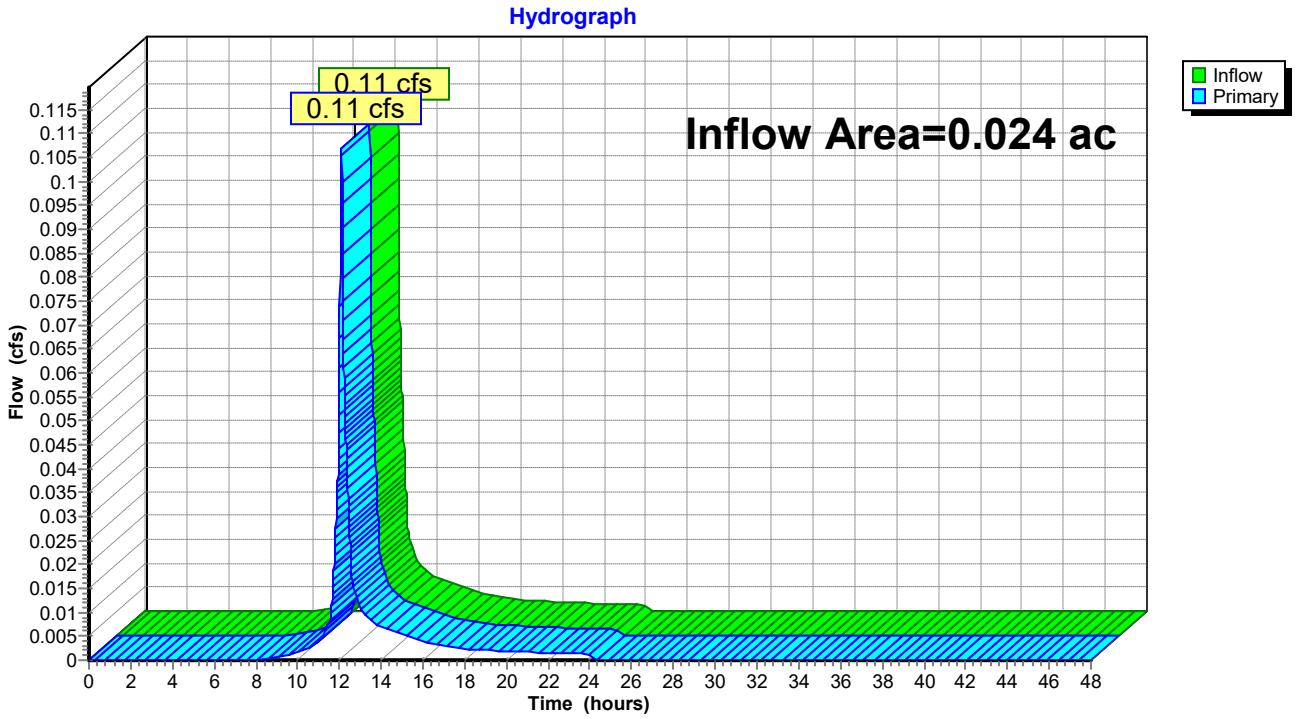
Pond 4.1P: Stormwater Pond #1 (Bioretention)



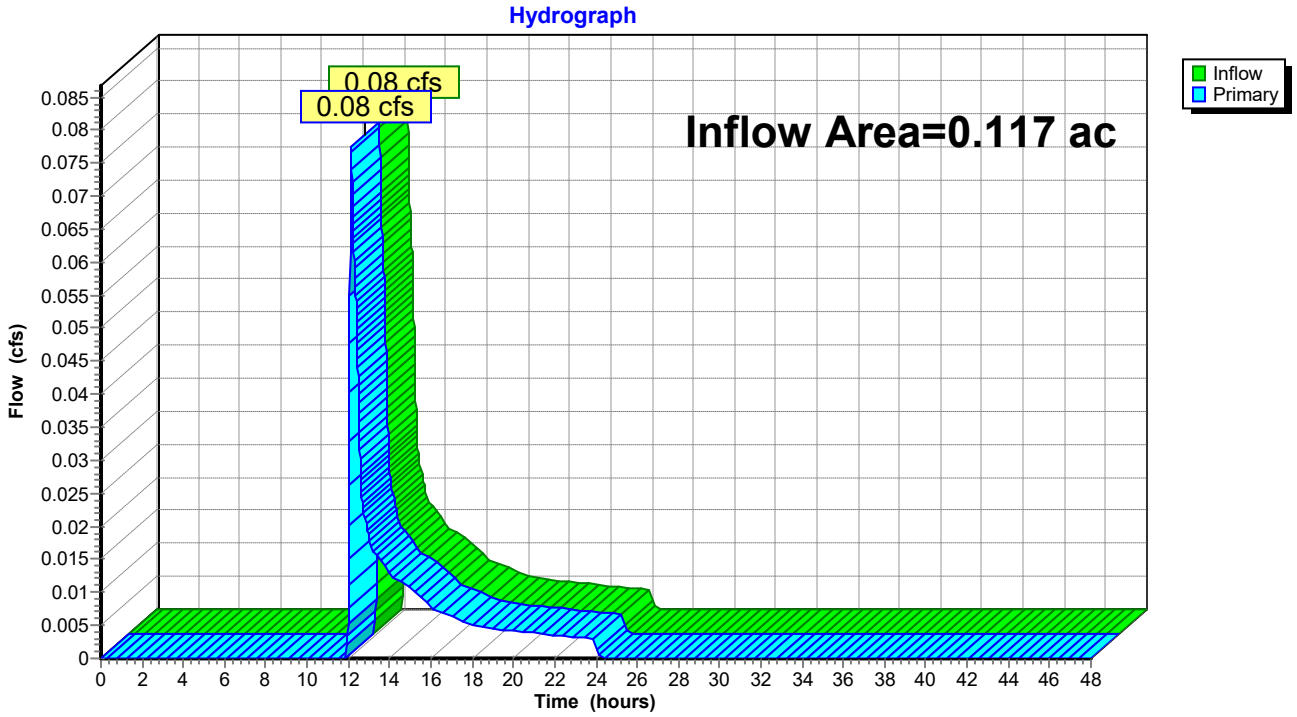
Pond 4.2P: CB-1



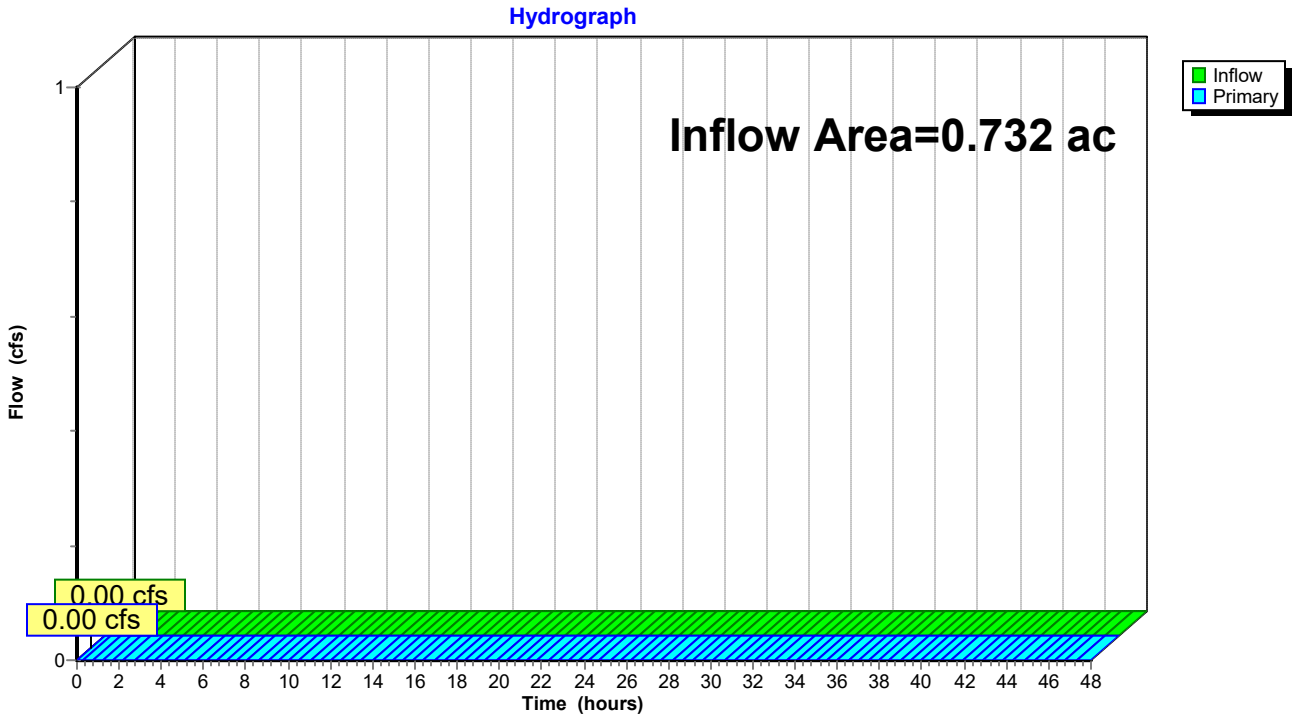
Link POA 1: Farm Lane Road



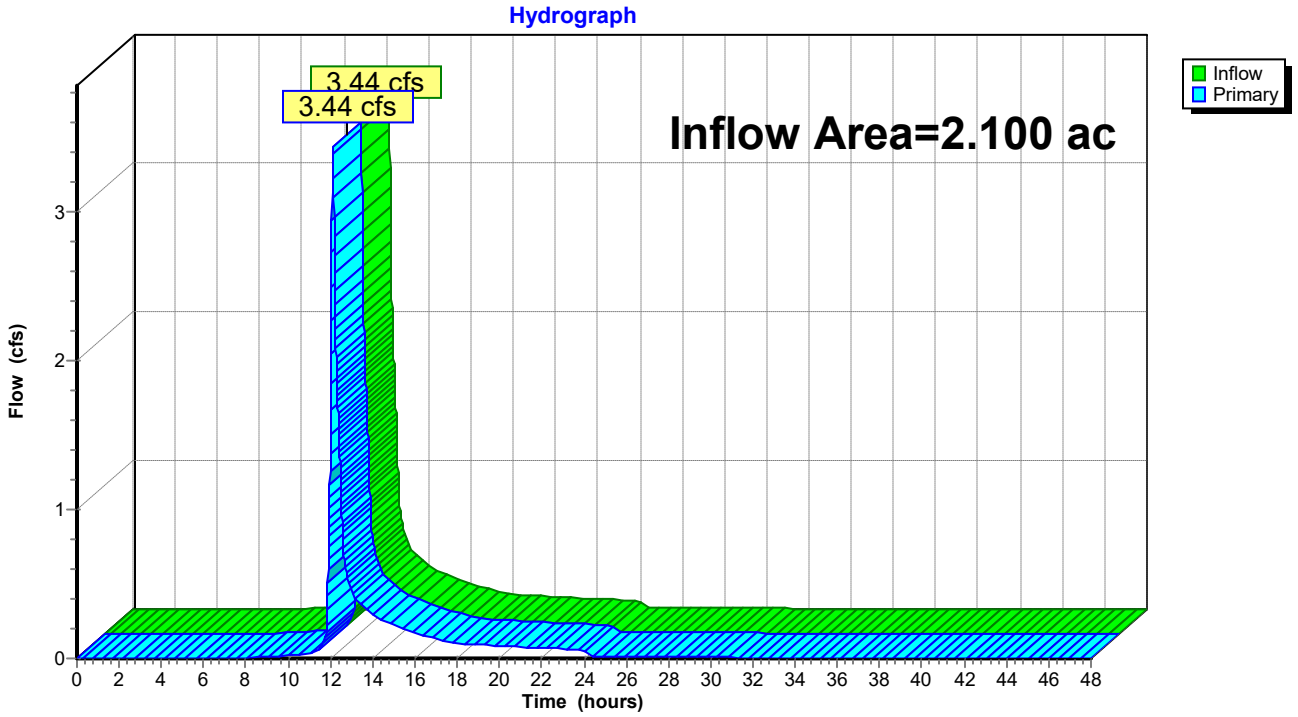
Link POA 2: Abutting Property



Link POA 3: Existing Natural Depression



Link POA 4: Existing City Drain Manhole



Section 5

Precipitation Table

ALTUS ENGINEERING

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	43.079 degrees North
Longitude	70.784 degrees West
Elevation	10 feet
Date/Time	Wed Jan 21 2026 13:34:59 GMT-0500 (Eastern Standard Time)

PRECIPITATION ESTIMATES INCREASED BY 15% FOR COSTAL COMMUNITY

2- YEAR: 2.66 * 1.15 = 3.06
10 - YEAR: 4.86 * 1.15 = 5.59
25 - YEAR: 6.16 * 1.15 = 7.08
50 - YEAR: 7.38 * 1.15 = 8.49

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	2.91	**1yr**	2.35	2.80	3.21	3.93	4.54	**1yr**
2yr	0.32	0.50	0.62	0.81	1.02	1.30	**2yr**	0.88	1.18	1.51	1.94	2.48	3.20	3.56	**2yr**	2.84	3.42	3.93	4.67	5.31	**2yr**
5yr	0.37	0.58	0.73	0.97	1.24	1.60	**5yr**	1.07	1.46	1.88	2.42	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	1.44	1.88	**10yr**	1.25	1.72	2.22	2.88	3.74	4.86	5.52	**10yr**	4.30	5.31	6.06	7.09	7.96	**10yr**
25yr	0.48	0.76	0.96	1.33	1.76	2.32	**25yr**	1.52	2.13	2.76	3.61	4.72	6.16	7.08	**25yr**	5.45	6.81	7.77	9.00	10.03	**25yr**
50yr	0.53	0.85	1.09	1.53	2.06	2.74	**50yr**	1.77	2.51	3.27	4.30	5.64	7.38	8.56	**50yr**	6.53	8.24	9.38	10.78	11.96	**50yr**
100yr	0.60	0.97	1.25	1.76	2.40	3.22	**100yr**	2.07	2.96	3.86	5.11	6.73	8.84	10.36	**100yr**	7.82	9.96	11.33	12.93	14.26	**100yr**
200yr	0.67	1.09	1.41	2.03	2.80	3.80	**200yr**	2.41	3.49	4.58	6.09	8.05	10.59	12.52	**200yr**	9.37	12.04	13.69	15.50	17.00	**200yr**
500yr	0.79	1.30	1.69	2.46	3.44	4.72	**500yr**	2.97	4.35	5.71	7.65	10.18	13.46	16.11	**500yr**	11.91	15.49	17.58	19.72	21.47	**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	0.89	**1yr**	0.63	0.87	0.92	1.32	1.67	2.22	2.50	**1yr**	1.96	2.41	2.85	3.16	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	3.81	4.54	5.06	**2yr**
5yr	0.35	0.54	0.67	0.92	1.17	1.40	**5yr**	1.01	1.37	1.61	2.12	2.74	3.78	4.19	**5yr**	3.35	4.03	4.71	5.53	6.23	**5yr**
10yr	0.38	0.59	0.73	1.02	1.32	1.60	**10yr**	1.14	1.56	1.81	2.40	3.07	4.37	4.86	**10yr**	3.87	4.68	5.43	6.41	7.19	**10yr**
25yr	0.44	0.67	0.83	1.18	1.56	1.90	**25yr**	1.35	1.86	2.10	2.77	3.55	4.68	5.90	**25yr**	4.14	5.67	6.64	7.79	8.68	**25yr**
50yr	0.48	0.73	0.91	1.31	1.76	2.17	**50yr**	1.52	2.12	2.35	3.09	3.96	5.28	6.82	**50yr**	4.67	6.56	7.73	9.04	10.02	**50yr**
100yr	0.54	0.81	1.01	1.46	2.01	2.47	**100yr**	1.73	2.42	2.63	3.44	4.38	5.93	7.88	**100yr**	5.25	7.57	8.99	10.51	11.56	**100yr**
200yr	0.59	0.89	1.13	1.63	2.28	2.82	**200yr**	1.97	2.75	2.93	3.82	4.84	6.63	9.10	**200yr**	5.87	8.75	10.45	12.22	13.36	**200yr**
500yr	0.69	1.02	1.31	1.91	2.71	3.37	**500yr**	2.34	3.29	3.41	4.37	5.53	7.70	11.00	**500yr**	6.81	10.58	12.75	14.95	16.16	**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**	0.76	1.06	1.26	1.74	2.21	2.99	3.14	**1yr**	2.65	3.02	3.58	4.37	5.04	**1yr**
2yr	0.33	0.52	0.64	0.86	1.06	1.26	**2yr**	0.92	1.24	1.48	1.96	2.51	3.42	3.69	**2yr**	3.03	3.55	4.07	4.82	5.63	**2yr**
5yr	0.40	0.61	0.76	1.05	1.33	1.61	**5yr**	1.15	1.58	1.88	2.53	3.24	4.33	4.94	**5yr**	3.83	4.75	5.36	6.35	7.13	**5yr**
10yr	0.47	0.72	0.89	1.24	1.60	1.97	**10yr**	1.38	1.92	2.27	3.10	3.94	5.33	6.17	**10yr**	4.72	5.93	6.77	7.81	8.72	**10yr**
25yr	0.57	0.87	1.08	1.54	2.03	2.55	**25yr**	1.75	2.50	2.94	4.06	5.12	7.80	8.29	**25yr**	6.90	7.97	9.07	10.29	11.36	**25yr**
50yr	0.66	1.01	1.26	1.81	2.44	3.10	**50yr**	2.10	3.04	3.58	4.97	6.27	9.77	10.39	**50yr**	8.65	9.99	11.33	12.66	13.90	**50yr**
100yr	0.78	1.18	1.48	2.14	2.93	3.77	**100yr**	2.53	3.69	4.35	6.12	7.69	12.24	13.01	**100yr**	10.83	12.51	14.15	15.61	17.02	**100yr**
200yr	0.91	1.37	1.74	2.52	3.51	4.60	**200yr**	3.03	4.50	5.30	7.53	9.42	15.36	16.31	**200yr**	13.59	15.69	17.69	19.23	20.83	**200yr**
500yr	1.13	1.68	2.16	3.14	4.47	5.97	**500yr**	3.85	5.83	6.88	9.94	12.37	20.77	22.01	**500yr**	18.38	21.16	23.77	25.35	27.24	**500yr**

Powered by ACIS Northeast Regional Climate Center

Section 6

NRCS Soils Report

ALTUS ENGINEERING

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Rockingham County, New Hampshire

January 8, 2026

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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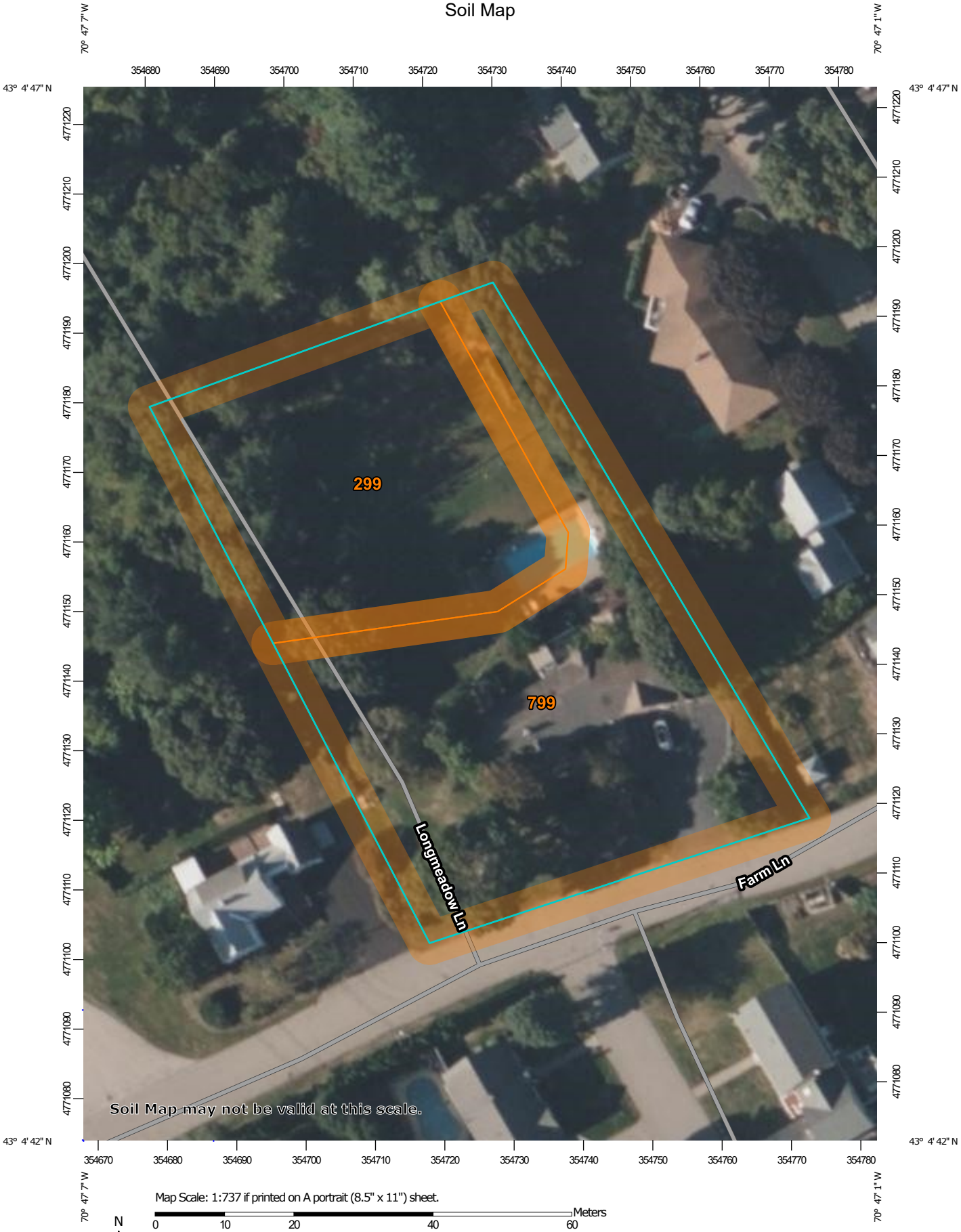
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:737 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 10 20 40 60

Feet: 0 35 70 140 210

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
299	Udorthents, smoothed	0.5	39.4%
799	Urban land-Canton complex, 3 to 15 percent slopes	0.7	60.6%
Totals for Area of Interest		**1.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Rockingham County, New Hampshire

299—Udorthents, smoothed

Map Unit Setting

National map unit symbol: 9cmt
Elevation: 0 to 840 feet
Mean annual precipitation: 44 to 49 inches
Mean annual air temperature: 48 degrees F
Frost-free period: 155 to 165 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Properties and qualities

Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

799—Urban land-Canton complex, 3 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9cq0
Elevation: 0 to 1,000 feet
Mean annual precipitation: 42 to 46 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 120 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 55 percent
Canton and similar soils: 20 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Canton

Setting

Parent material: Till

Typical profile

H1 - 0 to 5 inches: gravelly fine sandy loam
H2 - 5 to 21 inches: gravelly fine sandy loam
H3 - 21 to 60 inches: loamy sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Udorthents

Percent of map unit: 5 percent
Hydric soil rating: No

Squamscott and scitico

Percent of map unit: 4 percent
Landform: Marine terraces
Hydric soil rating: Yes

Boxford and eldridge

Percent of map unit: 4 percent
Hydric soil rating: No

Walpole

Percent of map unit: 4 percent
Landform: Depressions
Hydric soil rating: Yes

Scituate and newfields

Percent of map unit: 4 percent
Hydric soil rating: No

Chatfield

Percent of map unit: 4 percent
Hydric soil rating: No

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Section 7

Stormwater Operations & Maintenance Plan Inspection Form Stormwater Management Plan

ALTUS ENGINEERING

STORMWATER INSPECTION AND MAINTENANCE MANUAL

86 Farm Lane Subdivision
Tax Map 236, Lot 74

OWNER:
Flipping Berger's, LLC.
71 Bracket Road
Portsmouth, NH 03801

Proper inspection, maintenance, and repair are key elements in maintaining a successful stormwater management program on a developed property. Routine inspections ensure permit compliance and reduce the potential for deterioration of infrastructure or reduced water quality. The following responsible parties shall be in charge of managing the stormwater facilities:

RESPONSIBLE PARTIES:

Owner:	*Jeanette MacDonald*		*-*
	Name	*Company*	*Phone*
Inspection:	*Flipping Berger's, LLC*		*(914) 299-4438*
	Name	*Company*	*Phone*
Maintenance:	*Flipping Berger's, LLC*		*(603) 299-4438*
	Name	*Company*	*Phone*

NOTES:

Photographs of each stormwater BMP are to be taken at each inspection and submitted with the annual inspection reports.

Inspection and maintenance responsibilities shall transfer to any future property owner(s).

This manual shall be updated as needed to reflect any changes related to any transfer of ownership and/or any delegation of inspection and maintenance responsibilities to another entity

ALTUS ENGINEERING

STORMWATER PONDS/CELLS (AKA RAINGARDENS) BIORETENTION & INFILTRATION

Function – Bioretention and infiltration ponds provide treatment to runoff prior to directing it to stormwater systems by filtering sediment and suspended solids, trapping them in the bottom of the garden and in the filter media itself. Additional treatment is provided by the native water-tolerant vegetation which removes nutrients and other pollutants through bio-uptake. Stormwater detention and infiltration can also be provided as the filtering process slows runoff, decreases the peak rate of discharge and promotes groundwater recharge.

Bioretention and infiltration ponds shall be managed (Per AGR 3800 and RSA 430:53) to: prevent and control the spread of invasive plant, insect, and fungal species; minimize the adverse environmental and economic effects invasive species cause to agriculture, forests, wetlands, wildlife, and other natural resources of the state; and protect the public from potential health problems attributed to certain invasive species.

Maintenance

- Inspect annually and after significant rainfall events.
- If a raingarden does not completely drain within 72-hours following a rainfall event, then a qualified professional shall be retained to assess the condition of the facility to determine measures required to restore its filtration and/or infiltration function(s), including but not limited to removal of accumulated sediments and/or replacement or reconstruction of the filter media. Filter media shall be replaced with material matching the specification on the design drawings or the NHDES Stormwater Manual.
- Replace any riprap dislodged from spillways, inlets and outlets.
- Remove any obstructions, litter and accumulated sediment or debris as warranted but no less than once a year.
- Mowing of any grassed area in or adjacent to a raingarden, including its berm, shall be performed at least twice per year (when areas are not inundated) to keep the vegetation in vigorous condition. The cut grass shall be removed to prevent the decaying organic litter from clogging the filter media or choking other vegetation.
- Select vegetation should be maintained in healthy condition. This may include pruning, removal and replacement of dead or diseased vegetation.
- Remove any invasive species, Per AGR 3800 and RSA 430:53.
- Remove any hard wood growth from raingardens.

DRAINAGE PIPES

Function – Drainage pipes convey stormwater away from buildings, walkways, and parking areas and to surface waters or closed drainage systems.

Maintenance

- Drainage pipes shall be inspected semi-annually, or more often as needed, for accumulation of debris and structural integrity. Leaves and other debris shall be removed from the inlet and outlet to insure the functionality of drainage structures. Debris shall be disposed of on site where it will not concentrate back at the drainage structures or at a solid waste disposal facility.

DEEP SUMP CATCH BASINS

Function – Catch basins collect stormwater, primarily from paved surfaces and roofs. Stormwater from paved areas often contains sediment and contaminants. Catch basin sumps serve to trap sediment, trace metals, nutrients and debris. Hooded catch basins trap hydrocarbons and floating debris.

Maintenance

- Remove leaves and debris from structure grates on an as-needed basis.
- Sumps shall be inspected and cleaned annually and any removed sediment and debris shall be disposed of at a solid waste disposal facility.

RIP RAP OUTLETS, SWALES AND BUFFERS

Function – Rip rap outlets slow the velocity of runoff, minimizing erosion and maximizing the treatment capabilities of associated buffers. Vegetated buffers, either forested or meadow, slow runoff which promotes and reduces peak rates of runoff. The reduced velocities and the presence of vegetation encourage the filtration of sediment and the limited bio-uptake of nutrients.

Maintenance

- Inspect riprap and buffers at least annually for signs of erosion, sediment buildup, or vegetation loss.
- If a meadow buffer, provide periodic mowing as needed to maintain a healthy stand of herbaceous vegetation.
- If a forested buffer, then the buffer should be maintained in an undisturbed condition, unless erosion occurs.
- If erosion of the buffer (forested or meadow) occurs, eroded areas should be repaired and replanted with vegetation similar to the remaining buffer. Corrective action should include eliminating the source of the erosion problem and may require retrofit or reconstruction of the level spreader.
- Remove debris and accumulated sediment and dispose of properly.

VEGETATIVE SWALES

Function – Vegetative swales filter sediment from stormwater, promote infiltration, and the uptake of contaminates. They are designed to treat runoff and dispose of it safely into the natural drainage system.

Maintenance

- Timely maintenance is important to keep a swale in good working condition. Mowing of grassed swales shall be monthly to keep the vegetation in vigorous condition. The cut vegetation shall be removed to prevent the decaying organic litter from adding pollutants to the discharge from the swale.
- Fertilizing shall be bi-annual or as recommended from soil testing.
- Inspect swales following significant rainfall events.
- Woody vegetation shall not be allowed to become established in the swales or rock riprap outlet protection and if present shall be removed.
- Accumulated debris disrupts flow and leads to clogging and erosion. Remove debris and litter as necessary.
- Inspect for eroded areas. Determine cause of erosion and correct deficiency as required. Monitor repaired areas.

LANDSCAPED AREAS - FERTILIZER MANAGEMENT

Function – Fertilizer management involves controlling the rate, timing and method of fertilizer application so that the nutrients are taken up by the plants thereby reducing the chance of polluting the surface and ground waters. Fertilizer management can be effective in reducing the amounts of phosphorus and nitrogen in runoff from landscaped areas, particularly lawns.

Maintenance

- Have the soil tested by your landscaper or local Soil Conservation Service for nutrient requirements and follow the recommendations.
- Do not apply fertilizer to frozen ground.
- Clean up any fertilizer spills.
- Do not allow fertilizer to be broadcast into water bodies.
- When fertilizing a lawn, water thoroughly, but do not create a situation where water runs off the surface of the lawn.

LANDSCAPED AREAS - LITTER CONTROL

Function – Landscaped areas tend to filter debris and contaminates that may block drainage systems and pollute the surface and ground waters.

Maintenance

- Litter Control and lawn maintenance involves removing litter such as trash, leaves, lawn clippings, pet waste, oil and chemicals from streets, parking lots, and lawns before materials are transported into surface waters.
- Litter control shall be implemented as part of the grounds maintenance program.

CONTROL OF INVASIVE PLANTS

Function – Invasive plants are introduced, alien, or non-native plants, which have been moved by people from their native habitat to a new area. Some exotic plants are imported for human use such as landscaping, erosion control, or food crops. They also can arrive as "hitchhikers" among shipments of other plants, seeds, packing materials, or fresh produce. Some exotic plants become invasive and cause harm by:

- becoming weedy and overgrown;
- killing established shade trees;
- obstructing pipes and drainage systems;
- forming dense beds in water;
- lowering water levels in lakes, streams, and wetlands;
- destroying natural communities;
- promoting erosion on stream banks and hillsides; and
- resisting control except by hazardous chemical.

Maintenance

During maintenance activities, check for the presence of invasive plants and remove in a safe manner as described in the attached “Methods for Disposing Non-Native Invasive Plants” prepared by the UNH Cooperative Extension.

GENERAL CLEAN UP

- Upon completion of the project, the contractor shall remove all temporary stormwater structures (i.e., temporary stone check dams, silt fence, temporary diversion swales, catch basin inlet filter, etc.). Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform to the existing grade, prepared, and seeded. Remove any sediment in catch basins and clean drainpipes that may have accumulated during construction.
- Once in operation, all paved areas of the site should be swept at least once annually at the end of winter/early spring prior to significant spring rains.

APPPENDIX

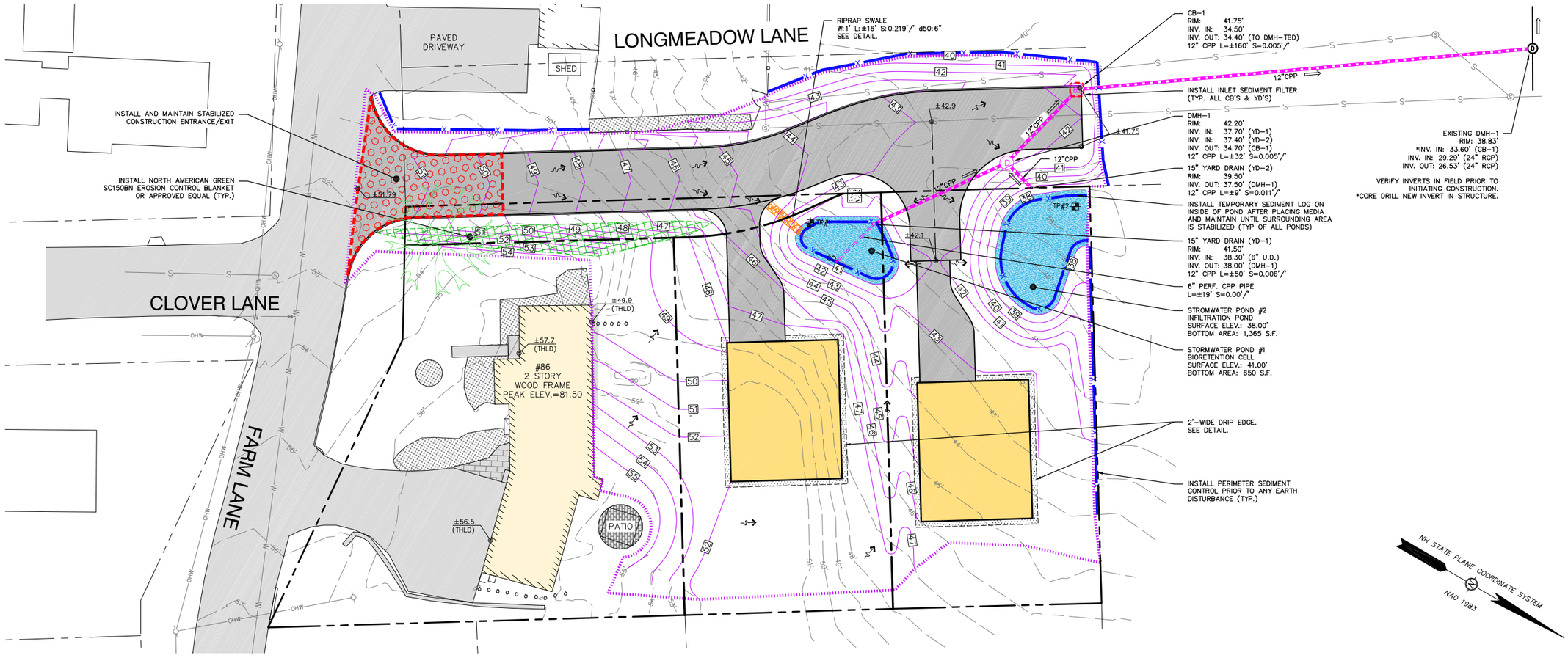
A. Stormwater System Operations and Maintenance Report
B. Stormwater Management Plan

STORM WATER SYSTEM OPERATION AND MAINTENANCE REPORT

General Information			
Project Name			
Owner			
Inspector's Name(s)			
Inspector's Contact Information			
Date of Inspection		**Start Time:**	**End Time:**
Type of Inspection: ☐ Annual Report ☐ Post-storm event ☐ Due to a discharge of significant amounts of sediment			
Notes:			

General Site Questions and Discharges of Significant Amounts of Sediment			
Subject		**Status**	**Notes**
A discharge of significant amounts of sediment may be indicated by (but is not limited to) observations of the following. Note whether any are observed during this inspection:			*Notes/ Action taken:*
1	Do the current site conditions reflect the attached site plan?	❑Yes ❑No	
2	Is the site permanently stabilized, temporary erosion and sediment controls are removed, and stormwater discharges from construction activity are eliminated?	❑Yes ❑No	
3	Is there evidence of the discharge of significant amounts of sediment to surface waters, or conveyance systems leading to surface waters?	❑Yes ❑No	

Permit Coverage and Plans				
#	**BMP/Facility**	**Inspected**	**Corrective Action Needed and Notes**	**Date Corrected**
	Bioretention Cell/ Infiltration Pond	❑Yes ❑No		
	Drainage Pipes	❑Yes ❑No		
	Deep Sump Catch Basins	❑Yes ❑No		
	Riprap Outlets, Swales and Buffers	❑Yes ❑No		
	Vegetative Swales	❑Yes ❑No		
	Site Vegetation & Landscaping	❑Yes ❑No		



GRADING & DRAINAGE NOTES

1. DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
2. CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
3. A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND THE MUNICIPAL ENGINEER SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
4. ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION. UNLESS OTHERWISE AGREED IN WRITING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING TEMPORARY BENCHMARKS (TBMS) AND PERFORMING ALL CONSTRUCTION SURVEY LAYOUT.
5. PRIOR TO CONSTRUCTION, FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING UTILITIES SCHEDULED TO REMAIN. PRESERVE AND PROTECT UTILITIES TO BE RETAINED.
6. THE LIMITS OF CONSTRUCTION DISTURBANCE SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY TREE CLEARING, STUMPING, GRUBBING OR EARTH MOVING OCCURS. WHERE CONSTRUCTION IS TO TAKE PLACE WITHIN 50' OF A PROPERTY LINE, THE PROPERTY LINE SHALL BE STAKED AT 50' MINIMUM INTERVALS.
7. PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES FOR FOUNDATIONS, PAVEMENT AREAS, UTILITY TRENCHES, AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL. IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER, EXPOSED SUBGRADES ARE SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN GROUND. THIS WILL LIKELY REQUIRE REMOVAL OF A FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATIONS. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST FREEZING.
8. IF SUITABLE, EXCAVATED MATERIALS SHALL BE PLACED AS FILL WITHIN UPLAND AREAS ONLY AND SHALL NOT BE PLACED WITHIN WETLANDS. PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION.
9. DEWATERING ACTIVITIES, IF REQUIRED, SHALL BE DONE IN ACCORDANCE WITH EPA AND NHDES REGULATIONS AND GUIDELINES.
10. DRAINAGE PIPE SHALL BE CORRUGATED POLYETHYLENE PIPE (CPP), TYPE ADS N-12 OR HANCOR H1-Q, OR PVC SDR 35 WHERE SPECIFIED. ALL STORMWATER PIPING REDUCERS, WYES AND TEES SHALL BE CONCENTRIC UNLESS OTHERWISE NOTED.
11. 2" RIGID INSULATION SHALL BE INSTALLED OVER DRAIN PIPES WHERE COVER IS < 2'.
12. ALL CATCH BASIN, MANHOLE AND OTHER DRAINAGE RIMS SHALL BE SET FLUSH WITH OR NO LESS THAN 0.1' BELOW FINISH GRADE. ANY RIM ABOVE SURROUNDING FINISH GRADE SHALL NOT BE ACCEPTED UNLESS OTHERWISE SPECIFIED. ALL DRAINAGE STRUCTURES WITHIN PAVED AREAS SHALL BE H-20 LOADING RATED.
13. IN ORDER TO PROVIDE VISUAL CLARITY ON THE PLANS, DRAINAGE AND OTHER UTILITY STRUCTURES MAY NOT BE DRAWN TO SCALE. SYMBOLS MAY NOT BE INDICATIVE OF THE CENTER OF A STRUCTURE, PARTICULARLY WHEN SHOWN ADJACENT TO A CURB LINE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER SIZING AND LOCATION OF ALL STRUCTURES AND IS DIRECTED TO RESOLVE ANY POTENTIAL DISCREPANCY WITH THE ENGINEER PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL PROTECT ALL RAINGARDENS FROM CONSTRUCTION STORMWATER RUNOFF. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED DURING CONSTRUCTION. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
15. ALL SPOT GRADES ARE AT FINISH GRADE AND BOTTOM OF CURB WHERE APPLICABLE. ADJUST GRADING AT EMERGENCY BUILDING EXITS AS NECESSARY TO ENSURE CODE COMPLIANCE. COORDINATE WITH ARCHITECT IF RAILINGS ARE REQUIRED.
16. UNLESS OTHERWISE NOTED, THE CONTRACTOR MAY CONNECT BUILDING AND RETAINING WALL FOUNDATION DRAINS TO THE NEAREST DRAINAGE STRUCTURE PROVIDED A MINIMUM 1% SLOPE CAN BE MAINTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FOUNDATION DRAINS WITH THE BUILDING AND WALL PLANS.
17. UPON COMPLETION OF CONSTRUCTION, ALL DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.
18. NO SNOW SHALL BE STORED IN ANY STORMWATER POND OR ANY OTHER STORMWATER BMP.
19. SEE SHEET C-3 FOR LEGEND.

EROSION & SEDIMENT CONTROL NOTES

1. AREA OF DISTURBANCE = ±36,000 S.F. NHDES ALTERATION OF TERRAIN PERMIT NOT REQUIRED, INCLUDING LOT DEVELOPMENT.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN STANDARDS AND SPECIFICATIONS SET FORTH BY THE NH DEPARTMENT OF ENVIRONMENTAL SERVICES.
3. TEMPORARY INLET PROTECTION MEASURES SHALL BE INSTALLED AT ALL CULVERT ENTRANCES AND IN ALL CATCH BASINS WITHIN 100' OF THE PROJECT SITE WHEN SITE WORK WITHIN CONTRIBUTING AREAS IS ACTIVE OR SAID AREAS HAVE NOT BEEN STABILIZED.
4. ALL EROSION CONTROL BLANKETS AND FASTENERS SHALL BE BIDEGRADEABLE.
5. ALL EROSION CONTROL BLANKETS SHALL BE BY NORTH AMERICAN GREEN OR EQUAL AS APPROVED IN WRITING BY THE ENGINEER.
6. ALL SWALES WITH SLOPES OF 5% OR GREATER SHALL BE STABILIZED WITH RIPRAP PER THE DETAILS. ALL OTHER SWALES SHALL BE STABILIZED WITH NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKET.
7. THE STORMWATER PONDS SHOWN IN THIS PLAN SET SHALL BE CONSTRUCTED BEFORE EARTHWORK COMMENCES ON THE REMAINDER OF THE SITE. THE CONTRACTOR MAY USE THE POND AS A SEDIMENTATION POND UNTIL THE SITE IS STABILIZED. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM. SILT SOXX SHALL BE INSTALLED AROUND THE PERIMETER OF THE STORMWATER BASINS.
8. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM; WITH THE EXCEPTION OF DETENTION PONDS SHOULD A SEDIMENTATION POND BE REQUIRED.
9. TEMPORARY SEDIMENT LOG (SILTSOXX OR EQUAL APPROVED BY THE ENGINEER) SHALL BE INSTALLED AROUND THE INLETS OFF ALL CULVERTS AND THE BOTTOM PERIMETERS OF ALL STORMWATER PONDS. THESE MEASURES ARE TO REMAIN IN PLACE UNTIL ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
10. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS.
11. MATERIAL STOCKPILE & CONCRETE WASHOUT LOCATIONS SHOWN ARE CONCEPTUAL. THE CONTRACTOR MAY LOCATE STOCKPILES OR WASHOUT WHERE NECESSARY PROVIDED THAT PERIMETER SEDIMENT CONTROLS ARE PROPERLY INSTALLED.
12. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF LOAM, LIMESTONE, FERTILIZER, SEED, AND HAY MULCH OR EROSION CONTROL BLANKET USING APPROPRIATE SOIL STABILIZATION TECHNIQUES. SEE DETAILS FOR ADDITIONAL INFORMATION.
13. UPON COMPLETION OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED AND ANY AREAS DISTURBED BY THE REMOVAL SMOOTHED AND REVEGETATED.
14. SEE DEMOLITION & SITE PREPARATION PLAN AND DETAIL SHEETS FOR ADDITIONAL SEDIMENT AND EROSION CONTROL NOTES AND DETAILS.

TEST PIT LOGS

EVALUATED BY ERIC D. WEINRIEB (PERMIT #809) ON JANUARY 14, 2026
WITNESSED BY DAVID DESFOSSES (TEST PIT 1 ONLY)

TEST PIT 1
0-9" 7.5 YR 3/3 – DARK BROWN GRASS MATT AND FINE SANDY LOAM, FRIABLE, GRANULAR
9-24" 7.5 YR 3/4 – DARK BROWN FINE SANDY LOAM, FRIABLE, GRANULAR
24-60" 5 YR 4/3 – REDDISH BROWN CLAYEY LOAM FIRM, MASSIVE WITH PROMINENT MOTTLES THROUGHOUT
60" STOPPED

ESTIMATED SEASONAL HIGH WATER TABLE – 24"
ROOTS – OOC TO 40"
OBSERVED WATER – 40"
LEDGE – NONE

TEST PIT 2
0-8" 10 YR 2/2 – VERY DARK BROWN GRASS MATT AND FINE LOAMY SAND, FRIABLE, GRANULAR
8-17" 5 YR 3/3 – DARK REDDISH BROWN LOAMY SAND, SINGLE GRAIN, LOOSE
17-33" 5 YR 6/4 – LIGHT REDDISH BROWN FINE SAND, SINGLE GRAIN, LOOSE
33-55" 5 YR 4/3 REDDISH BROWN CLAYEY LOAM, FIRM, MASSIVE WITH PROMINENT MOTTLES STARTING AT 43"
55" STOPPED

ESTIMATED SEASONAL HIGH WATER TABLE – 43"
ROOTS – NOT DOCUMENTED
OBSERVED WATER – 50"
LEDGE – NONE

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN *DATE*

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB
No. 7634
LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26
1	PER TAC COMMENTS	PMJ	03/23/26

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
GRADING, DRAINAGE & EROSION CONTROL PLAN

SHEET NUMBER:
C-5

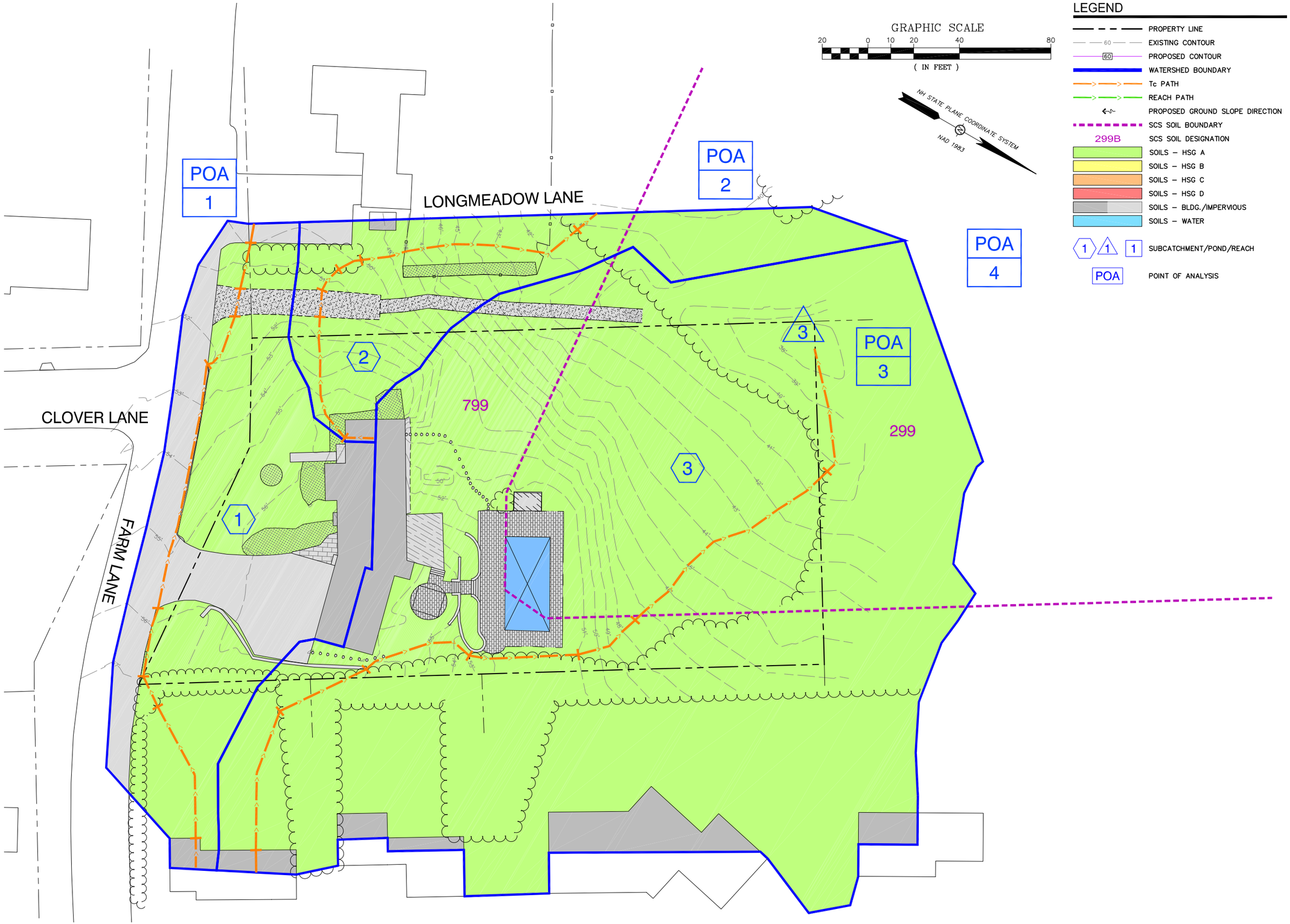
P5719

Section 8

Watershed Plans

Pre-Development Watershed and Soils Plan
Post-Development Watershed and Soils Plan

ALTUS
ENGINEERING



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133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE – ERIC D. WEINREB No. 7634 LICENSED PROFESSIONAL ENGINEER
2/13/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
FEBRUARY 13, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

SCALE:
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OWNER:
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86 FARM LANE
PORTSMOUTH, NH 03801

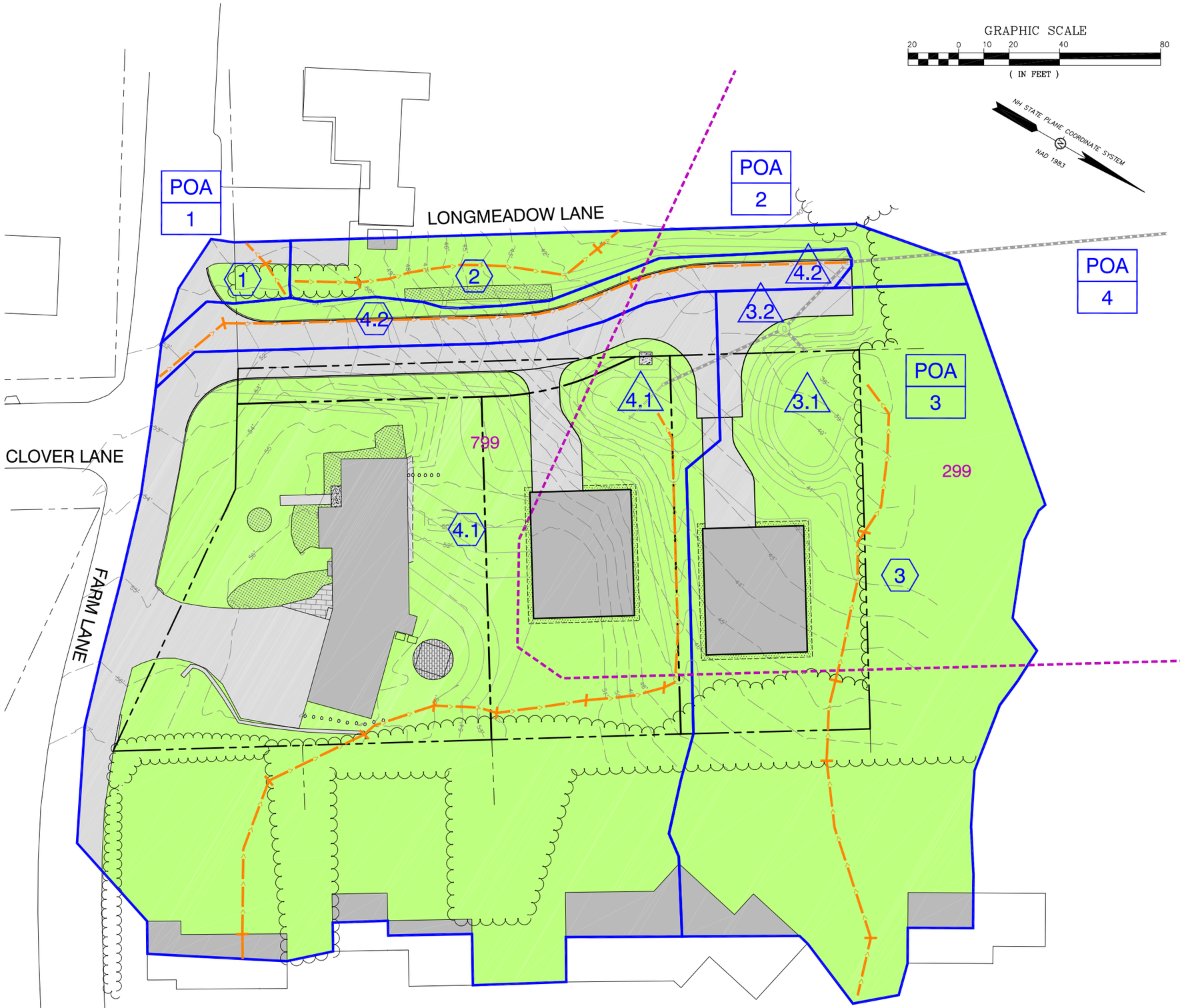
APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE
SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
PRE-DEVELOPMENT WATERSHED & SOILS PLAN

SHEET NUMBER:
WS-1

P5719



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(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26
1	PER TAC COMMENTS	PMJ	03/23/26

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

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22" x 34" - 1" = 20'
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86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
POST-DEVELOPMENT WATERSHED & SOILS PLAN

SHEET NUMBER:
WS-2

P5719

THIS DRAWING SET HAS NOT BEEN
RELEASED FOR CONSTRUCTION

RESIDENTIAL SUBDIVISION

86 FARM LANE
PORTSMOUTH, NEW HAMPSHIRE

Assessor's Parcel 236, Lot 74

ISSUED FOR PLANNING BOARD

Plan Issue Date:

February 13, 2026
Revised March 23, 2026
Revised April 22, 2026

Owner:

JEANETTE MACDONALD
86 Farm Lane
Portsmouth, NH 03801

Applicant:

FLIPPING BERGER'S, LLC
71 Brackett Road
Portsmouth, NH 03801
(914) 299-4438

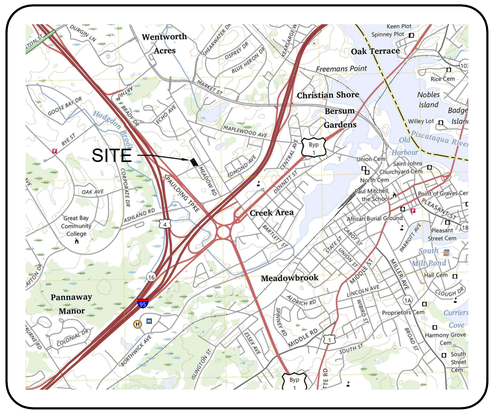
Civil Engineer:

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

Surveyor:

JVA JAMES VERRA & ASSOCIATES, INC.
100 GRIFFIN ROAD, UNIT C,
PORTSMOUTH, N.H., 03801-7876
603-436-3557

JOB NO: 25-2073



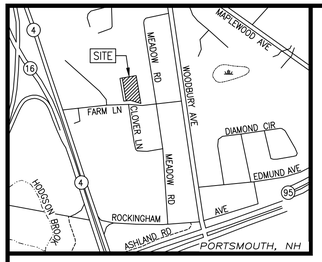
NOT TO SCALE

Sheet Index

Title	Sheet No.:	Rev.	Date
Existing Conditions Plan	V-1	1	03/16/26
Existing Conditions Plan	V-2	1	03/16/26
Subdivision & Easement Plan	C-1	1	03/23/26
Conceptual Site Plan	C-2	2	04/22/26
Demolition & Site Preparation Plan	C-3	1	03/23/26
Roadway Plan	C-4	1	03/23/26
Grading, Drainage & Erosion Control Plan	C-5	1	03/23/26
Utilities Plan	C-6	1	03/23/26
Erosion Control Notes & Details	D-1	0	02/13/26
Detail Sheet	D-2	0	02/13/26
Detail Sheet	D-3	0	02/13/26
Detail Sheet	D-4	1	02/13/26
Detail Sheet	D-5	1	03/23/26
Detail Sheet	D-6	0	02/13/26
Vehicular Access Plan	1 of 1	1	03/23/26

Permit Summary	Submitted	Received
Portsmouth Subdivision	02/13/26	04/07/26
Portsmouth Site Plan Review	03/23/26	04/07/26
Portsmouth Planning Board	04/24/26	–

P5719



LOCUS
(N.T.S.)

ABUTTERS

236-73
NE MARINE AND INDUSTRIAL, INC
200 SPAULDING TURNPIKE
PORTSMOUTH, NH 03801
2342/0694

236-68
SATYAJIT HEERALAL
404 CENTRE ST.
BOSTON, MA 02130
6348/2377

236-67
PETER & LIANNE M. VELEZ
141 MEADOW ROAD
PORTSMOUTH, NH 03801
3777/0273

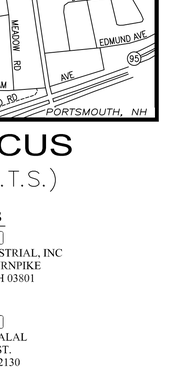
236-66
JONATHAN A. JACKSON
159 MEADOW ROAD
PORTSMOUTH, NH 03801
4125/2573

236-47
KINNALY FAMILTY TRUST OF 2012
EDWARD G. & KAREN KINNALY,
TRUSTEES
PO BOX 834
NEW CASTLE, NH 03854
6344/2213

236-40
WILLIAM J. CHARLAND &
JUDITH M. PINKHAM
45 CLOVER LANE
PORTSMOUTH, NH 03801
5662/2989

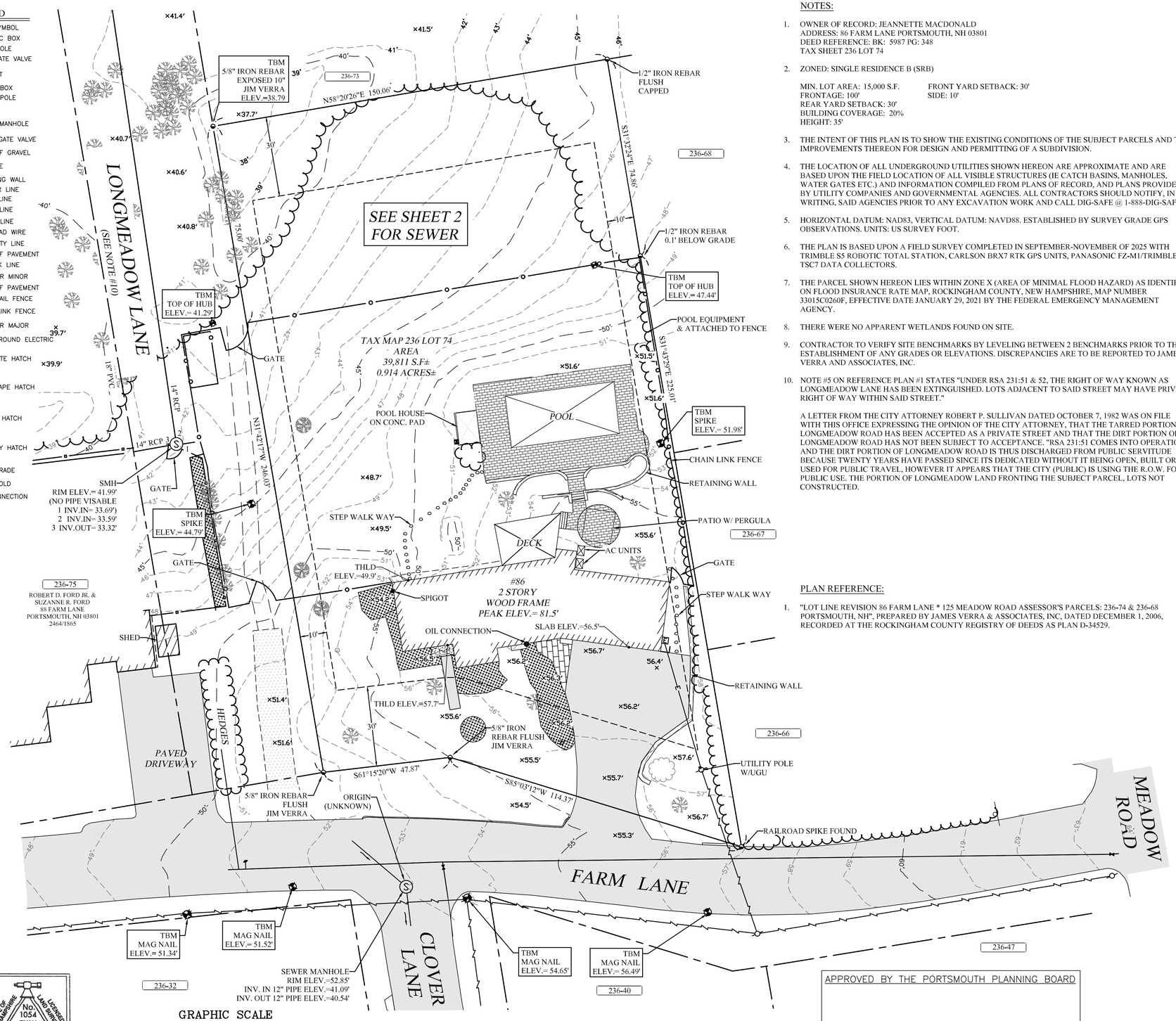
236-32
DENNIS HOSKIN
JEANNE HOSKIN
50 CLOVER LANE
PORTSMOUTH, NH 03801
5394/1195

236-75
ROBERT D. FORD JR. &
SUZANNE R. FORD
88 FARM LANE
PORTSMOUTH, NH 03801
2464/1865



LEGEND

TREE SYMBOL
ELECTRIC BOX
LIGHT POLE
WATERGATE VALVE
HYDRANT
UTILITY BOX
UTILITY POLE
SIGN
SEWER MANHOLE
WATER GATE VALVE
EDGE OF GRAVEL
TREELINE
RETAINING WALL
ABUTTER LINE
W WATER LINE
S SEWER LINE
SHRUB LINE
OVERHEAD WIRE
PROPERTY LINE
EDGE OF PAVEMENT
SETBACK LINE
CONTOUR MINOR
EDGE OF PAVEMENT
SPLIT RAIL FENCE
CHAIN LINK FENCE
CONTOUR MAJOR
E UNDERGROUND ELECTRIC
CONCRETE HATCH
LANDSCAPE HATCH
GRAVEL HATCH
WALKWAY HATCH
52.1' X SPOT GRADE
THLD THRESHOLD
OIL CONNECTION



NOTES:

1. OWNER OF RECORD: JEANNETTE MACDONALD
   ADDRESS: 86 FARM LANE PORTSMOUTH, NH 03801
   DEED REFERENCE: BK: 5987 PG: 348
   TAX SHEET 236 LOT 74
2. ZONED: SINGLE RESIDENCE B (SRB)

   MIN. LOT AREA: 15,000 S.F. — FRONT YARD SETBACK: 30'
   FRONTAGE: 100' — SIDE: 10'
   REAR YARD SETBACK: 30'
   BUILDING COVERAGE: 20%
   HEIGHT: 35'
3. THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF THE SUBJECT PARCELS AND THE IMPROVEMENTS THEREON FOR DESIGN AND PERMITTING OF A SUBDIVISION.
4. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE CATCH BASINS, MANHOLES, WATER GATES ETC.) AND INFORMATION COMPILED FROM PLANS OF RECORD, AND PLANS PROVIDED BY UTILITY COMPANIES AND GOVERNMENTAL AGENCIES. ALL CONTRACTORS SHOULD NOTIFY, IN WRITING, SAID AGENCIES PRIOR TO ANY EXCAVATION WORK AND CALL DIG-SAFE @ 1-888-DIG-SAFE.
5. HORIZONTAL DATUM: NAD83, VERTICAL DATUM: NAVD88. ESTABLISHED BY SURVEY GRADE GPS OBSERVATIONS. UNITS: US SURVEY FOOT.
6. THE PLAN IS BASED UPON A FIELD SURVEY COMPLETED IN SEPTEMBER-NOVEMBER OF 2025 WITH TRIMBLE S5 ROBOTIC TOTAL STATION, CARLSON BRX7 RTK GPS UNITS, PANASONIC FZ-M1/TRIMBLE TSC7 DATA COLLECTORS.
7. THE PARCEL SHOWN HEREON LIES WITHIN ZONE X (AREA OF MINIMAL FLOOD HAZARD) AS IDENTIFIED ON FLOOD INSURANCE RATE MAP, ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP NUMBER 33015C0260F, EFFECTIVE DATE JANUARY 29, 2021 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
8. THERE WERE NO APPARENT WETLANDS FOUND ON SITE.
9. CONTRACTOR TO VERIFY SITE BENCHMARKS BY LEVELING BETWEEN 2 BENCHMARKS PRIOR TO THE ESTABLISHMENT OF ANY GRADES OR ELEVATIONS. DISCREPANCIES ARE TO BE REPORTED TO JAMES VERRA AND ASSOCIATES, INC.
10. NOTE #5 ON REFERENCE PLAN #1 STATES "UNDER RSA 231:51 & 52, THE RIGHT OF WAY KNOWN AS LONGMEADOW LANE HAS BEEN EXTINGUISHED. LOTS ADJACENT TO SAID STREET MAY HAVE PRIVATE RIGHT OF WAY WITHIN SAID STREET."

    A LETTER FROM THE CITY ATTORNEY ROBERT P. SULLIVAN DATED OCTOBER 7, 1982 WAS ON FILE WITH THIS OFFICE EXPRESSING THE OPINION OF THE CITY ATTORNEY, THAT THE TARRED PORTION OF LONGMEADOW ROAD HAS BEEN ACCEPTED AS A PRIVATE STREET AND THAT THE DIRT PORTION OF LONGMEADOW ROAD HAS NOT BEEN SUBJECT TO ACCEPTANCE. "RSA 231:51 COMES INTO OPERATION AND THE DIRT PORTION OF LONGMEADOW ROAD IS THUS DISCHARGED FROM PUBLIC SERVITUDE BECAUSE TWENTY YEARS HAVE PASSED SINCE ITS DEDICATED WITHOUT IT BEING OPEN, BUILT OR USED FOR PUBLIC TRAVEL, HOWEVER IT APPEARS THAT THE CITY (PUBLIC) IS USING THE R.O.W. FOR PUBLIC USE. THE PORTION OF LONGMEADOW LAND FRONTING THE SUBJECT PARCEL, LOTS NOT CONSTRUCTED.

PLAN REFERENCE:

1. "LOT LINE REVISION 86 FARM LANE * 125 MEADOW ROAD ASSESSOR'S PARCELS: 236-74 & 236-68 PORTSMOUTH, NH", PREPARED BY JAMES VERRA & ASSOCIATES, INC, DATED DECEMBER 1, 2006, RECORDED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AS PLAN D-34529.

SURVEYOR'S CERTIFICATION

"I HEREBY CERTIFY THAT THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN FIFTEEN THOUSAND (1:15,000)."

LICENSED LAND SURVEYOR — DATE: 3/18/26

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — NO. 10541 — RYAN M. FOWLER — SIGNATURE

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

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN — DATE

SURVEYOR:
JVA
JAMES VERRA & ASSOCIATES, INC.
100 GRIFFIN ROAD, UNIT C,
PORTSMOUTH, N.H., 03801-7876
603-436-3557

JOB NO: 25-2073

ENGINEER:
ALTUS ENGINEERING
133 Court Street — Portsmouth, NH 03801
(603) 433-2335 — www.altus-eng.com

ISSUED FOR: SUBMISSION

ISSUE DATE: 2/10/26

REVISIONS

NO.	DESCRIPTION	BY	DATE
1	PER TAC COMMENTS	CWW	3/16/26

DRAWN BY: CWW
APPROVED BY: RMF
DRAWING FILE: 25-2037_EX-CON.DWG

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

APPLICANT:
BRETT BERGER
71 BRACKET ROAD
PORTSMOUTH, NH 03801

OWNER:
JEANNETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

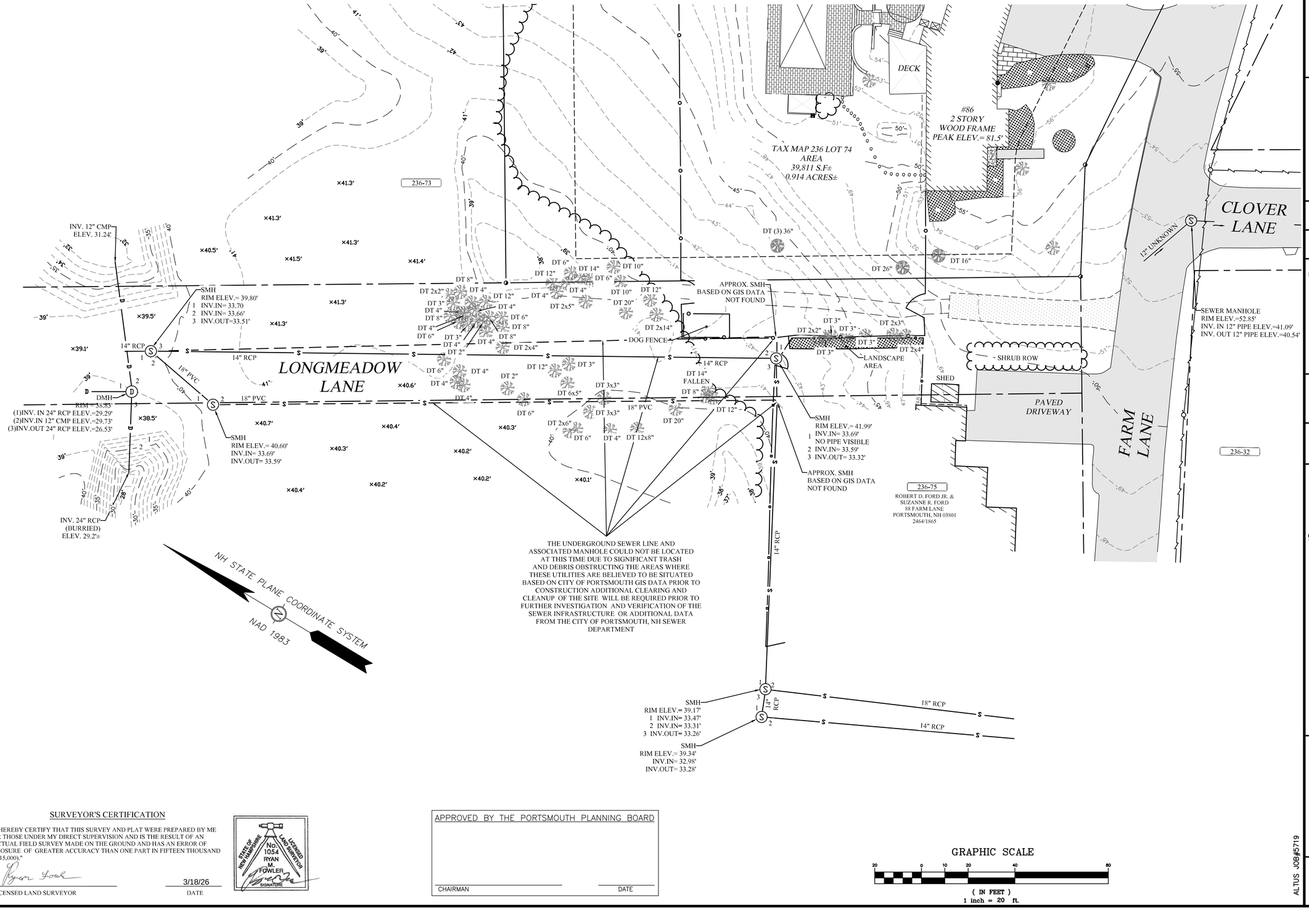
PROJECT:
86
FARM LANE
PORTSMOUTH, NEW
HAMPSHIRE
TAX MAP 236 LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
EXISTING
CONDITIONS
PLAN

SHEET NUMBER:
V-1

ALTUS JOB#5719

J:\2025 PROJECTS\25-2037 ALTUS MCMASTER 86 FARM LN PORTSMOUTH NH_DWG\25-2073_EX.dwg 2026-03-18



SURVEYOR'S CERTIFICATION

"I HEREBY CERTIFY THAT THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN FIFTEEN THOUSAND (1:15,000)."

LICENSED LAND SURVEYOR

3/18/26
DATE

STATE OF NEW HAMPSHIRE — No. 1054 — RYAN M. FOWLER — LICENSED LAND SURVEYOR — SIGNATURE

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN

DATE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

J:\2025 PROJECTS\25-2037 ALTUS MCMASTER 86 FARM LN PORTSMOUTH NH_DWG\25-2073_EX.dwg 2026-03-18

ALTUS JOB#5719

SURVEYOR:

JAMES VERRA & ASSOCIATES, INC.
100 GRIFFIN ROAD, UNIT C,
PORTSMOUTH, N.H., 03801-7876
603-436-3557

JOB NO: 25-2073

ENGINEER:

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ISSUED FOR:
SUBMISSION

ISSUE DATE:
2/10/26

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APPLICANT:

BRETT BERGER
71 BRACKET ROAD
PORTSMOUTH, NH 03801

OWNER:

JEANNETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

PROJECT:

86
FARM LANE
PORTSMOUTH, NEW HAMPSHIRE

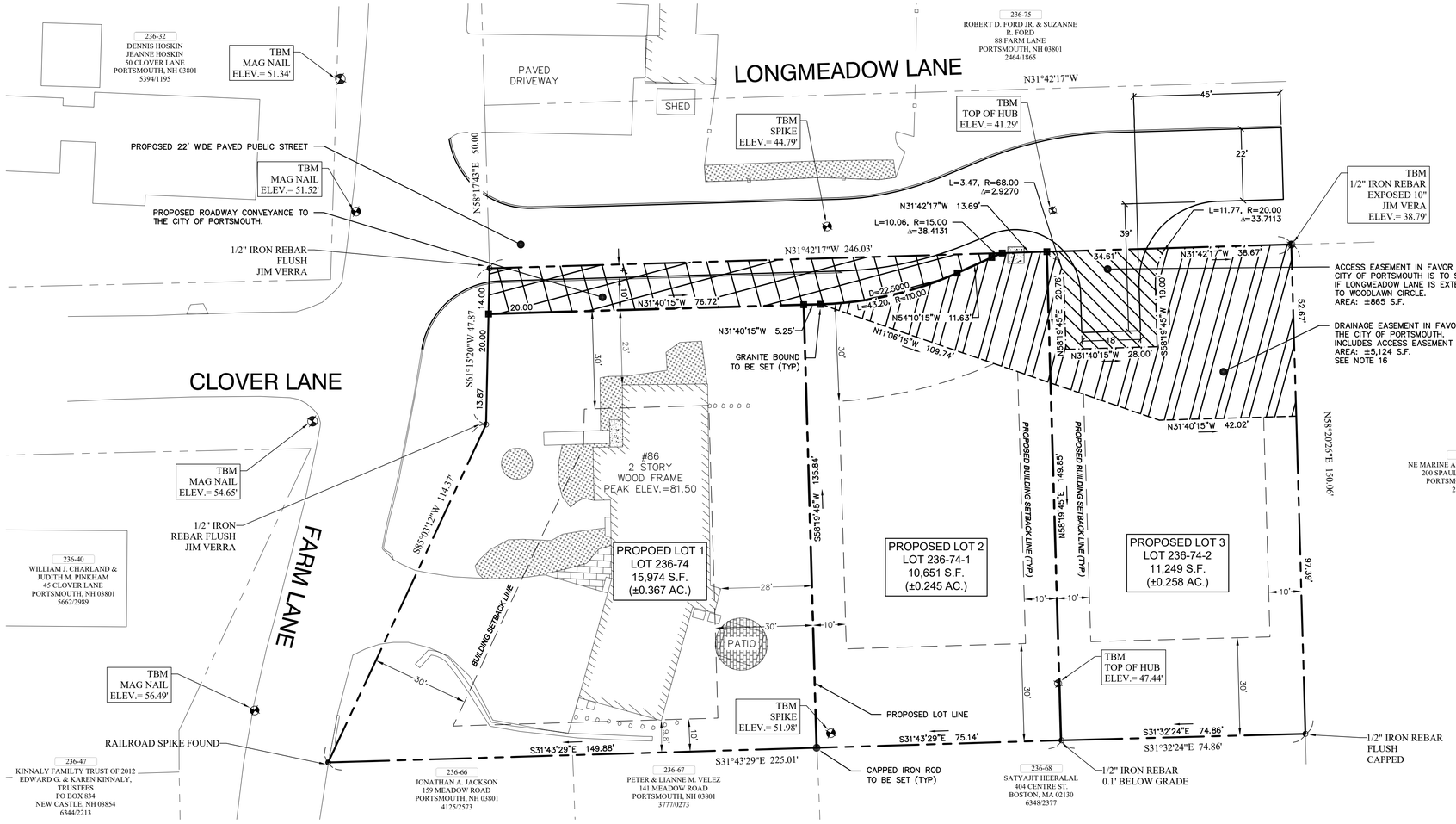
TAX MAP 236 LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

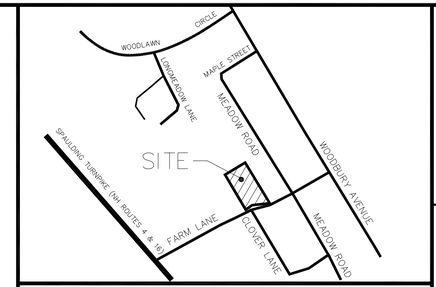
TITLE:

EXISTING CONDITIONS PLAN

SHEET NUMBER:

V-2





LOCUS
NOT TO SCALE

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN *DATE*

SUBDIVISION NOTES

1. DESIGN INTENT – THIS PLAN IS INTENDED TO DEPICT A THREE LOT RESIDENTIAL SUBDIVISION SERVICED WITH MUNICIPAL SEWER & WATER ON A NEW PUBLIC ROAD.
2. THE BASE PLAN USED HERE WAS DEVELOPED FROM THE 86 FARM LANE EXISTING CONDITIONS PLANS (V–1 & V–2), DATED 11/11/25, PROVIDED BY JAMES VERRA & ASSOCIATES, INC.
3. ZONE: SRB (SINGLE RESIDENCE B)
4. DIMENSIONAL REQUIREMENTS:

LOT AREA:	15,000 S.F.
FRONTAGE:	100'
LOT DEPTH:	100'
FRONT YARD:	30'
SIDE YARD:	10'
REAR YARD:	30'
BUILDING HEIGHT:	35' (MAX. w/SLOPED ROOF)
BUILDING COVERAGE:	20% MAX.
OPEN SPACE:	40% MIN.
WETLAND BUFFER:	NONE (WETLAND LESS THAN 10,000 S.F.)

5. PARKING REQUIREMENTS: NR (NO REQUIREMENT)
6. PARCEL IS NOT IN A FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP (FIRM), ROCKINGHAM COUNTY, NEW HAMPSHIRE, DATED JANUARY 29, 2021.
7. WAIVERS REQUESTED:
   - 7.1. SECTION IV: ROADWAY WIDTH – 32–FEET IS REQUIRED, 22–FEET IS PROVIDED.
   - 7.2. SECTION VI.3.i: CUL–DE–SAC REQUIRED, TURN AROUND PROVIDED.
   - 7.3. SECTION 2.13: RECORDING OF SITE PLAN, SITE PLAN IS CONCEPTUAL AND NOT TO BE RECORDED BUT SUBDIVISION PLAN IS TO BE RECORDED.
8. AREA OF DISTURBANCE LESS THAN 43,560 S.F., COVERAGE UNDER EPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT IS NOT REQUIRED.
9. NO NEW RESIDENTIAL USES SHALL BE PERMITTED WITHIN THE CITY'S RIGHT–OF–WAY WHICH SHALL BE RESERVED EXCLUSIVELY FOR A ROADWAY AND ASSOCIATED INFRASTRUCTURE.
10. SEE THE ENTIRE SET OF PLANS RELATED TO THIS SUBDIVISION ON FILE WITH THE CITY OF PORTSMOUTH PLANNING DEPARTMENT.
11. SNOW SHALL BE STORED AT THE EDGE OF THE ROAD OR REMOVED OFF SITE TO AN APPROVED LOCATION IF REQUIRED TO MAINTAIN SAFE ACCESS.
12. THIS PLAN SHALL BE RECORDED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
13. ALL CONDITIONS ON THIS PLAN SET SHOULD REMAIN IN EFFECT IN PERPETUITY.
14. ALL IMPROVEMENT SHOWN ON THIS SITE PLAN (SUBDIVISION 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 (SUBDIVISION PLAN) WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.
15. PERMANENT STREET ADDRESS SIGNS SHALL BE PLACED IN A HIGHLY VISIBLE LOCATED AT THE END OF EACH DRIVEWAY.
16. HOMEOWNERS SHALL BE RESPONSIBLE FOR MAINTAINING THE DRAINAGE EASEMENT AREAS ON THEIR RESPECTIVE LOTS. EASEMENT TO THE CITY IS FOR USAGE RIGHTS FOR ANY RUNOFF FROM THE NEW ROADWAY.

VARIANCES GRANTED BY ZBA ON MAY 27, 2025:

LOT 236–74:
SECTION 10.521:
- A. TO ALLOW 28–FOOT REAR YARD SETBACK WHERE 30–FEET IS REQUIRED.
- B. TO ALLOW 23–FOOT SECONDARY FRONT YARD WHERE 30–FEET IS REQUIRED.

LOT 236–74–1:
SECTION 10.521:
- C. TO ALLOW 10,664 S.F. OF LOT AREA WHERE 15,000 S.F. IS REQUIRED.
- D. TO ALLOW 10,664 S.F. OF LOT AREA PER DWELLING UNIT WHERE 15,000 S.F. IS REQUIRED.
- E. TO ALLOW 75–FEET OF CONTIUOUS STREET FRONTAGE WHERE 100–FEET IS REQUIRED.

LOT 236–74–2:
SECTION 10.521:
- C. TO ALLOW 11,250 S.F. OF LOT AREA WHERE 15,000 S.F. IS REQUIRED.
- D. TO ALLOW 11,250 S.F. OF LOT AREA PER DWELLING UNIT WHERE 15,000 S.F. IS REQUIRED.
- E. TO ALLOW 75–FEET OF CONTIUOUS STREET FRONTAGE WHERE 100–FEET IS REQUIRED.

LOT AREAS & COVERAGES SUMMARY

EXISTING LOT AREA:

LOT 236–74: 39,811 S.F.

EXISTING LOT TO BE SUBDIVIDED INTO THREE LOTS.

PROPOSED LOT AREAS:

LOT 236–74:	15,974 S.F.
LOT 236–74–1:	10,651 S.F.
LOT 236–74–2:	11,249 S.F.
NEW CITY RIGHT–OF–WAY:	1,937 S.F.
TOTAL:	39,811 S.F.

BUILDING COVERAGE:

LOT 236–74:

EXISTING:	±2,960 S.F. / 39,811 S.F. = ±7.4%
PROPOSED:	±2,960 S.F. / 15,974 S.F. = ±18.5%

PROPOSED BUILDING SIZE UNKNOWN FOR LOTS 236–74–1 & 236–74–2; LOTS WILL HAVE EQUAL TO OR LESS THAN 20% BUILDING COVERAGE.

LOT 236–74–1 MAXIMUM BUILDING FOOTPRINT: 2,130 S.F.
LOT 236–74–2 MAXIMUM BUILDING FOOTPRINT: 2,248 S.F.

OPEN SPACE:

LOT 236–74 IMPERVIOUS AREAS:	EXISTING	PROPOSED
HOUSE	±2,960 S.F.	±2,960 S.F.
DRIVEWAY	±2,120 S.F.	±2,120 S.F.
WALKWAYS	±250 S.F.	±250 S.F.
PATIO	±210 S.F.	±210 S.F.
RETAINING WALL & GRAVELS	±210 S.F.	±210 S.F.
DECK	±380 S.F.	±0 S.F.
POOL AREA & HARDSCAPE	±2,525 S.F.	±0 S.F.
TOTAL	±8,655 S.F.	±5,750 S.F.

LOT 236–74:
EXISTING OPEN SPACE: (39,811 S.F. – 8,655 S.F.) / 39,811 S.F. = (±78.3%)
PROPOSED OPEN SPACE: (15,974 S.F. – 5,750 S.F.) / 15,974 S.F. = (±64.0%)

PURPOSE OF PLAN:

THE PURPOSE OF THIS PLAN IS TO SHOW THE CONDITIONS OF APPROVAL FOR THE SUBDIVISION AND THE SITE PLAN REVIEW THAT ARE REQUIRED TO BE RECORDED BY THE CITY OF PORTSMOUTH AS PART OF THEIR APPROVAL OF THE DEVELOPMENT. THESE CONDITIONS WILL RUN WITH THE NEW LOTS IN PERPETUITY.

SURVEYOR OF RECORD DATE

PLAN REFERENCES:
1. "LOT LINE REVISION, 86 FARM LANE & 125 MEADOW ROAD, ASSESSOR'S PARCELS: 236–74 & 236–68, PORTSMOUTH, NEW HAMPSHIRE, OWNERS: JEANETTE MACDONALD & WILLIAM A. & CHRIS A. LACEY," LAST REVISED JANUARY 17, 2007 AND PREPARED BY JAMES VERRA AND ASSOC., INC. RCRD PLAN #D–34529.
2. "LAND IN PORTSMOUTH, N.H. PAUL C. & ORVILLE BADGER TO SAMUEL A. & LUCILLE E. MCMASTER" DATED NOVEMBER 1951, AND PREPARED BY JOHN W. DURGIN C.E. NOT RECORDED, AND ON FILE AT JAMES VERRA AND ASSOC., INC. FN:2107 PN: L–25.
3. "PLAN OF LOTS, PORTSMOUTH, N.H. FOR PAUL C. & ORVILLE C. BADGER" FILED MAY 24, 1954 AND PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS. RCRD PLAN #02160.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

STATE OF NEW HAMPSHIRE – ERIC D. WEINREB No. 7634 LICENSED PROFESSIONAL ENGINEER
3/23/26

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

JVA JAMES VERRA & ASSOCIATES, INC.
100 GRIFFIN ROAD, UNIT C,
PORTSMOUTH, N.H., 03801–7876
603–436–3557

JOB NO: 25–2073

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26
1	PER TAC COMMENTS	PMJ	03/23/26

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719–SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

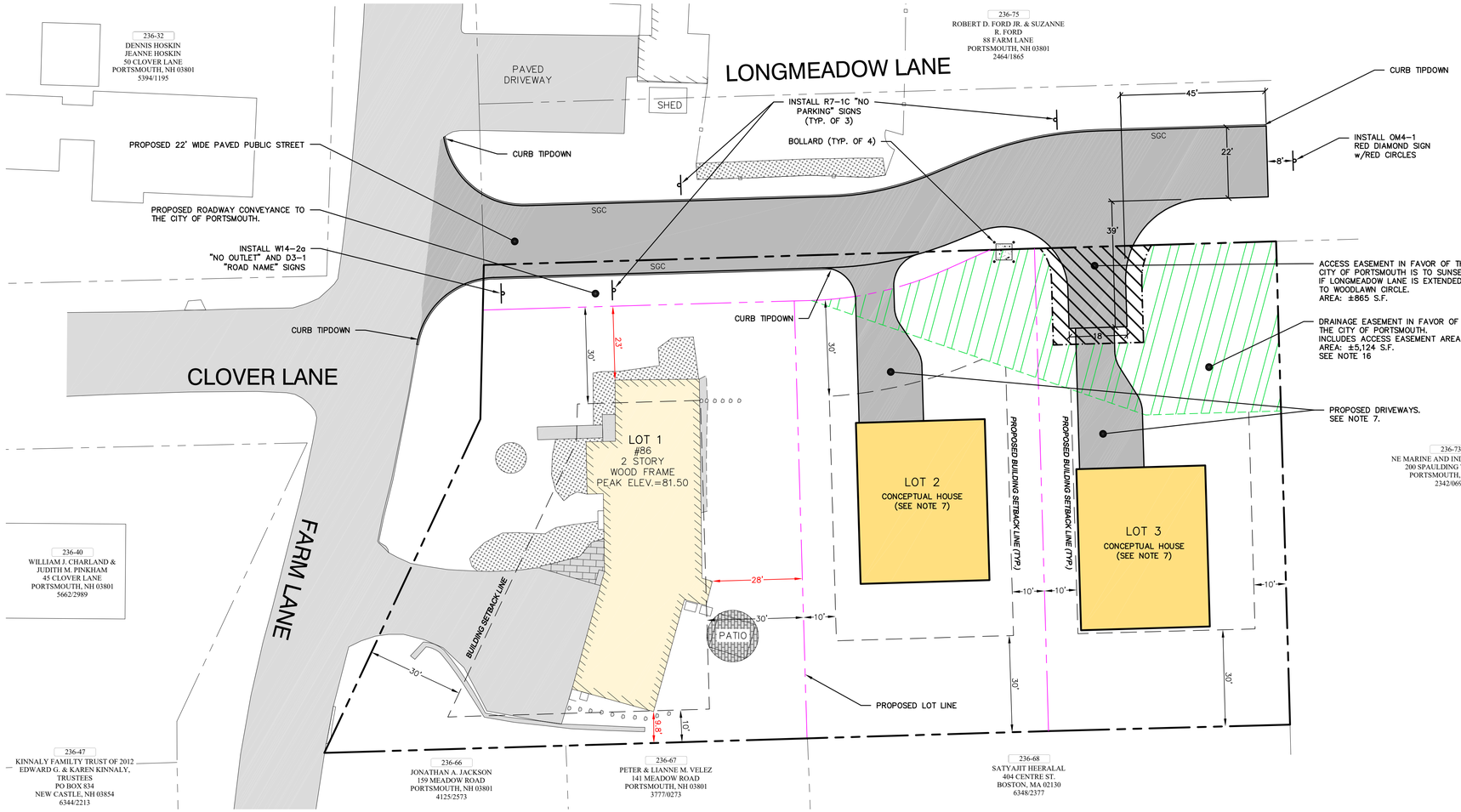
APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

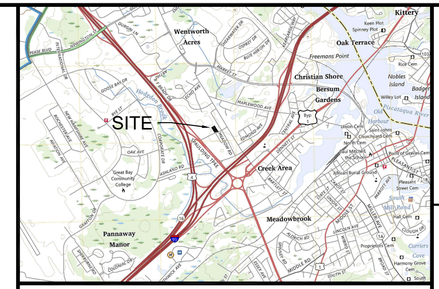
PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
SUBDIVISION & EASEMENT PLAN

SHEET NUMBER:
C-1

P5719





LOCUS
NOT TO SCALE

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

CONCEPTUAL SITE PLAN NOTES

1. DESIGN INTENT – THIS PLAN IS INTENDED TO DEPICT A THREE LOT RESIDENTIAL SUBDIVISION SERVICED WITH MUNICIPAL SEWER & WATER ON A NEW PUBLIC ROAD.
2. APPROXIMATE LOT AREA: 39,811 S.F. (±0.914 AC.)
3. ZONE: SRB (SINGLE RESIDENCE B)
4. DIMENSIONAL REQUIREMENTS:

		EXISTING	LOT 1	LOT 2	LOT 3
LOT AREA:	±15,000 S.F.	39,811 S.F.	15,974 S.F.	10,651 S.F.	11,249 S.F.
FRONTAGE:	100'	±162'	±245'	77.25'	75.0'
LOT DEPTH:	100'	±248'	±98'	±136'	±150'
FRONT YARD:	30'	±34'	±34'	>30'	>30'
SIDE YARD:	10'	±37'L/±9.8'R	±23'L/±9.8'R	>10'	>10'
REAR YARD:	30'	±178'	±28'	>30'	>30'
BUILDING HEIGHT:	35' (MAX.–SLOPED ROOF)	±25'	±25'	<35'	<35'
BUILDING COVERAGE:	20% MAX.	±7.4%	±18.5%	±18.8%	±17.8%
OPEN SPACE:	40% MIN.	±78.2%	±64.0%	±74.7%	±71.5%
WETLAND BUFFER:	NO WETLANDS IDENTIFIED				

5. NO WETLANDS WERE IDENTIFIED WITHIN THE LIMITS OF THE PROJECT AREA, BASED ON THE CITY OF PORTSMOUTH GIS.
6. PARCEL IS NOT IN A FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP (FIRM), ROCKINGHAM COUNTY, NEW HAMPSHIRE, DATED JANUARY 29, 2021.
7. DEVELOPMENT OF LOTS 2 & 3 IS FOR ILLUSTRATIVE PURPOSES ONLY. PROPOSED HOUSES AND DRIVEWAYS SHOWN ON THIS PLAN SET ARE CONCEPTUAL. FINAL BUILDING FOOTPRINTS, ELEVATIONS AND LOCATIONS MAY DIFFER. LOTS SHALL BE GRADED AS SPECIFIED IN THESE PLANS TO DRAIN AS INTENDED.
8. IF IMPERVIOUS ON LOT EXCEEDS THE AREA PROVIDED BELOW, AN INDIVIDUAL STORMWATER MANAGEMENT PLAN FOR THE LOT WILL BE REQUIRED:
   - 8.1. LOT 1: ±5,685 S.F.
   - 8.2. LOT 2: ±2,710 S.F.
   - 8.3. LOT 3: ±3,220 S.F.
9. PERMANENT STREET ADDRESS SIGNS SHALL BE PLACED IN A HIGHLY VISIBLE LOCATION AT THE END OF EACH DRIVEWAY.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN *DATE*

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE – ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER
4/22/26

NOT FOR CONSTRUCTION

ISSUED FOR: PLANNING BOARD

ISSUE DATE: APRIL 22, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26
1	PER TAC COMMENTS	PMJ	03/23/26
2	PER TAC COMMENT	PMJ	04/22/26

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

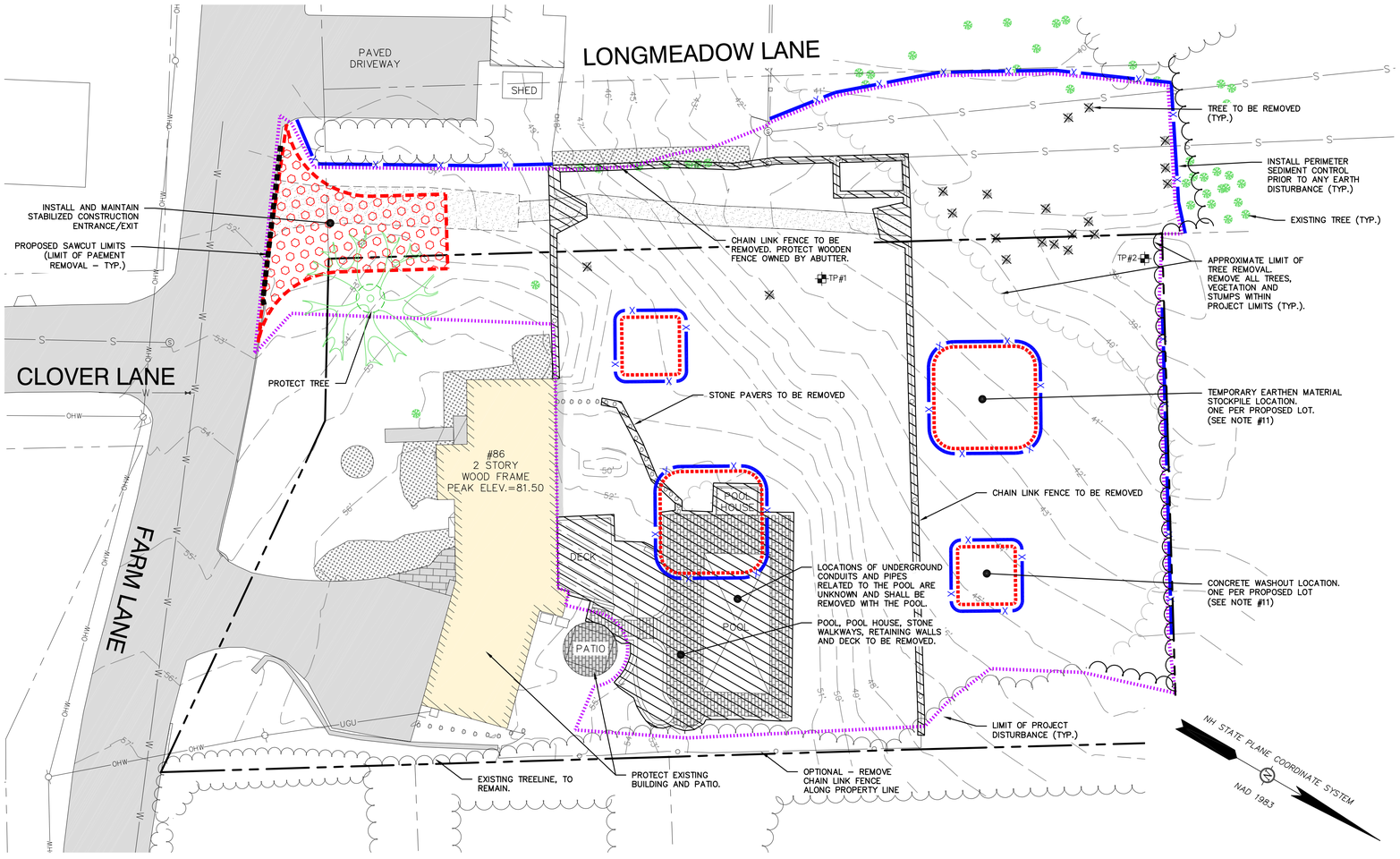
TITLE:
CONCEPTUAL SITE PLAN

SHEET NUMBER:
C-2

P5719

LEGEND

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- BUILDING SETBACK
- EASEMENT – CITY OF PORTSMOUTH
- 68 EXISTING CONTOUR
- 68 PROPOSED CONTOUR/INTERMEDIATE CONTOUR
- 72.00 EXISTING SPOT GRADE
- 72.00 PROPOSED SPOT GRADE
- VGC SGC EXISTING/PROPOSED BUILDING
- VGC SGC EXISTING PAVEMENT/CURB
- VGC SGC PROP. PAVEMENT/VERTICAL OR SLOPED GRANITE CURB
- EXISTING/PROPOSED PAVEMENT
- (44) [226] PARKING COUNT PER ROW/FOR TOTAL SITE
- EXISTING/PROPOSED GRAVEL
- EXISTING/PROPOSED CONCRETE
- EXISTING/PROPOSED STOCKADE FENCE
- EXISTING/PROPOSED CHAINLINK FENCE
- EXISTING TREE DRIP LINE
- PROPOSED TREE CLEARING LIMIT
- PROPOSED SAWCUT
- SILTFENCE/SEDIMENT BARRIER/CONST. FENCE
- STABILIZED CONSTRUCTION EXIT
- PROPOSED LIMIT OF DISTURBANCE
- OHW UGU EXIST. OVERHEAD/UNDERGROUND UTILITIES/POLE
- OHW PROPOSED OVERHEAD UTILITIES/UTILITY POLE
- UGE&T PROPOSED UNDERGROUND ELECTRIC & COMMUNICATION
- W EXISTING WATERLINE
- PW PROPOSED WATERLINE/GATE VALVE/REDUCER
- PROPOSED THRUST BLOCK/WATER SHUT-OFF/HYDRANT
- S EXISTING SEWER PIPE/MANHOLE
- S PROPOSED SEWER PIPE/MANHOLE/CLEANOUT
- EXISTING DRAINAGE PIPE)/CB/DCB/DMH/FES
- PROPOSED DRAINAGE HARD PIPE/CB/DCB/DMH/FES
- PROPOSED YARD DRAIN/OUTLET STRUCTURE
- PROPOSED CATCH BASIN INLET PROTECTION
- CPP FES HDWL CORRUGATED PLASTIC PIPE/FLARED END SECTION/HEADWALL
- PROPOSED GROUND SLOPE/STONE CHECK DAM
- PROPOSED RIPRAP
- PROPOSED BIORETENTION CELL
- PROPOSED STONE DRIPEDGE
- PROPOSED EROSION CONTROL BLANKET
- TEMPORARY BENCH MARK
- TP# TESTPIT
- EXISTING TREE



DEMOLITION & SITE PREPARATION NOTES

1. THIS PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR THE DEMOLITION OF EXISTING SITE FEATURES. UNLESS OTHERWISE NOTED TO REMAIN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL BUILDINGS, PAVEMENT, CONCRETE, CURBING, SIGNS, POLES, UTILITIES, FENCES, VEGETATION AND OTHER EXISTING FEATURES AS NECESSARY TO FULLY CONSTRUCT THE PROJECT.
2. ALL MATERIALS SCHEDULED FOR DEMOLITION REMOVAL ON PRIVATE PROPERTY SHALL BECOME PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED.
3. CITY DEMOLITION PERMIT REQUIRED PRIOR TO ANY DEMOLITION ACTIVITIES. CONTRACTOR IS NOTIFIED THAT THIS PERMIT PROCESS MAY REQUIRE A 30-DAY LEAD TIME.
4. LIMITS OF TREE CLEARING & TREES TO REMAIN SHALL BE CLEARLY MARKED PRIOR TO COMMENCING SITE WORK.
5. NO BURNING SHALL BE PERMITTED PER LOCAL REGULATIONS.
6. PERIMETER SEDIMENT CONTROLS SHALL BE INSTALLED AFTER TREE CLEARING OPERATIONS HAVE CEASED AND BEFORE ANY STUMPING, GRUBBING OR OTHER EARTH DISTURBANCE.
7. GRIND STUMPS AND REUSE GRINDINGS FOR EROSION CONTROL WHERE POSSIBLE OR TRUCK OFFSITE. NO STUMPS SHALL BE BURIED ON THE SITE OR LEFT AT ANY DEPTH BELOW ROADWAY OR PARKING LOT SURFACES.
8. NO EARTHWORK SHALL COMMENCE UNTIL ALL APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE PROPERLY MAINTAINED IN GOOD WORKING ORDER FOR THE DURATION OF CONSTRUCTION AND THE SITE IS STABILIZED.
9. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN STANDARDS AND SPECIFICATIONS SET FORTH BY NEW HAMPSHIRE DEPARTMENT ENVIRONMENTAL SERVICES.
10. SHOULD GROUNDWATER BE ENCOUNTERED DURING EXCAVATION, APPROPRIATE BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED TO ENSURE SEDIMENT LADEN WATER IS NOT DISCHARGED INTO THE CITY DRAINAGE SYSTEM, ABUTTING PROPERTIES, WETLANDS OR RIVERS. A DISCHARGE PERMIT SHALL BE OBTAINED PRIOR TO DISCHARGING GROUNDWATER TO THE CITY DRAINAGE SYSTEM.
11. MATERIAL STOCKPILE & CONCRETE WASHOUT LOCATIONS SHOWN ARE CONCEPTUAL. THE CONTRACTOR MAY LOCATE STOCKPILES OR WASHOUT WHERE NECESSARY PROVIDED THAT PERIMETER SEDIMENT CONTROLS ARE PROPERLY INSTALLED.
12. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT EROSION AND PREVENT SEDIMENT, DUST, AND OTHER MATERIALS FROM LEAVING THE SITE. THIS SHALL INCLUDE BUT NOT BE LIMITED TO THE PROACTIVE MANAGEMENT OF STOCKPILES, MATERIALS PROCESSING ACTIVITIES VEHICULAR TRAFFIC, THE EXCAVATION AND PLACEMENT OF EARTH MATERIALS, SPRAYING WATER, SWEEPING PAVED SURFACES, PROVIDING TEMPORARY VEGETATION, AND/OR MULCHING EXPOSED AREAS AND STOCKPILES. THE CONTRACTOR SHALL ENSURE PERMANENT SOIL STABILIZATION.
13. ALL MATERIAL SCHEDULED TO BE REMOVED SHALL BE LEGALLY DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS AND CODES.
14. IF HAZARDOUS MATERIALS ARE ENCOUNTERED DURING DEMOLITION AND CONSTRUCTION ACTIVITIES, THEY SHALL BE ABATED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.
15. CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES SCHEDULED TO REMAIN. WHERE SPECIFIED TO REMAIN, MANHOLE RIMS, CATCH BASIN GRATES, VALVE COVERS, HANDHOLES, ETC. SHALL BE ADJUSTED TO FINISH GRADE UNLESS OTHERWISE SPECIFIED.
16. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (I.E. CATCH BASINS, MANHOLES, WATER GATES ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY COMPANIES AND GOVERNMENTAL AGENCIES. ALL CONTRACTORS SHOULD NOTIFY, IN WRITING, SAID AGENCIES PRIOR TO ANY EXCAVATION WORK AND CALL DIG-SAFE @ 1-888-DIG-SAFE.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY NOTIFICATION OF ALL PARTIES, CORPORATIONS, COMPANIES, INDIVIDUALS AND STATE AND LOCAL AUTHORITIES OWNING AND/OR HAVING JURISDICTION OVER ANY UTILITIES RUNNING TO, THROUGH OR ACROSS AREAS TO BE DISTURBED BY DEMOLITION AND/OR CONSTRUCTION ACTIVITIES WHETHER OR NOT SAID UTILITIES ARE SUBJECT TO DEMOLITION, RELOCATION, MODIFICATION AND/OR CONSTRUCTION.
18. AT NO TIME SHALL ANY UTILITY SERVICE OR VEHICULAR ACCESS TO ADJOINING PROPERTIES BE COMPLETELY INTERRUPTED UNLESS A FULL SHUTDOWN IS COORDINATED WITH ALL AFFECTED PARTIES AND UTILITY PROVIDER(S).
19. ALL UTILITY DISCONNECTIONS, DEMOLITIONS AND RELOCATIONS SHALL BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES, PORTSMOUTH DPW AND ABUTTING PROPERTY OWNERS. UNLESS OTHERWISE SPECIFIED, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELATED EXCAVATION, TRENCHING AND BACKFILLING.
20. CONTRACTOR SHALL SAFELY SECURE THE SITE AND WORK LIMITS DURING NON-WORK HOURS.
21. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN AND DETAIL SHEETS FOR ADDITIONAL NOTES ON TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
22. SEE THIS SHEET FOR LEGEND.
23. SEE SHEET C-6 FOR TEST PIT INFORMATION.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN *DATE*

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26
1	PER TAC COMMENTS	PMJ	03/23/26

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

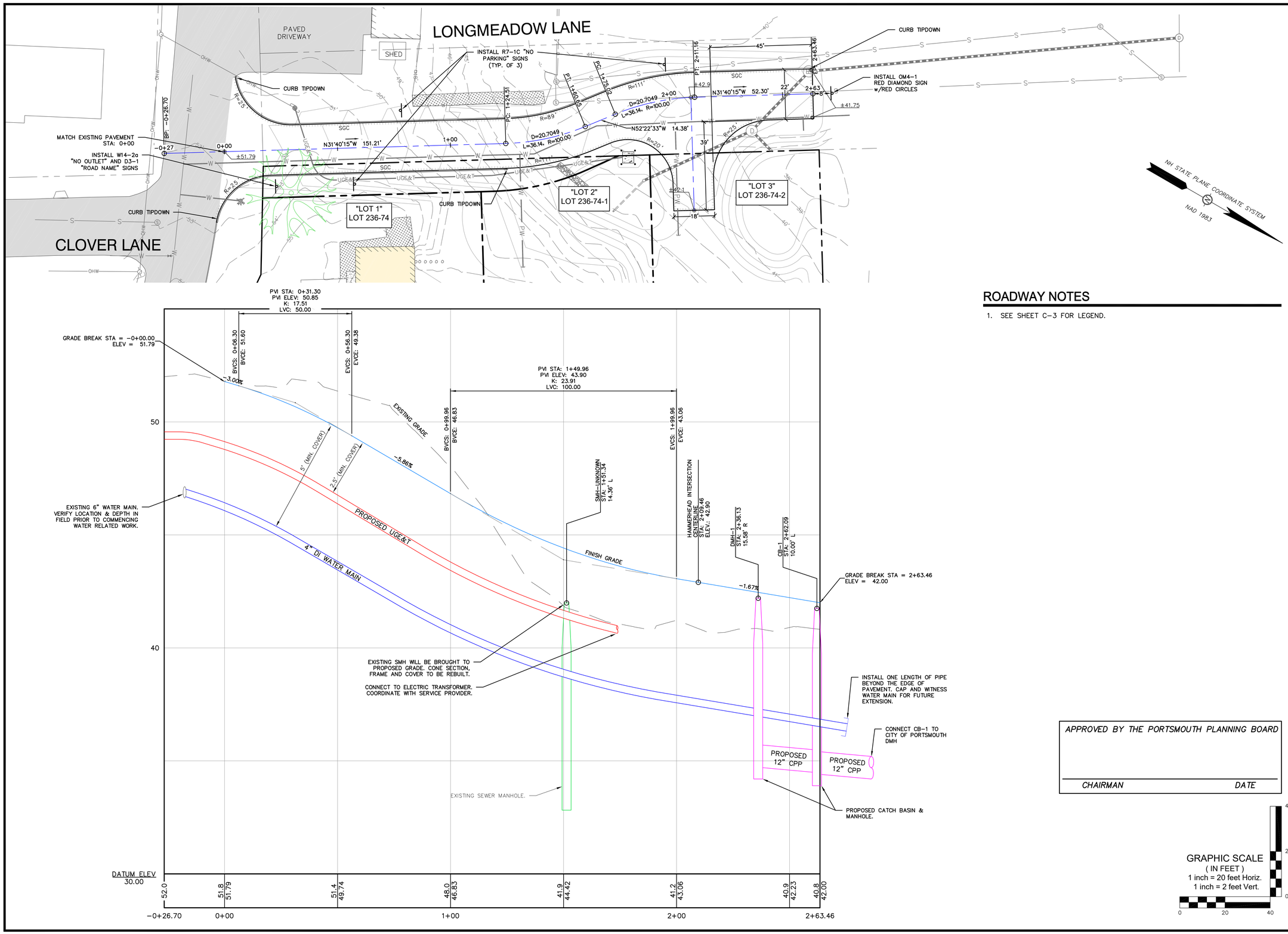
APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
DEMOLITION & SITE PREPARATION PLAN

SHEET NUMBER:
C-3

P5719



ROADWAY NOTES

1. SEE SHEET C-3 FOR LEGEND.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN *DATE*

GRAPHIC SCALE
(IN FEET)
1 inch = 20 feet Horiz.
1 inch = 2 feet Vert.

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STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB
No. 7634
LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
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1	PER TAC COMMENTS	PMJ	03/23/26

DRAWN BY: PMJ
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DRAWING FILE: 5719-SITE.dwg

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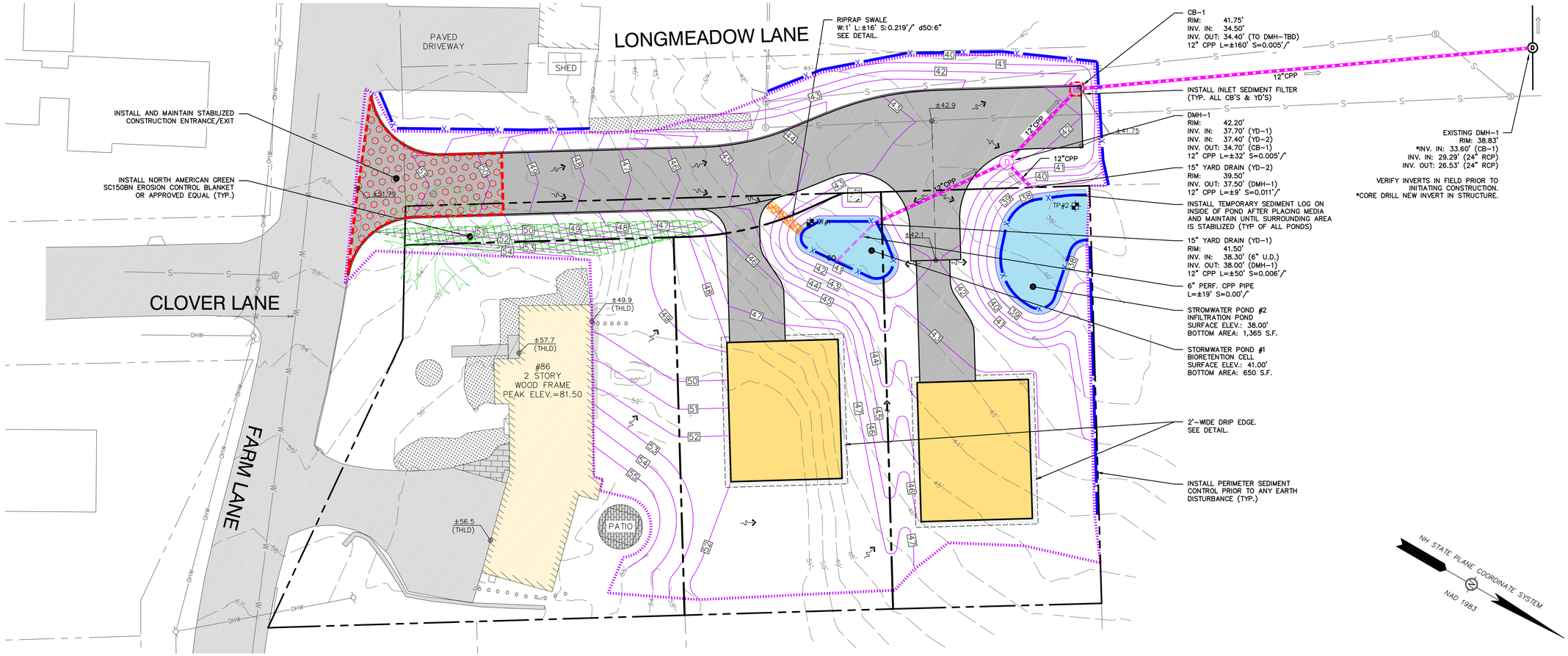
APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
ROADWAY PLAN

SHEET NUMBER:
C-4

P5719



GRADING & DRAINAGE NOTES

1. DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
2. CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
3. A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND THE MUNICIPAL ENGINEER SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
4. ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION. UNLESS OTHERWISE AGREED IN WRITING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING TEMPORARY BENCHMARKS (TBMS) AND PERFORMING ALL CONSTRUCTION SURVEY LAYOUT.
5. PRIOR TO CONSTRUCTION, FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING UTILITIES SCHEDULED TO REMAIN. PRESERVE AND PROTECT UTILITIES TO BE RETAINED.
6. THE LIMITS OF CONSTRUCTION DISTURBANCE SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY TREE CLEARING, STUMPING, GRUBBING OR EARTH MOVING OCCURS. WHERE CONSTRUCTION IS TO TAKE PLACE WITHIN 50' OF A PROPERTY LINE, THE PROPERTY LINE SHALL BE STAKED AT 50' MINIMUM INTERVALS.
7. PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES FOR FOUNDATIONS, PAVEMENT AREAS, UTILITY TRENCHES, AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL. IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER, EXPOSED SUBGRADES ARE SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN GROUND. THIS WILL LIKELY REQUIRE REMOVAL OF A FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATIONS. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST FREEZING.
8. IF SUITABLE, EXCAVATED MATERIALS SHALL BE PLACED AS FILL WITHIN UPLAND AREAS ONLY AND SHALL NOT BE PLACED WITHIN WETLANDS. PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION.
9. DEWATERING ACTIVITIES, IF REQUIRED, SHALL BE DONE IN ACCORDANCE WITH EPA AND NHDES REGULATIONS AND GUIDELINES.
10. DRAINAGE PIPE SHALL BE CORRUGATED POLYETHYLENE PIPE (CPP), TYPE ADS N-12 OR HANCOR H1-Q, OR PVC SDR 35 WHERE SPECIFIED. ALL STORMWATER PIPING REDUCERS, WYES AND TEES SHALL BE CONCENTRIC UNLESS OTHERWISE NOTED.
11. 2" RIGID INSULATION SHALL BE INSTALLED OVER DRAIN PIPES WHERE COVER IS < 2'.
12. ALL CATCH BASIN, MANHOLE AND OTHER DRAINAGE RIMS SHALL BE SET FLUSH WITH OR NO LESS THAN 0.1' BELOW FINISH GRADE. ANY RIM ABOVE SURROUNDING FINISH GRADE SHALL NOT BE ACCEPTED UNLESS OTHERWISE SPECIFIED. ALL DRAINAGE STRUCTURES WITHIN PAVED AREAS SHALL BE H-20 LOADING RATED.
13. IN ORDER TO PROVIDE VISUAL CLARITY ON THE PLANS, DRAINAGE AND OTHER UTILITY STRUCTURES MAY NOT BE DRAWN TO SCALE. SYMBOLS MAY NOT BE INDICATIVE OF THE CENTER OF A STRUCTURE, PARTICULARLY WHEN SHOWN ADJACENT TO A CURB LINE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER SIZING AND LOCATION OF ALL STRUCTURES AND IS DIRECTED TO RESOLVE ANY POTENTIAL DISCREPANCY WITH THE ENGINEER PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL PROTECT ALL RAINGARDENS FROM CONSTRUCTION STORMWATER RUNOFF. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED DURING CONSTRUCTION. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
15. ALL SPOT GRADES ARE AT FINISH GRADE AND BOTTOM OF CURB WHERE APPLICABLE. ADJUST GRADING AT EMERGENCY BUILDING EXITS AS NECESSARY TO ENSURE CODE COMPLIANCE. COORDINATE WITH ARCHITECT IF RAILINGS ARE REQUIRED.
16. UNLESS OTHERWISE NOTED, THE CONTRACTOR MAY CONNECT BUILDING AND RETAINING WALL FOUNDATION DRAINS TO THE NEAREST DRAINAGE STRUCTURE PROVIDED A MINIMUM 1% SLOPE CAN BE MAINTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FOUNDATION DRAINS WITH THE BUILDING AND WALL PLANS.
17. UPON COMPLETION OF CONSTRUCTION, ALL DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.
18. NO SNOW SHALL BE STORED IN ANY STORMWATER POND OR ANY OTHER STORMWATER BMP.
19. SEE SHEET C-3 FOR LEGEND.

EROSION & SEDIMENT CONTROL NOTES

1. AREA OF DISTURBANCE = ±36,000 S.F. NHDES ALTERATION OF TERRAIN PERMIT NOT REQUIRED, INCLUDING LOT DEVELOPMENT.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN STANDARDS AND SPECIFICATIONS SET FORTH BY THE NH DEPARTMENT OF ENVIRONMENTAL SERVICES.
3. TEMPORARY INLET PROTECTION MEASURES SHALL BE INSTALLED AT ALL CULVERT ENTRANCES AND IN ALL CATCH BASINS WITHIN 100' OF THE PROJECT SITE WHEN SITE WORK WITHIN CONTRIBUTING AREAS IS ACTIVE OR SAID AREAS HAVE NOT BEEN STABILIZED.
4. ALL EROSION CONTROL BLANKETS AND FASTENERS SHALL BE BIDEGRADEABLE.
5. ALL EROSION CONTROL BLANKETS SHALL BE BY NORTH AMERICAN GREEN OR EQUAL AS APPROVED IN WRITING BY THE ENGINEER.
6. ALL SWALES WITH SLOPES OF 5% OR GREATER SHALL BE STABILIZED WITH RIPRAP PER THE DETAILS. ALL OTHER SWALES SHALL BE STABILIZED WITH NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKET.
7. THE STORMWATER PONDS SHOWN IN THIS PLAN SET SHALL BE CONSTRUCTED BEFORE EARTHWORK COMMENCES ON THE REMAINDER OF THE SITE. THE CONTRACTOR MAY USE THE POND AS A SEDIMENTATION POND UNTIL THE SITE IS STABILIZED. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM. SILT SOXX SHALL BE INSTALLED AROUND THE PERIMETER OF THE STORMWATER BASINS.
8. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM; WITH THE EXCEPTION OF DETENTION PONDS SHOULD A SEDIMENTATION POND BE REQUIRED.
9. TEMPORARY SEDIMENT LOG (SILTSOXX OR EQUAL APPROVED BY THE ENGINEER) SHALL BE INSTALLED AROUND THE INLETS OFF ALL CULVERTS AND THE BOTTOM PERIMETERS OF ALL STORMWATER PONDS. THESE MEASURES ARE TO REMAIN IN PLACE UNTIL ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
10. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS.
11. MATERIAL STOCKPILE & CONCRETE WASHOUT LOCATIONS SHOWN ARE CONCEPTUAL. THE CONTRACTOR MAY LOCATE STOCKPILES OR WASHOUT WHERE NECESSARY PROVIDED THAT PERIMETER SEDIMENT CONTROLS ARE PROPERLY INSTALLED.
12. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF LOAM, LIMESTONE, FERTILIZER, SEED, AND HAY MULCH OR EROSION CONTROL BLANKET USING APPROPRIATE SOIL STABILIZATION TECHNIQUES. SEE DETAILS FOR ADDITIONAL INFORMATION.
13. UPON COMPLETION OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED AND ANY AREAS DISTURBED BY THE REMOVAL SMOOTHED AND REVEGETATED.
14. SEE DEMOLITION & SITE PREPARATION PLAN AND DETAIL SHEETS FOR ADDITIONAL SEDIMENT AND EROSION CONTROL NOTES AND DETAILS.

TEST PIT LOGS

EVALUATED BY ERIC D. WEINRIEB (PERMIT #809) ON JANUARY 14, 2026
WITNESSED BY DAVID DESFOSSES (TEST PIT 1 ONLY)

TEST PIT 1
0-9" 7.5 YR 3/3 – DARK BROWN GRASS MATT AND FINE SANDY LOAM, FRIABLE, GRANULAR
9-24" 7.5 YR 3/4 – DARK BROWN FINE SANDY LOAM, FRIABLE, GRANULAR
24-60" 5 YR 4/3 – REDDISH BROWN CLAYEY LOAM FIRM, MASSIVE WITH PROMINENT MOTTLES THROUGHOUT
60" STOPPED

ESTIMATED SEASONAL HIGH WATER TABLE – 24"
ROOTS – OOC TO 40"
OBSERVED WATER – 40"
LEDGE – NONE

TEST PIT 2
0-8" 10 YR 2/2 – VERY DARK BROWN GRASS MATT AND FINE LOAMY SAND, FRIABLE, GRANULAR
8-17" 5 YR 3/3 – DARK REDDISH BROWN LOAMY SAND, SINGLE GRAIN, LOOSE
17-33" 5 YR 6/4 – LIGHT REDDISH BROWN FINE SAND, SINGLE GRAIN, LOOSE
33-55" 5 YR 4/3 REDDISH BROWN CLAYEY LOAM, FIRM, MASSIVE WITH PROMINENT MOTTLES STARTING AT 43"
55" STOPPED

ESTIMATED SEASONAL HIGH WATER TABLE – 43"
ROOTS – NOT DOCUMENTED
OBSERVED WATER – 50"
LEDGE – NONE

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN *DATE*

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB
No. 7634
LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26
1	PER TAC COMMENTS	PMJ	03/23/26

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

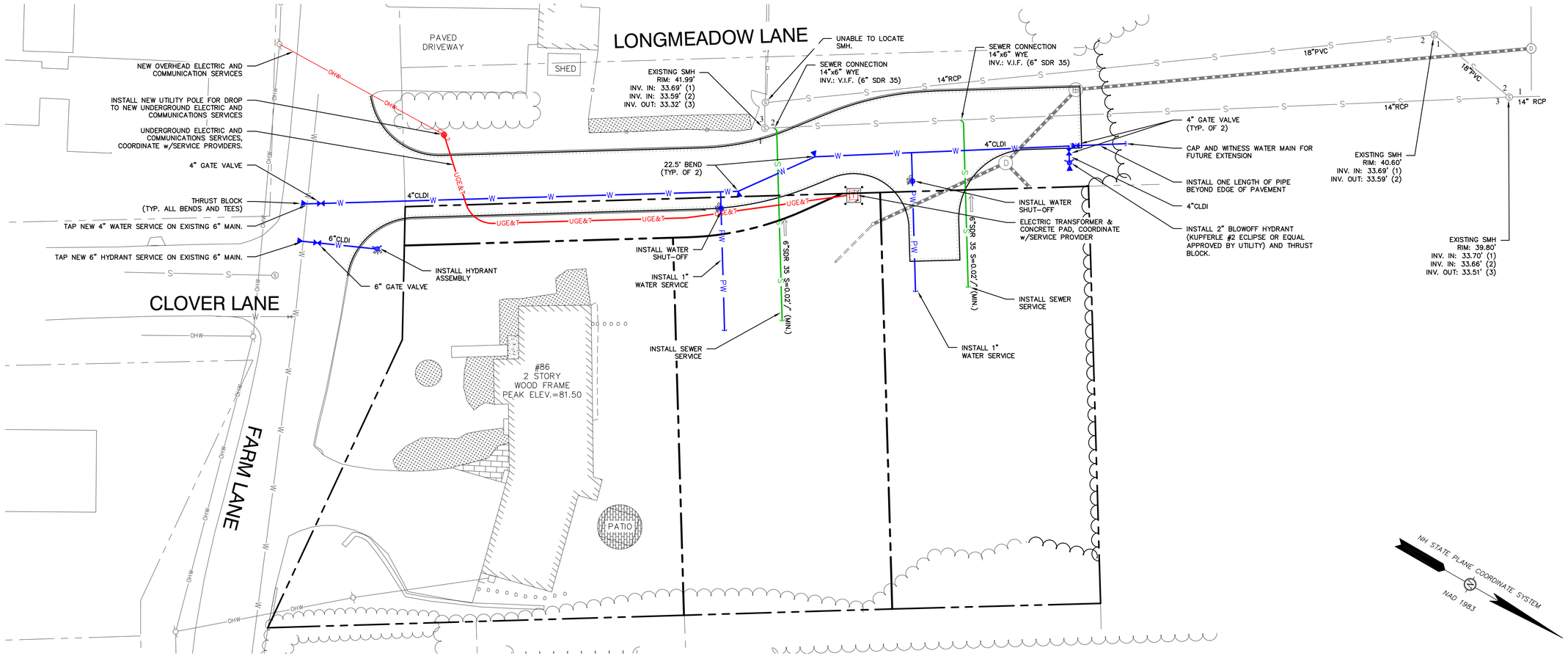
APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
GRADING, DRAINAGE & EROSION CONTROL PLAN

SHEET NUMBER:
C-5

P5719



UTILITY NOTES

1. THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (I.E. CATCH BASINS, MANHOLES, WATER GATES, ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY PROVIDERS AND GOVERNMENTAL AGENCIES. AS SUCH, THEY ARE NOT INCLUSIVE AS OTHER UTILITIES AND UNDERGROUND STRUCTURES THAT ARE NOT SHOWN ON THE PLANS MAY EXIST. THE ENGINEER, SURVEYOR AND OWNER ACCEPT NO RESPONSIBILITY FOR POTENTIAL INACCURACIES IN THE PLAN AND/OR UNFORESEEN CONDITIONS. THE CONTRACTOR SHALL NOTIFY, IN WRITING, SAID AGENCIES, UTILITY PROVIDERS, LOCAL DPW AND OWNER'S AUTHORIZED REPRESENTATIVE AND CALL DIG SAFE AT 1 (800) DIG-SAFE AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION WORK.
2. PRIOR TO CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING AND PROPOSED STORMWATER, WASTEWATER AND UTILITY LINES. CONFLICTS SHALL BE ANTICIPATED AND ALL EXISTING LINES TO BE RETAINED SHALL BE PROTECTED. ANY DAMAGE DONE TO EXISTING UTILITIES SHALL BE REPAIRED AND, IF NECESSARY, EXISTING UTILITIES SHALL BE RELOCATED AT NO EXTRA COST TO THE OWNER. ALL CONFLICTS SHALL BE RESOLVED WITH THE INVOLVEMENT OF THE ENGINEER, LOCAL DPW AND APPROPRIATE UTILITIES.
3. WATER: PORTSMOUTH DPW WATER DIVISION, DOUG SPARKS, (603) 427-1409.
4. SEWER: PORTSMOUTH DPW SEWER DIVISION, DOUG SPARKS, (603) 427-1409.
5. TELECOMMUNICATIONS: CONSOLIDATED, JOE CONSIDINE, (603) 427-5525.
6. CABLE: COMCAST, MIKE COLLINS, (603) 679-5695, EXT. 1037.
7. ELECTRICAL: EVERSOURCE, JOSHUA LAHAIE, (603) 332-7551.
8. GAS: UNITIL, DAVID BEAULIEU, (603) 294-5144
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF ALL BONDS AND PAYMENT OF ALL TAP, TIE-IN AND CONNECTION FEES.
10. THE APPLICANT SHALL AGREE TO PAY FOR THE SERVICES OF A THIRD-PARTY OVERSIGHT ENGINEER, TO BE SELECTED BY THE CITY, TO MONITOR THE INSTALLATION OF UTILITIES INCLUDING SEWER, WATER AND DRAINAGE.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL ROAD/LANE CLOSURES OR OTHER TRAFFIC INTERRUPTIONS THE CITY OF PORTSMOUTH POLICE DEPARTMENT AND/OR DPW AT LEAST TWO WEEKS PRIOR TO COMMENCING RELATED CONSTRUCTION.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING, BEDDING, BACKFILL & COMPACTION FOR ALL UTILITY TRENCHING IN ADDITION TO ALL CONDUIT INSTALLATION AND COORDINATION OF ALL REQUIRED INSPECTIONS.
13. ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE CITY OF PORTSMOUTH AND NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, LASTEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
14. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL CONFORM TO FEDERAL, OSHA, AND LOCAL REGULATIONS.
15. FINAL UTILITY LOCATIONS TO BE COORDINATED BETWEEN THE OWNER, CONTRACTOR, DPW AND APPROPRIATE UTILITY COMPANIES.
16. ALL WATER MAIN AND SERVICE INSTALLATIONS SHALL BE CONSTRUCTED AND TESTED PER PORTSMOUTH DPW STANDARDS AND SPECIFICATIONS. ALL OTHER UTILITIES SHALL BE TO THE STANDARDS AND SPECIFICATIONS OF THE RESPECTIVE UTILITY PROVIDERS.
17. PER PORTSMOUTH DPW SPECIFICATIONS, ALL NEW DUCTILE IRON WATERLINE SHALL BE WRAPPED WITH A WATER TIGHTPOLYETHYLENE WRAPPING FOR THEIR FULL LENGTH, ALL DOMESTIC WATER SERVICES SHALL BE PROVIDED WITH BACKFLOW PREVENTERS AND ALL JOINTS SHALL HAVE THREE (3) WEDGES PER JOINT.
18. WATER AND SANITARY SEWER LINES SHALL BE LOCATED AT LEAST 10' HORIZONTALLY FROM EACH OTHER. WHERE CROSSING, 18" MINIMUM VERTICAL CLEARANCE SHALL BE PROVIDED WITH WATER INSTALLED OVER SEWER.
19. ALL MEANS, METHODS, MATERIALS AND INSTALLATION OF NEW SEWER LATERALS SHALL BE APPROVED AND WITNESSED BY PORTSMOUTH DPW PRIOR TO BACKFILLING. SEWER LATERALS MAY BE CONSTRUCTED IN THE SAME TRENCH PROVIDED THAT A MINIMUM SEPARATION OF 3' IS MAINTAINED AND THE LINES ARE LOCATED ON THEIR RESPECTIVE LOTS IN THEIR ENTIRETY.
20. WHERE WATER LINES CROSS, RUN ADJACENT TO OR ARE WITHIN 5' OF STORM DRAINAGE PIPES OR STRUCTURES, 2"-THICK CLOSED CELL RIGID BOARD INSULATION SHALL BE INSTALLED FOR FROST PROTECTION.
21. THE CONTRACTOR SHALL PROVIDE DPW WITH DETAILS OF TEMPORARY & PERMANENT GROUNDWATER DEWATERING DESIGN IF NECESSARY.
22. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL HANDHOLES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS IN ORDER TO RENDER THE FULL INSTALLATION OF COMPLETE AND OPERATIONAL UTILITY AND DRAINAGE SYSTEMS.
23. UNLESS OTHERWISE DETERMINED BY THE UTILITY PROVIDER, ALL ELECTRICAL TRANSFORMERS AND SWITCHES SHALL REMAIN THE PROPERTY OF THE UTILITY.
24. THE INSTALLATION OF ELECTRIC POWER AND COMMUNICATIONS LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE, COORDINATE WITH UTILITY PROVIDER.
25. THE CONTRACTOR SHALL CONFIRM ALL UTILITY LINE AND CONDUIT SIZES WITH THE MEP PLANS AND SERVICE PROVIDERS PRIOR TO INSTALLATION. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
26. DETECTABLE WARNING TAPE SHALL BE PLACED OVER THE ENTIRE LENGTH OF ALL BURIED UTILITIES. COLORS SHALL MATCH THE RESPECTIVE UTILITY PROVIDERS.
27. SANITARY SEWERS WILL BE CONNECTED TO THE EXISTING 14" AC PIPE. ABESTOS CONCRETE PIPE A HAZARDOUS WASTE. CONTRACTOR SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO ENSURE THAT CONTAMINENTS ARE NOT RELEASED TO THE ENVIRONMENT.
28. SEE SHEET C-3 FOR LEGEND.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN *DATE*

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

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STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB
No. 7634
LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

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1	PER TAC COMMENTS	PMJ	03/23/26

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

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22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
UTILITIES PLAN

SHEET NUMBER:
C-6

P5719

PROJECT NAME AND LOCATION

Owner:

JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

Applicant:

FLIPPING BERGER'S, LLC
71 BRACKETT ROAD
PORTSMOUTH, NH 03801

DESCRIPTION

The project consists of the development of two residential properties on Farm Lane. The existing single-family home at 86 Farm Lane is to remain. The proposed buildings will be modern single family homes. Stormwater will be managed and treated with stormwater ponds. Site improvements include underground utilities, landscaping and associated site improvements.

DISTURBED AREA

The total area to be disturbed on the parcels and for the roadway, lot development, drainage, and utility construction is approximately ±36,000 S.F. The combined disturbed area DOES NOT exceed 43,560 SF (1 acre), thus a SWPPP will NOT be required for compliance with the USEPA-NPDES Construction General Permit. All local requirements for stormwater and erosion control during construction are still required.

NPDES CONSTRUCTION GENERAL PERMIT

Not required for this project.

SEQUENCE OF MAJOR ACTIVITIES

1. Hold a pre-construction meeting with City & stake holders.
2. Install temporary erosion control measures, including drain inlet protection, silt fences, and stabilized construction exit/entrance.
3. Remove existing pool, pool house, deck, stone staircases, retaining walls, and chain link fence.
4. Clear and Grub vegetated areas per plan; Strip and stockpile loam. Stockpiles shall be temporarily stabilized with hay bales, mulch and surrounded by a hay bale or silt fence barrier until material is removed and final grading is complete. Remove debris. Remove pavement and structures intended to be removed within the initial work limits.
5. Construct utility infrastructure. Rough grade lot to prepare for site development. Stabilize swales and stormwater managment systems prior to directing flow to them.
6. Construct roadway infrastrucutre and foundations.
7. Loam and see remaining disturbed areas in roadway.
8. Construct buildings.
9. When all construction activity is complete and site is stabilized, remove all silt fences and temporary structures and sediment that has been trapped by these devices.

NAME OF RECEIVING WATER

The site drainage discharges into an unnamed wetland that eventually discharges to Hodgeson Brook.

TEMPORARY EROSION & SEDIMENT CONTROL AND STABILIZATION PRACTICES

All work shall be in accordance with state and local permits. Work shall conform to the practices described in the "New Hampshire Stormwater Manual", dated February 2025. As indicated in the sequence of Major Activities, the silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Once construction activity ceases permanently in an area, silt fences and any earth/dikes will be removed once permanent measures are established.

During construction, runoff will be diverted around the site with stabilized channels where possible. Sheet runoff from the site shall be filtered through hay bale barriers, stone check dams, and silt fences. All storm drain inlets shall be provided with hay bale filters or stone check dams. Stone rip rap shall be provided at the outlets of drain pipes and culverts where shown on the drawings.

Stabilize all ditches, swales, stormwater ponds, level spreaders and their contributing areas prior to directing flow to them.

Temporary and permanent vegetation and mulching is an integral component of the erosion and sedimentation control plan. All areas shall be inspected and maintained until vegetative cover is established. These control measures are essential to erosion prevention and also reduce costly rework of graded and shaped areas.

Temporary vegetation shall be maintained in these areas until permanent seeding is applied. Additionally, erosion and sediment control measures shall be maintained until permanent vegetation is established.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

A. GENERAL

These are general inspection and maintenance practices that shall be used to implement the plan:

1. The smallest practical portion of the site shall be denuded at one time, but in no case shall it exceed 5 acres at one time.
2. All control measures shall be inspected at least once each week and following any storm event of 0.25 inches or greater.
3. All measures shall be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours.
4. Built-up sediment shall be removed from silt fence or other barriers when it has reached one-third the height of the fence or bale, or when "bulges" occur.
5. All diversion dikes shall be inspected and any breaches promptly repaired.
6. Temporary seeding and planting shall be inspected for bare spots, washouts, and unhealthy growth.
7. The owner's authorized engineer shall inspect the site on a periodic basis to review compliance with the Plans.
8. All roadways and parking lots shall be stabilized within 72 hours of achieving finished grade.
9. All cut and fill slopes shall be seeded/loamed within 72 hours of achieving finished grade.
10. An area shall be considered stable if one of the following has occurred:
    a. Base coarse gravels have been installed in areas to be paved;
    b. A minimum of 85% vegetated growth as been established;
    c. A minimum of 3 inches of non-erosive material such as stone of riprap has been installed;

    – or –

    d. Erosion control blankets have been properly installed.
11. The length of time of exposure of area disturbed during construction shall not exceed 45 days.

B. MULCHING

Mulch shall be used on highly erodible soils, on critically eroding areas, on areas where conservation of moisture will facilitate plant establishment, and where shown on the plans.

1. Timing – In order for mulch to be effective, it must be in place prior to major storm events. There are two (2) types of standards which shall be used to assure this:
    a. Apply mulch prior to any storm event. This is applicable when working within 100 feet of wetlands. It will be necessary to closely monitor weather predictions, usually by contacting the National Weather Service in Concord, to have adequate warning of significant storms.
    b. Required Mulching within a specified time period. The time period can range from 21 to 28 days of inactivity on a area, the length of time varying with site conditions. Professional judgment shall be used to evaluate the interaction of site conditions (soil erodibility, season of year, extent of disturbance, proximity to sensitive resources, etc.) and the potential impact of erosion on adjacent areas to choose an appropriate time restriction.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (CON'T)

2. Guidelines for Winter Mulch Application –

Type	Rate per 1,000 s.f.	Use and Comments
Hay or Straw	70 to 90 lbs.	Must be dry and free from mold. May be used with plantings.
Wood Chips or Bark Mulch	460 to 920 lbs.	Used mostly with trees and shrub plantings.
Jute and Fibrous Matting (Erosion Blanket	As per manufacturer Specifications	Used in slope areas, water courses and other Control areas.
Crushed Stone 1/4" to 1-1/2" dia.	Spread more than 1/2" thick	Effective in controlling wind and water erosion.
Erosion Control Mix	2" thick (min)	* The organic matter content is between 80 and 100%, dry weight basis. * Particle size by weight is 100% passing a 6"screen and a minimum of 70 %, maximum of 85%, passing a 0.75" screen. * The organic portion needs to be fibrous and elongated. * Large portions of silts, clays or fine sands are not acceptable in the mix. * Soluble salts content is less than 4.0 mmhos/cm. * The pH should fall between 5.0 and 8.0.

3. Maintenance – All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied.

C. TEMPORARY GRASS COVER

1. Seedbed Preparation –
   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.
2. 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.
3. Maintenance –
   Temporary seedings 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.).

D. FILTERS

1. Tubular Sediment Barrier
   a. See detail.
   b. Install per manufacturer's requirements.
2. Silt Fence (if used)
   a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements:

Physical Property	Test	Requirements
Filtering Efficiency	VTM-51	75% minimum
Tensile Strength at 20% Maximum Elongation*	VTM-52	Extra Strength 50 lb/lin in (min) Standard Strength 30 lb/lin in (min)
Flow Rate	VTM-51	0.3 gal/sf/min (min)

   * Requirements reduced by 50 percent after six (6) months of installation.

   Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizer to provide a minimum of six (6) months of expected usable construction life at a temperature range of 0 degrees F to 120° F.

   b. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location or as recommended by the manufacturer and driven securely into the ground (minimum of 16 inches).

   c. A trench shall be excavated approximately six (6) inches wide and eight (8) inches deep along the line of posts and upslope from the barrier.

   d. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one (1) inch long, tie wires or hog rings. The wire shall extend no more than 36 inches above the original ground surfaces.

   e. The "standard strength" filter fabric shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.

   f. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of item (g) applying.

   g. The trench shall be backfilled and the soil compacted over the filter fabric.

   h. Silt fences shall be removed when they have served their useful purpose but not before the upslope areas has been permanently stabilized.

3. Sequence of Installation –
   Sediment barriers shall be installed prior to any soil disturbance of the contributing upslope drainage area.
4. Maintenance –
   a. Silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water, the sediment barriers shall be replaced with a temporary stone check dam.
   b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.
   c. Sediment deposits must be removed when deposits reach approximately one-third (1/3) the height of the barrier.
   d. Any sediment deposits remaining in place after the silt fence or other barrier is no longer required shall be removed. The area shall be prepared and seeded.
   e. Additional stone may have to be added to the construction entrance, rock barrier and riprap lined swales, etc., periodically to maintain proper function of the erosion control structure.

E. PERMANENT SEEDING –

1. Bedding – stones larger than 1½", trash, roots, and other debris that will interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 5" to prepare a seedbed and mix fertilizer into the soil.
2. Fertilizer – lime and fertilizer should be applied evenly over the area prior to or at the time of seeding and incorporated into the soil. Kinds and amounts of lime and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:

   Agricultural Limestone @ 100 lbs. per 1,000 s.f.
   10–20–20 fertilizer @ 12 lbs. per 1,000 s.f.
3. Seed Mixture (See Landscape Drawings for additional information):
   3.1. Lawn seed mix shall be a fresh, clean new seed crop. The Contractor shall furnish a dealer's guaranteed statement of the composition of the mixture and the percentage of purity and germination of each variety.
   3.2. Seed mixture shall consist of
      a. 1/3 Kentucky blue,
      b. 1/3 perennial rye, and
      c. 1/3 fine fescue.
   3.1. Turf type tall fescue is unacceptable.
4. Sodding – sodding is done where it is desirable to rapidly establish cover on a disturbed area. Sodding an area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing, and placement of sod shall be performed according to the S.C.S. Handbook. Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt), etc.

WINTER CONSTRUCTION NOTES

1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and elsewhere seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting. 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% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions; and
3. After November 15th, 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.

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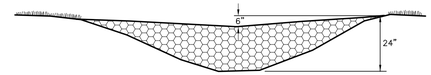
3. After November 15th, incomplete road or parking surfaces where work has stopped for the winter season shall be protected with a minimum of 3 inches of crushed gravel per NHDOT Item 304.3.

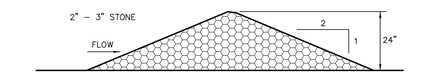
Long Term Inspection & Maintenance Schedule

	Spring	Fall or Yearly	After Major Storm	Every 2-5 Years
Vegetated Areas				
Inspect all slopes and embankments	x		x	
Replant bare areas or areas with sparse growth	x		x	
Armor areas with rill erosion with an appropriate lining or divert the erosive flows to on-site areas able to withstand concentrated flows.	x		x	
Stormwater Channels				
Inspect ditches, swales and other open stormwater channels	x	x	x	
Remove any obstructions and accumulated sediments or debris	x	x		
Control vegetated growth and woody vegetation		x		
Repair any erosion of the ditch lining		x		
Mow vegetated ditches		x		
Remove woody vegetation growing through riprap		x		
Repair any slumping side slopes		x		
Replace riprap where underlying filter fabric or underdrain gravel is exposed or where stones have been dislodged		x		
Culverts				
Remove accumulated sediments and debris at inlet, outlet and within the conduit	x	x	x	
Repair any erosion damage at the culvert's inlet and outlet	x	x	x	
Remove woody vegetation growing through riprap		x		
Roadways and Parking Surfaces				
Remove accumulated winter sand along roadways	x			
Sweep pavement to remove sediment	x			
Grade road shoulders and remove excess sand either manually or by a front-end loader	x			
Grade gravel roads and gravel shoulders	x			
Clean out sediment contained in water bars or open-top culverts	x			
Ensure that stormwater is not impeded by accumulations of material or false ditches in the roadway shoulder	x			
Runoff Infiltration Facilities				
Remove dead vegetation and any accumulated sediment (normally at the entrance to the garden) to allow for new growth	x			
Weed; add additional hardwood mulch to suppress weeds	x	x		
Mow turf three (3) times a growing season				
Aerate area with deep tines, if water ponds on the surface for more than 24 hours during the first year or for a length of 72 hours		x		
Vegetative Swale				
Mow grass swales monthly				
Inspect swale following significant rainfall event	x	x	x	
Control vegetated growth and woody vegetation	x	x		
Repair any erosion of the ditch	x	x		
Remove debris and liter as necessary				

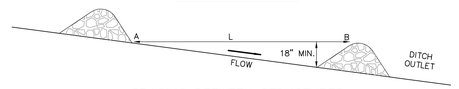
NOTE:
ALL FACILITIES SHOULD BE INSPECTED ON AN ANNUAL BASIS AT A MINIMUM. IN ADDITION, ALL FACILITIES SHOULD BE INSPECTED AFTER A SIGNIFICANT PRECIPITATION EVENT TO ENSURE THE FACILITY IS DRAINING APPROPRIATELY AND TO IDENTIFY ANY DAMAGE THAT OCCURRED AS A RESULT OF THE INCREASED RUNOFF. FOR THE PURPOSE OF THIS STORMWATER MANAGEMENT PROGRAM, A SIGNIFICANT RAINFALL EVENT IS CONSIDERED AN EVENT OF THREE (3) INCHES IN A 24-HOUR PERIOD OR 0.25 INCHES IN A ONE-HOUR PERIOD. IT IS ANTICIPATED THAT A SHORT, INTENSE EVENT IS LIKELY TO HAVE A HIGHER POTENTIAL OF EROSION FOR THIS SITE THAN A LONGER, HIGH VOLUME EVENT.



CROSS-SECTION



STRUCTURE DETAIL



SPACING BETWEEN STRUCTURES

1. L = DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION
2. CHECK DAM SHALL BE CONSTRUCTED OF 2" TO 3" STONE WITH COMPLETE COVERAGE OF DITCH OR SWALE TO INSURE THAT THE CENTER OF THE STRUCTURE IS LOWER THAN THE EDGES.

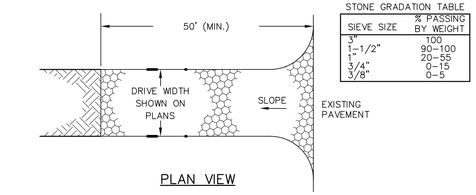
MAINTENANCE

TEMPORARY GRADE STABILIZATION STRUCTURES SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED STORMS. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE. WHEN THE STRUCTURES ARE REMOVED, THE DISTURBED PORTION SHOULD BE BROUGHT TO THE EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED, AND MULCHED. WHILE THIS PRACTICE IS NOT INTENDED TO BE USED PRIMARILY FOR SEDIMENT TRAPPING, SOME SEDIMENT WILL ACCUMULATE BEHIND THE STRUCTURES. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE STRUCTURE.

CONSTRUCTION SPECIFICATIONS

1. *STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.*
2. *CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.*
3. *SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATE VEGETATIVE BMP.*
4. *STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.*

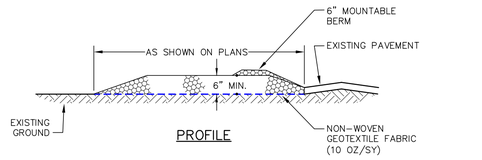
TEMPORARY EROSION CONTROL CHECK DAM — NOT TO SCALE



PLAN VIEW

STONE GRADATION TABLE

SIEVE SIZE	% PASSING BY WEIGHT
3"	100
1-1/2"	90–100
1"	20–55
3/4"	0–15
3/8"	0–5



PROFILE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – NHDOT STANDARD STONE SIZE #4 – SECTION 703 OF NHDOT STANDARD.
2. LENGTH – DETAILED ON PLANS (50 FOOT MINIMUM) OR AS SHOWN ON PLANS.
3. THICKNESS – SIX (6) INCHES (MINIMUM).
4. WIDTH – FULL DRIVE WIDTH UNLESS OTHERWISE SPECIFIED.
5. FILTER FABRIC – MIRAFI 600X OR EQUAL APPROVED BY ENGINEER.
6. SURFACE WATER CONTROL – ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. STABILIZED CONSTRUCTION EXITS SHALL BE INSTALLED AT ALL ENTRANCES TO PUBLIC RIGHTS-OF-WAY, AT LOCATIONS SHOWN ON THE PLANS, AND/OR WHERE AS DIRECTED BY THE ENGINEER.

STABILIZED CONSTRUCTION EXIT — NOT TO SCALE

P5719

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINREB
No. 7634
LICENSED
PROFESSIONAL ENGINEER
2/13/26

NOT FOR CONSTRUCTION

ISSUED FOR:
PRELIMINARY REVIEW

ISSUE DATE:
FEBRUARY 13, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26

DRAWN BY: RLH/PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-DETAILS.DWG

SCALE:
22" x 34" - NOT TO SCALE
11" x 17" - NOT TO SCALE

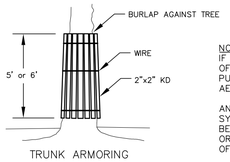
OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKETT ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
EROSION CONTROL NOTES & DETAILS

SHEET NUMBER:
D-1

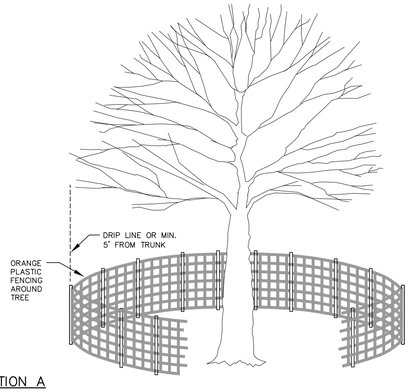


OPTION B

NOTE:
IF SOIL BECOMES COMPATCED OVER THE ROOT ZONE OF ANY TREE, THE GROUND SHOULD BE AERATED BY PUNCHING SMALL HOLES IN IT WITH SUITABLE AERATING EQUIPMENT.

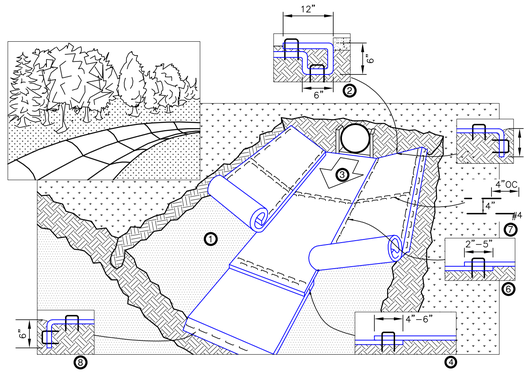
ANY DAMAGE TO THE CROWN, TRUNK OR ROOT SYSTEM OF ANY TREE RETAINED ON SITE SHOULD BE REPAIRED IMMEDIATELY. CONSULT A FORESTER OR TREE SPECIALIST FOR MORE SERIOUS DAMAGE OF TREES.

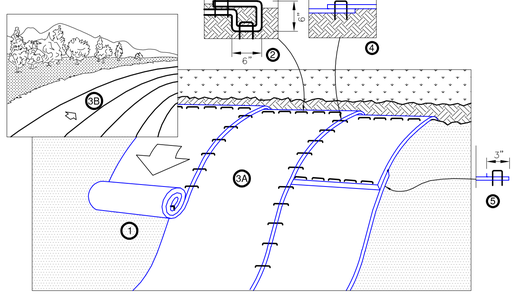
CONTRACTOR TO USE OPTION A OR B WHERE SUITABLE AND/OR AS DIRECTED BY THE ENGINEER.



OPTION A

TREE PROTECTION DETAILS NOT TO SCALE





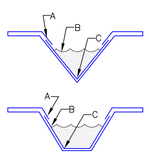
NOTES

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL BLANKET - SLOPE NOT TO SCALE

NOTES

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (DEPENDING ON BLANKET TYPE) AND STAPLED. TO INSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE BLANKET BEING OVERLAPPED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



CRITICAL POINTS:

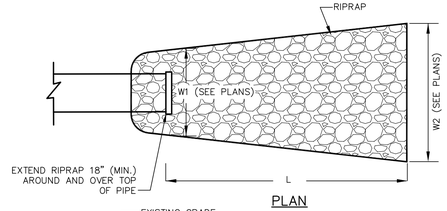
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTES:

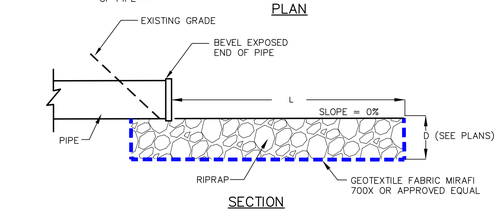
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

EROSION CONTROL BLANKET - SWALE NOT TO SCALE



PLAN



SECTION

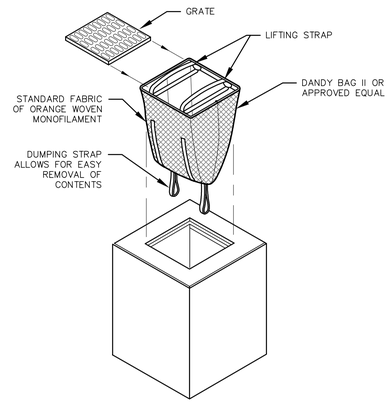
MAINTENANCE

THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

CONSTRUCTION SPECIFICATIONS

1. THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIPRAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK OR GRAVEL USED FOR FILTER OR RIPRAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIPRAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
5. BEVEL EXPOSED END OF PIPE FLUSH WITH GRADE.

RIPRAP OUTLET PROTECTION NOT TO SCALE



INSTALLATION AND MAINTENANCE:

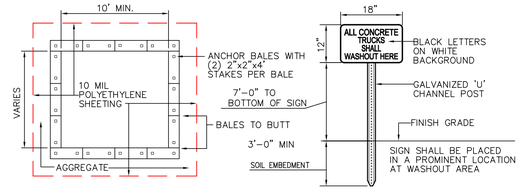
INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO CATCH BASIN INSERT SO THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF THE UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE CATCH BASIN INSERT. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY THE UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

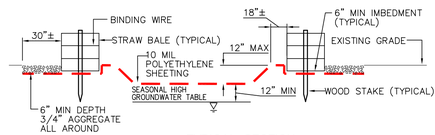
UNACCEPTABLE INLET PROTECTION METHOD:

A SIMPLE SHEET OF GEOTEXTILE UNDER THE GRATE IS NOT ACCEPTABLE.

STORM DRAIN INLET PROTECTION NOT TO SCALE



PLAN WASHOUT SIGN

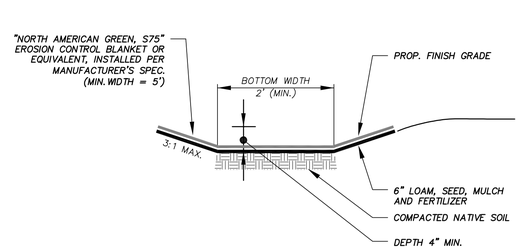


TYPICAL SECTION

NOTES

1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

CONCRETE WASHOUT NOT TO SCALE



NOTES:

1. THE FOUNDATION AREA OF THE WATERWAY SHALL BE CLEARED AND GRUBBED OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL. MATERIALS REMOVED SHALL BE DISPOSED OF SO THEY WILL NOT INTERFERE WITH THE CONSTRUCTION OR PROPER FUNCTIONING OF THE WATERWAY.
2. THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS SECTION AS REQUIRED TO MEET THE DESIGN CRITERIA. THE WATERWAY SHALL BE FREE OF IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. EARTH FILLS REQUIRED TO MEET SUBGRADE REQUIREMENTS BECAUSE OF OVER EXCAVATION OR TOPOGRAPHY SHALL BE COMPACTED TO THE SAME DENSITY AS THE SURROUNDING SOIL TO PREVENT UNEQUAL SETTLEMENT THAT COULD CAUSE DAMAGE TO THE COMPLETED WATERWAY. EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE WATERWAY.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER AS TO MINIMIZE EROSION AND AIR AND WATER POLLUTION. ALL APPROPRIATE STATE AND LOCAL LAWS AND REGULATIONS SHALL BE COMPLIED WITH FOR INSTALLATION.
5. VEGETATION SHALL BE ESTABLISHED IN THE SWALE OR AN EROSION CONTROL MATTING INSTALLED PRIOR TO ALLOWING STORMWATER RUNOFF TO FLOW THROUGH THE SWALE.
6. MAINTENANCE OF THE VEGETATION IN THE GRASSED WATERWAY IS EXTREMELY IMPORTANT IN ORDER TO PREVENT RILLING, EROSION, AND FAILURE OF THE WATERWAY. MOWING SHALL BE DONE FREQUENTLY ENOUGH TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION AND TO KEEP THE GRASSES IN A VIGOROUS CONDITION. THE VEGETATION SHALL NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE EROSION RESISTANCE IN THE WATERWAY.
7. THE WATERWAY SHOULD BE INSPECTED PERIODICALLY AND AFTER ANY STORM GREATER THAN 0.5" OF RAINFALL IN 24 HOURS TO DETERMINE THE CONDITION OF THE WATERWAY. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND REVEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.
8. APPLY LIME AND FERTILIZER AS NEEDED TO MAINTAIN VIGOROUS GROWTH.

GRASSED SWALE NOT TO SCALE

P5719

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINREB
No. 7634
LICENSED
PROFESSIONAL ENGINEER
2/13/26

NOT FOR CONSTRUCTION

ISSUED FOR:
PRELIMINARY REVIEW

ISSUE DATE:
FEBRUARY 13, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26

DRAWN BY: RLH/PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-DETAILS.DWG

SCALE:
22" x 34" - NOT TO SCALE
11" x 17" - NOT TO SCALE

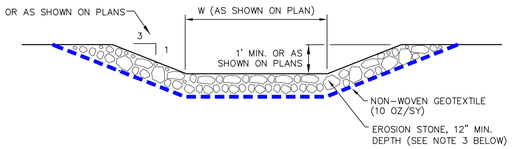
OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
DETAIL SHEET

SHEET NUMBER:
D-2

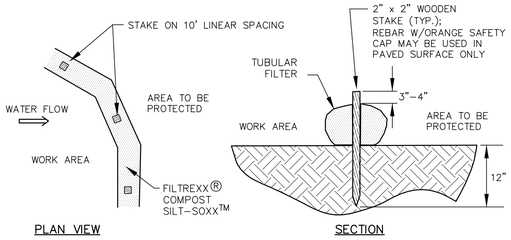


NOTES

1. CONSTRUCT RIP RAP LINED SWALE TO THE WIDTHS AND LENGTHS SHOWN ON THE PLAN.
2. THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIPRAP SHALL BE PREPARED TO LINES AND GRADES SHOWN ON THE PLANS.
3. EROSION STONE USED FOR THE RIP RAP LINED SWALE SHALL MEET THE GRADATION SHOWN ON THE PLANS.
4. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE EROSION STONE. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 18 INCHES.
5. THE EROSION STONE MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

RIPRAP SWALE

NOT TO SCALE

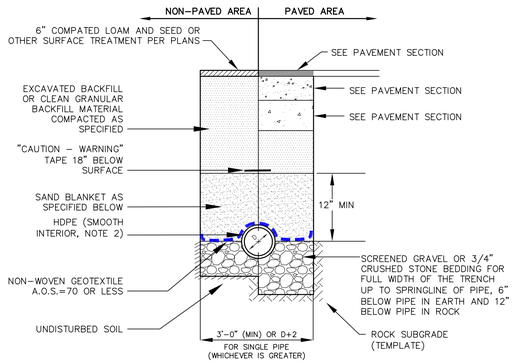


NOTES:

1. SILTSOXX OR APPROVED EQUAL SHALL BE USED FOR TUBULAR SEDIMENT BARRIERS.
2. ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS.
3. COMPOST/SOIL/ROCK/SEED FILL MATERIAL SHALL BE ADJUSTED AS NECESSARY TO MEET THE REQUIREMENTS OF THE SPECIFIC APPLICATION.
4. ALL SEDIMENT TRAPPED BY BARRIER SHALL BE DISPOSED OF PROPERLY.

TUBULAR SEDIMENT BARRIER DETAIL

NOT TO SCALE



NOTES

1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.
2. MAINTAIN 12" MINIMUM HORIZONTAL SEPARATION AND WIDEN TRENCH ACCORDINGLY IF MULTIPLE PIPES ARE IN TRENCH.

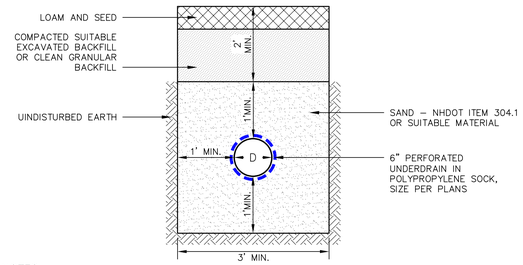
SAND BLANKET/BARRIER	
SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 – 100
200	0 – 15

SCREENED GRAVEL OR CRUSHED STONE BEDDING*	
SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 – 10
# 8	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

DRAINAGE TRENCH

NOT TO SCALE

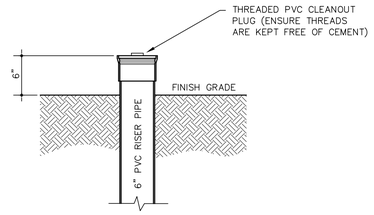


NOTES:

1. ALL MATERIALS ARE TO BE COMPACTED TO 95% OF ASTM D-1557.

BIO. CELL UNDERDRAIN TRENCH

NOT TO SCALE

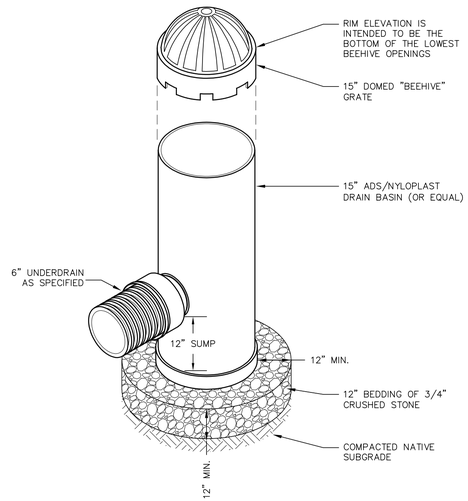


NOTES

1. THIS DETAIL IS INTENDED FOR USE WITH BIORETENTION POND UNDERDRAINS ONLY. SEE OTHER DETAILS FOR CLEANOUTS IN OTHER AREAS.
2. CLEANOUT LOCATIONS ARE MARKED "CO" ON STORMWATER MANAGEMENT PLANS.
3. CLEANOUTS MAY NOT BE SET TO FINISH GRADE WITHOUT APPROVAL FROM THE ENGINEER.

BIORETENTION U.D. CLEANOUT ("CO")

NOT TO SCALE

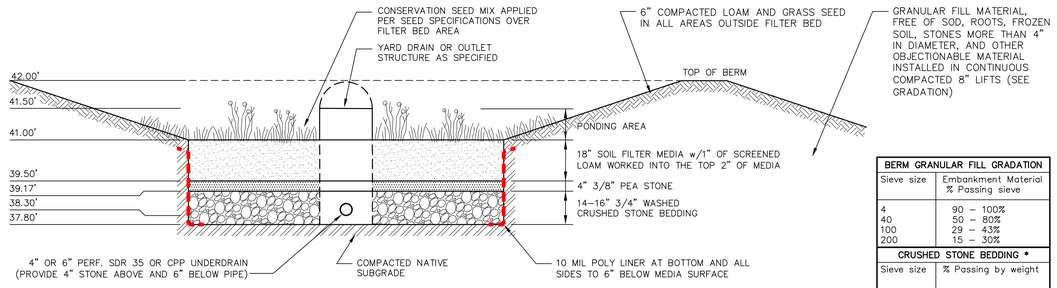


NOTES:

1. FRAMES AND GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN AND DETAILS.
3. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE, N-12HP AND PVC SEWER.
4. INLINE DRAIN TO BE PVC DIAMETER AS SPECIFIED AND AS MANUFACTURED BY ADS OR APPROVED EQUAL.
5. THE CONTRACTOR SHALL INSTALL THE DRAIN BASIN PER THE MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON THE DRAWINGS.
6. INLET AND OUTLET GEOMETRY MAY NOT BE SYMMETRICAL. ALL INLETS AND OUTLET LOCATIONS SHALL CONFORM TO THE LINES AND ANGLES SHOWN ON THE PLANS.

YARD DRAIN ("YD")

NOT TO SCALE



BERM GRANULAR FILL GRADATION	
Sieve size	Embankment Material % Passing sieve
4	90 – 100%
40	50 – 80%
100	29 – 43%
200	15 – 30%
CRUSHED STONE BEDDING *	
Sieve size	% Passing by weight
1"	100%
3/4"	90 – 100%
3/8'	20 – 55%
#4	0 – 10%
#8	0 – 5%

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 NHDOT STANDARD SPECIFICATIONS

FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Filter Media Option A			
ASTM C-33 concrete sand	50 – 55%		
Loamy sand topsoil, with fines as indicated	20 – 30%	200	15 to 25%
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 – 30%	200	< 5%
Filter Media Option B			
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 – 30%	200	< 5%
Loamy coarse sand	70 – 80%	10	85 – 100%
		20	70 – 100%
		60	15 – 40%
		200	8 – 15%

NOTES

1. WHEN CONTRACTOR EXCAVATES BIORETENTION POND AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL EITHER OPTION A OR OPTION B AT CONTRACTOR'S DISCRETION.
3. DO NOT PLACE BIORETENTION POND INTO SERVICE UNTIL ITS SIDE SLOPES AND CONTRIBUTING AREAS HAVE BEEN STABILIZED.
4. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES TO THE BIORETENTION POND DURING ANY STAGE OF CONSTRUCTION.
5. DO NOT TRAFFIC EXPOSED SURFACES OF BIORETENTION POND WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATION ACTIVITIES WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE BASIN.
6. POND BERMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STORMWATER POND BERM DETAIL.

MAINTENANCE REQUIREMENTS

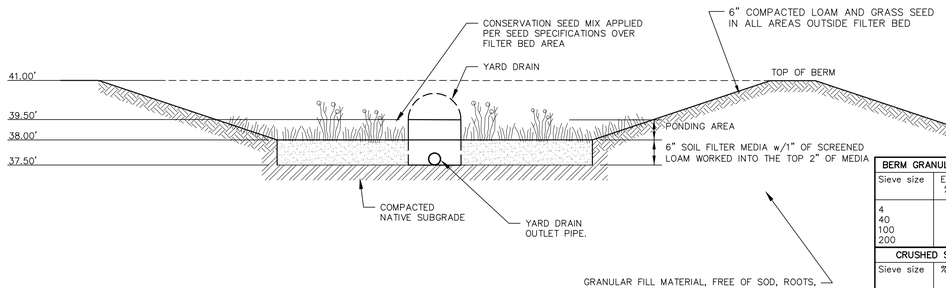
- SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.
- PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.
- AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.
- VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, WEED WHACKING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES. BERM AREAS ARE TO BE MOWED TWICE ANNUALLY.

DESIGN REFERENCES

- UNH STORMWATER CENTER
- EPA (1999A)
- NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, FEBRUARY 2025 AS AMENDED.

BIORETENTION CELL (STORMWATER POND #1)

NOT TO SCALE



BERM GRANULAR FILL GRADATION	
Sieve size	Embankment Material % Passing sieve
4	90 – 100%
40	50 – 80%
100	29 – 43%
200	15 – 30%
CRUSHED STONE BEDDING *	
Sieve size	% Passing by weight
1"	100%
3/4"	90 – 100%
3/8'	20 – 55%
#4	0 – 10%
#8	0 – 5%

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 NHDOT STANDARD SPECIFICATIONS

FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Filter Media Option A			
ASTM C-33 concrete sand	50 – 55%		
Loamy sand topsoil, with fines as indicated	20 – 30%	200	15 to 25%
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 – 30%	200	< 5%
Filter Media Option B			
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 – 30%	200	< 5%
Loamy coarse sand	70 – 80%	10	85 – 100%
		20	70 – 100%
		60	15 – 40%
		200	8 – 15%

NOTES

1. WHEN CONTRACTOR EXCAVATES BIORETENTION POND AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL EITHER OPTION A OR OPTION B AT CONTRACTOR'S DISCRETION.
3. DO NOT PLACE BIORETENTION POND INTO SERVICE UNTIL ITS SIDE SLOPES AND CONTRIBUTING AREAS HAVE BEEN STABILIZED.
4. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES TO THE BIORETENTION POND DURING ANY STAGE OF CONSTRUCTION.
5. DO NOT TRAFFIC EXPOSED SURFACES OF BIORETENTION POND WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATION ACTIVITIES WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE BASIN.
6. POND BERMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STORMWATER POND BERM DETAIL.

MAINTENANCE REQUIREMENTS

- SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.
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- VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, WEED WHACKING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES. BERM AREAS ARE TO BE MOWED TWICE ANNUALLY.

DESIGN REFERENCES

- UNH STORMWATER CENTER
- EPA (1999A)
- NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, FEBRUARY 2025 AS AMENDED.

INFILTRATION POND (STORMWATER POND #2)

NOT TO SCALE

P5719

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ERIC D. WEINREB No. 7634 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE
2/13/26

NOT FOR CONSTRUCTION

ISSUED FOR:
PRELIMINARY REVIEW

ISSUE DATE:
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REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26

DRAWN BY: RLH/PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-DETAILS.DWG

SCALE:
22" x 34" - NOT TO SCALE
11" x 17" - NOT TO SCALE

OWNER:
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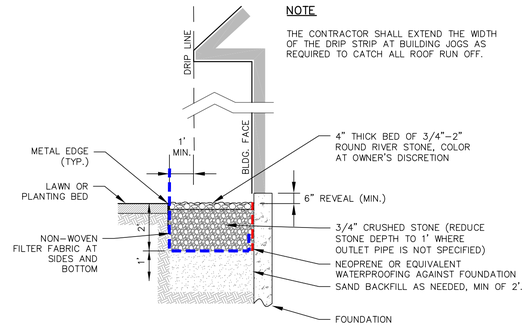
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

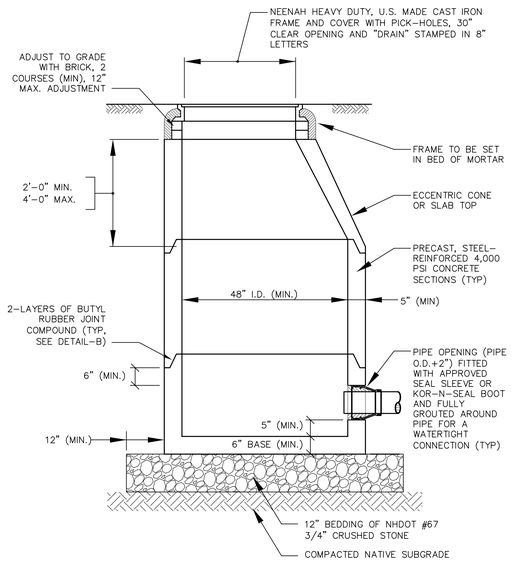
TITLE:
DETAIL SHEET

SHEET NUMBER:
D-3



STONE DRIP EDGE

NOT TO SCALE

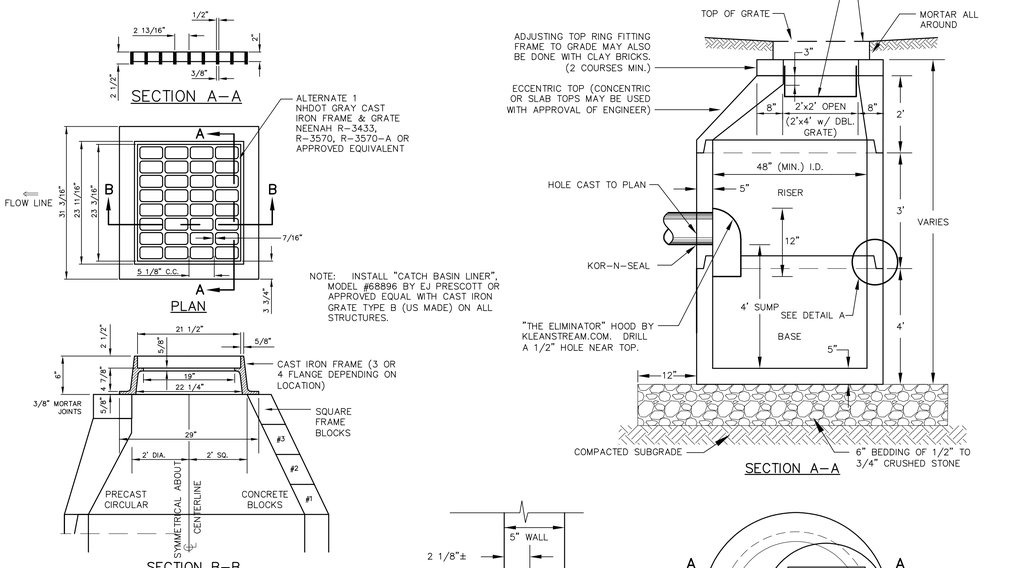


NOTES

1. ALL SECTIONS SHALL BE CONCRETE CLASS AA (4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. ALL MANHOLE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
6. USE H-20 LOADING SLAB TOP SECTION IN LIEU OF ECCENTRIC TOP WHERE PIPE INVERT IS WITHIN 4 FT OF GRADE.
7. NO MANHOLE STEPS.

DRAIN MANHOLE ("DMH")

NOT TO SCALE



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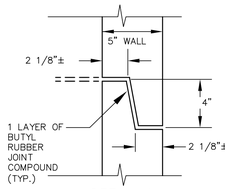
4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
6. USE H20 LOADING SLAB TOP SECTION IN LIEU OF ECCENTRIC TOP WHERE PIPE INVERT IS WITHIN 4' OF FINISH GRADE.
7. FRAME AND GRATE DIMENSIONS ARE TYPICAL BUT MAY VARY BASED ON PRODUCT SELECTED OR EQUIVALENT APPROVED BY THE ENGINEER.

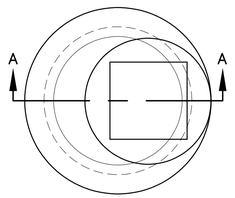
DEEP SUMP CATCH BASIN

NOT TO SCALE



DETAIL A

(TONGUE & GROOVE JOINT)



PLAN-ECCENTRIC CONE

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB
No. 7634
LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
PRELIMINARY REVIEW

ISSUE DATE:
MARCH 23, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26
1	PER TAC COMMENTS	PMJ	03/23/26

DRAWN BY: RLH/PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-DETAILS.DWG

SCALE:
22" x 34" - NOT TO SCALE
11" x 17" - NOT TO SCALE

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

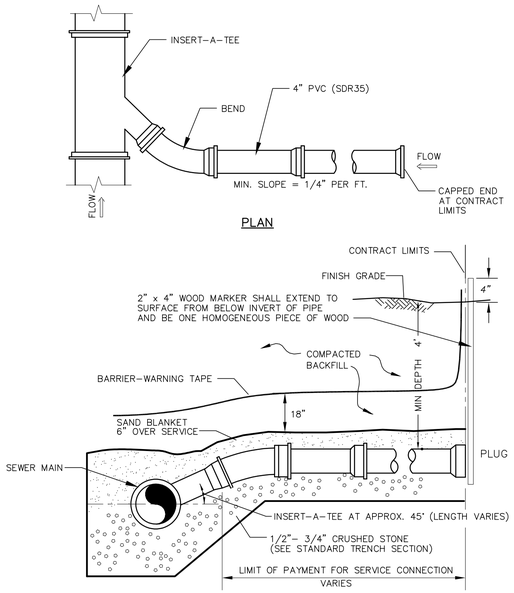
APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
DETAIL SHEET

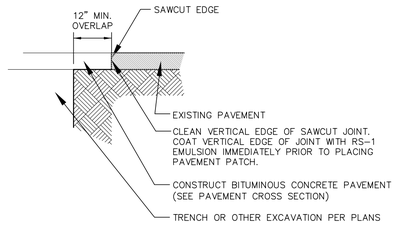
SHEET NUMBER:
D-4

P5719



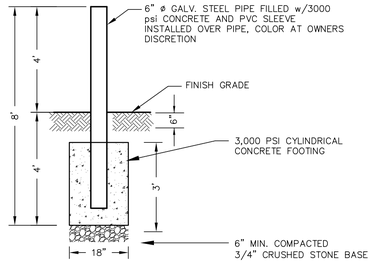
SEWER SERVICE CONNECTION

NOT TO SCALE



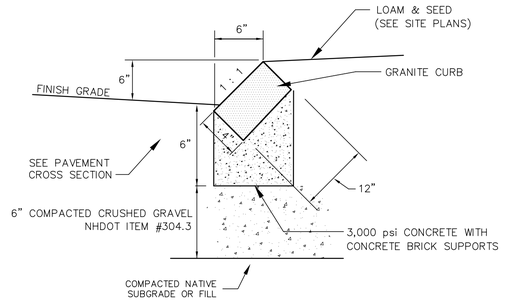
TYPICAL PAVEMENT SAWCUT

NOT TO SCALE



BOLLARD

NOT TO SCALE



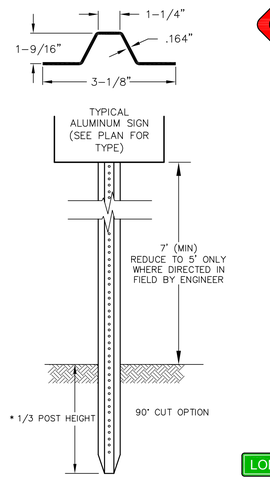
NOTES

1. SEE SITE PLAN FOR LIMITS OF CURBING
2. ADJOINING STONES OF STRAIGHT CURB LAID ON CURVES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH
3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 18"
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES – SEE CHART

RADIUS FOR STONES WITH SQUARE JOINTS	MAXIMUM LENGTH
16'-28'	1'-6"
29'-41'	2'
42'-55'	3'
56'-68'	4'
69'-82'	5'
83'-96'	6'
97'-110'	7'
OVER 110'	8'

SLOPED GRANITE CURB

NOT TO SCALE

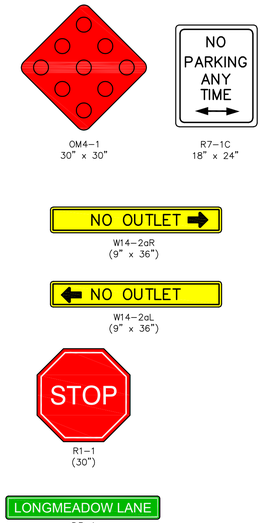


LENGTH: AS REQUIRED

WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)

HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH

STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070 – 1080)

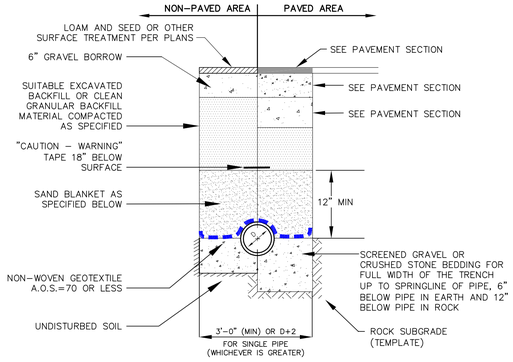


NOTES

1. ALL SIGNS SHALL MEET THE REQUIREMENTS OF AND BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. WHEN PLACED PERPENDICULAR TO A TRAVELLED WAY OR SIDEWALK, SIGN EDGE SHALL BE NO CLOSER THAN 2' TO THE EDGE OF PAVEMENT. GREATER MINIMUM DISTANCE MAY BE REQUIRED IN CERTAIN LOCATIONS.

SIGN DETAILS

NOT TO SCALE



NOTES

1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.
2. INSULATE GRAVITY SEWER AND FORCEMAINS WHERE THERE IS LESS THAN 5'-0" OF COVER WITH 2" THICK CLOSED CELL RIGID BOARD INSULATION, 18" ON EACH SIDE OF PIPE.
3. MAINTAIN 12" MINIMUM HORIZONTAL SEPARATION AND WIDEN TRENCH ACCORDINGLY IF MULTIPLE PIPES ARE IN TRENCH.

SAND BLANKET/BARRIER

SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 – 100
200	0 – 15

SCREENED GRAVEL OR CRUSHED STONE BEDDING*

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 – 10
# 8	0 – 5

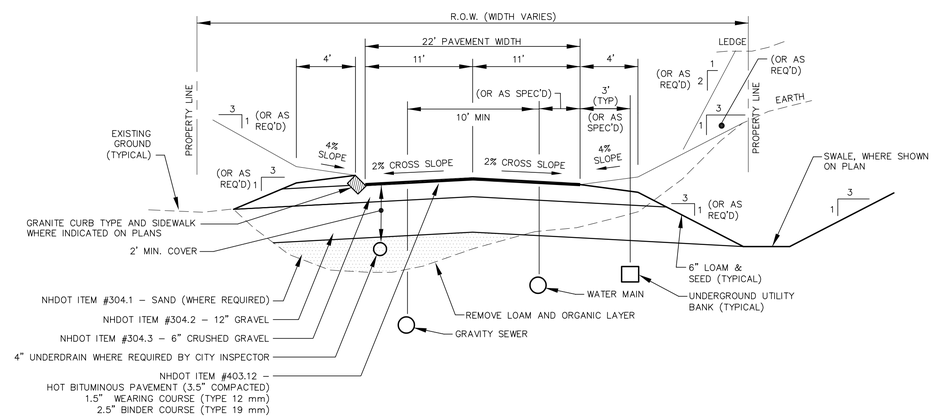
* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

SEWER TRENCH

NOT TO SCALE

STANDARD TRENCH NOTES

1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN ON THE DRAWING.
2. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING THE GRADATION SHOWN IN THE TRENCH DETAIL. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1-1/2 INCH TO 1/2 INCH SHALL BE USED.
3. SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER MEETING THE GRADATION SHOWN IN THE TRENCH DETAIL. BLANKET MAY BE REPLACED WITH BEDDING MATERIAL FOR CAST-IRON, DUCTILE IRON, AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2" IS IN CONTACT WITH THE PIPE AND THE GEOTEXTILE IS RELOCATED ACCORDINGLY.
4. SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT, OR CLAY, ALL EXCAVATED LEDGE MATERIAL, ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION, AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. IN CROSS COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK, OR PEAT ONLY IF SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLE RECONSTRUCTION WILL BE PRESERVED.
5. BASE COURSE AND PAVEMENT SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES – DIVISIONS 300 AND 400 RESPECTIVELY.
6. W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES IN NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE OUTSIDE DIAMETER (O.D.) ALSO, W SHALL BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
7. FOR CROSS COUNTRY CONSTRUCTION, BACKFILL, FILL AND/OR LOAM SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
8. CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATION REQUIREMENTS FOR CLASS A (3000#) CONCRETE AS FOLLOWS:
   CEMENT: 6.0 BAGS PER CUBIC YARD
   WATER: 5.75 GALLONS PER BAG
   CEMENT MAXIMUM SIZE OF AGGREGATE: 1 INCH
   CONCRETE ENCASEMENT IS NOT ALLOWED FOR PVC PIPE.
9. CONCRETE FULL ENCASEMENT: IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MINIMUM). BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.
10. NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES DESIGN STANDARDS REQUIRE TEN FEET (10') SEPARATION BETWEEN WATER AND SEWER. REFER TO TOWN'S STANDARD SPECIFICATIONS FOR METHODS OF PROTECTION IN AREAS THAT CANNOT MEET THESE REQUIREMENTS.
11. THE CONTRACTOR SHALL INSTALL TRENCH DAMS IN ACCORDANCE WITH NHDES REGULATIONS.
12. ALL GRAVITY SEWER INSTALLATIONS SHALL BE TESTED IN ACCORDANCE WITH NHDES ENV-WQ 704.06.



NOTES

1. EACH GRAVEL BASE COURSE TO BE CONSTRUCTED AT THE PAVEMENT CROSS SLOPE.
2. REMOVE LEDGE 18" BELOW LOWEST WORK BEING INSTALLED.
3. REMOVE ALL LOAM, CLAY, MUCK, ORGANIC, YIELDING OR OTHERWISE UNSTABLE MATERIAL TO A MINIMUM OF 24" BELOW FINISH GRADE. ADDITIONAL DEPTH MAY BE REQUIRED BY THE GEOTECHNICAL REPORT (IF AVAILABLE) OR THE ENGINEER. SUCH ADDITIONAL REMOVAL SHALL REQUIRE THE PLACEMENT OF COMPACTED SAND OR GRAVEL BORROW APPROVED BY THE ENGINEER TO THE BOTTOM OF SUBGRADE.
4. THE OVER-EXCAVATION OF UNSUITABLE MATERIAL BEYOND THAT SPECIFIED ABOVE, THE INSTALLATION OF UNDERDRAINAGE, AND/OR THE INSTALLATION OF GEOTEXTILE FABRIC SHALL BE PROVIDED UPON DETERMINATION OF THE ENGINEER.
5. FILL BELOW PAVEMENT SUBGRADE SHALL BE SAND OR GRANULAR BORROW COMPACTED PER DOT REQUIREMENTS.
6. SITEWORK CONTRACTOR SHALL COORDINATE GEOTECHNICAL ENGINEERING INSPECTIONS PRIOR TO PLACING GRAVELS.
7. SUBGRADE SHALL BE FREE OF VOIDS THAT ALLOW MOVEMENT AND/OR SETTLEMENT OF MATERIALS.
8. SUBGRADE SHALL BE ROLLED WITH A MINIMUM OF SIX PASSES OF A 10-TON VIBRATORY COMPACTOR OPERATING AT PEAK RATED FREQUENCY OR BY OTHER MEANS APPROVED BY THE ENGINEER.
9. SUBGRADE SHALL BE PROOF-ROLLED WITH A FULLY LOADED DUMP TRUCK PRIOR TO PLACEMENT OF SELECT GRAVELS. PROOF-ROLLING SHALL BE WITNESSED AND APPROVED BY THE ENGINEER.
10. BITUMINOUS PAVEMENT SHALL BE COMPACTED TO 90 TO 97 PERCENT OF ITS THEORETICAL MAXIMUM DENSITY AS DETERMINED BY ASTM D-2041. THE BASE AND SUBBASE MATERIALS SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THEIR MAXIMUM DRY DENSITIES AS DETERMINED BY ASTM D-1557. COMPACTION TESTING SHALL BE PERFORMED BY A GEOTECHNICAL ENGINEER FOR ALL MATERIAL COURSES AND THE RESULTS APPROVED BY THE ENGINEER PRIOR TO PLACING THE SUBSEQUENT COURSE.
11. TACK COAT SHALL BE APPLIED BETWEEN SUCCESSIVE LIFTS OF ASPHALT PAVEMENT.

TYPICAL ROADWAY CROSS SECTION

NOT TO SCALE

P5719

ALTUS ENGINEERING
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STATE OF NEW HAMPSHIRE ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR: PRELIMINARY REVIEW

ISSUE DATE: MARCH 23, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26
1	PER TAC COMMENTS	PMJ	03/23/26

DRAWN BY: RLH/PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-DETAILS.DWG

SCALE:
22" x 34" - NOT TO SCALE
11" x 17" - NOT TO SCALE

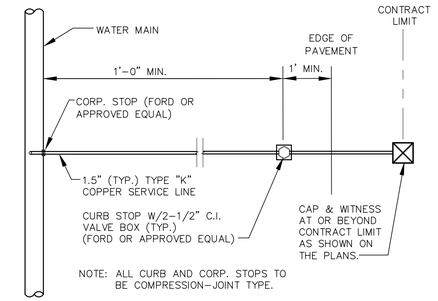
OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

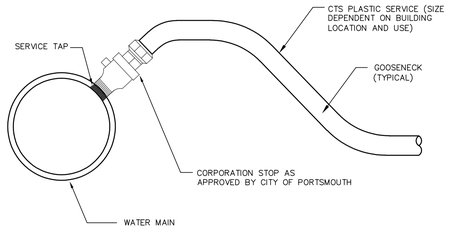
PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
DETAIL SHEET

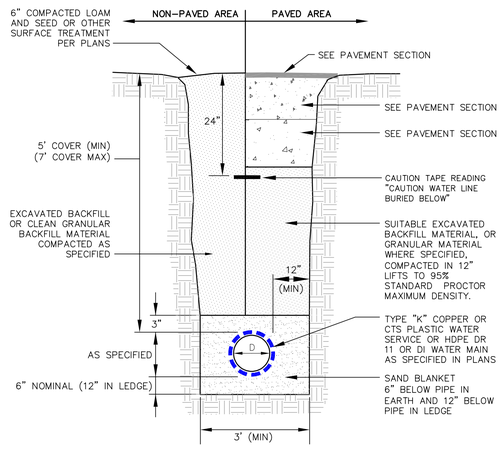
SHEET NUMBER:
D-5



NOTE: ALL MATERIALS AND SPECIFICATIONS SHALL CONFORM TO CITY OF PORTSMOUTH WATER DEPARTMENT STANDARDS AND REQUIREMENTS. VERIFY PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES.



WATER SERVICE CONNECTION NOT TO SCALE



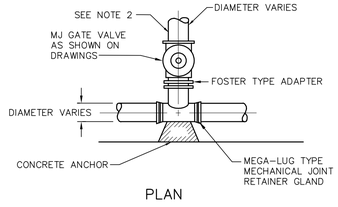
SAND BLANKET/BARRIER

SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 – 100
200	0 – 15

NOTES

1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.
2. ALL TRENCHING AND BACKFILL SHALL CONFORM WITH THE STANDARDS OF EXETER DPW.

WATER MAIN TRENCH NOT TO SCALE

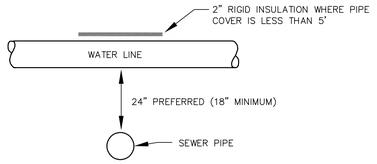


PLAN

NOTES:

1. GATE VALVES SHALL OPEN RIGHT, PER CITY STANDARDS.
2. BRANCH PIPING SHALL BE MECHANICALLY RESTRAINED AS NOTED UNDER THRUST BLOCK DETAIL REQUIREMENTS.

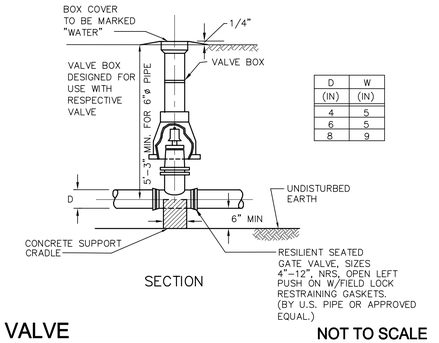
TEE & GATE VALVE ASSEMBLY NOT TO SCALE



NOTES

1. A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER AND SEWER MAINS. A MINIMUM VERTICAL DISTANCE WITH WATER ABOVE SEWER SHALL BE MAINTAINED.
2. SEWER PIPE JOINTS SHALL BE LOCATED A MINIMUM OF 6 FEET HORIZONTALLY FROM WATER MAIN.
3. IF THE REQUIRED CONFIGURATION CANNOT BE MET, THE SEWER MAIN SHALL BE CONSTRUCTED TO MEET THE NHDES REQUIREMENTS FOR FORCE MAIN CONSTRUCTION.

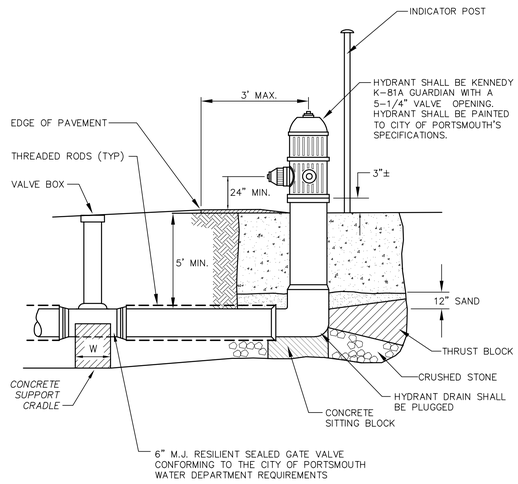
WATER MAIN / SEWER CROSSING NOT TO SCALE



D (IN)	W (IN)
4	5
6	5
8	9

SECTION

WATER VALVE NOT TO SCALE

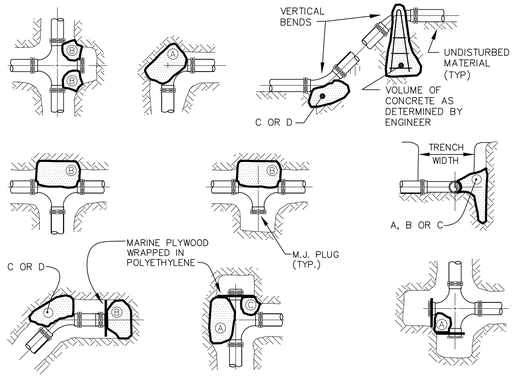


D (IN)	W (IN)
4	5
6	5
8	9

NOTES

1. HYDRANT INSTALLATION AND OPERATION TO CONFORM TO REGULATIONS OF THE CITY OF PORTSMOUTH WATER & FIRE DEPARTMENTS.
2. GATE VALVES & HYDRANTS TO OPEN RIGHT (CLOCKWISE).

FIRE HYDRANT NOT TO SCALE

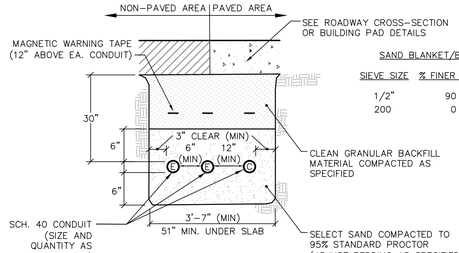


TEST PRESSURE = 150 psi	SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL					
	REACTION TYPE	PIPE SIZE				
		4"	6"	8"	10"	12"
	A 90°	0.89	2.19	3.82	11.14	17.24
	B 180°	0.65	1.55	2.78	8.38	12.00
	C 45°	0.48	1.19	2.12	6.02	9.32
	D 22-1/2°	0.25	0.60	1.06	3.08	4.74
	E 11-1/4°	0.13	0.30	0.54	1.54	2.38

NOTES

1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL.
2. NO JOINTS SHALL BE COVERED WITH CONCRETE. POLYETHYLENE (6 MIL) SHALL BE PLACED AROUND FITTINGS PRIOR TO CONCRETE PLACEMENT.
3. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
4. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS.
5. PRECAST THRUST BLOCKS MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER AND LOCAL WATER DEPARTMENT.

THRUST BLOCKING NOT TO SCALE



SAND BLANKET/BARRIER

SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 – 100
200	0 – 15

NOTES

1. ALL CONDUIT IS TO BE SCHEDULE 40 PVC, ELECTRICAL GRADE, GRAY IN COLOR AND INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. A 10-FOOT HORIZONTAL SECTION OF RIGID GALVANIZED STEEL CONDUIT WILL BE REQUIRED AT EACH SWEEP, UNLESS IN THE OPINION OF THE SERVICE PROVIDER DESIGNER, THE SWEEP-PVC JOINT IS NOT SUBJECT TO FAILURE DURING PULLING OF THE CABLE. ALL JOINTS ARE TO BE WATERTIGHT.
2. ALL 90 DEGREE SWEEPS WILL BE MADE WITH RIGID GALVANIZED STEEL WITH A MINIMUM RADIUS OF 36 INCHES FOR PRIMARY CABLES AND 24 INCHES FOR SECONDARY CABLES.
3. BACKFILL MAY BE MADE WITH EXCAVATED MATERIAL OR COMPARABLE, UNLESS MATERIAL IS DEEMED UNSUITABLE BY SERVICE PROVIDER. BACKFILL SHALL BE FREE OF FROZEN LUMPS, ROCKS, DEBRIS, AND RUBBISH. ORGANIC MATERIAL SHALL NOT BE USED AS BACKFILL. BACKFILL SHALL BE IN 6-INCH LAYERS AND THOROUGHLY COMPACTED.
4. A SUITABLE PULLING STRING, CAPABLE OF 300 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE SERVICE PROVIDER 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. A MINIMUM OF TWENTY-FOUR (24") INCHES OF ROPE SLACK SHALL REMAIN AT THE END OF EACH DUCT. PULL ROPE SHALL BE INSTALLED IN ALL CONDUIT FOR FUTURE PULLS. PULL ROPE SHALL BE NYLON ROPE HAVING A MINIMUM TENSILE STRENGTH OF THREE HUNDRED (300#) LBS.
5. SERVICE PROVIDER SHALL BE GIVEN THE OPPORTUNITY TO INSPECT ALL CONDUIT PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS SHOULD SERVICE PROVIDER BE UNABLE TO INSTALL ITS CABLE IN A SUITABLE MANNER.
6. TYPICAL CONDUIT SIZES ARE 3-INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4-INCH FOR THREE PHASE SECONDARY, AND 5-INCH FOR THREE PHASE PRIMARY. HOWEVER, SERVICE PROVIDERS MAY REQUIRE DIFFERENT NUMBERS, TYPES AND SIZES OF CONDUIT THAN THOSE SHOWN HERE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL CONDUIT SIZES, TYPES AND NUMBERS WITH EACH SERVICE PROVIDER PRIOR TO ORDERING THEM.
7. ROUTING OF CONDUIT, LOCATION OF MANHOLES, TRANSFORMERS, CABINETS, HANDHOLES, ETC., SHALL BE DETERMINED BY SERVICE PROVIDER DESIGN PERSONNEL. THE CONTRACTOR SHALL COORDINATE WITH ALL SERVICE PROVIDERS PRIOR TO THE INSTALLATION OF ANY CONDUIT.
8. 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. WHERE REQUIRED BY UTILITY PROVIDER, CONDUIT SHALL BE SUPPORTED IN PLACE USING PIPE STANCHIONS PLACED EVERY FIVE (5') FEET ALONG THE CONDUIT RUN.
9. UNDER A BUILDING SLAB THE CONDUIT SHALL BE ENCASED IN 8" OF CONCRETE ON ALL SIDES.
10. ALL CONDUIT TERMINATIONS SHALL BE CAPPED TO PREVENT DEBRIS FROM ENTERING CONDUIT.

ELECTRIC / COMMUNICATION TRENCH NOT TO SCALE

P5719

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

NOT FOR CONSTRUCTION

ISSUED FOR: PRELIMINARY REVIEW

ISSUE DATE: FEBRUARY 13, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26

DRAWN BY: RLH/PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-DETAILS.DWG

SCALE:
22" x 34" - NOT TO SCALE
11" x 17" - NOT TO SCALE

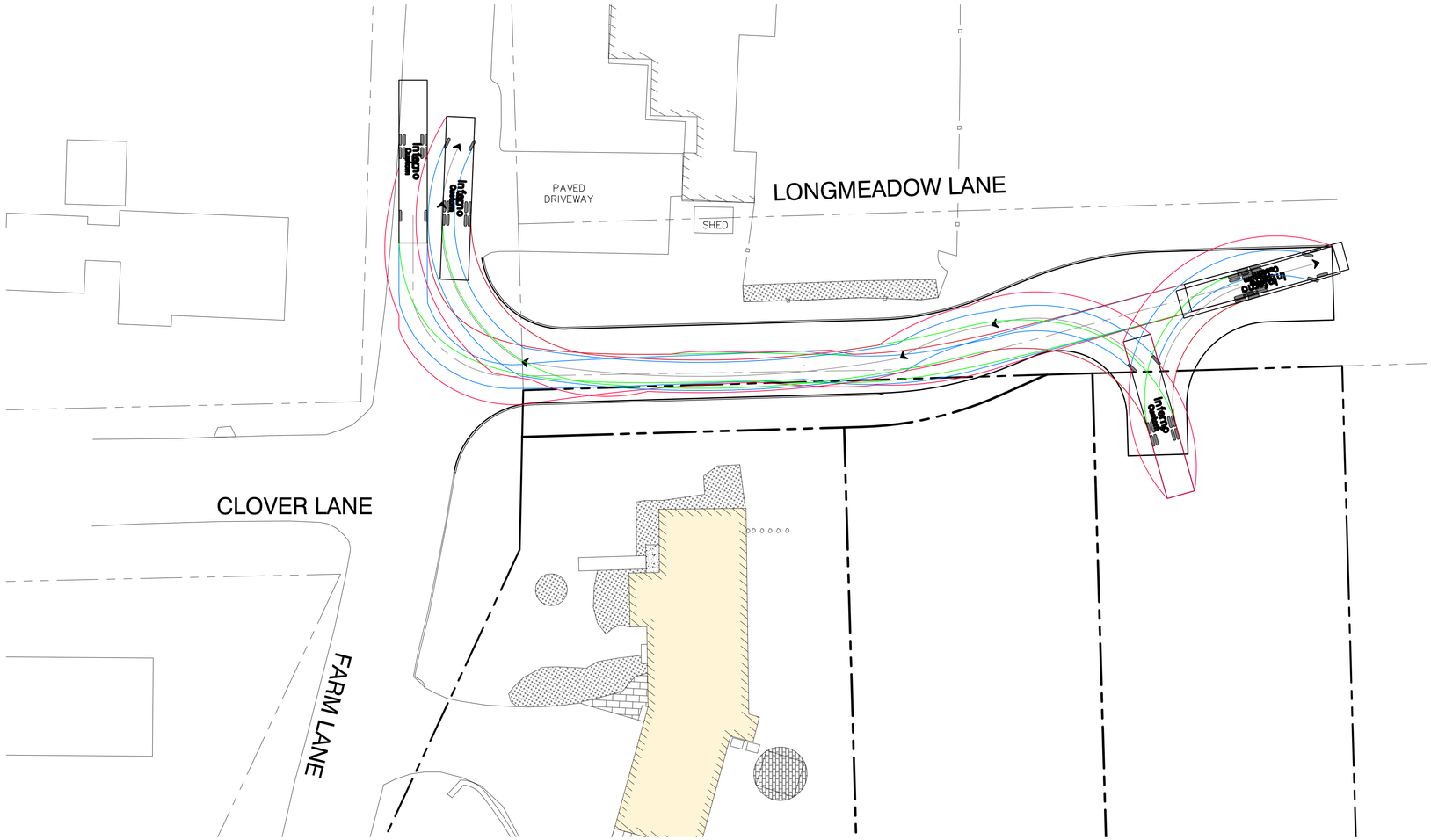
OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
DETAIL SHEET

SHEET NUMBER:
D-6

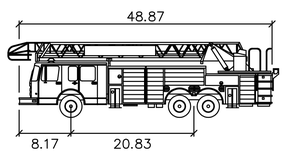


DESIGN VEHICLE PROFILE

FRONT TRACK

REAR TRACK

VEHICLE BODY/OVERHANG



Inferno Aerial

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 41.0

TURNING MOVEMENT NOTES

1. THE GRAPHIC VEHICLE PROFILE SHOULD NOT BE CONSIDERED A COMPLETELY ACCURATE VISUAL DEPICTION OF THE DESIGN VEHICLE AND IS ONLY INTENDED TO CONVEY A GENERIC REPRESENTATION OF ITS GENERAL APPEARANCE.
2. THE INFERNO AERIAL WAS SELECTED AS THE DESIGN VEHICLE DUE TO IT MEETING THE DIMENSIONS OF THE LARGEST VEHICLE EXPECTED TO ACCESS THE PROJECT SITE. THIS IS INTENDED TO DEMONSTRATE THAT THE PROJECT AS DESIGNED SHOULD BE ABLE TO ADEQUATELY ACCOMMODATE ANY VEHICLE UP TO AND INCLUDING THIS DESIGN VEHICLE.
3. TURNING MOTIONS SHOWN WERE GENERATED USING AUTOTURN SOFTWARE BY TRANSOFT SOLUTIONS, INC.

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN *DATE*

GRAPHIC SCALE

20 10 20 40 80

(IN FEET)

ALTUS ENGINEERING

133 Court Street
(603) 433-2335
Portsmouth, NH 03801
www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB
No. 7634
LICENSED
PROFESSIONAL ENGINEER

3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	PMJ	02/13/26
1	PER TAC COMMENTS	PMJ	03/23/26

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
VEHICULAR ACCESS PLAN

SHEET NUMBER:
1 OF 1

P5719

24 April 2026

Rick Chellman, Chair
City of Portsmouth Planning Board
1 Junkins Avenue
Portsmouth, NH 03801

Re: City of Portsmouth Wetland Conditional Use Permit | Tax Map 115, Lot 4-1 | Parrott Avenue Parking Lot; Development at 134 Pleasant Street, Portsmouth, New Hampshire

Dear Chair Chellman and Planning Board Members:

This letter transmits a City of Portsmouth Wetland Conditional Use Permit application for 601 square feet of disturbance within the 100-foot City of Portsmouth Wetland Buffer. We request that we be placed on the agenda for your **May 21, 2026,** Planning Board Meeting. The site is shown on Tax Map 115 as Lot 4-1 and is owned by the City of Portsmouth, and is currently used as the Parrott Avenue parking lot. The need for the impact is generated under the 134 Pleasant Avenue Site Plan application by the requirement that the developer update the site drainage infrastructure to separate the surface water run-off, which currently flows to the city sewer system, and direct that flow to a dedicated drainage collection system. The system location is off-site from the 134 Pleasant Street development site and requires drainage piping to be constructed through the Parrott Avenue parking lot to make the necessary connection. Since this connection is in the City of Portsmouth Buffer Zone, this permit application is being filed. The piping connection will not alter the ground conditions, with the exception of drainage access manholes at grade.

The impacts are associated with the 134 Pleasant Street development project and are required to provide appropriate stormwater separation and treatment, as outlined in the project Technical Advisory Committee (TAC) review and approval. The 134 Pleasant Street project consists of the adaptive reuse of the existing structure, with horizontal and vertical building expansions, and below grade (basement) parking, shown as "Building A". "Building B" will be constructed in the area between the existing Citizens Bank building and Pleasant street, bringing the site into conformance with the ordinance desire to enliven the street frontage. New exterior treatments and entrance locations are proposed, along with re-imaged pedestrian friendly sidewalks and landscaping improvements. The proposal is to increase the banking footprint, keeping the drive through in the same location, expanding the professional offices, and adding apartments. In addition to the banking facility and drive-up, the banking services will be expanded to include the headquarters of Kennebunk Savings Bank. The site is currently developed with an existing building and a surface parking lot.

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

The portion of the wetland buffer area that occurs on the Parrott Avenue Parking Lot is almost entirely covered with asphalt paving to provide for car parking. Between the city parking lot property and the South Mill Pond (the protected resource) there are trees and lawn area, with 40% of the area taken up by the Parrott Avenue pavement.

According to the City of Portsmouth Zoning Ordinance *Article 10.1017.50 Criteria for Approval*, the proposal shall comply with the following criteria:

1. **The land is reasonably suited to the use, activity or alteration.**

The proposal is to construct a drainage connection to decrease stormwater diverted to the sewer system which experiences surges and overflows in storm events. The portion of the proposed drainage improvement located within the 100' City of Portsmouth Wetland Buffer consists of 40 feet of pipe and an associated catch basin connection. The impact is temporary in nature as the ground surface will be returned to its original state. Given that the existing lot use will not change, the land is reasonably suited to the use, activity, or alteration.

2. **There is no alternative location outside of the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.**

Due to the configuration of the drainage system, and the location of the proposed connection, deviations from the connection point would create additional impacts to the 100' City of Portsmouth Wetland Buffer. We believe that the proposed connection location provides a reasonable use and minimizes impacts to the wetland buffer.

3. **There will be no adverse impact on the wetland functional values of the site or surrounding properties.**

We believe the proposal will not impact the existing wetland resource located adjacent to the site and its current functions and values. The proposed project is a cut, place, and cover operation. The diversion of potential sewer overflows will have a positive impact on the resource.

4. **Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.**

The proposed project does not include alteration of any naturally vegetated area to accommodate the construction. All construction is in an existing paved area.

5. **The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Section.**

The project represents the alternative with the least adverse impacts to the buffer areas and environments while allowing development of the adjacent property. The project

provides components which will serve to improve stormwater quality, treatment, and divert potential sewer overflows.

6. **Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.**

There are no areas within the vegetated buffer strip that will be impacted or altered by this project.

The Portsmouth Conservation Commission review the project at their meeting on April 8, 2026, and recommended approval, subject to the addition of the Wetland Scientist stamp to the plan, which has been updated.

We look forward to Planning Board review of this submission and look forward to an in-person presentation at your meeting.

Sincerely,

John R. Chagnon, PE

P:\NH\5010156-McNabb_Properties\1532-134 Pleasant St., Portsmouth-JRC\03-WIP_Files\Applications\NHDES Wetland and Shoreland\Portsmouth CUP\Planning Board CUP Submission Letter 4-24-26.docx

Findings of Fact | Wetland Conditional Use Permit
City of Portsmouth Planning Board

Date: May 21, 2026
Property Address: 0 Parrott Avenue
Application #: LU-26-60
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:

Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of all conditions necessary to obtain final approval.

In order to grant Wetland Conditional Use permit approval the Planning Board shall find the application satisfies criteria set forth in the Section 10.1017.50 (Criteria for Approval) of the Zoning Ordinance.

	Zoning Ordinance Sector 10.1017.50 Criteria for Approval	**Finding** (Meets Criteria for Approval)	**Supporting Information**
1	*1. The land is reasonably suited to the use activity or alteration.*	**Meets** **Does Not Meet**	This property is disturbed with pavement and the proposed activity would return the area of work back to pavement once the new piping is installed.
2	2. *There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.*	**Meets** **Does Not Meet**	This project is a sewer separation project and in order to split the stormwater from the existing combined line, the stormwater pipe will have to be directed to an existing connection, the closest of which is in the Parrott Avenue lot and within the 100' wetland buffer. An alternative location for the pipe does not seem feasible.
3	*3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.*	**Meets** **Does Not Meet**	The proposed work is within a very small section of the wetland buffer and will occur in mostly existing paved areas. The construction should not have an adverse impact on the South Mill Pond and the new stormwater line should create an improvement to existing conditions by having stormwater treated by a jellyfish

DRAFT

	Zoning Ordinance Sector 10.1017.50 Criteria for Approval	Finding (Meets Criteria for Approval)	Supporting Information
			filter before entering into the main stormwater system.
4	*4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.*	**Meets** **Does Not Meet**	This project only appears to alter a very small portion of a landscaped area within the parking lot.
5	*5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.*	**Meets** **Does Not Meet**	This project proposes impacting an area that is already impervious surface and the introduction of treated stormwater to this area of our stormwater system should create a positive impact on the water quality in the area.
6	*6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.*	**Meets** **Does Not Meet**	This project does not propose impacts to the vegetated buffer strip (25' buffer).
7	**<u>Other Board Findings:</u>**		

DRAFT

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: Double MC, LLC Date Submitted: 3-31-26

Application # (in City's online permitting): LU - 25 - 138

Site Address: 134 Pleasant Street Map: 115 Lot: 4-1

☑	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	Online
✔	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.	Delivered

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Basic property and wetland resource information. **(10.1017.21)**	Pg.13-16
✔	Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. **(10.1017.22)**	Pg. 13-16, Sheet C108
☐	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)**	N/A
✔	Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. **(10.1017.24)**	Sheet C108

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
☐	Wetland buffer enhancement plan. **(10.1017.25)**	N/A
☐	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)**	Sheets C103, C104
☐	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)**	N/A
☐	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)**	Wetland HOTL depicted on plans
☑	**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.	Submitted

Applicant's Signature: _____ **Date:** _____

CITY OF PORTSMOUTH
Planning & Sustainability
Department
1 Junkins Avenue
Portsmouth, New
Hampshire 03801
(603) 610-7216

CONSERVATION COMMISSION

April 13, 2026

Double Mc LLC
10 Pleasant Street, Suite 300
Portsmouth, New Hampshire 03801

RE: Request for Wetland Conditional Use Permit approval for property located at 134 Pleasant Street, Portsmouth NH 03801 (LU-25-138)

Dear Property Owner:

The Conservation Commission, at its regularly scheduled meeting of **Wednesday, April 8, 2026**, considered your application for the installation of a new treated stormwater pipe below the Parrott Avenue parking lot within the wetland buffer of the South Mill Pond. This project proposes a total impact area within the wetland buffer of 601 s.f. for disturbance of the existing asphalt parking lot to place and then cover the new stormwater line. This impact is almost entirely underneath existing impervious surfaces within the wetland buffer. Said property is shown on Assessor Map 116 Lot 30 and lies within the Character District 4 (CD4) and Historic District. As a result of said consideration, the Commission voted to **recommend approval** of this application to the Planning Board with the following condition.

1. Plans must be stamped, signed and dated by the New Hampshire Certified Wetland Scientist who delineated the wetland resource.

This matter will be placed on the agenda for the Planning Board meeting scheduled for **Thursday, May 21, 2026.** One (1) hard copy of any revised plans and/or exhibits as well as an updated electronic file (in a PDF format) must be filed in the Planning & Sustainability Department and uploaded to the online permit system no later than Wednesday, April 29, 2026.

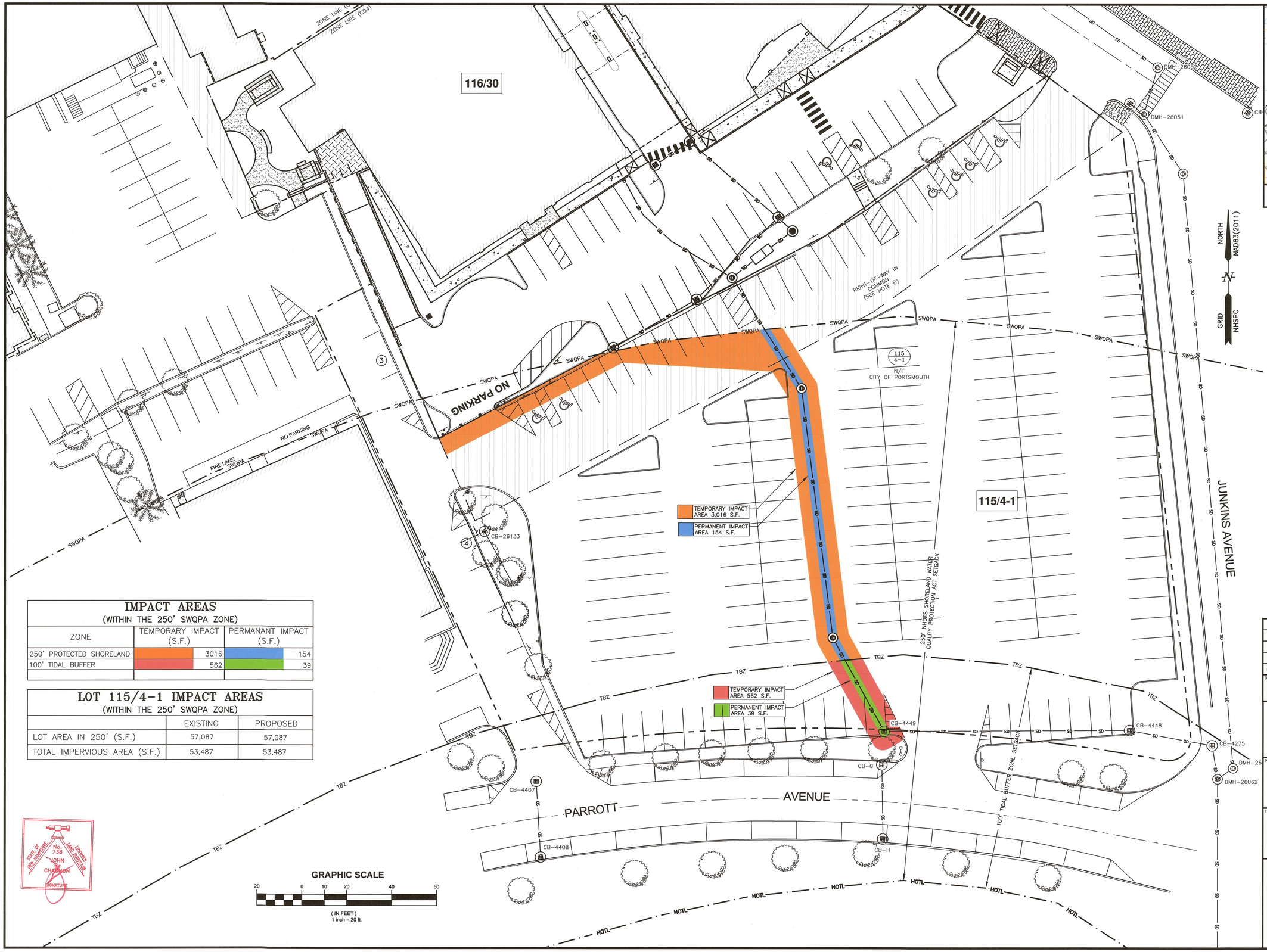
The minutes and audio recording of this meeting are available by contacting the Planning & Sustainability Department.

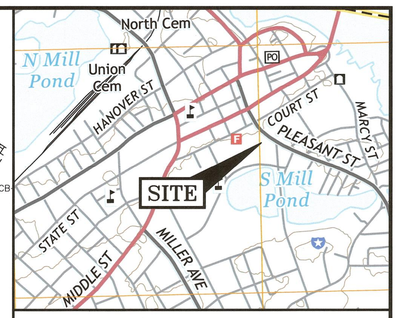
Very truly yours,

Samantha Collins, Chair
Conservation Commission

cc:

Francis X. Bruton, Esq., Attorney, Bruton & Berube, PLLC
Tracy Kozak, ARCove Architects
John Chagnon, Haley Ward
James J. Steinkrauss, Esq., Attorney, Rath, Young & Pignatelli, PC
Michael K. O'Neil, Esq., Attorney, Rath, Young & Pignatelli, PC





LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S TAX MAP 115 AS LOT 4-1.

2) OWNERS OF RECORD:
CITY OF PORTSMOUTH
1 JUNKINS AVENUE
PORTSMOUTH, N.H. 03801
RCRD 1093/64

3) PARCEL IS PARTIALLY IN SPECIAL FLOOD HAZARD AREA ZONE AE AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE JANUARY 29, 2021.

4) EXISTING LOT AREA:
71,740 S.F.
1.65 ACRES

5) PARCEL IS LOCATED IN THE MUNICIPAL (M) DISTRICT.

6) DIMENSIONAL REQUIREMENTS: SEE PORTSMOUTH ORDINANCE FOR REQUIREMENTS.

7) THE PURPOSE OF THIS PLAN IS TO SHOW SHORELAND AND TIDAL BUFFER ZONE IMPACTS ON ASSESSOR'S MAP 115, LOT 4-1 IN THE CITY OF PORTSMOUTH.

8) PARCEL IS BENEFITED BY A RIGHT OF WAY AS DESCRIBED IN RCRD 2975/349 AND SHOWN ON RCRD D-18880 AND RCRD D-26343.

IMPACT AREAS
(WITHIN THE 250' SWQPA ZONE)

ZONE	TEMPORARY IMPACT (S.F.)	PERMANANT IMPACT (S.F.)
250' PROTECTED SHORELAND	3016	154
100' TIDAL BUFFER	562	39

LOT 115/4-1 IMPACT AREAS
(WITHIN THE 250' SWQPA ZONE)

	EXISTING	PROPOSED
LOT AREA IN 250' (S.F.)	57,087	57,087
TOTAL IMPERVIOUS AREA (S.F.)	53,487	53,487

STATE OF NEW HAMPSHIRE No. 738 JOHN R. CHAGNON LICENSED LAND SURVEYOR SIGNATURE

STATE OF NEW HAMPSHIRE SAMUEL N HAYDEN No. 321 CERTIFIED WETLAND SCIENTIST 4/20/26

REV.	DATE	DESCRIPTION	BY	CHK.
3	04-07-26	EMERGENCY ACCESS ONLY	SJR	JRC
2	03-11-2026	ADDED IMPACT AREA	SJR	JRC
1	02-25-2026	REVISED LAYOUT	SJR	JRC
0	02-09-2026	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

CITY OF PORTSMOUTH
P.O. BOX 628 PORTSMOUTH, N.H.

TITLE

NHDES PERMIT PLAN-
CITY PROPERTY

STATE OF NEW HAMPSHIRE JOHN R. CHAGNON No. 7851 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
JULY 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	---	JRC

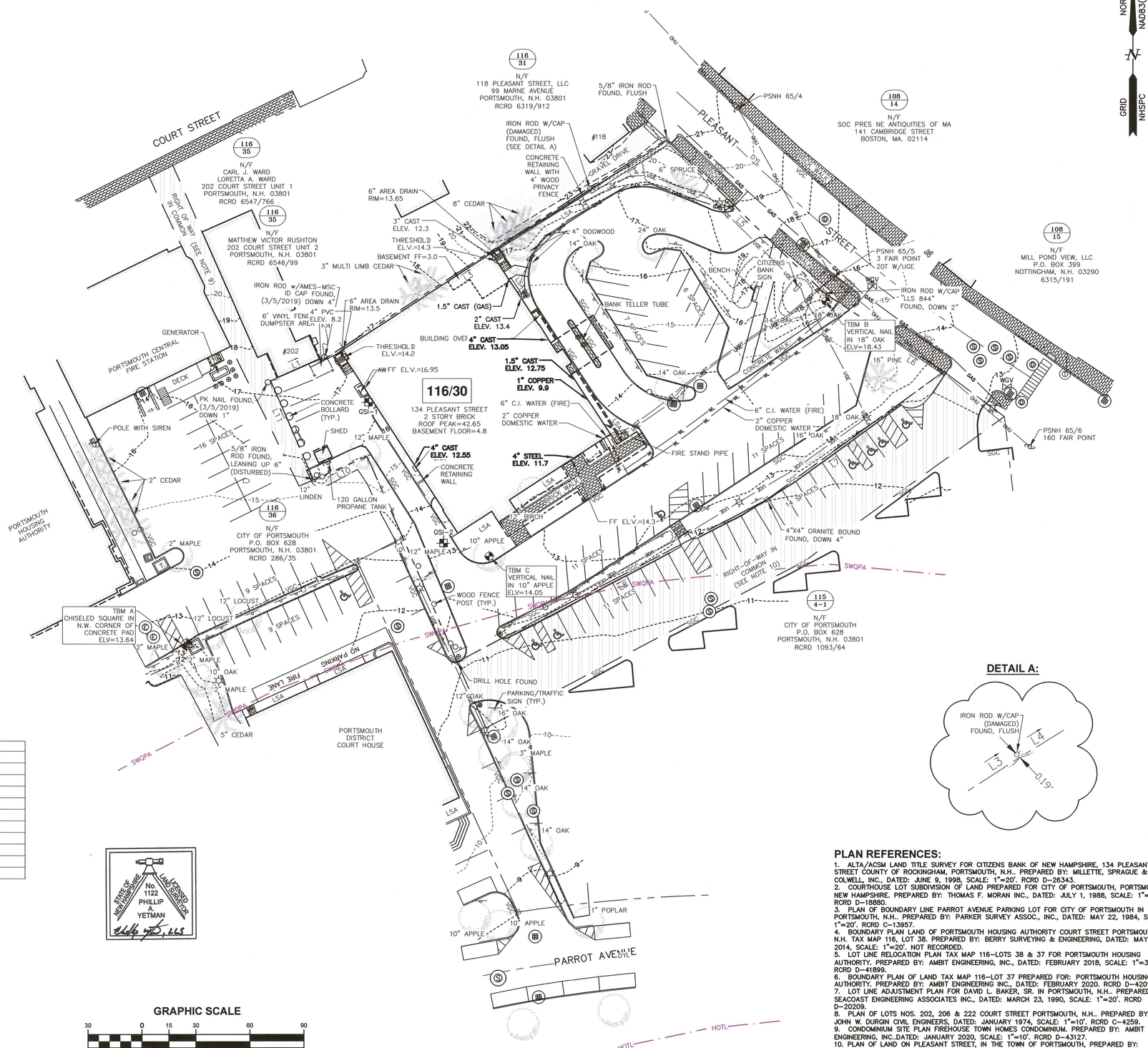
PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

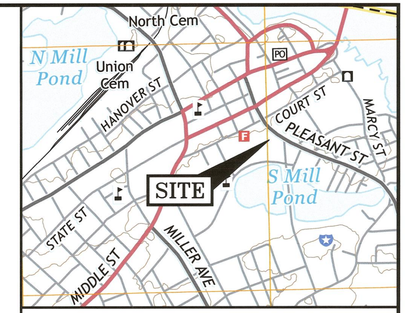
DRAWING No.	REV.
C108	3

FILE LOCATION: P:\NH\5010156-MCNABB_PROPERTIES\1532-134 PLEASANT ST., PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.06, 2:01 PM

LEGEND:

DESCRIPTION	EXISTING
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
1234/123	DEED BOOK/PAGE
N/F	NOW OR FORMALLY
TYP.	TYPICAL
TBS	TO BE SET
LSA	LANDSCAPE AREA
INV.	INVERT
ELV.	ELEVATION
FF	FINISHED FLOOR
DYL	DOUBLE YELLOW LINE
SGC	SLOPED GRANITE CURB
VGC	VERTICAL GRANITE CURB
MAP 21 LOT 8	(21-8)
BENCHMARK	
RAILROAD SPIKE	
BOUND	
IRON ROD/PIPE FOUND	
SET 5/8" REBAR WITH SURVEYOR'S CAP	
SEWER MANHOLE	(S)
DRAIN MANHOLE	(D)
COMMUNICATIONS MANHOLE	(D)
ELECTRIC MANHOLE	(E)
UTILITY POLE	
CATCH BASIN	
HYDRANT	
GATE VALVE	GGV WGV SGV
GAS/WATER SHUTOFF	
BOLLARD	
BORING	GSI-1
TREES	
GAS/ELECTRIC METER	E G
LIGHT POLE	
MAIL BOX	
AIR CONDITIONER	A
SIGN	
SPOT GRADE	12x1
ELECTRIC PEDESTAL	E
ELECTRIC HANDHOLD	
PROPERTY LINE	
APPROXIMATE EXTERIOR PROPERTY LINE	
EDGE OF PAVEMENT	
EDGE OF GRAVEL	
STONE WALL	
FENCE	X
SHRUBLINE	
MINOR FOOT CONTOUR	98
MAJOR FOOT CONTOUR	100
GAS LINE	GAS GAS
WATER LINE	WL WL
STORM DRAIN LINE	SD SD
SANITARY SEWER LINE	SS SS
OVERHEAD UTILITY LINE	OHU OHU
UNDERGROUND ELECTRICAL LINE	UGE UGE
UNDERGROUND COMMUNICATIONS LINE	UGT UGT
SHORELAND SETBACK LINE	SWQPA





LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S TAX MAP 116 AS LOT 30.

2) OWNERS OF RECORD:
DOUBLE MC, LLC
10 PLEASANT STREET SUITE 400
PORTSMOUTH, N.H. 03801
RCRD 6505/2411

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

4) EXISTING LOT AREA:
53,084 S.F.
1.22 ACRES

5) PARCEL IS LOCATED IN THE CHARACTER DISTRICT 4 (CD4) DISTRICT.

6) DIMENSIONAL REQUIREMENTS: SEE PORTSMOUTH ORDINANCE FOR REQUIREMENTS.

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE RESULTS OF AN EXISTING CONDITIONS SURVEY OF ASSESSOR'S MAP 116, LOT 30 IN THE CITY OF PORTSMOUTH.

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

9) PARCEL IS BENEFITED BY A RIGHT OF WAY TO COURT STREET AS DESCRIBED IN RCRD 1257/466.

10) PARCEL IS BENEFITED BY A RIGHT OF WAY AS DESCRIBED IN RCRD 2975/349 AND SHOWN ON RCRD D-18880 AND RCRD D-26343.

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

12) 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.

LINE TABLE:

LINE	BEARING	DISTANCE
L1	N66°28'05"E	32.60'
L2	S04°27'10"E	0.98'
L3	N57°05'10"E	175.24'
L4	N58°07'10"E	50.44'
L5	S45°49'50"E	122.39'
L6	S56°42'50"E	79.29'
L7	S54°09'10"W	121.33'
L8	S62°18'10"W	194.24'
L9	N23°38'50"W	124.67'
L10	S66°22'00"W	32.60'
L11	N23°20'25"W	60.00'

DETAIL A:

PLAN REFERENCES:

1. ALTA/ACSM LAND TITLE SURVEY FOR CITIZENS BANK OF NEW HAMPSHIRE, 134 PLEASANT STREET COUNTY OF ROCKINGHAM, PORTSMOUTH, N.H.. PREPARED BY: MILLETTE, SPRAGUE & COLWELL, INC., DATED: JUNE 9, 1998, SCALE: 1"=20'. RCRD D-26343.
2. COURTHOUSE LOT SUBDIVISION OF LAND PREPARED FOR CITY OF PORTSMOUTH, PORTSMOUTH NEW HAMPSHIRE. PREPARED BY: THOMAS F. MORAN INC., DATED: JULY 1, 1988, SCALE: 1"=40'. RCRD D-18880.
3. PLAN OF BOUNDARY LINE PARROT AVENUE PARKING LOT FOR CITY OF PORTSMOUTH IN PORTSMOUTH, N.H.. PREPARED BY: PARKER SURVEY ASSOC., INC., DATED: MAY 22, 1984, SCALE: 1"=20'. RCRD C-13957.
4. BOUNDARY PLAN LAND OF PORTSMOUTH HOUSING AUTHORITY COURT STREET PORTSMOUTH, N.H. TAX MAP 116, LOT 38. PREPARED BY: BERRY SURVEYING & ENGINEERING, DATED: MAY 30, 2014, SCALE: 1"=20'. NOT RECORDED.
5. LOT LINE RELOCATION PLAN TAX MAP 116-LOTS 38 & 37 FOR PORTSMOUTH HOUSING AUTHORITY. PREPARED BY: AMBIT ENGINEERING, INC., DATED: FEBRUARY 2018, SCALE: 1"=30'. RCRD D-41899.
6. BOUNDARY PLAN OF LAND TAX MAP 116-LOT 37 PREPARED FOR: PORTSMOUTH HOUSING AUTHORITY. PREPARED BY: AMBIT ENGINEERING INC., DATED: FEBRUARY 2020. RCRD D-42016.
7. LOT LINE ADJUSTMENT PLAN FOR DAVID L. BAKER, SR. IN PORTSMOUTH, N.H.. PREPARED BY: SEACOAST ENGINEERING ASSOCIATES INC., DATED: MARCH 23, 1990, SCALE: 1"=20'. RCRD D-20209.
8. PLAN OF LOTS NOS. 202, 206 & 222 COURT STREET PORTSMOUTH, N.H.. PREPARED BY: JOHN W. DURGIN CIVIL ENGINEERS, DATED: JANUARY 1974, SCALE: 1"=10'. RCRD C-4259.
9. CONDOMINIUM SITE PLAN FIREHOUSE TOWN HOMES CONDOMINIUM. PREPARED BY: AMBIT ENGINEERING, INC..DATED: JANUARY 2020, SCALE: 1"=10'. RCRD D-43127.
10. PLAN OF LAND ON PLEASANT STREET, IN THE TOWN OF PORTSMOUTH, PREPARED BY: BENJAMIN SHERMAN, DATED 1822 AND REVISED MAY 6, 1842, SCALE: 1"=50', RCRD #00537.
11. PLAN OF LAND FOR SUSAN J. WENTWORTH EST., PORTSMOUTH, N.H., PREPARED BY: JOHN W. DURGIN, DATED: APRIL 22, 1940, SCALE: 1"=50'. RCRD #0937.

GRAPHIC SCALE
30 0 15 30 60 90
(IN FEET)
1 inch = 30 ft.

STATE OF NEW HAMPSHIRE No. 1122 PHILLIP A. YETMAN LICENSED LAND SURVEYOR

"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."

PHILIP A. YETMAN, LLS 1122 — DATE 1/20/2026

REV.	DATE	DESCRIPTION	BY	CHK
1	01-21-26	UPDATE EXISTING BLDG. UTILITIES	SJR	JRC
0	07-18-2025	ISSUED FOR COMMENT	RJB	PAY

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

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

EXISTING CONDITIONS PLAN

DATE	SCALE
MARCH 2025	1"=30'

DRAWN BY	DESIGNED BY	CHECKED BY
RJB	---	PAY

PROJECT No. 5010156.1532 — FIELD BOOK/PAGE FB 276 PG 60

DRAWING No. **V101** — REV. **1**

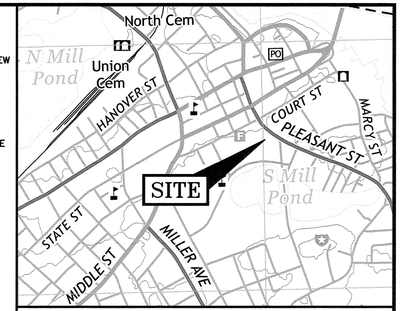
P:\Jobs\5010156.1532\ALTA\EXISTING CONDITIONS\5010156.1532-V-EC.DWG, 2026 01 20, 9:33 AM

PORTSMOUTH 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.



LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S TAX MAP 116 AS LOT 30.

2) OWNERS OF RECORD:
DOUBLE MC, LLC
10 PLEASANT STREET SUITE 400
PORTSMOUTH, N.H. 03801
RCRD 6505/2411

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

4) EXISTING LOT AREA:
53,084 S.F.
1.22 ACRES

5) PARCEL IS LOCATED IN THE CHARACTER DISTRICT 4 (CD4) DISTRICT.

6) DIMENSIONAL REQUIREMENTS: SEE PORTSMOUTH ORDINANCE FOR REQUIREMENTS.

7) THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED MIXED USE DEVELOPMENT ON ASSESSOR'S MAP 116, LOT 30 IN THE CITY OF PORTSMOUTH.

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

9) PARCEL IS BENEFITED BY A RIGHT OF WAY TO COURT STREET AS DESCRIBED IN RCRD 1257/466.

10) PARCEL IS BENEFITED BY A RIGHT OF WAY AS DESCRIBED IN RCRD 2975/349 AND SHOWN ON RCRD D-18880 AND RCRD D-26343.

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

12) PROPOSED USES:
–RETAIL BANKING
–BANK HEADQUARTERS
–APARTMENTS
–PROFESSIONAL OFFICE

13) CITY COUNCIL APPROVAL REQUIRED FOR WORK ON CITY PROPERTY. COORDINATION AND INSPECTIONS OF CONSTRUCTION REQUIRED.

IMPERVIOUS SURFACE AREAS
(TO PROPERTY LINE)

STRUCTURE	PRE–CONSTRUCTION IMPERVIOUS (S.F.)	POST–CONSTRUCTION IMPERVIOUS (S.F.)
MAIN STRUCTURES	12219	21967
ROOF DECK	0	287
SHED	51	0
PAVEMENT	24,004	17,704
CONCRETE	186	942
SIDEWALKS, WALKWAYS	2,262	3,982
STEPS/STOOPS	153	60
CURBING	775	462
RETAINING WALLS	196	426
TOTAL	39846	45830
LOT SIZE	53,084	53,084
% LOT COVERAGE	75.1%	86.3%

OPEN SPACE: LANDSCAPE AREAS GREATER THAN 6' WIDE
6,409 S.F./53,084 = 12.1% OPEN SPACE

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

REV.	DATE	DESCRIPTION	BY	CHK
8	04-07-2026	EMERGENCY ACCESS ONLY	SJR	JRC
7	02-03-2026	STOP, ONE-WAY SIGNS, USE	SJR	JRC
6	01-21-2026	TIP DOWNS, EXIT DOOR, PARKING, NOTE 13	SJR	JRC
5	12-30-2025	LANDSCAPE DETAIL	SJR	JRC
4	12-22-2025	BUILDING & SITE LAYOUT	SJR	JRC
3	10-08-2025	PLAN NOTES	SJR	JRC
2	09-22-2025	REVISED DRIVE THROUGH	SJR	JRC
1	09-05-2025	REVISED LAYOUT	SJR	JRC
0	07-18-2025	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

SITE PLAN

DATE	SCALE
JULY 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	—	JRC

PROJECT No. 5010156.1532
FIELD BOOK / PAGE FB 276 PG 60

DRAWING No. **C102** REV. **8**

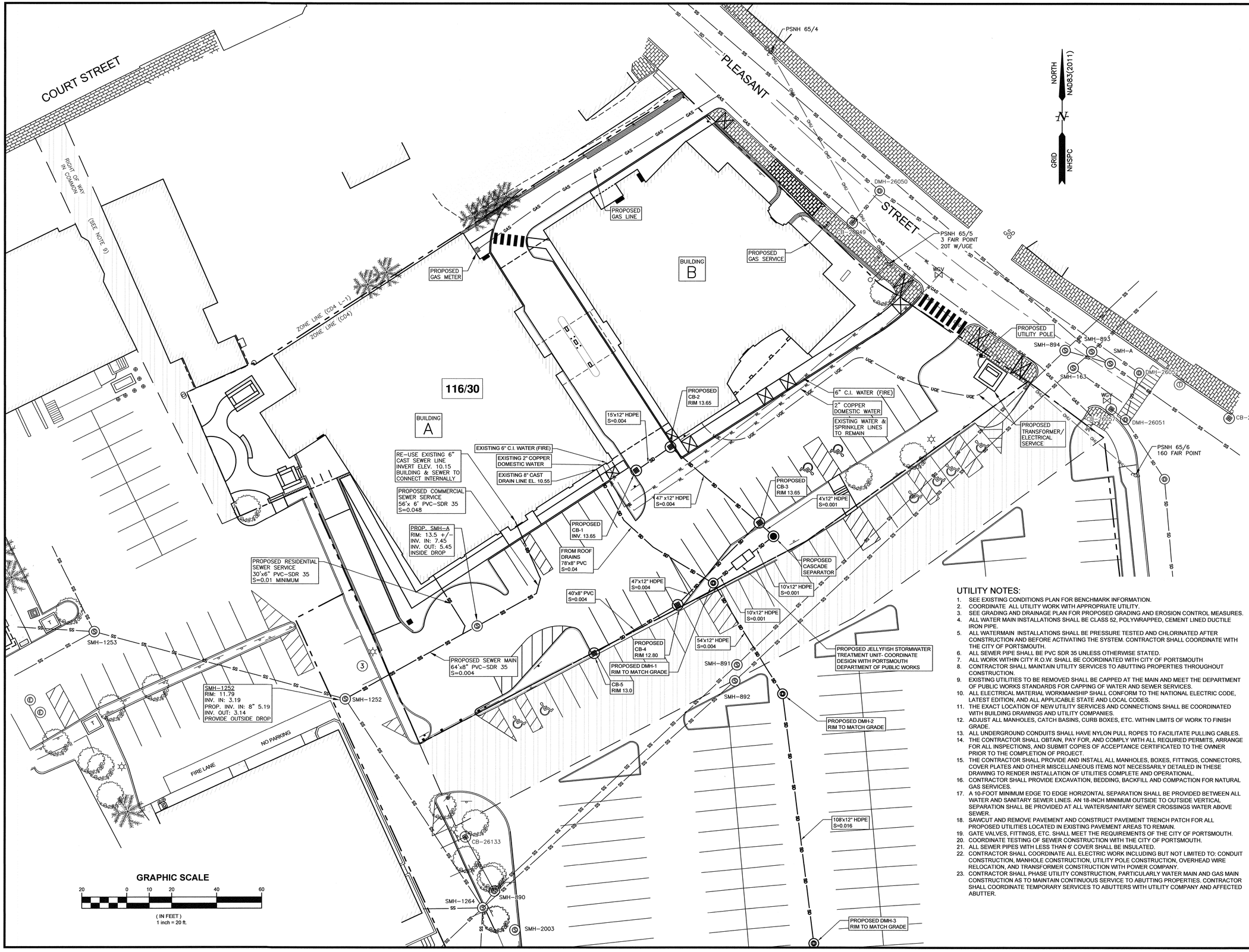
STATE OF NEW HAMPSHIRE – JOHN R. CHAGNON No. 7651 – LICENSED PROFESSIONAL ENGINEER

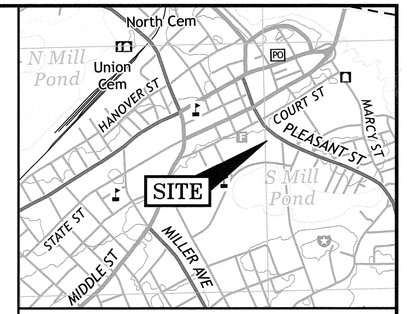
APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

STATE OF NEW HAMPSHIRE – No. 738 – JOHN R. CHAGNON – LICENSED LAND SURVEYOR – SIGNATURE

FILE LOCATION: P:\NH\5010156-MCNABB_PROPERTIES\1532-134 PLEASANT ST - PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.09, 2:30 PM





LOCATION MAP SCALE: 1" = 1,000'

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).

4) PROVIDE TEMPORARY WATER AND SEWER SERVICES TO ALL IMPACTED PROPERTIES DURING NEW WATER AND SEWER MAIN INSTALLATION.

5) PROPOSED SEWER FLOW:

PROFESSIONAL OFFICE: 13,956 S.F. X 2.5 GPD/100 S.F.
= 349 GPD

BANK AND BANK OFFICE: 10,358 S.F. X 2.5 GPD/100 S.F.
= 259 GPD

22 APARTMENTS X 216 GPD/APARTMENT
= 4,752 GPD

TOTAL FLOW 5,360 GPD.

6) APPLICANT, AND AUTHORIZED AGENTS, SHALL WORK WITH THE CITY OF PORTSMOUTH AND UTILITY PROVIDERS TO CONSTRUCT NEW, PERMANENT SERVICE CONNECTIONS TO PROPOSED WATER, SEWER, STORMDRAIN, POWER , AND COMMUNICATIONS.

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 WATER MAIN INSTALLATIONS SHALL BE CLASS 52, POLYWRAPPED, CEMENT LINED DUCTILE IRON PIPE.
5. ALL WATERMAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION AND BEFORE ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH.
6. ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.
7. ALL WORK WITHIN CITY R.O.W. SHALL BE COORDINATED WITH CITY OF PORTSMOUTH
8. CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT CONSTRUCTION.
9. 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.
10. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
11. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH BUILDING DRAWINGS AND UTILITY COMPANIES.
12. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
13. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
14. 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.
15. 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.
16. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES.
17. 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.
18. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
19. GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF PORTSMOUTH.
20. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF PORTSMOUTH.
21. ALL SEWER PIPES WITH LESS THAN 6' COVER SHALL BE INSULATED.
22. 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.
23. 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 UTILITY COMPANY AND AFFECTED ABUTTER.

REV.	DATE	DESCRIPTION	BY	CHK
5	04-07-2026	EMERGENCY ACCESS ONLY	SJR	JRC
4	02-25-2026	CATCH BASINS, DRAINAGE	SJR	JRC
3	02-03-2026	JELLYFISH, DRAINAGE	SJR	JRC
2	01-21-2026	UPDATE PROPOSED UTILITIES	SJR	JRC
1	12-22-2025	ISSUED FOR APPROVAL	SJR	JRC
0	09-05-2025	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

UTILITY PLAN

STATE OF NEW HAMPSHIRE – JOHN R. CHAGNON – NO. 7854 – LICENSED PROFESSIONAL ENGINEER

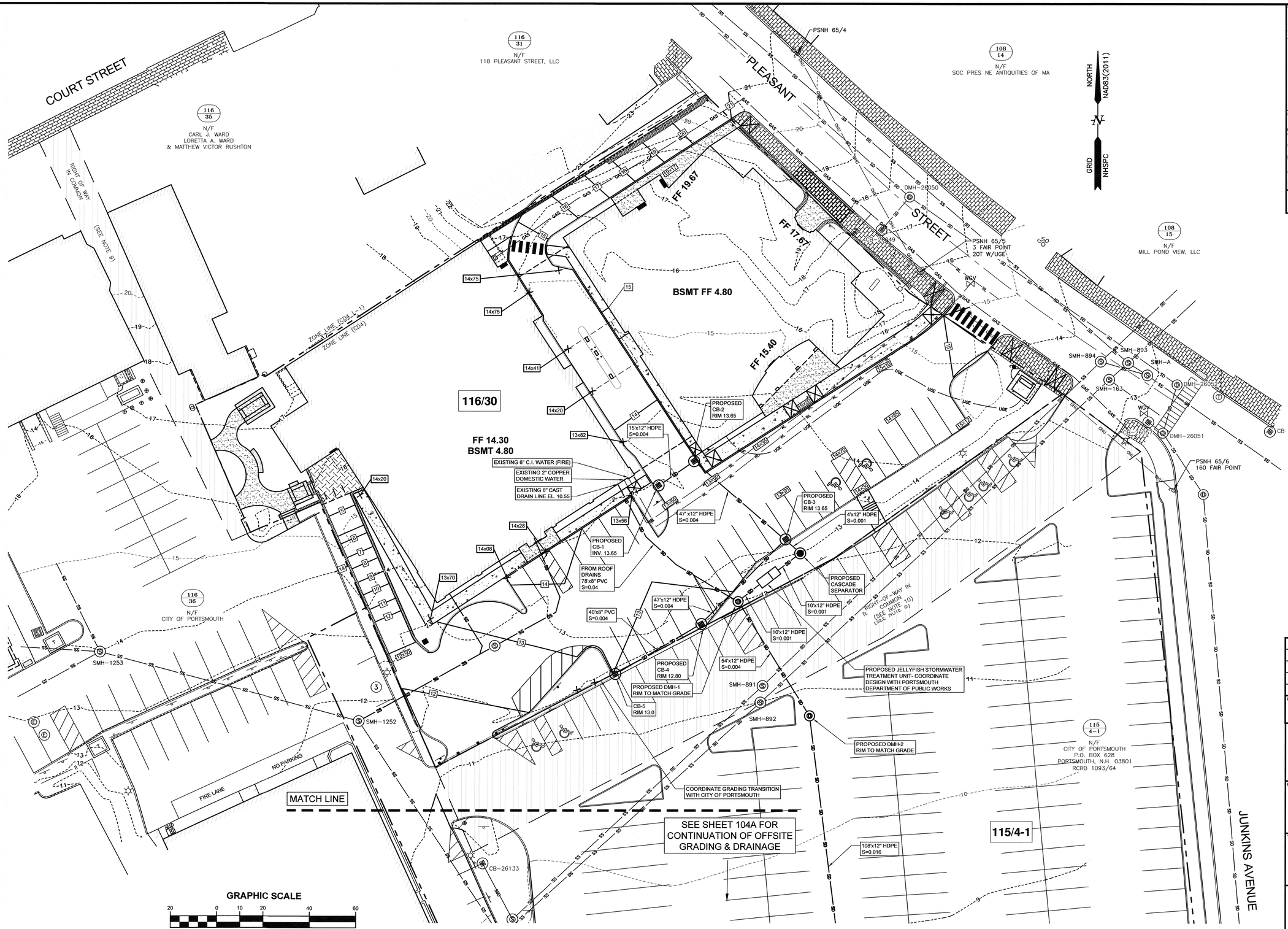
DATE	SCALE
JULY 2025	1"=20'

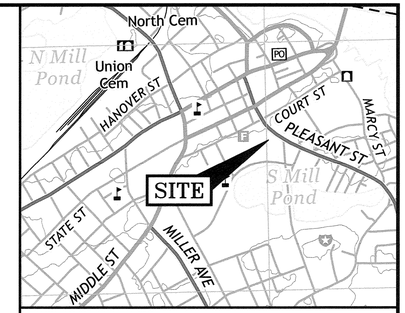
DRAWN BY	DESIGNED BY	CHECKED BY
SJR	---	JRC

PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

DRAWING No. **C103** REV. **5**

FILE LOCATION: P:\NH\5010156.MCNABB_PROPERTIES\1532-134 PLEASANT ST - PORTSMOUTH-JRC\2D-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.06, 1:31 PM





LOCATION MAP SCALE: 1" = 1,000'

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).

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

5) CITY OF PORTSMOUTH STORMWATER CONNECTION PERMIT REQUIRED.

REV.	DATE	DESCRIPTION	BY	CHK.
3	04-07-26	EMERGENCY ACCESS ONLY	SJR	JRC
2	02-25-26	DRAINAGE LAYOUT, GRADES	SJR	JRC
1	01-21-26	DRAINAGE & GRADING UPDATES	SJR	JRC
0	12-22-25	ISSUED FOR APPROVAL	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

ON SITE GRADING & DRAINAGE PLAN

STATE OF NEW HAMPSHIRE JOHN R. CHAGNON No. 14651 LICENSED PROFESSIONAL ENGINEER

DATE: JULY 2025		SCALE: 1"=20'	
DRAWN BY: SJR	DESIGNED BY: ---	CHECKED BY: JRC	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60		
DRAWING No.: C104		REV.: 3	

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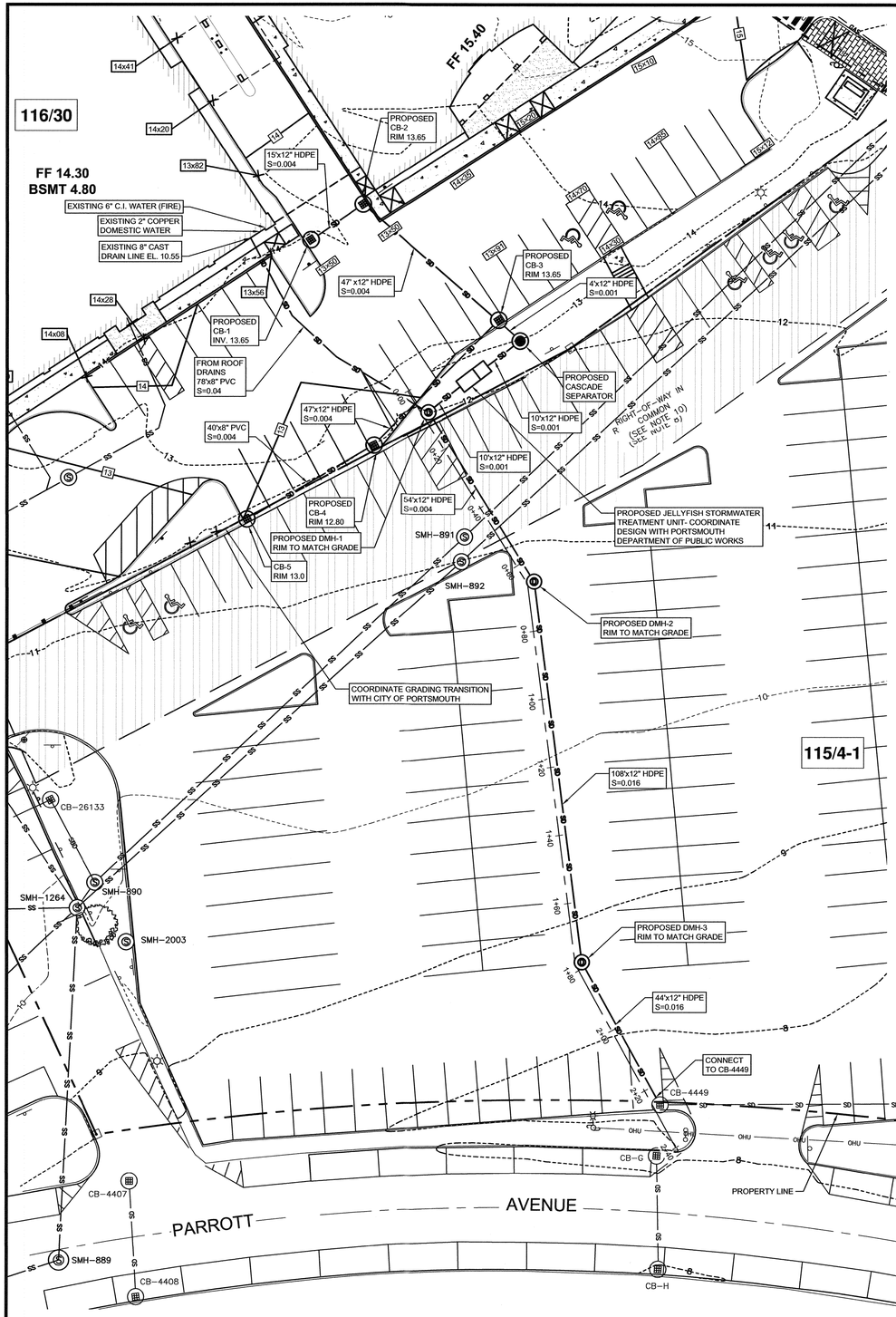
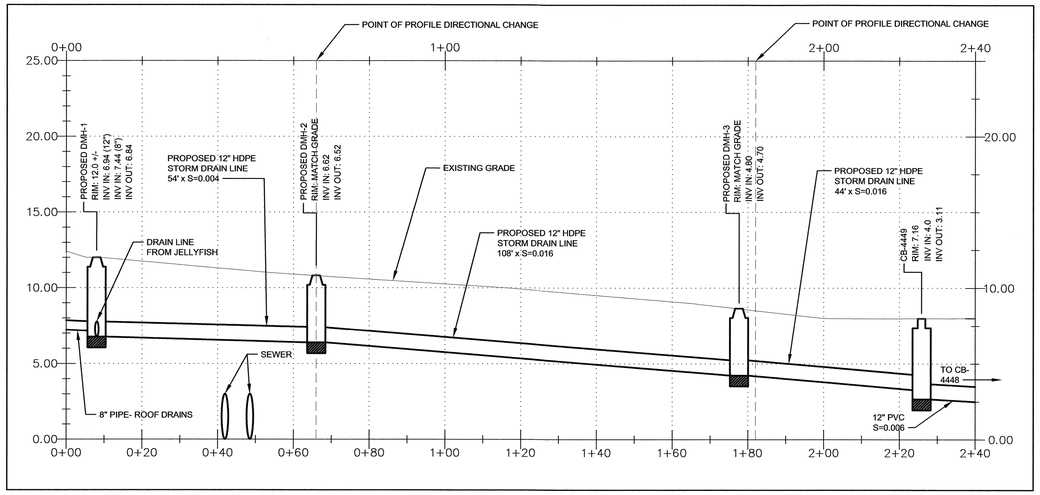




PROFILE VIEW OF PROPOSED SITE DRAINAGE TO PARROTT AVE. - STA 0+00 TO 2+40

SCALE: H: 1"=20' / V: 1"=5'

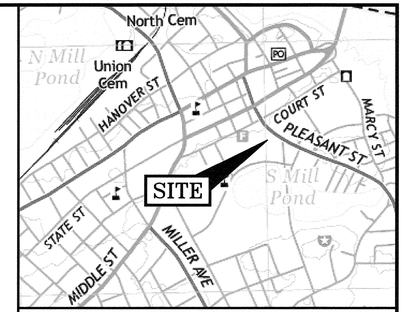
GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

NORTH NAD83(2011)

GRID NHSPC



LOCATION MAP SCALE: 1" = 1,000'

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.

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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).

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

5) CITY OF PORTSMOUTH STORMWATER CONNECTION PERMIT REQUIRED.

EXISTING DRAINAGE STRUCTURE TABLE

STRUCTURE	PROP/EX	RIM	PIPE SIZE/TYPE	INV. IN	INV. OUT	DIRECTION
CB-4407	EX	8.30	NO VISIBLE PIPES			
			WATER ELEVATION: 5.30			
			SUMP ELEVATION: 4.20			
CB-26133	EX	10.86	12" CLAY	4.31		SW
			12" CLAY		4.31	SE
CB-A	EX	12.22	12" AC		8.42	SE
CB-B	EX	12.80	8" CLAY	7.10		NW
			12" AC	7.10		NE
			12" AC	7.00		SW
			18" AC		7.00	S
CB-C	EX	13.47	12" AC	8.87		NE
			12" AC		8.82	S
CB-D	EX	13.54	4" AC	9.34		NW
			12" AC		9.34	SW
CB-E	EX	13.67	SILTED/LOCKED			
CB-F	EX	13.48	SILTED/LOCKED			
CB-G	EX	7.76	4" CLAY		4.76	
CB-H	EX	7.94	6" CLAY	4.24		
CB 26057	EX	12.53	12" CPP W/OIL SEPERATOR		8.33	SE
CB 26048	EX	22.70				
CB 26047	EX	22.89				
CB-26049	EX	17.08	12"PVC W/OIL SEPERATOR		11.78	NE
CB-4275	EX	7.46		2.56		NW
					2.56	S
CB-4448	EX	6.73	12" PVC	2.53		E
			12" PVC		2.53	SE
CB-4449	EX	7.16	12" PVC		3.11	E
DMH 26046	EX	22.99	12" CPP	18.49		SW
			12" CPP	18.49		NE
			12" CPP	19.79		NW
			12" CPP		18.44	SE
DMH 26050	EX	17.45	12" PVC	12.80		NW
			12" PVC	12.80		SW
			12" PVC		12.80	SE
DMH-26052	EX	12.93	12" CPP	8.18		NW
			12" CPP		8.13	S
DMH-26051	EX	12.61	12" CPP	7.86		N
			12" CPP	8.11		NW
			12" CPP		7.81	S
DMH-26061	EX	8.02				
DMH-26062	EX	7.84				

PROPOSED DRAINAGE STRUCTURE TABLE

STRUCTURE	PROP/EX	RIM	PIPE SIZE/TYPE	INV. IN	INV. OUT	DIRECTION
CB-1	PROP	13.65			10.90	E
CB-2	PROP	13.65		10.84		W
					10.74	E
CB-3	PROP	13.65		10.55		N&W
CB-4	PROP	12.80		10.84		W
					10.74	E
CB-5	PROP	13.00		11.00		E
SEPARATOR	PROP	13.00		10.41		N
					10.41	W
JELLYFISH	PROP	12.50	12" HDPE	10.31		E
			12" HDPE		7.04	W
DMH 1	PROP	XGD	12" HDPE	6.94		E
			12" HDPE		6.84	S
			8" PVC	7.44		N
DMH 2	PROP	XGD	12" HDPE	6.62		N
			12" HDPE		6.52	S
DMH 3	PROP	XGD	12" HDPE	4.70		N
			12" HDPE		4.80	S

XGD = EXISTING GRADE

REV.	DATE	DESCRIPTION	BY	CHK.
1	04-07-26	EMERGENCY ACCESS ONLY	SJR	JRC
0	02-25-26	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

OFF SITE GRADING & DRAINAGE/PROFILE

STATE OF NEW HAMPSHIRE – JOHN CHAGNON No. 7855 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
JULY 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	---	JRC

PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

DRAWING No. **C104A** REV. **1**

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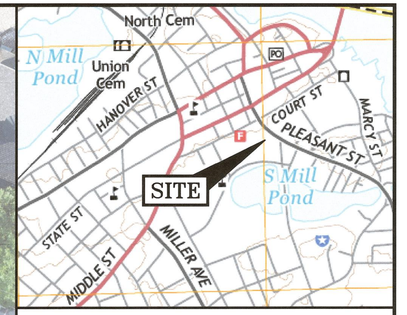


LOCATION MAP SCALE: 1" = 1,000'

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.

REV.	DATE	DESCRIPTION	BY	CHK.
2	04-07-26	EMERGENCY ACCESS ONLY	SJR	JRC
1	02-25-26	DRAINAGE LAYOUT	SJR	JRC
0	02-03-26	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

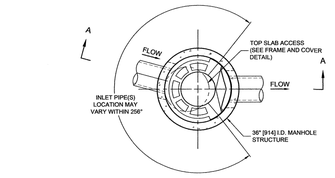
DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

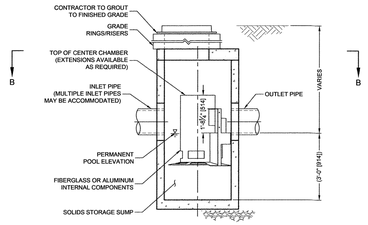
OFF SITE GRADING & DRAINAGE PLAN ORTHOPHOTO

DATE: JULY 2025	SCALE: 1"=20'
DRAWN BY: SJR	DESIGNED BY: ---
CHECKED BY: JRC	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: **C104B**	REV.: **2**

FILE LOCATION: P:\M\5010156.MCHAB_PROPERTIES\1532-134 PLEASANT ST - PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156.1532 SITE 2026.DWG, 2026.04.06, 2:13 PM



PLAN VIEW B-B
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

CASCADE
separator™

CASCADE SEPARATOR DESIGN NOTES

THE STANDARD CS-3 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION

CURB INLET ONLY (NO INLET PIPE)

CURB INLET WITH INLET PIPE OR PIPES

FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (cfs [L/s])			
PEAK FLOW RATE (cfs [L/s])			
RETURN PERIOD OF PEAK FLOW (yrs)			
RIM ELEVATION			
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			

NOTES / SPECIAL REQUIREMENTS:

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
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800-338-1122 513-645-7000 513-645-7993 FAX

CS-3
CASCADE SEPARATOR
STANDARD DETAIL

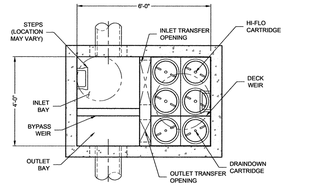
I:\COMMON\CAD\TREATMENT\2 CASCADE\HD STANDARD DRAWINGS\BROWN PROCESS\BROWN PROCESS\CS-3.DWG 6/29/2023 2:40 PM

JELLYFISH DESIGN NOTES

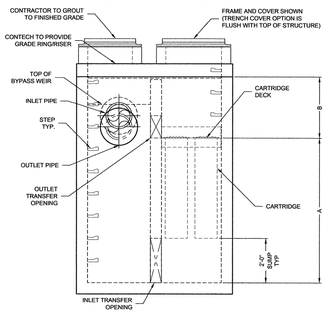
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT, CURB INLET OR SHALLOW PIPE INLET OPTIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD.

CARTRIDGE SELECTION

CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HIGH-FLO / DRAINDOWN (CFS) (PER CART.)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	0.89	0.67	0.45	0.25
DECK TO INSIDE TOP (MIN) (B)	5'-0"	4'-0"	4'-0"	4'-0"

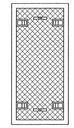


PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW

FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



24" TRENCH COVER
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID					*
WATER QUALITY FLOW RATE (cfs)					*
PEAK FLOW RATE (cfs)					*
RETURN PERIOD OF PEAK FLOW (yrs)					*
# OF CARTRIDGES REQUIRED (HF / DD)					*
CARTRIDGE LENGTH					*
PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION		*
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION AND SITE SPECIFIC EARTH COVER REQUIREMENT. TYPICAL CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-978, AND AASHTO LOAD FACTOR DESIGN METHOD.
6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE (WHERE APPLICABLE) AT EQUAL OR GREATER SLOPE.
8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

Jellyfish Filter
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NO. 8,287,728; 8,277,818; US & CA/EP; OTHER INTERNATIONAL PATENTS PENDING

C:\USERS\JOHN.WRIGHT\ONEDRIVE - THE QUANTE COMPANY\ENGINEERING\CONTECH\STANDARD DETAILS\JFPD0406-DTL.DWG 11/10/2022 3:01 PM

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

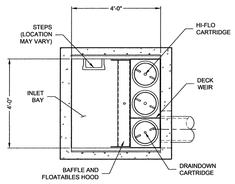
JELLYFISH JFPD0406
STANDARD DETAIL
PEAK DIVERSION CONFIGURATION

NOTES:

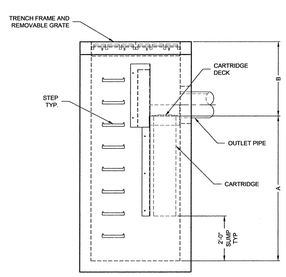
1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.

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).



PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



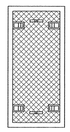
ELEVATION VIEW

JELLYFISH DESIGN NOTES

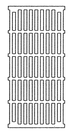
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD SURFACE INLET STYLE WITH TRENCH GRATE AND COVER IS SHOWN. ALTERNATE CURB INLET OR PIPE INLET OPTIONS ARE AVAILABLE. MAXIMUM 5.0 CFS PEAK FLOW CAPACITY.

CARTRIDGE SELECTION

CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HIGH-FLO / DRAINDOWN (CFS) (PER CART.)	0.179 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	0.45	0.33	0.22	0.12
OUTLET INVERT TO RIM (MIN) (B)	3'-4"	3'-4"	3'-4"	3'-4"



24" TRENCH COVER
N.T.S.



24" TRENCH GRATE
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID					*
WATER QUALITY FLOW RATE (cfs)					*
PEAK FLOW RATE (cfs)					*
RETURN PERIOD OF PEAK FLOW (yrs)					*
# OF CARTRIDGES REQUIRED (HF / DD)					*
CARTRIDGE LENGTH					*
PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION		*
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION AND SITE SPECIFIC EARTH COVER REQUIREMENT. TYPICAL CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-978, AND AASHTO LOAD FACTOR DESIGN METHOD.
6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE (WHERE APPLICABLE) AT EQUAL OR GREATER SLOPE.
8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

Jellyfish Filter
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NO. 8,287,728; 8,277,818; US & CA/EP; OTHER INTERNATIONAL PATENTS PENDING

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CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

JELLYFISH JFSI0404
STANDARD DETAIL
SURFACE INLET CONFIGURATION

DD
C104A
JELLYFISH FILTRATION SYSTEM
BY CONTECH ENGINEERED SOLUTIONS, LLC
NTS

SEE INSPECTION & MAINTENANCE ON SHEET C507

REV.	DATE	DESCRIPTION	BY	CHK
1	02/25/26	JELLYFISH DETAILS	SJR	JRC
0	10/21/25	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

DETAILS

DATE: SEPTEMBER 2025	SCALE: 1"=20'
DRAWN BY: SJR	DESIGNED BY: ---
CHECKED BY: JRC	
PROJECT No.: 5010156.1532	FIELD BOOK / PAGE: FB 276 PG 60
DRAWING No.: C506	REV.: 1

FILE LOCATION: P:\NH\5010156-MCNABB_PROPERTIES\1532-134 PLEASANT ST - PORTSMOUTH-JRC\02-CAD_FILES\CIVIL\5010156 1532 SITE 2025.DWG, 2026.02.24, 7:58 AM

1.0 Inspection and Maintenance Overview

The primary purpose of the Jellyfish® Filter is to capture and remove pollutants from stormwater runoff. As with any filtration system, these pollutants must be removed to maintain the filter's maximum treatment performance. Regular inspection and maintenance are required to insure proper functioning of the system.

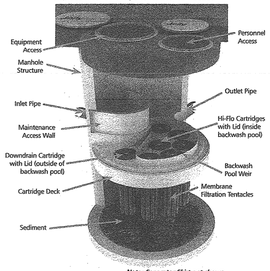
Maintenance frequencies and requirements are site specific and vary depending on pollutant loading. Additional maintenance activities may be required in the event of non-storm event runoff, such as base-flow or seasonal flow, an upstream chemical spill or due to excessive sediment loading from site erosion or extreme runoff events. It is a good practice to inspect the system after major storm events.

Inspection activities are typically conducted from surface observations and include:

- Observe if standing water is present
- Observe if there is any physical damage to the deck or cartridge lids
- Observe the amount of debris in the Maintenance Access Wall (MAW) or inlet bay for vault systems

Maintenance activities include:

- Removal of oil, floatable trash and debris
- Removal of collected sediments
- Rinsing and re-installing the filter cartridges
- Replace filter cartridge tentacles, as needed



Note: Separator Skirt not shown

2.0 Inspection Timing

Inspection of the Jellyfish Filter is key in determining the maintenance requirements for, and to develop a history of, the site's pollutant loading characteristics. In general, inspections should be performed at the times indicated below; *or per the approved project stormwater quality documents (if applicable), whichever is more frequent.*

1. A minimum of quarterly inspections during the first year of operation to assess the sediment and floatable pollutant accumulation, and to ensure proper functioning of the system.
2. Inspection frequency in subsequent years is based on the inspection and maintenance plan developed in the first year of operation. Minimum frequency should be once per year.
3. Inspection is recommended after each major storm event.
4. Inspection is required immediately after an upstream oil, fuel or other chemical spill.

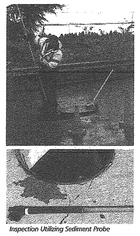
3.0 Inspection Procedure

The following procedure is recommended when performing inspections:

1. Provide traffic control measures as necessary.
2. Inspect the MAW or inlet bay for floatable pollutants such as trash, debris, and oil sheen.
3. Measure oil and sediment depth in several locations, by lowering a sediment probe until contact is made with the floor of the structure. Record sediment depth, and presences of any oil layers.
4. Inspect cartridge lids. Missing or damaged cartridge lids to be replaced.
5. Inspect the MAW (where appropriate), cartridge deck and receptacles, and backwash pool weir, for damaged or broken components.

3.1 Dry weather inspections

- Inspect the cartridge deck for standing water, and/or sediment on the deck.
- No standing water under normal operating conditions.
- Standing water inside the backwash pool, but not outside the backwash pool indicates, that the filter cartridges need to be rinsed.



Inspection Utilizing Sediment Probe

- Standing water outside the backwash pool is not anticipated and may indicate a backwater condition caused by high water elevation in the receiving water body, or possibly a blockage in downstream infrastructure.
- Any appreciable sediment (≥1/16") accumulated on the deck surface should be removed.

3.2 Wet weather inspections

- Observe the rate and movement of water in the unit. Note the depth of water above deck elevation within the MAW or inlet bay.
- Less than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges (i.e. cartridges located outside the backwash pool).
- Greater than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges and each of the hi-flo cartridges (i.e. cartridges located inside the backwash pool), and water should be overflowing the backwash pool weir.
- 18 inches or greater and relatively little flow is exiting the cartridge lids and outlet pipe, this condition indicates that the filter cartridges need to be rinsed.

4.0 Maintenance Requirements

Required maintenance for the Jellyfish Filter is based upon results of the most recent inspection, historical maintenance records, or the site specific water quality management plan; whichever is more frequent. In general, maintenance requires some combination of the following:

1. Sediment removal for depths reaching 12 inches or greater, or within 3 years of the most recent sediment cleaning, whichever occurs sooner.
2. Floatable trash, debris, and oil removal.
3. Deck cleaned and free from sediment.
4. Filter cartridges rinsed and re-installed as required by the most recent inspection results, or within 12 months of the most recent filter rinsing, whichever occurs sooner.
5. Replace tentacles if rinsing does not restore adequate hydraulic capacity, remove accumulated sediment, or if damaged or missing. It is recommended that tentacles should remain in service no longer than 5 years before replacement.
6. Damaged or missing cartridge deck components must be repaired or replaced as indicated by results of the most recent inspection.
7. The unit must be cleaned out and filter cartridges inspected immediately after an upstream oil, fuel, or chemical spill. Filter cartridge tentacles should be replaced if damaged or compromised by the spill.

5.0 Maintenance Procedure

The following procedures are recommended when maintaining the Jellyfish Filter:

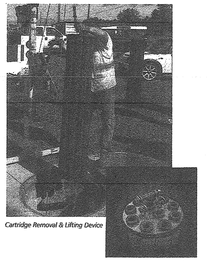
1. Provide traffic control measures as necessary.
2. Open all covers and hatches. Use ventilation equipment as required, according to confined space entry procedures. ***Caution: Dropping objects onto the cartridge deck may cause damage.***
3. Perform Inspection Procedure prior to maintenance activity.
4. To access the cartridge deck for filter cartridge service, descend into the structure and step directly onto the deck. Caution: Do not step onto the maintenance access wall (MAW) or backwash pool weir, as damage may result. Note that the cartridge deck may be slippery.
5. Maximum weight of maintenance crew and equipment on the cartridge deck not to exceed 450 lbs.

5.1 Filter Cartridge Removal

1. Remove a cartridge lid.
2. Remove cartridges from the deck using the lifting loops in the cartridge head plate. Rope or a lifting device (available from Contech) should be used. ***Caution: Should a snag occur, do not force the cartridge upward as damage to the tentacles may result. Wet cartridges typically weigh between 100 and 125 lbs.***
3. Replace and secure the cartridge lid on the exposed empty receptacle as a safety precaution. Contech does not recommend exposing more than one empty cartridge receptacle at a time.

5.2 Filter Cartridge Rinsing

1. Remove all 11 tentacles from the cartridge head plate. Take care not to lose or damage the O-ring seal as well as the plastic threaded nut and connector.

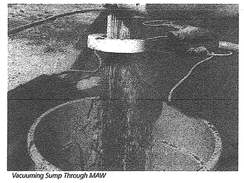


Cartridge Removal & Lifting Device

2. Position tentacles in a container (or over the MAW), with the threaded connector (open end) facing down, so rinse water is flushed through the membrane and captured in the container.
3. Using the Jellyfish rinse tool (available from Contech) or a low-pressure garden hose sprayer, direct water spray onto the tentacle membrane, sweeping from top to bottom along the length of the tentacle. Rinse until all sediment is removed from the membrane. ***Caution: Do not use a high pressure sprayer or focused stream of water on the membrane. Excessive water pressure may damage the membrane.***
4. Collected rinse water is typically removed by vacuum hose.
5. Reassemble cartridges as detailed later in this document. Reuse O-rings and nuts, ensuring proper placement on each tentacle.

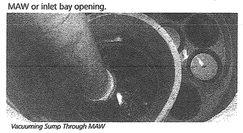
5.3 Sediment and Flotables Extraction

1. Perform vacuum cleaning of the Jellyfish Filter only after filter cartridges have been removed from the system. Access the lower chamber for vacuum cleaning only through the maintenance access wall (MAW) opening. Be careful not to damage the flexible plastic separator skirt that is attached to the underside of the deck on manhole systems. Do not lower the vacuum wand through a cartridge receptacle, as damage to the receptacle will result.
2. Vacuum floatable trash, debris, and oil, from the MAW opening or inlet bay. Alternatively, floatable solids may be removed by a net or skimmer.



Vacuuming Sump Through MAW

3. Pressure wash cartridge deck and receptacles to remove all sediment and debris. Sediment should be rinsed into the sump area. Take care not to flush rinse water into the outlet pipe.
4. Remove water from the sump area. Vacuum or pump equipment should only be introduced through the MAW or inlet bay.
5. Remove the sediment from the bottom of the unit through the MAW or inlet bay opening.



Vacuuming Sump Through MAW

6. For larger diameter Jellyfish Filter manholes (≥8-ft) and some vaults complete sediment removal may be facilitated by removing a cartridge lid from an empty receptacle and inserting a jetting wand (not a vacuum wand) through the receptacle. Use the sprayer to rinse loosened sediment toward the vacuum hose in the MAW opening, being careful not to damage the receptacle.

5.4 Filter Cartridge Reinstallation and Replacement

1. Cartridges should be installed after the deck has been cleaned. It is important that the receptacle surfaces be free from grit and debris.
2. Remove cartridge lid from deck and carefully lower the filter cartridge into the receptacle until head plate gasket is seated squarely in receptacle. ***Caution: Do not force the cartridge downward; damage may occur.***
3. Replace the cartridge lid and check to see that both male threads are properly seated before rotating approximately 1/3 of a full rotation until firmly seated. Use of an approved rim gasket lubricant may facilitate installation. See next page for additional details.
4. If rinsing is ineffective in removing sediment from the tentacles, or if tentacles are damaged, provisions must be made to replace the spent or damaged tentacles with new tentacles. Contact Contech to order replacement tentacles.

5.5 Chemical Spills

Caution: If a chemical spill has been captured, do not attempt maintenance. Immediately contact the local hazard response agency and contact Contech.

5.6 Material Disposal

The accumulated sediment found in stormwater treatment and conveyance systems must be handled and disposed of in accordance with regulatory protocols. It is possible for sediments to contain measurable concentrations of heavy metals and organic chemicals (such as pesticides and petroleum products). Areas with the greatest potential for high pollutant loading include industrial areas and heavily traveled roads. Sediments and water must be disposed of in accordance with all applicable waste disposal regulations. When scheduling maintenance, consideration must be made for the disposal of solid and liquid wastes. This typically requires coordination with a local landfill for solid waste disposal. For liquid waste disposal a number of options are available including a municipal vacuum truck decant facility, local waste water treatment plant or on-site treatment and discharge.

Jellyfish Filter Components & Filter Cartridge Assembly and Installation

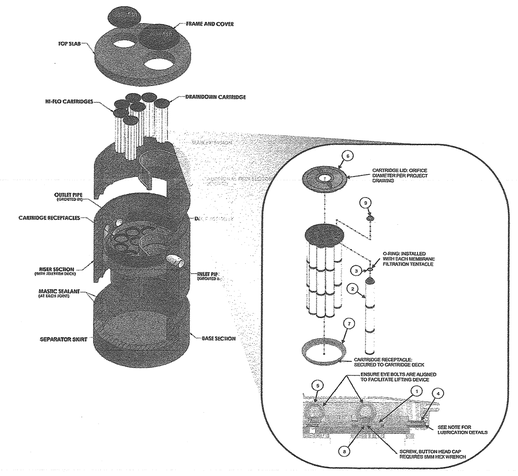


TABLE 1: BOM

ITEM NO.	DESCRIPTION
1	JF HEAD PLATE
2	JF TENTACLE
3	JF O-RING
4	JF HEAD PLATE GASKET
5	JF CARTRIDGE EYELET
6	JF 14IN COVER
7	JF RECEPTACLE
8	BUTTON HEAD CAP SCREW M6X14MM SS
9	JF CARTRIDGE NUT

TABLE 2: APPROVED GASKET LUBRICANTS

PART NO.	MFR	DESCRIPTION
78713	LA-CO	LUBRI-JOINT
40501	HERCULES	DUCK BUTTER
30603	OATEY	PIPE LUBRICANT
PSLUBXL1Q	PROSELECT	PIPE JOINT LUBRICANT

NOTES:

Head Plate Gasket Installation:
Install Head Plate Gasket (Item 4) onto the Head Plate (Item 1) and liberally apply a lubricant from Table 2: Approved Gasket Lubricants onto the gasket where it contacts the Receptacle (Item 7) and Cartridge Lide (ITem 6). Follow Lubricant manufacturer's instructions.

Lid Assembly:
Rotate Cartridge Lid counter-clockwise until both male threads drop down and properly seat. Then rotate Cartridge Lid clock-wise approximately one-third of a full rotation until Cartridge Lid is firmly secured, creating a watertight seal.

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).

REV.	DATE	DESCRIPTION	BY	CHK.
0	02/25/26	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

PERMIT PLANS

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

PROJECT

DOUBLE MC, LLC
134 PLEASANT STREET PORTSMOUTH, N.H.

TITLE

DETAILS

DATE	SCALE
SEPTEMBER 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	---	JRC

PROJECT No.	FIELD BOOK / PAGE
5010156.1532	FB 276 PG 60

DRAWING No.	REV.
C507	0

FILE LOCATION: P:\HHS\0150\MCNABB_PROPERTIES\1532-134 PLEASANT ST - PORTSMOUTH-JR\CSD-CAD_FILES\CIVIL\0010158.1532 SITE 2025.DWG, 2026.02.24, 8:39 AM

HALEY WARD

APPLICATION FOR SITE PLAN REVIEW

TO THE CITY OF PORTSMOUTH
FOR 94 LANGDON ST. & 98 CORNWALL ST.
Map 139, Lots 1 & 8 | Portsmouth, NH

APPLICANT:
Chinburg Development
3 Penstock Way, Newmarket, NH 03857

Revised: April 24, 2026
JN: 5010220.004

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

April 24, 2026

Rick Chellman, Planning Board Chair
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

RE: Request for Planning Board Review
94 Langdon Street & 98 Cornwall Street
Proposed Multifamily Development

Dear Mr. Chellman and Planning Board Members,

On behalf of Chinburg Development, we are pleased to submit the attached **Site Plan Review Application** for the above-mentioned project and request that we be placed on the agenda for your **May 21, 2026**, Planning Board Meeting. The properties are shown on the City of Portsmouth Assessors Map 139 as Lot 1 & Lot 8. The project was recently presented to the Portsmouth Technical Advisory Committee (TAC) and was approved at their April 7, 2026 meeting.

PROJECT OVERVIEW

The project consists of two adjoining parcels located at 94 Langdon Street and 98 Cornwall Street with a total area of 25,107 square feet. The site is currently developed with two commercial buildings and a surface parking lot. The current use is an electrical contractor building.

The project includes the merger of the two adjacent parcels, the removal of the existing structures and pavement on the parcels, and the construction of three single family dwellings with the associated and required site improvements. The site will remain as one parcel and the dwelling units will be in a condominium association.

The conversion of the site will comply with the applicable design, safety, and operational standards, including building code compliance. We believe that the transition to residential use will complement the surrounding neighborhood. The site's proximity to downtown Portsmouth further enhances this re-use. The existing Langdon Street curb cut will be relocated as the buildings will occupy the north, or railroad side of the site. Existing access to the Map 139 Lot 1 property will be discontinued; all access to the merged parcels will be from Langdon Street.

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

SITE HISTORY

Regan Electric Company, Inc. has owned and operated the site since purchasing the property in the early 1990s. The site has remained relatively unchanged and has served as an office with parking for company vehicles and electrical related storage.

SITE ZONING

The project is within the City of Portsmouth Mixed Residential Business (MRB) District which allows for residential development. The proposed project is consistent with the surrounding neighborhood which is predominantly single family residential. As proposed with the merged lots, the project meets all zoning requirements except for the minimum frontage which is a grandfathered non-conforming condition. A variance was sought for the non-conforming frontage and approved by the Board of Adjustment at their March 17, 2026 meeting.

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 development will be accessed by a shared 20-foot-wide paved driveway with a turnaround. Pedestrian access will be provided by a block sidewalk with flush curbing that will run adjacent to the driveway and connect the existing city sidewalk system along Langdon Street.

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 a reduction in peak hour trips based on the conversion of the property from commercial use to residential.

SCREENING AND LANDSCAPING

Detailed landscape plans were prepared by Terra Firma Landscape Architecture and are included in the submittal package. The landscape design provides a blend of street trees and shrubs to enhance the property while providing screening at the perimeter. Low level plantings are proposed between unit 2 and 3 to maintain a Cornwall Street view corridor.

WATER AND SEWAGE SYSTEMS

The development will be served by municipal water through a new 2" water line connected to the existing main in Langdon Street. Each dwelling will have a 1" service line connected to the new 2" water line. As easement will be provided to the City for water metering, valve control and leak detection. The easement will also have a provision to upsize and/or connect the line to Cornwall Street in the future if determined to be necessary.

Sewer for Unit 1 will connect to the existing 8" PVC line in Langdon Street. Sewer for Units 2 and 3 will connect to the existing 12" cast iron sewer line crossing the lot on Cornwall Street. All new sewers will be 6" PVC SDR 35 gasketed pipe. A 20' wide easement will be provided to the city for the sewer line.

STORMWATER MANAGEMENT

The impervious surfaces will be reduced by over 5,000 square feet onsite and an additional 1,000 square feet offsite, therefore creating a reduction in stormwater runoff. The proposed stormwater will maintain existing flow patterns and continue to discharge offsite to the north and to the municipal system within Langdon Street. 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

Natural gas, electric and communications services will be installed underground to serve the dwelling units. Included in the submission is a "will serve" letter for the project from Unitil. Coordination has begun with Eversource for the electrical connection and proposed transformer. Included in the submission is a copy of the Eversource work order.

SOLID WASTE

Solid waste will be collected through Portsmouth curb side pickup.

TAC CONDITIONS OF APPROVAL

Listed below are the Conditions of Approval obtained at the April 7, 2026 TAC meeting, with the initial condition repeated and the response in **bold** text:

1. An easement to the City is required for water metering, valve control, and leak detection. This easement shall have a provision to allow the City to upsize and/or connect the line to Cornwall Street in the future if determined to be necessary.

   Note 13 was added to drawing C102, Site Layout Plan, specifying the proposed easement as described above.

2. Show existing 10-12" sewer main crossing the lot on Cornwall Street and consider sewer connection there. An easement to the City is required for the sewer main pipe crossing the lot on Cornwall Street.

   The existing sewer line was field verified as a 12" cast iron line and has been added to Drawing V101, Existing Conditions Plan. A proposed 20' wide easement centered on the existing pipe is shown on the Sewer Easement Plan.

3. Revise the landscaping plan.

   The landscaping plan was revised to remove taller growth vegetation between the subject parcel and lot 139-6 as discussed in the TAC meeting.

4. The driveway will need to be named and approved by City Council.

   Note 14 was added to drawing C102, Site Layout Plan, specifying the proposed conditions as described above.

5. A fire access turning template is required.

   A fire truck turning template was applied to the proposed driveway entrance to confirm a fire truck can pull into the site and reverse out of the site from Langdon Street with adequate space. The turning movements are shown on drawing T101, Fire Truck Turning Plan

6. A 1" water line is insufficient for three single family dwellings, so a common line should be at lease 2" in size and that size should be confirmed as large enough by the MEP Engineer. All lines to homes must be 1" minimum. If fire suppression is required by the Fire Department, additional or larger water lines will be required.

   The common line was revised to 2" with 1" service lines to the units. Fire suppression is not required for this development as confirmed by the Fire Department.

7. Need air gap between stormwater system and foundation drains. Homes need to be mechanically drained via sumps. Watertight construction required.

   Note 5 was added to drawing C103, Grading & Drainage Plan, specifying the proposed conditions as described above.

8. City suggests slab on grad construction but in no case should there be more than a crawl space with no mechanicals due to high groundwater possible during storms in that area.

   Notes 3 and 5 were added to drawing C103, Grading & Drainage Plan, specifying the proposed conditions as described above.

9. Sidewalk must be 5.5' in width, excluding curb.

   All sidewalks have been revised to be 5.5' in width, excluding the curb.

10. Curb must be granite.

    All proposed curbing is specified as granite.

11. Brick inverts in sewer manholes are required.

    The proposed sewer design was revised and no longer proposes any sewer manholes that would require brick inverts.

SUBMISSION

The submission includes the following materials

- Site Plan Application Checklist
- Site Review Application Fee Form
- Construction Cost Estimate
- Site Photos
- Tax Map
- Zoning Map
- Trip Generation Letter
- Eversource Coordination Email
- Until "Will Serve" Letter
- Green Building Statement
- Architectural Plans
- Stormwater Management & Erosion Control Plan
- Inspection & Long-Term Maintenance Plan
- Site Plans

The following plans are included in our submission:

- C000 – Cover Sheet
- C001 – General Notes, Legend & Abbreviations
- V101 – Conditions Plan
- V102 – Sewer Easement Plan
- C101 – Demolition Plan
- C102 – Site Layout Plan
- C103 – Grading & Drainage Plan
- C104 – Utility Plan
- C501 & C502 – Construction Details
- C701 & C702 – Pre- & Post-Development Hydrology Plans
- T101 – Fire Truck Turning Plan
- L-1 & L-2 – Landscape Plans

We look forward to the Planning Boards's review of this submission and to presenting the project in person at your upcoming meeting.

Sincerely,
Haley Ward, Inc.

Shawn Tobey, PE
Southern Maine & New Hampshire Land Development Manager

Findings of Fact | Site Plan Review
City of Portsmouth Planning Board

Date: May 21, 2026
Property Address: 94 Langdon/198 Cornwall
Application #: LU-25-175
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:

Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of the all conditions necessary to obtain final approval.

Site Plan Regulations Section 2.9 Evaluation Criteria - in order to grant site plan review approval, the TAC and the Planning Board shall find that the application satisfies evaluation criteria pursuant to NH State Law and listed herein. In making a finding, the TAC and the Planning Board shall consider all standards provided in Articles 3 through 11 of these regulations.

	Site Plan Review Regulations Section 2.9 Evaluation Criteria	Finding (Meets Standard/Criteria)	Supporting Information
1	Compliance with all City Ordinances and Codes and these regulations. Applicable standards:	**Meets** **Does Not Meet**	A variance was granted for the grandfathered non-conforming frontage. All other aspects of the project comply with City Ordinances and Codes.
2	Provision for the safe development, change or expansion of use of the site.	**Meets** **Does Not Meet**	The development will improve the site and conform to neighboring uses. The project was reviewed and approved by the Technical Advisory Committee (TAC).
3	Adequate erosion control and stormwater management practices and other mitigative measures, if needed, to prevent adverse effects on downstream water quality and flooding of the property or that of another.	**Meets** **Does Not Meet**	The proposed development will reduce impervious cover by over 6,000 square feet therefore creating a reduction in stormwater runoff. The development proposes deep sump catch basins to collect sediment. Silt socks, inlet protection and construction entrances will be installed prior to construction for adequate erosion control.

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	Site Plan Review Regulations Section 2.9 Evaluation Criteria	Finding (Meets Standard/Criteria)	Supporting Information
4	Adequate protection for the quality of groundwater.	**Meets** **Does Not Meet**	No groundwater withdrawal (water supply is City). No nearby production wells. Catch Basins collect sediment.
5	Adequate and reliable water supply sources.	**Meets** **Does Not Meet**	The proposed water supply is provided by the City and was reviewed by TAC.
6	Adequate and reliable sewage disposal facilities, lines, and connections.	**Meets** **Does Not Meet**	The proposed sewer is connected to the City system and the design was reviewed by TAC.
7	Absence of undesirable and preventable elements of pollution such as smoke, soot, particulates, odor, wastewater, stormwater, sedimentation or any other discharge into the environment which might prove harmful to persons, structures, or adjacent properties.	**Meets** **Does Not Meet**	The development is a proposed residential use and is not a pollution generator.
8	Adequate provision for fire safety, prevention and control.	**Meets** **Does Not Meet**	The site entrance is designed for a fire truck to pull into the site and back out safely. The site was reviewed by the Fire Department and TAC
9	Adequate protection of natural features such as, but not limited to, wetlands.	**Meets** **Does Not Meet**	This is an urban site with no wetlands. A portion of the site is located within the 250' shoreland buffer for North Mill Pond that extends across the developed rail yard. The development area within the buffer will create a reduction in impervious cover and improve the buffer. A NHDES Shoreland permit will be obtained.
10	Adequate protection of historical features on the site.	**Meets** **Does Not Meet**	The are no historical features present on the site.
11	Adequate management of the volume and flow of traffic on the site and adequate traffic controls to protect public safety and prevent traffic congestion.	**Meets** **Does Not Meet**	The proposed development results in a reduction in peak hour trips based on the conversion from commercial to residential use therefore improving traffic and public safety.
12	Adequate traffic controls and traffic management measures to prevent an unacceptable increase in safety hazards and traffic congestion off-site.	**Meets** **Does Not Meet**	The reduction in traffic will prevent an unacceptable increase in safety hazards and traffic congestion off-site

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	Site Plan Review Regulations Section 2.9 Evaluation Criteria	Finding (Meets Standard/Criteria)	Supporting Information
13	Adequate insulation from external noise sources.	**Meets** **Does Not Meet**	Adequate insulation will be installed as required.
14	Existing municipal solid waste disposal, police, emergency medical, and other municipal services and facilities adequate to handle any new demands on infrastructure or services created by the project.	**Meets** **Does Not Meet**	Trash collection will be Portsmouth curb side pick-up. The TAC review included Fire and Police Departments. The design was approved by TAC.
15	Provision of usable and functional open spaces of adequate proportions, including needed recreational facilities that can reasonably be provided on the site	**Meets** **Does Not Meet**	The proposed development removes a substantial amount of existing pavement and allows for ample open space with adequate areas of recreational space for each dwelling unit.
16	Adequate layout and coordination of on-site accessways and sidewalks in relationship to off-site existing or planned streets, accessways, bicycle paths, and sidewalks.	**Meets** **Does Not Meet**	The proposed project extends the existing City sidewalk down Langdon Street and into the development to serve each dwelling unit.
17	Demonstration that the land indicated on plans submitted with the application shall be of such character that it can be used for building purposes without danger to health.	**Meets** **Does Not Meet**	The project is located within a residential neighborhood on land that is consistent in character with other residential dwelling units.
18	Adequate quantities, type or arrangement of landscaping and open space for the provision of visual, noise and air pollution buffers.	**Meets** **Does Not Meet**	A professionally prepared landscape design was provided and approved by TAC. The landscaping provides screening where needed and maintains existing view corridors.
19	Compliance with applicable City approved design standards.	**Meets** **Does Not Meet**	The project was reviewed for compliance at the TAC meeting and approved.
	Other Board Findings:		

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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: Chinburg Development Date Submitted: March 23, 2026

Application # (in City's online permitting): LU-25-175

Site Address: 94 Langdon Street & 98 Cornwall Street Map: 139 Lot: 1 & 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)**	**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 C102**	
☒	**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 C102**	
☒	**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 C104**	
☒	**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 C104**	

☒	**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 C104**	
☒	**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 Plans L-1 & L-2**	
☒	**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 C102**	
☒	**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 C103**	
☒	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 C102**	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 C102**	N/A

Applicant's Signature: Steven Ibsley **Date:** March 23, 2026

Applicants Agent

City of Portsmouth Planning Department

Site Plan Review Application Fee – FY25

Project: Multifamily Develoment - 94 Langdon St. **Map/Lot:** 139 / 1 & 8

Applicant: Chinburg Development

All development

Base fee $600			$600.00
Plus $5.00 per $1,000 of site costs			
Site costs	$470,470	+	$2,352.35
Plus $10.00 per 1,000 S.F. of site development area			
Site development area	25,000 S.F.	+	$250.00
		Fee	**$3,202.35**

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: March 20, 2026

Project: Proposed Multifamily Development Job No: 5010220.004

Location: 94 Langdon Street and 98 Cornwall Street Portsmouth, NH - **On Site**

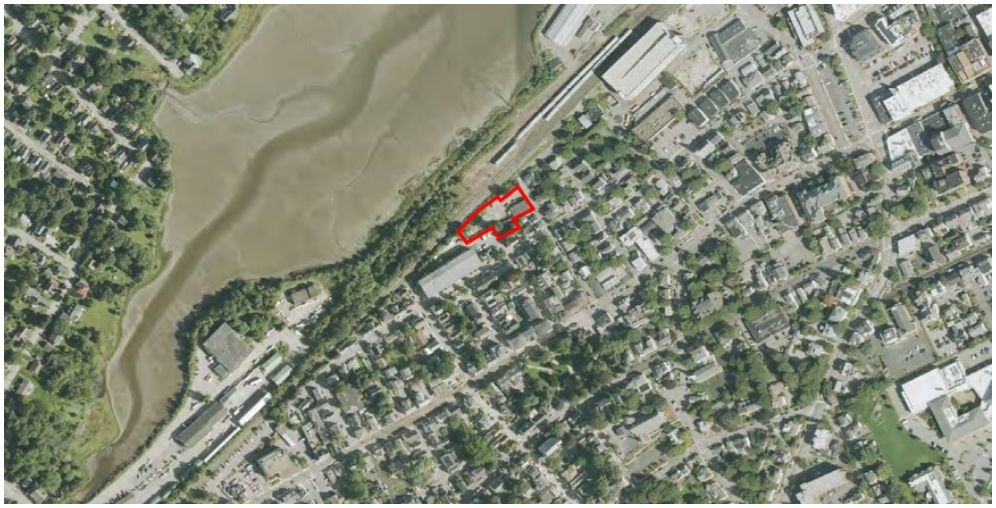
Scope: **Site Cost Estimate**

ITEM NO	DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
1	Construction Entrance	EA	2	$5,000.00	$10,000.00
2	Site Clearing & Demolition	LS	1	$ 36,400.00	$36,400.00
3	Saw Cutting Asphalt	LF	160	$ 13.50	$2,160.00
4	SiltSoxx	LF	390	$8.00	$3,120.00
5	Sub-Base Gravel (Type D)	CY	180	$52.00	$9,360.00
6	Base Gravel (Type A)	CY	94	$50.00	$4,700.00
7	Base Asphalt	TN	100	$85.00	$8,500.00
8	Surface Asphalt	TN	50	$110.00	$5,500.00
9	6" SDR-35	LF	335	$185.00	$61,975.00
10	Sewer Man Hole	VF	16	$900.00	$14,400.00
11	HDPE 12" Drain	LF	303	$85.00	$25,755.00
12	Drain Manhole	VF	5	$900.00	$4,500.00
13	Catch Basin	VF	14.5	$900.00	$13,050.00
14	Covers and Frames (SS & SD)	EA	7	$1,200.00	$8,400.00
15	Testing - Sewer	LS	1	$10,000.00	$10,000.00
16	HDPEP 3/4" Domestic & 2" Fire Water Service	LF	630	$145.00	$91,350.00
17	Testing - Water	LS	1	$15,000.00	$15,000.00
18	Underground Electric & Cable	LF	1040	$85.00	$88,400.00
19	Electrical Transformer	EA	1	$12,000.00	$12,000.00
20	Underground Gas Trench Prep & Backfill	LF	330	$50.00	$16,500.00
21	Loam & Seed Slopes	SY	1400	$21.00	$29,400.00
	TOTAL				**$470,470**

Note: This is an estimate of construction costs based upon various sources

CHINBURG
DEVELOP. BUILD. MANAGE.

Photos of 94 Langdon St & 98 Cornwall St



Bird's eye view of area

Aerial view of 94 Langdon St & 98 Cornwall St

View of Property from Langdon St

Garage at 98 Cornwall

Northeast facing view.

View from Langdon St.

Current existing condition of the site.

Abutting home, (constructed by Chinburg).

More abutting homes (constructed by Chinburg).

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
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.

Map Theme Legends

Zoning

March 23, 2026

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

RE: Trip Generation Letter
94 Langdon Street & 98 Cornwall Street
Proposed Multifamily Development

INTRODUCTION

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

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 = 1.98 Trips per 1,000 SF (LUC 180)
Existing Building = 3,000 SF (Assumed)
3,000/1,000 X 1.98 Trip Ends = **6 trips** (77% entering, 23% exiting)

Weekday PM Peak Hour of Generator = 2.18 Trips per 1,000 SF (LUC 180)
Existing Building = 3,000 SF (Assumed)
3,000/1,000 X 2.18 Trip Ends = **6 trips** (38% entering; 62% 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)

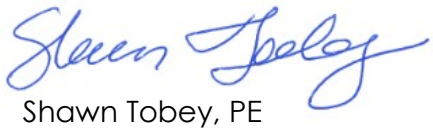
Weekday PM Peak Hour of Generator = 0.97 Trips per Dwelling Unit (LUC 210)
Dwelling Units = 3
3 X 0.75 Trip Ends = **3 trips** (63% entering; 37% exiting)

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

CONCLUSION

As demonstrated above, the proposed project will result in a reduced number of trips in both the Weekday AM and PM Peak hours therefore providing a betterment to the surrounding neighborhood as related to traffic.

Sincerely,
Haley Ward, Inc.



Shawn Tobey, PE
Southern Maine & New Hampshire Land Development Manager

Shawn Tobey

From: Eversource Do Not Reply <noreply@notifications.eversource.com>
Sent: Friday, March 13, 2026 9:48 AM
To: Shawn Tobey
Subject: Work Request Submission Confirmation #25249494

Follow Up Flag: Follow up
Flag Status: Flagged

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

EVERSOURCE

Work Request Submission Confirmation

Work Request Type:
Install Permanent Service Underground- Small (<=400A)

Work Request Number:
25249494

Job Location:
94 LANGDON STREET

Dear Valued Customer,

We received your work request with the following information:

* Request Type: Install Permanent Service Underground- Small (<=400A)
* Request Number: 25249494
* Work Requested Date: 2026-03-13
* Job Location: 94 LANGDON STREET
* Contractor Name: Shawn Tobey
* Contractor Phone Number: 6033912118

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.

March 13, 2026

Shawn Tobey
Haley Ward
200 Griffin Rd Unit 14
Portsmouth NH 03801

RE: Natural Gas Availability to 94 Langdon St Portsmouth NH

Dear Shawn,

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

Unitil hereby confirms natural gas service will be available to 94 Langdon St, Portsmouth NH to serve a three unit residential project.

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, 94 LANGDON ST, PORTSMOUTH, NH

LOCATION AND TRANSPORTATION

Walkable Destinations: 94 Langdon Street abuts the railroad tracks in the vicinity of North Mill Pond. It is very walkable to downtown Portsmouth.

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

Ride sharing: Although this location is not serviced directly by public transportation, it enjoys easy access and is a quickly identifiable address for cabs or shared transportation services.

SITE

Stormwater: The existing site has no stormwater infrastructure. Runoff currently sheet flows across the existing parking area and offsite to the north or into Langdon Street. The proposed development will include a significant reduction in impervious cover and the installation of four new deep sump catch basins to coney the stormwater into the city system in Langdon Street.

Reuse: The existing site is predominantly pavement with commercial buildings for an electrical contractor. The proposed project will redevelop the site into a new residential development that is 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 MRB zone. A frontage variance was issued by the ZBA on 17MAR2026. This parcel has 88' of frontage whereas zoning requires 100'.

UTILITIES AND FIRE PROTECTION

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

Sewer: Tying into to public sewer in Langdon St

Electric: Will need to relocate the utility pole. Electric within site will be UG (likely 1 pad mount transformer will suffice).

Gas or heating oil: Propane or natural gas, if available.

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: Very substantial windows and doors are state-of-the-art and shall have a U-value below .30, meeting or exceeding energy-star requirements. All Chinburg Builders windows exceed **Energy Star 7** window requirements for this region.

Sherlock

387.124.v26 GL (2/3/2026) - R2

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Art Form Architecture, LLC

603-431-9559

Dear Builders and Home Buyers,

In addition to our Terms and Conditions (the "Terms"), please be aware of the following:

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.

Art Form Architecture ("Art Form") requires that our home designs be built substantially as designed. Art Form will not be obligated by or liable for use of this design with markups as part of any builder agreement. While we attempt to accommodate where possible and reasonable, and where the changes do not denigrate our design, any and all changes to Drawings must be approved in writing by Art Form. It is recommended that you have your Drawing updated by Art Form prior to attaching any Drawing to any builder agreement. Art Form shall not be responsible for the misuse of or unauthorized alterations to any of its Drawings.

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).

2/3/2026

Sherlock

387.124.v26 GL (2/3/2026) - R2

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603-431-9559

Alt Window/Garage Door/Railing Color Option

2/3/2026

Sherlock

387.124.v26 GL (2/3/2026) - R2

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Alt Window/Garage Door/Railing Color Option

2/3/2026

Sherlock

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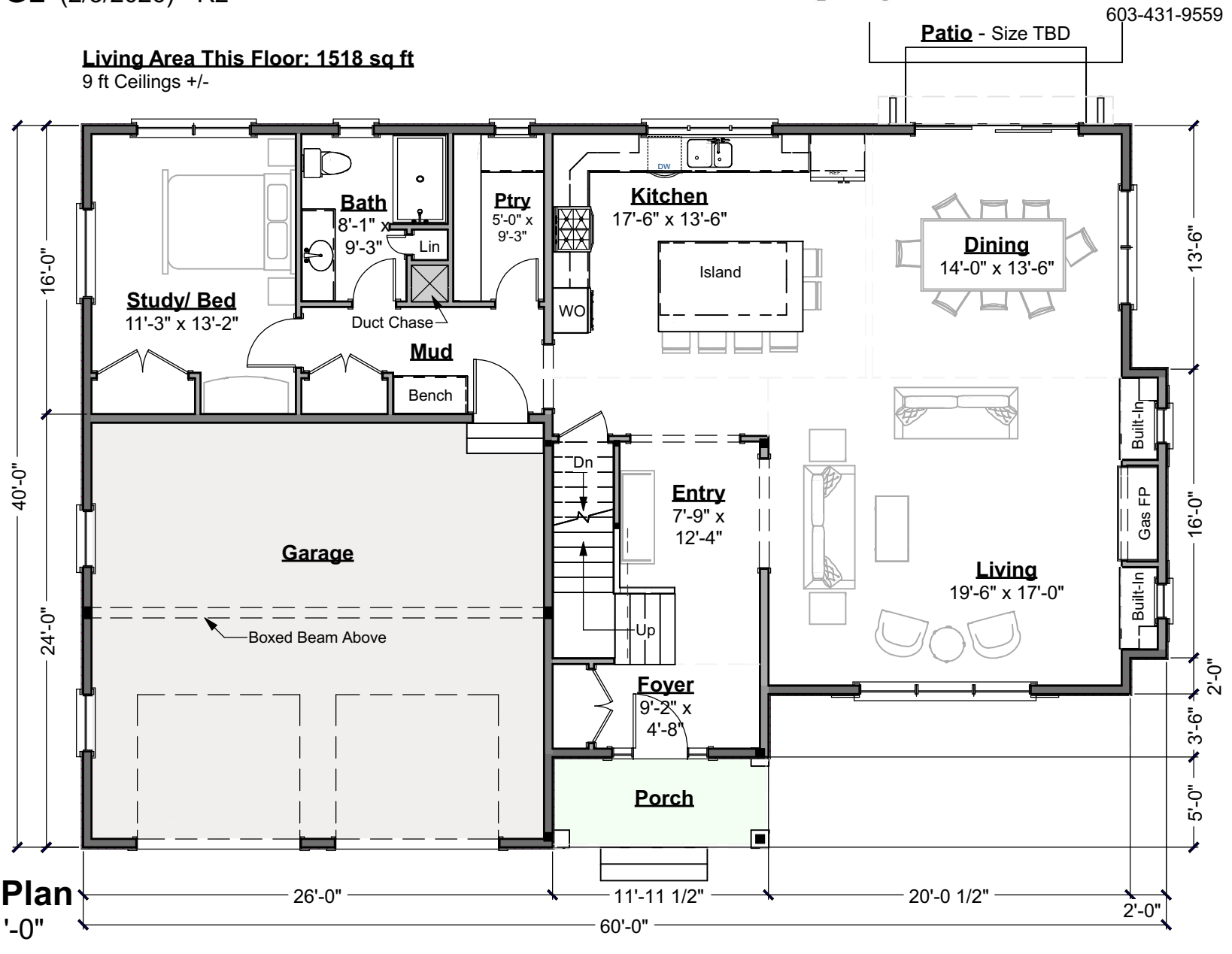
Living Area This Floor: 1518 sq ft
9 ft Ceilings +/-



First Floor Plan

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

2/3/2026

Sherlock

387.124.v26 GL (2/3/2026) - R2

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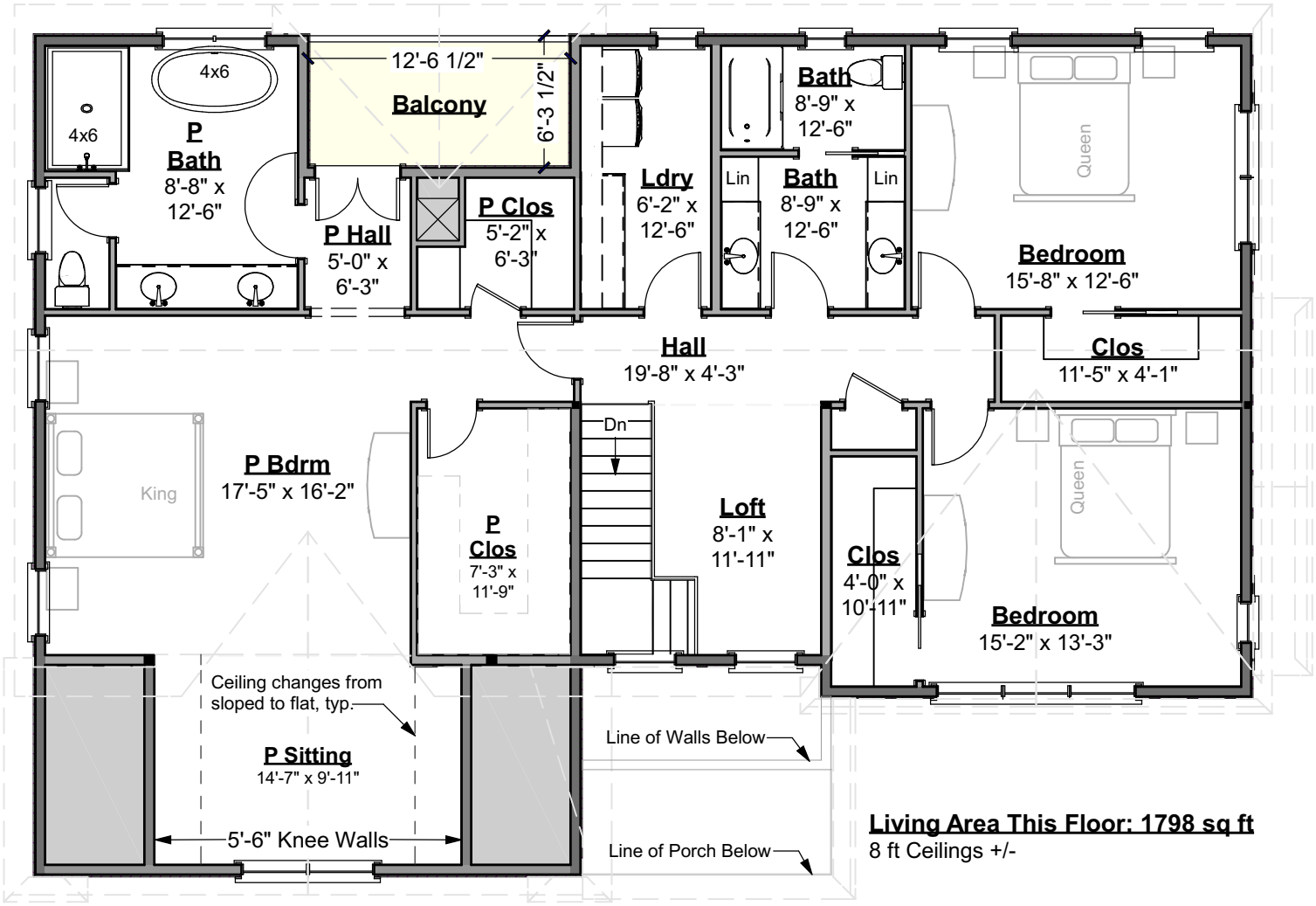

Living Area This Floor: 1798 sq ft

8 ft Ceilings +/-

Second Floor Plan

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

2/3/2026

Sherlock

387.124.v26 GL (2/3/2026) - R2

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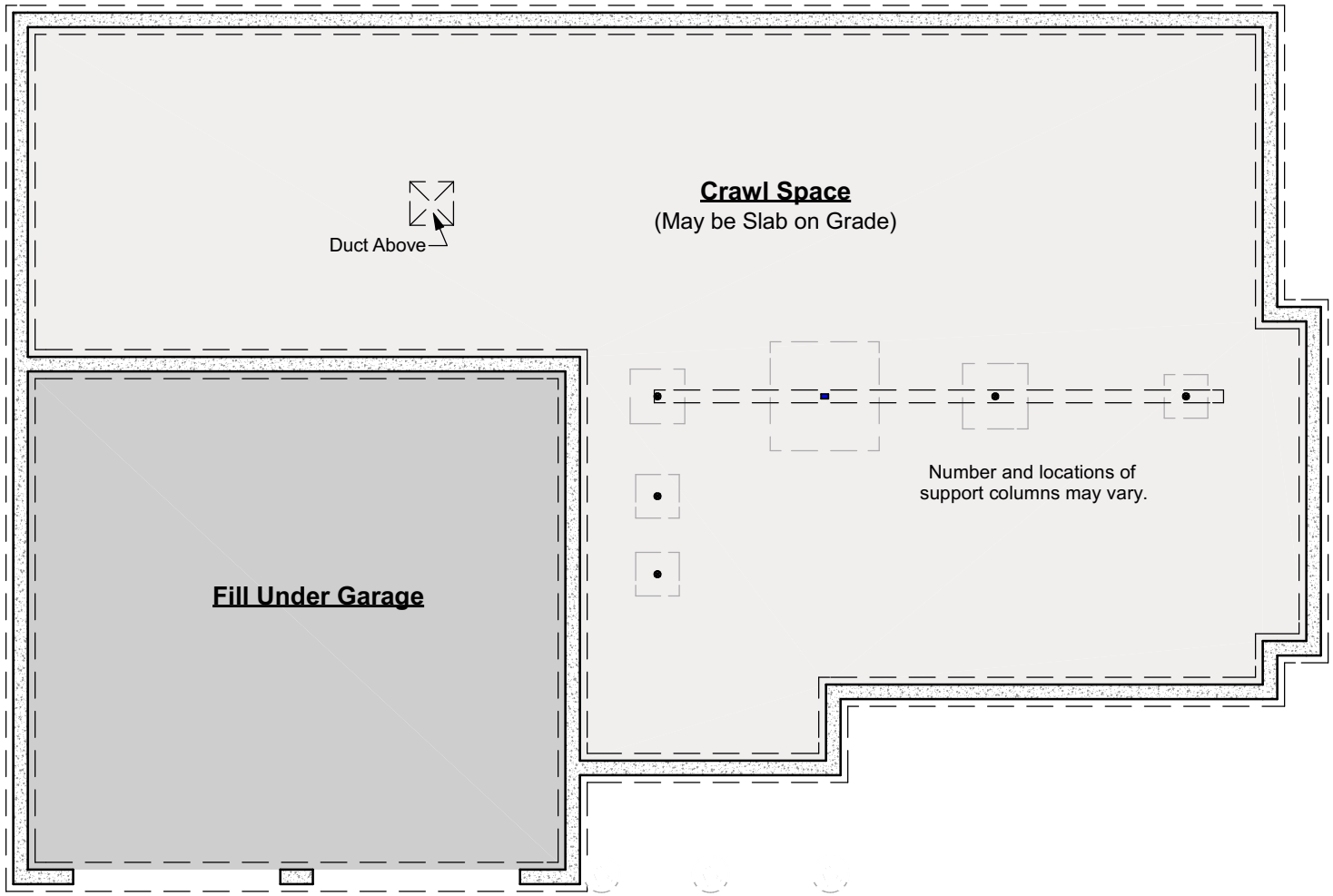

Foundation Plan

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

2/3/2026

Sherlock

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Front Elevation

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

2/3/2026

Sherlock

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Right Elevation

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

2/3/2026

Sherlock

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Rear Elevation

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Left Elevation

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

2/4/2026

Elsa

1221.124.v2 GL (2/4/2026) - R2

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2/4/2026

Elsa

1221.124.v2 GL (2/4/2026) - R2

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Alt Window/Garage Door/Railing Color Option

2/4/2026

Elsa

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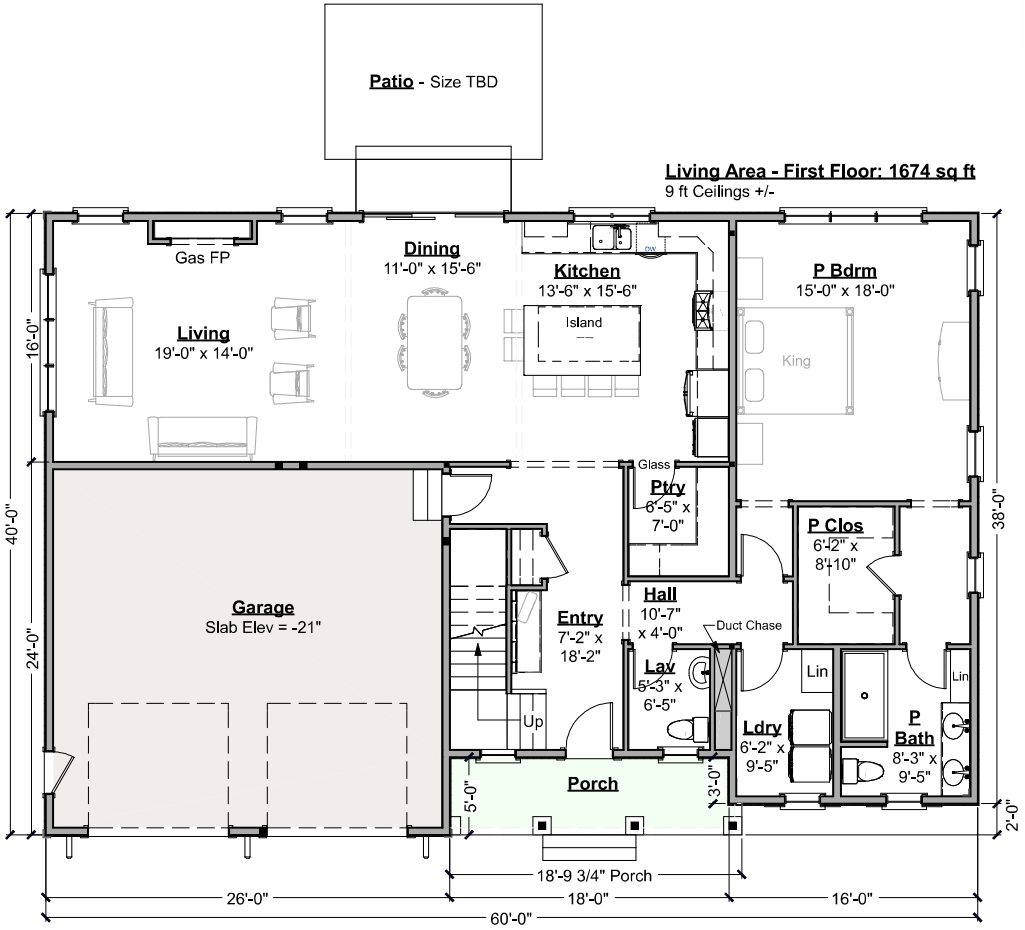

First Floor Plan

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

2/4/2026

Elsa

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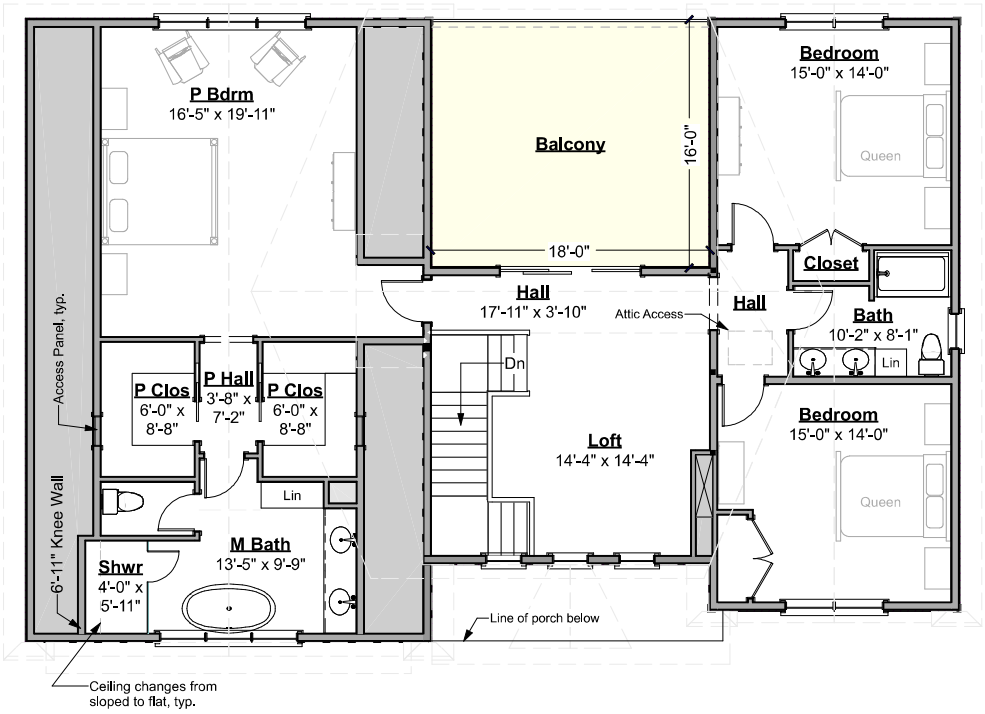
Living Area - Second Floor: 1684 sq ft

8 ft Ceilings +/-



Second Floor Plan

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

2/4/2026

Elsa

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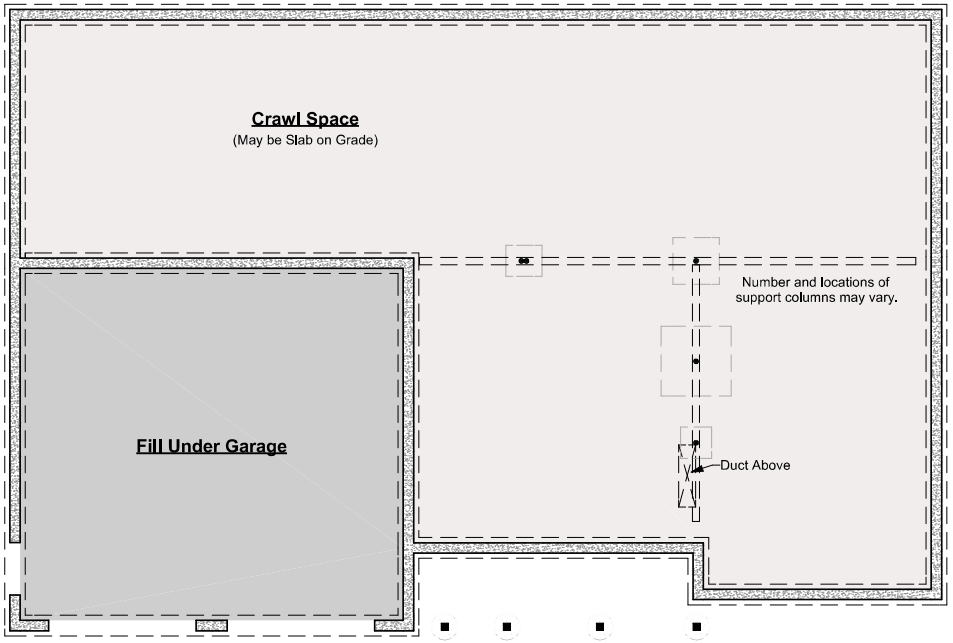

Foundation Plan

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

2/4/2026

Elsa

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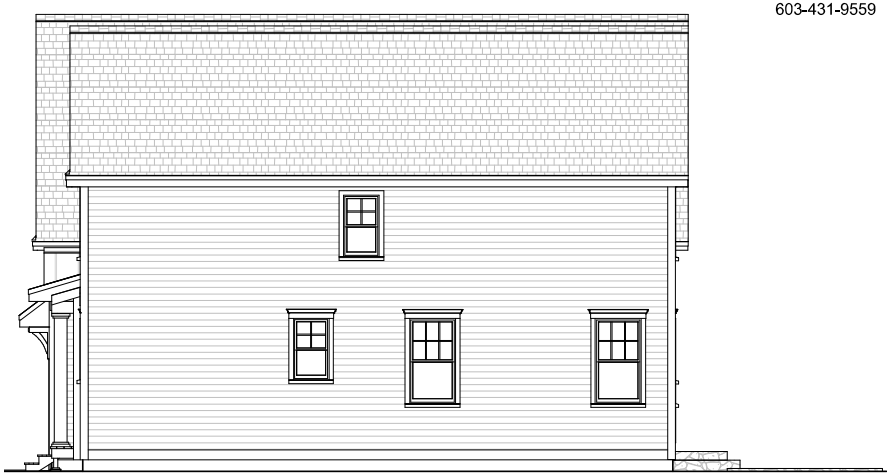
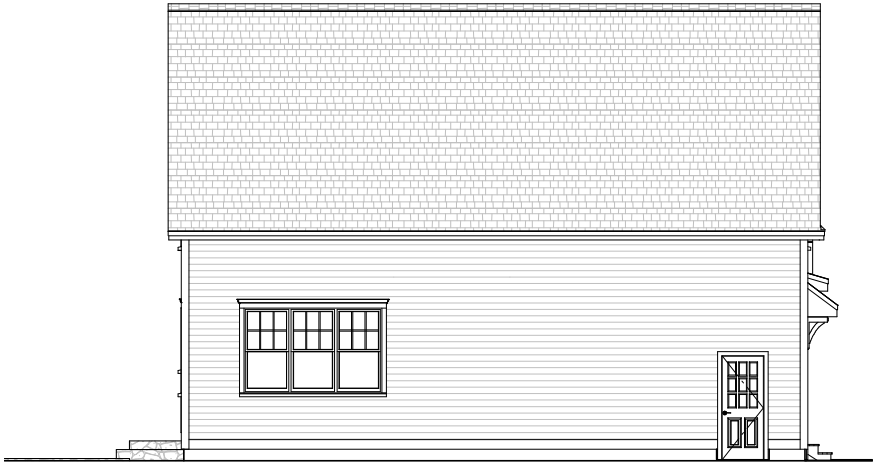
Front



Right

Rear



Left

Elevations

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

2/10/2026

Carter

1016.124.v2 GR (2/10/2026)

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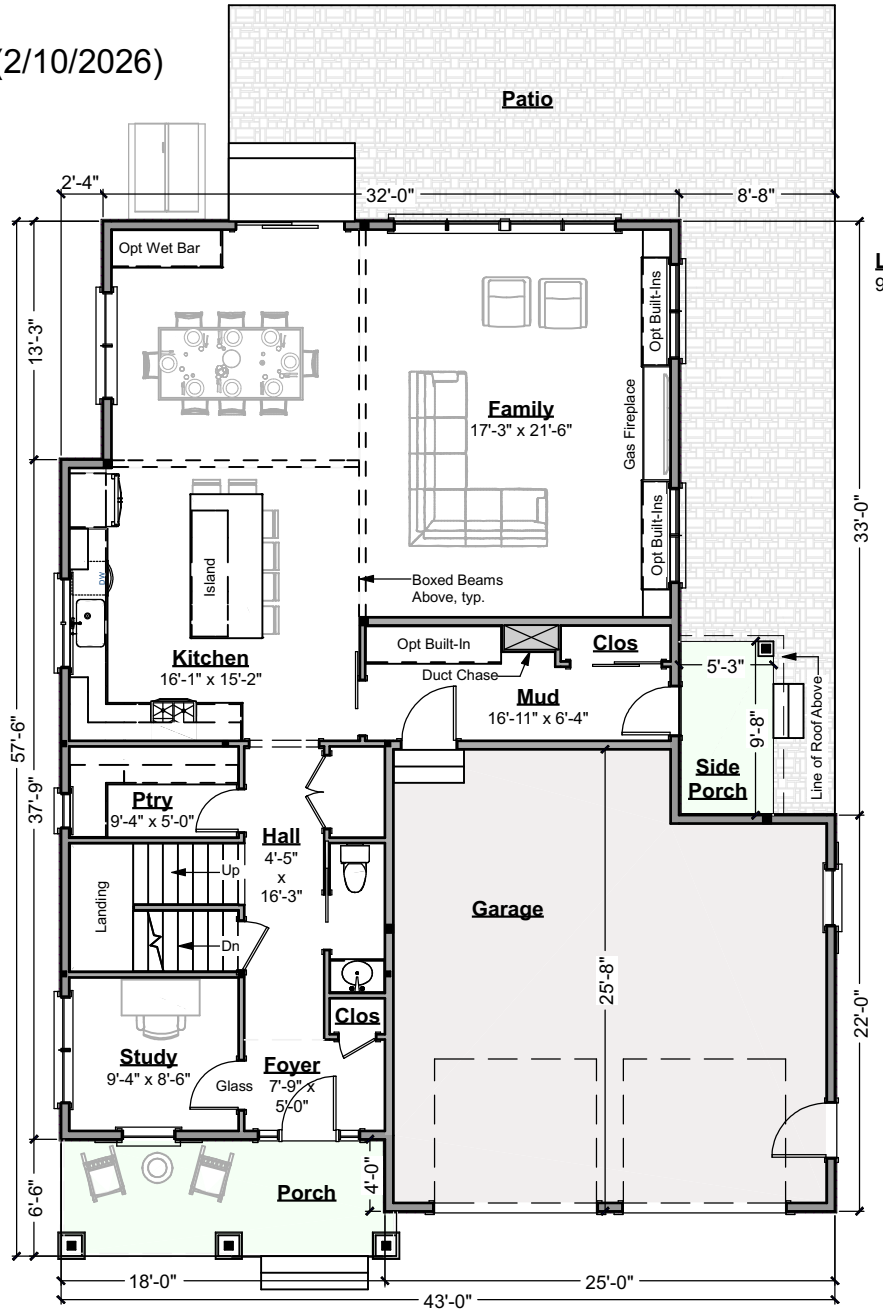

Living Area this Floor: 1376 sq ft

9 ft Ceilings +/-, unless noted otherwise

First Floor Plan

Scale: 3/32" = 1'-0"

2/10/2026

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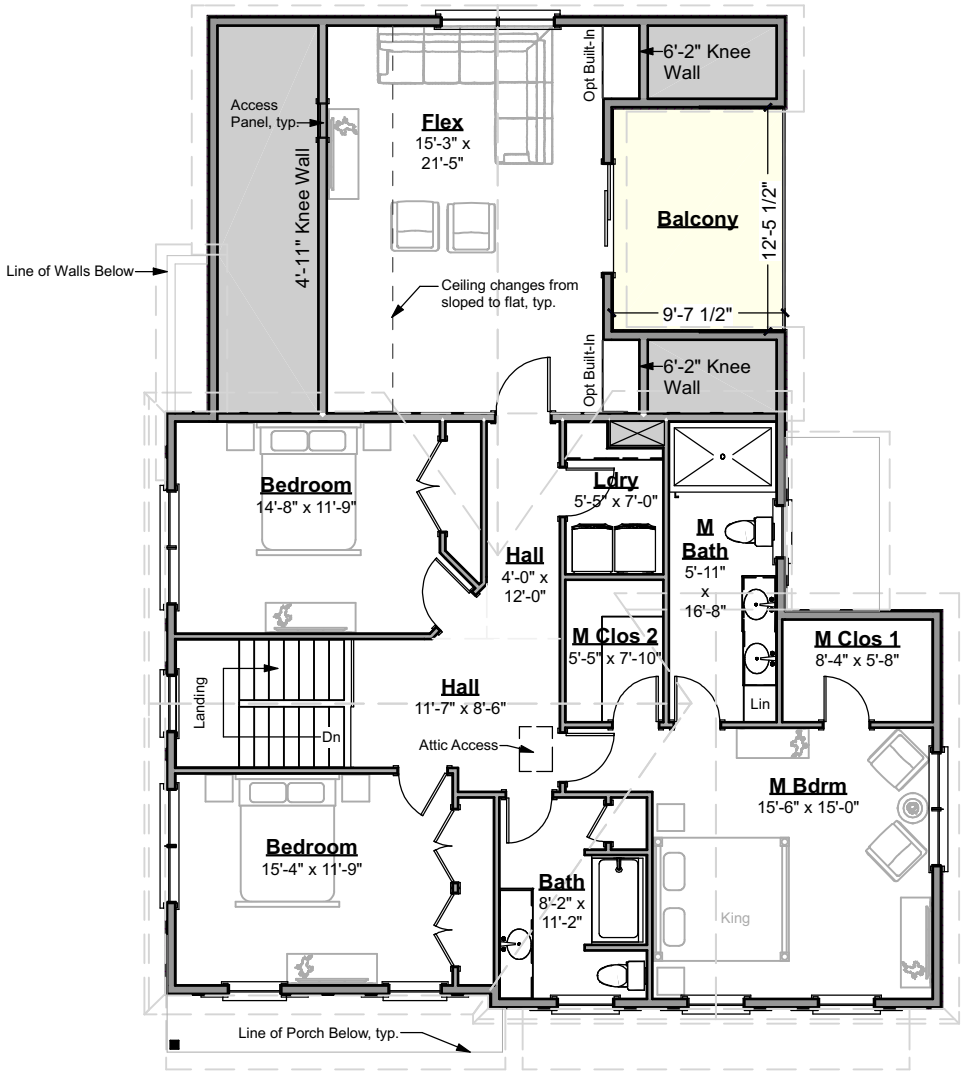
Living Area this Floor: 1688 sq ft

8 ft Ceilings +/-



Second Floor Plan

Scale: 3/32" = 1'-0"

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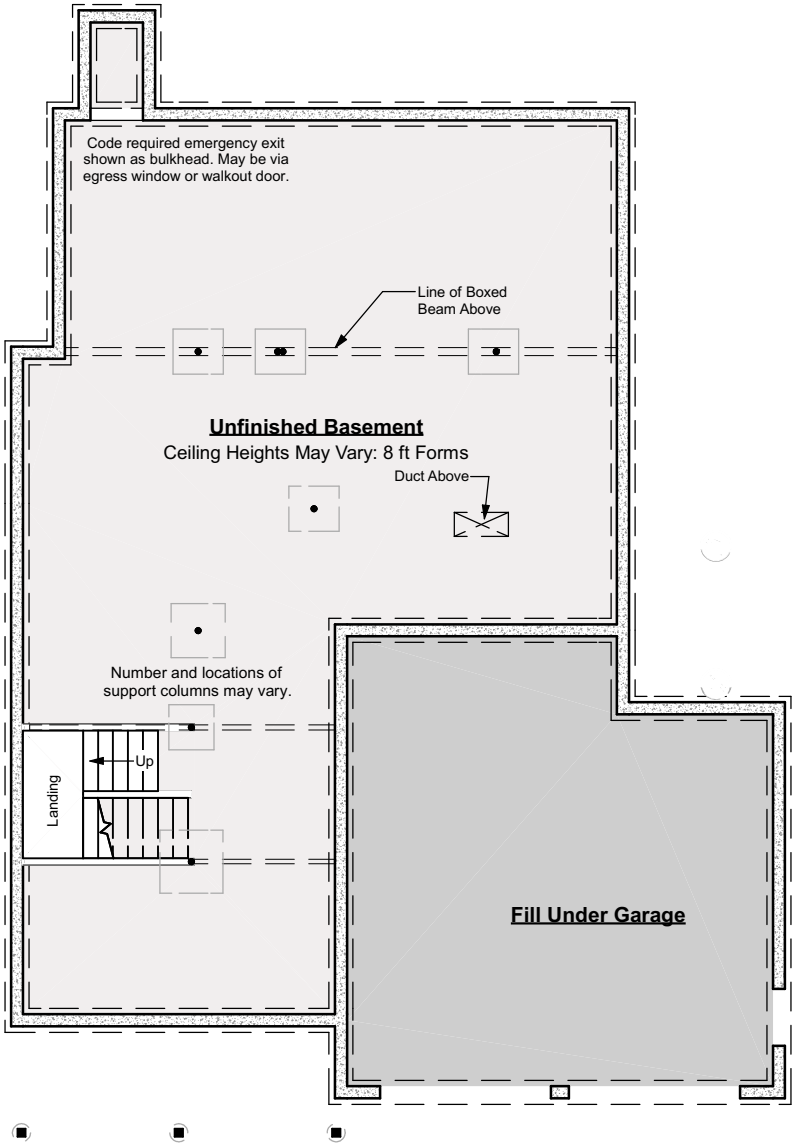

Foundation Plan

Scale: 3/32" = 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"

HALEY WARD

STORMWATER MANAGEMENT AND EROSION CONTROL PLAN

TO THE CITY OF PORTSMOUTH
FOR 94 LANGDON ST & 98 CORNWALL ST
Map 139, Lots 1 & 8 | Portsmouth, NH

APPLICANT:
Chinburg Development
3 Penstock Way
Newmarket, NH 03847

March 23, 2026
JN: 5010220.004

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 the intersection 94 Langdon Street and 98 Cornwall Street in Portsmouth, NH. The site is shown on the City of Portsmouth Assessor's Tax Map 139 as Lots 1 and 8. The total size of the existing lot is approximately 25,107 square feet.

The development will merge the two parcels, demolish the existing building, remove the existing parking, and construct three single-family homes in a condominium association, with associated landscaping, utilities, and driveways. The new buildings will be serviced by public water and sewer. The development has been designed to ensure that there will be no 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.

The site is bound to the north by a railroad corridor, to the east by Langdon Street, to the south by residential development and to the west by commercial development. The site is predominantly developed with two commercial buildings and associated pavement. The site has no existing stormwater infrastructure. Runoff currently sheet flows across the existing parking area and offsite to the north or into Langdon Street. The proposed development will include a significant reduction in impervious cover and the installation of four new deep sump catch basins to coney the stormwater into the city system in Langdon Street.

This report includes information about the existing site necessary to analyze stormwater runoff. The report includes maps of pre- development and post-development 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.

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

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, 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
699	Urban land
799	Urban land-Canton complex (3-15% slopes)

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

The lot is relatively flat and generally slopes towards the railroad and Langdon Street. Elevations on the site range from 11 to 18 feet above mean sea level. The western portion of the site drains towards the railroad, and the eastern portion of the site drains west into the city stormwater system located in Langdon Street.

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 subcatchment watershed basins based on localized topography and discharge locations. A Pre-Development Hydrology map and HydroCAD model results have been provided.

Subcatchment 1 represents the western half of the site and includes a mix of paved parking and grass area. This area drains northwest and onto the railroad property. (Summation Point 1.)

Subcatchment 2 represents the eastern half of the site and includes pavement and buildings. This area drains offsite to the east and into the city stormwater system located in Langdon Street. (Summation Point 2.)

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 subcatchment basins. A Post-Development Hydrology map and HydroCAD model results have been provided.

Subcatchment 1 continues to represent the reduced portion of the site draining to the railroad property.

Subcatchment 2 represents the proposed dwellings and driveway that drains into the Langdon Street stormwater system.

RUNOFF COMPARISON

Table 1: Pre-Development to Post-Development Comparison

	Q2 (CFS)		Q10 (CFS)		Q50 (CFS)		
Design Point	**Pre**	**Post**	**Pre**	**Post**	**Pre**	**Post**	**Description**
SP1	0.53	0.29	0.92	0.61	1.50	1.13	Offsite Flow to the North
SP2	1.49	1.34	2.27	2.19	3.45	3.45	Offsite Flow to Langdon Street

As shown in Table 1, post-development runoff rates are reduced to 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 significant reduction in impervious cover, the post- development runoff rates are reduced below the pre-development runoff rates. The addition of deep sump catch basins will allow for sediment capture and pre-treatment of runoff providing an overall betterment of the site compared to the current developed conditions.

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. Comprehensive Environmental Inc. and New Hampshire Department of Environmental Services. New Hampshire Stormwater Manual (Volumes 1, 2 and 3), December 2008 (Revision 1.0).
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 copyright 2013.

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	43.075 degrees North
Longitude	70.766 degrees West
Elevation	0 feet
Date/Time	Tue Mar 17 2026 14:41:45 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	2.81	3.22	3.94	4.55	**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	3.21	3.57	**2yr**	2.84	3.43	3.94	4.68	5.33	**2yr**
5yr	0.37	0.58	0.73	0.98	1.25	1.61	**5yr**	1.08	1.47	1.89	2.43	3.14	4.07	4.58	**5yr**	3.60	4.40	5.04	5.94	6.70	**5yr**
10yr	0.41	0.65	0.82	1.12	1.45	1.89	**10yr**	1.25	1.73	2.23	2.89	3.75	4.87	5.53	**10yr**	4.31	5.32	6.09	7.11	7.98	**10yr**
25yr	0.48	0.76	0.97	1.34	1.77	2.34	**25yr**	1.53	2.14	2.78	3.63	4.74	6.17	7.10	**25yr**	5.46	6.83	7.80	9.03	10.05	**25yr**
50yr	0.54	0.86	1.10	1.54	2.07	2.76	**50yr**	1.79	2.53	3.29	4.32	5.66	7.39	8.58	**50yr**	6.54	8.25	9.42	10.81	11.98	**50yr**
100yr	0.60	0.97	1.25	1.77	2.42	3.26	**100yr**	2.09	2.98	3.90	5.16	6.77	8.85	10.38	**100yr**	7.83	9.98	11.38	12.96	14.27	**100yr**
200yr	0.67	1.10	1.43	2.05	2.82	3.83	**200yr**	2.44	3.52	4.62	6.13	8.08	10.61	12.55	**200yr**	9.39	12.07	13.76	15.55	17.02	**200yr**
500yr	0.80	1.31	1.71	2.48	3.48	4.76	**500yr**	3.00	4.38	5.76	7.70	10.22	13.48	16.14	**500yr**	11.93	15.52	17.67	19.78	21.49	**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	0.72	0.88	**1yr**	0.63	0.86	0.92	1.33	1.68	2.24	2.49	**1yr**	1.98	2.40	2.87	3.18	3.90	**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	3.06	3.45	**2yr**	2.71	3.32	3.82	4.55	5.08	**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	3.79	4.19	**5yr**	3.35	4.03	4.72	5.53	6.24	**5yr**
10yr	0.39	0.59	0.73	1.03	1.33	1.60	**10yr**	1.14	1.56	1.80	2.39	3.06	4.37	4.86	**10yr**	3.87	4.67	5.44	6.41	7.20	**10yr**
25yr	0.44	0.67	0.83	1.19	1.56	1.90	**25yr**	1.35	1.86	2.10	2.75	3.53	4.72	5.89	**25yr**	4.18	5.66	6.65	7.79	8.68	**25yr**
50yr	0.48	0.73	0.91	1.31	1.76	2.17	**50yr**	1.52	2.12	2.35	3.07	3.93	5.33	6.80	**50yr**	4.72	6.54	7.72	9.04	10.02	**50yr**
100yr	0.54	0.81	1.01	1.47	2.01	2.47	**100yr**	1.73	2.41	2.63	3.41	4.35	6.00	7.85	**100yr**	5.31	7.55	8.98	10.51	11.56	**100yr**
200yr	0.59	0.89	1.13	1.63	2.28	2.81	**200yr**	1.96	2.75	2.93	3.78	4.79	6.72	9.06	**200yr**	5.95	8.71	10.42	12.22	13.37	**200yr**
500yr	0.68	1.02	1.31	1.90	2.71	3.36	**500yr**	2.34	3.29	3.41	4.31	5.45	7.82	10.94	**500yr**	6.92	10.52	12.69	14.96	16.19	**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	3.16	**1yr**	2.64	3.04	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	3.56	4.09	4.84	5.63	**2yr**
5yr	0.40	0.62	0.77	1.05	1.34	1.62	**5yr**	1.15	1.58	1.88	2.53	3.25	4.34	4.96	**5yr**	3.84	4.77	5.38	6.37	7.16	**5yr**
10yr	0.47	0.72	0.89	1.25	1.61	1.98	**10yr**	1.39	1.93	2.28	3.11	3.95	5.34	6.20	**10yr**	4.72	5.96	6.82	7.84	8.75	**10yr**
25yr	0.58	0.88	1.09	1.56	2.05	2.57	**25yr**	1.77	2.51	2.95	4.07	5.15	7.78	8.34	**25yr**	6.88	8.02	9.15	10.34	11.41	**25yr**
50yr	0.67	1.02	1.27	1.83	2.46	3.13	**50yr**	2.12	3.06	3.60	5.00	6.32	9.74	10.46	**50yr**	8.62	10.06	11.44	12.72	13.96	**50yr**
100yr	0.79	1.19	1.49	2.16	2.96	3.81	**100yr**	2.55	3.72	4.37	6.16	7.76	12.18	13.10	**100yr**	10.78	12.60	14.31	15.69	17.09	**100yr**
200yr	0.92	1.39	1.76	2.55	3.56	4.65	**200yr**	3.07	4.55	5.34	7.58	9.54	15.28	16.44	**200yr**	13.53	15.81	17.92	19.35	20.92	**200yr**
500yr	1.15	1.71	2.19	3.19	4.53	6.04	**500yr**	3.91	5.90	6.93	10.02	12.56	20.65	22.20	**500yr**	18.27	21.34	24.13	25.51	27.34	**500yr**

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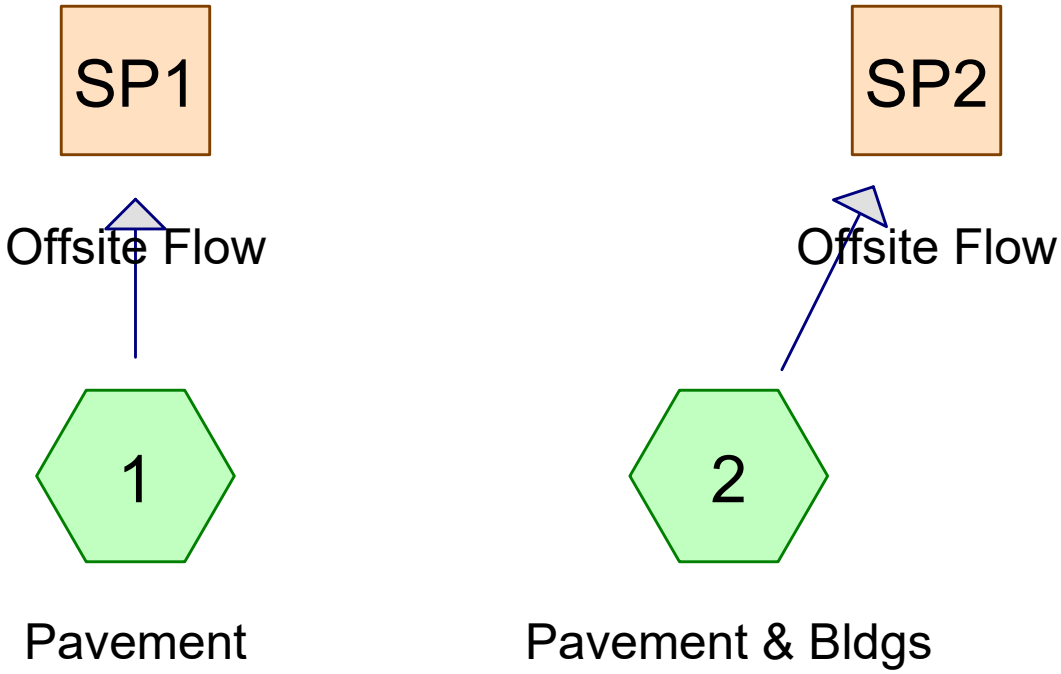
Northeast Regional Climate Center



Subcat Reach Pond Link

Routing Diagram for 5010220.004-Pre
Prepared by Haley Ward, Printed 3/20/2026
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Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
4,135	74	>75% Grass cover, Good, HSG C (1, 2)
1,000	96	Gravel surface, HSG C (2)
21,125	98	Paved parking, HSG C (1, 2)

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
26,260	HSG C	1, 2
0	HSG D	
0	Other	

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

Subcatchment1: Pavement Runoff Area=8,390 sf 53.99% Impervious Runoff Depth>2.36"
Tc=5.0 min CN=87 Runoff=0.53 cfs 1,651 cf

Subcatchment2: Pavement & Bldgs Runoff Area=17,870 sf 92.87% Impervious Runoff Depth>3.46"
Tc=5.0 min CN=98 Runoff=1.49 cfs 5,159 cf

Reach SP1: Offsite Flow Inflow=0.53 cfs 1,651 cf
Outflow=0.53 cfs 1,651 cf

Reach SP2: Offsite Flow Inflow=1.49 cfs 5,159 cf
Outflow=1.49 cfs 5,159 cf

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

Subcatchment1: Pavement Runoff Area=8,390 sf 53.99% Impervious Runoff Depth>4.14"
Tc=5.0 min CN=87 Runoff=0.92 cfs 2,896 cf

Subcatchment2: Pavement & Bldgs Runoff Area=17,870 sf 92.87% Impervious Runoff Depth>5.37"
Tc=5.0 min CN=98 Runoff=2.27 cfs 7,997 cf

Reach SP1: Offsite Flow Inflow=0.92 cfs 2,896 cf
Outflow=0.92 cfs 2,896 cf

Reach SP2: Offsite Flow Inflow=2.27 cfs 7,997 cf
Outflow=2.27 cfs 7,997 cf

Summary for Subcatchment 1: Pavement

Runoff = 0.92 cfs @ 12.07 hrs, Volume= 2,896 cf, Depth> 4.14"
Routed to Reach SP1 : Offsite Flow

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=5.61"

Area (sf)	CN	Description
4,530	98	Paved parking, HSG C
3,860	74	>75% Grass cover, Good, HSG C
8,390	87	Weighted Average
3,860		46.01% Pervious Area
4,530		53.99% Impervious Area

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

Summary for Subcatchment 2: Pavement & Bldgs

Runoff = 2.27 cfs @ 12.07 hrs, Volume= 7,997 cf, Depth> 5.37"
Routed to Reach SP2 : Offsite Flow

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=5.61"

Area (sf)	CN	Description
275	74	>75% Grass cover, Good, HSG C
1,000	96	Gravel surface, HSG C
16,595	98	Paved parking, HSG C
17,870	98	Weighted Average
1,275		7.13% Pervious Area
16,595		92.87% Impervious Area

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

Summary for Reach SP1: Offsite Flow

Inflow Area = 8,390 sf, 53.99% Impervious, Inflow Depth > 4.14" for 10-Yr event
Inflow = 0.92 cfs @ 12.07 hrs, Volume= 2,896 cf
Outflow = 0.92 cfs @ 12.07 hrs, Volume= 2,896 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: Offsite Flow

Inflow Area = 17,870 sf, 92.87% Impervious, Inflow Depth > 5.37" for 10-Yr event
Inflow = 2.27 cfs @ 12.07 hrs, Volume= 7,997 cf
Outflow = 2.27 cfs @ 12.07 hrs, Volume= 7,997 cf, Atten= 0%, Lag= 0.0 min

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

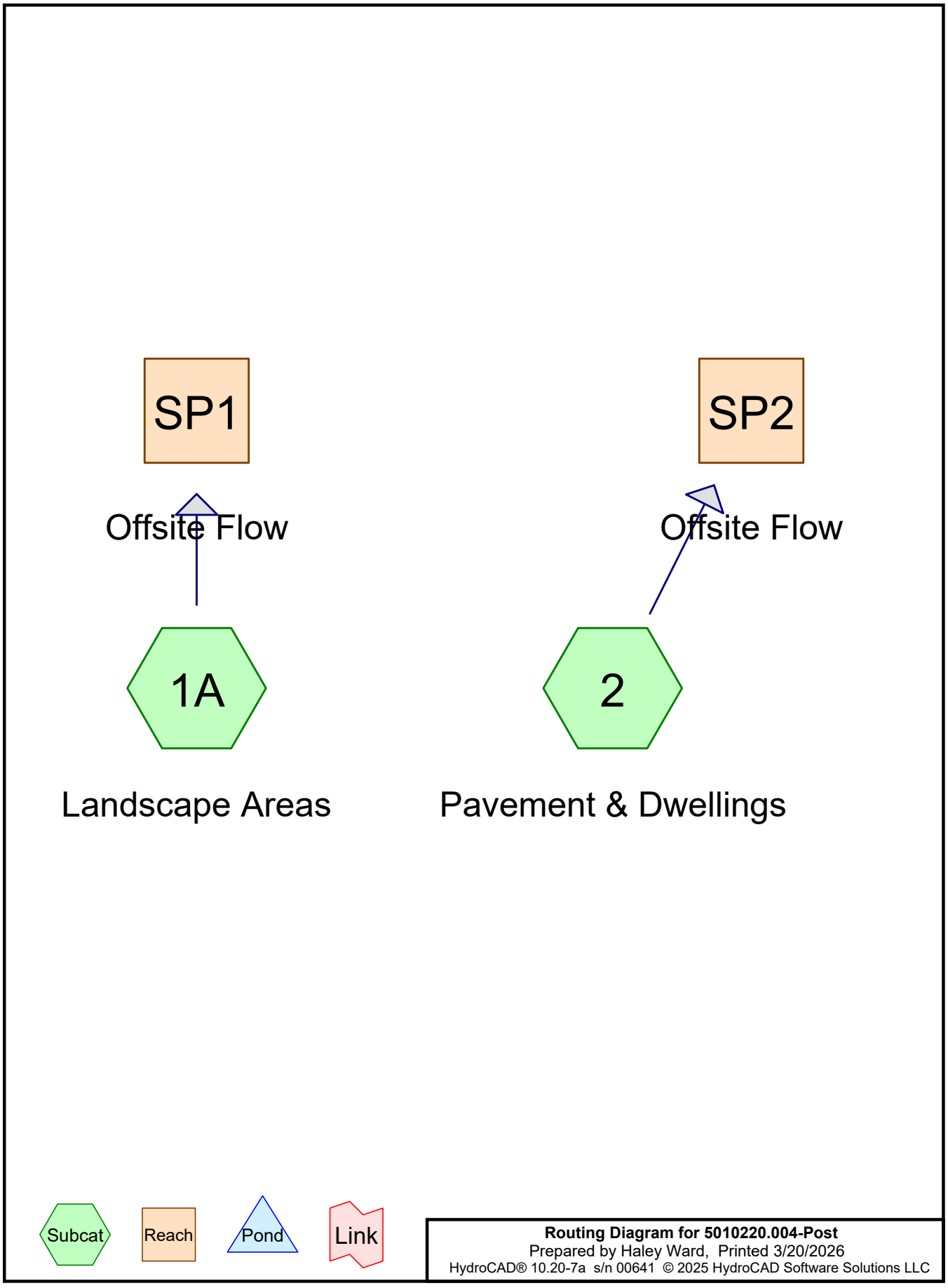
Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Pavement Runoff Area=8,390 sf 53.99% Impervious Runoff Depth>6.94"
Tc=5.0 min CN=87 Runoff=1.50 cfs 4,854 cf

Subcatchment2: Pavement & Bldgs Runoff Area=17,870 sf 92.87% Impervious Runoff Depth>8.27"
Tc=5.0 min CN=98 Runoff=3.45 cfs 12,310 cf

Reach SP1: Offsite Flow Inflow=1.50 cfs 4,854 cf
Outflow=1.50 cfs 4,854 cf

Reach SP2: Offsite Flow Inflow=3.45 cfs 12,310 cf
Outflow=3.45 cfs 12,310 cf



Routing Diagram for 5010220.004-Post
Prepared by Haley Ward, Printed 3/20/2026
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Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
12,725	74	>75% Grass cover, Good, HSG C (1A, 2)
13,535	98	Paved parking, HSG C (1A, 2)

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
26,260	HSG C	1A, 2
0	HSG D	
0	Other	

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: Landscape Areas Runoff Area=7,660 sf 4.44% Impervious Runoff Depth>1.44"
Tc=5.0 min CN=75 Runoff=0.29 cfs 917 cf

Subcatchment2: Pavement & Dwellings Runoff Area=18,600 sf 70.94% Impervious Runoff Depth>2.72"
Tc=5.0 min CN=91 Runoff=1.34 cfs 4,216 cf

Reach SP1: Offsite Flow Inflow=0.29 cfs 917 cf
Outflow=0.29 cfs 917 cf

Reach SP2: Offsite Flow Inflow=1.34 cfs 4,216 cf
Outflow=1.34 cfs 4,216 cf

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: Landscape Areas Runoff Area=7,660 sf 4.44% Impervious Runoff Depth>2.94"
Tc=5.0 min CN=75 Runoff=0.61 cfs 1,878 cf

Subcatchment2: Pavement & Dwellings Runoff Area=18,600 sf 70.94% Impervious Runoff Depth>4.56"
Tc=5.0 min CN=91 Runoff=2.19 cfs 7,074 cf

Reach SP1: Offsite Flow Inflow=0.61 cfs 1,878 cf
Outflow=0.61 cfs 1,878 cf

Reach SP2: Offsite Flow Inflow=2.19 cfs 7,074 cf
Outflow=2.19 cfs 7,074 cf

Summary for Subcatchment 1A: Landscape Areas

Runoff = 0.61 cfs @ 12.08 hrs, Volume= 1,878 cf, Depth> 2.94"
Routed to Reach SP1 : Offsite Flow

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=5.60"

Area (sf)	CN	Description
7,320	74	>75% Grass cover, Good, HSG C
340	98	Paved parking, HSG C
7,660	75	Weighted Average
7,320		95.56% Pervious Area
340		4.44% Impervious Area

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

Summary for Subcatchment 2: Pavement & Dwellings

Runoff = 2.19 cfs @ 12.07 hrs, Volume= 7,074 cf, Depth> 4.56"
Routed to Reach SP2 : Offsite Flow

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=5.60"

Area (sf)	CN	Description
5,405	74	>75% Grass cover, Good, HSG C
13,195	98	Paved parking, HSG C
18,600	91	Weighted Average
5,405		29.06% Pervious Area
13,195		70.94% Impervious Area

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

Summary for Reach SP1: Offsite Flow

Inflow Area = 7,660 sf, 4.44% Impervious, Inflow Depth > 2.94" for 10-Yr event
Inflow = 0.61 cfs @ 12.08 hrs, Volume= 1,878 cf
Outflow = 0.61 cfs @ 12.08 hrs, Volume= 1,878 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: Offsite Flow

Inflow Area = 18,600 sf, 70.94% Impervious, Inflow Depth > 4.56" for 10-Yr event
Inflow = 2.19 cfs @ 12.07 hrs, Volume= 7,074 cf
Outflow = 2.19 cfs @ 12.07 hrs, Volume= 7,074 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: Landscape Areas Runoff Area=7,660 sf 4.44% Impervious Runoff Depth>5.49"
Tc=5.0 min CN=75 Runoff=1.13 cfs 3,505 cf

Subcatchment2: Pavement & Dwellings Runoff Area=18,600 sf 70.94% Impervious Runoff Depth>7.41"
Tc=5.0 min CN=91 Runoff=3.45 cfs 11,493 cf

Reach SP1: Offsite Flow Inflow=1.13 cfs 3,505 cf
Outflow=1.13 cfs 3,505 cf

Reach SP2: Offsite Flow Inflow=3.45 cfs 11,493 cf
Outflow=3.45 cfs 11,493 cf

Soil Map—Rockingham County, New Hampshire

Map Scale: 1:669 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 5 10 20 30

Feet
0 30 60 120 180

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
699	Urban land	0.5	68.6%
799	Urban land-Canton complex, 3 to 15 percent slopes	0.2	31.4%
Totals for Area of Interest		**0.7**	**100.0%**

HALEY WARD

INSPECTION & LONG-TERM MAINTENANCE PLAN FOR RESIDENTIAL DEVELOPMENT

94 Langdon Street/98 Cornwall Street
PORTSMOUTH, NH

Introduction

The intent of this plan is to provide Chinburg Development (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 94 Langdon Street and 98 Cornwall Street. Specifically, the proposed roof Drip Strip Filter System and the proposed 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.

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.*

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	

STABILIZED CONSTRUCTION ENTRANCE CONSTRUCTION MAINTENANCE SHEET

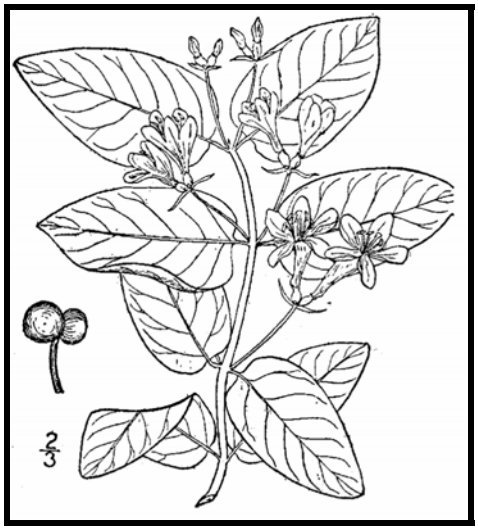
INSPECTION REQUIREMENTS		
ACTION TAKEN	**FREQUENCY**	**MAINTENANCE REQUIREMENTS**
ENTRANCE SURFACE *-Check for sediment accumulation/clogging of stone* *-Check Vegetative filter strips*	After heavy rains, as necessary	*-Top dress pad with new stone.* *-Replace stone completely if completely clogged.*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

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	

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

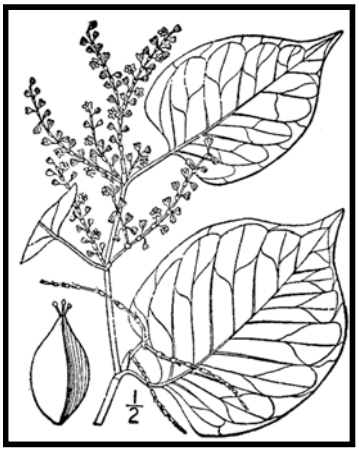
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

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
 </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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CHINBURG DEVELOPMENT
PROPOSED MULTIFAMILY DEVELOPMENT

94 LANGDON STREET & 98 CORNWALL STREET, 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

LANDSCAPE ARCHITECT
TERRA FIRMA LANDSCAPE ARCHITECTURE
ATTN: TERRENCE PARKER
163.A COURT STREET
PORTSMOUTH, NH 03801
T: 603.531.9109

OWNER
REGAN ELECTRIC CO., INC.
94 LANGDON STREET
PORTSMOUTH, NH 03801

APPLICANT
CHINBURG DEVELOPMENT
3 PENSTOCK WAY
NEWMARKET, NH 03857

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

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PLANS BY TERRA FIRMA LANDSCAPE ARCHITECTURE

L-1	LANDSCAPE PLAN
L-2	LANDSCAPE DETAILS

PERMITS & APPROVALS	PERMIT #	DATE
CITY OF PORTSMOUTH TAC REVIEW	LU-25-175	04/07/26
CITY OF PORTSMOUTH SITE PLAN REVIEW	LU-25-175	PENDING
CITY OF PORTSMOUTH ZONING BOARD	LU-25-175	03/17/26
NHDES SHORELAND PERMIT	TBD	PENDING

ISSUED FOR PERMITTING
APRIL 24, 2026

HALEY WARD
www.haleyward.com

STATE OF NEW HAMPSHIRE
SHAWN M. TOBEY No. 14121
LICENSED PROFESSIONAL ENGINEER
4/24/26

5010220.004

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 SITE FEATURES TO BE REMOVED.
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 MERGING TWO EXISTING LOTS AND DEMOLISHING THE EXISTING BUILDINGS TO CONSTRUCT THREE SINGLE FAMILY HOMES WITH A SHARED DRIVEWAY AND ASSOCIATED SITE IMPROVEMENTS.
2. THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 24,560 SQUARE FEET.
3. THE STORMWATER RUNOFF FROM THE SITE WILL FOLLOW EXISTING PATTERNS AND DISCHARGE OFFSITE TO THE ABUTTING PARCEL AND INTO THE CITY STORMWATER SYSTEM IN LANGDON 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 EARTHDIKES 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

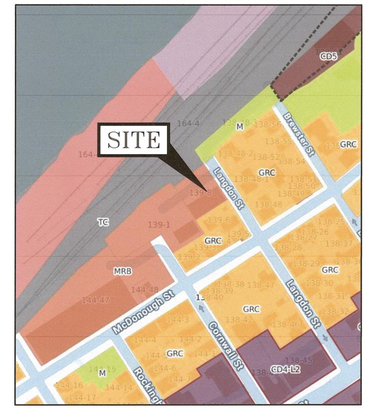
@	AT	MAX.	MAXIMUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MH	MANHOLE
APPROX.±	APPROXIMATELY	MIN	MINIMUM
BLDG	BUILDING	N	NORTHING
		NE	NORTHEAST
CL	CENTERLINE	NHDOT	NH DEPT. OF TRANSPORTATION
CB	CATCH BASIN	N.T.S.	NOT TO SCALE
CLR	CLEAR	NWT	NON WOVEN GEOTEXTILE
CMP	CORRUGATED METAL PIPE	OD	OUTSIDE 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	
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
2	2026.04.24	ISSUED FOR PERMITTING	CBA	SMT
1	2026.03.23	ISSUED FOR TAC	JHV	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 MULTIFAMILY DEVELOPMENT
94 LANGDON ST & 98 CORNWELL ST, PORTSMOUTH NH

TITLE

GENERAL NOTES, LEGEND & ABBREVIATIONS

STATE OF NEW HAMPSHIRE — SHAWN M. TOBEY No. 14121 — LICENSED PROFESSIONAL ENGINEER — 4/24/26

DATE	DECEMBER 2025
SCALE	NTS
DRAWN BY	JHV
DESIGNED BY	JHV
CHECKED BY	JRC
PROJECT No.	5010220.004
DRAWING No.	C001
REV.	2

FILE LOCATION: P:\NH\5010220-CN\NB\RG_BUILDER\5004-94 LANGDON ST - PORTSMOUTH-SMT302-CAD_FILES\04-CIVIL\5010220.004-C-CV.DWG, 2026.04.24, 11:40 AM

LEGEND:

DESCRIPTION	EXISTING
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
1234/123	DEED BOOK/PAGE
N/F	NOW OR FORMALLY
TYP.	TYPICAL
ELV.	ELEVATION
FF	FINISHED FLOOR
LSA	LANDSCAPE AREA
VGC	VERTICAL GRANITE CURB
MAP 21 LOT 8	21/8
BENCHMARK	
IRON ROD/PIPE FOUND	
SEWER MANHOLE	S
DRAIN MANHOLE	D
UTILITY POLE	
CATCH BASIN	CB
HYDRANT	
GATE VALVE	GGV WGV
GAS/WATER SHUTOFF	
BOLLARD	
FLAGPOLE	
TREES	
GAS/ELECTRIC METER	E G
AIR CONDITIONER	A
SIGN	
PROPERTY LINE	
APPROXIMATE EXTERIOR PROPERTY LINE	
EDGE OF PAVEMENT	
EDGE OF GRAVEL	
MINOR FOOT CONTOUR	98
MAJOR FOOT CONTOUR	100
GAS LINE	GAS GAS
WATER LINE	WL WL
STORM DRAIN LINE	SD SD
SANITARY SEWER LINE	SS SS
OVERHEAD UTILITY LINE	
UNDERGROUND ELECTRIC LINE	UGE UGE

PLAN REFERENCES:

1) LOT LINE REVISION PLAN FOR JOHN AHLGREN, PETER HAPPNY AND BOSTON AND MAINE CORPORATION, LANGDON STREET, MCDONOUGH STREET & BREWSTER STREET, PORTSMOUTH, NEW HAMPSHIRE. PREPARED BY DOUCET SURVEY INC., SCALE: 1"=20', DATED FEB. 13, 2002, R.C.R.D. D-31107.
2) SUBDIVISION PLAN TAX MAP 138 – LOT 48, FOR CHINBURG BUILDERS, INC. ON LAND OF JOHN L. AHLGREN & BESSIE PALMISCIANO, PREPARED BY AMBIT ENGINEERING, INC., SCALE: 1"=20', DATED: 5/7/13 (REV. 4), R.C.R.D. D-39552.
3) PLAN OF LAND COR. MCDONOUGH & CORNWALL STS. PORTSMOUTH, N.H. PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS, SCALE: 1"=10'. DATED: DEC. 1966. R.C.R.D. 1869/045.
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7) LAND IN PORTSMOUTH, N.H., BOSTON AND MAINE RAILROAD TO ALL STATE REALTY CORPORATION, DATED: FEBRUARY 1961, SCALE: 1"=50', RCRD C-160.
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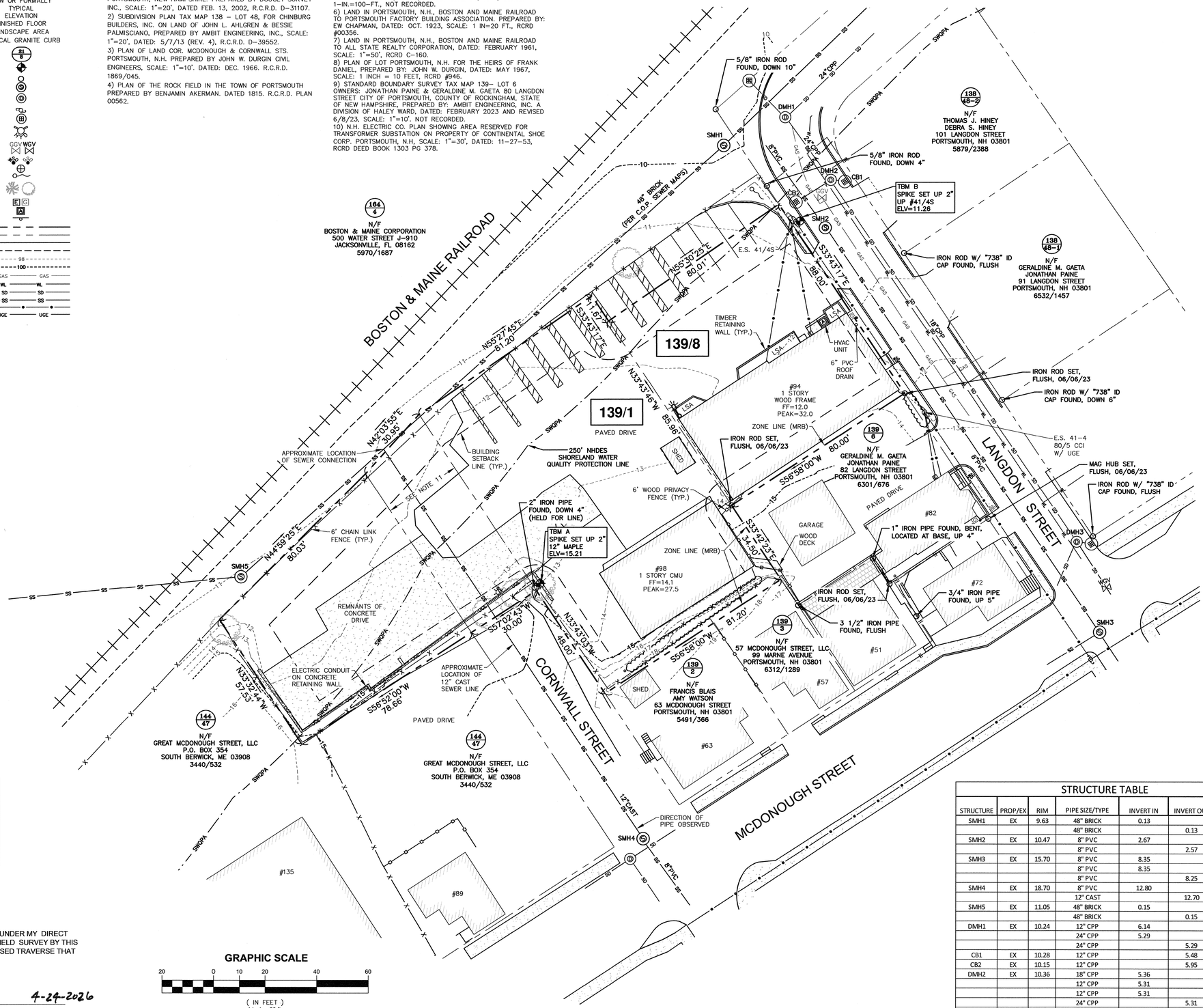
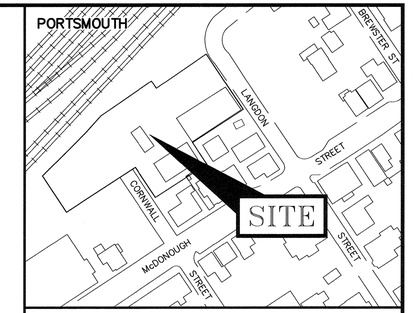
10) N.H. ELECTRIC CO. PLAN SHOWING AREA RESERVED FOR TRANSFORMER SUBSTATION ON PROPERTY OF CONTINENTAL SHOE CORP. PORTSMOUTH, N.H, SCALE: 1"=30', DATED: 11–27–53, RCRD DEED BOOK 1303 PG 378.





LOCATION MAP SCALE: 1" = 100'

NOTES:

1) PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 139 AS LOTS 1 & 8.

2) OWNER OF RECORD:
REGAN ELECTRIC COMPANY, INC.
94 LANGDON STREET
PORTSMOUTH, NH 03801
2956/1527 & 2960/1376

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

4) EXISTING LOT AREAS:

MAP 139 LOT 8	MAP 139 LOT 1	TOTAL
6,958 S.F.	18,149 S.F.	25,107 S.F
0.1597 ACRES	0.4166 ACRES	0.5764 ACRES

5) PARCEL IS LOCATED IN THE MIXED RESIDENTIAL BUSINESS (MRB) ZONING DISTRICT.

6) DIMENSIONAL REQUIREMENTS:

MIN. LOT AREA:		7,500 S.F.
FRONTAGE:		100 FEET
SETBACKS:	FRONT	5 FEET
	SIDE	10 FEET
	REAR	15 FEET
LOT DEPTH:		80 FEET
MAXIMUM STRUCTURE HEIGHT:		
	SLOPED ROOF	40 FEET
	FLAT ROOF	30 FEET
MAXIMUM BUILDING COVERAGE:		40%
MINIMUM OPEN SPACE:		25%

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE RESULTS OF AN EXISTING CONDITIONS SURVEY OF ASSESSOR'S MAP 139 LOTS 1 & 8 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) ABUTTER BUILDING LOCATIONS SHOWN HEREON SHOULD BE CONSIDERED APPROXIMATE.

11) IN 1965, THE CITY GRANTED A VARIANCE TO THE OWNER ALTERING THE LOT LINES OF 98 CORNWALL STREET, TAX MAP 19–1 TO THE CURRENT LOT LINES. THE CITY WILL RELEASE ANY AND ALL RIGHTS IT MAY HAVE IN THE PROPERTY IN EXCHANGE FOR A SEWER EASEMENT APPROXIMATELY 20 FEET WIDE LOCATED IN THE VIEW EASEMENT AS SHOWN ON THE PLAN. THE RELEASE AND EASEMENT ARE TO BE RECORDED AS A SUBSEQUENT CONDITION TO THE PLANNING BOARD APPROVAL.

STRUCTURE TABLE

STRUCTURE	PROP/EX	RIM	PIPE SIZE/TYPE	INVERT IN	INVERT OUT	DIRECTION
SMH1	EX	9.63	48" BRICK	0.13		SW
			48" BRICK		0.13	NE
SMH2	EX	10.47	8" PVC	2.67		SE
			8" PVC		2.57	NW
SMH3	EX	15.70	8" PVC	8.35		SW
			8" PVC	8.35		SE
			8" PVC		8.25	NW
SMH4	EX	18.70	8" PVC	12.80		SE
			12" CAST		12.70	NW
SMH5	EX	11.05	48" BRICK	0.15		SW
			48" BRICK		0.15	NE
DMH1	EX	10.24	12" CPP	6.14		NW
			24" CPP	5.29		SE
			24" CPP		5.29	NE
CB1	EX	10.28	12" CPP		5.48	W
CB2	EX	10.15	12" CPP		5.95	NE
DMH2	EX	10.36	18" CPP	5.36		SE
			12" CPP	5.31		SW
			12" CPP	5.31		E
			24" CPP		5.31	NW
DMH3	EX	14.57	12" CPP	10.17		SE

REV.	DATE	DESCRIPTION	BY	CHK
3	2026.04.13	ADDITIONAL SEWER INVERTS	RJB	PAY
2	2026.03.18	INVERTS	RJB	CSA
1	2026.02.18	CITY COMMENTS	CSA	PAY
0	2025.12.15	ISSUED FOR COMMENT	RJB	PAY

DRAWING ISSUE STATUS

SITE SURVEY

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

PROJECT

CHINBURG BUILDERS
94 LANGDON STREET & 98 CORNWALL STREET
PORTSMOUTH, NH 03801

TITLE

EXISTING CONDITIONS PLAN

DATE	SCALE
DECEMBER 2025	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
RJB	---	PAY

PROJECT No.	FIELD BOOK / PAGE
5010220.04	FB 443 PG 17

DRAWING No. **V101** REV. **4**

STATE OF NEW HAMPSHIRE No. 1122 PHILLIP A. YETMAN LAND SURVEYOR

"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."

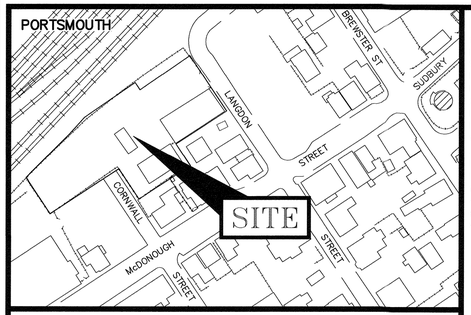
PHILLIP A. YETMAN, LLS 1122 — DATE 4-29-2026

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

P:\HW\5010220-Chinburg_Builders\004-94 Langdon St, Portsmouth-SMTP\05-CAD_Files\Survey\5010220.04-V-EC.dwg, 1/101



LOCATION MAP SCALE: 1"=100'

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LEGEND:

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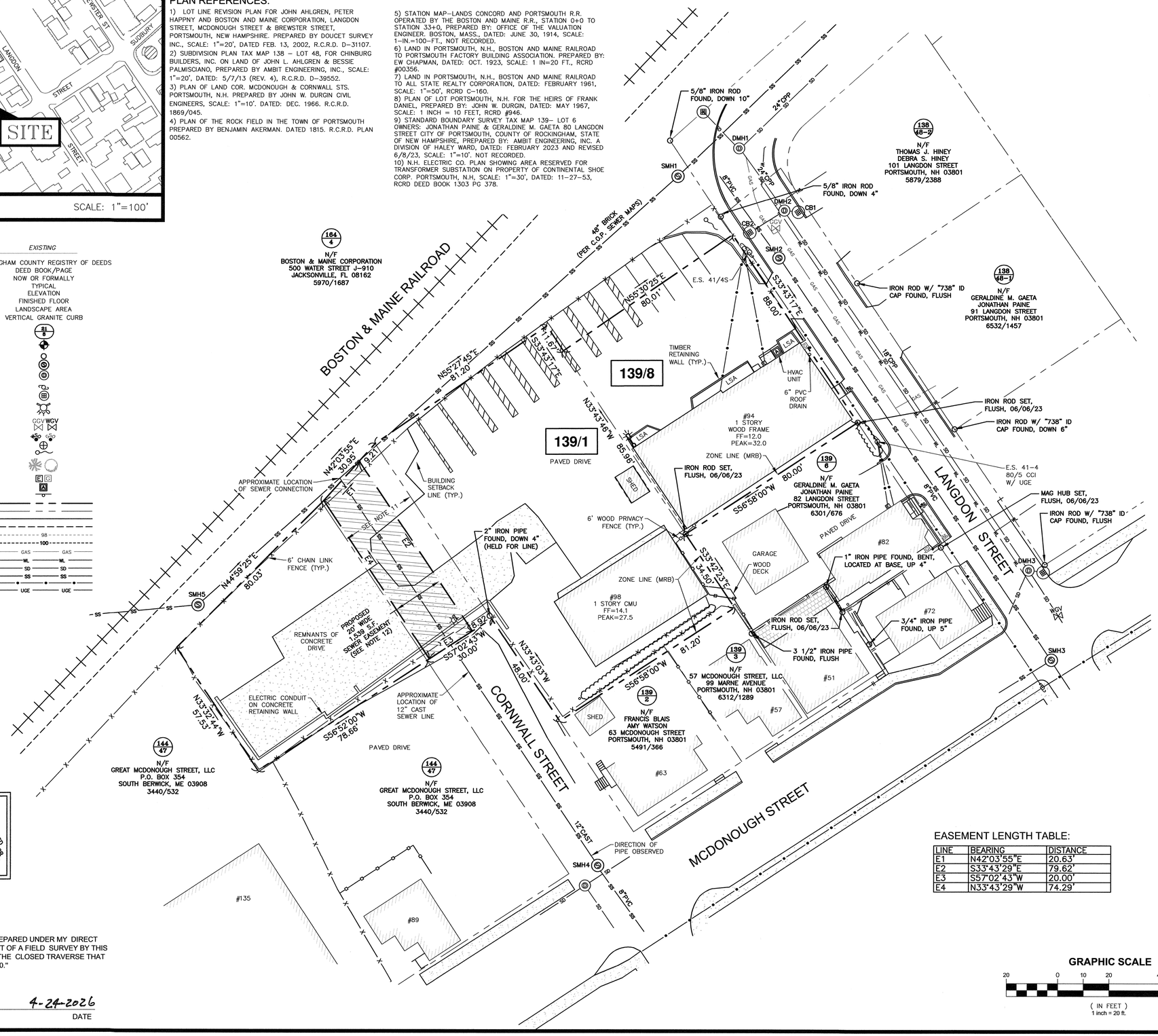
VGC	VERTICAL GRANITE CURB
MAP 21 LOT 8	21/8
BENCHMARK	
IRON ROD/PIPE FOUND	
SEWER MANHOLE	
DRAIN MANHOLE	
UTILITY POLE	
CATCH BASIN	
HYDRANT	
GATE VALVE	GV WGV
GAS/WATER SHUTOFF	GAS
BOLLARD	
FLAGPOLE	
TREES	
GAS/ELECTRIC METER	E G
AIR CONDITIONER	A
SIGN	
PROPERTY LINE	
APPROXIMATE EXTERIOR PROPERTY LINE	
EDGE OF PAVEMENT	
EDGE OF GRAVEL	
MINOR FOOT CONTOUR	98
MAJOR FOOT CONTOUR	100
GAS LINE	GAS GAS
WATER LINE	WL WL
STORM DRAIN LINE	SD SD
SANITARY SEWER LINE	SS SS
OVERHEAD UTILITY LINE	UGE UGE
UNDERGROUND ELECTRIC LINE	



EASEMENT LENGTH TABLE:

LINE	BEARING	DISTANCE
E1	N42°03'55"E	20.63'
E2	S33°43'29"E	79.62'
E3	S57°02'43"W	20.00'
E4	N33°43'29"W	74.29'

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

STATE OF NEW HAMPSHIRE No. 1122 PHILLIP A YETMAN LICENSED LAND SURVEYOR

"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."

4-24-2026
PHILLIP A. YETMAN, LLS 1122 DATE

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

NOTES:

1) PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 139 AS LOTS 1 & 8.

2) OWNER OF RECORD:
REGAN ELECTRIC COMPANY, INC.
94 LANGDON STREET
PORTSMOUTH, NH 03801
2956/1527 & 2960/1376

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

4) EXISTING LOT AREAS:

MAP 139 LOT 8	MAP 139 LOT 1	TOTAL
6,958 S.F.	18,149 S.F.	25,107 S.F
0.1597 ACRES	0.4166 ACRES	0.5764 ACRES

5) PARCEL IS LOCATED IN THE MIXED RESIDENTIAL BUSINESS (MRB) ZONING DISTRICT.

6) DIMENSIONAL REQUIREMENTS:

MIN. LOT AREA:		7,500 S.F.
FRONTAGE:		100 FEET
SETBACKS:	FRONT	5 FEET
	SIDE	10 FEET
	REAR	15 FEET
LOT DEPTH:		80 FEET
MAXIMUM STRUCTURE HEIGHT:		
	SLOPED ROOF	40 FEET
	FLAT ROOF	30 FEET
MAXIMUM BUILDING COVERAGE:		40%
MINIMUM OPEN SPACE:		25%

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE METES AND BOUNDS OF A PROPOSED SEWER EASEMENT TO THE CITY OF PORTSMOUTH ON ASSESSOR'S MAP 139 LOT 1 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) ABUTTER BUILDING LOCATIONS SHOWN HEREON SHOULD BE CONSIDERED APPROXIMATE.

11) IN 1965, THE CITY GRANTED A VARIANCE TO THE OWNER ALTERING THE LOT LINES OF 98 CORNWALL STREET, TAX MAP 19–1 TO THE CURRENT LOT LINES. THE CITY WILL RELEASE ANY AND ALL RIGHTS IT MAY HAVE IN THE PROPERTY IN EXCHANGE FOR A SEWER EASEMENT APPROXIMATELY 20 FEET WIDE LOCATED IN THE VIEW EASEMENT AS SHOWN ON THE PLAN. THE RELEASE AND EASEMENT ARE TO BE RECORDED AS A SUBSEQUENT CONDITION TO THE PLANNING BOARD APPROVAL.

12) PROPOSED EASEMENT WILL BE 20' WIDE AND 10' ON EITHER SIDE OF THE EXISTING 12" CAST SEWER LINE. THE LOCATION SHOWN HERON SHOULD BE CONSIDERED APPROXIMATE AND WILL BE VERIFIED IN THE FIELD DURING THE TIME OF CONSTRUCTION.

13) PROVIDE STANDARD WATER LEAK, VALVE, AND METER EASEMENT DEED WITH A PROVISION TO ALLOW THE CITY TO UPSIZE AND/OR CONNECT THE LINE TO CORNWALL STREET IN THE FUTURE IF DETERMINED TO BE NECESSARY.

REV.	DATE	DESCRIPTION	BY	CHK.
0	2026.04.14	ISSUED FOR COMMENT	RJB	CSA

DRAWING ISSUE STATUS

SITE SURVEY

SEWER EASEMENT PLAN

TAX MAP 139 – LOT 1

OWNER:

CHINBURG DEVELOPMENT
94 LANGDON STREET
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

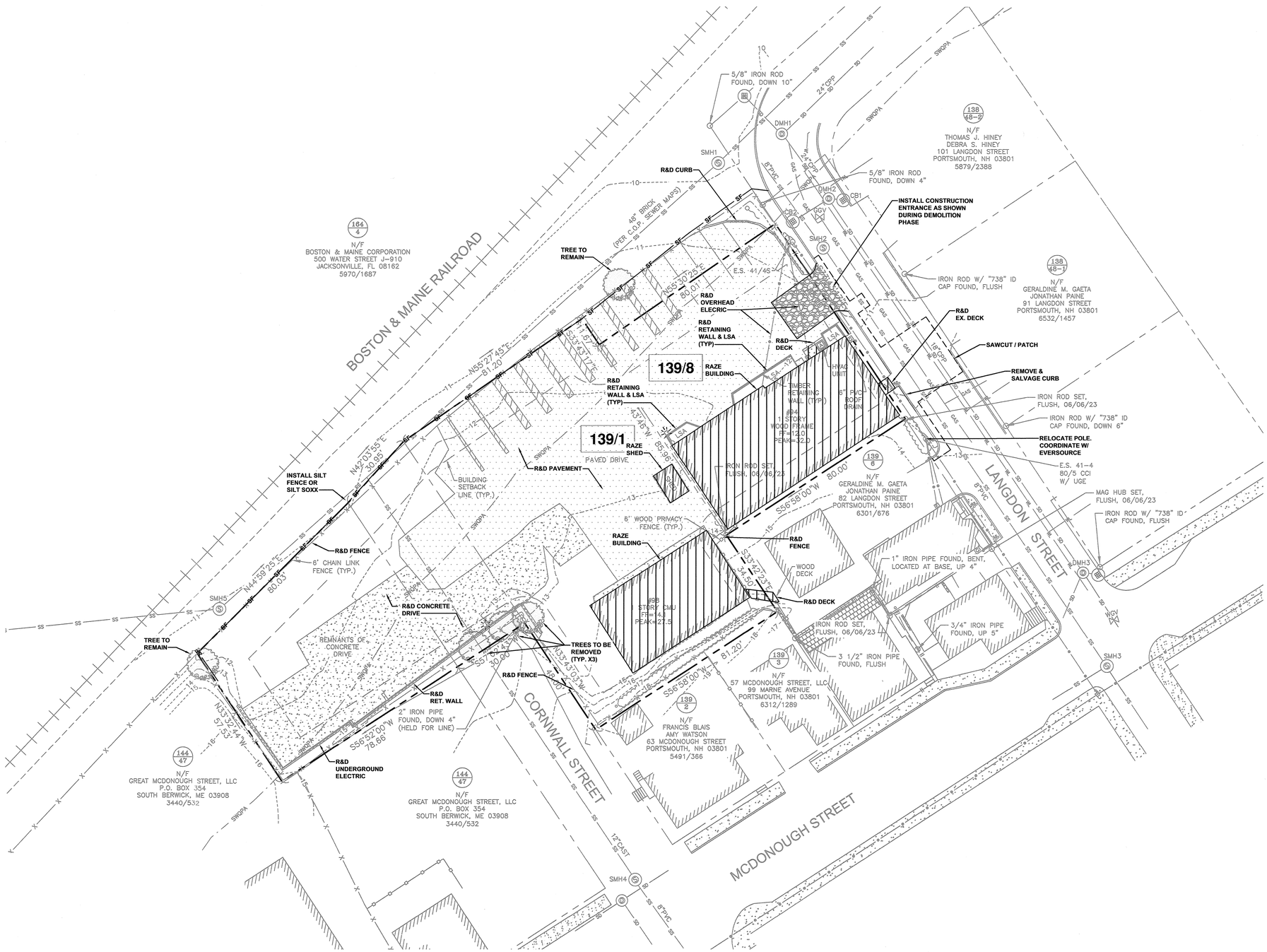
TO BENEFIT:

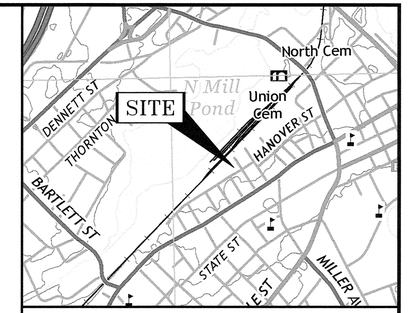
THE CITY OF PORTSMOUTH

SCALE: 1"=20' APRIL 2026

FB 443 & PG 17 5010220.04

P:\NH\5010220-Chinburg_Builders\004-94 Langdon St, Portsmouth-SMT\02-CAD_Files\Survey\5010220.04-V-E.dwg EASEMENT





LOCATION MAP SCALE: 1" = 1,000'

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.
10. ALL DEMOLITION WORK SHALL BE IN ACCORDANCE W/ THE PHASE 1 ENVIRONMENTAL SITE ASSESSMENT REPORT PREPARED BY EXETER ENVIRONMENTAL ASSOCIATES, LLC DATED NOVEMBER 17, 2025.

REV.	DATE	DESCRIPTION	BY	CHK
2	2026.04.24	ISSUED FOR PERMITTING	CBA	SMT
1	2026.03.23	ISSUED FOR TAC	JHV	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 MULTIFAMILY DEVELOPMENT
94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH

TITLE

DEMOLITION PLAN

STATE OF NEW HAMPSHIRE
SHAWN M. TOBEY
No. 14121
PROFESSIONAL ENGINEER
4/29/26

DATE	SCALE
MARCH 2026	1" = 20'

DRAWN BY	DESIGNED BY	CHECKED BY
JHV	JHV	SMT

PROJECT No. 5010220.004

DRAWING No. C101 REV. 2

F:\LE LOCATION\ P:\PWSW\2025\10\HW\RVG_BUILDER\5004-94 LANGDON ST., PORTSMOUTH-SMT\2026\CAD_FILES\94-CIVIL\5010220.004-C-DEP.DWG, 2026.04.29, 1:19 PM

TABLE OF DIMENSIONAL STANDARDS:

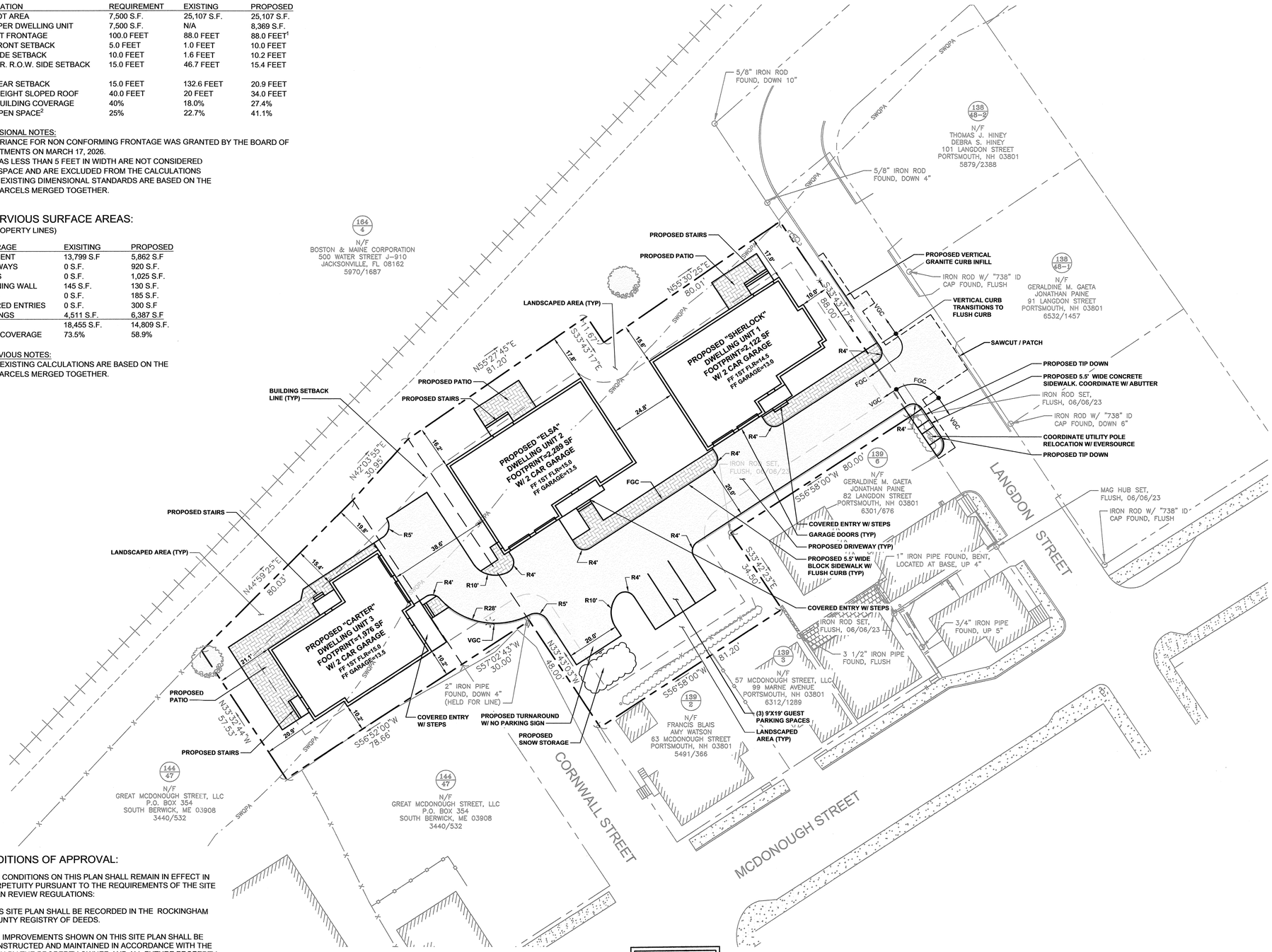
REGULATION	REQUIREMENT	EXISTING	PROPOSED
MIN. LOT AREA	7,500 S.F.	25,107 S.F.	25,107 S.F.
AREA PER DWELLING UNIT	7,500 S.F.	N/A	8,369 S.F.
STREET FRONTAGE	100.0 FEET	88.0 FEET	88.0 FEET[1]
MIN. FRONT SETBACK	5.0 FEET	1.0 FEET	10.0 FEET
MIN. SIDE SETBACK	10.0 FEET	1.6 FEET	10.2 FEET
MIN. R.R. R.O.W. SIDE SETBACK	15.0 FEET	46.7 FEET	15.4 FEET
MIN. REAR SETBACK	15.0 FEET	132.6 FEET	20.9 FEET
MAX. HEIGHT SLOPED ROOF	40.0 FEET	20 FEET	34.0 FEET
MAX. BUILDING COVERAGE	40%	18.0%	27.4%
MIN. OPEN SPACE[2]	25%	22.7%	41.1%

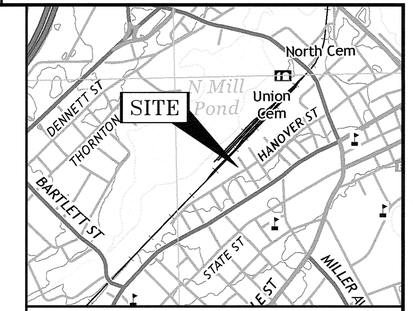
DIMENSIONAL NOTES:
1) A VARIANCE FOR NON CONFORMING FRONTAGE WAS GRANTED BY THE BOARD OF ADJUSTMENTS ON MARCH 17, 2026.
2) AREAS LESS THAN 5 FEET IN WIDTH ARE NOT CONSIDERED OPEN SPACE AND ARE EXCLUDED FROM THE CALCULATIONS
3) THE EXISTING DIMENSIONAL STANDARDS ARE BASED ON THE TWO PARCELS MERGED TOGETHER.

IMPERVIOUS SURFACE AREAS:
(TO PROPERTY LINES)

COVERAGE	EXISITING	PROPOSED
PAVEMENT	13,799 S.F	5,862 S.F
WALKWAYS	0 S.F.	920 S.F.
PATIOS	0 S.F.	1,025 S.F.
RETAINING WALL	145 S.F.	130 S.F.
STEPS	0 S.F.	185 S.F.
COVERED ENTRIES	0 S.F.	300 S.F
BUILDINGS	4,511 S.F.	6,387 S.F
TOTAL	18,455 S.F.	14,809 S.F.
% LOT COVERAGE	73.5%	58.9%

IMPERVIOUS NOTES:
1) THE EXISTING CALCULATIONS ARE BASED ON THE TWO PARCELS MERGED TOGETHER.





LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1. PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S TAX MAP 139 AS LOTS 1 & 8.
2. OWNER OF RECORD (MAP 139, LOTS 1 & 8):
   REGAN ELECTRIC CO.,INC.
   94 LANGDON STREET
   PORTSMOUTH, NH 03801
   APPLICANT:
   CHINBURG DEVELOPMENT
   3 PENSTOCK WAY
   NEWMARKET, NH 03857
3. PARCELS ARE NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE JANUARY 29, 2021.
4. PARCELS ARE LOCATED IN THE MIXED RESIDENTIAL BUSINESS (MRB) DISTRICT.
5. EXISTING LOT AREA:
   LOT 1: 18,149 S.F.
   LOT 8: 6,958 S.F.
   MERGED LOT TOTAL = 25,107 S.F.
6. THE TWO EXISTING PARCELS ARE TO BE MERGED.
7. REFER TO THE EXISTING CONDITIONS PLAN (DWG NO. V101) FOR ADDITIONAL SITE INFORMATION.
8. THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED 3 UNIT RESIDENTIAL DEVELOPMENT ON ASSESSOR'S TAX MAP 139, LOTS 1 & 8.
9. ALL EXISTING SITE FEATURES, STRUCTURES AND BUILDINGS ON THE SUBJECT PARCELS ARE TO BE DEMOLISHED AND REMOVED AS PART OF THIS DEVELOPMENT. SEE DEMOLITION PLAN.
10. PARKING CALCULATION (RESIDENTIAL)
    REQUIRED: 1 SPACE PER UNIT = 3 TOTAL
    PROVIDED: 6 GARAGE + 3 GUEST = 9 TOTAL
11. TRASH DISPOSAL SHALL BE CITY OF PORTSMOUTH CURBSIDE PICKUP.
12. LIGHTING SHALL BE STANDARD RESIDENTIAL WALL MOUNTED ONLY AND SHALL BE DARK SKY COMPLIANT.
13. PROVIDE STANDARD WATER LEAK , VALVE, AND METER EASEMENT DEED WITH A PROVISION TO ALLOW THE CITY TO UPSIZE AND/ OR CONNECT THE LINE TO CORNWALL STREET IN THE FUTURE IF DETERMINED TO BE NECESSARY.
14. THE PROPOSED DRIVEWAY SHALL BE NAMED AND APPROVED BY CITY COUNCIL.
15. ALL PROPOSED CURBING SHALL BE GRANITE.
16. ALL SIDEWALKS SHALL BE 5.5' WIDE EXCLUDING CURB.

REV.	DATE	DESCRIPTION	BY	CHK
5	2026.04.24	ISSUED FOR PERMITTING	CBA	SMT
4	2026.03.23	ISSUED FOR TAC	JHV	SMT
3	2026.02.18	ISSUED FOR ZBA	JHV	SMT
2	2026.01.07	ISSUED FOR PB CONCEPT REVIEW	SMT	JRC
1	2025.12.17	ISSUED FOR ZBA	SMT	JRC

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 MULTIFAMILY DEVELOPMENT
94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH

TITLE

SITE LAYOUT PLAN

DATE: DECEMBER 2025 | SCALE: 1" = 20'
DRAWN BY: JHV | DESIGNED BY: JHV | CHECKED BY: SMT
PROJECT No.: 5010220.004
DRAWING No.: C102 | REV.: 5

STATE OF NEW HAMPSHIRE SHAWN M. TOBEY No. 14121 LICENSED PROFESSIONAL ENGINEER 4/24/26

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**

``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."

PHILLIP A. YETMAN, LLS — 4-24-2026 DATE

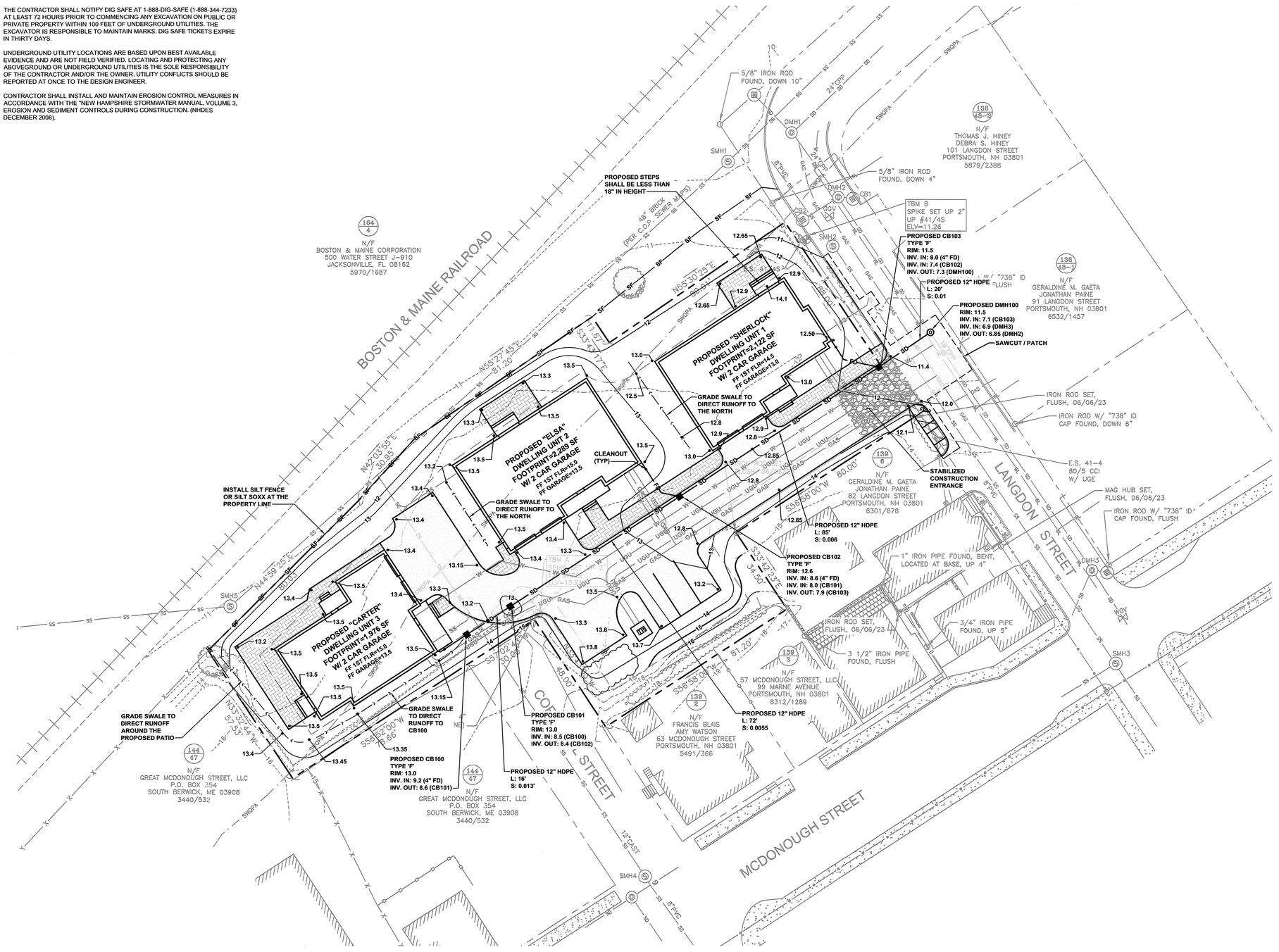
STATE OF NEW HAMPSHIRE No. 1122 LICENSED LAND SURVEYOR PHILLIP A. YETMAN

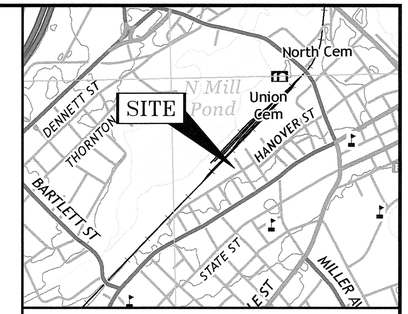
GRAPHIC SCALE
20 0 10 20 40 60
(IN FEET)
1 inch = 20 ft.

FILE LOCATION: P:\NH\01\0220-CHINBURG_BUILDER\B0004-84 LANGDON ST., PORTSMOUTH-SMT\292-CAD_FILES\04-CIVIL\00\102201004-C-SP.DWG, 2026.04.24, 1:53 PM

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).





LOCATION MAP SCALE: 1" = 1,000'

DRAINAGE NOTES:

1. REFER TO DWG C001 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. REFER TO DWGS C501 FOR ALL CONSTRUCTION DETAILS.
3. DWELLING UNITS WILL HAVE A CRAWL SPACE WITH NO BASEMENTS. THERE SHALL BE NO MECHANICALS IN THE CRAWL SPACE. WATERTIGHT CONSTRUCTION IS REQUIRED.
4. ALL ROOF RUNOFF SHALL BE COLLECTED WITH DRIP STRIPS OR A GUTTER COLLECTION SYSTEM AND CONNECTED TO THE STORMWATER SYSTEM.
5. ALL FOOTING DRAINS SHALL BE CONNECTED TO THE STORMWATER SYSTEM WITH A PROVIDED AIR GAP.
6. CRAWL SPACES SHALL BE MECHANICALLY DRAINED AND CONNECT TO THE STORMWATER SYSTEM WITH A PROVIDED AIR GAP.
7. VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.
8. PORTSMOUTH STORMWATER CONNECTION PERMIT REQUIRED.

REV.	DATE	DESCRIPTION	BY	CHK.
2	2026.04.24	ISSUED FOR PERMITTING	CBA	JRC
1	2026.03.23	ISSUED FOR TAC	JHV	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 MULTIFAMILY DEVELOPMENT
94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH

TITLE

GRADING & DRAINAGE PLAN

STATE OF NEW HAMPSHIRE SHAWN M. TOBEY No. 14121 PROFESSIONAL ENGINEER 4/24/26

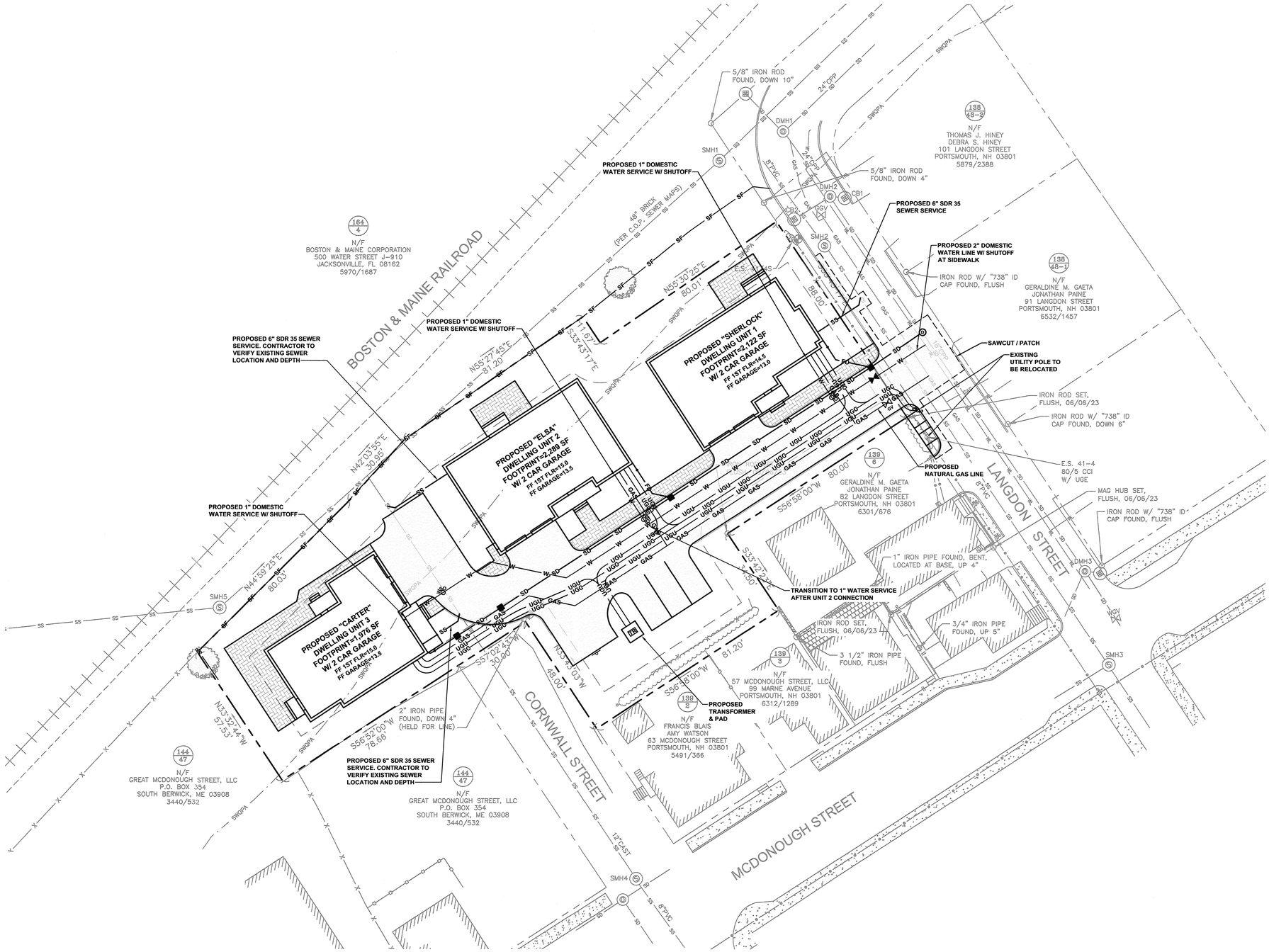
DATE	SCALE
MARCH 2026	1" = 20'

DRAWN BY	DESIGNED BY	CHECKED BY
JHV	JHV	SMT

PROJECT No. 5010220.004

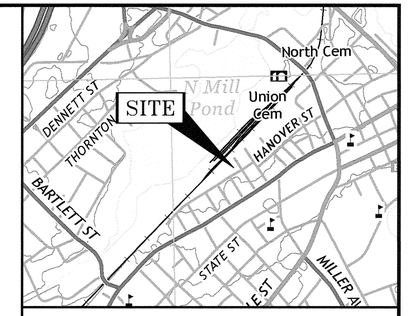
DRAWING No. **C103** REV. **2**

FILE LOCATION: P:\NH\5010220-CHINBURG_BUILDERS\004-94 LANGDON ST., PORTSMOUTH-SMT\200-CAD_FILES\04-CIVIL\5010220.004-C-SP.DWG, 2026.04.22, 1:00 PM



NORTH NAD83(2011)

GRID NHSPC



LOCATION MAP SCALE: 1" = 1,000'

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.

REV.	DATE	DESCRIPTION	BY	CHK.
2	2026.04.24	ISSUED FOR PERMITTING	CBA	SMT
1	2026.03.23	ISSUED FOR TAC	JHV	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 MULTIFAMILY DEVELOPMENT
94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH

TITLE

UTILITY PLAN

STATE OF NEW HAMPSHIRE SHAWN M. TOBEY No. 14121 LICENSED PROFESSIONAL ENGINEER 4/24/26

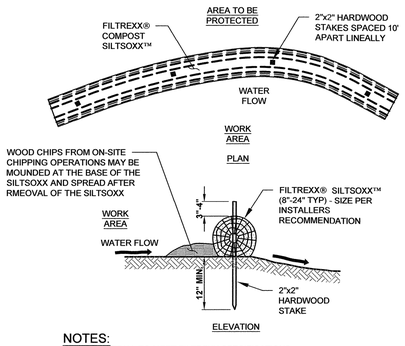
DATE	SCALE
MARCH 2026	1" = 20'

DRAWN BY	DESIGNED BY	CHECKED BY
JHV	JHV	SMT

PROJECT No. 5010220.004

DRAWING No. **C104** REV. **2**

FILE LOCATION: P:\NH\5010220-CHINBURG_BUILDERS\5004-94 LANGDON ST., PORTSMOUTH\SHTTXS\CAD_FILES\94-CIVIL\5010220.004-C-SP.DWG, 2026.04.22, 1:01 PM

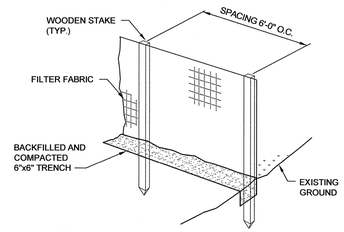


NOTES:

1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILTREXX 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.

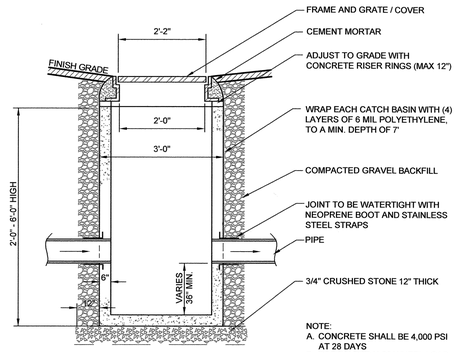


NOTES:

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

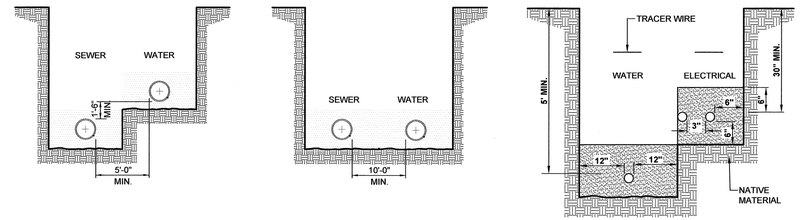
N.T.S.



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:

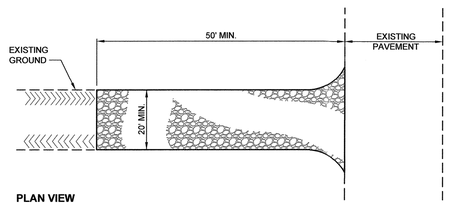
1. NORMAL CONDITIONS – WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY SANITARY SEWER, OR SEWER MANHOLE, WHENEVER POSSIBLE; THE DISTANCE SHALL BE MEASURED EDGE-TO-EDGE (PIPE WALL TO PIPE WALL).
2. UNUSUAL CONDITIONS – WHEN LOCAL CONDITIONS (SUCH AS LEDGE, BRIDGES, UTILITY CONGESTION, 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.

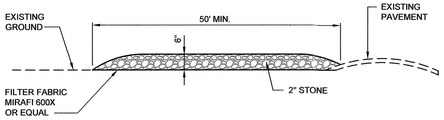
TYPICAL UTILITY SEPARATION DETAILS

N.T.S.



PLAN VIEW

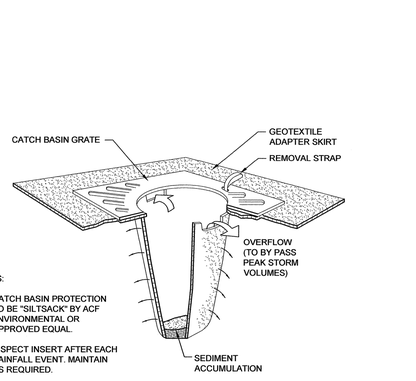
NOTE: CONTRACTOR SHALL ADD STONE TO ENTRANCE AS MUD/SILT MATERIAL ACCUMULATES



SECTION

STABILIZED CONSTRUCTION ENTRANCE DETAIL

N.T.S.

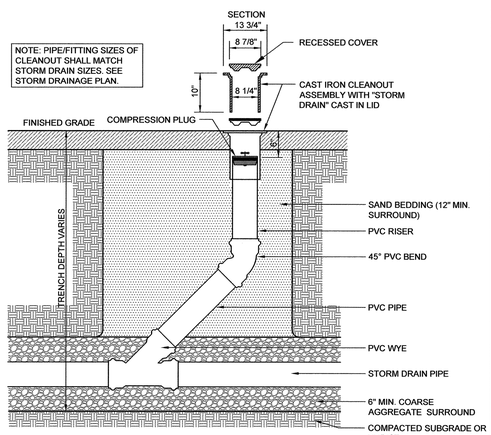


NOTES:

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.

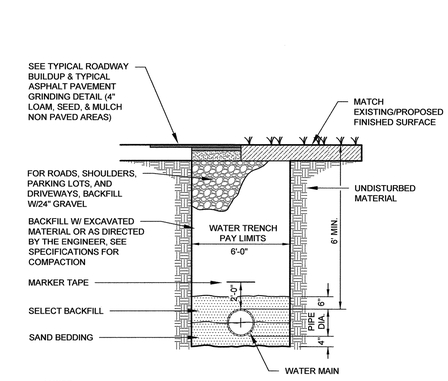
SEDIMENT SACK INLET PROTECTION DETAIL

N.T.S.



STORM DRAIN CLEANOUT DETAIL

N.T.S.

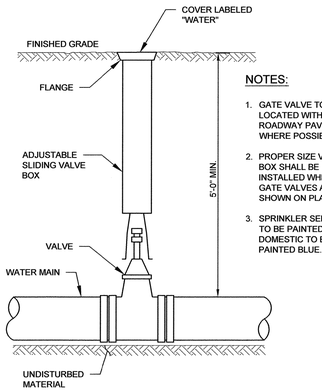


NOTE:

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

TYPICAL WATER MAIN TRENCH DETAIL

N.T.S.

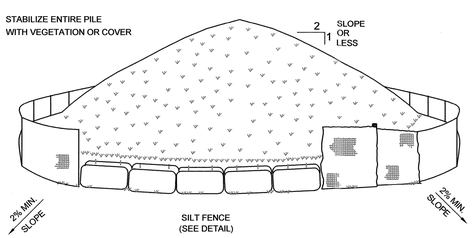


NOTES:

1. GATE VALVE TO BE LOCATED WITHIN ROADWAY PAVEMENT WHERE POSSIBLE.
2. PROPER SIZE VALVE BOX SHALL BE INSTALLED WHERE GATE VALVES ARE SHOWN ON PLANS.
3. SPRINKLER SERVICE TO BE PAINTED RED. DOMESTIC TO BE PAINTED BLUE.

TYPICAL VALVE AND BOX DETAIL

N.T.S.

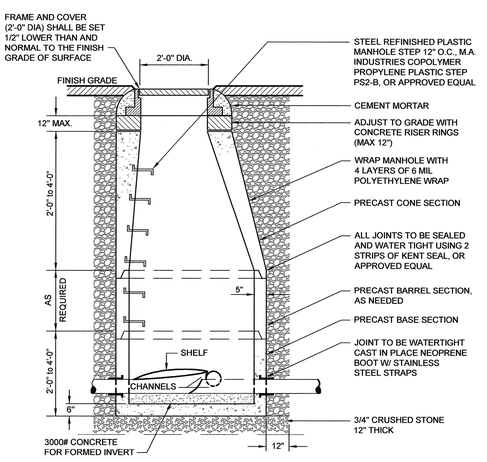


INSTALLATION NOTES:

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

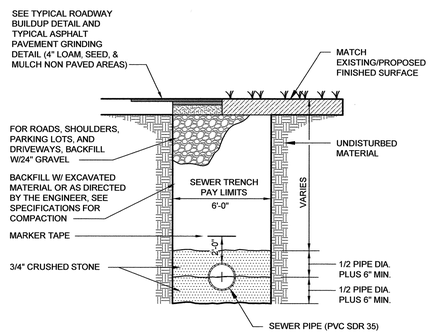
TEMPORARY STOCKPILE AREA

N.T.S.



TYPICAL MANHOLE DETAIL

N.T.S.

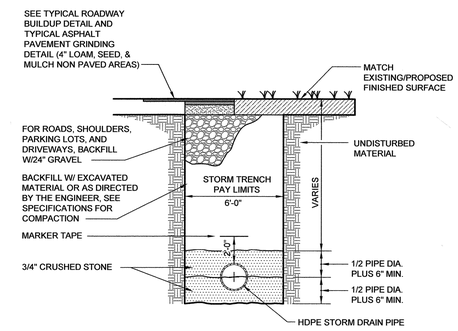


NOTE:

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.



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.

REV	DATE	DESCRIPTION	BY	CHK
2	2026.04.24	ISSUED FOR PERMITTING	CBA	SMT
1	2026.03.23	ISSUED FOR TAC	JHV	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 MULTIFAMILY DEVELOPMENT
94 LANGDON ST & 98 CORNWELL ST, PORTSMOUTH NH

TITLE

SITE DETAILS

STATE OF NEW HAMPSHIRE — SHAWN M. TOBEY No. 14121 — PROFESSIONAL ENGINEER — 4/29/26

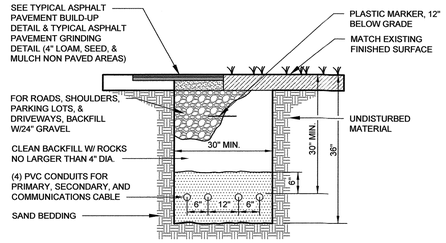
DATE	SCALE
MARCH 2026	NTS

DRAWN BY	DESIGNED BY	CHECKED BY
JHV	JHV	SMT

PROJECT No. 5010220.004

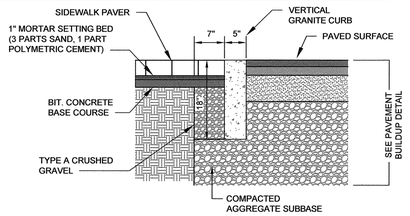
DRAWING No. **C501** REV. **2**

FILE LOCATION: P:\NH\01\0220-CHINBURG_BUILDERS\004-94 LANGDON ST - PORTSMOUTH-SMT20\2-CAD_FILES\04-CIVIL\01\0220.004-C-DT.DWG, 2026.04.29, 1:02 PM

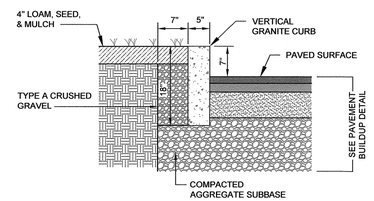


NOTES:
1. SIZE, NUMBER, MATERIAL, AND ARRANGEMENT OF CONDUIT SHALL BE COORDINATED WITH INDIVIDUAL UTILITIES.
2. ALL ELECTRICAL CONDUIT AND STRUCTURES SHALL BE WATER TIGHT.

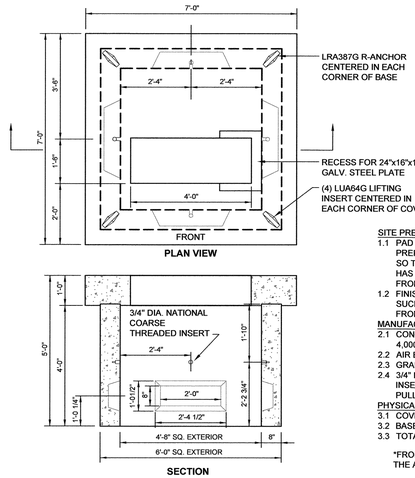
TYPICAL UNDERGROUND UTILITY TRENCH DETAIL
N.T.S.



TYPICAL FLUSH GRANITE CURB DETAIL (WHERE SHOWN)
N.T.S.



TYPICAL VERTICAL GRANITE CURB DETAIL (WHERE SHOWN)
N.T.S.



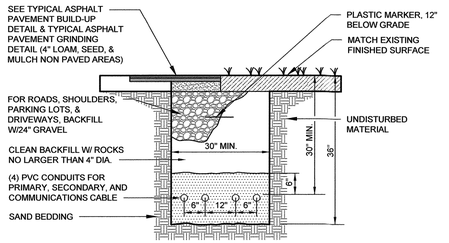
SITE PREPARATION NOTES:
1.1 PAD SHALL BE SET ON A PROPERLY PREPARED GRAVEL BASE AND ORIENTED SO THE FRONT OF THE TRANSFORMER HAS TRUCK ACCESS AND IS PROTECTED FROM TRAFFIC.
1.2 FINISHED GRADE SHALL BE PREPARED IN SUCH A WAY AS TO SHED WATER AWAY FROM THE PAD.

MANUFACTURING NOTES:
2.1 CONCRETE COMPRESSIVE STRENGTH: 4,000 PSI @ 28 DAYS.
2.2 AIR ENTRAINMENT: 4%-6%
2.3 GRADE 60 REINFORCEMENT
2.4 3/4" IDA. NATIONAL COURSE THREADED INSERTS CAST-IN AS SHOWN FOR PULLING EYES

PHYSICAL SPECIFICATIONS
3.1 COVER WEIGHT: 6,280 LBS
3.2 BASE WEIGHT: 8,080 LBS
3.3 TOTAL WEIGHT: 14,370 LBS

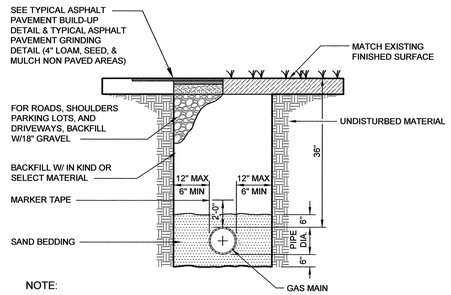
*FRONT DENOTES THE SIDE ON WHICH THE ACCESS DOORS ARE LOCATED

SINGLE PHASE TRANSFORMER PAD DETAIL
N.T.S.



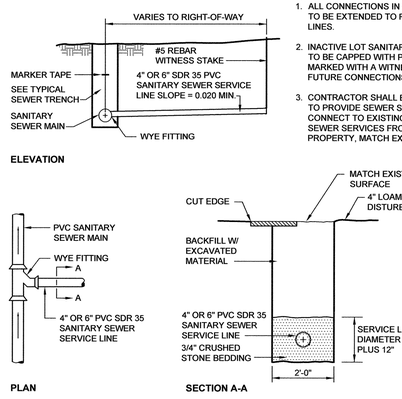
NOTES:
1. SIZE, NUMBER, MATERIAL, AND ARRANGEMENT OF CONDUIT SHALL BE COORDINATED WITH INDIVIDUAL UTILITIES.
2. ALL ELECTRICAL CONDUIT AND STRUCTURES SHALL BE WATER TIGHT.

TYPICAL UNDERGROUND UTILITY TRENCH DETAIL
N.T.S.



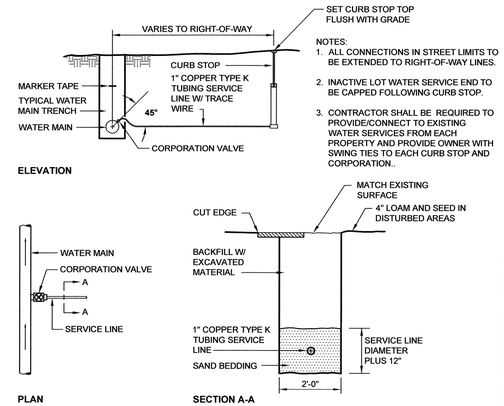
NOTE:
1. COMPACT ALL GRANULAR MATERIAL AND BACKFILL TO 95%.
2. SIDE CLEARANCE APPLICABLE TO BACKHOE OPERATIONS.

TYPICAL GAS TRENCH DETAIL
N.T.S.



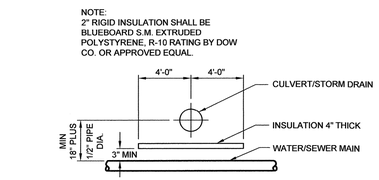
NOTES:
1. ALL CONNECTIONS IN STREET LIMITS TO BE EXTENDED TO RIGHT-OF-WAY LINES.
2. INACTIVE LOT SANITARY SEWER END TO BE CAPPED WITH PIPE CAPS, AND MARKED WITH A WITNESS STAKE FOR FUTURE CONNECTIONS.
3. CONTRACTOR SHALL BE REQUIRED TO PROVIDE SEWER SERVICE AND CONNECT TO EXISTING SANITARY SEWER SERVICES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

TYPICAL SANITARY SEWER SERVICE DETAIL
N.T.S.



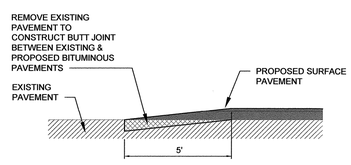
NOTES:
1. ALL CONNECTIONS IN STREET LIMITS TO BE EXTENDED TO RIGHT-OF-WAY LINES.
2. INACTIVE LOT WATER SERVICE END TO BE CAPPED FOLLOWING CURB STOP.
3. CONTRACTOR SHALL BE REQUIRED TO PROVIDE/CONNECT TO EXISTING WATER SERVICES FROM EACH PROPERTY AND PROVIDE OWNER WITH SWING TIES TO EACH CURB STOP AND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

TYPICAL WATER SERVICE DETAIL
N.T.S.

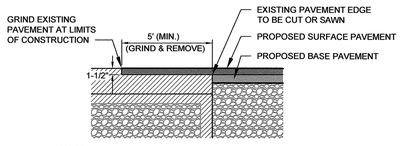


NOTES:
1. 2" RIGID INSULATION SHALL BE BLUEBOARD S.M. EXTRUDED POLYSTYRENE, R-10 RATING BY DOW CO. OR APPROVED EQUAL.
2. INSULATION TO BE 2 FEET WIDE FOR PIPES LESS THAN 6 INCHES IN DIAMETER AND 4 FEET WIDE FOR PIPES 6 INCHES IN DIAMETER AND LARGER, OR AS DIRECTED BY THE ENGINEER.

TYPICAL PIPE CROSSING INSULATION DETAIL
N.T.S.

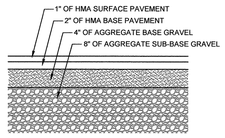


TYPICAL ASPHALT PAVEMENT BUTT JOINT DETAIL
N.T.S.

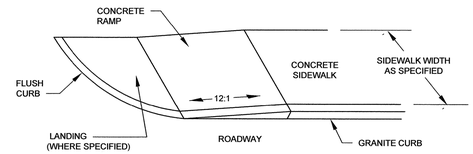


NOTES:
1. EXTEND NEW SURFACE PAVEMENT ACROSS BUTT JOINT BASE COURSE.
2. PROVIDE TACK COAT ON ALL SURFACES OF EXISTING PAVEMENT TO BE COVERED.

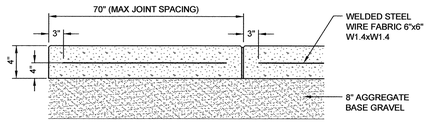
TYPICAL ASPHALT PACEMENT GRINDING DETAIL
N.T.S.



TYPICAL DRIVEWAY PAVING DETAIL
N.T.S.



TYPICAL SIDEWALK TIP DOWNS
N.T.S. (NON INTERSECTION)



TYPICAL CONCRETE SIDEWALK DETAIL
N.T.S.

REV.	DATE	DESCRIPTION	BY	CHK
2	2024.04.24	ISSUED FOR PERMITTING	CBA	SMT
1	2026.03.23	ISSUED FOR TAC	JHV	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 MULTIFAMILY DEVELOPMENT
94 LANGDON ST & 98 CORNWELL ST, PORTSMOUTH NH

TITLE
SITE DETAILS

SHAWN M. TOBEY No. 14121 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
4/29/26

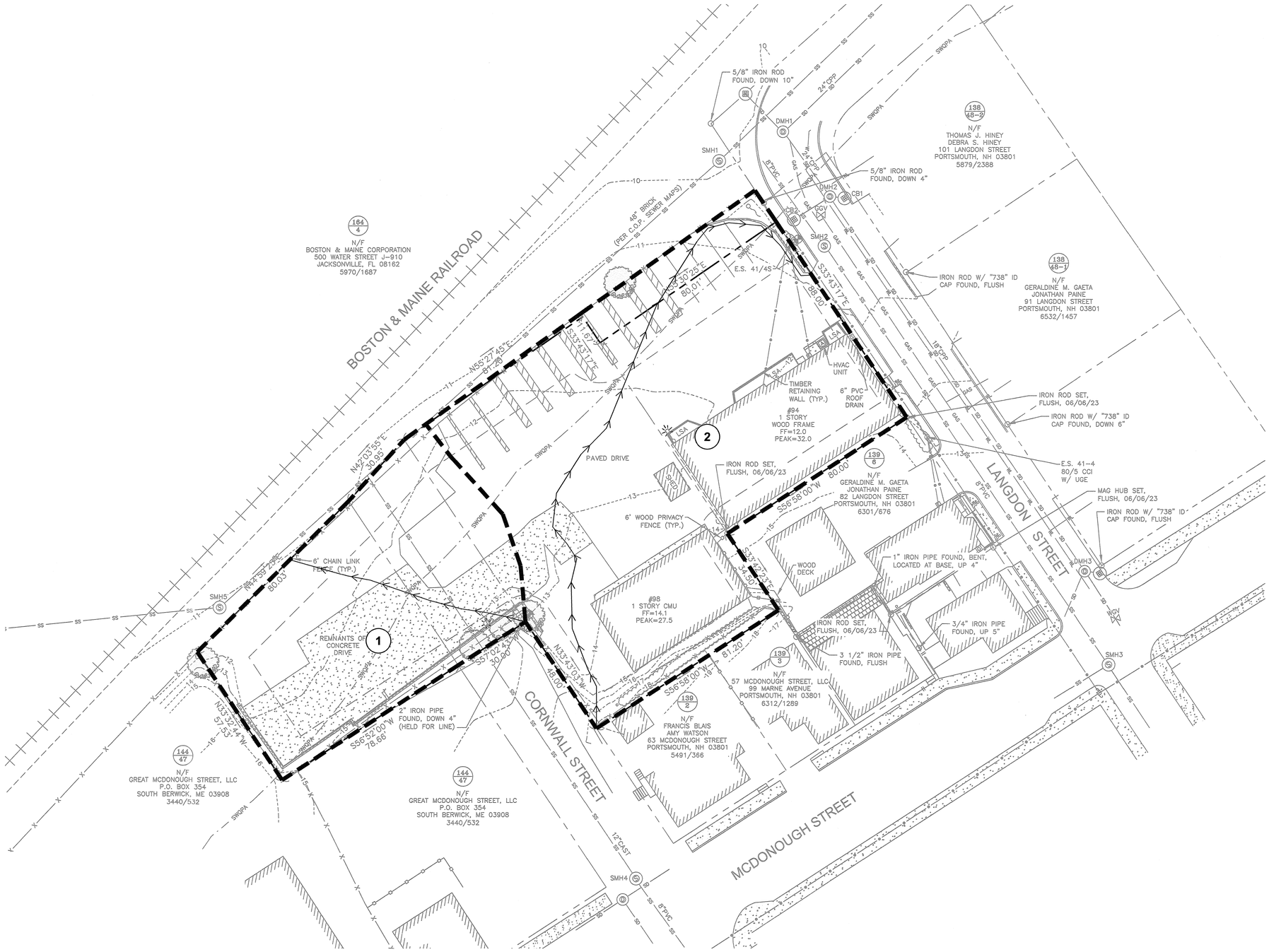
DATE	SCALE
MARCH 2026	NTS

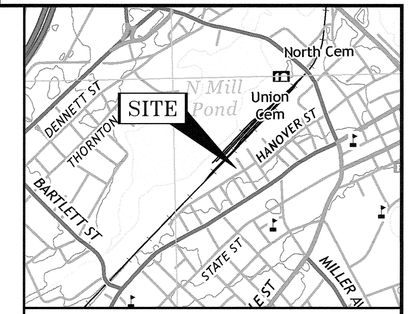
DRAWN BY	DESIGNED BY	CHECKED BY
JHV	JHV	SMT

PROJECT No. 5010220.004

DRAWING No. **C502** REV. **2**

FILE LOCATION: P:\NH\5010220-CHINBURG_BUILDER\5004-94 LANGDON ST., PORTSMOUTH-SMT\2\02-CAD_FILES\04-CIVIL\5010220.004-C-DT DWG, 2026.04.22, 1:03 PM





LOCATION MAP SCALE: 1" = 1,000'

PRE LEGEND:

- PROPERTY LINE
- WATERSHED BOUNDARY LINE
- (1) WATERSHED DESIGNATION
- TIME OF CONCENTRATION FLOW PATH

NORTH NAD83(2011)

GRID NHSPC

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

REV.	DATE	DESCRIPTION	BY	CHK.
2	2026.04.24	ISSUED FOR PERMITTING	CBA	SMT
1	2026.03.23	ISSUED FOR TAC	JHV	SMT

DRAWING ISSUE STATUS

ISSUED FOR PERMITTING

HALEY WARD

200 Griffin Rd., Unit 14
Portsmouth, New Hampshire 03801
603.430.9282

PROJECT

PROPOSED MULTIFAMILY DEVELOPMENT
94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH

TITLE

PRE-DEVELOPMENT HYDROLOGY PLAN

STATE OF NEW HAMPSHIRE SHAWN M. TOBEY No. 14121 LICENSED PROFESSIONAL ENGINEER 4/24/26

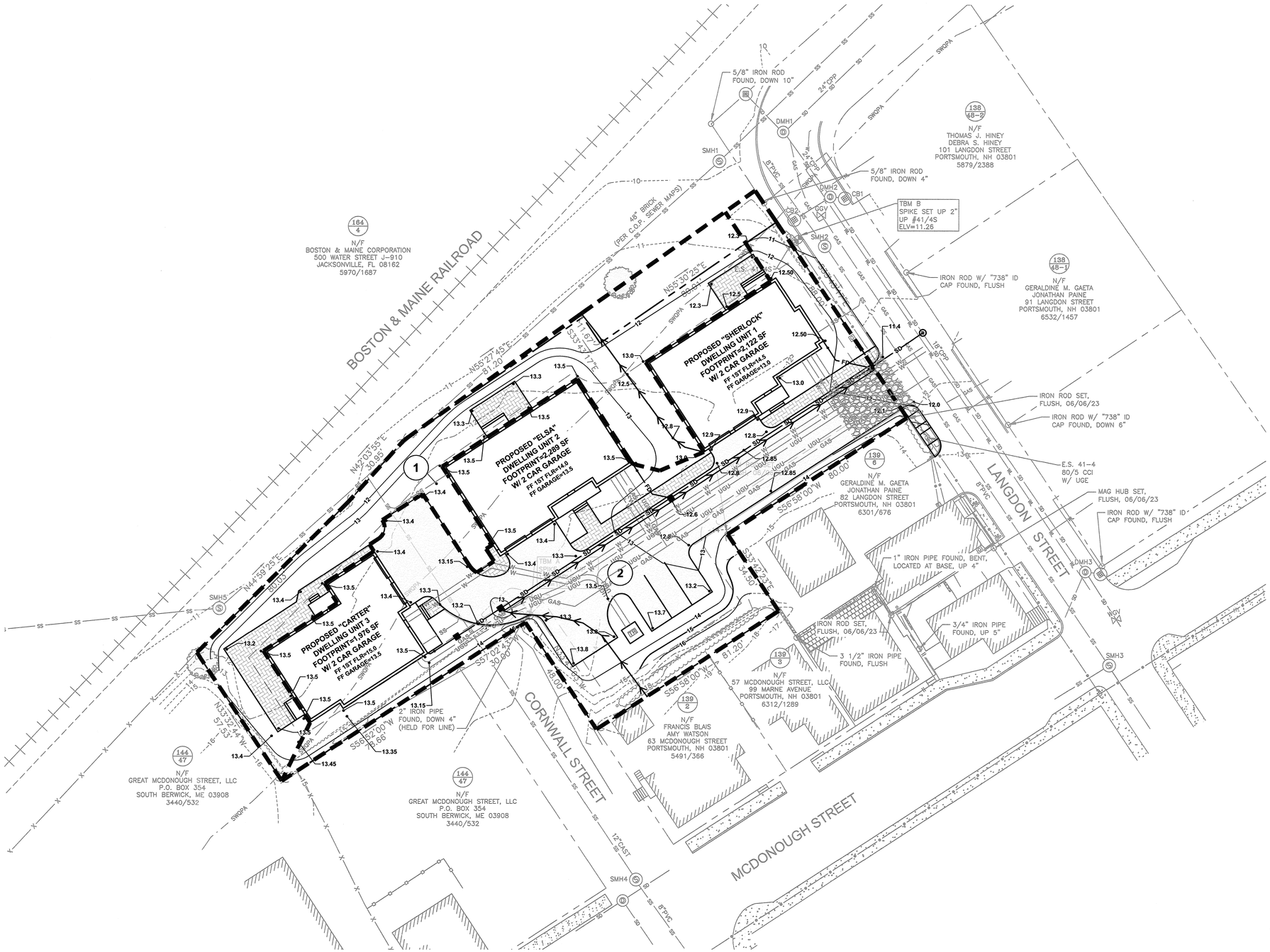
DATE	SCALE
DECEMBER 2025	1" = 20'

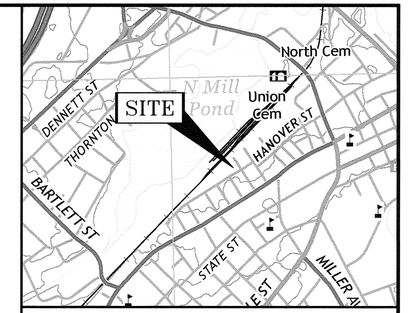
DRAWN BY	DESIGNED BY	CHECKED BY
JHV	JHV	SMT

PROJECT No. 5010220.004

DRAWING No. **C701** REV. **2**

FILE LOCATION: P:\NH\5010220-CHINBURG_BUILDERS\004-94 LANGDON ST., PORTSMOUTH-SMT\202-CAD_FILES\04-CIVIL\5010220.004-C-HY.DWG, 2026.04.22, 1:41 PM





LOCATION MAP SCALE: 1" = 1,000'

NORTH NAD83(2011)

GRID NHSPC

POST LEGEND:

- PROPERTY LINE
- WATERSHED BOUNDARY LINE
- (1) WATERSHED DESIGNATION
- TIME OF CONCENTRATION FLOW PATH

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

REV.	DATE	DESCRIPTION	BY	CHK.
2	2026.04.24	ISSUED FOR PERMITTING	CBA	SMT
1	2026.03.23	ISSUED FOR TAC	JHV	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 MULTIFAMILY DEVELOPMENT
94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH

TITLE

POST-DEVELOPMENT HYDROLOGY PLAN

STATE OF NEW HAMPSHIRE SHAWN M. TOBEY No. 14121 LICENSED PROFESSIONAL ENGINEER 4/24/26

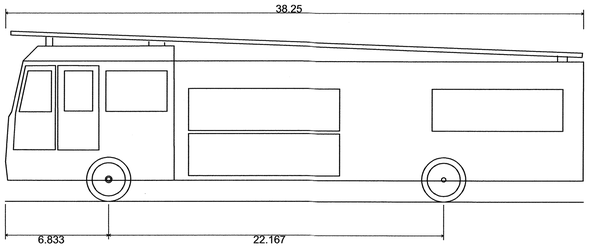
DATE	SCALE
MARCH 2026	1" = 20'

DRAWN BY	DESIGNED BY	CHECKED BY
JHV	JHV	SMT

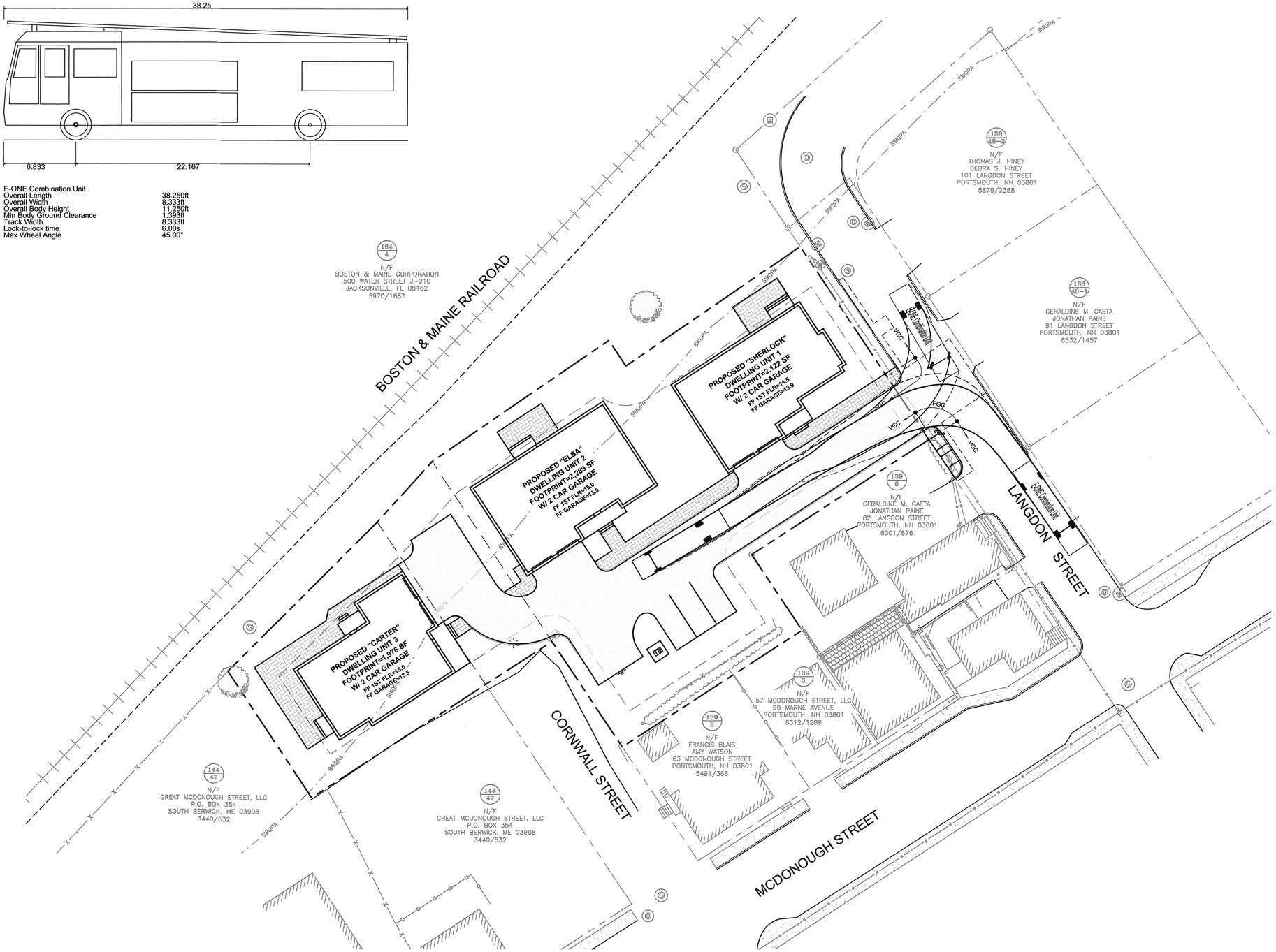
PROJECT No. 5010220.004

DRAWING No. **C702** REV. **2**

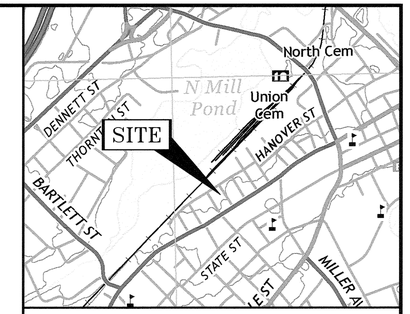
FILE LOCATION: P:\NH\5010220-CHINBURG_BUILDERS\004-94 LANGDON ST., PORTSMOUTH-SMT202-CAD_FILES\04-CIVIL\5010220.004-C-HY.DWG, 2026.04.22, 1:45 PM



E-ONE Combination Unit	
Overall Length	38.250ft
Overall Width	8.333ft
Overall Body Height	11.250ft
Min Body Ground Clearance	1.393ft
Track Width	8.333ft
Lock-to-lock time	6.00s
Max Wheel Angle	45.00°



NORTH
NAD83(2011)
N
GRID
MASS SPC



LOCATION MAP SCALE: 1" = 1,000'

NOTE:

1. THE PURPOSE OF THIS PLAN IS TO DEMONSTRATE THE PROPOSED SITE ENTRANCE CAN ACCOMODATE THE TURNING MOVEMENTS OF AN E-ONE COMBINATION FIRE TRUCK INTO THE SITE AND THEN REVERSING OUT OF THE SITE.

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

REV.	DATE	DESCRIPTION	BY	CHK
1	2026.04.24	ISSUED FOR PERMITTING	CBA	SMT

DRAWING ISSUE STATUS
ISSUED FOR PERMITTING

HALEY WARD
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT
PROPOSED MULTIFAMILY DEVELOPMENT
94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH

TITLE
FIRE TRUCK TURNING PLAN

STATE OF NEW HAMPSHIRE
SHAWN M. TOBEY
No. 14121
LICENSED PROFESSIONAL ENGINEER
4/24/26

DATE	SCALE
APRIL 2026	1" = 20'

DRAWN BY	DESIGNED BY	CHECKED BY
CBA	CBA	SMT

PROJECT No. 5010220.004

DRAWING No. **T101** REV. **1**

FILE LOCATION: P:\NH\5010220-CHN\BLRG_BUILDERS\2004-94 LANGDON ST - PORTSMOUTH-SMT\2026-CAD_FILES\04-CIVIL\5010220-2004-C-TP.DWG, 2026.04.22, 1:37 PM

Plant List - Trees and Shrubs

ID	Qty	Botanical Name	Common Name	Scheduled Size	Mature Height	Mature Width	Growth Habit	Tolerances	Requirements
ARB	1	Acer rubrum 'Bowhall'	Bowhall Maple	3 1/2" Cal.	40-60'	10-15'	Upright, Broadly Columnar	Urban, Wet Soil	Full, partial sun. Moist, well-drained soil
CFF	5	Carpinus betulus 'Frans Fontaine'	Frans Fontaine Hornbeam	2 1/2" Cal.	30-40'	20-30'	Oval	Disease, Drought, Urban	Full, partial sun. Well-drained soil
COGN	6	Chamaecyparis obtusa 'Nana Gracilis'	Hinoki Cypress	2 1/2' Ht.	6-8'	4-5'	Pyramidal	Disease, Drought, Deer	Full, partial sun. Moist, well-drained soil
HAL	1	Halesia carolina 'Jersey Belle'	Jersey Belle Carolina Silverbelle	1 1/2" Cal.	20-30'	20'	Rounded	Urban, Disease, Moist Soil	Full, partial sun. Moist, well-drained soil.
HYP	12	Hypericum x 'Hidcote'	Hidcote St. John's Wort	2 Gal.	2-3'	3-4'	Mounded	Salt, Deer, Urban	Full, partial sun. Moist, well-drained soil.
ICH	7	Ilex crenata 'Hetzi'	Hetzi Japanese Holly	3 Gal.	3-6'	3-6'	Rounded	Urban, Clay soil, Drought	Full, partial sun. Moist, well-drained soil.
LT	4	Liriodendron tulipifera	Tulip Tree	2 1/2" Cal.	60-90'	30-40'	Rounded	Deer, Moist Soil, Urban	Full, partial sun. Moist, well-drained soil
RGL	64	Rhus aromatica 'Grow Low'	Grow Low Sumac	18-24"	18-24"	18-24"	Spreading	Drought, Urban, Salt	Full, partial sun. Dry to average, well-drained soil
SA	5	Sassafras albidum	Sassafras	2" Cal.	30-40'	20-30'	Pyramidal	Drought, Deer, Clay Soil, Urban	Full, partial sun. Moist, well-drained soil
TOS	6	Thuja occidentalis 'Smaragd'	American Arborvitae	7-8'	15-20'	5-6'	Upright, Pyramidal	Urban, Moist Soil	Full, partial sun. Average, well-drained soil
TOT	3	Thuja occidentalis 'Techny'	Techny Arborvitae	8-10'	10-15'	6-8'	Pyramidal	Urban, Moist Soil	Full sun. Average, well-drained soil
TPA	3	Thuja plicata 'Atrovirens'	Atrovirens Western Red Cedar	8-10'	30-40'	15-20'	Pyramidal	Moist Soil, Urban	Full, partial sun. Average, well-drained soil
VBM	5	Viburnum dentatum 'Blue Muffin®'	Blue Muffin® Viburnum	3-4'	6-8'	4-5'	Compact	Deer, Moist Soil, Drought, Salt, Urban	Full, partial sun. Average, well-drained soil
VCC	13	Viburnum carlesi 'Compacta'	Dwarf Mayflower Viburnum	3-4'	4-5'	4-5'	Compact	Disease, Deer, Wind, Urban	Full, partial sun. Average, well-drained soil
VIN	15	Viburnum p.p. 'Newport'	Dwarf Japanese Snowball Viburnum	3-4'	5-6'	5-6'	Rounded	Deer, Moist Soil	Full, partial sun. Average, well-drained soil
VSS	3	Viburnum p. t. 'Summer Snowflake'	Summer Snowflake Viburnum	5-6'	8-10'	6-8'	Upright	Deer, Moist Soil, Drought, Urban	Full, partial sun. Average, well-drained soil

ERNST SEEDS

Ernst Conservation Seeds
8884 Mercer Pike
Meadville, PA 16335
(800) 873-3321 Fax (814) 336-5191
www.ernstseed.com

Date: March 13, 2026

5311 Conservation Mix - ERNMX-114

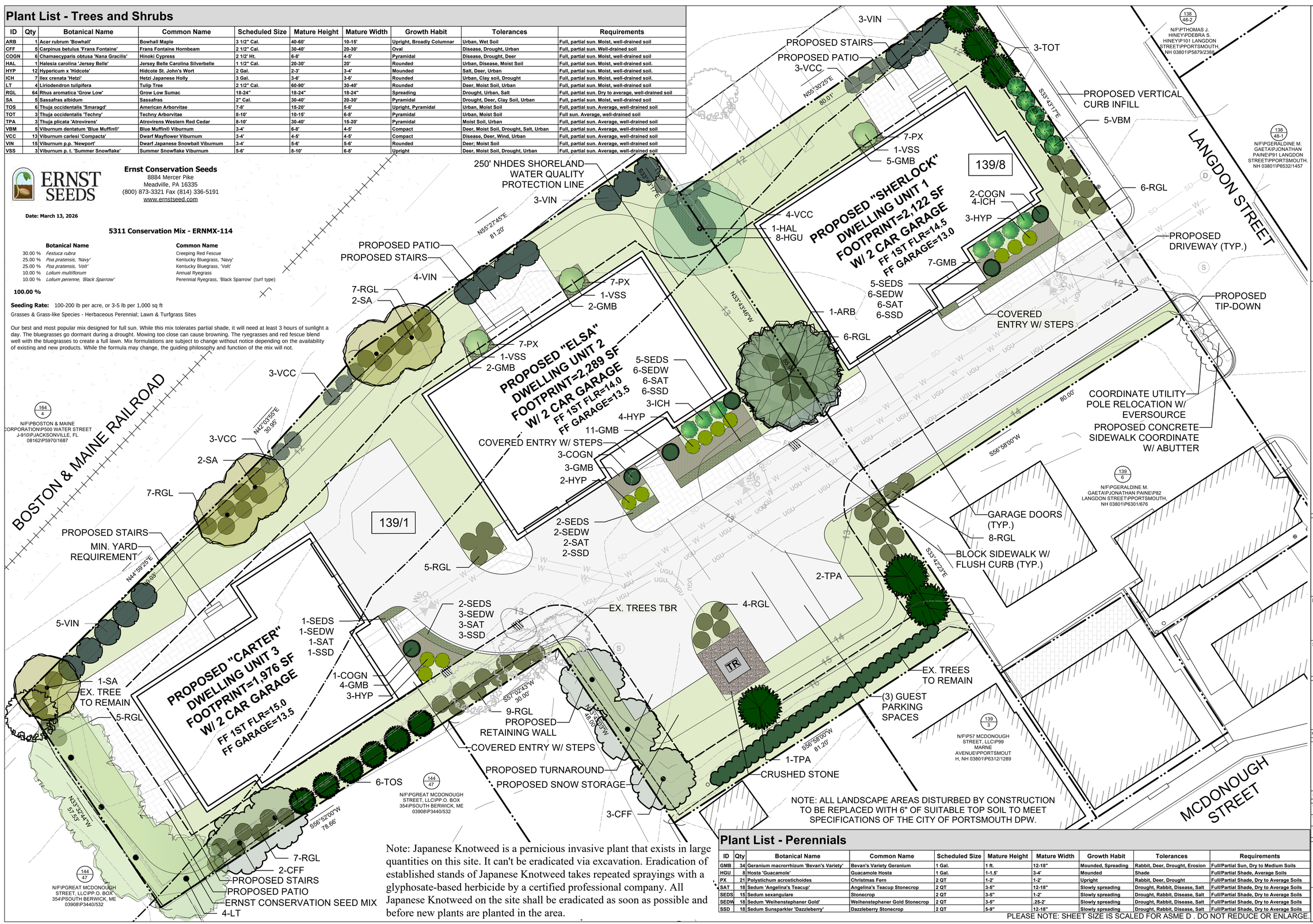
	Botanical Name	Common Name
30.00 %	*Festuca rubra*	Creeping Red Fescue
25.00 %	*Poa pratensis, 'Navy'*	Kentucky Bluegrass, 'Navy'
25.00 %	*Poa pratensis, 'Volt'*	Kentucky Bluegrass, 'Volt'
10.00 %	*Lolium multiflorum*	Annual Ryegrass
10.00 %	*Lolium perenne, 'Black Sparrow'*	Perennial Ryegrass, 'Black Sparrow' (turf type)

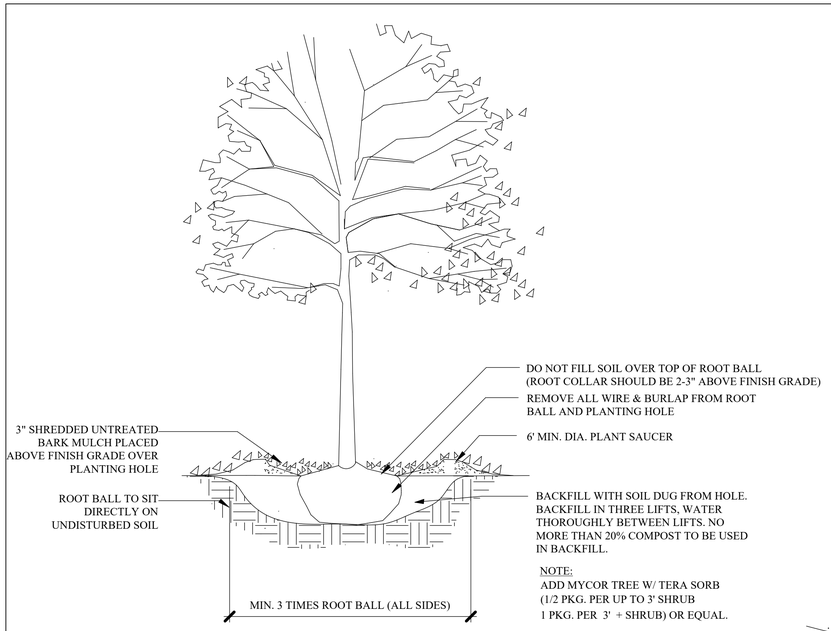
100.00 %

Seeding Rate: 100-200 lb per acre, or 3-5 lb per 1,000 sq ft

Grasses & Grass-like Species - Herbaceous Perennial; Lawn & Turfgrass Sites

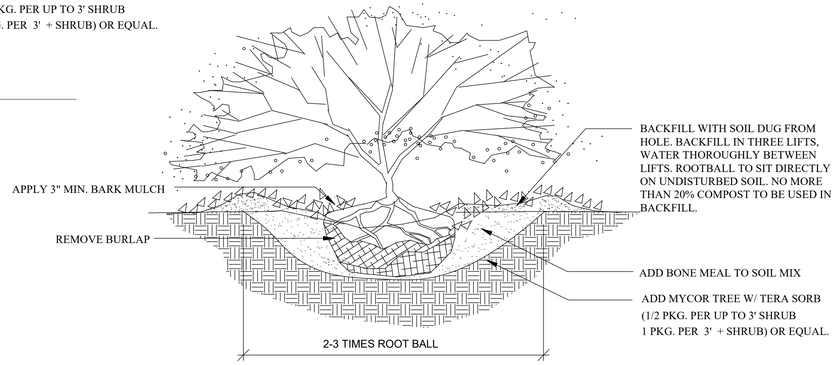
Our best and most popular mix designed for full sun. While this mix tolerates partial shade, it will need at least 3 hours of sunlight a day. The bluegrasses go dormant during a drought. Mowing too close can cause browning. The ryegrasses and red fescue blend well with the bluegrasses to create a full lawn. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.


3-VIN
PROPOSED STAIRS
PROPOSED PATIO
3-VCC
N55°30'25"E
80.01'
S33°43'17"E
7-PX
1-VSS
5-GMB
139/8
PROPOSED "SHERLOCK" DWELLING UNIT 1 FOOTPRINT=2,122 SF W/ 2 CAR GARAGE FF 1ST FLR=14.5 FF GARAGE=13.0
3-TOT
PROPOSED VERTICAL CURB INFILL
5-VBM
LANGDON STREET
138 48-2
N/F\PTHOMAS J. HINEY\PDEBRA S. HINEY\P101 LANGDON STREET\PPORTSMOUTH, NH 03801\P5879/2388
138 48-1
N/F\PGERALDINE M. GAETA\PJONATHAN PAINE\P91 LANGDON STREET\PPORTSMOUTH, NH 03801\P6532/1457
250' NHDES SHORELAND WATER QUALITY PROTECTION LINE
S33°43'17"E
3-VIN
N55°27'45"E
81.20'
4-VCC
1-HAL
8-HGU
2-COGN
4-ICH
3-HYP
6-RGL
7-GMB
PROPOSED DRIVEWAY (TYP.)
PROPOSED TIP-DOWN
PROPOSED VERTICAL CURB INFILL
PROPOSED TRANSFORMER
PROPOSED TRANSFORMER
PROPOSED TRANSFORMER



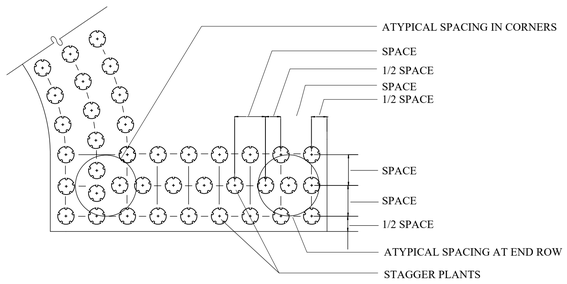
1 L-3

TREE PLANTING - 2"+ CAL.
SCALE: NTS



3 L-3

B&B SHRUB PLANTING
SCALE: NTS

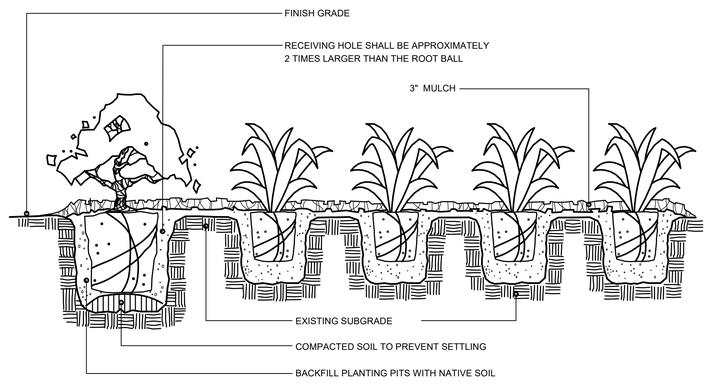


NOTES:

1. PLACE PLANTS IN BED AS SHOWN, SPACING AS SPECIFIED IN PLANT SCHEDULE.
2. GROUNDCOVER SHALL BE TRIANGULAR SPACED IN ROWS PARALLEL TO STRAIGHT EDGES AND SHALL BE EVENLY SPACED IN ROWS PARALLEL TO CURVE EDGES.

4 L-3

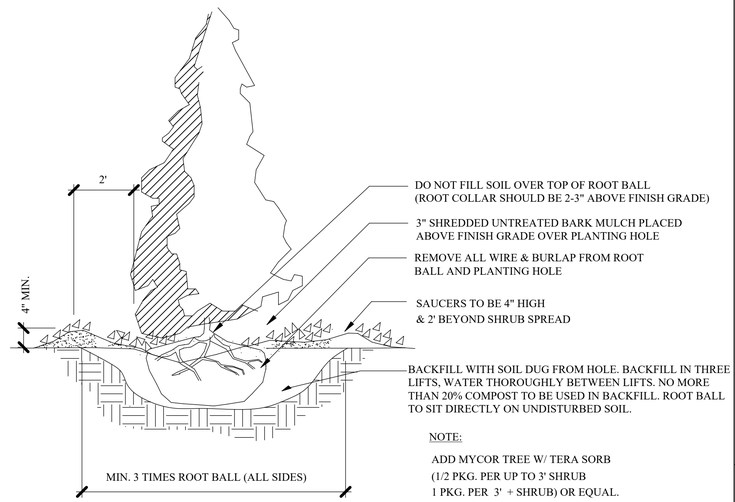
GROUND COVER SPACING DETAIL
SCALE: NTS



NOTE: SHRUBS SHALL BE PLANTED A MINIMUM OF 1" & NO MORE THAN 2" ABOVE FINISH GRADE, DEPENDING UPON SITE CONDITIONS.

5 L-3

SHRUB/GROUND COVER PLANTING DETAIL
SCALE: NTS



2 L-3

PYRAMIDAL EVERGREEN TREE PLANTING
SCALE: NTS

LANDSCAPE NOTES:

1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THE DRAWINGS.
3. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. ALL PLANT SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
5. ALL PLANT MATERIALS SHALL BE EXACTLY AS SPECIFIED BY THE LANDSCAPE ARCHITECT. IF PLANT SPECIES CULTIVARS ARE FOUND TO VARY FROM THAT SPECIFIED AT ANY TIME DURING THE GUARANTEE PERIOD, THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO HAVE THE CONTRACTOR REPLACE THAT PLANT MATERIAL. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT DELIVERED TO THE SITE FOR AESTHETIC REASONS BEFORE PLANTING. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE QUALITY FOR ALL THE PLANTS.
6. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, UPON DELIVERY OR AT THE JOB SITE WHILE WORK IS ON-GOING TO CONFORMITY TO SPECIFIED QUALITY, SIZE AND VARIETY.
7. PLANTS FURNISHED IN CONTAINERS SHALL HAVE THE ROOTS WELL ESTABLISHED IN THE SOIL MASS AND SHALL HAVE AT LEAST ONE (1) GROWING SEASON. ROOT-BOUND PLANTS OR INADEQUATELY SIZED CONTAINERS TO SUPPORT THE PLANT MAY BE DEEMED UNACCEPTABLE.
8. NO PLANT SHALL BE PUT IN THE GROUND BEFORE GRADING HAS BEEN FINISHED AND APPROVED BY THE LANDSCAPE ARCHITECT.
9. ALL PLANTS SHALL BE INSTALLED AND DETAILED PER PROJECT SPECIFICATIONS.
10. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN IF NECESSARY, DURING THE FIRST GROWING SEASON.
11. ALL PLANTS SHALL BE GUARANTEED BY THE CONTRACTOR FOR NOT LESS THAN ONE FULL YEAR FROM THE TIME OF PROVISIONAL ACCEPTANCE. DURING THIS TIME, THE OWNER SHALL MAINTAIN ALL PLANT MATERIALS IN THE ABOVE MANNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE PLANTS TO ENSURE PROPER CARE. IF THE CONTRACTOR IS DISSATISFIED WITH THE CARE GIVEN, HE SHALL IMMEDIATELY, AND IN SUFFICIENT TIME TO PERMIT THE CONDITION TO BE RECTIFIED, NOTIFY THE LANDSCAPE ARCHITECT IN WRITING OR OTHERWISE FORFEIT HIS CLAIM. LANDSCAPE CONTRACTOR SHALL PRUNE PLANTINGS OF DEAD LIMBS OR TWIGS DURING THE FIRST YEAR OF GROWTH.
12. FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT WILL BE MADE UPON THE CONTRACTOR'S REQUEST AFTER ALL CORRECTIVE WORK HAS BEEN COMPLETED.
13. LANDSCAPE CONTRACTOR SHOULD REPLACE DEAD PLANTINGS IMMEDIATELY UPON OWNER DIRECTION WITHIN THE WARRANTY PERIOD AND AGAIN AT THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL HAVE REPLACED ANY PLANT MATERIAL THAT IS MISSING, NOT TRUE TO SIZE AS SPECIFIED, THAT HAVE DIED, THAT HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESSIVE PRUNING OR INADEQUATE OR IMPROPER CARE, OR THAT ARE, IN THE OPINION OF THE LANDSCAPE ARCHITECT, IN UNHEALTHY OR UNSIGHTLY CONDITION.
14. ALL LANDSCAPE AREAS TO BE GRASS COMMON TO REGION EXCEPT FOR INTERIOR LANDSCAPED ISLANDS OR WHERE OTHER PLANT MATERIAL IS CALLED FOR.
15. ALL TREES AND SHRUBS TO BE PLANTED IN MULCH BEDS WITH DEFINED AND CUT EDGES TO SEPARATE TURF GRASS AREAS.
16. FOR ANY LANDSCAPE AREA SO DESIGNATED TO REMAIN, WHETHER ON OR OFF-SITE, REMOVE WEEDS, ROCKS, CONSTRUCTION ITEMS, ETC., THEN APPLY GRASS SEED OR PINE BARK MULCH AS DEPICTED ON PLANS.
17. LANDSCAPE CONTRACTOR SHALL FEED AND PRUNE EX. TREES, ON OR JUST OFF SITE, THAT HAVE EXPERIENCED ROOT BASE INTRUSION OR DAMAGE DURING CONSTRUCTION IMMEDIATELY AND FOR THE DURATION OF THE WARRANTY PERIOD AT THE DIRECTION OF THE LANDSCAPE ARCHITECT.
18. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY SNOW FENCING AT THE EDGE OF THE EX. TREE CANOPY THE CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS WITHIN THE LANDSCAPED AREAS. ANY DAMAGE TO EXISTING TREES, SHRUBS OR LAWN SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
19. ALL MULCH AREAS SHALL RECEIVE A 2-3" LAYER OF SHREDDED PINE BARK MULCH.
20. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
21. ALL PLANTING HOLES TO BE HAND-DUG, EXCEPT IN NEW CONSTRUCTION WITH NEW PLANTING PITS, PLANTING NEAR CURBS, OR AREAS WHERE SILVA CELLS WILL BE USED. IF HOLES ARE MACHINE-DUG, BOTTOM OF HOLES NEED TO BE THE APPROPRIATE HEIGHT, AND FIRMED BY THE MACHINE TO CREATE STABILITY FOR THE PLANT MATERIAL.

PLEASE NOTE: SHEET SIZE IS SCALED FOR ASME D . DO NOT REDUCE OR ENLARGE.

terra *firma*
landscape architecture

165.a Court Street Portsmouth, NH 03801
603.531.9109 | terrence@terrafirmalandarch.com

Project Title
PROPOSED MULTIFAMILY DEVELOPMENT
94 LANGDON STREET & 98 CORNWALL STREET
PORTSMOUTH, NH

Landscape Architect

Scale
SEE DETAILS

REV.	DATE	DESCRIPTION
A	4/23/2026	TAC REVISION
NO.	DATE	ISSUE NOTE

Project Manager | Drawn By
Date 3/23/2026 | Reviewed By
Project ID PROPOSED MULTIFAMILY DEVELOPMENT

Sheet Title
LANDSCAPE DETAILS

Sheet No.
L-2

SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS
SINCE 1901

54 Portsmouth Street
Concord, NH 03301
Tel. 603.224.9945
Fax 603.228.0423
info@forestsociety.org
www.forestsociety.org

4/28/2026

Wetland Conditional Use Permit Application

Society for the Protection of New Hampshire Forests
400 Little Harbor Rd, Portsmouth, NH
Tax Map 203, Lot 8

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SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS
SINCE 1901

54 Portsmouth Street
Concord, NH 03301
Tel. 603.224.9945
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April 28th, 2026

Rick Chellman, Chair, Planning Board
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH, 03801

Project Narrative

Wetland Conditional Use Permit
Creek Farm – Little Harbor Loop Trail Turnpike
Tax Map 203, Lot 8
400 Little Harbor Rd, Portsmouth, NH

Chair Chellman,

The Society for the Protection of New Hampshire Forests is seeking a wetland conditional use permit to conduct trail maintenance on the part of the Little Harbor Loop trail on our conservation area at Creek Farm in Portsmouth. The shoreline trail at Creek Farm was created prior to the Forest Society's ownership, likely dating back to the late 19th century as part of the historic summer estate. As the trail has grown in popularity over the recent decades, this relatively unimproved trail has seen extensive wear, and requires significant maintenance within certain sections, including the need to construct new trail features to address decades of erosion and compaction.

Within an approximately 300-foot section of the trail (see attached map for location reference), significant compaction and erosion of the trail surface has created a low-lying depression within the trail corridor. Since the trail is situated in gentle terrain, the depression tends to collect water making the trail muddy and wet, especially in springtime, winter thaws, or after large rain events. During these seasonally wet trail conditions, many hikers walk around the edges of the mud to keep their feet dry, which has widened the trail over time, and has caused damage to the trail and loss of vegetation in the wetland buffer zone.

This section of the trail is within the 100ft buffer of the tidal wetland of Sagamore Creek, and the very westerly end of the turnpike (~40sq ft) is within the 100ft buffer of inland wetlands on the property. The tidal wetland buffer on the property is a mix of upland forest, shrubs, and lawn with much of the upland shrub areas being mostly invasive species, about 8% of the buffer area. Please see attached reports from Joesph Noel, NH Certified wetland scientist. The first is a Wetland Delineation & Functional

Assessment Report prepared in 2020 for the Creek Farm waterline replacement project, and the second is an update to that report prepared by Mr. Noel in March 2026.

The Forest Society is proposing to construct 300 liner feet of turnpike through this section to address the trail problem. A “turnpike”, as outlined in the New Hampshire Best Management Practices for Trail Construction and Maintenance manual, is a constructed trail feature built by importing fill material to establish a raised, durable, and well-drained tread surface above the existing trail tread. A layer of coarse crushed drainage stone will be added first, with a layer of compacted aggregate on top, with geotextile fabric separating the layers from each other and the existing ground. The raised trail surface will be crowned and accompanied in some areas by a shallow ditch on the downhill side of the turnpike, which drains water away from the structure and into lead-off ditches at low points, which will also connect to capped stone cross-drains to facilitate dispersing water away from the trail (see example photo page 15). While many turnpikes are elevated enough above the existing ground to require the tread to be retained by timber or rocks walls, after consultation with our professional trail contractor, we have decided that we do not need to elevate the trail surface at this site high enough to require retaining. The completed turnpike will be about 4-5 feet wide. Assorted light machinery for this project will likely include a small tracked-carrier to transport material to the project site, a compact excavator or small skid steer for preparing the ground and spreading material, and a plate compactor to stabilize the new surface material. Construction will follow all applicable BMPs outlined in the *Best Management Practices For Erosion Control During Trail Maintenance and Construction Manual* (NH DNCR, 2017). Silt socks will be installed along the project perimeter between the work and the tidal wetland areas.

We have attached a USFS standard trail plan for a turnpike as an example of the structure. What we plan to build will differ from their example in a few ways, first being low enough to not require retainment on the sides, and second, the drainage ditches will be much subtler and less deep compared to those depicted in the plan, as well as only being needed on the downhill side.

In April 2026 the Portsmouth Conservation Commission recommend a version of this project for approval, totaling 270 linear feet (1,350 square feet) of turnpike. Since that recommendation we have made two changes to the project scope. First, when the proposal went before the Conservation Commission, we had planned two unconnected sections of turnpike only in the existing muddy areas, totaling 270 feet of the trail section, with a 30 foot section in the middle to remain unimproved as it was less impacted and didn’t have issues with mud. After consultation with our trail contractor, we determined that it would be best to also improve the 30 foot middle section,

as there is a chance that it could become a new low point in the trail that gathers water if it remains unimproved. This section will only require the top aggregate surfacing without the addition of drainage stone, but will create a contiguous tread surface throughout this section to address future potential impacts. As a result we are proposing a total of 300 linear feet (1500 square feet) of permanent impact. Second, we determined that approximately a third of the area we plan to stockpile material during construction is within the tidal wetland buffer, amounting to 133 square feet of temporary impact on an area that is currently lawn. We will put up silt fencing on the downhill side of the stockpiles to prevent spill over, and restore the existing lawn after the approximately two-week construction period. As a result of these changes, we are proposing an additional 150 square feet of permanent impact, and 133 square feet of temporary impact over what was proposed to the Conservation Commission. I have attached both an old and revised site plan so that you can compare the changes proposed.

Wetland Conditional Use Permit
Criteria for Approval

In the following section I outline how our project meets approval criteria. After meeting with the Conservation Commission in March, I prepared an additional narrative that addressed some of the specific concerns brough up by the Conservation Commission in detail. Please find that additional narrative attached.

1. The land is reasonably suited to the use, activity, or alteration.

The existing trail pre-dates the Forest Society's ownership of the property, with year-round non-motorized recreational uses including walking, snowshoeing, and skiing being popular and appropriate uses of this area. The wear currently seen on the trail is typical for a natural surface trail in this type of location and needs to be addressed to stop further resource damage.

2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity, or alteration.

To continue providing access to the scenic views and points of interest that the current trail accesses and connects, the trail must remain inside the wetland buffer. If the section of trail with the planned turnpike were relocated outside the wetland buffer, it would require impacts to the wetland buffer in currently un-impacted areas so the relocated trail could reconnect with the existing trail. Given the nature of the surrounding terrain, any trail

reroute would require being surfaced with a hardened fill material in a similar manner as the turnpike to avoid similar erosion and drainage problems in the long term. Relocating the trail would cause more significant ecological impacts within the wetland buffer than simply improving the trail in its existing location.

3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.

This project will not have any substantive adverse impacts on any wetland resources or their functional values on the property, or any other surrounding property. By creating a more erosion resistant and dry trail surface that hikers will stay on, the project will protect and enhance wetland functional values by stopping the widening of the trail and improving drainage compared to the existing trail.

4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.

This project will create very little disturbance to any existing vegetation since the existing trail corridor is wide enough for the planned structure. In one narrower area, the trail corridor may need to be expanded by 1-2 feet temporarily to accommodate construction activities, and this area is outside the vegetated buffer strip zone. The vegetation that would be removed along this narrower section of trail is primarily state-recognized invasive species such as Glossy Buckthorn, European Honeysuckle, and Oriental Bittersweet.
There are several larger trees with large roots exposed by erosion of the trail, these roots would be built over or around rather than removed, to reduce the likelihood of any impact to healthy trees.

5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.

A trail re-route is more impactful to the wetland buffer for reasons described in criteria 2. Other alternatives would be a wooden puncheon boardwalk, which would involve the construction of a substantial structure with increased use of pressure-treated wood and still require construction activity within the same existing footprint. A puncheon boardwalk would be less accessible to different users and would do less to address existing drainage issues than a turnpike. Moreover, a puncheon boardwalk would need to be entirely replaced 20-30 years, while a turnpike will last indefinitely with basic maintenance. The far shorter lifespan of the

puncheon would create future intrusions into the area to replace, and render the project economically unfeasible.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.

This project will not create any permanent impact outside the existing trail corridor. With hikers staying on the new trail surface, areas impacted by hikers going around wet ground should revegetate naturally.

Impervious Surfaces and Wetland Buffer Enhancement Plan / Living Shoreline Strategy

Most municipalities consider trails to be impervious surfaces, as they already lack vegetation, and soils compacted by heavy use function as impervious surfaces in many ways. Since our project stays entirely within the existing trail, it would not increase impervious surfaces within the buffer.

Moreover, through the incorporation of well-draining layers of crushed stone in the turnpike, as well as ditches that will direct runoff, the turnpike should overall improve drainage in the buffer compared to the existing trail. When combined with the project protecting vegetation and allowing natural re-vegetation of areas impacted by hikers widening the trail, we believe the project's overall benefits to the wetland buffer offset any "new" impervious surfaces from the creation of the turnpike.

For the same reason that we are not creating new impacts on the tidal wetland buffer, we determined we should not need a living shoreline strategy, in consultation with Kate Homet from the planning department, during a visit to the site.

Findings of Fact | Wetland Conditional Use Permit
City of Portsmouth Planning Board

Date: May 21, 2026
Property Address: 400 Little Harbor Road
Application #: LU-26-26
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:

Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of all conditions necessary to obtain final approval.

In order to grant Wetland Conditional Use permit approval the Planning Board shall find the application satisfies criteria set forth in the Section 10.1017.50 (Criteria for Approval) of the Zoning Ordinance.

	Zoning Ordinance Sector 10.1017.50 Criteria for Approval	**Finding** (Meets Criteria for Approval)	**Supporting Information**
1	*1. The land is reasonably suited to the use activity or alteration.*	**Meets** **Does Not Meet**	The existing trail pre-dates the Forest Society's ownership of the property, with year-round non-motorized recreational uses including walking, snowshoeing, and skiing being popular and appropriate uses of this area. The wear currently seen on the trail is typical for a natural surface trail in this type of location and needs to be addressed to stop further resource damage.
2	2. *There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.*	**Meets** **Does Not Meet**	To continue providing access to the scenic views and points of interest that the current trail accesses and connects, the trail must remain inside the wetland buffer. If the section of trail with the planned turnpike were relocated outside the wetland buffer, it would require impacts to the wetland buffer in currently un-impacted areas so the relocated trail could reconnect with the existing trail. Given the nature of the surrounding terrain, any trail Page 4reroute would require being surfaced with a hardened fill material in a

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	Zoning Ordinance Sector 10.1017.50 Criteria for Approval	Finding (Meets Criteria for Approval)	Supporting Information
			similar manner as the turnpike to avoid similar erosion and drainage problems in the long term. Relocating the trail would cause more significant ecological impacts within the wetland buffer than simply improving the trail in its existing location.
3	*3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.*	**Meets** **Does Not Meet**	This project will not have any substantive adverse impacts on any wetland resources or their functional values on the property, or any other surrounding property. By creating a more erosion resistant and dry trail surface that hikers will stay on, the project will protect and enhance wetland functional values by stopping the widening of the trail and improving drainage compared to the existing trail.
4	*4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.*	**Meets** **Does Not Meet**	This project will create very little disturbance to any existing vegetation since the existing trail corridor is wide enough for the planned structure. In one narrower area, the trail corridor may need to be expanded by 1-2 feet temporarily to accommodate construction activities, and this area is outside the vegetated buffer strip zone. The vegetation that would be removed along this narrower section of trail is primarily state-recognized invasive species such as Glossy Buckthorn, European Honeysuckle, and Oriental Bittersweet. There are several larger trees with large roots exposed by erosion of the trail, these roots would be built over or around rather than removed, to reduce the likelihood of any impact to healthy trees.
5	*5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.*	**Meets** **Does Not Meet**	A trail re-route is more impactful to the wetland buffer for reasons described in criteria 2. Other alternatives would be a wooden puncheon boardwalk, which would involve the construction of a substantial structure with increased use of pressure-treated wood and still require construction activity within the same existing footprint. A puncheon boardwalk would be less accessible to different users and would do less to

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	Zoning Ordinance Sector 10.1017.50 Criteria for Approval	Finding (Meets Criteria for Approval)	Supporting Information
			address existing drainage issues than a turnpike. Moreover, a puncheon boardwalk would need to be entirely replaced 20-30 years, while a turnpike will last indefinitely with basic maintenance. The far shorter lifespan of the Page 5puncheon would create future intrusions into the area to replace and render the project economically unfeasible.
6	*6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.*	**Meets** **Does Not Meet**	This project will not create any permanent impact outside the existing trail corridor. With hikers staying on the new trail surface, areas impacted by hikers going around wet ground should revegetate naturally.
7	**<u>Other Board Findings:</u>**		

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SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS
SINCE 1901

54 Portsmouth Street
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Tel. 603.224.9945
Fax 603.228.0423
info@forestsociety.org
www.forestsociety.org

March 25th, 2026
Samantha Collins, Chair, Conservation Commission
Rick Chellman, Chair, Planning Board
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH, 03801

Project Narrative Update
Wetland Conditional Use Permit
Creek Farm – Little Harbor Loop Trail Turnpike
400 Little Harbor Rd, Portsmouth, NH
Tax Map 203, Lot 8

Chair Collins and Chair Chellman,

On behalf of the Society for the Protection of New Hampshire Forests (Forest Society), I would like to take this opportunity to provide some additional information and details regarding the wetlands conditional use permit application we have submitted for our trail improvement project at Creek Farm (400 Little Harbor Road). We appreciate the Conservation Commission taking time to review our application and provide feedback during the meeting on March 11th, 2026. The primary questions that were asked by the commission members included why we're seeking to construct a turnpike in this situation, additional design and maintenance details, accessibility considerations, and how this project fits within our larger trail and recreational plans for the property. The following narrative elaborates on the answers I gave to those questions during the March 11th meeting.

Additionally, Commission members requested additional information added to the site plan, that the delineation by reviewed and stamped by the wetland scientist who did the original delineation, copies of our filed State wetland permit, and photo examples of what a turnpike looks like. Please find those items attached, and more information in the following narrative.

Our decision to build a turnpike reflects the most appropriate and cost-effective solution to the primary maintenance problem at this site. Given that the periodically wet trail surface conditions arise from the long-term impacts of significant visitor use over time (compaction), and not due to this site having saturated wetland soils, a turnpike is the most suitable best management practice for this site. A puncheon design or boardwalk would provide no substantial benefits over turnpike construction, and given that pressure treated wood would be needed for long-term structural integrity, would introduce chemicals leached from pressure treated wood into the surrounding soil within the wetland buffer.

A turnpike will also improve drainage at the site in multiple ways that a puncheon would not. Installing the turnpike will break up existing soils that have been compacted by high foot traffic and restore more natural water infiltration. The turnpike itself is designed to facilitate effective drainage by incorporating a base layer of coarse drainage stone with geofabric for long term separation of layers, making the turnpike a functionally permeable surface – more so than existing compacted soils within the trail corridor. Finally, strategically incorporating ditches along portions of the turnpike with ancillary lead-off ditches will help relieve drainage issues in areas where compaction and erosion of the trail surface currently trap water within below-grade depressions. A puncheon, which would be built on top of the existing trail surface, would do little to restore more natural drainage to the site.

Furthermore, building puncheon style bridging would cost as much or more than a turnpike with a much shorter lifespan. A turnpike built with rock retainers is expected to have an indefinite lifespan, requiring simple yearly maintenance of drainage ditches (preformed by trained volunteers), and periodic repairs to the turnpike. A puncheon built of pressure treated wood would likely need significant repairs at around 10-15 years (repair/replace decking) and need the entire structure replaced after about 25 years. Built with non pressure-treated wood, the replacement interval is even shorter, at around 10 years. As a conservation organization, we will continue to steward this trail in perpetuity, well beyond the lifespan of several puncheon bridges. We need to invest intentionally in our infrastructure improvements, and prefer not to implement a design that will cost us 4 times as much or more in the long term.

Joesph Noel, who delineated wetlands on the property in 2020 for the waterline replacement project, returned to the site on 3/20/2026 to confirm that the boundaries of the delineated wetlands have not changed, as well as flag the highest observable tide line of the tidal wetland next to the project site. Please see the attached signed and stamped letter describing his findings, as well as the revised site plan showing the location of the flagged tidal wetland boundary.

In terms of visitor accessibility, our project will substantially increase the year-round accessibility of the trail. While not designed to the specifications of an all-person accessible trail following U.S. Forest Service standards, the existing trail from the Forest Society Education Center out past the work area to the edge of Sagamore Creek is relatively accessible, with gentle grades and few obstacles along its length. Our project addresses the intermittently wet tread surface, which is the most significant obstacle to access along this section of the trail, along with several areas with roots exposed by trail erosion. Trail accessibility advocates, like Enock

Glidden of Outdoor Access Solutions, emphasize that modest changes and conscious decisions in trail design, construction or maintenance can considerably improve the accessibility of a trail for many users even where other factors (terrain, cost, etc.) prohibit building a fully accessible all persons trail. Different people living with a range of mobility disabilities are able to navigate different types of obstacles or may have access to different sorts of technological aids. Those factors mean that even incremental improvements to accessibility can still be beneficial to many people with mobility disabilities and, given that this section of trail has fewer barriers to access than many other trails, improvements to accessibility in this location go a long way.

Overall, this project substantially supports our goals of increasing public engagement on the property and providing a high-quality recreational experience for visitors. Maintaining and improving the existing Little Harbor Loop Trail is our primary trail management objective and, at this time, we do not have plans to create additional trails or relocate existing ones. Opportunities may exist in the future to further enhance accessibility along this trail system, though we currently do not have any immediate plans beyond ongoing maintenance and installing the new trail turnpike. The Forest Society has been actively working to increase public engagement at Creek Farm, including better utilizing our existing trails and increasing programming based at our onsite Education Center. In 2023, we built a new public restroom facility for visitors outside of our Education Center. Last year we also added staff to support our engagement goals, hiring a new Southeast Region Program Manager to help expand educational programing and public engagement at Creek Farm, which this year will included a series of public and private guided walks (including partnering with the Portsmouth Senior Activity Center) among other new programming. We are also continuing existing programming such as our partnerships with the Gundalow Company River Rats summer camp and the Piscataqua Youth Sailing Association. With an ever-increasing program presence at Creek Farm, upgrading this section of the trail significantly supports our programs and is necessary to protect the long-term integrity of the trail.

As the Conservation Commission continues to review our application, I welcome you contact me via email (dsummers@forestsociety.org) with any additional questions you may have. I look forward to meeting with commission members for the site walk we have scheduled for 4/1/2026 and hope it will be a good opportunity to further explain the design details, add context, and discuss other considerations we're incorporating into our project.

Sincerely,
Dylan Summers

Proposed Trail Turnpike
Little Harbor Loop Trail
Creek Farm

City of Portsmouth
Wetlands Conditional Use Permit Site Plan

400 Little Harbor Road, Portsmouth, NH
Tax Map 203, Lot 08

Date Submitted: 2/20/2026
Revision: 3/25/2026, 4/28/2026

Access road unmaintained after here

Build over large exposed roots to protect tree health

Additional section between muddy areas.
Surfacing only, creates treadway continuity to prevent drainage issues

Good cross drainage, ditching not needed in this section

Silt Socks along length of project

End Flags EOT #11

Prune overhanging branches from apple tree only if needed for equipment clearance

Trim back Glossy Buckthorn, Honeysuckle, Multiflora Rose and Oriental Bittersweet to allow for equipment clearance

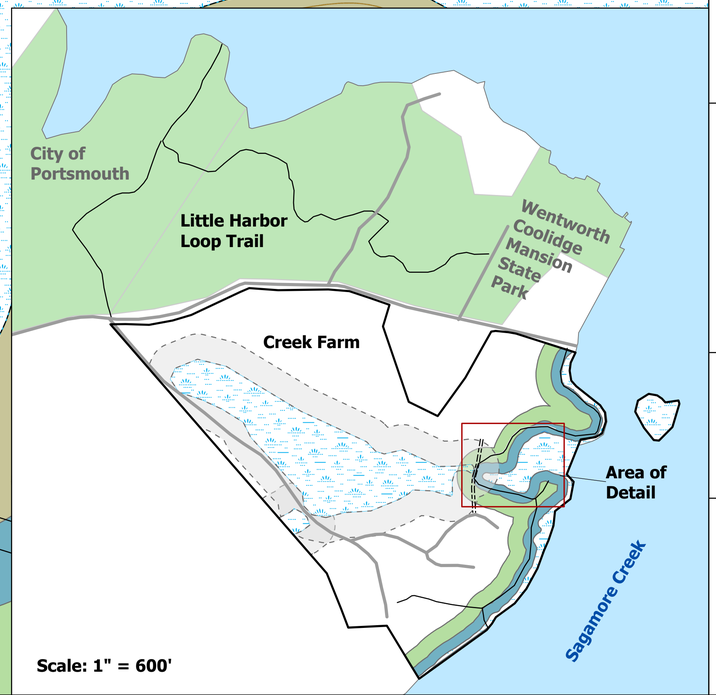
Start Flags EOT #1

Approximate location of blue flags delineating wetland, placed by Joe Noel, 3/20/2026. See Wetland Delineation Note for details

Material Stockpiles with Silt Fencing

To parking and road

30 15 0 30 60 90 Feet



Legend

- Flagged Tidal Wetland Boundary
- Wetlands
- 25 ft Tidal Wetland Buffer
- 40 ft Vegetated Buffer Strip (No Cut)
- 100 ft Tidal Wetland Buffer
- 100 ft Freshwater Wetland Buffer
- Little Harbor Loop Trail
- Turnpike to be constructed
- Erosion Control (Silt Socks or Silt Fence)
- Downhill side ditch and lead-off ditches
- Access Road
- Material Stockpile
- Shrub to be trimmed back
- Tree near project area
- 2 foot Contour Interval
- 10 foot Index Contour Interval

Scale:
(22"x34") 1 inch = 15 feet (1:180)

Wetland Delineation Note:

The wetland boundary depicted on this plan was delineated/flagged by Joseph W. Noel, NH Certified Wetland Scientist #086 in 2019 and again on March 19, 2026 (only the portion where the trail improvements are planned was reflagged/reviewed). Some of the flags were survey located by Knight Hill Land Surveying Services, Inc. in 2019. The eastern end of the flagging does not appear to have been survey-located in 2019 but follows the same contour line as the survey-located portion. The delineation was conducted in accordance with the U.S. Army Corps of Engineers document Corps of Engineers Wetlands Delineation Manual, (1987) along with the required Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, (Version 2, January 2012) at the federal level and per NH Code of Administrative Rules Env-Wt 602.23 at the state level.
See signed and stamped report dated 3/21/2026 for more information

Prepared By:
Dylan Summers
Stewardship Project Manager
Society for the Protection of New Hampshire Forests
dsummers@forestsocety.org
(603) 224-9945

Owner/Applicant:
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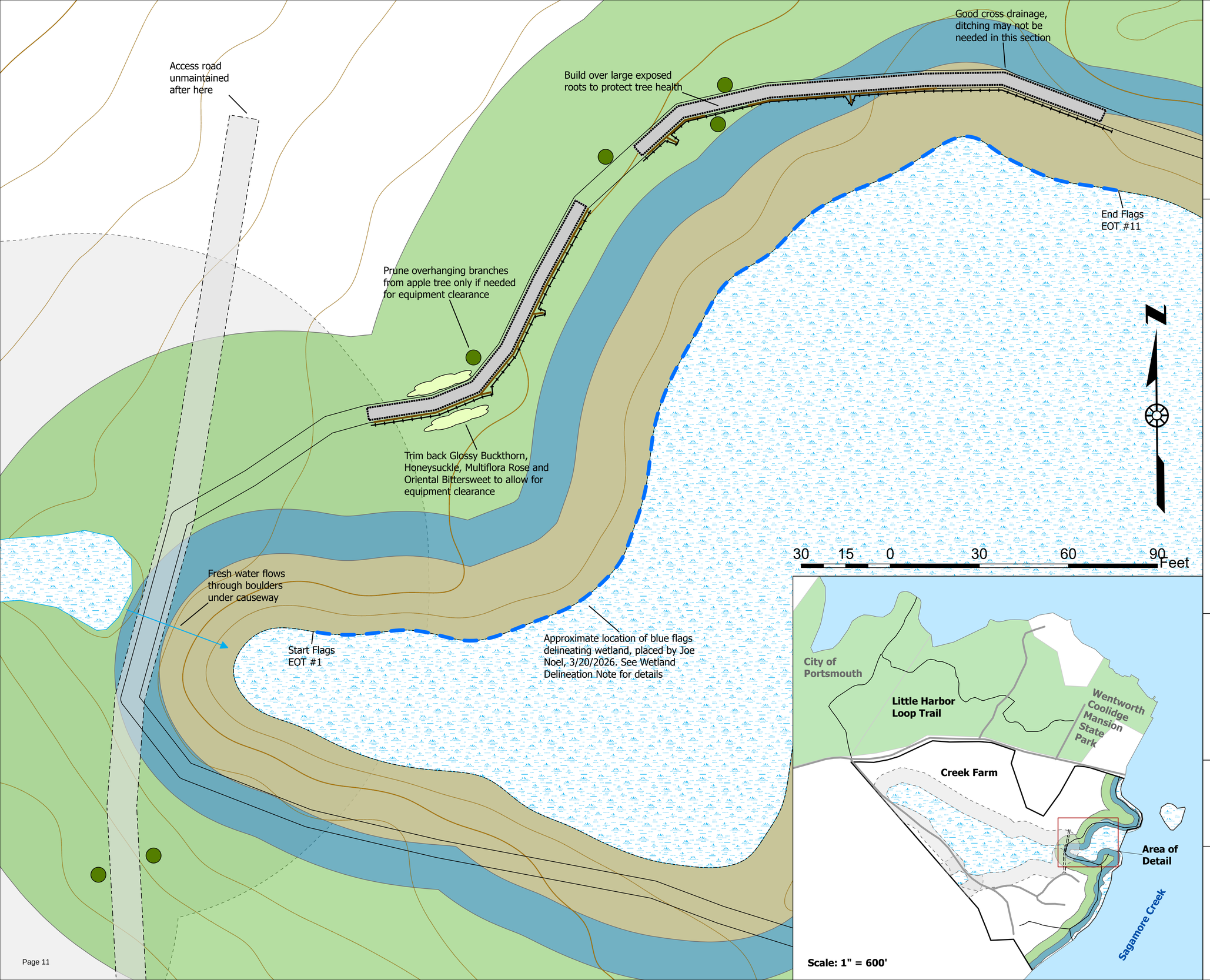
SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS
SINCE 1901

Proposed Trail Turnpike
Little Harbor Loop Trail
Creek Farm

City of Portsmouth
Wetlands Conditional Use Permit Site Plan

400 Little Harbor Road, Portsmouth, NH
Tax Map 203, Lot 08

Date Submitted: 2/20/2026
Revision: 3/25/2026



Legend

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- 25 ft Tidal Wetland Buffer
- 40 ft Vegetated Buffer Strip (No Cut)
- 100 ft Tidal Wetland Buffer
- 100 ft Freshwater Wetland Buffer
- Little Harbor Loop Trail
- Turnpike to be constructed
- Erosion Control (Silt Socks)
- Downhill side ditch and lead-off ditches (uphill side ditch not shown)
- Access Road
- Shrub to be trimmed back
- Tree near project area
- 2 foot Contour Interval
- 10 foot Index Contour Interval

Scale:
(22"x34") 1 inch = 15 feet (1:180)

Wetland Delineation Note:

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See signed and stamped report dated 3/21/2026 for more information

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Project Area Photo Exhibit 1

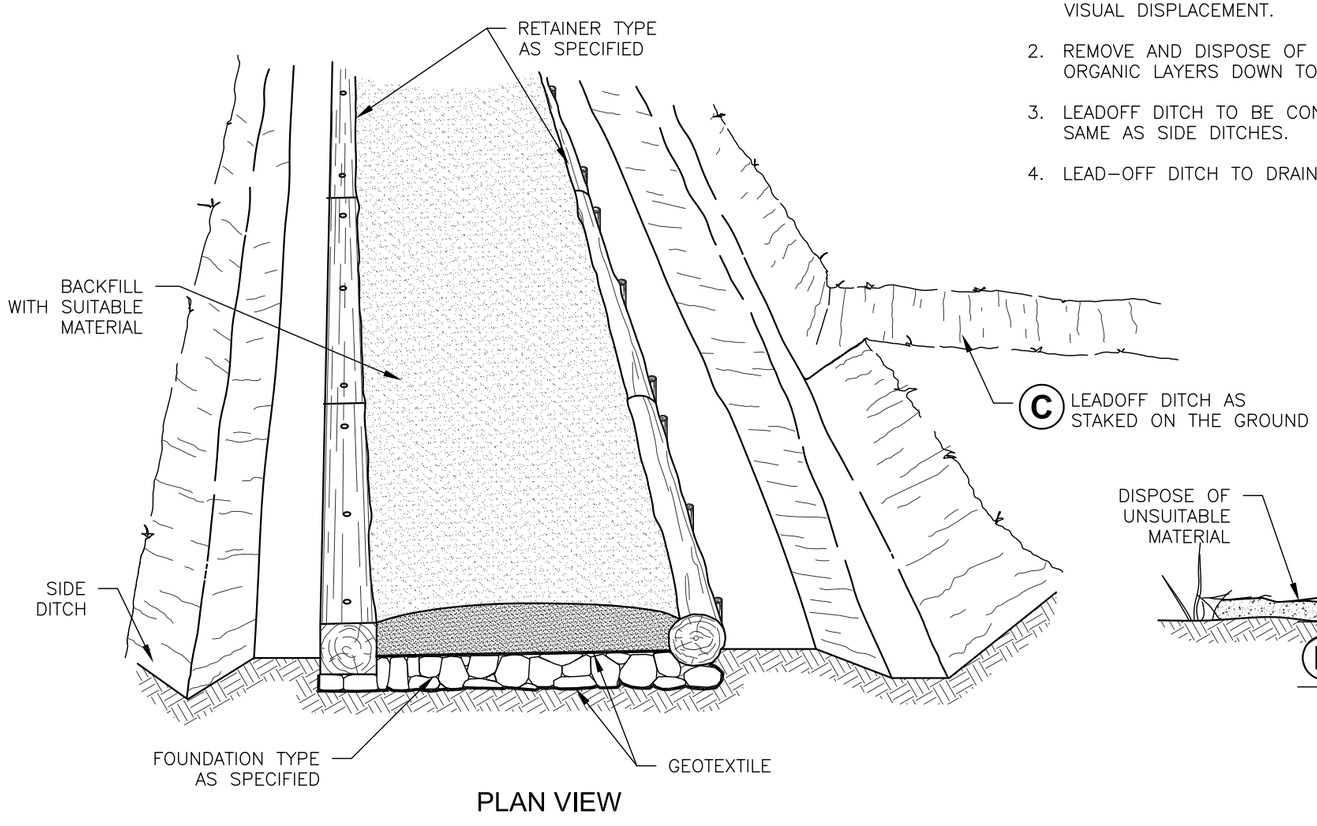
Taken from eastern end of west section of proposed turnpike, looking west.
Visible impact on the right side of the photo from hikers circumventing wet trail

Project Area
Photo Exhibit 2
Taken from the middle of the eastern section of proposed turnpike, looking west
Visible impact on right side of photo of hikers avoiding wet trail

TYPE 2 - STANDARD TURNPIKE WITH FOUNDATION

TYPICAL ID	GEOTEXTILE			RETAINER*	DITCH							FOUNDATION**	COMMENTS
	TYPE	TOP	BTM	TYPE	TYPE	LOCATION		DIMENSIONS (INCHES)				TYPE	
						LT	RT	Ⓓ	Ⓔ	Ⓕ	Ⓖ		
TPF–1	G			R								FD	

N/A WHEN NOT APPLICABLE
*FOR TYPICAL RETAINERS SEE SHEET STD_911–03
**FOR FOUNDATIONS SEE SECTION STD_918



PLAN VIEW

NOTES:

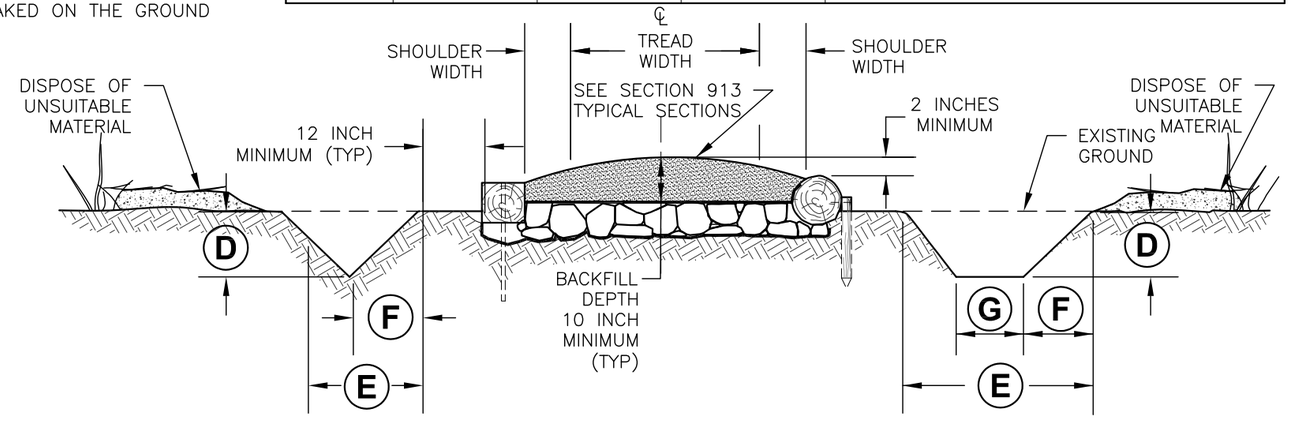
1. COMPACT BACKFILL IN 6 INCH LIFTS UNTIL NO VISUAL DISPLACEMENT.
2. REMOVE AND DISPOSE OF DUFF AND TOP ORGANIC LAYERS DOWN TO MINERAL SOIL.
3. LEADOFF DITCH TO BE CONSTRUCTED THE SAME AS SIDE DITCHES.
4. LEAD–OFF DITCH TO DRAIN TO DAYLIGHT.

GEOTEXTILE TYPE

TYPE	MATERIAL	COMMENTS
G1	NON–WOVEN	
G2	WOVEN	
G3		

IN-FILL MATERIAL TYPE

TYPE	MATERIAL	ROCK SIZE	GRADATION %	COMMENTS
FD1	AGGREGATE	1 INCH MINUS		
FD2	COARSE ROCK	4 TO 6 INCH		
FD3	HEAVY ROCK	8 INCH +		
FD4				



A "V" DITCH SECTION

B FLAT BOTTOM DITCH SECTION

TYPICAL CROSS SECTION

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
STANDARD TRAIL PLAN

PROJECT NAME & LOCATION

DRAWING NAME **TYPE 2 - STANDARD TURNPIKE w/FOUNDATION**

SECTION **932 - TURNPIKES**

TYPICAL ID **TPF**

REVISION DATE **XX/XX/XX**

NO SCALE

DRAWING NO. **STD_932-20-01**

SHEET

OF

Example of Turnpike without sides retained

JOSEPH W. NOEL
P.O. BOX 174
SOUTH BERWICK, MAINE 03908
(207) 384-5587

*CERTIFIED SOIL SCIENTIST * WETLAND SCIENTIST * LICENSED SITE EVALUATOR*

March 21, 2026

Mr. Dylan Summers
Stewardship Projects Manager
Society for the Protection of New Hampshire Forests
54 Portsmouth Street
Concord, New Hampshire 03301

RE: 400 Little Harbor Road, Portsmouth, New Hampshire, JWN #95-445

Dear Dylan:

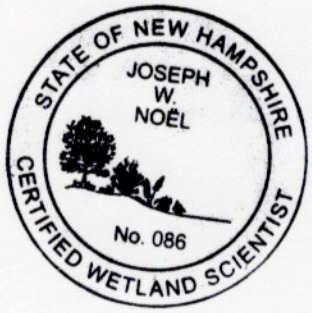
It was a pleasure meeting you on March 19, 2026 at the above-referenced site (known as Creek Farm). You showed me the approximate limits of where the planned Little Harbour Loop trail improvements will occur. These improvements are near the adjacent coastal wetland system (i.e., tidal area). The scope of work only included this limited area where the trail system is being upgraded.

A second visit was made on March 20, 2026 and blue flagging (EOT1 – EOT11) was placed along the highest observable tide line (HOTL). The delineation was done in accordance with NH Code of Administrative Rules Env-Wt 602.23. This boundary was previously flagged by the undersigned on December 13, 2019 using blue flagging and at least a portion of this boundary was located by Knight Hill Land Surveying Services, Inc. The eastern end of the 2026 flagging (i.e., last few flags) may not have been survey-located in 2019 but do follow the same contour line). The approximate location of the EOT1 – EOT11 have been added to the sketch map that you provided for planning purposes. Four of the original 2019 flags (i.e. remaining knots) were observed during the 2026 fieldwork. It appears from the on-site that there are no detectable changes to the wetland boundary. Refer to that attached photo that shows one of the remaining blue flags on a honeysuckle shrub (*Lonicera sp.*). Also noted nearby is a patch of marsh elder (Iva frutescens). This shrub is also known as Jesuit's-Bark or High-Tide Bush (refer to attached photo) and its state status is Threatened. No direct impacts will occur where this patch of shrubs is located.

Please feel free to call if you have any questions or need additional information.

Sincerely,

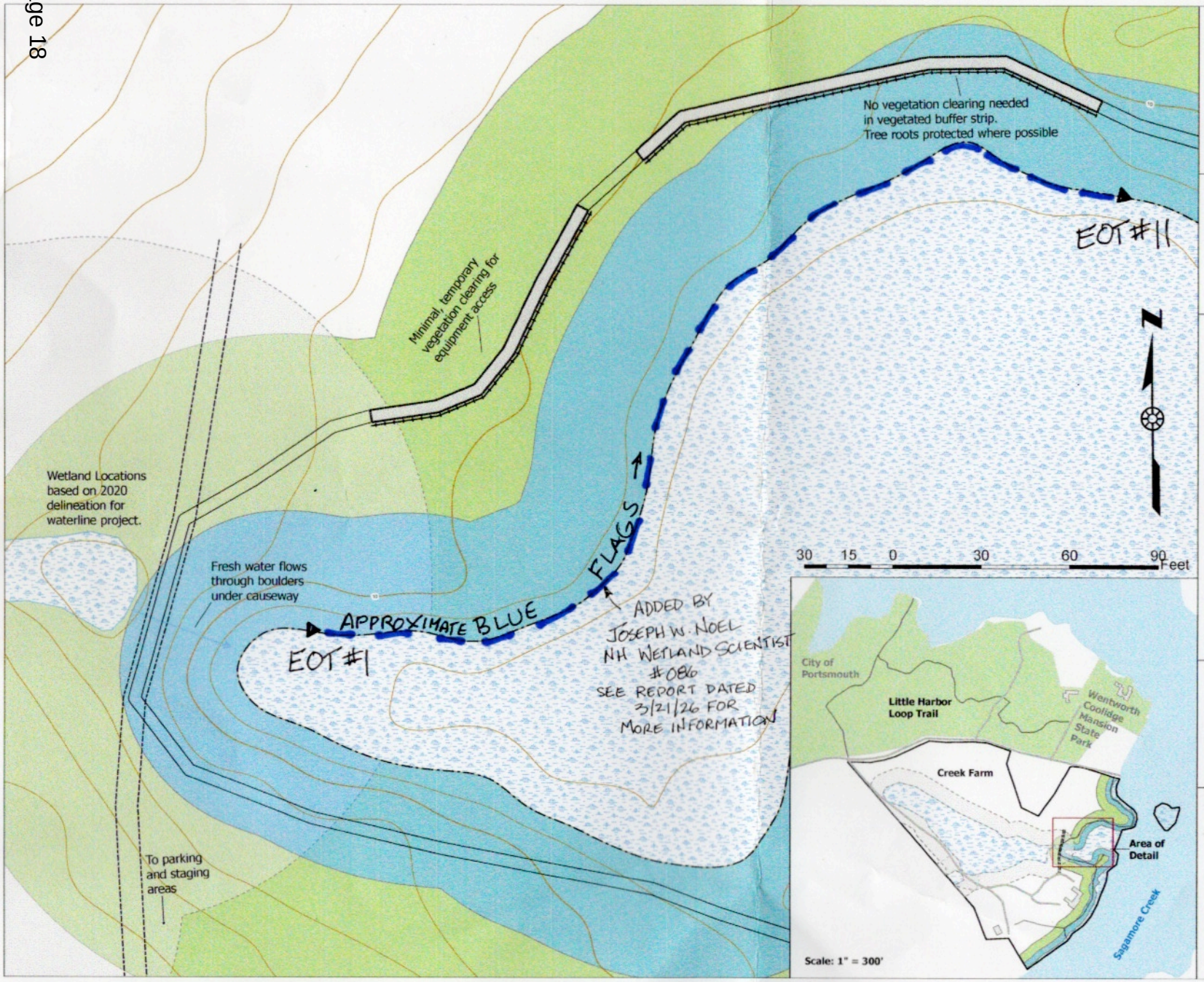
Joseph W. Noel
NH Certified Wetland Scientist #086



PHOTOS
400 Little Harbor Road – Portsmouth, New Hampshire
(Photos taken by Joseph W. Noel on March 20, 2026)

Remnant of blue flagging from the 2019 delineation

Photo of a patch of marsh elder (*Iva frutescens)*



Proposed Trail Turnpike
Little Harbor Loop Trail
Creek Farm

400 Little Harbor Road
Portsmouth, NH
Tax Map 203, Lot 08

City of Portsmouth Wetlands Conditional Use Permit Site Plan

Date Submitted: 2/20/2026

Legend

- Highest Observable Tide
- Wetlands
- 100 ft Tidal Wetland Buffer
- 40 ft Vegetated Buffer Strip
- 100 ft Freshwater Wetland Buffer
- Little Harbor Loop Trail
- Turnpike to be constructed
- Erosion Control
- Access Road
- 2 foot Contour Interval
- 10 foot Index Contour Interval

Scale:
(22" x 34") - 1" = 15'
(11" x 17") - 1" = 30'

Prepared By:
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SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS
SINCE 1901

WETLAND DELINEATION
&
FUNCTIONAL ASSESSMENT REPORT

FOR

CREEK FARM
400 LITTLE HARBOR ROAD
PORTSMOUTH, NEW HAMPSHIRE

PREPARED FOR:

ALTUS ENGINEERING, INC.
133 COURT STREET
PORTSMOUTH, NEW HAMPSHIRE 03801

PREPARED BY:

JOSEPH W. NOEL
P.O. BOX 174
SOUTH BERWICK, MAINE 03908

JWN# 95-445
MARCH 23, 2020

JOSEPH W. NOEL
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SOUTH BERWICK, MAINE 03908
(207) 384-5587

*CERTIFIED SOIL SCIENTIST * WETLAND SCIENTIST * LICENSED SITE EVALUATOR*

INTRODUCTION

This report replaces the Partial Wetland Delineation Report/Letter dated January 22, 2020. This report was prepared to aid in the review of the proposed municipal waterline replacement (930'+/- linear feet) for Creek Farm. The property is 30.20+/- acres and is located at 400 Little Harbor Road in Portsmouth, New Hampshire. No direct wetland impacts are planned but the proposed project will require encroaching into the 100-foot wetland buffer to relocate and replace a portion of the waterline serving the property. This Functional Assessment is for the freshwater wetland not the adjacent downstream tidal wetland associated with Sagamore Creek.

WETLAND DELINEATION

To determine the wetland boundary, the methodologies in the U.S. Army Corps of Engineers document *Corps of Engineers Wetlands Delineation Manual* (1987) along with the required *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, (Version 2.0) were used. Wetlands were identified based on soils, vegetation, and wetland hydrology. Except in special cases, all three factors (hydric soils, hydrophytic vegetation, and wetland hydrology) must be present for an area to classify as wetland. A predominance of wetland and upland vegetation was determined from visual estimates in the vegetative layers (herbaceous, shrub, sapling, and tree layers). Plant species indicator status was based on the U.S. Army Corps of Engineers publication *National Wetland Plant List* (2016).

Shallow soil observations were made using a hand auger to assess the soil morphological features and to examine for wetland hydrology. Hydric soil determinations were conducted in accordance with the United States Department of Agriculture, Natural Resources Conservation Service document *Field Indicators of Hydric Soils in the United States, Version 8.1* (2017) along with the manual *Field Indicators for Identifying Hydric Soils in New England* (Version 4, April 2019).

The freshwater wetland boundary in the vicinity of the proposed waterline replacement/relocation was field delineated with sequentially numbered pink and black striped flagging on December 13, 2019. Flagged sequence A1 thru A8 delineates a portion of the freshwater wetland southwest of the former "Carriage House" now unoccupied and used for storage (not part of the wetland assessment area). Flagged sequences B1 thru B20 delineate a portion of the freshwater wetland north of Creek Farm and west of a Sagamore Creek tidal inlet (wetland assessment wetland). The freshwater and tidal wetlands are separated by a culverted trail (culvert type unknown - may be an old stone culvert or simply stone/boulder pile serving as a drainageway). The tidal boundary or HOTL was flagged with blue flagging on April 24, 2019 and extended on December 13, 2019. These flags were located by Knight Hill Land Surveying Services, Inc. and placed on the project plans.

FUNCTIONAL ASSESSMENT

The majority of the freshwater wetland being assessed is nearly level to gently sloping and dominated by a scrub-shrub plant community with forested edges and pockets of emergent vegetation. The National Wetland Inventory (NWI) database classifies the wetland as PFO1C (palustrine, forested, broad-leaved deciduous, seasonally flooded), PSS1C (palustrine, scrub-shrub, broad-leaved deciduous, seasonally flooded), and PEM1C (palustrine, emergent, persistent, seasonally flooded). The soils are poorly drained and fine textured. Project plans show no direct wetland impacts will occur. No formal vernal pool survey was conducted by the undersigned; however, the delineated wetlands near the proposed project did not appear to have the physical characteristics of a vernal pool. Refer to attached photos of the wetland systems and the trail where the waterline will be crossing.

The parcel contains an old farm/estate that contains the main house and the Creek Farm Cottage that was originally built in the 1800s. In ~1997 a conservation easement was established and in 2000 the Society For the Protection Of Forests acquired the property as a conservation area. Currently the land is being used for hiking trails, outdoor education, tree farm, bird sanctuary and wildlife refuge. The freshwater wetland drains down to Sagamore Creek through a constricted outlet (intermittent stream section and wetland swale with a portion that was dug out a long time ago to improve drainage out of the freshwater wetland system.

METHODOLGY

Provided by Altus Engineering, Inc. for the wetland assessment was a plan with the existing condition and where the proposed waterline is being replaced/rerouted. Also reviewed by the undersigned were the following resource maps: NH Wetland Mapper map, NRCS soil survey, FEMA map, and the NWI map. The fieldwork portion of the wetland assessment was conducted on March 1, 2020 using *The Highway Methodology Workbook Supplement: Wetland Functions and Values, A Descriptive Approach* (US Army Corps of Engineers, New England Division, 1999). One completed Wetland Function-Value Evaluation Form has been included (refer to Attachments for details). There is one identified rare species or exemplary community documented on the site by the New Hampshire Natural Heritage Bureau (NHB). Marsh elder/jesuit's-bark (*Iva frutescens*) is documented but is not in the wetland being assessed. A survey was conducted by the undersigned in close proximity to the project and two additional small communities were noted on the upper banks of the downstream tidal system (located ~70' or more from the waterline project). Attached are plant and wildlife lists of the subject development area (not detailed lists of the entire property). Observations were also limited due to winter conditions. The FEMA map verified that the wetland is not within the 100 year floodplain. There are no downstream public or private wells (municipal water on-site). The USGS shows a blue line associated with the subject wetland, however, this stream appears to be dug out in some areas and more intermittent in nature in the freshwater wetland from the limited site observations (refer to stream photo in Attachment section).

The Highway Methodology utilizes list of considerations/qualifiers to assist in determining the presence and evaluating the importance of the following functions and values. The description

of each function and value comes directly from *The Highway Methodology Workbook Supplement* (1999).

1) Groundwater Recharge/Discharge – This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area.
2) Floodflow Alteration – This function considers the effectiveness of the wetland in reducing flood damage by water retention for prolonged periods following precipitation events and the gradual release of floodwaters.
3) Fish and Shellfish Habitat (Freshwater) – This function considers the effectiveness of seasonal or permanent watercourses associated with the wetland in question for fish and shellfish habitat
4) Sediment/Toxicant/Pathogen Retention – This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens in runoff water from surrounding uplands or upstream eroding wetland areas.
5) Nutrient Removal/Retention/Transformation – This function considers the effectiveness of the wetland as a trap for nutrients in runoff water from surrounding uplands or contiguous wetlands and the ability of the wetland to process these nutrients into other forms or trophic levels.
6) Production Export – This function evaluates the effectiveness of the wetland to produce food or usable products for humans or other living organisms.
7) Sediment/Shoreline Stabilization – This function considers the effectiveness of a wetland to stabilize streambanks and shorelines against erosion.
8) Wildlife Habitat – This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge.
9) Recreation – This value considers the suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting, and other passive recreational activities.
10) Education/Scientific Value – This value considers the suitability of the wetland as a site for an "outdoor classroom" or a location for scientific study or research.
11) Uniqueness/Heritage – This value considers the effectiveness of the wetland or its associated waterbodies to provide certain special values.
12) Visual Quality/Aesthetics – This value considers the visual and aesthetic quality or usefulness of the wetland.
13) Endangered Species Habitat – This value considers the suitability of the wetland to support threatened or endangered species.

FUNCTION AND VALUES DISCUSSION

The wetlands will not be directly impacted by the proposed waterline. There is one principle function in the wetland system (i.e., Wildlife Habitat). This wetland is favorable for birds (migrating, nesting, etc.) along with a number of smaller mammals. Deer use was also noted in the wetland. Two other principle values were noted but had more to do with the area adjacent to or surrounding the freshwater wetland (i.e., Recreation and Education/Scientific Value). In addition, the wetland system does provide the following functions and values: Groundwater Recharge/Discharge, Floodflow Alteration, Sediment/Toxicant Retention, Nutrient Removal, Production Export, Uniqueness/Heritage, and Visual Quality/Aesthetics. The wetland does not

provide the following functions and values: Fish and Shellfish Habitat, Sediment/Shoreline Stabilization, or Endangered Species Habitat. The adjacent tidal wetland does provide these values and should be considered a highly valuable wetland system. No Historic Preservation database review was provided. This should be conducted due to the historic nature of the site (first settled in 1640).

The wetland buffer to be impacted is almost all along the existing trail system and through an overgrown old field that is dominated by invasive species. The water line is planned in uplands represented by invasive plant species such as: asian bittersweet (*Celastrus orbiculatus*), japanese-knotweed (*Reynoutria japonica*), european buckthorn (*Rhamnus cathartica*), european barberry (*Berberis vulgaris*), japanese barberry (*Berberis thunbergii*), glossy false buckthorn (*Frangula alnus*), rambler rose (*Rosa multiflora*), honeysuckles (*Lonicera spp.*), norway maple (*Acer platanoides*), and black locust (*Robinia pseudoacacia*). These invasive plants are listed in the *New Hampshire Guide to Upland Invasive Species* (2011) or the NH Invasive Plant Species Watch List (April 24, 2019). In addition to the aforementioned invasive plants: eastern white pine (*Pinus strobus*), northern red oak (*Quercus rubra*), quaking aspen (*Populus tremuloides*), apple (*Malus sp.*), stag-horn sumac (*Rhus typhina*), sensitive fern (*Onoclea sensibilis*), and grape (*Vitis sp.*) were also noted. The water line will pass through an existing narrow stone culverted trail where the freshwater "B" flagged series drains to the tidal creek (i.e., wetlands separated by trail). The downslope side of the trail where the waterline is crossing is essentially boulders. The upslope side of the trail is the freshwater wetland. Plant species noted on the upslope side slope side of the trail and in close proximity to the trail in the freshwater wetland included: rambler rose, sedges, smooth arrow-wood, sedges, Japanese barberry, asian bittersweet, and buckthorn. Observations were limited due the winter conditions and area just upslope was still iced over. The trail where the waterline will be crossing between the two wetland systems is the natural constricted point of the freshwater wetland system and being adjacent to the tidal system, this crossing was most likely established here back in the late 1800's.

The upland soils are shallow to moderately deep to bedrock (i.e., ranging from 10 to 40 inches deep) with textures ranging from fine sandy loam to loamy sand. The hydric soils within the freshwater wetlands are primarily fine textured (i.e., very fine sandy loam or finer).

By using the existing gravel path to cross between the wetland system (where existing line is) and rerouting the balance of the waterline through upland that are further away from the tidal system than the existing waterline, there will be no permanent impacts to the wetland buffer or the wetland systems from the new waterline. This will also be further away from the marsh elder communities.

Selective thinning of the vegetation will also occur within the 100-foot buffer. By removing the invasive species, etc. a more natural plant community/buffer could regenerate here. Proper removal of the invasive species should be conducted to prevent further spread. Contractors should be familiar with proper removal of these plants (e.g., New Hampshire Guide to Upland Invasive Species publication is one guide that provides proper removal of invasive species). Soil disturbance will be limited to the waterline corridor, this will not impact the wetlands function and values. This should enhance the wetland buffer.

Wildlife Habitat is the function that will be temporarily impacted by the proposed development. White-tailed deer rubs were noted but wildlife observations were very limited due to the time of

year and several groups of people walking their leashed dogs on the trail system. The impacts to the wildlife will be temporary during the construction of the waterline. The wildlife will return after the construction is completed. Kim Tuttle of the NHB also noted concerns about a nearby bat hibernacula and voluntary recommendations provided Ms. Tuttle in her email dated March 6, 2020 should be followed. If Best Management Practices are strictly adhered to along with the other design features to limit impacts (e.g., SiltSoxx will be installed around the project limits), there should be no secondary impacts to the wetlands or direct impacts to the wetland buffers. This will also be the case with the highly valuable tidal wetland that is downstream. Refer to Altus Engineering, Inc. plans for details on erosion control, etc. Please note, the NH Wetland Functional Assessment worksheet was referred to but is not part of this report. All pertinent information discussed in the worksheet is included in the narrative report or the attached Corps Wetland Function-Value Form.

Joseph W. Noel
New Hampshire Certified Soil Scientist #017
New Hampshire Certified Wetland Scientist #086

ATTACHMENTS

PHOTOS
Creek Farm – 400 Little Harbor Road – Portsmouth, New Hampshire
(Photos taken by Joseph W. Noel on March 1, 2020)

Walkway Where Waterline Crosses Between Wetlands

From The Walkway Looking At The Freshwater Wetland

PHOTOS
Creek Farm – 400 Little Harbor Road – Portsmouth, New Hampshire
(Photos taken by Joseph W. Noel on March 1, 2020)

From Walkway Looking At the Tidal Wetland

Overview Of Wetland Assessment Wetland (Forested Example)

PHOTOS
Creek Farm – 400 Little Harbor Road – Portsmouth, New Hampshire
(Photos taken by Joseph W. Noel on March 1, 2020)

Overview Of Wetland Assessment Wetland (Scrub-Shrub Example)

Overview Of Wetland Assessment Wetland (Emergent Example)

PHOTOS
Creek Farm – 400 Little Harbor Road – Portsmouth, New Hampshire
(Photos taken by Joseph W. Noel on March 1, 2020)

Intermittent Stream Segment Leaving Wetland System Upslope From Walkway

Jesuit's-bark (*Iva frutescens*) – Also Known As Marsh Elder Or High-tide Bush Community

Wetland Function-Value Evaluation Form (freshwater wetland only – not downstream tidal wetland)

Total area of wetland 5.2+/- Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No
Adjacent land use Residential Homes Distance to nearest roadway or other development <100 feet
Dominant wetland system present PSS1 Contiguous undeveloped buffer zone present No
Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin? .
How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list) yes attached
PFO Swale

Wetland I.D. Unnamed freshwater wetland
Latitude 43.059 Longitude 70.741
Prepared by: JWN NHCWS #086 Date 3/23/2020
Wetland Impacts: amount subject to change (no direct impacts)
Type N/A Amount N/A
Evaluation based on: Office – Yes Field – Yes
Corps manual wetland delineation
Completed? Yes

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	X		6,(7), 9, 10	No	Fine-textured soils limit this function, discharge via intermittent stream/wetland swale only near outlet may contribute to limited groundwater recharge. Wetlands near project (waterline crossing) drain to Sagamore Creek Tidal wetland.
Floodflow Alteration	X		3, (6), (7) , 9, 15 (18)	No	Subject wetland provides limited flood storage from surrounding uplands, Intermittent stream/wetland swale drains to Sagamore Creek via a bedrock natural constricted outlet. Limited floodplain storage near waterline
Fish and Shellfish Habitat (Freshwater)		X	1	No	This function does not appear to apply to the freshwater wetland system. Just downstream of the evaluation area is a special aquatic site. Freshwater wetland has negligble surface water.
Sediment/Toxicant Retention	X		4, 7, 8, 9, (10), 13, 14, 16	No	Wetland structure (basin) can trap sediment. Contains constricted outlet. Some dense vegetation. Limited opportunity exists to trap sediments from overland flow from adjacent parking areas.
Nutrient Removal	X		3, 7, 8, 9, 11, 12, 13, 14	No	Minor potential for nutrient uptake exist, lack of persistent deep open water, little dense vegetation except in limited areas
Production Export	X		1, 2, 4, 5, (7), 12	No	Seeds, fruits, berries, etc., are present intermittent stream provides mode of transportation
Sediment/Shoreline Stabilization		X	2, 7, (9), 12, 15	No	Intermittent stream/wetland swale outlets to Sagamore Creek. No erosive forces in freshwater wetland.
Wildlife Habitat	X		3, (4), 5, 7, 8, 11, (13),(15), 16, 17, 18, 19, (21)	Yes	Favorable for birds (migrating, nesting, insect source, etc.), small mammals, etc. Limited wildlife observations due to winter conditions. Adjacent forested uplands and tidal system increase this function.
Recreation	X		1, (4), 5, 7, 8, 10, 11, 12	Yes*	* = not in freshwater wetland itself but existing trail system provides opportunityfor hiking, birdwatching, etc.. Access to available parking.
Educational/Scientific Value	X		(1), 3, (4), 5, 6, 8, 9, 10, 13, 15, 16	Yes*	* = not in freshwater wetland. Lacks unusual wetland plant community in freshwater wetland, parking is available, handicap accesible. Downstream tidal wetland has threatnend plant. Trail system with some limited views of freshwater wetland.
Uniqueness/Heritage	X		4, 5, 7, 8, 9, 10, 12, (13), (15), 19, (20)	No	Freshwater wetland is not unique. Database search should be conducted for historic features – part of old farm estate dating back to 1887 & first settled in 1640. Downstream is man-made tidal pool.
Visual Quality/Aesthetics	X		1, 3, 4, 5, 7, 8, (9), 10	No	Freshwater wetland is not visually distinct – parking available – trail access provided - Sagamore Creek (adjacent is high quality)
Endangered Species Habitat		X	(1)	No	No trees will be cut for the proposed waterline. NHB and NHFG reviewed proposed project – no expected impacts to sensitive wildife or the Marsh Elder plant communities (noted during wetland assessment) A review should be conducted with the Federal Wildife Service (IPAC) (not provided for the weland assessment).
Ecological Integrity (Required For NH Permits)		X	N/A	No	Old farmland (not natural area), invasive plant species noted in the area, trail system/road in wetland buffer, parking areas, man-made tidal pool, ditch out just upstream from the walkway – alter the natural communities

Sagamore Creek tidal/marine system (very valuable wetland system) is downstream of the walkway (i.e., where waterline will cross). The tidal system is not part of this wetland assessment but pertinent comments will be included. The watershed is ~35 acres and the freshwater wetland being assessed is ~5.2 acres per NH Wetland Mapper.

Plant List

Alder-leaf buckthorn	*Rhamnus alnifolia*
Allegheny blackberry	*Rubus allegheniensis*
American bittersweet	*Celastrus scandens*
Apple	*Malus sp.*
Asian bittersweet	*Celastrus orbiculatus*
Barberry	*Berberis sp.*
Black cherry	*Prunus serotina*
Black locust	*Robinia pseudoacacia*
Bluejoint	*Calamagrostis canadensis*
Bristly dewberry	*Rubus hispidus*
Broad-leaf cat-tail	*Typha latifolia*
Burning bush	*Euonymus alatus*
Common winterberry	*Ilex verticillata*
Cottongrass bulrush	*Scirpus cyperinus*
Eastern marsh fern	*Thelypteris palustris*
Eastern poison ivy	*Toxicodendron radicans*
Eastern white pine	*Pinus strobus*
European barberry	*Berberis vulgaris*
European buckthorn	*Rhamnus cathartica*
Fringed sedge	*Carex crinita*
Glossy False Buckthorn	*Frangula alnus*
Grape	*Vitis sp.*
Honeysuckle	*Lonicera spp.*
Horsetail	*Equisetum sp.*
Japanese barberry	*Berberis thunbergii*
Japanese-knotweed	*Reynoutria japonica*
Jesuit's-bark	*Iva frutescens*
Lamp rush	*Juncus effusus*
Maleberry	*Lyonia ligustrina*
New England American-aster	*Symphyotrichum novae-angliae*
New York fern	*Parathelypteris noveboracensis*
Northern bayberry	*Morella penslyvanica*
Northern bracken fern	*Pteridium aquilinum*
Northern red oak	*Quercus rubra*
Norway maple	*Acer platanoides*
Pointed broom sedge	*Carex scoparia*
Possumhaw	*Viburnum nudum*
Purple loosestrife	*Lythrum salicaria*
Quaking aspen	*Populus tremuloides*
Rambler rose	*Rosa multiflora*
Red maple	*Acer rubrum*
Royal fern	*Osmunda spectabilis*
Sedges	*Carex spp.*
Sensitive fern	*Onoclea sensibilis*

Shag-bark hickory	*Carya ovata*
Silky dogwood	*Cornus amomum*
Smooth arrow-wood	*Viburnum recognitum*
Speckled alder	*Alnus incana*
Stag-horn sumac	*Rhus typhina*
Steeplebush	*Spiraea tomentosa*
White meadowsweet	*Spiraea alba*
Willowherb	*Epilobium sp.*

Wildlife List

American crow	*Corvus brachyrhynchos*
Black-capped chickadee	*Poecile atricapillus*
Blue jay	*Cyanocitta cristata*
Cardinal	*Cardinalis cardinalis*
Carolina wren	*Thryothorus ludovicianus*
Downy woodpecker	*Picoides pubescens*
Eastern chipmunk	*Tamias striatus*
Eastern gray squirrel	*Sciurus carolinensis*
Nuthatch	*Sitta sp.*
White-tailed deer	*Odocoileus virginianus*

** A complete wildlife survey was not conducted. Observations from visual sightings, scat, and tracks.

JONES & BEACH ENGINEERS INC.
85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885
603.772.4746 - JonesandBeach.com

April 29, 2026

Portsmouth Planning Board
Attn: Board Members
1 Junkins Avenue, Suite 3rd Floor
Portsmouth, NH 03801

RE: Amended Site Plan Application
304 Maplewood Avenue, Portsmouth, NH
Tax Map 140, Lot 7
JBE Project No. 23169

Dear Board Members,

Jones & Beach Engineers, Inc., respectfully submits a Site Plan Application on behalf of the owner & applicant, 304 Maplewood LLC. The intent of this application is to remove a small portion of the rear of the building and then to construct a 1,011 S.F. office addition. The property is located in the Historic District and received HDC approval for this work in February. We also received approval from the Technical Advisory Committee on April 13, 2026. There is no change to the parking lot proposed, only striping to define parking spaces. The last site approval on this lot that we could find was from 1988.

The following items are provided in support of this Application:

1. Completed Site Plan (submitted online).
2. Historic District Approval.
3. Technical Advisory Committee Approval.
4. Letter of Authorization.
5. Current Deed.
6. Abutters List and Three (3) Mailing Labels each.
7. Tax Map.
8. Architectural Plans.
9. One (1) Full Size Plan Sets Folded.
10. One (1) Half Size Plan Sets Folded.

If you have any questions or need any additional information, please feel free to contact our office. Thank you very much for your time.

Very truly yours,
JONES & BEACH ENGINEERS, INC.

Joseph A. Coronati
Vice President

cc: Robert Graham, 304 Maplewood LLC (via email)

JONES & BEACH ENGINEERS INC.
85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885
603.772.4746 - JonesandBeach.com

April 28, 2026

Portsmouth Planning Board
Attn: Board Members
1 Junkins Avenue, Suite 3rd Floor
Portsmouth, NH 03801

RE: Response Letter – LU-26-5
304 Maplewood Avenue, Portsmouth, NH
Tax Map 140, Lot 7
JBE Project No. 23169

Dear Board Members,

We are in receipt of TAC Approval comments dated April 7, 2026. Review comments are listed below with our responses in bold.

1. *Show new fence within property line on plans.*
   RESPONSE: The fence has been moved within the property lines on the plans.

2. *Handicapped parking spots and access aisle will be switched.*
   RESPONSE: Handicap parking spots and access aisle have been switched on the plans.

3. *Confirm active waterline and remove inactive one from plans.*
   RESPONSE: The inactive waterline has been removed and the active waterline has been labeled on the plans.

Thank you very much for your time.

Very truly yours,
JONES & BEACH ENGINEERS, INC.

Joseph Coronati
Vice President

cc: Robert Graham, 304 Maplewood LLC (via email)

Findings of Fact | Site Plan Review
City of Portsmouth Planning Board

Date: May 21, 2026
Property Address: 304 Maplewood Avenue
Application #: LU-26-5
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:

Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of the all conditions necessary to obtain final approval.

Site Plan Regulations Section 2.9 Evaluation Criteria - in order to grant site plan review approval, the TAC and the Planning Board shall find that the application satisfies evaluation criteria pursuant to NH State Law and listed herein. In making a finding, the TAC and the Planning Board shall consider all standards provided in Articles 3 through 11 of these regulations.

	Site Plan Review Regulations Section 2.9 Evaluation Criteria	**Finding (Meets Standard/Criteria)**	**Supporting Information**
1	Compliance with all City Ordinances and Codes and these regulations. Applicable standards:	**Meets** **Does Not Meet**	Applicable standards: Building addition conforms to Zoning Ordinance and HDC approved.
2	Provision for the safe development, change or expansion of use of the site.	**Meets** **Does Not Meet**	Agreed, small addition and only minor changes to the site.
3	Adequate erosion control and stormwater management practices and other mitigative measures, if needed, to prevent adverse effects on downstream water quality and flooding of the property or that of another.	**Meets** **Does Not Meet**	Agreed, this is a small building addition and no other added impervious surface proposed. Roof water to be infiltrated with stone drip edge.

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	Site Plan Review Regulations Section 2.9 Evaluation Criteria	Finding (Meets Standard/Criteria)	Supporting Information
4	Adequate protection for the quality of groundwater.	**Meets** **Does Not Meet**	No change, infiltratry stormwater
5	Adequate and reliable water supply sources.	**Meets** **Does Not Meet**	Yes, building already connected to city water.
6	Adequate and reliable sewage disposal facilities, lines, and connections.	**Meets** **Does Not Meet**	Yes, building already connected to city sewer.
7	Absence of undesirable and preventable elements of pollution such as smoke, soot, particulates, odor, wastewater, stormwater, sedimentation or any other discharge into the environment which might prove harmful to persons, structures, or adjacent properties.	**Meets** **Does Not Meet**	No odors from office building exist or proposed.
8	Adequate provision for fire safety, prevention and control.	**Meets** **Does Not Meet**	Yes, see architectural plans.
9	Adequate protection of natural features such as, but not limited to, wetlands.	**Meets** **Does Not Meet**	Yes, NHDES Shoreland Permit already granted. No impacts to local wetland buffers.
10	Adequate protection of historical features on the site.	**Meets** **Does Not Meet**	Yes, there are none present to our knowledge.
11	Adequate management of the volume and flow of traffic on the site and adequate traffic controls to protect public safety and prevent traffic congestion.	**Meets** **Does Not Meet**	Yes, curb cuts are well defined and no change to parking accept adding better stripping.
12	Adequate traffic controls and traffic management measures to prevent an unacceptable increase in safety hazards and traffic congestion off-site.	**Meets** **Does Not Meet**	Yes, curb cuts are well defined and no change to parking accept adding better stripping.

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	Site Plan Review Regulations Section 2.9 Evaluation Criteria	Finding (Meets Standard/Criteria)	Supporting Information
13	Adequate insulation from external noise sources.	**Meets** **Does Not Meet**	Yes
14	Existing municipal solid waste disposal, police, emergency medical, and other municipal services and facilities adequate to handle any new demands on infrastructure or services created by the project.	**Meets** **Does Not Meet**	Small addition already connected to city utilities. No change proposed.
15	Provision of usable and functional open spaces of adequate proportions, including needed recreational facilities that can reasonably be provided on the site	**Meets** **Does Not Meet**	This proposal exceeds the open space requirements.
16	Adequate layout and coordination of on-site accessways and sidewalks in relationship to off-site existing or planned streets, accessways, bicycle paths, and sidewalks.	**Meets** **Does Not Meet**	No change to access to building.
17	Demonstration that the land indicated on plans submitted with the application shall be of such character that it can be used for building purposes without danger to health.	**Meets** **Does Not Meet**	Property is already developed and area for proposed addition is currently lawn and flat.
18	Adequate quantities, type or arrangement of landscaping and open space for the provision of visual, noise and air pollution buffers.	**Meets** **Does Not Meet**	Yes, we are adding stockade fencing around the property and maintaining the existing landscaping, open space and wooded buffers.
19	Compliance with applicable City approved design standards.	**Meets** **Does Not Meet**	Agreed
	Other Board Findings:		

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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: 304 Maplewood LLC Date Submitted: 2/13/26

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

Site Address: 304 Maplewood Avenue Map: 140 Lot: 7

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)**		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)**		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)**		
☒	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)**		N/A
☒	Tax map and lot number, and current zoning of all parcels under Site Plan Review. **(2.5.3.1D)**		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)**		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)**		N/A
☒	Names, addresses and telephone numbers of all professionals involved in the site plan design. **(2.5.3.1G)**		N/A
☒	List of reference plans. **(2.5.3.1H)**		N/A
☐	List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)**		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)**		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)**		N/A
☒	Title (name of development project), north point, scale, legend. **(2.5.4.2A)**		N/A
☒	Date plans first submitted, date and explanation of revisions. **(2.5.4.2B)**		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)**		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.		
☒	**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.		
☒	**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).		
☒	**4. Parking and Loading: (2.5.4.3D)** • Location of off street parking/loading areas, landscaped areas/buffers; • Parking Calculations (# required and the # provided).		
☒	**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).		
☒	**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.		

☒	**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.		
☒	**8. Solid Waste Facilities: (2.5.4.3H)**		
	• 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.		
☒	**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.		
☒	**11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)**		
☒	**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.		
☒	**13. Contours and Elevation: (2.5.4.3L)** • Existing/Proposed contours (2 foot minimum) and finished grade elevations.		
☒	**14. Open Space: (2.5.4.3M)** • Type, extent and location of all existing/proposed open space.		
☒	**15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)**		
☒	**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).		
☒	**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.		

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	
☒	Indicate where Low Impact Development Design practices have been incorporated. **(7.1)**		
☐	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	
☐	Inspection and Maintenance Plan **(7.6.5)**	N/A	

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)**		
☒	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)**		
☒	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)**		

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)**	N/A	
☒	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)**		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)**		N/A

Applicant's Signature: _____ **Date:** 2/13/26

CITY OF PORTSMOUTH
Planning & Sustainability Department
1 Junkins Avenue
Portsmouth, New Hampshire 03801
(603) 610-7216

HISTORIC DISTRICT COMMISSION

February 10, 2026

304 Maplewood Avenue LLC
C/O Planet Fitness
304 Maplewood Avenue
Portsmouth, NH 03801

RE: **Work Session/Public Hearing for property located at 304 Maplewood Avenue (LU-26-5)**

Dear Owner:

The Historic District Commission, at its regularly scheduled meeting of **Wednesday, February 04, 2026**, considered your application for new construction to an existing structure (construct new rear 1-story addition) as per plans on file in the Planning & Sustainability Department. Said property is shown on Assessor Map 140 as Lot 7 and lies within the Character District 4-L2 (CD4-L2) and Historic Districts. As a result of said consideration, the Commission voted to **grant** Certificate of Approval as presented.

Findings of Fact

A. Purpose and Intent

The proposed application meets the following objective(s) of the Historic District (as provided in Section 10.631.20 of the Zoning Ordinance):

-Preserves the integrity of the district.

B. Review Criteria

The proposed application also meets the following review criteria of the Historic District (as provided in Section 10.635.70 of the Zoning Ordinance):

-Compatibility of design with surrounding properties.

The Commission's decision may be appealed up to thirty (30) days after the vote. Any action taken by the applicant pursuant to the Commission's decision during this appeal period shall be at the applicant's risk. Please contact the Planning & Sustainability Department for more details about the appeals process.

Approvals may also be required from other City Committees or Boards. Once all required approvals have been received, applicant is responsible for applying for and securing a building permit from the Inspection Department prior to starting any project work.

This approval shall expire unless a building permit is issued within a period of one (1) year from the date granted by the Historic District Commission unless an extension is granted by the Commission in accordance with Section 10.636.70 of the Zoning Ordinance.

Please note that any changes or modifications to this application require review and approval from the Commission prior to implementation and additional fees may apply.

The minutes and audio recording of this meeting are available by contacting the Planning & Sustainability Department.

Very truly yours,

Izak Gilbo, Planner 1
for Reagan Ruedig, Chair of the Historic District Commission

cc: Shanti Wolph, Chief Building Inspector
Rosann Maurice-Lentz, City Assessor

CITY OF PORTSMOUTH
Planning & Sustainability
Department
1 Junkins Avenue
Portsmouth, New
Hampshire 03801
(603) 610-7216

TECHNICAL ADVISORY COMMITTEE

April 13, 2026

304 Maplewood Avenue LLC
304 Maplewood Avenue
Portsmouth, New Hampshire 03801

RE: Request for amened Site Plan approval for property located at 304 Maplewood Ave, Portsmouth, NH (LU-26-5)

Dear Owner:

The Technical Advisory Committee, at its regularly scheduled meeting of Tuesday, April 7, 2026, considered your application for amended Site Plan approval for a 1,011 square foot addition to the existing office building. Said property is shown on Assessor Map 140 as Lot 7 and lies within the Character District 4-L2 (CD4-L2) and Historic Districts. As a result of said consideration, the Committee voted to **recommend approval** of this application to the Planning Board with the following **conditions**:

1) Show new fence within property line on plans.

2) Handicapped parking spots and access aisle will be switched.

3) Confirm active waterline and remove inactive one from plans.

This matter will be placed on the agenda for the Planning Board meeting scheduled for **Thursday, May 21, 2026**. One (1) hard copy of all plans and supporting reports and exhibits as well as an updated electronic file (in a PDF format) must be filed in the Planning & Sustainability Department and uploaded to the online permit system no later than **Wednesday, April 29, 2026**.

Per Section 2.5 of the Site Plan Regulations, a site plan review application to the Planning Board must include all applicable information and supporting materials including but not limited to the following items:

- *Full updated plan set*
- *Draft Easements*
- *Drainage Analysis*
- *Traffic Studies*
- *Etc.*

All comments, corrections, and conditions identified as "Items to be addressed before Planning Board submittal' must be resolved/corrected for the Planning Board application submittal to be deemed complete.

The minutes and audio recording of this meeting are available by contacting the Planning & Sustainability Department.

Very truly yours,

Peter Britz,
Planning and Sustainability Director

cc: Joe Coronati, Jones and Beach, Inc.

The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

April 27, 2026

304 MAPLEWOOD LLC
304 MAPLEWOOD AVE
PORTSMOUTH NH 03801

Re: Received Shoreland Permit Application (RSA 483-B)
NHDES File Number: 2026-01055
Subject Property: 304 Maplewood Ave, Portsmouth, Tax Map/Block/Lot(s): 140/no block/7

Dear Applicant:

On April 27, 2026, the New Hampshire Department of Environmental Services (NHDES) Shoreland Program received the above-referenced Shoreland Permit Application (Application). This application shall be reviewed in accordance with the timeframes established under RSA 483-B:5-b, V. The language of RSA 483-B:5-b, V has been provided on the reverse of this document for your reference. The status of the Application is available on OneStop at https://www4.des.state.nh.us/lrmonestop/.

If you have any questions, please contact the Shoreland Program at (603) 271-2147.

Sincerely,

Nicole A. Pitts
Application Receipt Center, Shoreland Program
Wetlands Bureau, Land Resources Management
Water Division

Copied: Agent
Municipal Clerk

RSA 483-B:5-b, V

(a) Within 30 days of receipt of an application for a permit or 30 days of receipt of an application for a permit that will require a waiver of the minimum standards of RSA 483-B:9, the department shall request any additional information reasonably required to complete its evaluation of the application, and provide the applicant with any written technical comments the department deems necessary. Any request for additional information shall specify that the applicant submit such information as soon as practicable and notify the applicant that if all of the requested information is not received within 60 days of the request, the department shall deny the application.

(b) When the department requests additional information pursuant to subparagraph (a), the department shall, within 30 days of the department's receipt of the information:
  (1) Approve the application and issue a permit; or
  (2) Deny the application, and issue written findings in support of the denial; or
  (3) Extend the time for rendering a decision on the application for good cause and with the written agreement of the applicant.

(c) Where no request for additional information is made, the department shall, within 30 days of receipt of the application for a permit or 30 days of receipt of an application for a permit that will require a waiver of the minimum standards of RSA 483-B:9, approve or deny the application with written findings in support of the decision.

(d) Within 5 business days of receipt of a permit by notification filing, the department shall issue a written notice to the property owner or agent stating that the notification has either been accepted or rejected. If the department does not respond within the 5-day period, the property owner or agent may submit to the department a written request for a response. A request submitted electronically by the applicant shall constitute a written request provided that the applicant has previously agreed to accept electronic communication. If the department fails to respond to the written request within an additional 5 days the property owner or agent shall be deemed to have a permit by notification and may proceed with the project as presented in the notification filing. The authorization provided by this subparagraph shall not relieve the applicant of complying with all requirements applicable to the project, including but not limited to requirements established in or under this chapter and RSA 485-A relative to water quality.

(e) (1) The time limits prescribed by this paragraph shall supersede any time limits provided in any other provision of law. If the department fails to act within the applicable time frame established in subparagraphs (b) and (c), the applicant may ask the department to issue the permit by submitting a written request. If the applicant has previously agreed to accept communications from the department by electronic means, a request submitted electronically by the applicant shall constitute a written request.
  (2) Within 14 days of the date of receipt of a written request from the applicant to issue the permit, the department shall:
    (A) Approve the application, in whole or in part, and issue a permit; or
    (B) Deny the application and issue written findings in support of the denial.
  (3) If the department does not issue either a permit or a written denial within the 14-day period, the applicant shall be deemed to have a permit by default and may proceed with the project as presented in the application. The authorization provided by this subparagraph shall not relieve the applicant of complying with all requirements applicable to the project, including but not limited to requirements established in or under this chapter and RSA 485-A relating to water quality.
  (4) Upon receipt of a written request from an applicant, the department shall issue written confirmation that the applicant has a permit by default pursuant to subparagraph (e)(3), which authorizes the applicant to proceed with the project as presented in the application and requires the work to comply with all requirements applicable to the project, including but not limited to requirements established in or under this chapter and RSA 485-A relating to water quality.

(f) All applications filed in accordance with the rules adopted by the department under RSA 483-B:17 and which meet the minimum standards of this chapter shall be approved and a permit shall be issued.

(g) The department may extend the time for rendering a decision under subparagraphs (b)(3) and (c)(3), without the applicant's agreement, on an application from an applicant who previously has been determined, after the exhaustion of available appellate remedies, to have failed to comply with this chapter or any rule adopted or permit or approval issued under this chapter, or to have misrepresented any material fact made in connection with any activity regulated or prohibited by this chapter, pursuant to an action initiated under RSA 483-B:18. The length of such an extension shall be no longer than reasonably necessary to complete the review of the application, and shall not exceed 30 days unless the applicant agrees to a longer extension. The department shall notify the applicant of the length of the extension.

(h) The department may suspend review of an application for a proposed project on a property with respect to which the department has commenced an enforcement action against the applicant for any violation of this chapter, RSA 482-A, RSA 485-A:17, or RSA 485-A:29-44, or of any rule adopted or permit or approval issued pursuant to this chapter, RSA 482-A, RSA 485-A:17, or RSA 485-A:29-44. Any such suspension shall expire upon conclusion of the enforcement action and completion of any remedial actions the department may require to address the violation; provided, however, that the department may resume its review of the application sooner if doing so will facilitate resolution of the violation. The department shall resume its review of the application at the point the review was suspended, except that the department may extend any of the time limits under this paragraph and its rules up to a total of 30 days for all such extensions. For purposes of this subparagraph, "enforcement action" means an action initiated under RSA 482-A:13, RSA 482-A:14, RSA 482-A:14-b, RSA 483-B:18, RSA 485-A:22, RSA 485-A:42, or RSA 485-A:43.

Letter of Authorization

I, Robert Graham, 304 Maplewood LLC, 304 Maplewood Avenue, Portsmouth, NH 03801, authorized representative of owner of property located in Portsmouth, NH, known as Tax Map 140, Lot 7, do hereby authorize Jones & Beach Engineers, Inc., PO Box 219, Stratham, NH, to act on my behalf concerning the previously mentioned property. The parcel is located at 304 Maplewood Avenue in Portsmouth, NH.

I hereby appoint Jones & Beach Engineers, Inc., as my agent to act on my behalf in the review process, to include any required signatures.

Cynthia Mix
Witness

R V Graham III
Robert Graham
Designated Agent for Manager
304 Maplewood LLC

2-13-2026
Date

MAIL TO
PLEASE RETURN TO:
HALEY, DESMARES, GAGLIARDI & WOELFEL, PC
BOX 33

BK 4849 PG 2483

Return to:
Feniger & Uliasz, LLP
45 Bay Street
Manchester, NH 03104

STATE OF NEW HAMPSHIRE
DEPARTMENT OF REVENUE ADMINISTRATION
REAL ESTATE TRANSFER TAX
7 THOUSAND 4 HUNDRED AND 25 DOLLARS
10 04 07 844510 $7425.00

056487

2007 OCT -4 PM 12:01

ROCKINGHAM COUNTY
REGISTRY OF DEEDS

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS that, Murray Hill Properties, Inc., a Maine Corporation having an address of PO Box 21, East Boothbay, Maine 04544, for consideration paid, grants to 304 Maplewood, LLC, a New Hampshire Limited Liability Company having an address of 304 Maplewood Avenue, Portsmouth, NH, with WARRANTY COVENANTS, the following described property:

Two certain tracts or parcels of land with the buildings thereon, situate in the City of Portsmouth, County of Rockingham and State of New Hampshire and known as 304 Maplewood Avenue, being more particularly bound and described as follows:

Tract I: Beginning on Maplewood Avenue at land now or formerly of Clara D. Moore, and running southwesterly by said land of said Moore, 86 feet to land now or formerly of Biagio Donini and Candina Donini (conveyed to the them by Frederick O. Baumgarten, et al by deed dated 05/31/35 and recorded in Volume 906, Page 430 of the Rockingham County Registry of Deeds); thence turning and running northwesterly by said last mentioned land 50' feet 4" to other land of said Doninis; thence turning and running by said last mentioned land northeasterly 42' feet to an angle, and thence northerly 32'7" to Dennett Street; thence turning and running northeasterly by said Dennett Street 23'8" to Maplewood Avenue; thence turning and running by said Maplewood Avenue, southeasterly 51', more or less to the point of beginning.

Tract II: Bounded northeasterly by Maplewood Avenue 72', more or less, northwesterly by land of Frederick O. Baumgarten and Charlotte E. Baumgarten and by land now or formerly of Biagio Donini and C.C. Donini 133 feet, more or less, southwesterly by land now or formerly of John J. Hoyt and land now or formerly of Charles W. Marden, 72 feet, more or less, southeasterly by land now or formerly of Susan B. Marvin, land now or formerly of Lydia L. Pinkham and land of said Charles V. Marden, 133 feet, more or less.

Subject to any and all easements, restrictions and covenants of record.

Meaning and intending to describe and convey the same premises as conveyed to Murray Hill Properties, Inc., by Quitclaim Deed of D. Wayne Moore dated 09/03/02 and recorded in Volume 3964, Page 671 of the Rockingham County Registry of Deeds.

Executed this 24th day of September, 2007.

Murray Hill Properties, Inc.

By: D W Moore

D. Wayne Moore, Duly Authorized

COUNTY OF Lincoln
STATE OF MAINE

On this 24 day of September, 2007, personally appeared before me, D. Wayne Moore, duly authorized President of Murray Hill Properties, Inc., a 9 Corporation, and known to me or satisfactorily proven to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purposes therein contained.

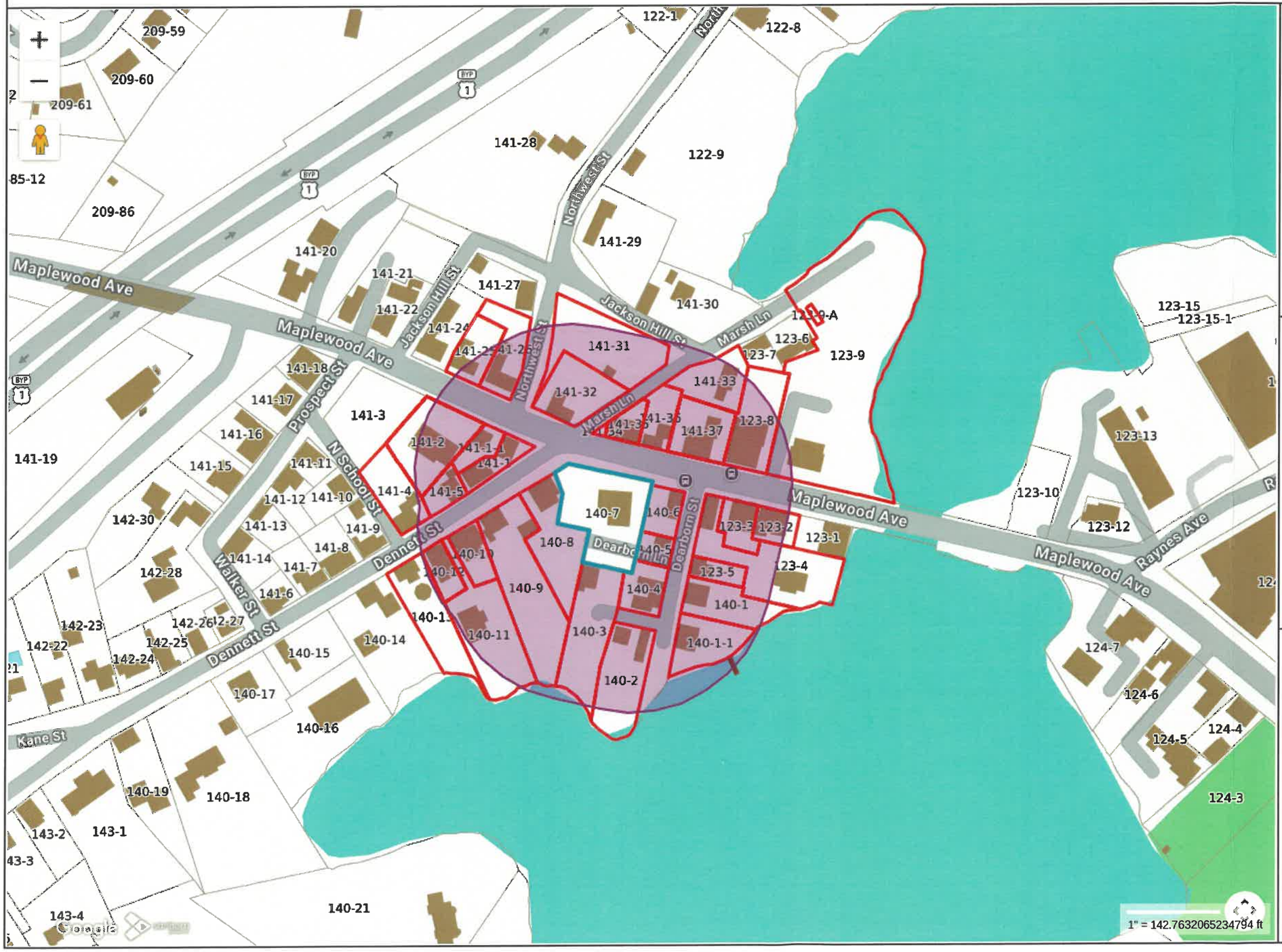
Justice of Peace/Notary Public
My commission expires: _____

Notary
My Commission Ex 2014

Property ID	Site Address	Owner Name	Owner Name 2	Owner Address	City	State	Zip
0140-0001-0000	28 DEARBORN ST	REGAN BRIAN M		28 DEARBORN ST	PORTSMOUTH	NH	03801
0140-0002-0000	41 DEARBORN ST	GOLDEN JAMES E	MCCARTHY COURTNEY E	41 DEARBORN ST	PORTSMOUTH	NH	03801
0140-0003-0000	39 DEARBORN ST	BARDONG SHAWN & MICHIYO		39 DEARBORN ST	PORTSMOUTH	NH	03801
0140-0004-0000	33 DEARBORN ST	STASIUK MICHAEL		31/33 DEARBORN ST	PORTSMOUTH	NH	03801
0140-0005-0000	21 DEARBORN ST	ALATI BRIAN J REV TRUST	ALATI BRIAN J TRUSTEE	274 NEW CASTLE AVE	PORTSMOUTH	NH	03801
0140-0006-0000	276 MAPLEWOOD AVE	SALAS RAFAEL	ABRUZESE MARIA RUTH	276 MAPLEWOOD AVE	PORTSMOUTH	NH	03801
0140-0008-0000	12 DENNETT ST	ANCTIL S CHRISTOPHER		73 EXETER RD	NORTH HAMPTON	NH	03862
0140-0009-0000	28 DENNETT ST	BENSLEY JOHN E	BENSLEY CYNTHIA S	28 DENNETT ST	PORTSMOUTH	NH	03801
0140-0010-0000	38 DENNETT ST	SHOOP ZEHRA N		PO BOX 277	KITTERY	ME	03904
0140-0011-0000	42 DENNETT ST	DEMPSEY GEORGE HENRY LIVING TRUST		42 DENNETT ST	PORTSMOUTH	NH	03801
0140-0012-0000	44 DENNETT ST	DENNETT INVESTMENT GROUP LLC		56 DENNETT ST	PORTSMOUTH	NH	03801
0140-0013-0000	56 DENNETT ST	HOERMAN FAMILY REVOCABLE TRUST OF 2019	HOERMAN WALTER A AND MARY ELLEN TRUSTEES	56 DENNETT ST	PORTSMOUTH	NH	03801
0141-0004-0000	49 DENNETT ST	VIEIRA ROBERT F	VIEIRA DIANE R	49 DENNETT ST	PORTSMOUTH	NH	03801
0141-0005-0000	31 DENNETT ST	ABSHIER NICOLE L		31 DENNETT ST	PORTSMOUTH	NH	03801
0141-0025-0000	347 MAPLEWOOD AVE	HEAD PAUL B II	HEAD HOLLY	347 MAPLEWOOD AVE	PORTSMOUTH	NH	03801
0141-0033-0000	1 MARSH LN	WHITE L MICHELLE	ZIEBARTH WALTER	3 MARSH LN	PORTSMOUTH	NH	03801
0141-0035-0000	293 MAPLEWOOD AVE	293 MAPLEWOOD AVENUE CONDOMINIUMS		295 MAPLEWOOD AVE	PORTSMOUTH	NH	03801
0141-0036-0000	287 MAPLEWOOD AVE	COOPER EVON		16 GARLAND RD	LINCOLN	MA	01773
0141-0001-0001	334 MAPLEWOOD AVE	JORDAN KATHRYN H		55 OAKWOOD DR	PORTSMOUTH	NH	03801
0141-0002-0001	348 MAPLEWOOD AVE #1	GLENNEY AARON		348 MAPLEWOOD AVE #1	PORTSMOUTH	NH	03801
0141-0002-0002	348 MAPLEWOOD AVE #2	GIBB BRIAN K		348 MAPLEWOOD AVE UNIT 2	PORTSMOUTH	NH	03801
0141-0002-0003	348 MAPLEWOOD AVE #3	DENICOLA ROBERT JR		348 MAPLEWOOD AVE #3	PORTSMOUTH	NH	03801
0141-0002-0004	348 MAPLEWOOD AVE #4	ABSHIRE DIANA C		348 MAPLEWOOD AVE APT 4	PORTSMOUTH	NH	03801
0141-0002-0005	348 MAPLEWOOD AVE #5	STANDISH DEBORAH		348 MAPLEWOOD AVE APT 5	PORTSMOUTH	NH	03801
0123-0002-0000	248 MAPLEWOOD AVE	MAPLEWOOD AVE LLC		30 SPRING ST	PORTSMOUTH	NH	03801
0123-0003-0000	258 MAPLEWOOD AVE	BVB LLC		87 RIDGE RD	YORK	ME	03909
0123-0004-0000	6 DEARBORN ST	6-10 DEARBORN STREET LLC		3 QUILL LANE STE 107	BARRINGTON	NH	03825
0123-0005-0000	22 DEARBORN ST	HUDLIN MELISSA A REV TR	HUDLIN MELISSA A TRUSTEE	256 WIBIRD ST	PORTSMOUTH	NH	03801
0123-0008-0000	259 MAPLEWOOD AVE	259 MAPLEWOOD AVENUE LLC		259 MAPLEWOOD AVE	PORTSMOUTH	NH	03801
0123-0009-0000	235 MAPLEWOOD AVE	JACKSON POINT LLC		PO BOX 1131	RYE	NH	03870
0141-0001-0000	324 MAPLEWOOD AVE	NEILA LLC		31 DENNETT ST	PORTSMOUTH	NH	03801
0141-0026-0000	335 MAPLEWOOD AVE	PETERSEN JAMES F REVOCABLE TRUST	PETERSEN JAMES F TRUSTEE	PO BOX 4516	PORTSMOUTH	NH	03802
0141-0031-0000	NORTHWEST ST	PUBLIC SERVICE CO OF NH		PO BOX 270	HARTFORD	CT	06141
0141-0034-0000	JACKSON HILL ST	35 PINES LLC		295 MAPLEWOOD AVE UNIT 1	PORTSMOUTH	NH	03801
0141-0037-0001	273 MAPLEWOOD AVE #1	NISSENBAUM & CELLETTI RV LV TR	CELLETTI MADELINE M TRUSTEE	18 WASHINGTON ST	BOXFORD	MA	01921
0141-0037-0002	273 MAPLEWOOD AVE #2	CARON JEFFREY	CARON RONDA	325 THAXTER RD	PORTSMOUTH	NH	03801
0141-0037-0003	273 MAPLEWOOD AVE #3	FORTIN ALISON A		273 MAPLEWOOD AV UNIT 3	PORTSMOUTH	NH	03801
0141-0037-0004	273 MAPLEWOOD AVE #4	COGSWELL TIMOTHY E		273 MAPLEWOOD AVE UNIT 4	PORTSMOUTH	NH	03801
0141-0002-0000	348 MAPLEWOOD AVE	OLD FRANKLIN SCHOOL CONDO MASTERCARD					
0141-0037-0000	273 MAPLEWOOD AVE	BOISVERT BRADLEY P		20 SHERBURNE RD	PORTSMOUTH	NH	03801
0141-0035-0003	295 MAPLEWOOD AVE F #3	SEE AARON & ALLYSON		293 MAPLEWOOD AVE UNIT F	PORTSMOUTH	NH	03801
0141-0035-0002	295 MAPLEWOOD AVE R #2	BASSI VICTORIA	BOUCHARD CAMERON J	295 MAPLEWOOD AVE R #2	PORTSMOUTH	NH	03801
0141-0035-0001	295 MAPLEWOOD AVE #1	35 PINES LLC		295 MAPLEWOOD AVE #1	PORTSMOUTH	NH	03801
0141-0032-0000	315 MAPLEWOOD AVE	GEREMIA PETER P		315 MAPLEWOOD AVE	PORTSMOUTH	NH	03801
0140-0012-0002	46 DENNETT ST #2	BURRA STEFANIE A		120 TOWNE ST APT #248	FAIRFIELD	CT	06902
0140-0012-0001	44 DENNETT ST #1	NORTH MILL RENTALS LLC		294 THORNTON ST	PORTSMOUTH	NH	03801
0140-0001-0001	30 DEARBORN ST	REGAN SUSAN M		30 DEARBORN ST	PORTSMOUTH	NH	03801

Jones & Beach Engineers, Inc., Attn. Joseph Coronati, PO Box 219, Stratham, NH 03885

304 Maplewood LLC, 304 Maplewood Ave., Portsmouth, NH 03801



Property Information

Property ID	0140-0007-0000
Location	304 MAPLEWOOD AVE
Owner	304 MAPLEWOOD LLC

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 10/23/2025

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

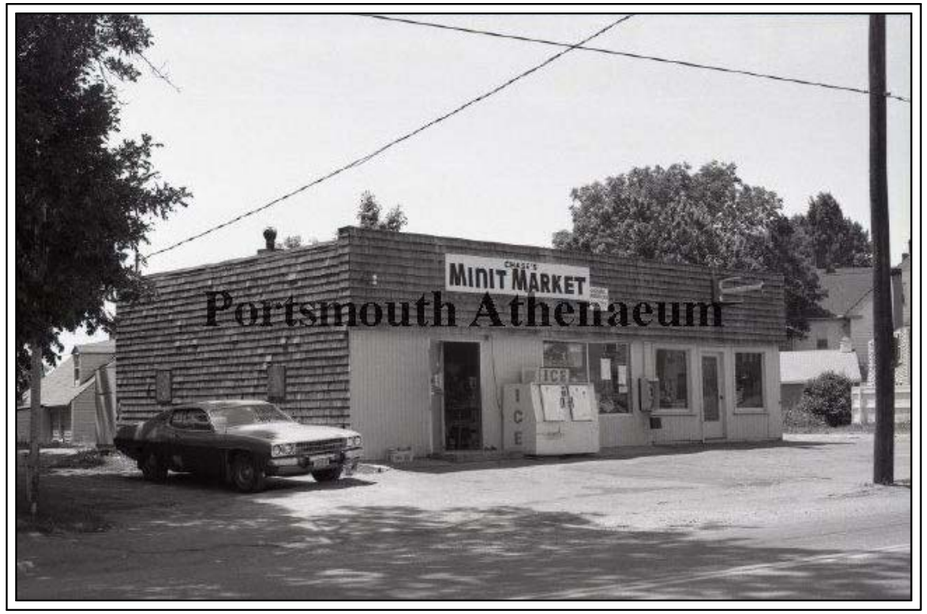
304 MAPLEWOOD AVENUE OFFICE ADDITION

HISTORIC DISTRICT COMMISSION PUBLIC HEARING, FEBRUARY 2026

BUILDING HISTORY:
- BUILT IN 1940, ORIGINALLY A MODERN STYLE COMMERCIAL BUILDING OCCUPIED BY CHASE'S MINIT MARKET
- THE STRUCTURE IS A ONE STORY, RECTANGULAR BUILDING WITH REAR ELL
- WHEN RENOVATED, THE ROOF CHANGED FROM A FLAT ROOF TO A GABLE/HIP ROOF
- STRUCTURE IS NOW AN OFFICE BUILDING
- REMOVE REAR SHED ADDITION

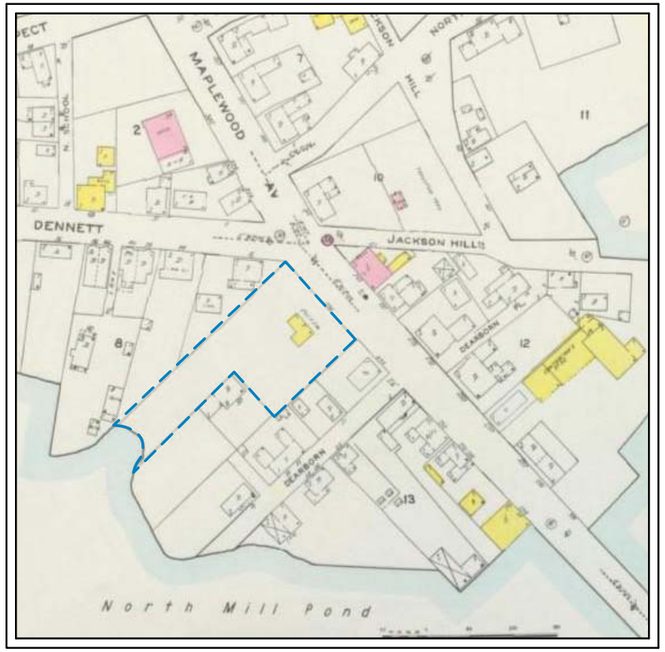
GENERAL PROJECT DESCRIPTION:
- EXISTING BUILDING TO REMAIN
- EXISTING REAR SHED DORMER ADDITION TO BE REMOVED
- 1,000 SF OFFICE ADDITION ON REAR OF BUILDING

SHEET LIST - HDC	
Sheet Number	Sheet Name
A0	COVER
C1	EXISTING CONDITIONS PLAN
A1	SITE PLAN
A2	EXISTING IMAGES
A3	PROPOSED PLANS
A4	PROPOSED ELEVATIONS
A5	PROPOSED ELEVATIONS
A6	WINDOW SCHEDULE/MATERIALS

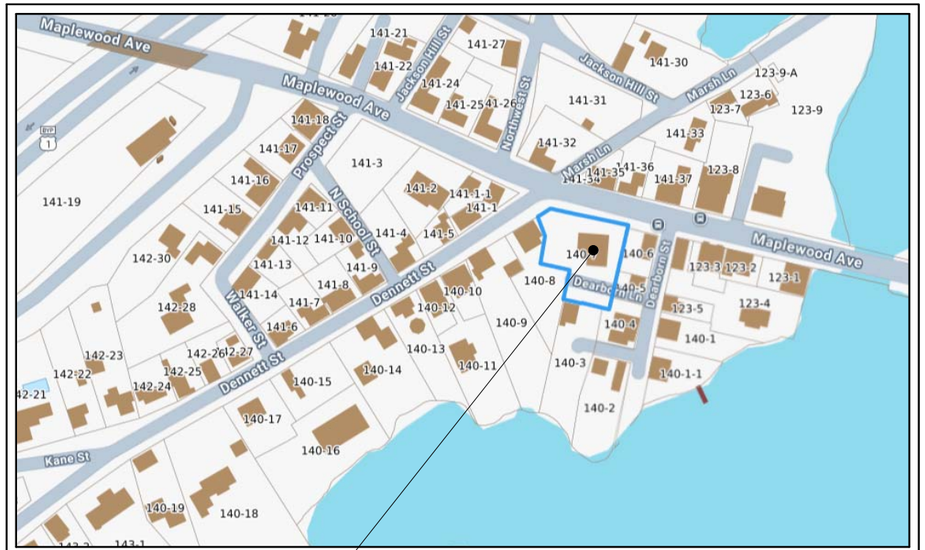


VIEW OF CHASE'S MINIT MARKET, 304 MAPLEWOOD AVE. IMAGE DATE: AUGUST 6, 1982
PHOTOGRAPHER: WOODARD DORR OPENO, COURTESY OF PORTSMOUTH ATHENAEUM

EXISTING PERSPECTIVE FROM MAPLEWOOD AVE LOOKING AT 304 MAPLEWOOD



ZONING PLAN FROM THE SANDBORN FIRE INSURANCE MAPS IN 1956, PROVIDED BY THE PORTSMOUTH ATHENAEUM.



304 MAPLEWOOD AVE
PORTSMOUTH NH, 03801

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OFFICE ADDITION

304 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

COVER

HISTORIC DISTRICT COMMISSION- PUBLIC HEARING,
FEBRUARY 2026

4 Market Street
Portsmouth, New Hampshire
603.430.0274

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McHENRY ARCHITECTURE

A0

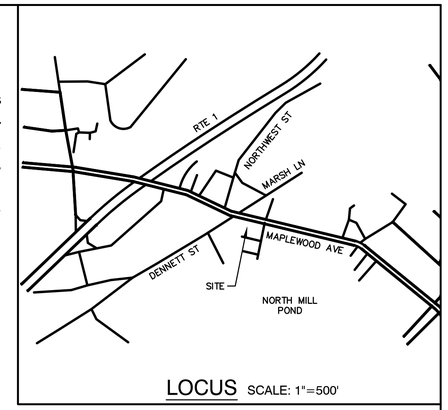
01/16/2026
PA: MM / MG
Project Number: 25081
NOT TO SCALE

Z:\Active Project Files\25081-304 MAPLEWOOD\Dwgs\2-SD\25081-304 MAPLEWOOD SD.rvt

PROJECT PARCEL
TOWN OF PORTSMOUTH
TAX MAP 140, LOT 7

APPLICANT/OWNER
304 MAPLEWOOD LLC 304 MAPLEWOOD AVE
PORTSMOUTH, NH 03801
BK 4849, PG 2483

TOTAL LOT AREA
14,396 SQ. FT.
0.33 ACRES



LOCUS SCALE: 1"=500'

LEGEND

- PROPERTY LINE
- ABUTTER PROPERTY LINE
- BUILDING SETBACK
- SURVEY TIE LINES
- EASEMENT
- SIDEWALK
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- OVERHEAD ELECTRIC LINES
- EDGE OF LANDSCPAED AREA
- VGC — VERTICAL CONCRETE CURB
- CATCH BASIN
- UTILITY POLE
- ELECTRIC METER
- G GV G — GAS LINE
- GAS GATE VALVE
- GAS METER
- IRON ROD / IRON PIPE AS NOTED
- METAL FENCE POST
- CONCRETE
- STONE PAVERS
- DETECTIBLE WARNING PAD
- RIP-RAP

ZONING SUMMARY	
ZONE	CHARACTER DISTRICT (CD4-L2)
MINIMUM LOT AREA	3,000 S.F.
MAXIMUM FRONT YARD SETBACK	15'
SIDE YARD SETBACK	5' MIN; 20' MAX
MINIMUM REAR YARD SETBACK	5' FROM REAR LOT LINE; 10' FROM CENTER LINE OF ALLEY
MAXIMUM BUILDING HEIGHT	60' (2-5 STORIES)
MAXIMUM BUILDING COVERAGE	60% OF LOT
MAXIMUM BUILDING FOOTPRINT	2,500 S.F.
MINIMUM OPEN SPACE	25% OF LOT

CERTIFICATION:

PURSUANT TO RSA 676:18-III AND RSA 672:14

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

I CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEED BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 503.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

STATE OF NEW HAMPSHIRE — No. 1030 — MATTHEW J. SALVUCCI — LICENSED LAND SURVEYOR — SIGNATURE

MATTHEW J. SALVUCCI, LLS 1030 DATE:
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

NOTES:

1. THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING SITE FEATURES OF TAX MAP 140 LOT 7.
2. THE UTILITY LOCATIONS SHOWN HEREON WERE DETERMINED BY OBSERVED ABOVE GROUND EVIDENCE AND SHOULD BE CONSIDERED APPROXIMATE IN LOCATION ONLY. LOCATION, DEPTH, SIZE, TYPE, EXISTENCE OR NONEXISTENCE OF UNDERGROUND UTILITIES AND/OR UNDERGROUND STORAGE TANKS WAS NOT VERIFIED BY THIS SURVEY. ALL CONTRACTORS SHOULD NOTIFY IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES PRIOR TO ANY EXCAVATION WORK OR CALL DIG-SAFE AT 1-888-DIG-SAFE.
3. THE SUBJECT PARCEL IS NOT LOCATED WITHIN AN AREA HAVING A SPECIAL FLOOD HAZARD ZONE DESIGNATION BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 33015C0259F, WITH EFFECTIVE DATE OF JANUARY, 29, 2021,
4. BASIS OF BEARING: HORIZONTAL - NH STATE PLANE. VERTICAL - NAVD88.
5. CERTAIN DATA HEREON MAY VARY FROM RECORDED DATA DUE TO DIFFERENCES IN DECLINATION, ORIENTATION, AND METHODS OF MEASUREMENT.
6. ALL BOOK AND PAGE NUMBERS REFER TO THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
7. THE TAX MAP AND LOT NUMBERS ARE BASED ON THE TOWN OF PORTSMOUTH. TAX RECORDS AND ARE SUBJECT TO CHANGE.
8. RESEARCH WAS PERFORMED AT THE TOWN OF PORTSMOUTH ASSESSOR'S OFFICE AND THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
9. THIS SURVEY IS NOT A CERTIFICATION TO OWNERSHIP OR TITLE OF LANDS SHOWN. OWNERSHIP AND ENCUMBRANCES ARE MATTERS OF TITLE EXAMINATION NOT OF A BOUNDARY SURVEY. THE INTENT OF THIS PLAN IS TO RETRACE THE BOUNDARY LINES OF DEEDS REFERENCED HEREON. OWNERSHIP OF ADJOINING PROPERTIES IS ACCORDING TO ASSESSOR'S RECORDS. THIS PLAN MAY OR MAY NOT INDICATE ALL ENCUMBRANCES EXPRESSED, IMPLIED OR PRESCRIPTIVE.
10. ANY USE OF THIS PLAN AND OR ACCOMPANYING DESCRIPTIONS SHOULD BE DONE WITH LEGAL COUNSEL, TO BE CERTAIN THAT TITLES ARE CLEAR, THAT INFORMATION IS CURRENT, AND THAT ANY NECESSARY CERTIFICATES ARE IN PLACE FOR A PARTICULAR CONVEYANCE, OR OTHER USES.
11. NO WETLANDS WERE OBSERVED ON THE SUBJECT PREMISES.
12. SURVEY TIE LINES SHOWN HEREON ARE NOT BOUNDARY LINES. THEY SHOULD ONLY BE USED TO LOCATE THE PARCEL SURVEYED FROM THE FOUND MONUMENTS SHOWN AND LOCATED BY THIS SURVEY.

PLAN REFERENCES:

1. "LOT LINE RELOCATION PLAN FOR JOHN J. & CATHERINE PAUSON AND HAROLD C. & ASTRID LOUISE PASSER, 12-28 DENNETT STREET, PORTSMOUTH, NH." DATED NOVEMBER 30, 1983. PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES. R.C.R.D. 12123.
2. "PLAN OF LAND PREPARED FOR MICHAEL BRANDZEL & HELEN LONG, TAX MAP 140 LOT 3, 39 DEARBORN STREET, PORTSMOUTH, NH." DATED OCTOBER 1, 2012. PREPARED BY BOUDREAU LAND SURVEYING. R.C.R.D. 37444.
3. "NO-BUILT EASEMENT PLAN, LAND OF SHAWN & MICHIYO BARDONG, TAX MAP 140 LOT 3, 39 DEARBORN STREET, PORTSMOUTH, NH." DATED JUNE 27, 2023. PREPARED BY BOUDREAU LAND SURVEYING. R.C.R.D. 44486.
4. "SITE PLAN, MEDICAL MARKET, 304 MAPLEWOOD AVE. PORTSMOUTH, NH," DATED OCTOBER 28, 1988. PREPARED BY INTERFACE DESIGNS. NOT RECORDED. ON FILE AT THE CITY OF PORTSMOUTH PLANNING DEPARTMENT. THIS PLAN NOTES THAT IS IT BASED UPON A PLAN BUT MOULTON ENGINEERING, WHICH WAS NOT FOUND BY THIS OFFICE.
5. "PLAN OF LOT, NO. 304 MAPLEWOOD AVE., PORTSMOUTH, N.H." DATED JUNE 1960. PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS. NOT RECORDED. ON FILE AT THE CITY OF PORTSMOUTH PLANNING DEPARTMENT.

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 feet

Design: XXX	Draft: KDR	Date: 01/14/26	
Checked: JAC	Scale: AS SHOWN	Project No.: 23169	
Drawing Name: 23169-PLAN.dwg			

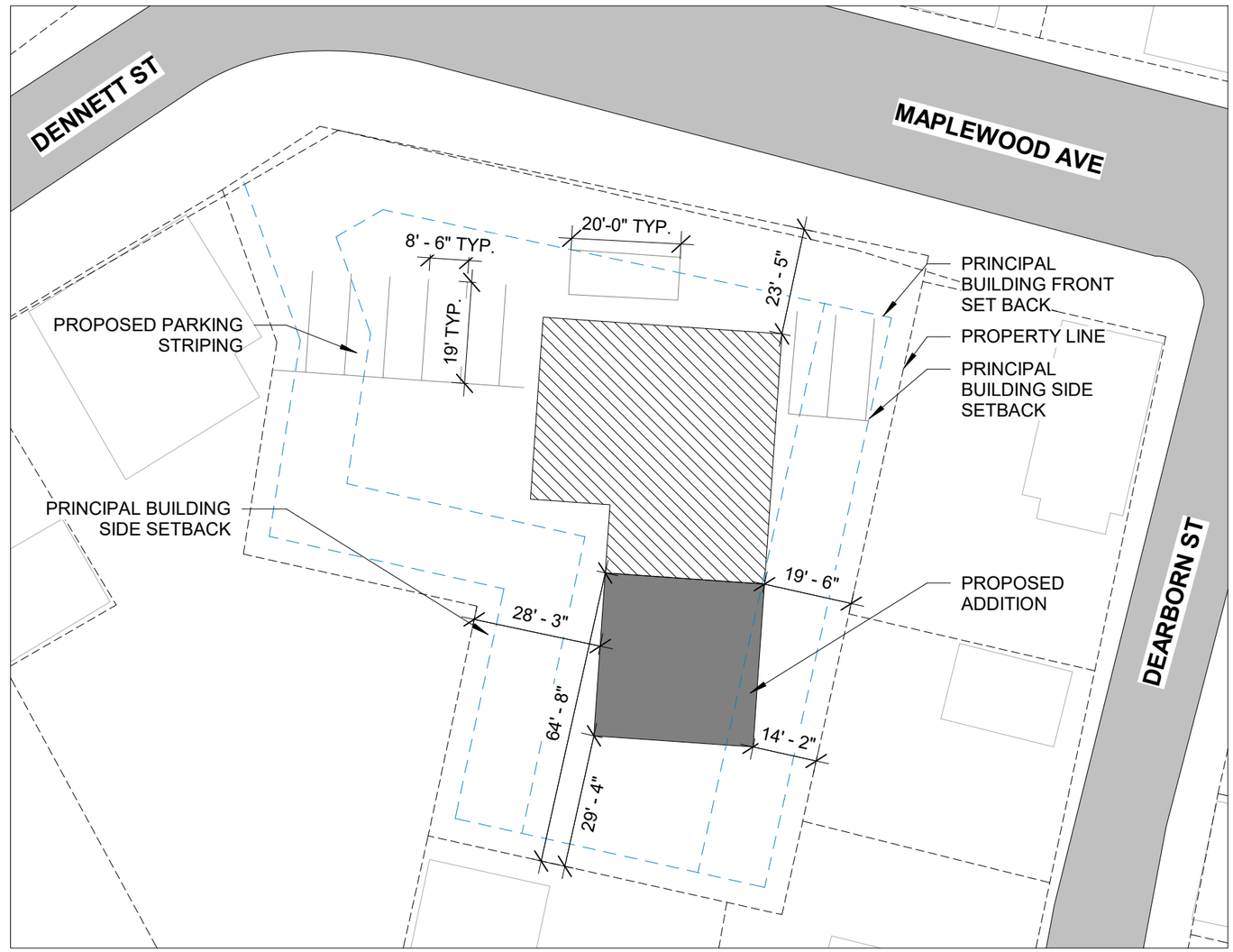
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
0	1/14/26	ISSUED FOR REVIEW	KDR

Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
85 Portsmouth Ave. PO Box 219 Stratham, NH 03885
Civil Engineering Services
603-772-4746
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: EXISTING CONDITIONS PLAN
Project: 304 MAPLEWOOD AVE, PORTSMOUTH, NH
Owner of Record: 304 MAPLEWOOD LLC
304 MAPLEWOOD AVE, PORTSMOUTH, NH 03801

DRAWING No.
C1
SHEET 1 OF 2
JBE PROJECT NO. 23169



ZONING SUMMARY	
ZONE	CHARACTER DISTRICT (CD4-L2)
MINIMUM LOT AREA	3,000 SF
MAXIMUM FRONT YARD SETBACK	15'
SIDE YARD SETBACK	5' MIN; 20' MAX
MINIMUM REAR YARD SETBACK	5' FROM REAR LOT LINE; 10' FROM CENTER LINE OF ALLEY
MAXIMUM BUILDING HEIGHT	60' (2-5 STORIES)
MAXIMUM BUILDING COVERAGE	60% OF LOT
MAXIMUM BUILDING FOOTPRINT	2,500 S.F.
MINIMUM OPEN SPACE	25% OF LOT

1 ARCHITECTURAL SITE PLAN
1" = 30'-0"

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OFFICE ADDITION

304 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

SITE PLAN

HISTORIC DISTRICT COMMISSION- PUBLIC HEARING,
FEBRUARY 2026

4 Market Street
Portsmouth, New Hampshire
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A1

01/16/2026
PA: MM / MG
Project Number: 25081
AS INDICATED

Z:\Active Project Files\25081-304 MAPLEWOOD\Dwgs\2-SD\25081-304 MAPLEWOOD SD.rvt

PERSPECTIVE FROM MAPLEWOOD AVE

PERSPECTIVE OF BACK OF BUILDING, REAR SHED ADDITION TO BE REMOVED

VIEW OF EXISTING UTILITIES AND SERVICES ON WEST SIDE OF BUILDING

PERSPECTIVE OF BACK SIDE OF BUILDING

PERSPECTIVE OF EAST SIDE OF BUILDING

PERSPECTIVE FROM BACK OF BUILDING, SHOWING THE YARD

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OFFICE ADDITION

304 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

EXISTING IMAGES

HISTORIC DISTRICT COMMISSION- PUBLIC HEARING,
FEBRUARY 2026

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Portsmouth, New Hampshire
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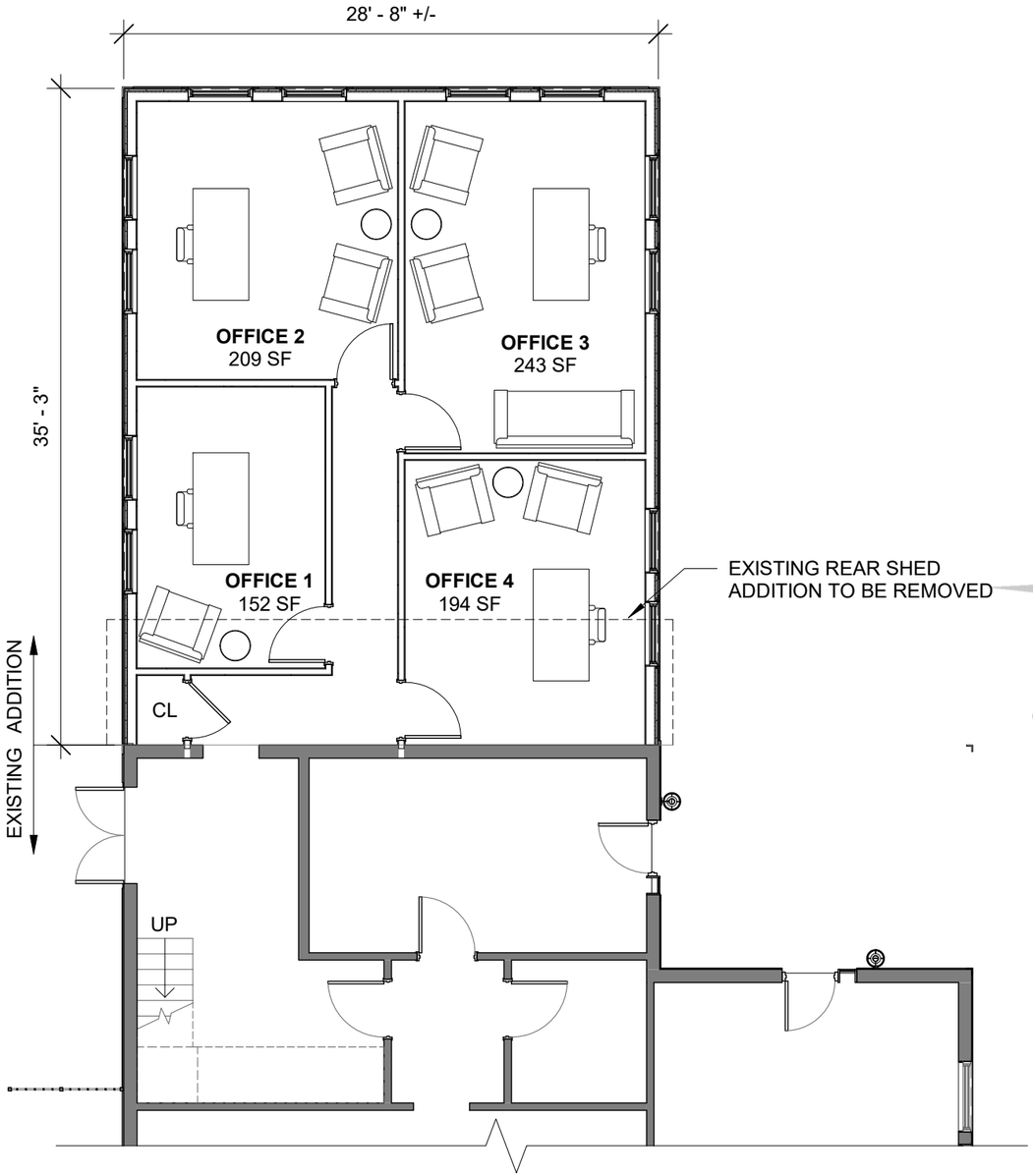
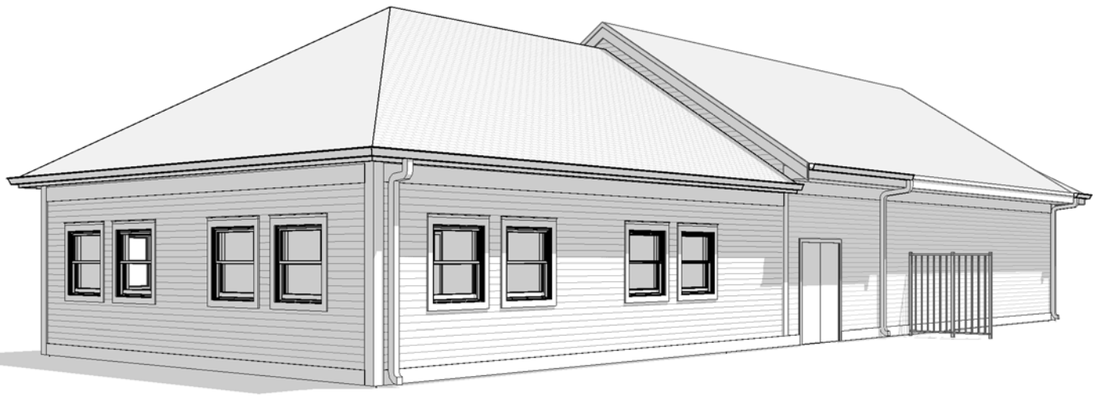
McHENRY ARCHITECTURE

A2

01/16/2026
PA: MM / MG
Project Number: 25081
NOT TO SCALE



1 FLOOR PLAN
1/8" = 1'-0"



2 3D VIEW - ADDITION

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OFFICE ADDITION

304 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

PROPOSED PLANS

HISTORIC DISTRICT COMMISSION- PUBLIC HEARING,
FEBRUARY 2026

4 Market Street
Portsmouth, New Hampshire
603.430.0274
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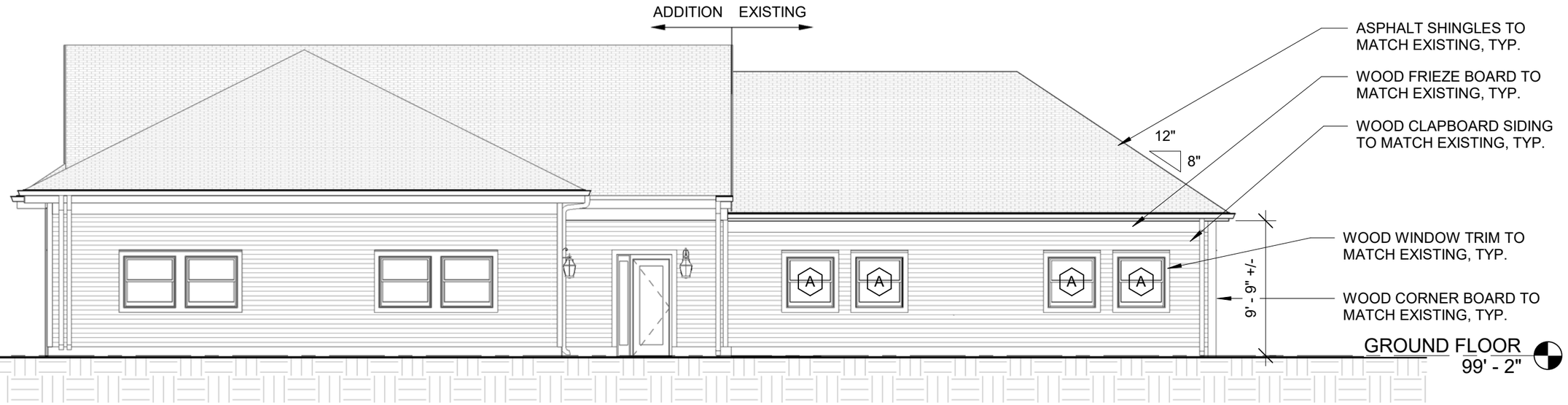
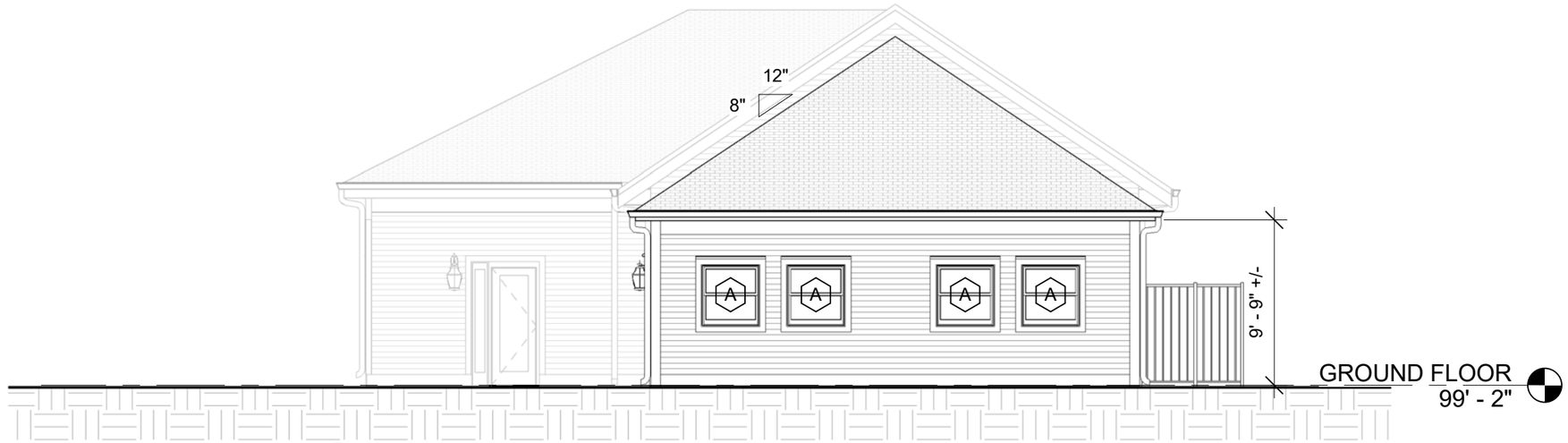
A3

01/16/2026
PA: MM / MG
Project Number: 25081
AS INDICATED



2 WEST ELEVATION
1/8" = 1'-0"



1 SOUTH ELEVATION
1/8" = 1'-0"

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OFFICE ADDITION

304 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

PROPOSED ELEVATIONS

HISTORIC DISTRICT COMMISSION- PUBLIC HEARING,
FEBRUARY 2026

4 Market Street
Portsmouth, New Hampshire
603.430.0274
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A4

01/16/2026
PA: MM / MG
Project Number: 25081
Scale: 1/8" = 1'-0"

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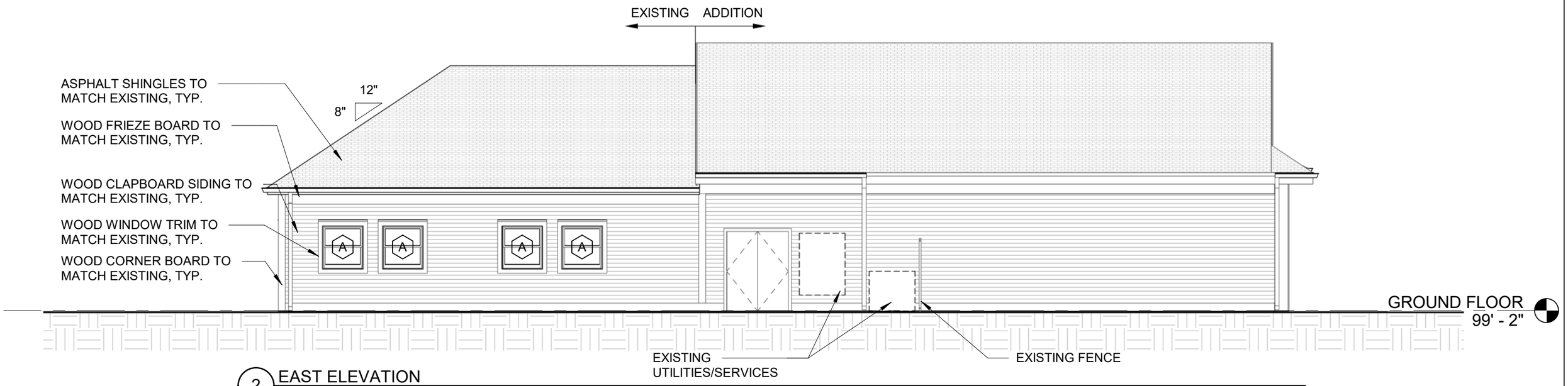

2 EAST ELEVATION
1/8" = 1'-0"

1 NORTH ELEVATION
1/8" = 1'-0"

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OFFICE ADDITION

304 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

PROPOSED ELEVATIONS

HISTORIC DISTRICT COMMISSION- PUBLIC HEARING,
FEBRUARY 2026

4 Market Street
Portsmouth, New Hampshire
603.430.0274
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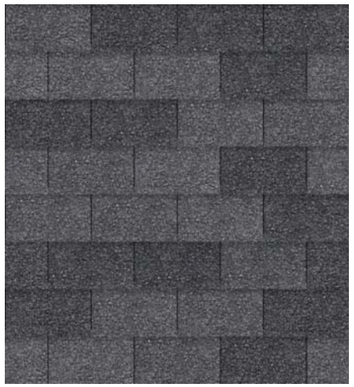
A5

01/16/2026
PA: MM / MG
Project Number: 25081
Scale: 1/8" = 1'-0"

Z:\Active Project Files\25081-304 MAPLEWOOD\Dwgs\2-SD\25081-304 MAPLEWOOD SD.rvt

WINDOW SCHEDULE

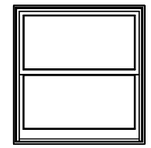
Type Mark	Manufacturer	Material / Cladding	Width	Height
A	Marvin Windows and Doors	Fiberglass	3' - 5 1/2"	3' - 7 3/4"



ASPHALT SHINGLES

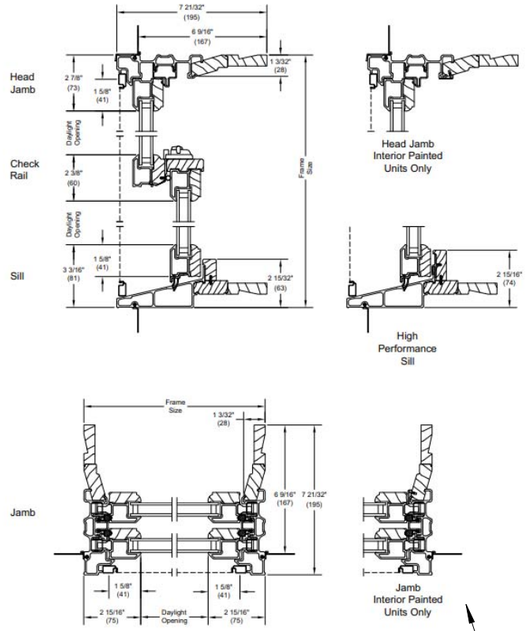
CLAPBOARD SIDING
4" EXPOSURE TO MATCH EXISTING

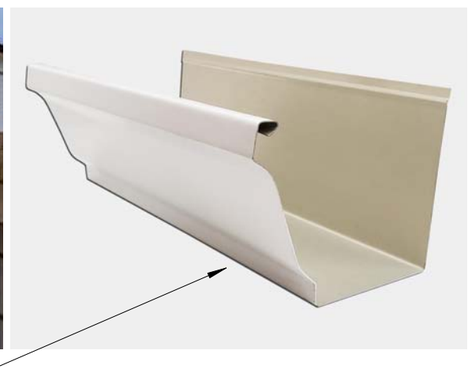
WINDOW TYPES



TYPE A:

FIBERGLASS CLAD WOOD DOUBLE HUNG WINDOW





K-STYLE GUTTER AND RECTANGULAR DOWNSPOUT TO MATCH EXISTING

WINDOWS
MARVIN ELEVATE DOUBLE HUNG G2

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OFFICE ADDITION

304 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

WINDOW SCHEDULE / MATERIALS

HISTORIC DISTRICT COMMISSION- PUBLIC HEARING,
FEBRUARY 2026

4 Market Street
Portsmouth, New Hampshire
603.430.0274

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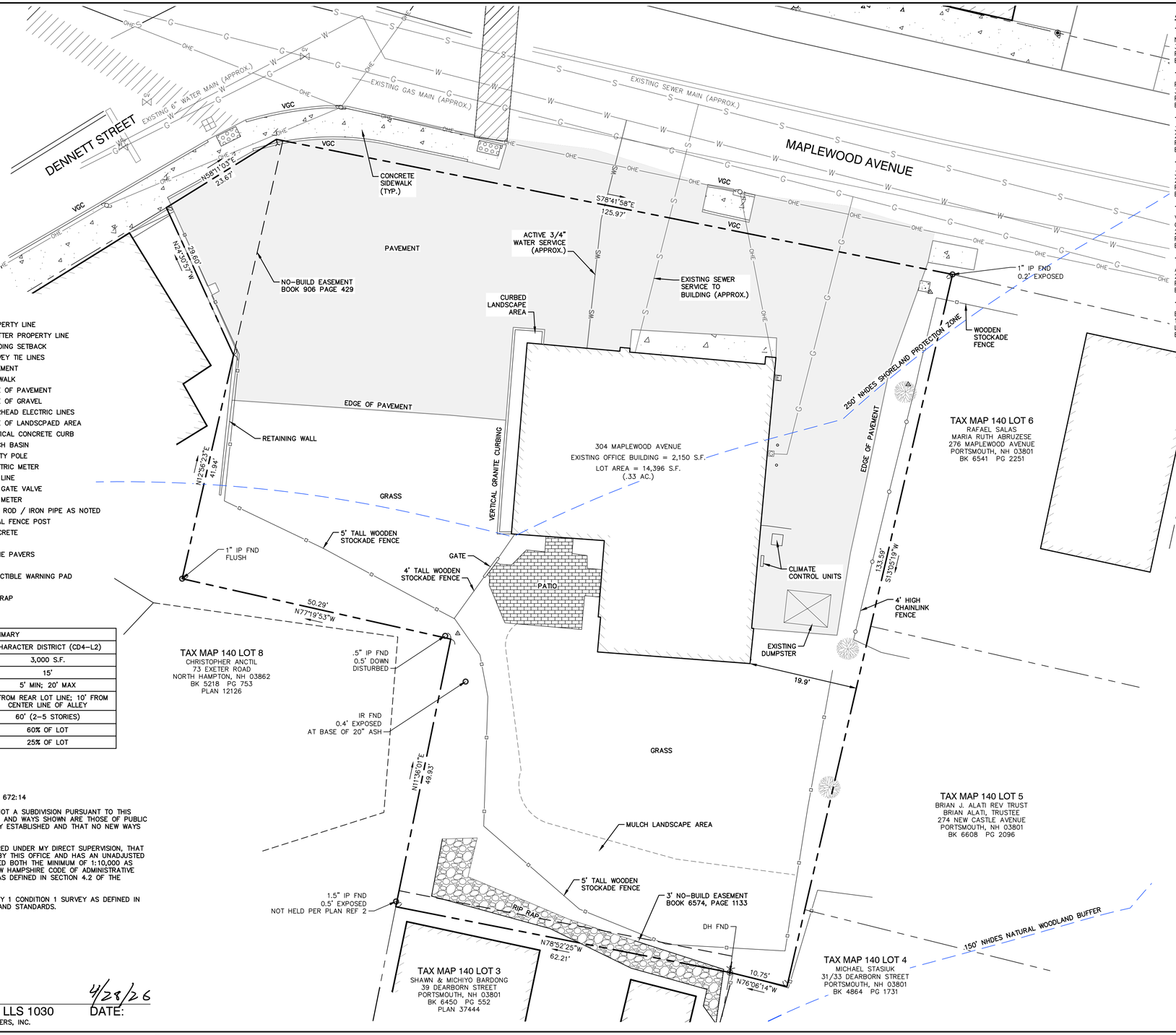
A6

01/16/2026
PA: MM / MG
Project Number: 25081
NOT TO SCALE



ABUTTERS NOT SHOWN:

TAX MAP 141 LOT 1
NEILA LLC
31 DENNETT STREET
PORTSMOUTH, NH 03801
BK 6415 PG 2630

TAX MAP 141 LOT 32
PETER GEREMIA
315 MAPLEWOOD AVENUE
PORTSMOUTH, NH 03801
BK 4829 PG 1699

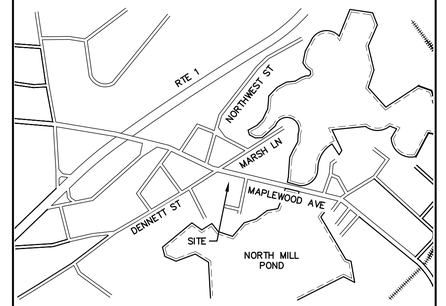
TAX MAP 141 LOT 34
35 PINES LLC
295 MAPLEWOOD AVENUE, UNIT 1
PORTSMOUTH, NH 03801
BK 6671 PG 1433

TAX MAP 141 LOT 35-1
35 PINES LLC
295 MAPLEWOOD AVENUE #1
PORTSMOUTH, NH 03801
BK 6347 PG 71

TAX MAP 141 LOT 35-2
VICTORIA BASSI
CAMERON BOUCHARD
295 MAPLEWOOD AVENUE R #2
PORTSMOUTH, NH 03801
BK 6228 PG 2499

TAX MAP 141 PG 35-3
ARRON & ALLYSON SEE
293 MAPLEWOOD AVENUE, UNIT F
PORTSMOUTH, NH 03801
BK 6411 PG 1662

TAX MAP 141 LOT 36
EVON COOPER
16 GARLAND ROAD
LINCOLN, MA 01773
BK 3261 PG 0831



LOCUS SCALE: 1"=500'

LEGEND

- PROPERTY LINE
- ABUTTER PROPERTY LINE
- BUILDING SETBACK
- SURVEY TIE LINES
- EASEMENT
- SIDEWALK
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- OVERHEAD ELECTRIC LINES
- EDGE OF LANDSCPAED AREA
- VGC — VERTICAL CONCRETE CURB
- CATCH BASIN
- UTILITY POLE
- ELECTRIC METER
- GAS LINE
- GV — GAS GATE VALVE
- GAS METER
- IRON ROD / IRON PIPE AS NOTED
- METAL FENCE POST
- CONCRETE
- STONE PAVERS
- DETECTIBLE WARNING PAD
- RIP-RAP

ZONING SUMMARY	
ZONE	CHARACTER DISTRICT (CD4–L2)
MINIMUM LOT AREA	3,000 S.F.
MAXIMUM FRONT YARD SETBACK	15'
SIDE YARD SETBACK	5' MIN; 20' MAX
MINIMUM REAR YARD SETBACK	5' FROM REAR LOT LINE; 10' FROM CENTER LINE OF ALLEY
MAXIMUM BUILDING HEIGHT	60' (2–5 STORIES)
MAXIMUM BUILDING COVERAGE	60% OF LOT
MINIMUM OPEN SPACE	25% OF LOT

CERTIFICATION:

PURSUANT TO RSA 676:18–III AND RSA 672:14

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

I CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEED BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 503.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

STATE OF NEW HAMPSHIRE — No. 1030 — MATTHEW J. SALVUCCI — LICENSED LAND SURVEYOR — SIGNATURE

4/29/26

MATTHEW J. SALVUCCI, LLS 1030 DATE:
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

NOTES:

1. THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING SITE FEATURES OF TAX MAP 140 LOT 7.
2. WATER, SEWER, AND GAS LINES WERE DRAWN IN BASED OFF OF UTILITIES SHOWN IN PLAN REF. 4 AND SHOULD BE CONSIDERED APPROXIMATE. LOCATION, DEPTH, SIZE, TYPE, EXISTENCE OR NONEXISTENCE OF UNDERGROUND UTILITIES AND/OR UNDERGROUND STORAGE TANKS WAS NOT VERIFIED BY THIS SURVEY. ALL CONTRACTORS SHOULD NOTIFY IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES PRIOR TO ANY EXCAVATION WORK OR CALL DIG–SAFE AT 1–888–DIG–SAFE.
3. THE SUBJECT PARCEL IS NOT LOCATED WITHIN AN AREA HAVING A SPECIAL FLOOD HAZARD ZONE DESIGNATION BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 33015C0259F, WITH EFFECTIVE DATE OF JANUARY, 29, 2021,
4. BASIS OF BEARING: HORIZONTAL – NH STATE PLANE. VERTICAL – NAVD88.
5. CERTAIN DATA HEREON MAY VARY FROM RECORDED DATA DUE TO DIFFERENCES IN DECLINATION, ORIENTATION, AND METHODS OF MEASUREMENT.
6. ALL BOOK AND PAGE NUMBERS REFER TO THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
7. THE TAX MAP AND LOT NUMBERS ARE BASED ON THE TOWN OF PORTSMOUTH. TAX RECORDS AND ARE SUBJECT TO CHANGE.
8. RESEARCH WAS PERFORMED AT THE TOWN OF PORTSMOUTH ASSESSOR'S OFFICE AND THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
9. THIS SURVEY IS NOT A CERTIFICATION TO OWNERSHIP OR TITLE OF LANDS SHOWN. OWNERSHIP AND ENCUMBRANCES ARE MATTERS OF TITLE EXAMINATION NOT OF A BOUNDARY SURVEY. THE INTENT OF THIS PLAN IS TO RETRACE THE BOUNDARY LINES OF DEEDS REFERENCED HEREON. OWNERSHIP OF ADJOINING PROPERTIES IS ACCORDING TO ASSESSOR'S RECORDS. THIS PLAN MAY OR MAY NOT INDICATE ALL ENCUMBRANCES EXPRESSED, IMPLIED OR PRESCRIPTIVE.
10. ANY USE OF THIS PLAN AND OR ACCOMPANYING DESCRIPTIONS SHOULD BE DONE WITH LEGAL COUNSEL, TO BE CERTAIN THAT TITLES ARE CLEAR, THAT INFORMATION IS CURRENT, AND THAT ANY NECESSARY CERTIFICATES ARE IN PLACE FOR A PARTICULAR CONVEYANCE, OR OTHER USES.
11. NO WETLANDS WERE OBSERVED ON THE SUBJECT PREMISES.
12. SURVEY TIE LINES SHOWN HEREON ARE NOT BOUNDARY LINES. THEY SHOULD ONLY BE USED TO LOCATE THE PARCEL SURVEYED FROM THE FOUND MONUMENTS SHOWN AND LOCATED BY THIS SURVEY.
13. WATER, SEWER, AND GAS LINES WERE DRAWN IN BASED OFF OF UTILITIES SHOWN IN PLAN REF. 4 AND SHOULD BE CONSIDERED APPROXIMATE.
14. THE EASTERLY BOUNDARY OF THE SURVEYED PROPERTY WAS DETERMINED USING THE IRON PIPE FOUND ALONG MAPLEWOOD AVENUE. EXISTING FENCES FOR LOTS 5 AND 6 CROSS THIS LINE. TITLE TO LANDS BEYOND THE FENCES IS UNCLEAR.

PLAN REFERENCES:

1. "LOT LINE RELOCATION PLAN FOR JOHN J. & CATHERINE PAUSON AND HAROLD C. & ASTRID LOUISE PASSER, 12–28 DENNETT STREET, PORTSMOUTH, NH." DATED NOVEMBER 30, 1983. PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES. R.C.R.D. 12123.
2. "PLAN OF LAND PREPARED FOR MICHAEL BRANDZEL & HELEN LONG, TAX MAP 140 LOT 3, 39 DEARBORN STREET, PORTSMOUTH, NH." DATED OCTOBER 1, 2012. PREPARED BY BOUDREAU LAND SURVEYING. R.C.R.D. 37444.
3. "NO–BUILT EASEMENT PLAN, LAND OF SHAWN & MICHIYO BARDONG, TAX MAP 140 LOT 3, 39 DEARBORN STREET, PORTSMOUTH, NH." DATED JUNE 27, 2023. PREPARED BY BOUDREAU LAND SURVEYING. R.C.R.D. 44486.
4. "SITE PLAN, MEDICAL MARKET, 304 MAPLEWOOD AVE. PORTSMOUTH, NH," DATED OCTOBER 28, 1988. PREPARED BY INTERFACE DESIGNS. NOT RECORDED. ON FILE AT THE CITY OF PORTSMOUTH PLANNING DEPARTMENT. THIS PLAN NOTES THAT IS IT BASED UPON A PLAN BUT MOULTON ENGINEERING, WHICH WAS NOT FOUND BY THIS OFFICE.
5. "PLAN OF LOT, NO. 304 MAPLEWOOD AVE., PORTSMOUTH, N.H." DATED JUNE 1960. PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS. NOT RECORDED. ON FILE AT THE CITY OF PORTSMOUTH PLANNING DEPARTMENT.

J/B — STATE PLANE

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 feet

Design: XXX	Draft: KDR
Checked: JAC	Scale: AS SHOWN
Date: 01/14/26	Project No.: 23169
Drawing Name: 23169-PLAN.dwg	

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

STATE OF NEW HAMPSHIRE — PAIGE S. LIBBEY No.16670 — LICENSED PROFESSIONAL ENGINEER

REV.	DATE	REVISION	BY
1	3/19/26	REVISED PLAN SET	KDR
0	1/14/26	ISSUED FOR REVIEW	KDR

Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
85 Portsmouth Ave. PO Box 219 Stratham, NH 03885
Civil Engineering Services
603-772-4746
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: EXISTING CONDITIONS PLAN
Project: TAX MAP 140, LOT 7 — 304 MAPLEWOOD AVE, PORTSMOUTH, NH
Owner of Record: 304 MAPLEWOOD, LLC — 304 MAPLEWOOD AVE, PORTSMOUTH, NH 03801 — BK 4849, PG 2483

DRAWING No. C1
SHEET 1 OF 3
JBE PROJECT NO. 23169

ABUTTERS NOT SHOWN:

TAX MAP 141 LOT 1
NEILA LLC
31 DENNETT STREET
PORTSMOUTH, NH 03801
BK 6415 PG 2630

TAX MAP 141 LOT 32
PETER GEREMIA
315 MAPLEWOOD AVENUE
PORTSMOUTH, NH 03801
BK 4829 PG 1699

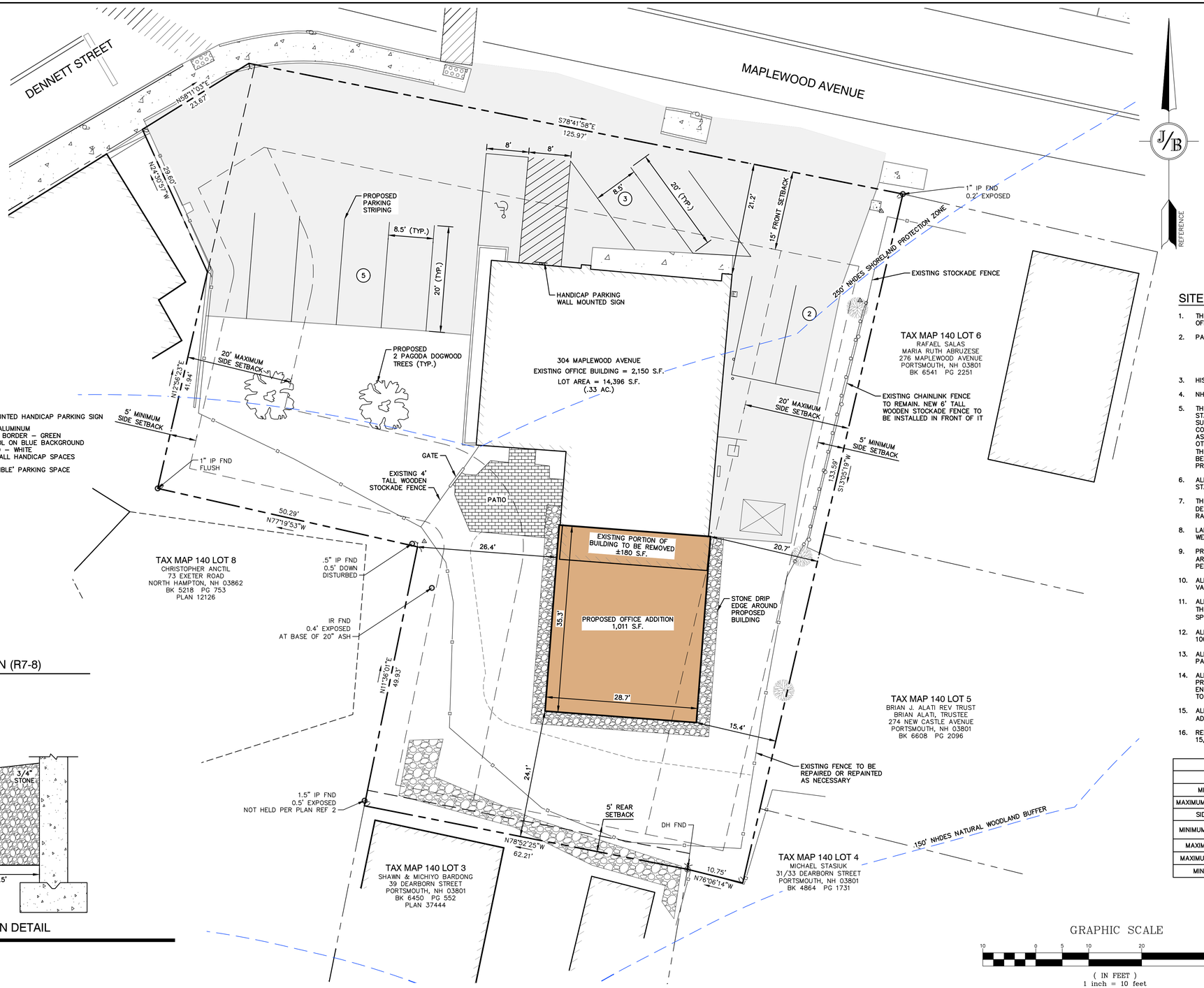
TAX MAP 141 LOT 34
35 PINES LLC
295 MAPLEWOOD AVENUE, UNIT 1
PORTSMOUTH, NH 03801
BK 6671 PG 1433

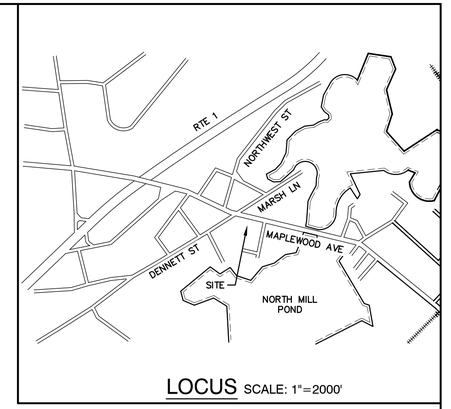
TAX MAP 141 LOT 35-1
35 PINES LLC
295 MAPLEWOOD AVENUE #1
PORTSMOUTH, NH 03801
BK 6347 PG 71

TAX MAP 141 LOT 35-2
VICTORIA BASSI
CAMERON BOUCHARD
295 MAPLEWOOD AVENUE R #2
PORTSMOUTH, NH 03801
BK 6228 PG 2499

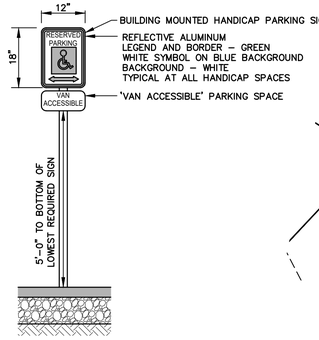
TAX MAP 141 PG 35-3
ARRON & ALLYSON SEE
293 MAPLEWOOD AVENUE, UNIT F
PORTSMOUTH, NH 03801
BK 6411 PG 1662

TAX MAP 141 LOT 36
EVON COOPER
16 GARLAND ROAD
LINCOLN, MA 01773
BK 3261 PG 0831



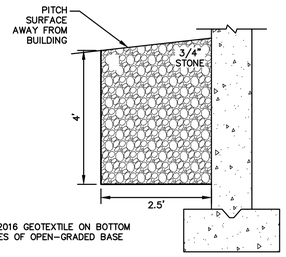


LOCUS SCALE: 1"=2000'



WALL MOUNTED
HANDICAP PARKING SIGN (R7-8)

NOT TO SCALE



DRIP EDGE INFILTRATION DETAIL

NOT TO SCALE

SITE NOTES:

1. THE INTENT OF THIS PLAN IS TO SHOW A PROPOSED OFFICE BUILDING ADDITION TO THE EXISTING OFFICE BUILDING, AND TO SHOW PROPOSED PARKING STRIPING ON THE SITE.
2. PARKING CALCULATIONS: OFFICE USE – PROFESSIONAL, BUSINESS AND FINANCIAL SERVICES
   1 SPACE PER 350 S.F. GROSS FLOOR AREA
   2,981 S.F. GROSS FLOOR AREA / 350 S.F. PER SPACE = 9 SPACES REQUIRED
   9 PARKING SPACES REQUIRED
   10 PARKING SPACES PROVIDED
3. HISTORIC DISTRICT APPROVED ADDITION DESIGN IN FEBRUARY, 2026.
4. NHDES SHORELAND IMPACT PERMIT #_____ DATED: _____.
5. THIS PLAN SET HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC., FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS, INCLUDING ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS ON THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS, MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED. CONTRACTOR TO ALWAYS CONTACT DIG SAFE PRIOR TO DIGGING ONSITE OR OFFSITE TO ENSURE SAFETY AND OBEY THE LAW.
6. ALL CONSTRUCTION SHALL CONFORM TO TOWN STANDARDS AND REGULATIONS, AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
7. THE SUBJECT PARCEL IS NOT LOCATED WITHIN AN AREA HAVING A SPECIAL FLOOD HAZARD ZONE DESIGNATION BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 33015C0259F, WITH EFFECTIVE DATE OF JANUARY, 29, 2021,
8. LANDOWNERS ARE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING PERMITTING REQUIRED UNDER THESE REGULATIONS.
9. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.
10. ALL PROPOSED SIGNAGE SHALL CONFORM WITH THE TOWN ZONING REGULATIONS, UNLESS A VARIANCE IS OTHERWISE REQUESTED.
11. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND NHDOT STANDARDS AND SPECIFICATIONS (NON-REFLECTORIZED PAVEMENT MARKINGS), UNLESS OTHERWISE NOTED.
12. ALL PARKING STALLS SHALL BE SEPARATED USING 4" WIDE SOLID STRIPES. STRIPING SHALL BE 100% ACRYLIC TYPE, LOW VOC, FAST DRYING, IN A COLOR OF WHITE.
13. ALL STOP BARS SHALL BE 18" IN WIDTH IN A COLOR OF WHITE; ALL TRAFFIC ARROWS SHALL BE PAINTED IN A COLOR OF WHITE.
14. ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PROVIDED BY THE OWNER. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER PRIOR TO THE START OF CONSTRUCTION. BUILDING DIMENSIONS AND AREAS TO BE TO OUTSIDE OF MASONRY, UNLESS OTHERWISE NOTED.
15. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
16. REFERENCE PREVIOUSLY APPROVED SITE PLAN BY INTERFACE DESIGNS, APPROVED ON DECEMBER 15, 1988.

ZONING SUMMARY		
ZONE	CHARACTER DISTRICT (CD4-L2) – REQUIRED	PROVIDED
MINIMUM LOT AREA	3,000 S.F.	14,396 S.F. (.33 AC)
MAXIMUM FRONT YARD SETBACK	15'	21.2'
SIDE YARD SETBACK	5' MIN; 20' MAX	15.4'
MINIMUM REAR YARD SETBACK	5' FROM REAR LOT LINE; 10' FROM CENTER LINE OF ALLEY	24.1'
MAXIMUM BUILDING HEIGHT	60' (2-5 STORIES)	23.0'
MAXIMUM BUILDING COVERAGE	60% OF LOT	20.7% (2,981 S.F.)
MINIMUM OPEN SPACE	25% OF LOT	49.7% (7,156 S.F.)

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 feet

CITY OF PORTSMOUTH PLANNING BOARD

CHAIRPERSON _____ DATE _____

Design: XXX	Draft: KDR
Checked: JAC	Scale: AS SHOWN
Drawing Name: 23169-PLAN.dwg	
Date: 01/14/26	Project No.: 23169

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

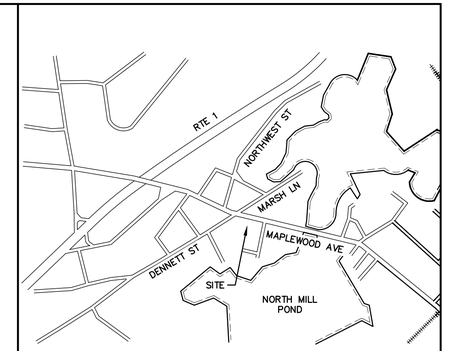
PAIGE S. LIBBEY No.16670 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE 01/14/2026

REV.	DATE	REVISION	BY
1	3/19/26	REVISED PLAN SET	KDR
0	1/14/26	ISSUED FOR REVIEW	KDR

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: AMENDED SITE PLAN
Project: TAX MAP 140, LOT 7
304 MAPLEWOOD AVE, PORTSMOUTH, NH
Owner of Record: 304 MAPLEWOOD, LLC
304 MAPLEWOOD AVE, PORTSMOUTH, NH 03801
BK 4849, PG 2483

DRAWING No.
C2
SHEET 2 OF 3
JBE PROJECT NO. 23169



LOCUS SCALE: 1"=2000'

SHORELAND IMPERVIOUS COVERAGE CALCULATIONS

AREA OF LOT WITHIN 250' SHORELAND PROTECTION ZONE = 7,737 S.F.

DESCRIPTION	EXISTING	PROPOSED
BUILDING	1,069 S.F.	1,899 S.F.
PAVEMENT	648 S.F.	648 S.F.
PATIO	240 S.F.	240 S.F.
TOTALS:	1,957 S.F.	2,787 S.F.
PERCENT COVERAGE IN PROTECTIVE SHORELAND AREA:	25.3%	36.0%

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 feet

Design: XXX	Draft: KDR	Date: 01/14/26	
Checked: JAC	Scale: AS SHOWN	Project No.: 23169	
Drawing Name: 23169-PLAN.dwg			

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PAIGE S. LIBBEY No.16670 STATE OF NEW HAMPSHIRE PROFESSIONAL ENGINEER LICENSED 04/28/2026

REV.	DATE	REVISION	BY
1	3/19/26	REVISED PLAN SET	KDR
0	1/14/26	ISSUED FOR REVIEW	KDR

Designed and Produced in NH
Jones & Beach Engineers, Inc.
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
Civil Engineering Services
603-772-4746
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	SHORELAND PROTECTION PLAN
Project:	TAX MAP 140, LOT 7 304 MAPLEWOOD AVE, PORTSMOUTH, NH
Owner of Record:	304 MAPLEWOOD, LLC 304 MAPLEWOOD AVE, PORTSMOUTH, NH 03801 BK 4849, PG 2483

DRAWING No.

C3

SHEET 3 OF 3
JBE PROJECT NO. 23169

ARIES ENGINEERING

Environmental & Geotechnical Engineers & Hydrogeologists

April 13, 2026
File No. 2021-075

Peter Stith
Planning Manager
Rick Chellman
Chairman of Planning Board
Planning & Sustainability Department
1 Junkins Ave, 3rd Floor
Portsmouth, NH 03801

Subject: 185-187 Wentworth Road, Portsmouth, NH
Request for Extension of Wetlands Conditional Use Permit (WCUP) LU-25-2
Marina Restoration Project

Dear Sirs:

On behalf of the Project Applicant/our client Sea Level LLC, Aries Engineering LLC is submitting this letter via hard copy and electronic copy via email for the subject project. The electronic copy can be uploaded to the portsmouthnh.portal.opengov.com as the Department directs. This letter requests a one-year extension of the WCUP issued on June 25, 2025, which otherwise expires on June 24, 2025. The reason is to allow the applicant sufficient time and resources to implement the activities allowed under the WCUP.

Please let us know if you have any questions.

Sincerely,
Aries Engineering, LLC

Stephen J. Graham, P.E.
Director of Engineering

Cc: Jay Johonnett, PE, Aries
Tom Reis, Carol Riley, Sea Level LLC
Rick Kowalski, PG, Aries
Drew Olehowski, Haley & Ward
Sam Hayden, Haley & Ward

HALEY WARD

200 Griffin Road, Unit 14, Portsmouth, NH 03801
Phone (603) 430-9282 Fax 436-2315

5 May, 2026

Rick Chellman, Planning Board Chair
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

RE: Request for Site Plan Approval Extension, 361 Hanover Street, Commercial and Residential Mixed-Use Development

Dear Mr. Chellman and Planning Board Members:

On behalf of 361 Hanover Steam Factory, LLC, we submit a request for a one-year extension of the above-mentioned project from the August 21, 2025, **Site Plan Approval,** under Section 2.12 of the Site Review Approval Regulations. We request that we be placed on the agenda for your **May 21, 2026,** Planning Board Meeting. The project consists of the **addition and renovation of the existing building and the construction of four new structures** at 361 Hanover Street, with the associated and required site improvements. This request is to extend the approval to August 21, 2027. Since the 361 Hanover Site Plan approval, the applicant has been working on the Conditions of Approval, including the final design and approval of the site electrical services. Additional time is needed to complete this and other design work prior to pulling the building permit.

Approval Requested

We hereby request that the Planning Board grant the one-year extension request.

Sincerely,

John Chagnon, PE; Ambit Engineering – Haley Ward

P:\NH\5010135-Hampshire_Development\2977.01-Hanover St., Portsmouth-JRC\JN 2977\2024 Site Plan\Applications\City of Portsmouth Site Plan\361 Hanover Planning Board Request for Extension 5-5-26.doc