**PLANNING BOARD**
**PORTSMOUTH, NEW HAMPSHIRE**

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

**7:00 Public Hearings begin** **February 19, 2026**

# AGENDA

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## REGULAR MEETING 7:00pm

## I. APPROVAL OF MINUTES

**A.** Approval of the January 22, 2026 meeting minutes.

## II. DETERMINATIONS OF COMPLETENESS

### SUBDIVISION REVIEW

**A.** The request of **Nicole** and **William Douglas (Owners),** for property located at **409 Lafayette Road** requesting Preliminary and Final Subdivision approval to subdivide the existing residential lot into two residential lots with associated site improvements Said property is located on Assessor Map 230 Lot 22 and lies within the Single Residence B (SRB) District.

### SITE PLAN REVIEW

**A.** The request of **Colbea Enterprises LLC (Owner),** for property located at **1980 Woodbury Avenue** requesting Site Plan Review approval for the redevelopment of the site to include a 5,500 s.f. convenience store with six fueling islands and associated site improvements. Said property is located on Assessor Map 239 Lot 11 and lies within the Gateway Corridor (G1) District.

## 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 **Mariya Kontsepolskaya** and **Ralph Minderhoud (Owners),** for property located at **65 Onyx Lane** requesting a Wetland Conditional Use Permit from Section 10.1017.50 to install 12 push piers to stabilize the existing foundation in the

100-foot wetland buffer area. Said property is located on Assessor Map 220 Lot 35 and lies within the Single Residence B (SRB) District. (LU-25-158)

## 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 **Colbea Enterprises LLC (Owner),** for property located at **1980 Woodbury Avenue** requesting Site Plan Review approval for the redevelopment of the site to include a 5,500 s.f. convenience store with six fueling islands and associated site improvements. Said property is located on Assessor Map 239 Lot 11 and lies within the Gateway Corridor (G1) District. (LU-25-163)

**B.** The request of **Nicole** and **William Douglas (Owners),** for property located at **409 Lafayette Road** requesting Preliminary and Final Subdivision approval to subdivide the existing residential lot into two residential lots with associated site improvements. Said property is located on Assessor Map 230 Lot 22 and lies within the Single Residence B (SRB) District. (LU-25-126)

**C.** The request of **The Welby Long Family Revocable Trust (Owner),** and **Jeffrey Paul McMahon** and **Lisa Hagerty-McMahon (Owners),** for property located at **245-255 Thornton Street** requesting approval of a Lot Line Revision between Map 162 Lot 2 and Map 162 Lot 1 to settle a property line dispute. The revision will result in an increase of 454 square feet to Lot 1 and a decrease of that amount from Lot 2. Said properties are located on Assessor Map 162 Lot 1 and Map 162 Lot 2 and lie within the General Residence A (GRA) District. (LU-26-10)

**D.** The request of **HCA Health Services of NH (Owner) dba Ducharme McMillen and Associates (Applicant)**, for property located at **333 Borthwick Avenue** requesting a Wetland Conditional Use Permit from Section 10.1017.50 to widen the existing sidewalk and construct a new overhead canopy at the ambulance bay. The proposed impacts include approximately 730 s.f. of new impervious surface within the 100' wetland buffer. Said property is located on Assessor Map 240 Lot 2-1 and lies within the Office Research (OR) and Highway Noise Overlay Districts (HNOD). (LU-25-180)

## V. CITY COUNCIL REFERRALS

**A.** Historic District Commission Design Review of New Structures

## VI. OTHER BUSINESS

**A. 635 Sagamore Avenue** - Requesting a 1-Year extension to the February 20, 2025 Site Plan Approval. (LU-22-12)

**B.** Chairman updates and discussion items

**C.** Board discussion of Regulatory Amendments & other matters

## VII. 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: February 12, 2026

Re: Recommendations for the February 19, 2026 Planning Board Meeting

## I. APPROVAL OF MINUTES

**A.** Approval of the January 22, 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 January 22, 2026 meeting and vote to approve meeting minutes with edits if needed.*

## II. DETERMINATIONS OF COMPLETENESS

### SUBDIVISION REVIEW

**A.** The request of **Nicole** and **William Douglas (Owners),** for property located at **409 Lafayette Road** requesting Preliminary and Final Subdivision approval to subdivide the existing residential lot into two residential lots with associated site improvements Said property is located on Assessor Map 230 Lot 22 and lies within the Single Residence B (SRB) District.

***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 application for consideration.*

### SITE PLAN REVIEW

**A.** The request of **Colbea Enterprises LLC (Owner),** for property located at **1980 Woodbury Avenue** requesting Site Plan Review approval for the redevelopment of the site to include a 5,500 s.f. convenience store with six fueling islands and associated site improvements. Said property is located on Assessor Map 239 Lot 11 and lies within the Gateway Corridor (G1) District.

***Planning Department Recommendation***

*Vote to 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 application for consideration.*

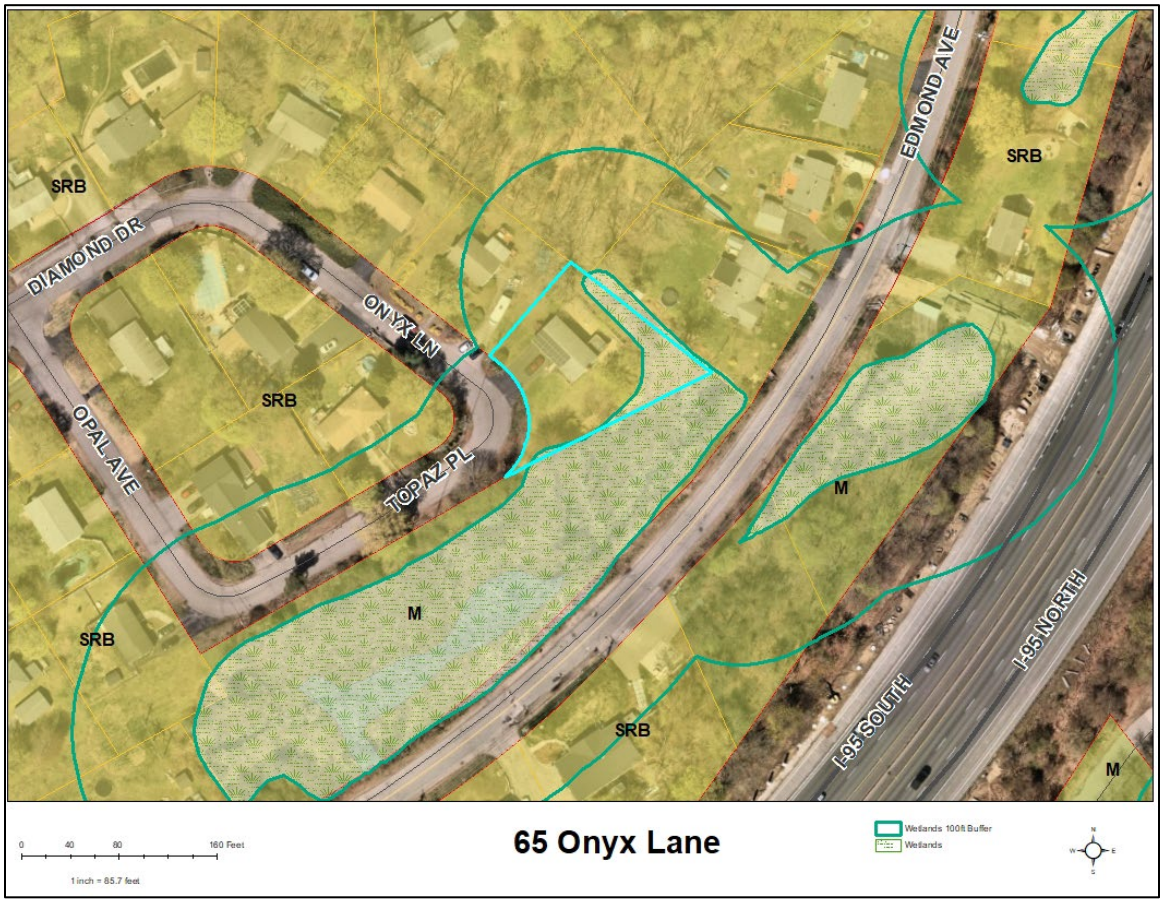
## III. PUBLIC HEARINGS – OLD BUSINESS

*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 **Mariya Kontsepolskaya** and **Ralph Minderhoud (Owners),** for property located at **65 Onyx Lane** requesting a Wetland Conditional Use Permit from Section 10.1017.50 to install 12 push piers to stabilize the existing foundation in the 100-foot wetland buffer area. Said property is located on Assessor Map 220 Lot 35 and lies within the Single Residence B (SRB) District. (LU-25-158)

Background

This application is for the installation of piers to stabilize the existing dwelling. As shown on the map below, the house is located entirely within the 100' wetland buffer, which triggers the need for a conditional use permit for any ground disturbance.



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 lot is already a residential use within the wetland buffer and it is proposing to reduce impacts while also pulling the structural impacts further away from the wetland resource.

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

This lot is entirely within the wetland buffer and there is no alternative location for this work.

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

The proposed work aims to reduce permanent impacts to the wetland buffer through the reduction of impervious surfaces. It is recommended that the applicant consider the use of erosion controls during the demolition phase.

**4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.**

This project does not propose any impacts to existing vegetation through the demolition and construction.

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

This project proposes reducing the permanent impacts to the wetland buffer and pulling proposed impacts further from the wetland resource than the existing sunroom and deck to be demolished.

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

The vegetated buffer strip is not being impacted as part of this project.

**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, November 13, 2025 and the Commission voted unanimously (7-0) to recommend approval with the following condition:

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. depth of materials and the materials to be used.*

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***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) 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.*

## IV. PUBLIC HEARINGS – NEW BUSINESS

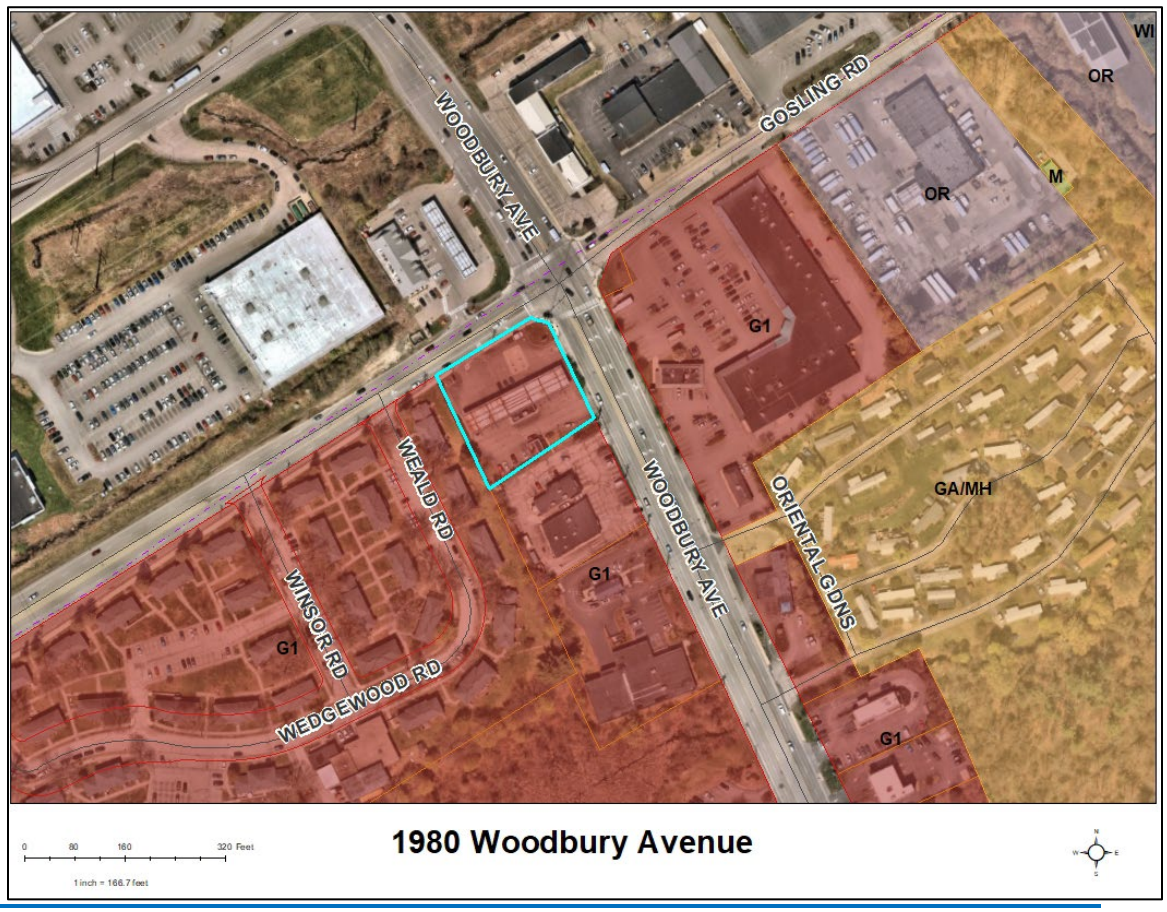
*The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.*

**A.** The request of **Colbea Enterprises LLC (Owner),** for property located at **1980 Woodbury Avenue** requesting Site Plan Review approval for the redevelopment of the site to include a 5,500 s.f. convenience store with six fueling islands and associated site improvements. Said property is located on Assessor Map 239 Lot 11 and lies within the Gateway Corridor (G1) District. (LU-25-163)

Project Background

This proposal includes demolition of the existing structures and construction of a 5,500 s.f. convenience store. The existing site contains a small store with pump islands on both sides. This proposal reduces the number of gas pumps from 16 (8 islands) to 12 pumps (6 islands). The plan reduces the width of the entrance along Gosling Road and increases the sidewalk to 8 feet around the perimeter of the side to improve pedestrian safety and access.

The applicant is in the process of changing the address for the property and has submitted a request to Public Works to change the address from Woodbury Ave to 90 Gosling Road, which has been preliminarily approved. This impacts the principal front and rear lot line. Currently, the rear lot line is opposite Woodbury and the side is opposite Gosling. The change of address would change the rear and side lot line, allowing the building to be situated as proposed without the need for an additional variance.




**Project Review, Decisions, and Recommendations**

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

Board of Adjustment

The project was before the Board of Adjustment at their regularly scheduled meeting of Tuesday, July 15, 2025 requesting the following relief:

1) Variance from Section 10.5B33.20 to allow for a front lot line build out of 0% where a minimum of 75% is required for a commercial building;
2) Variance from Section 10.5B34.60 to allow for a front setback from the lot line of 27 feet on Woodbury Avenue and 53.5 feet on Gosling Road where a maximum of 20 feet is required;
3) Variance from Section 10.5B83.10 to allow for parking spaces to be located between the principal building and the street;
4) Variance from Section 10.835.31 to allow outdoor service facilities to be located within 34.5 feet and 40.5 of a lot line where 50 feet is required;
5) Variance from Section 10.835.32 to allow for drive-through lanes, bypass lanes and stacking lanes to be located within 13 feet of the property line where 30 feet

is required;
6) Variance from Section 10.843.33 to allow for pump islands to be located within 34.5 feet of the lot lines where 40 feet is required;
7) Variance from Section 10.1251.10 to allow for an aggregate sign area of 309 s.f. where a maximum of 223.5 s.f. is allowed;
8) Variance from Section 10.1251.20 to allow a 134 s.f. freestanding sign where a maximum of 100 s.f. is allowed; and
9) Variance from Section 10.1253.10 to allow for a freestanding sign at a height of 26.5 feet where a maximum of 20 feet is allowed. Said property is shown on Assessor Map 239 Lot 11 and lies within the Gateway Corridor (G1) District. As a result of said consideration, the Board voted to
**grant** Variances 1, 2, 3, and 6 as presented and advertised only.

The Board voted to **deny** Variances 4 and 5 as presented and advertised, because the request was not consistent with the spirit of the ordinance and failed to meet the hardship criterion.

The Board voted to **deny** Variances 7, 8, and 9 as presented and advertised, because the special conditions of the property don't support the variances, so it failed the hardship criterion.

***The applicant will be back before the Zoning Board on February 18, 2026 due to a noticing error. Staff will provide any update on the outcome of the decision from that meeting at the Planning Board meeting.***

Technical Advisory Committee
At their regularly scheduled meeting of Tuesday, December 2, 2025 meeting TAC voted to recommend that the Planning Board recommend approval of the project with the following conditions:

1) *Please provide a green building statement.*
2) *Move water and sewer services out from under canopy for gas pumps.*
3) *Do not route domestic sewer (bathrooms) through grease trap. Connect domestic sewer to sewer service after grease trap.*
4) *Provide easements as necessary for 8' sidewalk around lot.*

***The conditions above have been addressed in the Planning Board submission.***

***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.*

*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 **Nicole and William Douglas (Owners)**, for property located at **409 Lafayette Road** requesting Preliminary and Final Subdivision approval to subdivide the existing residential lot into two residential lots with associated site improvements. Said property is located on Assessor Map 230 Lot 22 and lies within the Single Residence B (SRB) District.

Project Background

The applicant is proposing to subdivide the existing lot into two lots. The existing lot is large enough in size to be divided into two lots that conform to the 15,000 square foot lot area required in the SRB district. However, the rear lot will lack any street frontage. The applicant received a variance for frontage, outlined in the details below.




**Project Review, Decisions, and Recommendations**

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

Board of Adjustment

At their regular meeting of Tuesday, September 16, 2025, the Board of Adjustment

considered the variance request to subdivide the property with the rear lot having no street frontage. The Board voted unanimously to grant the variance.

Technical Advisory Committee
At their regularly scheduled meeting of Tuesday, January 6, 2026 meeting TAC voted to recommend that the Planning Board approve the subdivision with the following conditions:

1. *Install address placard before the back building is built.*
2. *Work with the Assessing Department for map and lot number and add to plan before submittal to the Planning Board.*
3. *Fix the note about the 4" pvc sewer lateral.*
4. *Show the proposed power hook up for the new lot and review with DPW prior to Planning Board submittal.*
5. *That relevant waivers are requested from the Subdivision Ordinance.*

***The conditions above have been addressed in the Planning Board submittal.***

***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.*

## 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.*

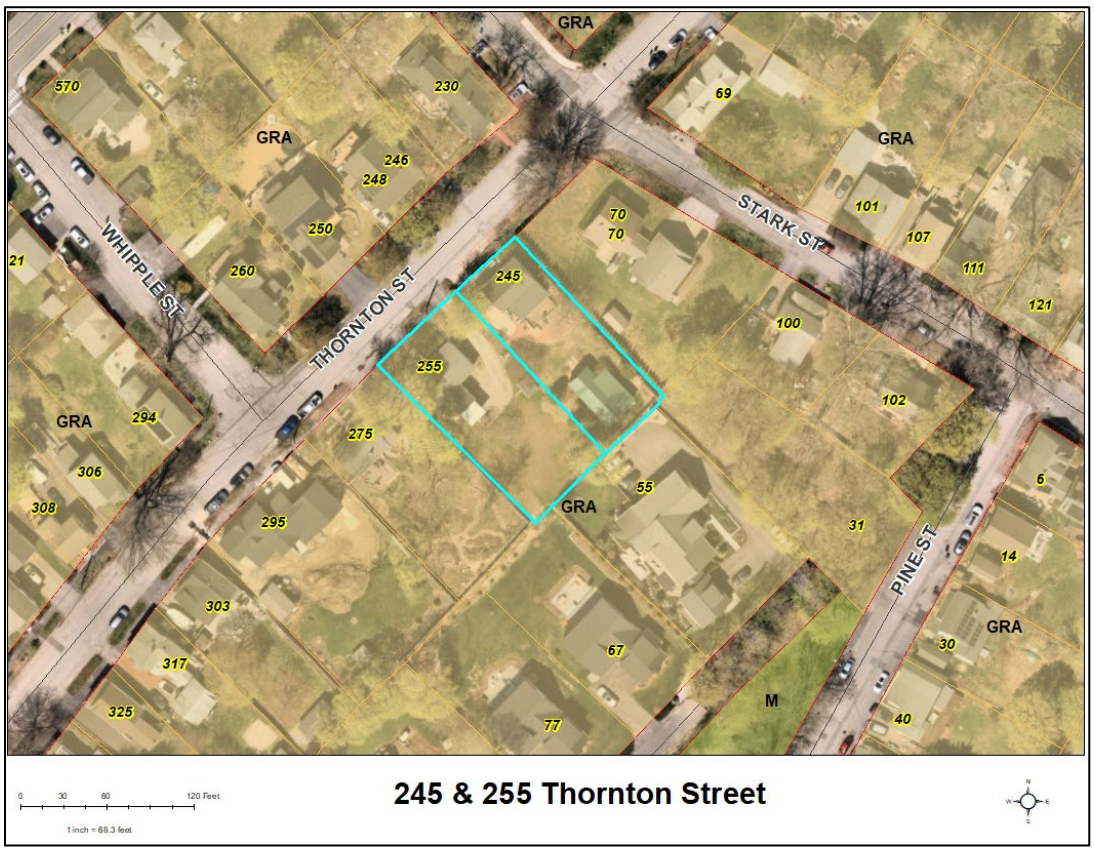
**C.** The request of **The Welby Long Family Revocable Trust (Owner)**, and **Jeffrey Paul McMahon and Lisa Hagerty-McMahon (Owners)**, for property located at **245-255 Thornton Street** requesting approval of a Lot Line Revision between Map 162 Lot 2 and Map 162 Lot 1 to settle a property line dispute. The revision will result in an increase of 454 square feet to Lot 1 and a decrease of that amount from Lot 2. Said properties are located on Assessor Map 162 Lot 1 and Map 162 Lot 2 and lie within the General Residence A (GRA) District.

Project Background

This proposal includes a lot line revision to settle a property line dispute between the two applicants that has been ongoing since 2024. The applicants have reached a settlement through Superior Court and the proposed lot line revision before the Board is the next step in resolving the conflict. Both parcels exceed the dimensional requirements for the district, with the exception of frontage. The proposed revision does not change the frontage for either lot, maintaining the existing condition for frontage.

A waiver from Section IX, 1 of the Subdivision Rules and Regulations for Improvement and Installation Bond was requested in the application, but this is not necessary since no work or improvements are proposed with the lot line revision. This lot line adjustment did not need to go before the Technical Advisory Committee because the application did not contain any of the following:

a. Creation of a new lot;
b. Construction of a new public or private street;
c. Widening or realignment of an existing public or private street;
d. Construction of public or private water, sewer or stormwater facilities serving more than one lot;
e. Establishment of an easement over one lot for water, sewer or stormwater facilities to serve a different lot; or
f. Provision of a common driveway or access easement;




***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) 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.*

## IV. PUBLIC HEARINGS – NEW BUSINESS

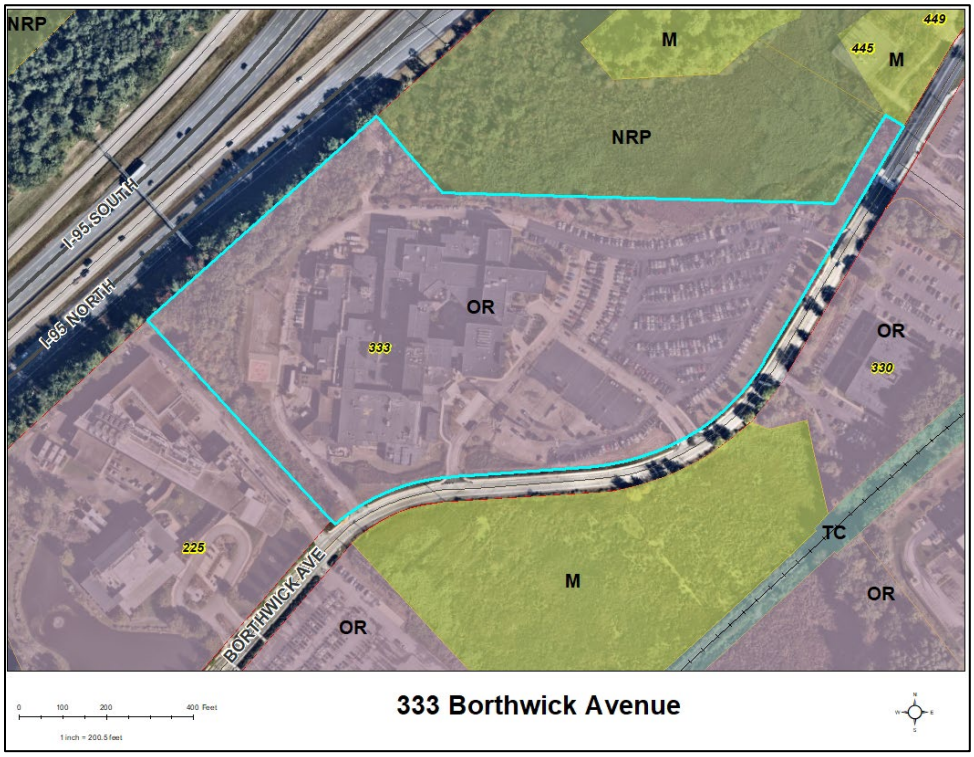
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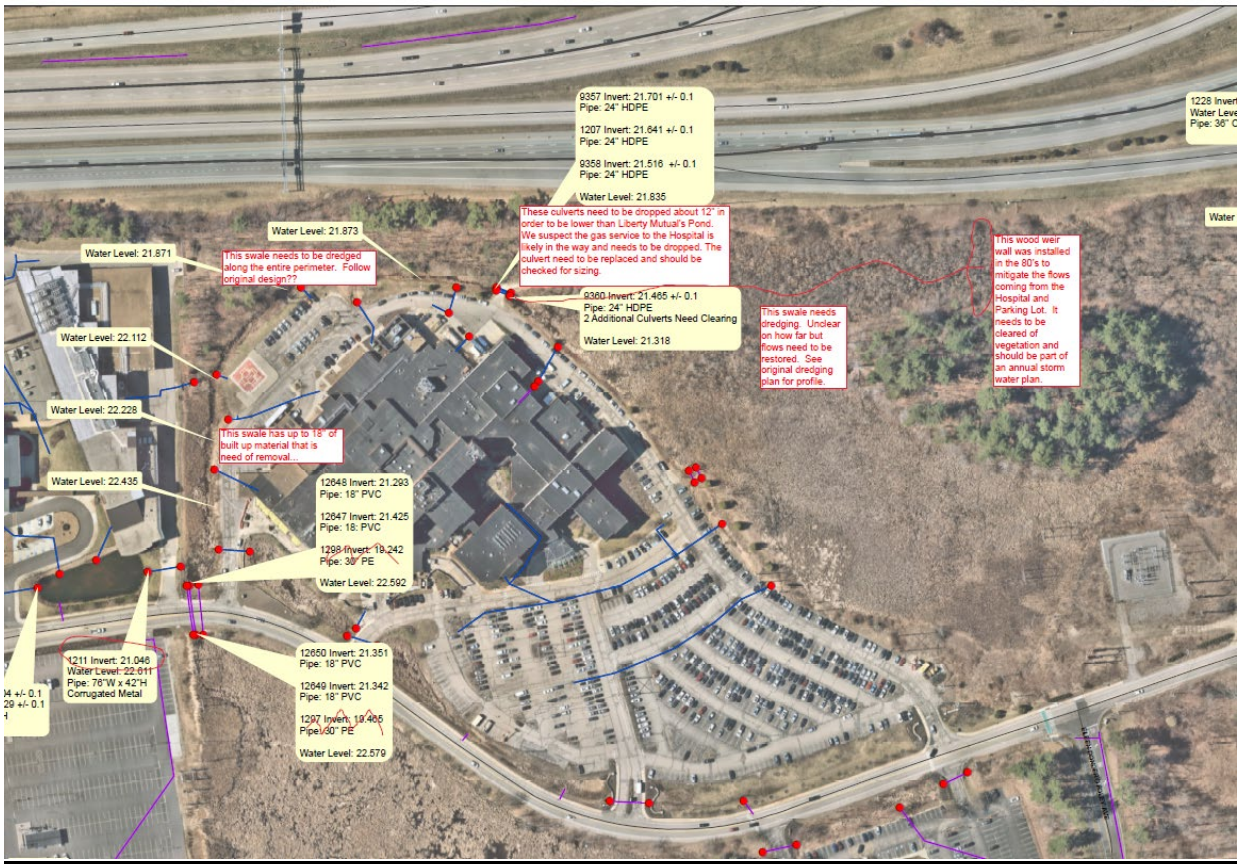
**D.** The request of **HCA Health Services of NH (Owner) dba Ducharme McMillen and Associates (Applicant)**, for property located at **333 Borthwick Avenue** requesting a Wetland Conditional Use Permit from Section 10.1017.50 to widen the existing sidewalk and construct a new overhead canopy at the ambulance bay. The proposed impacts include approximately 730 s.f. of new impervious surface within the 100' wetland buffer. Said property is located on Assessor Map 240 Lot 2-1 and lies within the Office Research (OR) and Highway Noise Overlay Districts (HNOD). (LU-25-180)

Background

This application is for the replacement of an ambulance garage door and the addition of a widened concrete sidewalk with a new overhead canopy at the Portsmouth Regional Hospital ambulance bay. A portion of this project lies within the 100' wetland buffer. The proposed impacts include approximately 730 s.f. of new impervious surfaces added to expand the sidewalk width. The changes to the site are minor and can be approved administratively by the Planning & Sustainability Director.

The Planning Board granted a wetland CUP on March 20, 2025 to replace three existing culverts with a box culvert. This permit included dredging the sediment accumulation which has not been completed yet. An exhibit prepared by DPW is below showing the areas that need to be dredged in order to achieve optimal flow through the system. A condition has been added to this request to ensure the dredging is completed prior to a certificate of completion.


NRP
M
449
445
M
NRP
I-95 SOUTH
I-95 NORTH
OR
333
OR
330
225
TC
M
OR
BORTHWICK AVE
OR
0 100 200 400 Feet
1 inch = 200.5 feet
333 Borthwick Avenue


9357 Invert: 21.701 +/- 0.1
Pipe: 24" HDPE
1207 Invert: 21.641 +/- 0.1
Pipe: 24" HDPE
9358 Invert: 21.516 +/- 0.1
Pipe: 24" HDPE
Water Level: 21.835
These culverts need to be dropped about 12" in order to be lower than Liberty Mutual's Pond. We suspect the gas service to the Hospital is likely in the way and needs to be dropped. The culvert need to be replaced and should be checked for sizing.
Water Level: 21.873
Water Level: 21.871
This swale needs to be dredged along the entire perimeter. Follow original design??
9360 Invert: 21.465 +/- 0.1
Pipe: 24" HDPE
2 Additional Culverts Need Clearing
Water Level: 21.318
This swale needs dredging. Unclear on how far but flows need to be restored. See original dredging plan for profile.
This wood weir wall was installed in the 80's to mitigate the flows coming from the Hospital and Parking Lot. It needs to be cleared of vegetation and should be part of an annual storm water plan.
Water Level: 22.112
Water Level: 22.228
This swale has up to 18" of built up material that is need of removal...
Water Level: 22.435
12648 Invert: 21.293
Pipe: 18" PVC
12647 Invert: 21.425
Pipe: 18" PVC
1298 Invert: 19.242
Pipe: 30" PE
Water Level: 22.592
1211 Invert: 21.046
Water Level: 22.611
Pipe: 76"W x 42"H
Corrugated Metal
12650 Invert: 21.351
Pipe: 18" PVC
12649 Invert: 21.342
Pipe: 18" PVC
1297 Invert: 19.465
Pipe: 30" PE
Water Level: 22.579

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 lot is a previously disturbed lot with mostly impervious surfaces for transportation and pedestrian access to the hospital. This project is a safety improvement for patients of the hospital and would create a small increase in impervious surface where landscaping exists today.

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

The location of proposed work is within the existing ambulance bay. There is no alternative location outside of the wetland buffer.

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

This project proposed an increase in impervious surfaces while also adding new downspouts to proposed canopy to capture additional stormwater runoff. New plantings are proposed near the sidewalk, but additional plantings should be included along the top of the swale bank that stretches the length of the ambulance garage to the lawn south of the helipad.

**4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.**

The expansion of impervious surfaces is proposed to occur within a portion of the existing landscape in order to accommodate the new sidewalk. New plantings are proposed adjacent to the new sidewalk.

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

Due to the nature of the use, the applicant is proposing concrete sidewalks and asphalt within the wetland buffer. Additional plantings along the resource should be provided to offset the proposed impacts.

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

It appears as though the vegetated buffer strip is not being impacted as part of this project. Applicant should consider plantings within this area of the buffer to protect the wetland resource.

**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, January 14, 2026 and the Commission voted unanimously (6-0) to recommend approval with the following conditions:

1. *Applicant shall provide a planting plan prior to submission to the Planning Board for the work site which should include new plantings for the river rock area noted on the plan, the area between the new sidewalk extension and existing building, and a portion of the top of the swale bank that stretches the length of the ambulance garage to the lawn south of the helipad.*
2. *Applicant shall submit a plan to the Planning & Sustainability Department staff for review prior to submission to the Planning Board that shows the existing locations of onsite snow storage areas and plans for mitigating snow storage near wetland resources onsite. If existing snow storage occurs within close proximity to wetland resources, alternative locations shall be sought.*
3. *Applicant shall show on plans and install permanently prior to the start of construction, wetland boundary markers every fifty feet along the edge of the swale from the box culvert south down to the intersection of Borthwick Avenue.*
4. *Applicant shall note on plans that, during regular maintenance, no mowing shall occur in the area of new plantings along the top of the swale bank.*
5. *All necessary dredging and maintenance work for the swale onsite shall be completed by the applicant and approved by the City of Portsmouth Department of Public Works as a condition prior to the issuance of a Certificate of Completion for this project.*
6. *It is recommended that staff from the Department of Public Works make themselves available at the Planning Board meeting to speak to Stipulation #5.*

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***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 conditions:*

*2.1) Applicant shall provide a planting plan to be reviewed and approved by Planning Department for the portion of the top of the swale bank that stretches the length of the ambulance garage to the lawn south of the helipad.*

2.2) *Applicant shall add a note to the plan that no snow storage in the wetland or within 25' of the resource.*

*2.3) All necessary dredging and maintenance work for the swale onsite shall be completed by the applicant and approved by the City of Portsmouth Department of Public Works as a condition prior to the issuance of a Certificate of Completion for this project.*

## V. CITY COUNCIL REFERRALS

**A.** Historic District Commission Design Review of New Structures

Background

On January 20, 2025, the City Council voted to request a report back from the Planning & Sustainability staff on how to remove new construction from Historic District Commissions' purview. Moved a friendly amendment to request a report back from the Planning & Sustainability staff, Historic District Commission and the Planning Board on the impact and costs associated with review of new construction from the Historic District Commission, and any recommendation to improve review efficiency.

The Historic District Commission met on Wednesday, February 4, 2026 and provided the following comments in response to the City Council referral.

*The Historic District Commission upholds the importance of reviewing all new construction projects within the Historic District. The Commission agrees that there are an additional cost and time-period for review. However, the Historic District review is the primary means of preserving the district for the benefit of the city and is the only opportunity for public engagement regarding these important additions to the fabric of our city. Removing new construction from review jeopardizes, or removes completely, these safeguards.*

*With regard to quantifying additional costs incurred from the review process, a quick review of several recent projects indicated that the highest cost charged for fees was about $6,210 for a multimillion-dollar project. The number of hearings varied from three to eight to reach approval. This does not account for the additional time and costs associated with additional land use review and approvals beyond the Historic District review. A more in-depth analysis would involve a wide range of factors and include obtaining construction estimates for the project before the review and after to determine changes in cost, assuming the only changes made were solely the result of the review. The Historic District Commission does not recommend using Planning Department resources for this type of study.*

*The Commission is committed to finding ways to improve efficiency, such as creating approved materials lists for property owners and developers and to improve our existing design guidelines. Furthermore, the city and the Historic District Commission are the recipients of a Certified Local Government (CLG) Program grant which supports training on various topics, including the review of new construction.*

## VI. OTHER BUSINESS

**A.** Extension Request – 635 Sagamore Avenue

Project Background

On February 20, 2025, the Planning Board granted Site Plan approval for the project referenced above. A building permit has not been issued yet and the applicant is requesting a 1-year extension for the site plan approval.
The Board can grant a 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***

*Vote to grant a one-year extension of the site plan approved on February 20, 2025 to expire on February 20, 2027.*

**B.** Chairman's Updates and Discussion Items

**C.** Board Discussion of Regulatory Amendments and Other Matters

a. March Meeting

*The March meeting will be held on March 26, 2026 due to holiday. This meeting will start at 6:00 pm with an update on the Master Plan from Utile.*

## VII. ADJOURNMENT

**PLANNING BOARD**
**PORTSMOUTH, NEW HAMPSHIRE**

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

**7:00 PM Public Hearings begin** **January 22, 2026**

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

**ALSO PRESENT:** Peter Stith, Planning Department Manager

**MEMBERS EXCUSED:** Paul Giuliano, Ryann Wolf

Chair Chellman called the meeting to order at 7:00 p.m. City Manager Karen Conard arrived later in the meeting. Alternates Mr. Perier and Mr. Roy took voting seats for Ms. Wolf and Mr. Giuliano, who were excused for the evening.

## I. ELECTION OF OFFICERS [Video timestamp 4:42]

*City Council Representative Moreau moved to elect Rick Chellman as Chair. Mr. Samonas seconded. The motion passed with all in favor.*

*Councilor Moreau moved to elect Tony Coviello as Vice-Chair. Mr. Almeida seconded. The motion passed with all in favor.*

## II. APPROVAL OF MINUTES [Timestamp 5:18]

**A.** Approval of the **November 20, 2025** meeting minutes.

**B.** Approval of the **September 16, 2025 public site walk minutes** held with the Master Plan consultants.

**C.** Approval of the **December 18, 2025** meeting minutes.

Chair Chellman explained that the Board received a letter from Tom Morgan and that there was an issue of whether the site walk was publicly noticed. After some discussion, the Board agreed that the site walk was posted and available to the public to attend, and they decided to accept the letter and place it on file.

*Mr. Almeida moved that the Board **approve** the three sets of minutes, seconded by Vice-Chair Coviello. The motion passed with all in favor.*

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*Vice-Chair Coviello moved to accept the letter from Mr. Morgan and place it on file, seconded by Councilor Moreau. The motion passed with all in favor.*

## III. DETERMINATIONS OF COMPLETENESS [Timestamp 6:57]

### SITE PLAN REVIEW

**A.** The request of **Ralph 1912 LLC (Owner),** for property located at **175 Fleet Street** requesting Site Plan Review approval for the addition of two new food service structures with associated site improvements. Said property is located on Assessor Map 117 Lot 8 and lies within Character District 5 (CD5) and Historic District.

**B.** The request of **Colbea Enterprises LLC (Owner),** for property located at **1980 Woodbury Avenue** requesting Site Plan Review approval for the redevelopment of the site to include a 5,500 s.f. convenience store with six fueling islands and associated site improvements. Said property is located on Assessor Map 239 Lot 11 and lies within the Gateway Corridor (G1) District.

**C.** The request of **PNF Trust of 2013** and **282 Middle Street, LLC (Owners),** for property located at **84 Pleasant Street and 266 – 278 State Street, Floros Building** requesting Site Plan Review approval that includes merging four lots and redevelopment of the site to include remodeling of existing structures and new construction to mimic the former Times building and a new structure on the corner of State Street and Pleasant Street. The proposal includes 17 dwelling units, retail/commercial/restaurant space on the ground floor and 17 parking spaces in a car storage system and associated site improvements. Said property is located on Assessor Map 107 Lot 77-80 and lies within the Character District 4 (CD4), Historic and Downtown Overlay Districts.

### DECISION OF THE BOARD

Chair Chellman read Requests A, B, and C into the record.

*Mr. Samonas moved that the Board determine that Items A, B, and C are complete according to the Site Plan Review Regulation (contingent on the granting of any required waivers under Section V of the agenda) and to accept the applications for consideration. Vice-Chair Coviello seconded. The motion passed with all in favor.*

## IV. PUBLIC HEARINGS -- OLD BUSINESS [Timestamp 9:17]

**A.** The request of **Perkins Kwoka Joint Revocable Trust (Owner),** for property located at **224 Broad Street, Unit 3** requesting a Wetland Conditional Use Permit from Section 10.1017.50 for the replacement and expansion of an existing 192 s.f. sunroom and the demolition of a 286 s.f. rear deck, with new construction for a 384 s.f. addition to the existing sunroom, a new 367.5 s.f. rear deck and regrading of a portion of the site including a retaining wall, stone drip edge and underdrain for

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stormwater control, replacement of the existing lawn with a micro-clover seed mix, and a planting plan. Said property is located on Assessor Map 131 Lot 13-3 and lies within the General Residence A (GRA) District. (LU-23-179)

**SPEAKING TO THE PETITION** [Timestamp 10:02]

Rebecca Perkins Kwoka of 224 Broad Street said she was before the Board the previous year to present the same application and that it had not changed. She said she forgot to resubmit prior to the expiration of the wetland conditional use permit in August and was now asking for an extension so that she had time to pursue the permit.

The Board had no questions. 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**

1) *Councilor Moreau 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. Mr. Almeida seconded. The motion passed with all in favor.*

2) *Councilor Moreau moved that the Board grant the Conditional Use Permit with the following **condition**:*

    *2.1) Applicant shall provide details of the proposed paver entry and their permeability. This should include a cross-section of the pavers, the proposed depth of materials and the materials to be used.*

*Mr. Samonas seconded. The motion passed with all in favor.*

**B.** The request of **John Galt LLC (Owner)**, for property located at **14 Market Square** requesting a Conditional Use Permit from Section 10.112.14 to allow 0 parking spaces where 4 are required. Said property is shown on Assessor Map 107 as Lot 29 and lies within the Character District 5 (CD5), Downtown Overlay, and Historic Districts. (LU-25-142)

**SPEAKING TO THE PETITION** [Timestamp 12:20]

John Chagnon of Haley Ward was present on behalf of the owner. Proponent Mark McNabb and project architect Tracy Kozak were also present. Mr. Chagnon said they were requesting a parking Conditional Use Permit and that the project would convert office space into apartments and required eight parking spaces. He said there was no room on the site for parking because it was in Market Square. He said they did a parking demand analysis based on converting the

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office space into seven dwelling units, and the result of the conversion was a demand reduction of eight spaces. He said the criteria were addressed in the Board's package.

The Board had no questions. 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 15:28]

1) *Vice-Chair Coviello moved that the Board find that the Conditional Use Permit application meets the requirements set forth in Section 10.1112.14 of the Ordinance and adopt the findings of fact as presented. Mr. Samonas seconded.*

Mr. Bowen said parking was in short supply downtown. He said the project would reduce the parking demand, at least on paper, but that parking requirements kept being added downtown in small increments. He said it put more of a burden in an area that was already overburdened, and he wanted to ensure that the Board applied a consistent principle to everyone who came forward with that kind of proposition in the downtown area. Chair Chellman said Mr. Bowen's concern was a bigger question that the Board addressed in the downtown parking study a year ago and with the recommendation of the Capital Improvements Plan that recently put a $3 million placeholder for the next public parking garage. He said the parking study recommendation was adopted by the City Council and said that downtown parking should be treated as public infrastructure and not private. It was further discussed. Mr. Bowen asked if there was a concept of requiring proof of contracting with parking in other locations. Mr. Samonas said it was tried before and was not effective. It was further discussed.

*The motion passed with all in favor.*

2) *Vice-Chair Coviello moved that the Board **grant** the Conditional Use Permit as presented, seconded by Mr. Samonas. The motion passed 7-1, with Mr. Bowen opposed.*

**V. PUBLIC HEARINGS – NEW BUSINESS** [Timestamp 22:05]

**A.** The request of **Christopher J.** and **Rachel A. Delisle (Owners),** for property located at **250 McKinley Road** requesting a Wetland Conditional Use Permit from Section 10.1017.50 for the demolition of an existing sunroom and deck, and the addition of two new sets of landings and stairs, as well as a concrete pad for an A/C unit all within the 100' wetland buffer. This application is reducing 224 s.f. of impervious area through demolition while introducing approximately 48 s.f. of new impervious. In total, this project will result in a net loss of 176 s.f. of impervious within the wetland buffer. Said property is located on Assessor Map 250 Lot 117 and lies within the Single Residence B (SRB) District. (LU-25-139)

**SPEAKING TO THE PETITION** [Timestamp 23:01]

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Owner Chris Delisle was present to speak to the petition. He said he wanted to replace the sunroom and deck with two small egresses and a small concrete pad board as well as a small pad for the air conditioner. He said it would lessen the impact to the wetland buffer. He said substantial grading and plantings were done and rain gardens and swales were added.

The Board had no questions. 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 25:03]

1) *Vice-Chair Coviello 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. Mr. Almeida seconded. The motion passed with all in favor.*

2) *Vice-Chair Coviello moved to **grant** the Conditional Use Permit with the following **condition**:*

    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.*

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

**B.** The request of **Ralph 1912 LLC (Owner),** for property located at **175 Fleet Street** requesting Site Plan Review approval for the addition of two new food service structures with associated site improvements. Said property is located on Assessor Map 117 Lot 8 and lies within Character District 5 (CD5), Downtown Overlay District (DOD) and Historic District. (LU-25-152)

**SPEAKING TO THE PETITION** [Timestamp 26:13]

John Chagnon of Haley Ward was present on behalf of the owner, along with principal Mark McNabb, project architect Tracy Kozak, and project landscape architect Terrence Parker. Mr. Chagnon said they wanted to install two new food service structures on the lot and perform some renovations to the Gilley's existing site structure including bathrooms and two takeout restaurants. He said improvements would include a trash area, on-site seating, landscaping, and bike racks. He said there was a proposed licensing agreement and plan because of some synergies due to the proximity to the parking garage and land controlled by the City. He noted that the submitted package included renderings, a Green Building Statement, and lighting specifications. He said Mr. McNabb would create a fenced-in trash area that would have a key fob entry and would be available to other businesses in the area to use. He reviewed the landscape improvements and explained how the project would tie into the look and feel of

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Newbery Way. He said the area would be much safer at night than it was before. He noted that the Technical Advisory Committee (TAC) recommended approval in December.

[Timestamp 31:26] Vice-Chair Coviello asked Mr. Chagnon to describe the lighting on site and asked if there would be security cameras. Mr. Chagnon said there would be several soffit building-mounted lights, and in the adjacent Newberry Way there would be wire-supported circular lights. He said there would not be security cameras. Vice-Chair Coviello said he was more concerned about the restroom area and the alleyway between the existing garage addition and the restrooms. Mr. Chagnon said those areas would have the same level of illumination as on the front side of the Gilley's restaurant. Ms. Kozak clarified that all four sides of all structures would be illuminated with recessed soffit downlighting and that the back of the restroom addition would have recessed vertical sconces on the corner boards. She said there would be no dark spots. Vice-Chair Coviello asked if the back would have only sconces. Ms. Kozak said there would also be perimeter linear LED downlighting emanating out from the soffits on all structures, and vertical linear lights on the corners. Vice-Chair Coviello asked if the lumens light plan for the site was removed as a City requirement. Mr. Stith said it had not been removed and was still a requirement. Vice-Chair Coviello said the area had a history of transitional pedestrians. Mr. Chagnon referred to the night illumination rendering and said Newberry Way previously had a full lumens plan that showed that the applicant was making the area safer. He said the Newberry Way alley was a separate part of the 1-15 Congress St approval that had lighting approvals and if it was a concern, he could create a lumens plan. Vice-Chair Coviello asked if the restrooms were public and would be advertised as such. Mr. Chagnon said they would be available to the public but would not be advertised because it was part of the food court arrangement and that it would be locked when the restaurant was closed.

[Timestamp 35:50] Councilor Moreau asked how the public would be prevented from getting into the area between the garage entrance and the side of the existing building. Mr. Chagnon showed where the fencing would be. Councilor Moreau asked how snow would be dealt with. Mr. Chagnon said the developer would have a maintenance team to remove any snow. Mr. Samonas asked if the pad where Gilley's was and the new restrooms and circulation on the parcel would be ADA. Mr. Chagnon said the bathroom in the back addition and the take-out restaurants would be, but there was no change proposed to the existing access to Gilley's. He explained how the newly-created Newberry Way would be accessible to ADA individuals. Mr. Samonas suggested wayfinding signs on Fleet Street to highlight the two new restaurants. Mr. Bowen asked why there would be no security cameras. Mr. Chagnon said it was because the area would be well lit and maintained, but he said they would install cameras if there was a problem. Vice-Chair Coviello said the area could become known as having a public restroom and people might go there late at night after everything was locked down. Chair Chellman said that was more of a lighting issue and thought the lighting could be bolstered. Motion sensor lighting was discussed. Mr. Almeida said it was common to have music venues at a site like that and he wanted to ensure that there would not be amplified music. He asked if the applicant considered using fabric shading for the area during the summer. Mr. Chagnon said the outdoor dining tables could have umbrellas. Chair Chellman asked if the Newberry Way grading would stop at the applicant's property for now. Mr. Chagnon said it would not because part of the project would lower the grade as well as improve the finished grade. It was further discussed. Chair Chellman

asked who would get the key fobs for the trash location. Mr. Chagnon said businesses in the general area would and that the existing trash functions would be moved to the fenced-in area. Mr. Almeida asked if the truck would be able to get on the site to manage the trash containers. Mr. Chagnon said there would be a short interruption in the street, like when the City trucks did trash pickup. Ms. Conard noted that the area would be reconfigured to have wider sidewalks. Mr. Almeida said it was important to know how the neighbors would be impacted by all the totes being emptied in that specific area and whether there would be specific hours. Mr. Chagnon said it would be discussed at the City Council meeting.

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 51:35]

1) *Vice-Chair Coviello 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. Mr. Samonas seconded. The motion passed with all in favor.*

2) *Vice-Chair Coviello 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:**

*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) All work and improvements proposed on city property (Garbage totes, bike racks, and landscaping) will require City Council approval.*

*2.4) The two kiosks will need to be individually licensed per health department requirements.*

*2.5) Applicant shall submit a lighting plan showing lumens and adequate lighting remains on after hours, to be reviewed approved by the Planning Department.*

*2.6) Any fencing as required by the liquor commission or used to divide the site is required to go to the HDC.*

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*2.7) A shoring plan stamped by a structural engineer shall be provided to ensure there will be no undermining of any structure along Newbury Way.*

*2.8) A Construction Management and Mitigation Plan (CMMP) required. 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.*

*2.9) No amplified music permitted.*

*Mr. Samonas seconded.*

Vice-Chair Coviello said a lot of people cared about the history of the property and the Gilley's structure. He said he saw the project as an overall improvement to the area and for the City because it would give the property a breath of fresh air.

*The motion passed with all in favor.*

**C.** The request of **Colbea Enterprises LLC (Owner),** for property located at **1980 Woodbury Avenue** requesting Site Plan Review approval for the redevelopment of the site to include a 5,500 s.f. convenience store with six fueling islands and associated site improvements. Said property is located on Assessor Map 239 Lot 11 and lies within the Gateway Corridor (G1) District. (LU-25-163)

[Timestamp 59:07] Chair Chellman said there was a notice problem with the application, so there would be a second public hearing at the February meeting, with full notice. He said, however, that since the petition was noticed, he wanted to listen to the presentation and accept any public comment.

**SPEAKING TO THE PETITION**

Chris Rice of TFMoran was present on behalf of the applicant and gave a few handouts to the Board. He introduced Michael Gazdacko and Jay Hall from Colbea Enterprises and the rest of the project team. He reviewed the site plan application to develop the existing gas station. He said they proposed to demolish the current gas station, convenience store, and fueling canopy with 16 fueling stations and build a new gas station, a larger convenience store, and a new fueling canopy that would have six dispenser islands with a total of 12 fueling stations. He said they had 27 parking spaces that included the 12 at the pumps, the 10 spaces in front of the building, and five spaces off the side. He said they received four variances from the BOA in July 2025 and presented it conceptually to the Planning Board in early 2025. He said the major change was that the drive-thru component was removed. He said the project would have a minimal impact on traffic because only four new trips per hour would be added to the roadway network. He said they met all the City's site plan and stormwater treatment regulations. [Timestamp 1:06:32] Mr. Almeida said a lot of people cut through the light to avoid the backup and that the way the project had the curb cut at a certain angle would make it easy for drivers to speed into there. Mr. Rice said the curb cut matched what was there but the one on Gosling Dr

was reduced in width. Mr. Gazdacko said they owned the site but did not operate it and that their business relied on a tractor trailer to come in once a day or so. Mr. Almeida asked about the proposed 8-ft fence. Mr. Rice said they proposed a stockade fence, along with plantings. Mr. Almeida asked whether the lighting would shine into people's windows. Mr. Rice said they did not have lighting on that side of the building except for one downcast light over the emergency door. Mr. Samonas asked if there was a plan for snow storage and removal. Mr. Gazdacko said there was not a lot of room for snow storage so they would truck out the snow and have a snowplow contractor. Mr. Rice said they were also providing an 8-ft sidewalk along Gosling Road as well as a sidewalk and bike rack elsewhere. Chair Chellman asked how vehicles would access the two-way access adjacent to Woodbury Avenue. Mr. Rice said it was an inter-circulation scenario in case someone pumping gas wanted to go into the store. He said the only exit onto Woodbury Avenue was at the southerly curb cut and that a left turn could not be taken out of the site due the median island. It was further discussed. Councilor Moreau asked if a sign at the Gosling Road exit indicating a right turn only could be added. Mr. Rice agreed. Mr. Bowen asked if the design would have an impact on the bus stops, and Mr. Rice said it would not. Vice-Chair Coviello said the lighting plan indicted that there was light at the rear of the building but that Mr. Rice had said there would be no lighting back there. Mr. Rice said there were some sconces along the back but that it was more like decorative and safety lighting.

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**

*There was no action taken. The Public Hearing will be held at the February 19, 2026 meeting.*

**D.** The request of **PNF Trust of 2013** and **282 Middle Street, LLC (Owners),** for property located at **84 Pleasant Street** and **266–278 State Street (Floros Building)** requesting Site Plan Review approval that includes merging four lots and redevelopment of the site to include remodeling of existing structures and new construction to mimic the former Times building and a new structure on the corner of State Street and Pleasant Street. The proposal includes 17 dwelling units, retail/commercial/restaurant space on the ground floor and 17 parking spaces in a car storage system and associated site improvements. Said property is located on Assessor Map 107 Lot 77-80 and lies within the Character District 4 (CD4), Historic and Downtown Overlay Districts. (LU-24-195)

**SPEAKING TO THE PETITION** [Timestamp 1:19:20]

John Chagnon of Haley Ward was present on behalf of the owner, along with Attorney Chris Mulligan, project architect Michael Keane, and construction manager Amos Blanchard. Mr. Chagnon reviewed the petition, noting that four lots would be merged and redeveloped and that the building would have 17 units, with retail, commercial and a restaurant on the first floor. He

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said there would be 17 parking spaces that included a unique parking interior lift system and there would also be bike storage. He said TAC approval was obtained for City utilities and that roof water would be treated with downspout filters. He said the cornice at the top of the building would require a license from the City because it projected over the extended property line. He said they obtained HDC approval in August 2025 for the building design. He reviewed the plans and explained the parking in more detail. He said TAC recommended approval of the project.

[Timestamp 1:27:10] Vice-Chair Coviello asked if there was a plan for EV charging inside the building and parking area. Mr. Keane said the parking rack system had the availability of having EV charging at every station and that some would be provided but that the specific places were not yet known. Vice-Chair Coviello said there were a lot of incidents of EV chargers catching on fire and the difficulty of putting them out. Mr. Keane said the issue was not discussed with the Fire Chief but was sure that it would come up with the Building Permitting Department. Councilor Moreau asked how the 17 parking spaces were obtained. Mr. Chagnon explained that the spaces were layered. Mr. Almeida said he had concerns with the Position 3 entry on the turning diagram and thought if it went one or two feet in every direction, it would relieve a complicated system. Mr. Chagnon said adjustments were made through the TAC process, then reviewed by the City's Traffic Engineer. It was further discussed. Mr. Logan asked if the noise study on the transformer doors referred to the fence outside it or the door itself. Mr. Chagnon said it referred to the door and probably the fence but that the team was in the process of working it out. He said it might be a sliding gate. Mr. Keane explained the 2-gate operation. Mr. Logan asked if the iron fence could be replaced with something more solid to reduce noise. Mr. Keane said they were deferring to the utility and air flow around the transformer. He said the sound study was only for the exterior noise and there would be a further drop-off in the interior.

[Timestamp 1:34:58] Mr. Samonas asked if the recycling bins would be brought out to the sidewalk. Mr. Chagnon agreed. Mr. Samonas asked if the two parking spaces that were not part of the project would inhibit the view coming out of the garage. Mr. Chagnon said it was discussed with TAC and that the City's Traffic Engineer looked at the turning movements. He said a mirror could be hung off the building if it was a problem. Mr. Samonas asked if delivery vehicles would have a dedicated area. Mr. Chagnon said the area already existing. Mr. Chagnon said the two parking spots behind the building were paid public spaces and that one of the spots would be relocated to allow dedicated access to the trash room.

Chair Chellman opened the public hearing.

**SPEAKING TO, FOR, OR AGAINST THE PETITION** [Timestamp 1:40:40]

Barbara Jenny of Working Stiff Properties (via Zoom) said she was the direct abutter at 92 and 94 Pleasant Street. She said an issue that was not brought up was the fact that the back façade of 84 Pleasant Street, the continuous townhouse to hers, still exists. She said the City had rules about what to do where there was a proposed demolition of a historic façade, and she wanted it to be addressed to ensure that the appropriate steps were taken for public notice so that people were aware of it. She said the original building should be preserved. She said the architect was willing to cooperate with the developer on the common wall and thought it should be kept. She

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said Working Stiff Properties were willing to work with them as well so that the wall was not as high as it was. Mr. Almeida noted that the cornice as shown on the renderings wrapped the corner of the historic building facing Pleasant Street and was completely exposed, so there was an opportunity for restoration on the clapboarded end of that building. It was further discussed.

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

**DECISION OF THE BOARD** [Timestamp 1:48:50]

*1) Vice-Chair Coviello 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. Mr. Almeida seconded. The motion passed with all in favor.*

*2) Vice-Chair Coviello 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:**

*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. This shall include an easement for the conduit connected to the transformer located on private property.*

*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 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.*

*2.4) 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.*

*2.5) A license will be required for the transformer doors that open onto City property.*

**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.*

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

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**E.** The request of **Mariya Kontsepolskaya** and **Ralph Minderhoud (Owners),** for property located at **65 Onyx Lane** requesting a Wetland Conditional Use Permit from Section 10.1017.50 to install 12 push piers to stabilize the existing foundation in the 100 foot wetland buffer area. Said property is located on Assessor Map 220 Lot 35 and lies within the Single Residence B (SRB) District. (LU-25-158)

**SPEAKING TO THE PETITION**

The applicant was not present.

**DECISION OF THE BOARD**

*Ms. Conard moved to continue the request to the February 19 meeting, seconded by Mr. Almeida. The motion passed with all in favor.*

**2) PRELIMINARY CONCEPTUAL CONSULTATION** [Timestamp 2:01:12]

**A.** The request of **Regan Electric CO INC (Owner),** for property located at **94 Langdon Street** and **98 Cornwall Street** requesting Preliminary Consultation for Site Plan Review. Said property is located on Assessor Map 139 Lots 1-8 and lies within the Mixed Residential Business (MRB) District. (LUPD-26-1)

Councilor Moreau recused herself because she was an abutter.

Alexx Monastiero of Chinburg Builders was present on behalf of the applicant. She said they wanted to merge the two lots and create three single-family detached homes off one shared driveway. She said the area would be about 25,000 square feet once the parcels were merged. She said there would be more green space around the site and that the impervious would be reduced by about 5,000 square feet to bring it more into conformance. She said they would go before the BOA in February for a variance for less frontage on Langdon Street.

[Timestamp 2:03:56] Vice-Chair Coviello asked if the wetland buffer would be impacted. Ms. Monastiero said they would not be in the buffer. Chair Chellman asked if there were hazardous materials on the site. Ms. Monastiero said they had to do additional site testing to determine that and if so, would take the necessary precautions when removing materials. She said they did not intend to do full foundations. Mr. Samonas asked if the applicant considered making it one building with more units. Ms. Monastiero said they did not because they felt that the best redevelopment of the site was to be congruent with the existing neighborhood feel. Mr. Bowen asked if there could be an ADU. Ms. Monastiero said there could not because of the three detached single-family homes on the lot. Mr. Stith agreed. Vice-Chair Coviello asked what restrictions applied to the 250-ft DES shoreland water quality protection line. Ms. Monastiero said they could be within the 250-ft shoreland buffer, and if they impacted it at all they would have to pay a fee and get a permit. Mr. Samonas asked for more detail on the design of the buildings. Ms. Monastiero said the unique shape of the site dictated what they could do and that they did not think there would be a great advantage in connecting the buildings. She said they would have three parking spaces and were restoring a lot of the site to create more green space. She said that section of Cornwall Street was not a City street, which was why the frontage

variance was needed. Chair Chellman said one house might have to change dimensions to fit the view corridor. Vice-Chair Coviello asked about trash removal. Ms. Monastiero said the condo association would contract it and that it would involve wheeling bins to the truck. She said it would be determined further after the project obtained the variance and that delivery trucks would also be addressed. It was further discussed.

**DECISION OF THE BOARD**

No action was taken.

**B.** The request of **Hill Hanover Group LLC (Owner),** for property located at **181 Hill Street** requesting Preliminary Consultation for Site Plan Review. Said property is located on Assessor Map 125 Lot 14 and lies within the Character District 4-L1 (CD4-l1). (LUPD-26-2)

[Timestamp 2:14:20] Attorney Derek Durbin was present on behalf of the applicant, along with the project architects Mark Gianniny and Richard Desjardins and property manager Jeff Stevens. He noted that a Hill Hanover Group member was also on Zoom. Attorney Durbin said the lot was 16,127 square feet and had three separate two-story multi-family buildings of four units each. He said the property was in the CD4-11 zoning district but was bordered to the north and west by the CD5 district and surrounded by a diverse mixture of uses. He said the portion of Hill Street that bordered the property that was privately owned was partly owned by Hill Hanover and by the Foundry Place property. He said the property had 24 parking spaces, including 10 surface spaces and 14 within the Foundry Place Garage. He said one single 3-story building with 18 residential units was proposed, along with 20 subterranean parking spaces in addition to keeping the 14 spaces in the garage. He said the property would require zoning relief from the BOA due to the proposed density, but the height and massing would be consistent with zoning.

[Timestamp 2:21:19] Mr. Gianniny said the lot was unique and that they felt it was transitional based on the zoning. He showed a conceptual rendering of the building and its surroundings and said they were stepping down the property to keep it looking residential. He said the parking garage would have two entrances and there would be a large area for mechanical spaces and other services, like trash recycling and mail delivery. He said the residential floor plans were similar and had six units ranging from 1,000 sf to under 1,600 sf and a mix of 1- to 3-bedroom units. He reviewed the site plan. Mr. Almeida said there was also an opportunity to gain three street parking spaces back where the curb cuts previously were, so he thought the parking situation was good. Vice-Chair Coviello said he felt a sense of loss by having the buildings demolished. He said he preferred that the property keep the garage the way it was but separate the above-grade three structures to help the transition. He said lumping the buildings together seemed like a big mass. Mr. Bowen asked about traffic flow, maintenance, and snow plowing. Mr. Gianniny said there would be an option to go to Hill Street or Hanover Street coming out of the parking garage. He said there was an existing access easement from the property as well as the condo association to the left to cross over the Heinemann property and that the easement would continue. Attorney Durbin said currently there were two contractors that maintained the area and snow plowing, and there was no formal agreement for one contractor to maintain it all. Mr. Bowen asked if the access easement across 363 Hanover Street was used. Attorney Durbin

said that easement was currently in litigation and that their plan was not dependent on the outcome. Mr. Samonas said different statements were made about parking. Attorney Durbin said his statement was an error, and he clarified that there would be 17 subterranean spaces and six spaces along Hill Street. Councilor Moreau clarified that the property behind Hill Street was in the CD4 zone and not the CD5 zone. Mr. Stith said it may still be showing as CD5 on MapGEO. Mr. Perier asked how the trash pickup would be dealt with, seeing that there wasn't much space in the entrance to the trash recycle room. Mr. Gianniny said typically a building that size would have private pickup, so totes or smaller dumpsters would be brought out to the truck.

**DECISION OF THE BOARD**

No action was taken.

3) **CITY COUNCIL REFERRALS** [Timestamp 2:35:50]

**a. Historic District Map**

Chair Chellman recommended tabling the map amendment until after the completion of the Master Plan update.

*Vice-Chair Coviello moved that the Board table this map amendment until after the Master Plan update has been completed. Ms. Conard seconded. The motion passed with all in favor.*

**b. Portsmouth Submarine and Maritime Association request for a zoning change for the Albacore Park property located at 569 Submarine Way**

Vice-Chair Coviello recused himself from the discussion.

Mr. Stith said the Association submitted a letter. He said currently the zoning was Single Residence B (SRB) and the use was not permitted. He said the Association originally got a variance for the use, but when they do expansions, they had to go back to the Zoning Board of Adjustment, so they requested to be zoned either Gateway 1 or Gateway 2. He said Gateway 2 would probably be more suitable because the property was across Market Street. He said a museum was not permitted by right in Gateway 1, so another consideration would be to make it a permitted use. It was further discussed. Mr. Stith said he recommended Gateway 2 zoning. Mr. Bowen said a letter was received from a neighbor who said Albacore Park abutted a residential area that would be adversely affected by the zoning change. Councilor Moreau said other properties owned by not-for-profits were considered civic districts, and she asked why the Board was not considering that. Mr. Almeida said the assumption that the park would have a negative impact was not fair and that there were opportunities to review the project at other levels.

*Ms. Conard moved that the Board vote to recommend the City Council schedule first reading to change the zoning from Singel Residence B to Gateway-2 on Map 209 Lot 87. Mr. Almeida seconded. The motion passed with all in favor, with Vice-Chair Coviello recused.*

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*Ms. Conard moved that the Board recommend the City Council schedule first reading to allow museum as a permitted use in Gateway-1 and Gateway-2. Mr. Almeida seconded. The motion passed with all in favor, with Vice-Chair Coviello recused.*

**c. Gateway Parcels** [Timestamp 2:48:09]

Mr. Stith said when the Board voted in November, there was one property that showed up as two parcels in the Staff Memo, but that project merged the lots. He said it still showed up as two properties in the City's GIS and that the parcel was currently in the MRB zone. It was decided to classify it as the Gateway 1 District.

*Ms. Conard moved that the Board recommend the City Council to change these two parcels to G1 and schedule first reading on the proposed map amendments as presented. Vice-Chair Coviello seconded. The motion passed with all in favor.*

## VIII. OTHER BUSINESS [Timestamp 2:49:42]

**A. 1-15, 21 Congress Street** - Requesting a **1-Year extension** to the January 16, 2025 Site Plan Approval. (LU-22-12)

*Vice-Chair Coviello moved that the Board **grant** a one-year extension of the site plan approved on January 16, 2025. Ms. Conard seconded. The motion passed with all in favor.*

**B. Chairman Updates and Discussion Items**

Chair Chellman asked the Board for authority to have a discussion with Pease and report back about whether the Board should consider having discussions with the Pease Development Authority (PDA) and the City Manager about a possible change to the current scheme of the Pease property and the PDA's management of the non-airport portions of the site.

*Vice-Chair Coviello moved to give authorization for the Chair to have the discussion with Pease. Mr. Almeida seconded. The motion passed with all in favor.*

**C. Board Discussion of Regulatory Amendments & Other Matters**

There was no discussion.

## IX. ADJOURNMENT

The meeting adjourned at 9:51 p.m.

Respectfully submitted,

Joann Breault
Planning Board Meeting Minutes Taker

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# Findings of Fact | Wetland Conditional Use Permit
## City of Portsmouth Planning Board

Date: January 22, 2026
Property Address: 65 Onyx Lane
Application #: LU-25-158
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**<br>**Does Not Meet** | This lot is already a residential use within the wetland buffer and it is proposing only temporary impacts to the wetland buffer through soil excavation. |
| **2** | *2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.* | **Meets**<br>**Does Not Meet** | This lot is entirely within the wetland buffer and there is no alternative location for this work. |
| **3** | *3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.* | **Meets**<br>**Does Not Meet** | The proposed work involves only temporary impacts which include soil disturbance. To limit impacts to the wetland, the applicant should consider the use of erosion controls to prevent sediment from entering the wetland on site during construction. |

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| | Zoning Ordinance Sector 10.1017.50 Criteria for Approval | Finding (Meets Criteria for Approval) | Supporting Information |
|---|---|---|---|
| **4** | *4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.* | **Meets**<br><br>**Does Not Meet** | This project does not propose any impacts to existing vegetation, only existing lawn immediately surrounding the home's foundation. |
| **5** | *5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.* | **Meets**<br><br>**Does Not Meet** | This project proposes temporary impacts to achieve construction goals and further protect the existing home. |
| **6** | *6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.* | **Meets**<br><br>**Does Not Meet** | The vegetated buffer strip is not being impacted as part of this project. |
| **7** | **<u>Other Board Findings:</u>** | | |

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

Dear Chair Chellman,

On behalf of the property owner of 65 Onyx Lane and Groundworks New England, LLC, this letter is submitted in support of a Conditional Use Permit for foundation stabilization work located within a designated Wetland Buffer Zone and in proximity to an inland wetland area. **The concluding section of this narrative outlines the project's compliance with the Planning Board's conditions of approval.**

The proposed scope of work consists of the installation of twelve (12) SettleStop push piers to stabilize the existing foundation of the residence. Installation will require limited excavation along the perimeter of the structure to expose the existing foundation footings, followed by the placement of steel pier brackets and the driving of galvanized steel piers to suitable load-bearing strata beneath the foundation. Each pier location will involve localized soil disturbance approximately 2 to 4 feet in depth and 2 to 3 feet in width. All excavated soil will be replaced and compacted upon completion of the work.

The residence has exhibited signs of settlement and structural movement. The installation of push piers is necessary to prevent further settlement and to permanently stabilize the structure. This work is considered a structural repair and not new construction, and it is essential to maintaining the integrity and safety of the existing home.

No direct disturbance to inland wetlands is proposed. However, because the parcel is located within the Wetland Buffer Zone, a Conditional Use Permit is required for the limited excavation associated with the pier installation. The estimated areas of impact are as follows:

- Total area of inland wetland (on and off parcel): 59,241.6 square feet
- Inland wetland area to be disturbed: 0 square feet
- Total wetland buffer area on lot: 10,534.6 square feet
- Wetland buffer area to be disturbed: 162 square feet
- Distance to nearest wetland edge: 27 feet

**Compliance with Conditions of Approval:**
All work will be conducted in accordance with the Planning Board's conditions of approval. **If rain is forecasted during construction activities, any excavation stockpiles on the site of work will be covered to limit runoff impacts to the adjacent wetland and wetland buffer area.**

We respectfully submit this updated narrative for the Planning Board's review and consideration.

Sincerely,

Isabella Coluccio

Production Administrative Assistant/ Groundworks New England, LLC

Groundworks®

**Manchester** **Phone:** (603) 600-6760
198 Londonderry Turnpike **Website:** www.groundworks.com
Hooksett, NH 3106

| Licensed Contractor | Date |
|---|---|
| | 8/19/2025 |
| Customer and Account Number | Phone (Work or Home) |
| Mariya Kontsepolskaya - 582522 | CallerID: 512-922-9938 |
| Project Location | E-mail |
| 65 Onyx Ln PORTSMOUTH, NH 03801 | Mk@rednim.com |

| PROPOSED PRODUCTS | QTY |
|---|---|
| SettleStop Push Pier | 12.0 |
| 3 Year Annual Service Plan PROMO | 1.0 |
| Permit Package A | 1.0 |
| Engineering A | 1.0 |
| Excavation 0-4' - Equipment Access | 12.0 |
| Site Work/Obstruction | 2.0 |

| | |
|---|---|
| **Subtotal** | **$29,119.64** |
| **Discount** | **$2,911.96** |
| **Contract Price** | **$26,207.68** |

This Contract, along with the Terms and Conditions, the Warranties, the Notice of Cancellation, and the Payment Terms form the contract (the "Contract") between the Customer and Groundworks New England, LLC (the “Contractor”).

x MK Customer is responsible for removing all personal items from the work area.

x MK Customer assumes responsibility for damages to hidden or unmarked utility lines.

x MK Stabilization is warrantied. Contractor can attempt to lift at Customer's request.

x N/A A full perimeter drainage system with sump pump was recommended.

x MK Customer is aware of warranty and all addenda.

x MK Customer is responsible for providing all necessary electrical outlets.

Acceptance of Contract - The above prices, specifications, conditions, and separate warranty are satisfactory and hereby accepted. You are authorized to do work as specified. Payment will be made as outlined above or in accordance with the attached addendum. Subject to the Terms and Conditions, Contractor shall endeavor to start work within one hundred fifty (150) days of the date of the Contract and shall endeavor to complete the work within an estimated one hundred twenty (120) days of the start date of the work..

**Customer**

x MK

x N/A

Date 8/19/2025

**Contractor**

x

Date 8/19/2025

Supplemental Notes Groundworks New England, LLC to:

### Product Specifications

- Engineering package includes all administration duties, engineering documentation and fees associated with project.
- Excavate the work area to expose the foundation wall.
- Site work and/or obstructions on project.
- Install Foundation Push Pier(s) - Dig hole to expose the footing. Prep the footing for the Push Pier bracket. Install Push Pier bracket. Install collar to reduce skin friction. Install the reinforcement sleeve to support the steel just below the bracket to protect the integrity of the steel from the bending forces. Drive Galvanized steel piers to the necessary depths based on pressure readings. Contractor can attempt lift at the customer's request. Lift is not guaranteed, but stabilization is. Final location of the piers subject to change. Push piers come with a LIFETIME TRANSFERRABLE WARRANTY. See warranty section for full details. Any obstructions or vegetation are the responsibility of the customer unless otherwise specified in this contract. Contractor will take care to remove the vegetation but is not responsible for the life of the vegetation in the work area. Customer understands that if additional soil and/or seed is required, this will be the responsibiliy of the Customer.
- Three years of service is included in this contract. Customer is aware this will be on the aniversary date of install completed. This is not refundable and will transfer to new home owners if house is sold.
- Permit package includes all administration duties and permit fees associated with project.

### Customer agrees to

- Make final payment to foreman after completion of work.
- Remove and replace any plumbing, electrical or HVAC lines in the work area.
- Repair any sprinkler systems, grass and/or landscaping that may be damaged during installation. The use of excavators or trenchers may be required..
- Home Owner is aware during any lift procedure additional cracks could appear. Homeowner is responsible for repairs of these cracks if any result in lifting of the structure. Includes drywall, tile or other interior finishes..
- Move all personal items at least 10 feet from the work area.
- Mark any private underground lines (sprinkler systems, exterior lighting, cable etc.) and assumes liability if damage should occur to such lines.
- If on average all SettleStop Push Piers and / or Helical Piers surpasses a depth of 14' , customer is responsible for the cost of additional material needed to hit load bearing strata. Customer agrees to pay an additional $32.94 per foot.
- SL Dept Clause: If on average all SettleStop Push Piers and / or Helical Piers surpasses a depth of 40' , customer is responsible for the cost of additional material needed to hit load bearing strata. Customer agrees to pay an additional $32.94 per foot.

## Terms and Conditions

1. **Services.** Groundworks New England, LLC d/b/a Groundworks,
   is a specialty contractor licensed in residential building, commercial building, masonry, concrete, commercial improvement, and/or home improvement, if required by individual municipalities.
   This Contract for the services requested by Customer (the "Work") is based primarily upon Customer's description of the project and/or the related problem(s) and is intended to remediate those problem(s). Contractor assumes existing construction generally complies with the relevant building codes. Any drawing(s) attached to the Contract are intended solely for illustration purposes, are not to scale, and do not create any additional representation, warranty, or commitment on the part of Contractor in connection with the Work. Contractor is not responsible for products, services, or conditions not expressly reflected herein, not expressly included in the Contract, and not purchased and paid for by Customer. Start dates and completion deadlines for the Work are approximate and may be affected by events beyond Contractor's control, such as weather, permitting issues, access to the property, etc. Any delay caused by events beyond the control of Contractor shall not constitute abandonment and shall not be included in calculating timeframes for payment and performance. Contractor reserves the right to amend the scope of the Work in order to best address the project and/or problems. Any changes to the scope of Work which change the cost, materials, work to be performed, or estimated completion date must be made in writing, signed by both parties, and paid for before the Work can be performed. Any deviation from the scope of Work set forth in the Contract that results in additional costs, including but not limited to unforeseen site conditions, unusual building construction, changes needed after Contractor's engineering/ management review of the signed Contract, and/or special requirements from the county/city/agency, will become an extra charge over and above the contract amount set forth in the Contract. If Customer and Contractor cannot agree on the amount of such additional costs and sign an amendment to the Contract, then Contractor has the option, at its sole discretion, of not proceeding with the Work and canceling the Contract for its convenience. Contractor reserves the right to substitute a product with an equivalent or superior product. The Work will be completed in a workmanlike manner according to the standard practices of the industry, and Contractor will comply with local permitting, inspection, and zoning requirements.
2. **Acceptance of Contract.** By signing the Contract, Customer acknowledges that he/she understands and accepts all terms, the Terms and Conditions and the Warranties, and desires to enter into a contract with Contractor for the completion of the Work. Customer's signature authorizes Contractor to perform the Work as specified in the Contract. The Contract may be withdrawn by Contractor if it is not accepted within thirty (30) days from the date of delivery.
3. **Compensation.** Customer agrees to pay Contractor compensation as set forth in the Contract. Payment must be made in full upon completion of the Work. Failure by Customer to make payments when due shall constitute a breach of the Contract. A service fee of $25 will be charged for each returned check,
   and interest at a rate of 1% per month shall be applied to any amounts owed by Customer to Contractor if Customer fails to pay the amounts owed for the Work as agreed.
4. **Insurance.** Contractor represents and warrants that it maintains insurance as set forth in the Contractor's Certificate of Liability Insurance, which can be made available upon request.
5. **Dispute Resolution.**
   Dispute Resolution. Contractor and Customer agree that the Contract evidences a transaction involving or affecting interstate commerce and that their agreement to arbitrate, including whether an agreement to arbitrate exists or whether the controversy is subject to an agreement to arbitrate, shall be governed by the Federal Arbitration Act ("FAA"), 9 U.S.C. § 1, et seq. Any claim, dispute, or other matter in controversy arising out of or related to this Contract or breach thereof and/or related to the Work shall be settled by arbitration administered by the American Arbitration Association ("AAA") in accordance with its Construction Industry Arbitration Rules and the FAA in the place where the project is located, unless another location is mutually agreed upon, and judgment on the award rendered by the single arbitrator appointed to decide such proceeding may be entered in accordance with applicable law in any court having jurisdiction thereof. The fee schedule is listed on the AAA website at http://info.adr.org/constructionfeeschedule/. For any other issues, the Contract shall be governed by the law of the place where the project is located, excluding that jurisdiction's choice of law rules.
   If Customer elects to initiate arbitration, the arbitrator has the discretion and authority to award such remedies as may be available under applicable law.
   If payment in full is not made when due, Contractor may recover from Customer all expenses of collection, including attorneys' fees, court costs, court reporter fees, and expert witness fees, in such amount as the arbitrator may adjudge reasonable if Contractor prevails on such payment claim. Except as stated in the preceding sentence, each party shall be responsible for its own attorneys' fees for the arbitration. Contractor is also entitled to recover interest on the unpaid amount from the date due until paid at the rate of 1% per month. EACH PARTY TO THIS CONTRACT FOR ITSELF, ITS SUCCESSORS AND ASSIGNS, WAIVES ALL RIGHTS TO TRIAL BY JURY FOR ANY CLAIM, DISPUTE, OR OTHER MATTER IN CONTROVERSY ARISING OUT OF OR RELATED TO THIS CONTRACT.
6. **Customer's Responsibility.**
   a. **Cosmetic Repairs.** Unless specifically noted in the Contract, Contractor is not responsible for any cosmetic repairs. Rather, Customer is responsible for any finished carpentry, painting, repointing, electrical work, extending discharge lines, replacement of floor tiles, carpeting, paneling, etc. that may be necessary after Contractor has completed the Work, unless such repairs are specifically identified in the Contract. When trenching or excavation is required, Contractor will backfill and compact soil to the best of its ability; however, Customer may need to add more topsoil at a later date if the excavated area settles. Customer is also responsible for any landscaping, reseeding, and resodding that may be necessary after Contractor has completed the Work.
   b. **Utilities.** Contractor will call the appropriate utility protection service or damage prevention authority (i.e., 811 or "Miss Utility") to have all public underground utilities located. If Customer lives at a rural address, public lines will only be located to the pole or Customer's property line. Customer is responsible for marking any private lines such as satellite dish cables, propane lines, low voltage lighting wires, sprinkler system lines, security system wires, services to outbuildings and swimming pools, etc. Customer assumes all responsibility for damage caused to hidden, buried, or unmarked fuel/utility/service/private lines. Unless otherwise noted, electrical work is not included in this Contract and problems with electrical connections are the responsibility of Customer.
   c. **Water Seepage.** Customer agrees to maintain positive drainage away from any wall(s) repaired by wall anchors, foundation piers, and/or carbon fiber strips/reinforcers. In the event of a wall anchor installation, a water management system is recommended to reduce hydrostatic pressure (which increases at greater depths) on the wall(s) and reduce the chance of water seepage into the basement. Water seepage into any area of the basement is NOT covered by the attached Warranties.
   d. **Access and Personal Property.** Customer shall provide access to the areas where the Work is to be performed and shall furnish utilities of electric and water at no cost to Contractor. Customer shall prepare such areas so that Contractor can begin work, including moving all items at least 10 feet away from areas where Work is to be performed and adequately sealing off living space from work areas. Customer shall remove or protect personal property, inside and outside of the residence, including but not limited to carpets, rugs, shrubs and plants, and Contractor shall not be responsible for said items. In the event that the removals have not been completed by the scheduled start date for Work, Customer shall be assessed a trip fee of $250. Contractor may offer, but is not required, to assist (i) in the preparation of the Work areas and/or (ii) in the removal and replacement of drywall, paneling, flooring, finish carpentry, wall coverings, or landscaping at a rate of $40 per man hour.

e. **Representations.** Customer warrants that except as described in the request for service, all electrical, plumbing, HVAC, restoration, and handyman services located on the property are in good repair and condition and agrees to indemnify Contractor for any defective conditions that exist prior to or that occur after performance of the Work through no fault of Contractor. Customer is responsible for protecting the components that Contractor provides from future damage and shall follow all instructions provided in maintaining and protecting such components.

7. **On-Site Meetings.** Customer shall meet with Contractor on-site before the Work begins and shall meet with Contractor on-site when the Work is completed and ready for inspection such that Contractor can explain the Work and finalize payment by Customer. Customer shall be responsible for being present on-site during any attempts to lift any part of the structure and/or concrete pavement.
8. **Notice and Contractor's Right to Cure.** Customer shall promptly report, in writing, any problems with the Work to Contractor. If the problem with the Work is attributable to Contractor, Contractor will begin to repair/correct the problem within fourteen (14) days of receipt of written notice and shall complete the repair/correction in a reasonable time.
9. **Assignment.** This Contract will be binding upon the parties hereto and their respective successors and assigns. This Contract is not assignable without the written consent of both parties.
10. **Miscellaneous.** This Contract constitutes the entire agreement of the parties. All prior agreements, whether written or oral, are merged herein and shall be of no force or effect. This Contract shall not be modified except in writing signed by both parties. The waiver by any party of a breach or the failure to enforce any provision of this Contract shall not operate as a continued waiver or agreement or be construed as any other waiver or agreement. The validity, performance, and construction of this Contract shall be governed and interpreted in accordance with the law of the place where the project is located. If any term, condition, or provision of this Contract is found unenforceable by a court of law or equity, this Contract shall be construed as though that term, condition, or provision did not exist, and its unenforceability shall have no effect whatsoever on the rest of this Contract.
11. **Signatures.** This Contract may be executed in any number of counterparts, each of which shall, when executed, be deemed to be an original and all of which shall be deemed to be one and the same instrument. This Contract may be executed by facsimile or electronic signature pages which shall have the same force and effect as original executed signature pages. The person signing below for Customer represents that he/she has authority to act on behalf of the owner(s) of the property described in the Contract.
12. **Limitation of Liability.** IN NO EVENT SHALL CONTRACTOR BE RESPONSIBLE FOR INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO, LOSS OF USE OF THE SUBJECT PROPERTY, DAMAGE TO ANY PROPERTY NOT FURNISHED BY CONTRACTOR, ATTORNEYS' FEES, EXPERT FEES AND/OR COSTS. **THE TOTAL LIABILITY OF CONTRACTOR UNDER ANY CLAIMS, LOSSES, COSTS OR DAMAGES WHATSOEVER ARISING OUT OF, RESULTING FROM OR IN ANY WAY RELATED TO THIS CONTRACT AND/OR THE WORK SHALL NOT EXCEED THE TOTAL COMPENSATION PAID BY CUSTOMER TO CONTRACTOR PURSUANT TO THIS CONTRACT.**
13. NOTICE TO CUSTOMER

    NEW HAMPSHIRE LAW, RSA 359-G, CONTAINS IMPORTANT REQUIREMENTS YOU MUST FOLLOW BEFORE YOU MAY FILE A LAWSUIT OR OTHER ACTION FOR DEFECTIVE CONSTRUCTION AGAINST THE CONTRACTOR WHO CONSTRUCTED, REMODELED, OR REPAIRED YOUR HOME. SIXTY DAYS BEFORE YOU FILE YOUR LAWSUIT OR OTHER ACTION, YOU MUST SERVE ON THE CONTRACTOR A WRITTEN NOTICE OF ANY CONSTRUCTION CONDITIONS YOU ALLEGE ARE DEFECTIVE. UNDER THE LAW, A CONTRACTOR HAS THE OPPORTUNITY TO MAKE AN OFFER TO REPAIR AND/OR PAY FOR THE DEFECTS. THERE ARE STRICT DEADLINES AND PROCEDURES UNDER STATE LAW, AND FAILURE TO FOLLOW THEM MAY AFFECT YOUR ABILITY TO FILE A LAWSUIT OR OTHER ACTION.

**IN WITNESS WHEREOF**, Customer and Contractor have caused their duly authorized representatives to execute this Contract as of the date first written above.

**Customer**

Name:
X_____

By: Mariya Kontsepolskaya - 582522

**Contractor Groundworks New England, LLC**

Name:
_X_____

By: Beth Murch

## Warranties

These Warranties are in effect only after the Work is completed and Customer has paid in full. If payment is not received, these Warranties are null and void. These Warranties are made in lieu of all other warranties, express or implied, and of all other obligations on the part of Contractor to Customer. There are no other oral or written warranties. There are no warranties which extend beyond the descriptions that appear below, including no warranties of express or implied merchantability and no warranties of express or implied fitness for a particular purpose. These Warranties are transferable to future owners of the structure on which the Work is completed. Contractor shall charge a fee of $240 to complete a system inspection and new owner orientation. All warranty claims must be brought prior to the expiration of the applicable warranty period in order to be valid. Contractor does not warrant products not mentioned herein. Some products may be covered by a separate manufacturer's warranty, and Customer is responsible for compliance with any notice and claim procedure included in such warranties.

1. Definitions. The term "stabilize," as used in these Warranties, shall mean to make unlikely to give way or fail. The term "horizontal movement", as used in these Warranties shall mean bowing. The term "vertical movement," as used in these Warranties shall mean settlement.
2. Wall Support Systems. Contractor hereby warrants that wall support systems, including wall anchors, carbon fiber strips, and steel I-beam systems, will stop further inward horizontal movement of the wall(s) in the areas where they are installed for the lifetime of the structure from the date of installation. Wall support systems are warranted only to stabilize repaired walls(s), not straighten. Walls that do not have wall support systems installed by Contractor entirely from corner to corner are not warranted. Contractor recommends annual maintenance for wall support systems. The cost of maintenance is not included in this contract, but maintenance is available from Contractor at an additional charge. For carbon fiber strips, contractor does not warrant against: (1) any tipping or leaning at the top of the wall(s) repaired; (2) shearing or sliding at the bottom of the wall(s) repaired. In the rare instance that the repaired wall(s) experience leaning or shearing, steel brackets or other methods can be installed by Contractor at an additional charge.
3. Foundation Push Piers and Foundation Helical Piers. Contractor warrants that the foundation push piers and foundation helical piers will stabilize the affected area(s) against further vertical movement for the lifetime of the structure from the date of installation. Contractor DOES NOT WARRANT TO LIFT ANY STRUCTURE, to close cracks, to render doors and windows operational, or to move walls back to their original position, but will do its best to achieve positive results in this regard, if lift is requested by Customer. Contractor is not responsible for any damages caused by a lifting operation on Customer's foundation. Foundation push piers and foundation helical piers are sold and installed without the benefit of detailed knowledge of the existing foundation construction or subsurface conditions at the site. Contractor reserves the right to conduct a more thorough subsurface investigation, if necessary. Such an investigation may result in additional charges and delays.
4. Steel Columns/Adjustable Screw Jacks/IntelliJack Supports/SettleStop Floor Supports. Contractor warrants that the support system will stabilize the affected area(s) against further vertical movement for a period of Two (2) years from the date of installation. This Two (2) years warranty against further vertical movement is separate and apart from the manufacturer's warranty of twenty-five (25) years on the product(s). Contractor DOES NOT WARRANT TO LIFT ANY STRUCTURE, to close cracks, to render doors and windows operational, or to move walls back to their original position, but will do its best to achieve positive results in this regard, if lift is requested by Customer. Contractor is not responsible for any damages caused by a lifting operation on Customer's framing. The condition of wood located in crawl spaces can be highly variable and can rapidly deteriorate or move as a result of changes in environmental conditions and/or changes in the building envelope conditions. Contractor is not responsible for wood repair (i.e., joist sistering, beam replacement, sill plate repair, cracking/movement in hardwood flooring or tiles) incidental to changes in environmental conditions and/or changes in the building envelope conditions, unless specifically noted in this Contract. Contractor warrants carpentry work for a period of . Steel columns/adjustable screw jacks are sold and installed without the benefit of detailed knowledge of the existing foundation construction or subsurface conditions at the site. Contractor reserves the right to conduct a more thorough subsurface investigation, if necessary. Such an investigation may result in additional charges and delays.
5. Slab Piers. Contractor warrants that the slab piers will stabilize the affected area(s) against further vertical movement for a period of from the date of installation. Contractors DOES NOT WARRANT TO LIFT the slab back to its original position.
6. Water Management. Contractor warrants that if water from the walls or floor wall joint passes through the perimeter of the water management system and into the basement floor, Contractor will provide the additional labor and materials to fix the leak at no additional charge to the Customer. This warranty applies to water management systems along the specific areas where the system is installed. This warranty will be in effect for the lifetime of the structure and may be transferred to future homeowners provided Contractor is notified within thirty (30) days of the real estate transfer. Annual maintenance is strongly recommended for all water management systems, but is not required for the warranty to be in effect. The water management system shall not rust, rot, or corrode for the life of the structure. If the entire perimeter of the basement was not treated, then additional work at an additional charge may be necessary to extend the system or treat other areas or other problems not addressed by this Work. In addition, a pump or power failure is possible; therefore, this warranty is not a guarantee of a dry basement. This warranty shall not apply to condensation, or any system that has been altered in any way, water vapor transmission, concrete discoloration from capillary action, water squirting out of the walls over the system, window well flooding, plumbing leaks, surface water flooding, leaks from chimneys or garages, wall dampness, or efflorescence (white powder) on concrete, masonry or bricks. Contractor is not responsible for frozen discharge lines or water once it is pumped from the structure. Installation of a water management system does not include extending discharge lines more than five (5) feet from the foundation or electrical work, unless specified. Floor cracks are warranted against leakage only with full perimeter water management systems. Primary AC operated sump pumps and DC back-up pumps may be covered under a separate manufacturer's warranty. Systems that drain to daylight cannot be warranted by Contractor if such system does not drain enough water, does not drain water from under the floor, clogs, or freezes. While drainage systems clogging or malfunctioning from iron ochre, iron get, or iron bacteria from the soil are rare, Contractor cannot be responsible for these situations, or for a system that requires cleaning, flushing, or other service as necessary to keep it functioning.
7. Crawl Space Encapsulation. A crawl space encapsulation system will isolate the home from the earth. The humidity level in the air will be lowered, reducing moisture; however, the encapsulation system does not claim to be a mold mitigation system and a dehumidification/air purification system is highly recommended to further reduce mold growth. CrawlSeal has a transferable twenty-five (25) years warranty—there will be no charge for service calls on any tears or holes in the CrawlSeal liner (not caused by abuse or misuse), in the unlikely event this occurs. Wet crawl spaces require a drainage system and a sump pump system to remedy any problems with water below the liner. There will be no charge for Contractor to repair tears or holes in the crawl space encapsulation liner, unless Contractor determines that the tear/hole was caused by abuse or misuse. Sump pumps and crawl space encapsulation systems may be covered under a separate manufacturer's warranty. Installation of a crawl space encapsulation system does not include extending discharge lines more than five (5) feet from the foundation or electrical work, unless specified. Contractor is not responsible for frozen discharge lines, water once it is pumped from the structure, or condensation. The condition of wood located in crawl spaces can be highly variable and can rapidly deteriorate or move as a result of changes in environmental conditions and/or changes in the building envelope conditions. Contractor is not responsible for the repair of pre-existing wood damage unless specifically noted in this Contract.
8. PolyRenewal and Expanding Polyurethane Structural Foam. Contractor represents that expanding polyurethane structural foam will fill voids, but will not necessarily lift Customer's slab to meet any criteria of levelness. Contractor recommends sealing all cracks and joints, and Contractor can do so for an additional charge. Contractor warrants that the area where the slab of concrete was stabilized will not settle more than ¼ inch for a period of five (5) years from the date of installation. If it does, Contractor will provide the labor and materials to re-inject the area at no additional charge to Customer. This Warranty does not include patching or caulking between slabs. Customer is aware that the concrete may not be perfectly level or may not lift at all. Contractor guarantees stabilization, NOT LIFT. Any personal items in the work area are to be removed by the Customer

prior to the arrival of the Contractor's crew. This warranty is void if Customer does not maintain grade around slabs and seal joints between slabs.

9. Exclusions. THIS WARRANTY DOES NOT COVER, AND CONTRACTOR SPECIFICALLY DISCLAIMS LIABILITY FOR: (a) any product or system that is altered in any way; (b) exterior waterproofing; (c) system damage caused by Customer's negligence, misuse, abuse, or alteration; (d) damage, issues, and conditions incidental to installation, including dust and dirt; (e) changes to wood framing system; (f) damage to personal property of any type; (g) unmarked utility line breakage; (h) private utilities and lines (e.g., sprinkler, plumbing, discharge lines, etc.); (i) damage caused by unforeseen conditions such as mold, asbestos, or lead based paint; (j) removal and/or disposal of any hazardous materials; (k) failure or delay in performance or damage caused by acts of God (flood, fire, storm, earthquake, methane gas, etc.), acts of civil or military authority, or any other cause outside of Contractor's control; (l) damage beyond Contractor's control caused by dry rot, corrosion, termite infestation, and substandard construction; (m) damage done during a lifting operation; (n) basement water seepage, unless a full perimeter drainage system has been installed; (o) heave or any damage caused by it; and (p) damage caused by lateral movements and forces of hillside creep, land sliding or slumping of fill soils of deep embankments. EXCEPT AS EXPRESSLY SET FORTH, ALL SERVICES, MATERIALS, PARTS AND COMPONENTS PROVIDED BY CONTRACTOR ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, AND CONTRACTOR EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

NOTICE OF CANCELLATION

Date of Transaction: August 19, 2025

You may CANCEL this transaction, without any penalty or obligation, within THREE BUSINESS DAYS from the above date.

If you cancel, any property traded in, any payments made by you under the Contract or sale, and any negotiable instrument executed by you will be returned within 10 BUSINESS DAYS following receipt by Contractor of your cancellation notice, and any security interest arising out of the transaction will be canceled.

If you cancel, you must make available to Contractor at your residence, in substantially as good condition as when received, any goods delivered to you under this Contract or sale; or you may, if you wish, comply with the instructions of Contractor regarding the return shipment of the goods at Contractor's expense and risk.

If you do make the goods available to Contractor and Contractor does not pick them up within 20 days of the date of your notice of cancellation, you may retain or dispose of the goods without any further obligation. If you fail to make the goods available to Contractor, or if you agree to return the goods to Contractor and fail to do so, then you remain liable for performance of all obligations under the Contract.

To cancel this transaction, mail or deliver a signed and dated copy of this cancellation notice or any other written notice, or send a telegram, to:

Groundworks New England, LLC at 198 Londonderry Turnpike, Hooksett, NH 3106

NOT LATER THAN MIDNIGHT OF August 22, 2025

I HEREBY CANCEL THIS TRANSACTION.

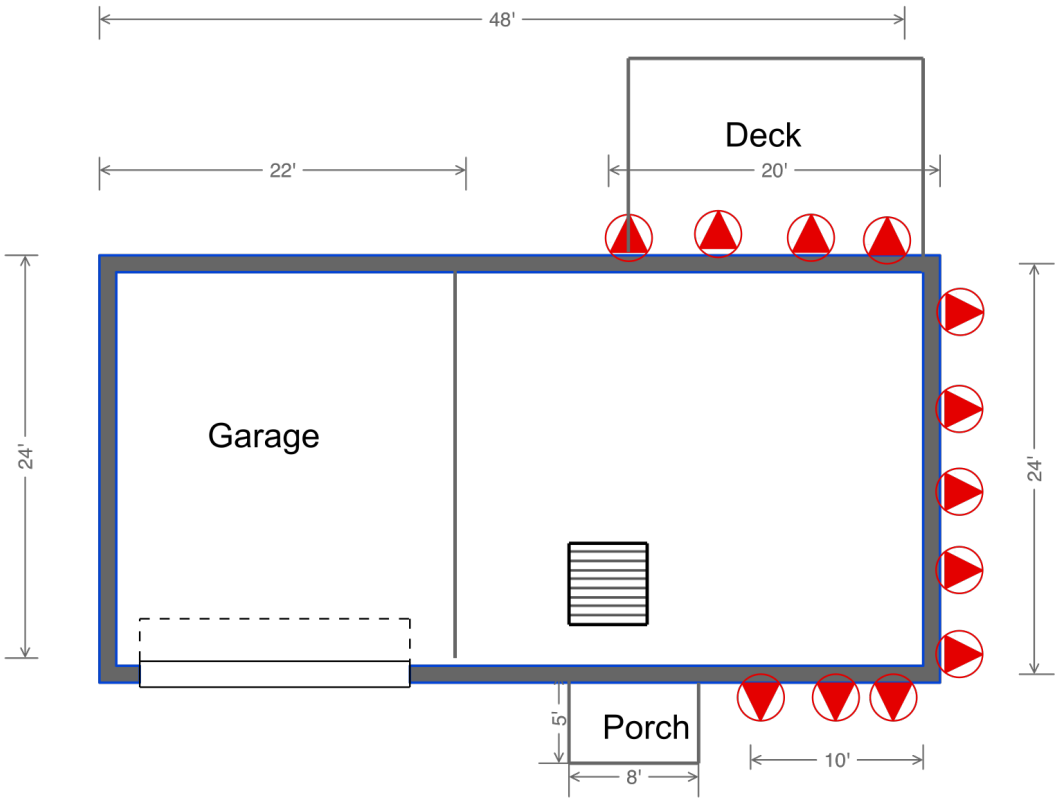
(Date) _____

(Customer's signature) _____

If after three business days the transaction has not been canceled, then the deposit will be non-refundable.

**DRAWINGS**

Push Pier



## PAYMENT TERMS

**We propose hereby to complete the services indicated in this Contract for the sum of:**

| | |
|---|---|
| **Contract Amount** | **$26,207.68** |
| **Deposit** | **$0.00** |
| **Due Upon Completion** | **$26,207.68** |

Is the project financed? YES _____ NO _____ (Financing must be set up at the time of the signed contract.)

**Approval/Account #_____**

**X MK (initial) - Customer must be present on final day of install and final walk-through is to be performed with the job foreman.**

**X MK (initial) - Balance to be paid in full to foreman on last day of install. (Unless financed)**

**BUYER'S RIGHT TO CANCEL.**

**ANY CUSTOMER MAY CANCEL THIS TRANSACTION ANY TIME PRIOR TO MIDNIGHT OF THE THIRD BUSINESS DAY AFTER THE DATE OF THIS TRANSACTION.**
**If this Contract was solicited to Customer's residence and Customer does not want the goods or services, Customer may cancel the Contract by mailing or delivering a notice to Contractor. The notice must say that Customer does not want the goods or services.**
**The notice must be mailed or delivered to: Groundworks New England, LLC at 198 Londonderry Turnpike, Hooksett, NH 3106.**
**If Customer cancels a home solicitation sale during the cancellation period listed in this paragraph of the Contract, Contractor must return any payments made by Customer. If Customer does not cancel the transaction during the cancellation period listed in this paragraph of the Contract, the deposit will be non-refundable. See the attached Notice of Cancellation form for further explanation of this cancellation right.**

| **Customer** | **Contractor** |
|---|---|
| x MK | _X [signature] |
| x N/A | _ |
| Date 8/19/2025 | Date 8/19/2025 |

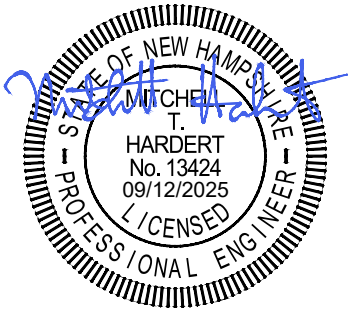
September 9, 2025

RE: Engineering Report for Repairs – 65 Onyx Ln, Portsmouth, NH 03801

On behalf of the contractor, Koontz Bryant Johnson Williams, Inc. (KBJW) is providing the attached Building Permit Application relative to the installation of:

1. **12 SettleStop Push Piers**

for the referenced project as part of the permit application for structural repairs.

| | |
|---|---|
| Report Date: September 9, 2025<br><br>Koontz Bryant Johnson Williams, Inc.<br><br>*This report has been signed and sealed by the P.E. on the date adjacent to the seal.*<br>*Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.* | **PE Seal**<br>  |

**Third Party Engineering Notes:**

1. These calculations are provided in support of a contract between the Contractor and the Owner. The calculations are to provide engineering design and a review of the proposed scope of work provided in the terms of the contract. This design represents a proposed solution agreed upon in the contract used to address the areas of concern identified to KBJW by the Contractor. The Owner should be alert to possible changes to the condition of the structure and continue to monitor the building's condition. Any observed changes in condition (before or after installation) should be immediately reported to the Contractor.

2. KBJW represents that this design is based on accepted engineering principles but makes no other warranty or guarantee, express or implied, including any warranty or guarantee regarding the work performed by the Contractor. The Contractor is responsible for knowing and following all local, state, and federal safety requirements in the execution of this project.

3. This design is based on information supplied to KBJW by the Contractor, and this provided information has not been independently verified by KBJW. Field technicians from the Contractor should verify that the as-built conditions do not violate any information and/or notes in this submittal and will install the system shown in accordance with this submittal, the manufacturer's recommendations, and industry accepted standards and practices. Any observed deviations from the provided information must be reported to KBJW for review and possible revision of this design.

4. KBJW did not perform a cost analysis to determine if this is the most cost-effective solution for the homeowner's request to correct structural and cosmetic issues related to current and potential future foundation settlement.

5. The building weight assumptions used herein to calculate pier loads are estimated values based on Typical IRC Load Tables.

6. All new construction on this site will comply with the **2021 New Hampshire Building Code.**

7. If the project involves push piers or helical piles, the Contractor is advised to drive each pier until a slight lifting of the building occurs to indicate that the structure's load has transferred from the soil to the pier. Do not lift or drive past the load transfer point as damage may occur to the foundation or to interior and exterior finishes.

8. If the repair project involves a mobile home, note that the adequacy of earth anchors and straps to resist hurricane wind loads and stabilizer structures required to prevent the home from moving in the longitudinal and transverse directions were not reviewed or specified as part of this design analysis.

KOONTZ BRYANT JOHNSON WILLIAMS
ENGINEERING • SURVEYING • GEOTECHNICAL • ENVIRONMENTAL
KBJWGROUP.COM

## Engineering Structural Repair Report

| Engineering Report for Repairs on | | |
|---|---|---|
| **PROJECT: ADDRESS** | **65 Onyx Ln, Portsmouth, NH 03801** | |
| **OVERVIEW:** | As requested by the owner/representative of the above referenced project (client), the contractor visited the project and performed a visual inspection of readily accessible foundation areas (walls and piers) and associated structural framing elements. Unless noted below, destructive testing and evaluation was not performed. Based on this inspection, the contractor's Inspector and the client agreed to the following "Scope-Of-Work". | |
| **SCOPE-OF-WORK:** | SettleStop Push Piers | [SEE PLAN] |
| **QUANTITY:** | 12 | Each |
| **SPACING (Typ):** | Varies | Feet [+/-12" Allowable] |
| **STRUCTURE DESCRIPTION:** | | |
| **• Classification:** | Single Family Residence | |
| **• Year Built:** | NA | |
| **• Style:** | Custom | |
| **• Stories:** | 2 | |
| **• Construction:** | Wood Frame | |
| **• Exterior:** | Vinyl | |
| **• Foundation:** | Basement (Masonry Walls and Piers on Spread Type Footings) | |
| | | |
| **STRUCTURAL DETAILS -EXISTING** | NOTE: Wall height might vary due to site grading and footing steps. | |
| **• Foundation Wall Type:** | N/A | |
| **• Wall Thickness:** | N/A | - inches |
| **• Wall Height:** | N/A | - feet |
| **• Unbalanced Fill:** | N/A | NOTE: Fill depth for basement conditions may vary. |
| **• Wall Reinforcement:** | N/A | |
| **• Surcharge Load (On Walls):** | N/A | plf |
| | | |
| **Loads: [@ Footing Level]** | [Based on Typical IRC Load Tables]<br>[Add upper wall and point loads] | |
| **Walls: [LL + DL]** | 3800 | NOTE: Non-Load Bearing Wall |
| **Floor: [LL + DL]** | 110 | PSF NOTE: N/A |

# SITE AND LOCATION PLAN/NOTES

**PROJECT:**

65 Onyx Ln, Portsmouth, NH 03801

**GENERAL COMMENTS: SEE ATTACHED SITE DRAWINGS**

| | |
|---|---|
| * Push pier spacing along the foundation shall be installed in accordance with the plan details, typically 4-6 feet apart and less than and 2-ft from a corner. | PP |
| * Contractor will install push piers, brackets, and all related components per the support manufacturer's current installation instructions. | PP |
| * Pier shall not be installed in recently backfilled sites, in bedrock soils, or where there is possible sinkhole activity. Notify engineer if foundation is cracked between piers. | PP |
| * Only local effects have been checked on existing structural members (e.g., concrete bearing at pier bracket). The integrity of the existing supported structure is outside of our scope of work. | PP |
| * The systems should be used on structures that are fixed from translation or braced to prevent translation of the foundation. The surrounding soil must provide continuous lateral support. | PP |
| * Where voids are created below the slab during lifting, it is recommended to fill with PolyRenewal. Use compacted soil around the footing. | PP |
| * The contractor should retain a log of the installed locations, depth, and final drive pressure of the push piers. | PP |
| * Where voids are created below a slab during lifting, it is recommended to fill with PolyRenewal. Use compacted soil around the footing. | PP |
| * **All work will comply with the New Hampshire RBC based on the International Residential Code (IRC) with any specific modifications for the municipality.** | ALL |
| * **See the attached technical reports for detailed structural system installation instructions** | ALL |

**DRAWINGS**

Push Pier

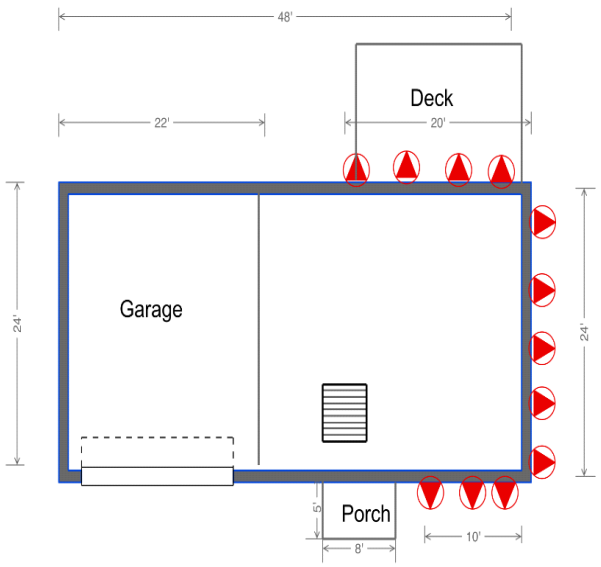



*Figure 1 – Location of Repair Work*

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# PUSH PIER DESIGN CALCULATIONS

**PROJECT:** 65 Onyx Ln, Portsmouth, NH 03801

The foundation support system is intended to stabilize and potentially lift the existing foundation structure - reducing pressure on existing soils. Load requirements for the helical or push piers were calculated in areas identified by the contractor.

## DESIGN CALCULATIONS: Push Piers 1-12

- Based on wall loading and building characteristics outlined in the front page of this report. of this report, assume a wall load of: **3,800** plf

- Push Piers Design Spacing: **5**

Spacing value is for calculations only & to include field tolerance of +/- 12" (see plan for specified spacing)

- Using the wall load and pier spacing indicated above, the load on each pier will be:

**PIER LOAD** = Wall Load x Spacing = **19,000** lbs **ACCEPTABLE** **[SEE NOTE 1 BELOW]**

**SAFETY FACTOR** = Planned Load/ Max Load **1.5** **ACCEPTABLE** **[SEE NOTE 1 BELOW]**

## DESIGN COMMENTS:

NOTE 1: This actual load is less than the "Average" Allowable Load per Pier of 28.14 kips and a Factor of Safety > 2.0; therefore OKAY).

# GENERAL COMMENTARY, LIMITATIONS and ATTACHMENTS

**PROJECT:** 65 Onyx Ln, Portsmouth, NH 03801

**GENERAL COMMENTARY**

The recommendations provided herein are based on our understanding of the project and subsurface characteristics at the time of this report. Based on actual field conditions, push piers may be converted to helical piers. If differing project conditions are encountered, contractor's field personnel shall notify Engineering Department immediately for resolution.

Unless determined by a site-specific soil boring and laboratory soils analysis, the bearing capacity (net allowable soil pressure) referenced in this report is based on our experience with soils in the project area as well as the "Presumptive Load-Bearing Values" as outlined in the current Residential Code /IRC. It should be noted that subsurface conditions can vary across the site due to natural occurrence or because of construction, clearing, filling, or cut and grading operations.

## LIMITATIONS

The intent of the Floor Support Jacks is to provide support to existing beams/girders or to provide support to new beams serving in a supplemental support condition (as noted herein).

It should be understood that one of the benefits of the SettleStop System is the adjustable screw, which allows for minor and/or incremental adjustments over a period of time, which minimizes stress to the structure. This situation may also apply to permanent applications. In this regard, disabling the thread rod should be field verified based on job specifics.

## ATTACHMENTS:

| | |
|---|---|
| Yes | • A. Evaluation Report for Structural Components |
| N/A | • B. Soil Report |

ICC EVALUATION SERVICE®

# ICC-ES Evaluation Report

**ESR-5005**

*Reissued October 2024*

*Subject to renewal October 2025*

*This report also contains:*

- **City of Chicago Supplement**
- **CA Supplement**
- **FL Supplement**

*ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.*

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| DIVISION: 31 00 00 — EARTHWORK<br>Section: 31 63 00 — Bored Piles | REPORT HOLDER: INDEPENDENCE MATERIALS GROUP, LLC (IMG) | EVALUATION SUBJECT: IMG PUSH PIER MODEL NO. IMG PP21617-34 | |
|---|---|---|---|

## 1.0 EVALUATION SCOPE

**Compliance with the following codes:**

- 2021, 2018, 2015, and 2012 *International Building Code®* (IBC)
- 2021, 2018, 2015, and 2012 *International Residential Code®* (IRC)

**Property evaluated:**

Structural

## 2.0 USES

IMG Push Pier is used as support for structures to recover lost elevations and to provide uniform supplemental support to foundations. The IMG Push Pier provides structural lift and is intended to stop further settlement of the structure. This product is used for residential, commercial, and industrial foundation settlement problems, and may be installed in either interior or exterior applications.

When IMG Push Pier is installed under the IRC, an engineered design is required in accordance with IRC Section R301.1.3.

## 3.0 DESCRIPTION

**3.1 General:** IMG model PP21617-34 is a push pier system consisting of an under footing self-standing bracket body, a reinforcing sleeve that passes through the bracket body, a pier tube shaft that is hydraulically advanced to a firm bearing strata, and the associated hardware consisting of threaded rods and nuts passing through a solid steel cap plate. Certain parts are offered in both a black, non-coated version and a hot dipped coated version designated by the suffix (G).

**3.2 System Components and Materials:**

**3.2.1 Bracket Body:** #PP21617-34B is fabricated using 0.375 inch (9.5 mm) ASTM A572 Grade 50 flat plate or ASTM A36 flat plate and CNC cut and bent to the required shapes. Additional bracket body parts consist of two (2) 1.66 inches OD x 0.140-inch (42 mm OD x 4 mm) ASTM A500 Grade B tube spacers and one (1) 4 inches OD x 0.188 inch x $11^{3}/_{16}$ inches (102 mm OD x 4.8 mm x 284 mm) ASTM A513 Grade 1026 or A500B(C) tube body. The sand plate is CNC cut from 0.250-inch (6.4 mm) ASTM A36 or A572 steel.

**3.2.2 External Sleeve**: #PP21617-48ES is fabricated using ASTM A500 Grade B/C 3.5 inches OD x 0.216 inch x 48 inches (89 mm OD x 5.5 mm) wall tube with a 4 inches OD x 0.219 inch x 1 inch (102 mm OD

x 5.6 mm x 25 mm) ASTM A513 Grade 1026 tube ring welded to the end to serve as a hard stop. Alternatively, a ¾ inch (19 mm) long ring of the 4 inches OD x 0.226 inch (102 mm x 5.7 mm) tube may be welded ½ inch (13 mm) down from the leading edge using four (4) 1 inch (25 mm) fillet welds or a flared end on the tube create a hard stop.

**3.2.3 Pier Cap Plate:** #PP21617-34CAP is fabricated using ASTM A36 1-inch x 4 inches (25 mm x 102 mm) flat bar stock and cut to 9 inches (229 mm) length. A ¾ inch (19 mm) long ring is cut from 3.5 inches OD x 0.216-inch (89 mm x 5.5 mm) ASTM A500 Grade B tube and is stitch welded using four (4) 1-inch (25 mm) evenly spaced ¼ inch (6 mm) fillet welds.

**3.2.4 Lifting Rods and Nuts:** Lifting rods and nuts consist of two (2) 16 inches (406 mm) long threaded rods and four (4) hex nuts. The flat washers meet ASTM F436 Type 1. See Table 2 for details of the approved threaded rods and nuts.

**3.2.5 Starter Pipe:** #PP21617-50SP is fabricated using a 2.875 inches OD x 0.165 inch (73 mm x 4 mm) wall thickness tube meeting ASTM A500 Grade C. A 1 inch (25 mm) long section of a 3.5 inches x 0.300 inch (89 mm x 7.6 mm) wall tube meeting ASTM A500 Grade C is fillet welded to the leading edge of one end of the tubing to serve as a friction reducing collar or a ¾ inch (19 mm) long ring welded ½ inch (13 mm) down from the leading edge using four (4) 1 inch (25 mm) fillet welds. Alternately, a $3^1/_8$ inches (79 mm) OD x $^3/_{16}$ inches (5 mm) wall x 1-inch (25 mm) long tube meeting ASTM A500 is swagged inside the leading edge. Tube shaft material is galvanized using a three-coat inline process meeting ASTM 1057 with a minimum galvanized thickness of 0.85 to 1.19 mils (0.02 to 0.03 mm).

**3.2.6 Tube Extension:** #PP21617-36PTP is fabricated using a 2.875 inches OD x 0.165 inch (73 mm x 4 mm) wall thickness tube meeting ASTM A500 Grade C. A 2.5 inches x 0.188 inch (64 mm x 8 mm) wall x 6 inches (152 mm) long nipple meeting ASTM A513 Grade 1026 is inserted into one end of the tube and is held in position by three (3) ¼ inch (6 mm) hydraulically punched dimples installed to create a triangular shape and approximately in equal distances around the pipe. Tube shaft material is galvanized using a three-coat inline process meeting ASTM 1057 with a minimum galvanized thickness of 0.85 to 1.19 mils (0.02 to 0.03 mm).

## 4.0 DESIGN AND INSTALLATION

### 4.1 Design:

**4.1.1 General:** Engineering calculations (analysis and design) and drawings, must be prepared by a registered design professional, submitted to and be subjected to the approval of the code official for each project, and must be based on accepted engineering principles, as described in IBC Section 1604.4 and must conform to 2021, 2018, 2015 and 2012 IBC Section 1810. The design method for the steel components is in Allowable Strength Design (ASD) as described in IBC Section 1602 and AISC 360 Section B3.4. The engineering analysis must address hydraulically driven foundation system performance related to structural and geotechnical requirements.

A soil investigation report in accordance with this Section must be submitted for each project, when requested by the authority having jurisdiction. The soil interaction capacity between the pier and the soil including the required safety factor and the soil effects of the hydraulically driven steel pier installation must be determined in accordance with the applicable code by a registered design professional.

**4.1.2 Bracket Capacity:** The compression load ratings of the push pier brackets with a maximum unsupported length below the bracket bearing plate of 5 feet (1.52 m) are provided in Table 1 of this report. The concrete foundation must be designed and justified to the satisfaction of the local code official with due consideration to the eccentricity of the applied loads, including reactions provided by the brackets, acting on the concrete foundation. Only localized limits states of the steel components to the piles have been evaluated in this evaluation report. Other limit states are outside the scope of this evaluation and must be determined by the registered design professional. The effects of reduced lateral sliding resistance due to uplift from wind or seismic loads must be considered for each project.

**4.1.3 Tube Shaft Capacity:** The tube shaft capacity has not been evaluated and is outside the scope of this report.

**4.2 Installation:** The IMG Push Pier must be installed by IMG LLC's certified and trained installers in accordance with this section (Section 4.2), the site-specific approved construction documents (engineering plans and specifications), the manufacturer's installation instructions, and the following conditions:

1- A site survey is necessary of the area where the piers are going to be driven to locate any possible interference such as utilities, plumbing, electrical or phone lines.

2- An area of approximately 2.5 square feet (0.23 square meter) to a depth of 8.5 inches (216 mm) below the bottom of the footing will need to be excavated at each pier location. The excavated concrete bearing surface shall be free of all soil, debris, and loose concrete prior to installation of the push pier system.

3- The bearing area around the footing must be a smooth and level condition while adjusting the face of the stem wall to vertical at the point of the bracket attachment. Notching of the concrete footing may be necessary and shall be performed under the guidance of a registered design professional and approval of the code official.

4- The existing structure is used as a reaction force with a hydraulic pump and cylinder combination to drive the pier into the soil.

5- Adjacent piers must not be advanced simultaneously.

6- Each installed Push Pier must follow IMG Push Pier Installation Instructions. In accordance with the 2021, 2018, 2015 and 2012 IRC Section R106.1.2, a copy of these installation instructions must be made available on the job site at the time of installation.

### 4.3 Special inspection

Special inspection in accordance with 2021, 2018, 2015 and 2012 IBC Section 1705.7, is required for installation of the IMG Push Pier, except as indicated in Section 1704.2 of the IBC. Items to be recorded and confirmed by the special inspector must include, but are not limited to, the following:

1. Verification of the product manufacturer, and the manufacturer's certification of installers.
2. Product identification, including lead sections, extension sections, brackets, bolts, and nuts, as specified in the construction documents and this evaluation report.
3. Installation procedures anticipated and actual piling depth.
4. Tip elevations, the installation pressure and final depth of the driven foundation system.
5. Inclination and position/location of hydraulically driven steel piles.
6. Compliance of the installation with the approved construction documents and this evaluation report.

## 5.0 CONDITIONS OF USE:

The IMG Push Pier described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

**5.1** The IMG Push Pier is manufactured, identified, and installed in accordance with this report, the approved construction documents, and the manufacturer's published installation instructions. In the event of a conflict between this report, the approved construction documents, and the manufacturer's published installation instructions, the most restrictive governs.

**5.2** This evaluation report does not address seismic loading for this system, existing footing suitability or attachment requirements to existing footings.

**5.3** Installation of the hydraulically driven pile systems must be limited to support of uncracked normal-weight concrete, as determined in accordance with the applicable code.

**5.4** Brackets must be used only to support structures that are laterally braced as defined in 2021, 2018, 2015 and 2012 IBC Section 1810.2.2.

**5.5** Corrosion resistance and durability are outside the scope of this evaluation report.

**5.6** The IMG Push Pier is rated for compression loading only. Lateral and uplift loading from wind and seismic are outside the scope of this evaluation report and must be carried by the existing shallow foundation and verified by a registered design professional.

**5.7** Each push pier that is installed, is load tested against the weight of the structure to ensure that the system can withstand a load greater than needed to restore the structure. A registered design professional must provide the test load safety factor requirements based upon the site-specific soil conditions.

**5.8** All the excavated soil at each pile location must be replaced and compacted after the piles are proof load tested.

**5.9** The adequacy of the concrete structures that are connected to the IMG Push Pier must be verified by a registered design professional, in accordance with applicable code provisions, such as Chapter 13 of ACI 318-19 under the 2021 IBC, Chapter 13 of ACI 318-14 under the 2018 and 2015 IBC (Chapter 15 of ACI 318 under the 2012 IBC) and Chapter 18 of IBC, and subject to the approval of the code official.

**5.10** Special inspection is provided in accordance with Section 4.3 of this report.

**5.11** Engineering calculations and drawings as described in Section 1604.4 of the IBC and comply with the design and installation requirements of this evaluation report are to be prepared by a registered design professional. All these documents are to be submitted and approved by the local code official.

**5.12** Settlement of the hydraulically driven pile is outside the scope of this evaluation report and must be determined by a registered design professional as required in 2021, 2018, 2015 and 2012 IBC Section 1810.2.3.

**5.13** The interaction between the hydraulically driven pile system and the soil is outside the scope of this report.

**5.14** A copy of the manufacturer's published installation instructions must be made available on the job site at the time of installation.

**5.15** The IMG Push Pier is manufactured under a quality control program with inspections monitored by the ICC-ES.

## 6.0 EVIDENCE SUBMITTED

- Bracket eccentric compression load tests in accordance with ASTM E72.
- Quality control documentation and installation instructions.

## 7.0 IDENTIFICATION

**7.1** The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-5005) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.

In addition, each Push Pier that is covered by this report must be marked with the following information:

1. IMG Push Pier Product/Model Number
2. Bracket Load Rating
3. Manufacturer Address

**7.2** The report holder's contact information is the following:

**INDEPENDENCE MATERIALS GROUP, LLC (IMG)**
**1741 CORPORATE LANDING PARKWAY**
**VIRGINIA BEACH, VIRGINIA 23454**
**(803) 807-8629**
**www.independencematerialsgroup.com**

**TABLE 1—PUSH PIER COMPRESSION LOAD RATINGS[1]**

| Model | Product Designation | | Average Tested Ultimate Capacity (lbs) | Allowable Push Pier Capacity[2] (lbs) |
|---|---|---|---|---|
| IMG PP21617-34 | Push Pier Bracket | | 56,293 | 28,147 |

For **SI:** 1 kip (1000 lbf) = 4.48 kN.

[1] Table provides tested bracket assembly capacities only. A licensed engineer shall verify the actual available capacity based on the size of the tube shaft, expected corrosion loss, and the site-specific soil conditions.

[2] Allowable capacities are based upon the minimum of the average tested yield capacity (Py) multiplied by 0.6 and the average tested ultimate capacity (Pmax) multiplied by 0.5. Allowable capacities shall be utilized with Allowable Strength Design (ASD) loading.

**TABLE 2—APPROVED THREADED RODS AND NUTS**

| Lifting Rod | Lifting Rod Steel | Nut | Nut Steel | |
|---|---|---|---|---|
| $^3/_4$" - 10 unc | ASTM A193 Grade B7 | $^3/_4$-10 Heavy Hex | ASTM A193 | |
| (#7) $^7/_8$" - 5 All Thread Rebar | ASTM A615 Grade 75 | $^7/_8$" - 16 Hex Head | ASTM A108 or A576 | |
| $^3/_4$" 4.5 Coil Rod* | ASTM A108 GR 1045 | $^3/_4$" - 4.5 Coil Nut (2) Nuts required per rod end | ASTM A1035 | |
| | | $^3/_4$" - 4.5 Heavy Coil Nut (1) Nut required per rod end | ASTM A1045 | |

* Coil rod material has minimum 69750 psi (481 MPa) yield strength and 96550 psi (666 MPa) minimum ultimate tensile strength.

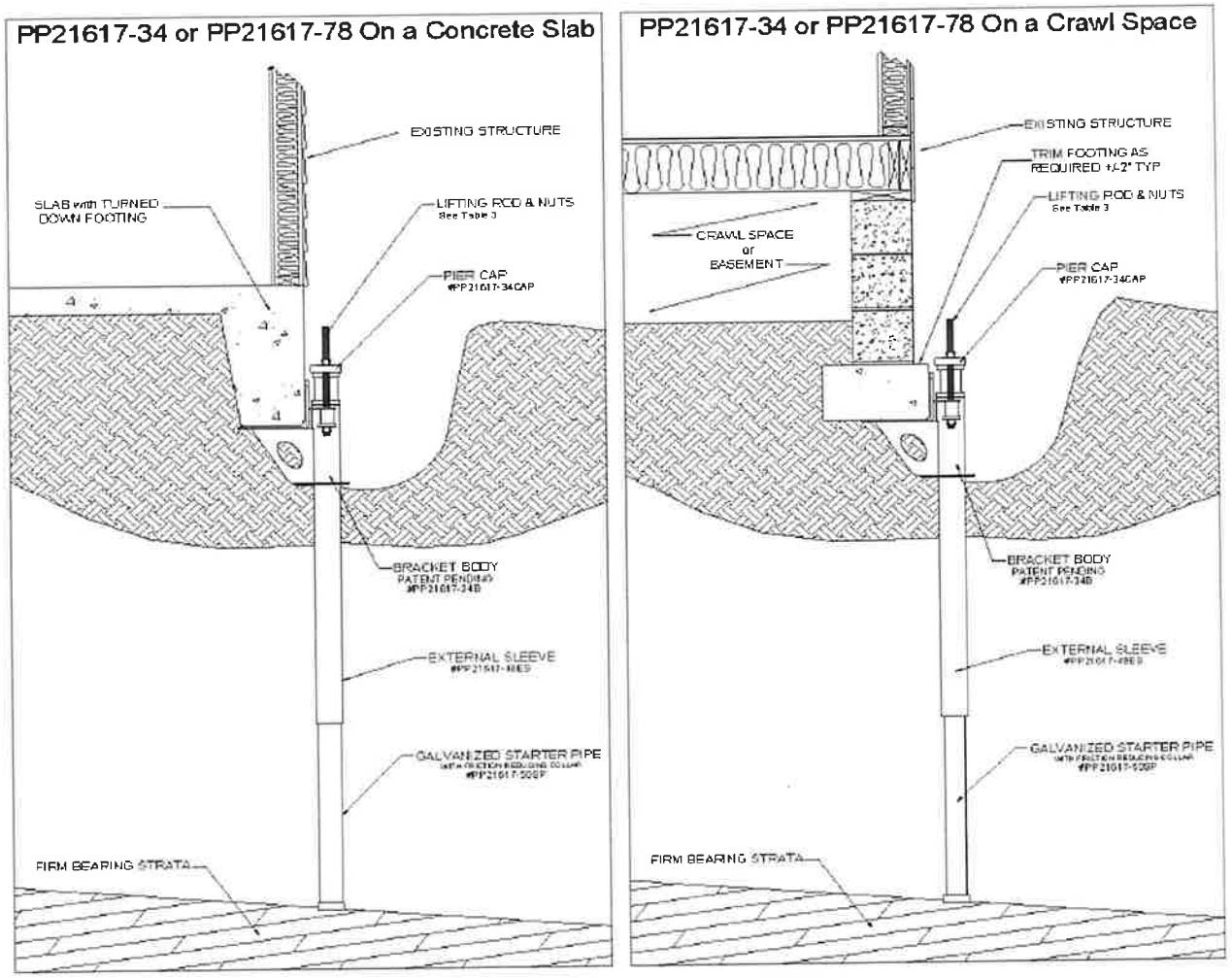
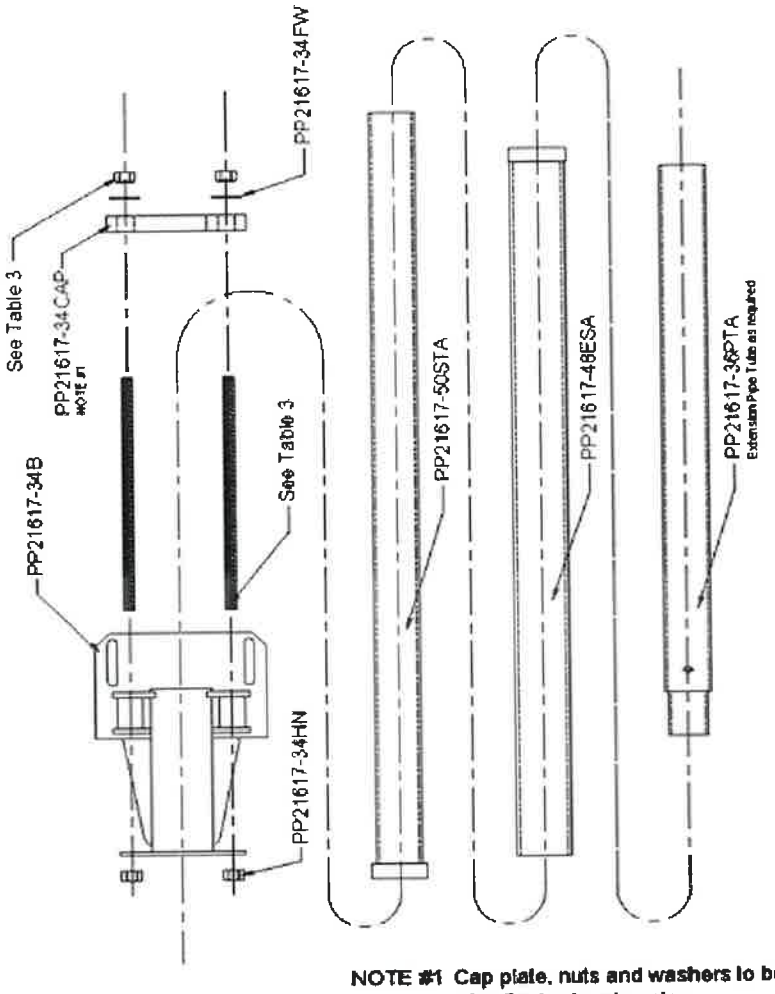



**FIGURE 1—PP21617-34 BRACKET ASSEMBLY**

# PP21617-34 Typical Installation

**The IMG Bracket Design is PATENT PENDING**




**NOTE #1 Cap plate, nuts and washers to be installed after final extension pipe**

**FIGURE 1 (Continued) —PP21617-34 BRACKET ASSEMBLY**

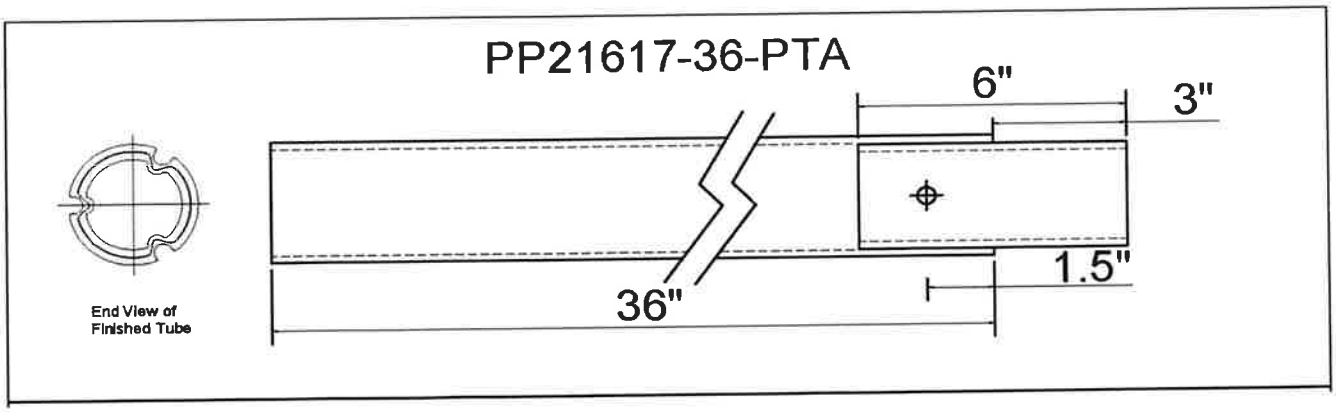



**FIGURE 2—PUSH PIN COUPLER DETAILS**

# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 8/26/2025

**THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.**

**IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).**

| | |
|---|---|
| **PRODUCER**<br>Marsh & McLennan Agency LLC<br>3625 N. Elm Street<br>Suite 200<br>Greensboro NC 27455 | **CONTACT NAME:** Conrad Ifejuka<br>**PHONE (A/C, No, Ext):** 336-346-1399 **FAX (A/C, No):** 212-607-6599<br>**E-MAIL ADDRESS:** Conrad.Ifejuka@MarshMMA.com |
| **INSURED** SCPJE-1<br>Groundworks New England, LLC<br>dba Groundworks<br>70 Zachary Rd.<br>Manchester NH 03109 | **INSURER(S) AFFORDING COVERAGE** / **NAIC #**<br>**INSURER A :** Axis Surplus Insurance Company 26620<br>**INSURER B :** Old Republic Insurance Company 24147<br>**INSURER C :** Safety National Casualty Corporation 15105<br>**INSURER D :** Travelers Prop & Casualty Co of America 25674<br>**INSURER E :** Axis Surplus Insurance Company 26620<br>**INSURER F :** |

**COVERAGES** **CERTIFICATE NUMBER:** 762112110 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | TYPE OF INSURANCE | ADDL INSD | SUBR WVD | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS | |
|---|---|---|---|---|---|---|---|---|
| B | X **COMMERCIAL GENERAL LIABILITY**<br>CLAIMS-MADE X OCCUR<br>GEN'L AGGREGATE LIMIT APPLIES PER:<br>POLICY X PRO-JECT LOC<br>OTHER: | | | MWZY31889824 | 12/1/2024 | 12/1/2025 | EACH OCCURRENCE<br>DAMAGE TO RENTED PREMISES (Ea occurrence)<br>MED EXP (Any one person)<br>PERSONAL & ADV INJURY<br>GENERAL AGGREGATE<br>PRODUCTS - COMP/OP AGG | $ 1,000,000<br>$ 1,000,000<br>$ 10,000<br>$ 1,000,000<br>$ 2,000,000<br>$ 2,000,000 |
| C | **AUTOMOBILE LIABILITY**<br>X ANY AUTO<br>OWNED AUTOS ONLY<br>HIRED AUTOS ONLY<br>SCHEDULED AUTOS<br>NON-OWNED AUTOS ONLY | | | CA6676839 | 12/1/2024 | 12/1/2025 | COMBINED SINGLE LIMIT (Ea accident)<br>BODILY INJURY (Per person)<br>BODILY INJURY (Per accident)<br>PROPERTY DAMAGE (Per accident) | $ 2,000,000<br>$<br>$<br>$ |
| A | UMBRELLA LIAB X OCCUR<br>X **EXCESS LIAB** CLAIMS-MADE<br>DED RETENTION $ | | | P00100142546401 | 12/1/2024 | 12/1/2025 | EACH OCCURRENCE<br>AGGREGATE | $ 2,000,000<br>$ 2,000,000 |
| C | **WORKERS COMPENSATION AND EMPLOYERS' LIABILITY**<br>ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: N<br>**(Mandatory in NH)**<br>If yes, describe under DESCRIPTION OF OPERATIONS below | N / A | | LDC4069047 | 12/1/2024 | 12/1/2025 | X PER STATUTE OTH-ER<br>E.L. EACH ACCIDENT<br>E.L. DISEASE - EA EMPLOYEE<br>E.L. DISEASE - POLICY LIMIT | <br>$ 1,000,000<br>$ 1,000,000<br>$ 1,000,000 |
| D<br>E | Leased/Rented Equipment<br>Pollution Liability | | | QT6306Y436046TIL24<br>CP004517052025 | 12/1/2024<br>4/29/2025 | 12/1/2025<br>4/29/2026 | Limit<br>Occ/Agg<br>Deductible | 100,000<br>4M/8M<br>250,000 |

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)**

Installation Floater
Travelers Property & Casualty
$100,000 Per Job Site
$100,000 Storage
$100,000 Transit
$200,000 All Covered Locations Combined
QT6306Y436046TIL24 12/01/24 - 12/01/25

See Attached...

**CERTIFICATE HOLDER**

City of Portsmouth
Portsmouth City Hall
1 Junkins Ave
Portsmouth NH 03801

**CANCELLATION**

**SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.**

**AUTHORIZED REPRESENTATIVE**



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# ADDITIONAL REMARKS SCHEDULE



| AGENCY | NAMED INSURED |
|---|---|
| Marsh & McLennan Agency LLC | Groundworks New England, LLC<br>dba Groundworks<br>70 Zachary Rd.<br>Manchester NH 03109 |
| POLICY NUMBER | |
| CARRIER / NAIC CODE | EFFECTIVE DATE: |

**ADDITIONAL REMARKS**

**THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,**

**FORM NUMBER:** 25 **FORM TITLE:** CERTIFICATE OF LIABILITY INSURANCE

Excess Limits:

Excess Auto:
Carrier: AXIS Surplus Insurance Company
Policy: P00100142546401
Policy Dates 12/01/24 - 12/01/25
Limit: $2,000,000 excess of Primary

Excess Auto:
Carrier: The Bridgeway Insurance Company
Policy 8EA7XL000255200
Policy Dates 12/01/24 - 12/01/25
Limit: $2,000,000 excess of $2,000,000 Auto only

Excess Layer #1
Carrier: Starr Indemnity & Liability Company
Policy: 1001261069241
Policy Dates 12/01/24 - 12/01/25
Limits:
$5,000,000 excess of $4,000,000 Auto
$5,000,000 excess of Primary GL/EL

Excess Layer #2
Carrier: Gotham Insurance Company
Policy: EX202400005702
Policy Dates 12/01/24 - 12/01/25
Limits:
$5,000,000 excess of $9,000,000 Auto
$5,000,000 excess of $5,000,000 GL/EL

Excess Layer #3
Carrier: QBE Specialty Insurance Company
Policy: 140001043
Policy Dates 12/01/24 - 12/01/25
Limits:
$5,000,000 excess of $14,000,000 Auto
$5,000,000 excess of 10,000,000 GL/EL

Excess Layer #4
Carrier: Homesite Insurance Company of Florida
Policy: CXP04178300
Policy Dates 12/01/24 - 12/01/25
Limits:
$5,000,000 excess of $19,000,000 Auto
$5,000,000 excess of $15,000,000 GL/EL

Excess Layer #5
Carrier: Texas Insurance Company
Policy: JTI24XCAN0239403
Policy Dates 12/01/24 - 12/01/25
Limits:
$5,000,000 Part of $10,000,000 excess of $24,000,000 Auto
$5,000,000 Part of $10,000,000 excess of $20,000,000 GL/EL

Carrier: HDI Specialty Insurance Company
Policy: CLXD6791100S
Policy Dates 12/01/24 - 12/01/25
Limits:
$5,000,000 Part of $10,000,000 excess of $24,000,000 Auto
$5,000,000 Part of $10,000,000 excess of $20,000,000 GL/EL

Excess Layer #6
Carrier: SiriusPoint Specialty Insurance Corporation
Policy: TSX00120824
Policy Dates 12/01/24 - 12/01/25
Limits:
$5,000,000 Part of $15,000,000 excess of $34,000,000 Auto
$5,000,000 Part of $15,000,000 excess of $30,000,000 GL/EL


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# ADDITIONAL REMARKS SCHEDULE



| AGENCY | NAMED INSURED |
|---|---|
| Marsh & McLennan Agency LLC | Groundworks New England, LLC<br>dba Groundworks<br>70 Zachary Rd.<br>Manchester NH 03109 |
| POLICY NUMBER | |
| CARRIER / NAIC CODE | EFFECTIVE DATE: |

**ADDITIONAL REMARKS**

**THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,**

**FORM NUMBER:** 25 **FORM TITLE:** CERTIFICATE OF LIABILITY INSURANCE

Carrier: Westfield Specialty Insurance Company
Policy: XSL455648W00
Policy Dates 12/01/24 - 12/01/25
Limits:
$5,000,000 Part of $15,000,000 excess of $34,000,000 Auto
$5,000,000 Part of $15,000,000 excess of $30,000,000 GL/EL

Carrier: Endurance Risk Solutions Assurance Company
Policy: EXC30074003800
Policy Dates 12/01/24 - 12/01/25
Limits:
$5,000,000 Part of $15,000,000 excess of $34,000,000 Auto
$5,000,000 Part of $15,000,000 excess of $30,000,000 GL/EL


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

Date: January 22, 2026
Property Address: 1980 Woodbury Avenue
Application #: LU-25-163
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.<br>Applicable standards: | **Meets**<br>**Does Not Meet** | Applicable standards:<br>- Portsmouth Zoning Ordinance (Variances recvd. July 15, 2025)<br>- Portsmouth Site Plan Review Regulations |
| **2** | Provision for the safe development, change or expansion of use of the site. | **Meets**<br>**Does Not Meet** | The project proposes the development of a gas station and convenience store, aligning with the current use. |
| **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**<br>**Does Not Meet** | Standard erosion control methods are proposed during site development.<br><br>There will be no adverse impacts to downstream properties. All runoff is captured and routes through treatment BMP's prior to entering the city drainage system. |
| **4** | Adequate protection for the | | Groundwater recharge requirements are |

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| | Site Plan Review Regulations Section 2.9 Evaluation Criteria | Finding (Meets Standard/Criteria) | Supporting Information |
|---|---|---|---|
| | quality of groundwater. | **Meets**<br>**Does Not Meet** | met as the site is classified as "urban land". |
| **5** | Adequate and reliable water supply sources. | **Meets**<br>**Does Not Meet** | The site currently contains a gas station and convenience store and is supplied by municipal water. The proposed development will be served in the same manner, and the utility design has been review by DPW. |
| **6** | Adequate and reliable sewage disposal facilities, lines, and connections. | **Meets**<br>**Does Not Meet** | The site currently contains a gas station and convenience store and is supplied by municipal sewer. The proposed development will be served in the same manner, and the utility design has been review by DPW. |
| **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**<br>**Does Not Meet** | Any contaminants present due to the demolition of the current gas station and convenience store will be disposed of in accordance with all applicable regulations. |
| **8** | Adequate provision for fire safety, prevention and control. | **Meets**<br>**Does Not Meet** | The proposed gas station and convenience store will undergo fire code review within the Building Permit Process. |
| **9** | Adequate protection of natural features such as, but not limited to, wetlands. | **Meets**<br>**Does Not Meet** | There are no wetlands on-site. Natural features are being protected although the current site is fully developed. |
| **10** | Adequate protection of historical features on the site. | **Meets**<br>**Does Not Meet** | The site falls outside the City's Historic District |
| **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**<br>**Does Not Meet** | Sufficient off-street parking is provided in-site including for employees. The site entrances and exits will follow the same "right in, right out" traffic pattern that exists today. |
| **12** | Adequate traffic controls and traffic management measures to prevent an unacceptable | **Meets** | The project includes widening the existing sidewalk at the intersection of Woodbury Avenue and Gosling Road. This, along with |

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| | Site Plan Review Regulations Section 2.9 Evaluation Criteria | Finding (Meets Standard/Criteria) | Supporting Information |
|---|---|---|---|
| | increase in safety hazards and traffic congestion off-site. | **Does Not Meet** | sidewalks on-site will improve pedestrian mobility. All crosswalks on-site will be constructed with stamped concrete providing a visual and physical indicator of pedestrian areas. |
| **13** | Adequate insulation from external noise sources. | **Meets**<br>**Does Not Meet** | Additional landscaping is proposed between the new convenience store and abutting residential use. The additional landscaping, along with the shape and orientation of the proposed building will help to mitigate noise pollution from the proposed development and traffic along Woodbury Avenue. |
| **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**<br>**Does Not Meet** | The existing site is currently served by municipal solid waste disposal, police, emergency, medical and other municipal services. The site will remain serviced by the same municipal departments. Furthermore, the project has undergone review by the Technical Advisory Committee to ensure adequate capacity with municipal 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**<br>**Does Not Meet** | Outdoor seating is proposed adjacent to the convenience store. This, along with the proposed bike rack and sidewalks provide usable and functional open space. |
| **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**<br>**Does Not Meet** | The sidewalks at the intersection of Gosling and Woodbury will be widened as a part of this project. On-site, there is pedestrian access from both Gosling Road and Woodbury Ave to the convenience store. This connection will also act as an additional route for pedestrians to travel to avoid walking near the busy intersection. |
| **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**<br>**Does Not Meet** | Plans have been reviewed by the Technical Advisory Committee, and the proposed use will be consistent with other uses in the area. |
| **18** | Adequate quantities, type or arrangement of landscaping and open space for the provision of visual, noise and air pollution buffers. | **Meets**<br>**Does Not Meet** | Landscaping is proposed throughout the site to provide both visual buffers and noise/air pollution buffers. |

DRAFT

| | Site Plan Review Regulations Section 2.9 Evaluation Criteria | Finding (Meets Standard/Criteria) | Supporting Information |
|---|---|---|---|
| **19** | Compliance with applicable City approved design standards. | **Meets**<br><br>**Does Not Meet** | The site design meets City approved standards. |
| | **Other Board Findings:** | | |

DRAFT

Civil Engineers
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Traffic Engineers
Land Surveyors
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Scientists

NEW HAMPSHIRE 200

February 12, 2026

Peter Stith, Planning Manager
Portsmouth Planning & Sustainability
1 Junkins Avenue, 3rd Floor
Portsmouth, NH 03801

via Portsmouth's Online Permitting Site

**RE: Response to Technical Advisory Committee Comments**
**1980 Woodbury Avenue – Colbea Enterprises, LLC – Tax Map 239 Lot 11**
**Application #LU-25-163**

Dear Mr. Stith:

On behalf of our client, Colbea Enterprises, LLC., TF Moran, Inc. (TFM) respectfully submits the following letter in response to the comments made by the City of Portsmouth at the Technical Advisory Committee meeting held on December 2nd, 2025. The following materials are included in this revised submission:

- **Letter of Authorization (1 copy);**
- **Site Plan Checklist (1 copy);**
- **Abutters List (1 copy, 3 sets of labels);**
- **Traffic Memo (1 copy);**
- **Drainage Analysis Report (1 copy);**
- **Green Building Statement (1 copy);**
- **Draft Sidewalk Access Easement (1 copy); and**
- **Revised Site Development Plans entitled "Site Development Plans, Tax Map 239 Lot 11, Proposed Gas Station, 1980 Woodbury Avenue, Portsmouth, New Hampshire", prepared by TFMoran, Inc., dated November 17, 2025, revised December 22, 2025 (1 copy at 22"x34).**

During the review of this project, City Planning Staff noted that a rear setback was not depicted on the submitted plans (the plans that the Planning Board previously reviewed had shown two 10-foot side setbacks). In discussions with City Staff, given that the site currently has an address of 1980 Woodbury Avenue, the westerly property line should have shown a 15' rear setback instead of the 10' side setback as previously shown. With this configuration, a small portion of the building was within the setback area. To avoid requesting an additional variance for the proposed design, the owner/applicant has initiated a change of the site address to 90 Gosling Road. With this change, the southerly property line (opposite Gosling Road) would be classified as the rear lot line and the westerly property line (opposite Woodbury Avenue) would remain a side setback (as shown on the prior plan). With this modification, the building

now complies with rear and side setback requirements, and we have revised the plan to reflect one 10-foot side setback along the westerly lot line and one 15-foot rear setback along the southerly lot line. This revision is administrative in nature and does not result in any changes to the building footprint, site layout, parking configuration, or overall design.

To facilitate your review, we have provided your comments along with our responses, which are shown in ***bold italics***.

**REVIEW COMMENTS:**

**General Comments**

1. Please provide a green building statement.
    a. ***See attached Green Building Statement.***
2. Move water and sewer services out from under canopy for gas pumps.
    a. ***Water and sewer services have been relocated outside the fueling canopy and associated concrete pad.***
3. Do not route domestic sewer (bathrooms) through grease trap. Connect domestic sewer to sewer service after grease traps.
    a. ***Domestic sewer has been routed through a manhole after the grease trap.***
4. Provide easements as necessary for 8' sidewalk around lot.
    a. ***The sidewalk along Gosling Road has been widened to 8' and a draft easement has been attached to this submission.***

We trust that the above responses satisfy the concerns expressed in the City of Portsmouth's comments. Should you wish to further discuss any of the above please contact us so that we may meet and resolve any outstanding concerns.

Respectfully,
**TFMoran, Inc.**



**Jason Cook, EIT**
*Civil Engineer*

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

NEW HAMPSHIRE 200

# Letter of Authorization

I, Michael Gazdacko, of Colbea Enterprises, LLC, 695 George Washington Highway, Lincoln, RI, hereby authorize TFMoran, Inc., 170 Commerce Way, Suite 102, Portsmouth, NH, to act on my behalf concerning property owned by Colbea Enterprises, LLC, 1980 Woodbury Avenue, Portsmouth, NH, known as Tax Map 239, Lot 11. I hereby appoint TFMoran, Inc. as my agent to act on my behalf in the review process, to include any required signatures.

Client Name — Authorized Representative, Colbea Enterprises LLC — November 5, 2024 — Date

Witness — 11/5/24 — Date

TFMoran, Inc.
48 Constitution Drive, Bedford, NH 03110
T(603) 472-4488 www.tfmoran.com

TFMoran, Inc. Seacoast Division
170 Commerce Way–Suite 102, Portsmouth, NH 03801
T(603) 431-2222

# 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: Colbea Enterprises, LLC Date Submitted: November 17, 2025

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

Site Address: 1980 Woodbury Avenue Portsmouth, NH 03801 Map: 239 Lot: 11

| 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 Portal | 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 Portal / Delivered on November 17, 2025 | 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)** | Cover Letter | |
| ☑ | 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)** | S-01 & C-04 | N/A |
| ☑ | Tax map and lot number, and current zoning of all parcels under Site Plan Review. **(2.5.3.1D)** | S-01 | 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)** | C-00 | 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)** | Abutters List | N/A |
| ☑ | Names, addresses and telephone numbers of all professionals involved in the site plan design. **(2.5.3.1G)** | C-00 | N/A |
| ☑ | List of reference plans. **(2.5.3.1H)** | S-01 | N/A |
| ☑ | List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)** | C-01 | 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)** | S-01 | 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)** | S-01 | N/A |
| ☑ | Title (name of development project), north point, scale, legend. **(2.5.4.2A)** | C-00 | 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)** | S-01 | 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)**<br>• Surveyed plan of site showing existing natural and built features;<br>• Existing building footprints and gross floor area;<br>• Existing parking areas and number of parking spaces provided;<br>• Zoning district boundaries;<br>• Existing, required, and proposed dimensional zoning requirements including building and open space coverage, yards and/or setbacks, and dwelling units per acre;<br>• Existing impervious and disturbed areas;<br>• Limits and type of existing vegetation;<br>• Wetland delineation, wetland function and value assessment (including vernal pools);<br>• SFHA, 100-year flood elevation line and BFE data, as required. | S-01 | |
| ☑ | **2. Buildings and Structures: (2.5.4.3B)**<br>• Plan view: Use, size, dimensions, footings, overhangs, 1st fl. elevation;<br>• Elevations: Height, massing, placement, materials, lighting, façade treatments;<br>• Total Floor Area;<br>• Number of Usable Floors;<br>• Gross floor area by floor and use. | C-04 and Architectural Elevations | |
| ☑ | **3. Access and Circulation: (2.5.4.3C)**<br>• Location/width of access ways within site;<br>• Location of curbing, right of ways, edge of pavement and sidewalks;<br>• Location, type, size and design of traffic signing (pavement markings);<br>• Names/layout of existing abutting streets;<br>• Driveway curb cuts for abutting prop. and public roads;<br>• If subdivision; Names of all roads, right of way lines and easements noted;<br>• AASHTO truck turning templates, description of minimum vehicle allowed being a WB-50 (unless otherwise approved by TAC). | C-04 & C-12 | |
| ☑ | **4. Parking and Loading: (2.5.4.3D)**<br>• Location of off street parking/loading areas, landscaped areas/buffers;<br>• Parking Calculations (# required and the # provided). | C-04 | |
| ☑ | **5. Water Infrastructure: (2.5.4.3E)**<br>• Size, type and location of water mains, shut-offs, hydrants & Engineering data;<br>• Location of wells and monitoring wells (include protective radii). | C-06 | |
| ☑ | **6. Sewer Infrastructure: (2.5.4.3F)**<br>• Size, type and location of sanitary sewage facilities & Engineering data, including any onsite temporary facilities during construction period. | C-06 | |

| | | | |
|---|---|---|---|
| ☑ | **7. Utilities: (2.5.4.3G)**<br>• The size, type and location of all above & below ground utilities;<br>• Size type and location of generator pads, transformers and other fixtures. | C-06 | |
| ☑ | **8. Solid Waste Facilities: (2.5.4.3H)** | | |
| | • The size, type and location of solid waste facilities. | C-06 | |
| ☑ | **9. Storm water Management: (2.5.4.3I)**<br>• The location, elevation and layout of all storm-water drainage.<br>• The location of onsite snow storage areas and/or proposed off-site snow removal provisions.<br>• Location and containment measures for any salt storage facilities<br>• Location of proposed temporary and permanent material storage locations and distance from wetlands, water bodies, and stormwater structures. | C-05 | |
| ☑ | **10. Outdoor Lighting: (2.5.4.3J)**<br>• Type and placement of all lighting (exterior of building, parking lot and any other areas of the site) and photometric plan. | Lighting Plan | |
| ☑ | **11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)** | Lighting Plan | |
| ☑ | **12. Landscaping: (2.5.4.3K)**<br>• Identify all undisturbed area, existing vegetation and that which is to be retained;<br>• Location of any irrigation system and water source. | C-07 | |
| ☑ | **13. Contours and Elevation: (2.5.4.3L)**<br>• Existing/Proposed contours (2 foot minimum) and finished grade elevations. | S-01 & C-05 | |
| ☑ | **14. Open Space: (2.5.4.3M)**<br>• Type, extent and location of all existing/proposed open space. | S-01 & C-04 | |
| ☑ | **15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)** | S-01 | |
| ☑ | **16. Character/Civic District (All following information shall be included): (2.5.4.3P)**<br>• Applicable Building Height (10.5A21.20 & 10.5A43.30);<br>• Applicable Special Requirements (10.5A21.30);<br>• Proposed building form/type (10.5A43);<br>• Proposed community space (10.5A46). | C-04 | |
| ☑ | **17. Special Flood Hazard Areas (2.5.4.3Q)**<br>• The proposed development is consistent with the need to minimize flood damage;<br>• All public utilities and facilities are located and construction to minimize or eliminate flood damage;<br>• 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)** | Traffic Memo | |
| ☑ | Indicate where Low Impact Development Design practices have been incorporated. **(7.1)** | Drainage Analysis Report | |
| ☑ | 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)** | Not within wellhead protection area | |
| ☑ | Stormwater Management and Erosion Control Plan. **(7.4)** | C-09 | |
| ☑ | Inspection and Maintenance Plan **(7.6.5)** | Drainage Analysis Report | |

| 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:<br>• Waivers;<br>• Driveway permits;<br>• Special exceptions;<br>• Variances granted;<br>• Easements;<br>• Licenses.<br>**(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:<br>• Calculations relating to stormwater runoff;<br>• Information on composition and quantity of water demand and wastewater generated;<br>• Information on air, water or land pollutants to be discharged, including standards, quantity, treatment and/or controls;<br>• Estimates of traffic generation and counts pre- and post-construction;<br>• Estimates of noise generation;<br>• A Stormwater Management and Erosion Control Plan;<br>• Endangered species and archaeological / historical studies;<br>• Wetland and water body (coastal and inland) delineations;<br>• Environmental impact studies.<br>**(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.<br>**(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)** | | |
| ☐ | 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)** | | |
| ☐ | Plan sheets submitted for recording shall include the following notes:<br>a. "This Site Plan shall be recorded in the Rockingham County Registry of Deeds."<br>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:** November 17, 2025

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

# Abutters List

**COLBEA ENTERPRISES LLC**
**1980 WOODBURY AVE, PORTSMOUTH, NH**
November 17, 2025
46077.16

| Assessors Map | | Abutter Name | Mailing Address |
|---|---|---|---|
| Map | Lot | | |
| LOCUS 239 | 11 | COLBEA ENTERPRISES LLC | 695 GEORGE WASHINGTON HWY<br>LINCOLN, RD 02865 |
| 239 | 12 | PORTSMOUTH HOUSING AUTHORITY | 245 MIDDLE ST<br>PORTSMOUTH, NH 03801 |
| 239 | 10 | RIX MAR REALTY TRUST | 175 CANAL ST SUITE 401<br>MANCHESTER, NH 03101 |
| 215 | 7 | DANGELO INC, ATTN A/P | PO BOX 519<br>W BRIDGEWATER, MA 02379 |
| 34 | 2 | CFI PROPERTIES LLC | 165 FLANDERS ROAD<br>WESTBOROUGH, MA 01851 |
| 34 | 1 | NEWINGTON CROSSING LLC | 291 CARL BROGG HIGHWAY<br>LEBANON, NH 04027 |
| | | | |
| Civil Engineers / Surveyor | | TFMoran, Inc. | 170 Commerce Way - Suite 102<br>Portsmouth, NH 03801 |

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

# TRAFFIC MEMORANDUM

Date: 14 November 2025

To: City of Portsmouth
1 Junkins Ave, 3rd Floor
Portsmouth, NH

From: Robert E. Duval, P.E.

**Re: Proposed Gas Station & Convenience Store**
**1980 Woodbury Avenue (Lot 239/11), Portsmouth NH**
TFM Project No. 46077.16

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## INTRODUCTION

TFMoran has prepared this traffic memo to evaluate the change in trip generation associated with a proposal to replace an existing gas station/convenience store on Woodbury Ave in Portsmouth, NH with a new gas/convenience store.

The existing site is located at the southwest corner of Woodbury Ave and Gosling Road. The site has three existing driveways, one on Gosling Road and two on Woodbury Ave.

Colbea Enterprises, LLC is proposing to raze the existing 1800 sf x 16 vfp gas/convenience store and build a new, 5500 sf x 12 vfp gas/convenience store on the lot. The three driveway access points will be maintained, with one right-in/right-out driveway on Gosling Road, and a right n enter-only an the north Woodbury Ave access closest to the intersection to be enter-only, and the south Woodbury Ave driveway to remain full access.

## DESCRIPTION OF ROADWAYS AND INTERSECTIONS

*Woodbury Ave*

- Classification. Woodbury Ave is a City-maintained arterial that runs from Arboretum Ave at Pease Tradeport in the north to Barlett Street in downtown Portsmouth to the south.
- AADT volume. NHDOT station 82379077 on Woodbury Ave south of Durgin Lane shows 14,530 vehicles per day (2024).
- Lane widths and usage. In the project vicinity, the roadway generally provides two travel lane in each direction, with turn lanes at major intersections and curbed sidewalks on both sides of the road. The speed limit is posted at 30 mph. Pavement markings consist of a double-yellow centerline and solid white shoulder markings and white skip lines between lanes.
- Lighting. There are cobra-head lights along the roadway and at intersections.
- Adjacent uses include mainly retail and commercial with some side streets to residential neighborhoods.

*Gosling Road*

- Classification. Gosling Road is a City-maintained major collector that runs east from the Spaulding Turnpike Exit 1 interchange at Pease Blvd to Schiller Station on the Piscataqua River.
- AADT volume. NHDOT station 82379130 on Gosling Road west of Woodbury Ave shows 11,535 vehicles per day (2024).
- Lane widths and usage. In the project vicinity, the roadway generally provides two travel lanes in each direction, with turn lanes at major intersections. There are generally sidewalks and granite curbing on the south side and a mixture of curbing and open drainage to the north. A concrete median separates the two directions of travel. The posted speed limit is 30 mph. Pavement markings consist of a double-yellow centerline and solid white shoulder markings and white skip lines between lanes.
- Lighting. There are cobra-head lights along the roadway and at intersections.
- Adjacent uses include several large industrial, retail, and residential developments.

*Woodbury Ave at Gosling Road*

- Traffic Control. This is an existing 4-way signalized intersection with Gosling Road forming the eastbound and westbound approaches, and Woodbury Ave forming the northbound and southbound approaches. A raised median island is provided on all approaches except the westbound approach.
- Pedestrian facilities. There are pedestrian crosswalks at each approach with pedestrian signals and push buttons.
- Approaches. Each approach accommodates two way traffic. The eastbound approach has an exclusive right-turn lane and a left-thru lane. Westbound has one lane that provides left-thru-right movements. The northbound approach provides two exclusive left turn lanes, a thru lane and a thru-right lane. Southbound has an exclusive right-turn lane and an exclusive left-turn lane with two thru lanes.
- Signage. There are lane usage signs on each approach and roadway navigation signage.
- Lighting. There are cobra-head fixtures at the northwest and southeast corners on the mast arms.

## TRIP GENERATION

Trip generation rates published by the ITE (12th Edition) for Land Use Code (LUC) 945, Convenience Store / Gas Station, were used to calculate vehicle trips for the existing and proposed facilities. The following table shows existing and proposed trip generation and composition, as well as the net change in trips for the new proposal.

Site-generated trips can be broken down into Primary trips, Pass-by trips, and Diverted-linked trips[1],. A primary trip typically goes from the origin to the generator and then returns to the origin. Pass-by trips are attracted from traffic passing the site on an adjacent roadway; i.e. trips already using Gosling Road or Woodbury Ave. Because the site is located at the intersection of two major roadways, Diverted-Linked trips are considered Primary trips for this project.

[1] ITE Trip Generation Handbook (3rd edition), Appendix E, September 2017.

**Table 1: Trip Generation & Composition**

| | Non Pass-By | | Pass-By | | Total Trips at Site | **New** Trips on Streets |
|---|---|---|---|---|---|---|
| | In | Out | In | Out | | |
| **Existing Gas / Convenience** | | | | | | |
| Weekday AM Peak Hour Adjacent Street | 26 | 26 | 83 | 83 | 218 | **52** |
| Weekday PM Peak Hour Adjacent Street | 32 | 32 | 95 | 95 | 254 | **64** |
| Weekend SAT Peak Hour of the Generator | 29 | 29 | 86 | 86 | 230 | **58** |
| **Proposed Gas / Convenience** | | | | | | |
| Weekday AM Peak Hour Adjacent Street | 32 | 32 | 102 | 101 | 267 | **64** |
| Weekday PM Peak Hour Adjacent Street | 34 | 34 | 104 | 103 | 275 | **68** |
| Weekend SAT Peak Hour of the Generator | 34 | 35 | 104 | 104 | 277 | **69** |
| **Change in Trip Composition** | | | | | | |
| Weekday AM Peak Hour Adjacent Street | 6 | 6 | 19 | 18 | 49 | **12** |
| Weekday PM Peak Hour Adjacent Street | 2 | 2 | 9 | 8 | 21 | **4** |
| Weekend SAT Peak Hour of the Generator | 5 | 6 | 18 | 18 | 47 | **11** |

## CONCLUSION

The change in traffic associated with this redevelopment will add approximately 20-50 total trips at the driveways during peak hours, or less than one added trip per minute for AM and Sat hours, and one per 3 minutes in the PM.

Due to the nature of the use, 75% of these driveway volumes will be pass-by trips already on the roadways. Thus only 4 to 12 trips per hour will be added to the roadway network.

This level of traffic is significantly less than day-to-day variations in volume along the adjacent roadways, and represents less than one additional vehicle per cycle passing through the signal. The roadways and signal are appropriately sized to accommodate this minimal change in new trips.

In summary, we find that the traffic associated with this proposal can be safely accommodated on the adjacent roadway network without need for improvements. Please let me know if you have any questions in regard to these items.

**TFMORAN, INC.**



Robert Duval, PE
Chief Engineer

## Existing Trip Generation

*Based on ITE Trip Generation 12th Edition*

**ITE LUC 945 - Convenience Store / Gas Station: 1,800 S.F. (8 pumps, 16 vfp)**

| Time Period | Variable: VFP Subcat: GFA (2-4k) X | | Rate /Eq Used | Trip Ends | Directional Split* In | Directional Split* Out | Directional Distribution In | Directional Distribution Out |
|---|---|---|---|---|---|---|---|---|
| Weekday AM Peak Hour Adjacent Street | 16 | 13.65 | Rate | 218 | 50% | 50% | 109 | 109 |
| Weekday PM Peak Hour Adjacent Street | 16 | 15.85 | Rate | 254 | 50% | 50% | 127 | 127 |
| Weekend SAT Peak Hour of Generator | 16 | 14.39 | Rate | 230 | 50% | 50% | 115 | 115 |
| Weekday Daily | 16 | 211.05 | Rate | 3377 | 50% | 50% | 1689 | 1688 |
| Weekend (SAT) Daily | 16 | | Rate | 0 | | 100% | 0 | 0 |

## Existing Trip Composition

**ITE LUC 945 - Convenience Store / Gas Station: 1,800 S.F. (8 pumps, 16 vfp)**

| | Trips IN | Trips OUT | Primary % In | Primary # In | Primary % Out | Primary # Out | Pass-By* % In | Pass-By* # In | Pass-By* % Out | Pass-By* # Out |
|---|---|---|---|---|---|---|---|---|---|---|
| AM | **109** | **109** | 24% | 26 | 24% | 26 | 76% | 83 | 76% | 83 |
| PM | **127** | **127** | 25% | 32 | 25% | 32 | 75% | 95 | 75% | 95 |
| SAT | **115** | **115** | 25% | 29 | 25% | 29 | 75% | 86 | 75% | 86 |

* Table: Vehicle Pass-By Rates by Land Use, ITE Trip Generation Manual, 12th Edition, LUC 945 Convenience Store/Gas Station, General Urban/Suburban, Weekday AM Peak Period, Weekday PM Peak Period, Sites with between 9and 20 VFP, - used PM % for SAT since rates are similar.

## Proposed Trip Generation

*Based on ITE Trip Generation 12th Edition*

**ITE LUC 945 - Convenience Store / Gas Station: 5,500 S.F. (6 pumps, 12 vfp)**

| Time Period | Variable: SF Subcat: VFP (9-15) X | | Rate/ Eq Used | Trip Ends | Directional Split In | Directional Split Out | Directional Distribution In | Directional Distribution Out |
|---|---|---|---|---|---|---|---|---|
| Weekday AM Peak Hour Adjacent Street | 5.5 | 48.6 | Rate | 267 | 50% | 50% | 134 | 133 |
| Weekday PM Peak Hour Adjacent Street | 5.5 | 50.08 | Rate | 275 | 50% | 50% | 138 | 137 |
| Weekend SAT Peak Hour of Generator | 5.5 | 50.33 | Rate | 277 | 50% | 50% | 138 | 139 |
| Weekday Daily | 5.5 | 579.86 | Rate | 3189 | 50% | 50% | 1595 | 1594 |
| Weekend (SAT) Daily | 5.5 | 700.00 | Rate | 3850 | 50% | 50% | 1925 | 1925 |

## Proposed Trip Composition

**ITE LUC 945 - Convenience Store / Gas Station: 5,500 S.F. (6 pumps, 12 vfp)**

| | Trips IN | Trips OUT | Primary % In | Primary # In | Primary % Out | Primary # Out | Pass-By* % In | Pass-By* # In | Pass-By* % Out | Pass-By* # Out |
|---|---|---|---|---|---|---|---|---|---|---|
| AM | **134** | **133** | 24% | 32 | 24% | 32 | 76% | 102 | 76% | 101 |
| PM | **138** | **137** | 25% | 34 | 25% | 34 | 75% | 104 | 75% | 103 |
| SAT | **138** | **139** | 25% | 34 | 25% | 35 | 75% | 104 | 75% | 104 |

* Table: Vehicle Pass-By Rates by Land Use, ITE Trip Generation Manual, 12th Edition, LUC 945 Convenience Store/Gas Station, General Urban/Suburban, Weekday AM Peak Period, Weekday PM Peak Period, Sites with between 9and 20 VFP, - used PM % for SAT since rates are similar.

## Change in Trip Generation

| TOTAL TRIP GENERATION | Trip Ends | | In | Out |
|---|---|---|---|---|
| Weekday AM Peak Hour Adjacent Street | 49 | | 25 | 24 |
| Weekday PM Peak Hour Adjacent Street | 21 | | 11 | 10 |
| Weekend SAT Peak Hour of Generator | 47 | | 23 | 24 |
| Weekday Daily | -188 | | -94 | -94 |
| Weekend (SAT) Daily | no existing data | | | |

## Change in Trip Composition

| | Trips IN | Trips OUT | Primary | Primary # In | Primary | Primary # Out | Pass-By* | Pass-By* # In | Pass-By* | Pass-By* # Out |
|---|---|---|---|---|---|---|---|---|---|---|
| AM | **25** | **24** | | 6 | | 6 | | 19 | | 18 |
| PM | **11** | **10** | | 2 | | 2 | | 9 | | 8 |
| SAT | **23** | **24** | | 5 | | 6 | | 18 | | 18 |

**Existing Trip Generation - Comparison between variables**

*Based on ITE Trip Generation 12th Edition*

**ITE LUC 945 - Convenience Store / Gas Station: 1,800 S.F. (8 pumps, 16 vfp)**

| Time Period | Variable: VFP Subcat: GFA (2-4k) X | | Rate /Eq Used | Trip Ends | Directional Split* | | Directional Distribution | |
|---|---|---|---|---|---|---|---|---|
| | | | | | In | Out | In | Out |
| Weekday AM Peak Hour Adjacent Street | 16 | 13.65 | Rate | 218 | 50% | 50% | 109 | 109 |
| Weekday PM Peak Hour Adjacent Street | 16 | 15.85 | Rate | 254 | 50% | 50% | 127 | 127 |
| Weekend SAT Peak Hour of Generator | 16 | 14.39 | Rate | 230 | 50% | 50% | 115 | 115 |
| Weekday Daily | 16 | 211.05 | Rate | 3377 | 50% | 50% | 1689 | 1688 |
| Weekend (SAT) Daily | 16 | | Rate | 0 | | 100% | 0 | 0 |

**ITE LUC 945 - Convenience Store / Gas Station: 1,800 S.F. (8 pumps, 16 vfp)**

| Time Period | Variable: SF Subcat: VFP (16-24) X | | Rate/ Eq Used | Trip Ends | Directional Split | | Directional Distribution | |
|---|---|---|---|---|---|---|---|---|
| | | | | | In | Out | In | Out |
| Weekday AM Peak Hour Adjacent Street | 1.8 | 64.97 | Rate | 117 | 51% | 49% | 60 | 57 |
| Weekday PM Peak Hour Adjacent Street | 1.8 | 61.09 | Rate | 110 | 50% | 50% | 55 | 55 |
| Weekend SAT Peak Hour of Generator | 1.8 | 54.02 | Rate | 97 | 50% | 50% | 49 | 48 |
| Weekday Daily | 1.8 | 642.41 | Rate | 1156 | 50% | 50% | 578 | 578 |
| Weekend (SAT) Daily | 1.8 | | Rate | 0 | | 100% | 0 | 0 |

**Description of LUC 945:**

A convenience store/gas station is a facility with a co-located convenience store and gas station. The convenience store sells groceries and other everyday items that a person may need or want as a matter of convenience. The gas station sells automotive fuels such as gasoline and diesel. The sites in this land use include both self-pump and attendant-pumped fueling positions and both pre-pay and post-pay operations.

A convenience store/gas station is typically located along a major thoroughfare to optimize motorist convenience. Extended hours of operation (with many open 24 hours, 7 days a week) are common at these facilities.

The convenience store product mix typically includes pre-packaged grocery items, beverages, dairy products, snack foods, confectionary, tobacco products, over-the-counter drugs, and toiletries. A convenience store may sell alcohol, often limited to beer and wine. Coffee and premade sandwiches are also commonly sold at a convenience store. Made-to-order food orders are sometimes offered. Some stores offer limited seating

**Proposed Trip Generation - Comparision between variables**

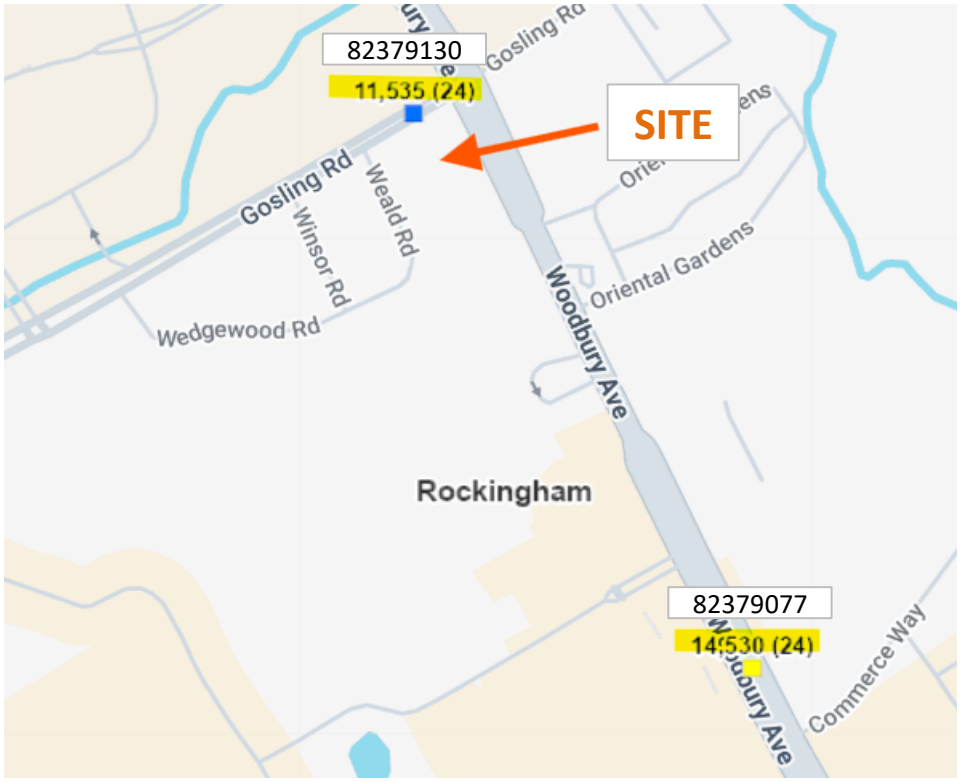
*Based on ITE Trip Generation 12th Edition*

**ITE LUC 945 - Convenience Store / Gas Station: 5,500 S.F. (6 pumps, 12 vfp)**

| Time Period | Variable: VFP Subcat: GFA (4-5.5k) X | | Rate/ Eq Used | Trip Ends | Directional Split | | Directional Distribution | |
|---|---|---|---|---|---|---|---|---|
| | | | | | In | Out | In | Out |
| Weekday AM Peak Hour Adjacent Street | 12 | 19.91 | Rate | 239 | 51% | 49% | 122 | 117 |
| Weekday PM Peak Hour Adjacent Street | 12 | 19.15 | Rate | 230 | 50% | 50% | 115 | 115 |
| Weekend SAT Peak Hour of Generator | 12 | 19.2 | Rate | 230 | 51% | 49% | 118 | 112 |
| Weekday Daily | 12 | 203.49 | Rate | 2442 | 50% | 50% | 1221 | 1221 |
| Weekend (SAT) Daily | 12 | 291.67 | Rate | 3500 | 50% | 50% | 1750 | 1750 |

**ITE LUC 945 - Convenience Store / Gas Station: 5,500 S.F. (6 pumps, 12 vfp)**

| Time Period | Variable: SF Subcat: VFP (9-15) X | | Rate/ Eq Used | Trip Ends | Directional Split | | Directional Distribution | |
|---|---|---|---|---|---|---|---|---|
| | | | | | In | Out | In | Out |
| Weekday AM Peak Hour Adjacent Street | 5.5 | 48.6 | Rate | 267 | 50% | 50% | 134 | 133 |
| Weekday PM Peak Hour Adjacent Street | 5.5 | 50.08 | Rate | 275 | 50% | 50% | 138 | 137 |
| Weekend SAT Peak Hour of Generator | 5.5 | 50.33 | Rate | 277 | 50% | 50% | 138 | 139 |
| Weekday Daily | 5.5 | 579.86 | Rate | 3189 | 50% | 50% | 1595 | 1594 |
| Weekend (SAT) Daily | 5.5 | 700.00 | Rate | 3850 | 50% | 50% | 1925 | 1925 |


82379130
11,535 (24)
SITE
Gosling Rd
Weald Rd
Winsor Rd
Wedgewood Rd
Woodbury Ave
Oriental Gardens
Rockingham
82379077
14,530 (24)
Commerce Way

# Traffic Count (TCDS)

Home | Locate | Locate All | Email This | Backup | Auto-Locate:

List View | All DIRs | Save Search | Report Center | Ad-Hoc Rpts | Graphs/Rpts

Record 1 of 1 Goto Record go

| | | | |
|---|---|---|---|
| Location ID | 82379130 | MPO ID | |
| Type | SPOT | HPMS ID | |
| On NHS | No | On HPMS | Yes |
| LRS ID | L3790486__ | LRS Loc Pt. | |
| SF Group | 04 (2024) | Route Type | |
| AF Group | 04 (2024) | Route | |
| GF Group | E (2024) | Active | Yes |
| Class Dist Grp | Default (2024) | Category | Short Count Volume |
| Seas Clss Grp | Default (2024) | | |
| WIM Group | Default (2024) | | |
| QC Group | Default | | |
| Fnct'l Class | Major Collector | Milepost | |
| Located On | Gosling Rd | | |
| Loc On Alias | GOSLING RD WEST OF WOODBURY AVENUE | | |

More Detail

## STATION DATA

Directions: 2-WAY

### AADT

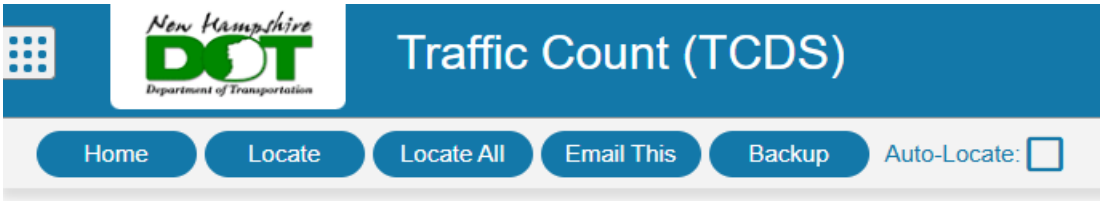
Graph

| Year | AADT | DHV-30 | K % | D % | PA | BC | Src |
|---|---|---|---|---|---|---|---|
| 2024 | 11,535[3] | | | | 10,680 (93%) | 855 (7%) | Grown from 2023 |
| 2023 | 11,309[3] | | 11 | | 10,505 (93%) | 804 (7%) | Grown from 2022 |
| 2022 | 11,055 | 1,269 | 11 | | 10,360 (94%) | 695 (6%) | |
| 2021 | 11,530[3] | | 12 | | 10,481 (91%) | 1,049 (9%) | Grown from 2020 |

### VOLUME COUNT

Graphs/Rpts

| Date | Int | Total | Status |
|---|---|---|---|
| Thu 7/17/2025 | 15 | 12,563 | ✔ |
| Wed 7/16/2025 | 15 | 11,947 | ✔ |
| Thu 8/11/2022 | 60 | 12,922 | ✔ |
| Wed 8/10/2022 | 60 | 12,715 | ✔ |
| Tue 8/9/2022 | 60 | 13,064 | ✔ |
| Thu 6/6/2019 | 60 | 14,066 | ✔ |
| Wed 6/5/2019 | 60 | 14,524 | ✔ |
| Tue 6/4/2019 | 60 | 14,258 | ✔ |
| Wed 7/27/2016 | 60 | 15,840 | ✔ |
| Tue 7/26/2016 | 60 | 16,166 | ✔ |




| | | | |
|---|---|---|---|
| Location ID | 82379077 | MPO ID | |
| Type | SPOT | HPMS ID | |
| On NHS | No | On HPMS | Yes |
| LRS ID | N3790035__ | LRS Loc Pt. | |
| SF Group | 04 (2024) | Route Type | |
| AF Group | 04 (2024) | Route | |
| GF Group | E (2024) | Active | Yes |
| Class Dist Grp | Default (2024) | Category | Short Count Class |
| Seas Clss Grp | Default (2024) | | |
| WIM Group | Default (2024) | | |
| QC Group | Default | | |
| Fnct'l Class | Minor Arterial | Milepost | |
| Located On | Woodbury Ave | | |
| Loc On Alias | WOODBURY AVE SOUTH OF DURGIN LANE (SB-NB) (81379208-81379209) | | |

More Detail

**STATION DATA**

**Directions:** 2-WAY | NB | SB

**AADT** Graph

| | Year | AADT | DHV-30 | K % | D % | PA | BC | Src |
|---|---|---|---|---|---|---|---|---|
| | 2024 | 14,530[3] | | | | 13,453 (93%) | 1,077 (7%) | Grown from 2023 |
| | 2023 | 14,245 | 1,418 | 10 | 51 | 13,563 (95%) | 682 (5%) | |
| | 2022 | 16,032[3] | | 10 | 54 | 15,023 (94%) | 1,009 (6%) | Grown from 2021 |
| | 2021 | 15,733[3] | | 10 | 54 | 14,302 (91%) | 1,431 (9%) | Grown from 2020 |

**VOLUME COUNT** Graphs/Rpts

| | Date | Int | Total | Status |
|---|---|---|---|---|
| | Thu 7/20/2023 | 15 | 16,472 | ✔ |
| | Wed 7/19/2023 | 15 | 16,728 | ✔ |
| | Tue 7/18/2023 | 15 | 16,471 | ✔ |
| | Thu 8/13/2020 | 60 | 16,627 | ✔ |
| | Wed 8/12/2020 | 60 | 16,071 | ✔ |
| | Tue 8/11/2020 | 60 | 16,511 | ✔ |
| | Thu 9/21/2017 | 60 | 16,733 | ✔ |
| | Wed 9/20/2017 | 60 | 18,212 | ✔ |
| | Tue 9/19/2017 | 60 | 17,778 | ✔ |

Project #46077.16

# *DRAINAGE ANALYSIS REPORT*

**F O R**

# Proposed Gas Station & Convenience Store

**1980 Woodbury Avenue**
**Portsmouth, NH 03801**

**Tax Map 239, Lot 11**

**Owned by Colbea Enterprises, LLC**

**November 17, 2025**

**Prepared By:**

TFM Since 1968

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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## 1.0 - SUMMARY & PROJECT DESCRIPTION

The project includes the development of a Gas Station and Convenience Store at 1980 Woodbury Avenue, Portsmouth, NH. The existing Tax Map 239 Lot 11 is approximately 0.88 acres and currently contains a gas station and convenience store. The site is within the Gateway Neighborhood Mixed Use Corridor and is adjacent to the intersection of Woodbury Avenue and Gosling Road as well as the Portsmouth – Newington Town border.

The proposed project is to construct a 5,500 s.f. single-story building. Associated improvements include and are not limited to access, grading, utilities, stormwater management system, lighting, and landscaping. The project proposes a total of 30,521 SF of impervious area within the property lines and approximately 38,399 SF of disturbance to facilitate the development.

This analysis has been completed to verify the project will not pose adverse stormwater effects on-site and off-site. Compared to the pre-development conditions, the post-development stormwater management system has been designed to reduce peak runoff rates, reduce, or increases within regulatory limits, the runoff volume, reduces the risk of erosion and sedimentation, and improves stormwater runoff quality. In addition, Best Management Practices are employed to formulate a plan that assures stormwater quality both during and after construction. The following summarizes the findings from the study.

## 2.0 - CALCULATION METHODS

The design storms analyzed in this study are the 2-year, 10-year, 25-year and 50-year 24-hour storm events. The software program, HydroCAD version 10.00[1] was utilized to calculate the peak runoff rates from these storm events. The program estimates the peak rates using the TR-20 method. A Type III storm pattern was used in the model. Rainfall frequencies for the analyzed region were also incorporated into the model. Rainfall frequencies from the higher of the Extreme Precipitation Rates from Cornell University's Northeast Regional Climate Center (see Appendix A) and Portsmouth Site Plan Review Regulations were used to determine the storm-event intensities, see Table 1. Due to the project's location within the Coastal/Great Bay Region community, the design rainfall increases the Cornell rates by 15% to address projected storm surge, sea level rise, and precipitation events per Env-Wq 1503.08(I). Design standards were taken from the New Hampshire Stormwater Manual, December 2008[2].

| | 24-HOUR RAINFALL RATES | |
|---|---|---|
| Storm-Event (year) | Northeast Regional Climate Center Extreme Precipitation (in) | Design Rainfall (in) |
| 2 | 3.19 | 3.67 |
| 10 | 4.84 | 5.57 |
| 25 | 6.13 | 7.05 |
| 50 | 7.35 | 8.45 |

**Table 1 – 24-Hour Rainfall Rates**

[1] HydroCAD version 10.00, HydroCAD Software Solutions LLC, Chocorua, NH, 2013.
[2] New Hampshire Stormwater Manual: Volume One - Stormwater and Antidegradation, December 2008; Volume Two - Post-Construction Best Management Practices Selection and Design, December 2008; Volume Three - Erosion and Sediment Controls During Construction, December 2008.

Time of Concentration is the time it takes for water to flow from the hydraulically most remote point in the watershed (with the longest travel time) to the watershed outlet. This time is determined by calculating the time it takes runoff to travel this route under one of three hydrologic conditions: sheet flow, shallow concentrated flow, or channel flow. Because the Intensity-Duration-Frequency (IDF) curve is steep with short TC's, estimating the actual intensity is subject to error and overestimates actual runoff. Due to this, the TC's are adjusted to a minimum of 6 minutes.

## 3.0 – EXISTING SITE CONDITIONS

The soils within the proposed area of disturbance are identified by the NRCS Web Soil (see Appendix B for detail and soil locations). The soils are composed of Urban Land (No HSG Rating).

## 4.0 - PRE-DEVELOPMENT CONDITIONS

The pre-development condition is characterized by one watershed divided into many subcatchments. Stormwater runoff from the site primarily drains to the municipal stormwater system. There are catch basins located throughout the site that lead to a catch basin in Gosling Road before leaving the area. Pre-development subcatchment areas are depicted on the attached plan entitled "Pre-Development Drainage Map," Sheet D-01 in Appendix G.

In the pre-development condition, the total impervious area is 31,059 SF over a total drainage analysis area of 38,399 SF.

## 5.0 - POST-DEVELOPMENT CONDITIONS

The post-development condition is characterized by one watershed divided into many subcatchment areas. Post-development subcatchment areas are depicted on the attached plan entitled "Post-Development Drainage Map," sheet D-02 in Appendix G.

In the post-development condition, the total impervious area is 30,521 SF over a total drainage analysis area of 30,399 SF. Impervious area from the project consists of a 5,500 SF footprint Convenience Store and associated improvements. A Stormceptor, Stormtech chambers, and Jellyfish filter are proposed to treat and mitigate the stormwater runoff from the impact of the new impervious area from the proposed development.

Table 2 summarizes the pre- and post-development peak runoff rates for the 2-year, 10-year, 25-year, and 50-year 24-hour Type III storm events for all discharge. Table 3 summarizes the pre- and post-development peak runoff volumes for the 2-year 24-hour Type III storm events for all discharge.

| TABLE 2 – SURFACE WATER PEAK RUNOFF RATE COMPARISON (CF) | | | | | |
|---|---|---|---|---|---|
| POINT OF INTEREST | | DESIGN STORM | | | |
| | | 2-year | 10-year | 25-year | 50-year |
| Map 239 Lot 12 | Pre | 0.0 | 0.1 | 0.1 | 0.1 |
| | Post | 0.0 | 0.1 | 0.1 | 0.1 |
| CB #1428 | Pre | 2.4 | 3.7 | 4.8 | 5.8 |
| | Post | 2.3 | 3.6 | 4.5 | 5.3 |
| CB #1343 | Pre | 0.4 | 0.7 | 0.9 | 1.0 |
| | Post | 0.0 | 0.1 | 0.1 | 0.1 |

**Table 2 - Pre and Post- Development Peak Runoff Rate Comparison**

| TABLE 3 – SURFACE WATER PEAK RUNOFF VOLUME COMPARISON (CF) | | |
|---|---|---|
| POINT OF INTEREST | | DESIGN STORM |
| | | 2-year |
| Map 239 Lot 12 | Pre | 85 |
| | Post | 132 |
| CB #1428 | Pre | 7,973 |
| | Post | 9,261 |
| CB #1343 | Pre | 1,462 |
| | Post | 83 |

**Table 3 - Pre and Post- Development Peak Runoff Volume Comparison**

The proposed project reduces peak rates of runoff compared to existing conditions for all storm events, in accordance Portsmouth stormwater regulations. Additionally, per NHDES, the 2-year 24-hour storm does not result in an increased peak flow rate and reduces, or increases volume within the limits of Env-Wq 1507.05(b)(1), from the pre-development to post-development condition. There will be no adverse effects on the abutting properties from the proposed stormwater management system.

Appendices C and E summarizes all 24-hour storm events for pre- and post-development drainage calculations using HydroCAD analysis. Appendices D and F provide a full summary of the 10-year, 24-hour storm for the pre- and post-development drainage calculations using HydroCAD analysis.

There were four warning messages for the 10-year storm event related to the proposed Stormtech detention system:

- *[80] Warning: Pond CB05 exceeded Pond CB07 by 0.02' @ 12.10hrs (0.5cfs 144cf)*
- *[80] Warning: Pond CB07 exceeded Pond CB06 by 0.25' @ 12.10hrs (1.8cfs 442cf)*
- *[80] Warning: Pond CB07 exceeded Pond CB08 by 0.20' @ 12.10hrs (0.8cfs 153cf)*
- *[80] Warning: Pond CB09 exceeded Pond CB10 by 0.04' @ 12.10hrs (0.8cfs 251cf)*
- *[80] Warning: Pond DMH03 exceeded Pond CB04 by 0.04' @ 12.15hrs (0.8cfs 272cf)*

Warning 80 occurs due stormwater staging in the Subsurface Infiltration Basins, causing some adjacent stormwater drainage systems to also stage stormwater. The exceeded catch basins

and manholes are located where inverts into the basins are similar to the bottom of the chambers.

Catch basin and manhole inverts were adjusted to minimize the severity of this occurrence. Catch basin and manholes have been designed to maintain 2' of cover over culverts, slopes of at least 0.5%, and 0.1' drop between inlet and outlet. For all analyzed storm events, stormwater contained in catch basins and manholes do not overflow structure rims.

## 6.0 – REGULATORY COMPLIANCE

The following regulatory requirements are provided to show project conformance to the applicable criteria of the City of Portsmouth stormwater management regulations defined in the Portsmouth Site Plan Review Regulations Section 7.6.1. All regulations are met.

1. *Adequate provisions shall be made to retain natural and existing flow patterns and maintain existing groundwater recharge volumes to the maximum extent feasible, where appropriate, and/or retain, treat, and/or potentially reuse the stormwater generated on the site.*
    a. In both the existing and proposed site conditions, the site will drain to the municipal system via catch basins along Woodbury Avenue and Gosling Road.

2. *Efforts shall be made to utilize methods that disconnect and/or reduce the amount of effective impervious area including, but not limited to, infiltration trenches, dry wells, bioretention areas, filter strips, permeable pavement, and cisterns.*
    a. The proposed site improvements will result in an overall decrease in impervious area compared to what exists today. In addition to the reduced impervious area, significant plantings are proposed where almost no vegetation exists today.

3. *Applicants shall demonstrate why on-site infiltration approaches are not possible or adequate before proposing the use of conventional systems that rely on collection and conveyance to remove runoff from the site.*
    a. Due to the location of this development and classification of the site, by NRCS, as urban land, the site is not conditioned for infiltration.

4. *All proposed stormwater treatment practices shall be adequately sized to treat the Water Quality Volume (WQV) or Water Quality Flow (WQF) in order to minimize pollutant discharges and be properly maintained in accordance with NH Administrative Code PART Env-Wq 1507.03 "Pollutant Discharge Minimization Requirements" and PART Env-Wq 1707.03, respectively (or as revised/renumbered).*
    a. The proposed treatment methods, including the Stormceptor and Jellyfish filter are sized to handle the water quality flow and water quality volume.

5. *Where vegetative areas are used to control and treat stormwater, such areas shall be planted with appropriate non-invasive groundcover, shrubs, and/or other plantings sufficient to prevent soil erosion and to promote proper treatment of stormwater.*
    a. Vegetative areas for stormwater treatment are not proposed although all plants proposed on-site are non-invasive.
6. *Measures shall be taken to control the post-development peak rate of runoff so that it does not exceed pre-development runoff for the 2, 10, 25, and 50-year, 24-hour storm event. Rainfall amounts for these events shall be based on local rainfall data using the extreme precipitation table provided by the Northeast Regional Climate Center or as otherwise required by the NHDES Alteration of Terrain requirements, if applicable.*

a. The peak rate of runoff is maintained or decreased for all storm events listed above.

7. *Where stormwater will discharge directly to tidal waters, the Planning Board may waive peak flow control requirements provided the Applicant can demonstrate minimal risk of flooding or increased erosion as result of the discharge, adequate onsite stormwater treatment is provided for water quality purposes and the City Engineer concurs with the waiver request.*
    a. The site does not drain directly to tidal waters.
8. *Site development shall comply with the requirements of the Flood Plain District as regulated by the Zoning Ordinance.*
    a. The site is not within the Flood Plain District.

9. *BMP designs shall include appropriate separation distances from the seasonal high-water table elevations, where appropriate, and as specified in the New Hampshire Stormwater Manual (as amended).*
    a. The proposed stormtech system includes an impervious liner. This will provide appropriate separation from the estimated seasonal high water table.

10. *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.*
    a. There are no salt storage areas proposed.

11. *Snow storage areas shall be located such that no direct discharges to receiving waters are possible from the storage site. Runoff from snow storage areas shall enter treatment areas to remove suspended solids and other contaminants before being discharged to receiving waters or preferably be allowed to infiltrate into the groundwater.*
    a. Proposed snow storage areas will drain towards the catch basins on-site and will pass through the proposed treatment systems.

12. *The applicant shall demonstrate that there is sufficient on- and off-site downstream channel or system capacity to carry the stormwater run-off volume and flow without adverse effects, such as flooding and erosion of stream banks and shoreland areas.*
    a. While the stormwater runoff leaves the site in three different areas, it ultimately all reaches the municipal system. The total volume or runoff in the two-year storm, where comparing post development conditions to pre-development, is reduced by 44 cubic feet.

13. *Stormwater treatment BMPs involving excavation or other site alterations shall be located outside of protected wetland buffer areas as defined in the City's Zoning Ordinance Article 10 -- Environmental Protection Standards unless approved under a Conditional Use Permit as outlined Article 10, as amended.*
    a. There are no wetlands or associated buffers located on-site.

14. *In addition to the requirements of this Article, all developments subject to Site Plan Review shall comply with the City's Regulation of Discharges into the Stormwater Drainage System Ordinance.*
    a. This project will comply with the Stormwater Drainage System Ordinance. A Stormwater Connection Permit will be obtained.

15. *The applicant shall submit documentation demonstrating how and who will maintain stormwater treatment devices post-development.*
    a. An Inspection and Maintenance Manual has been included as a part of this Drainage Analysis Report. The manual provides language as to who is responsible for maintenance.

16. *Property owners of new development projects that will add new paved areas shall minimize their salt use through appropriate measures including hiring Green SnowPro certified operators for winter maintenance.*
    a. Note 4 on Sheet C-04 describes the winter maintenance requirements listed above.

## 7.0 – BEST MANAGEMENT PRACTICES

Best Management Practices will be developed in accordance with the New Hampshire Stormwater Manual, Volumes Two and Three, December 2008[3] to formulate a plan that assures stormwater quality both during and after construction. The intent of the outlined measures is to minimize erosion and sedimentation during construction, stabilize and protect the site from erosion after construction is complete and mitigate any adverse impacts to stormwater quality resulting from development. Best Management Practices for this project include:

- Temporary practices to be implemented during construction.

- Permanent practices to be implemented after construction.

## 7.1 – TEMPORARY PRACTICES

1. Erosion, sediment, and stormwater detention measures must be installed as directed by the engineer.
2. All disturbed areas, as well as loam stockpiles, shall be seeded and contained by a silt barrier.
3. Silt barriers must be installed prior to any construction commencing. All erosion control devices including silt barriers and storm drain inlet filters shall be inspected at least once per week and following any rainfall. All necessary maintenance shall be completed within twenty-four (24) hours.
4. Any silt barriers found to be failing must be replaced immediately. Sediment is to be removed from behind the silt fence if found to be one-third the height of the silt barrier or greater.
5. Any area of the site, which has been disturbed and where construction activity will not occur for more than twenty-one (21) days, shall be temporarily stabilized by mulching and seeding.
6. No construction materials shall be buried on-site.

[3] New Hampshire Stormwater Manual: Volume One - Stormwater and Antidegradation, December 2008; Volume Two - Post-Construction Best Management Practices Selection and Design, December 2008; Volume Three - Erosion and Sediment Controls During Construction, December 2008.

7. After all areas have been stabilized, temporary practices are to be removed, and the area they are removed from must be smoothed and revegetated.
8. Areas must be temporarily stabilized within 14 days of disturbance or seeded and mulched within 3 days of final stabilization.
9. After October 15th, incomplete driveways or parking areas must be protected with a minimum of 3" of crushed gravel, meeting the standards of NHDOT item 304.3.
10. An area shall be considered stable if one of the following has occurred:
    a) Base course gravels are installed in areas to be paved.
    b) A minimum of 85% vegetated growth has been established.
    c) A minimum of 3" of non-erosive material such as stone or rip rap has been installed.
    d) Erosion control blankets have been properly installed.

## 7.2 – PERMANENT PRACTICES

The objectives for developing permanent Best Management Practices for this site include the following:

1. Maintain existing runoff flow characteristics.
    a) Drainage is structured to minimize any offsite increase in runoff.
2. Treatment BMP's are established to ensure the water quality.
3. Maintenance schedules are set to safeguard the long-term working of the stormwater BMP's.

A Stormwater Management Inspection & Maintenance Manual (see Appendix H) is provided to ensure the proper functioning of the system over time.

## 7.3 – BEST MANAGEMENT PRACTICE EFFICIENCIES

Appendix E of Volume 2 of the New Hampshire Stormwater [4] lists the pollutant removal efficiencies of various BMP's. All proposed BMP's meet all state and City requirements for total suspended solids (TSS) and pollutant removal, Total Nitrogen (TN), and Total Phosphorous (TP).

In-Ground and Subsurface Infiltration Basins (greater than 75 FT from surface water) have 90% TSS removal efficiency, 60% TN removal efficiency, and 65% TP efficiency.

## 8.0 – CONCLUSION

The proposed stormwater management system will treat, infiltrate, and mitigate the runoff generated from the proposed development and provide protection of groundwater and surface waters as required through the City of Portsmouth stormwater management regulations. The project has been designed in accordance with City regulations. There is little change in the

[4] New Hampshire Stormwater Manual: Volume One - Stormwater and Antidegradation, December 2008; Volume Two - Post-Construction Best Management Practices Selection and Design, December 2008; Volume Three - Erosion and Sediment Controls During Construction, December 2008.

flow characteristics of the site. The proposed project has been designed to pose no adverse effects on surrounding properties.

Respectfully,
**TFMoran, Inc. Seacoast Division**

**Jack McTigue, PE**
*Project Manager, CPESC*

# APPENDIX A – EXTREME PRECIPITATION RATES

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# 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** | 43.094 degrees North |
| **Longitude** | 70.794 degrees West |
| **Elevation** | 10 feet |
| **Date/Time** | Mon Nov 03 2025 11:55:42 GMT-0500 (Eastern Standard 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 | 2.02 | 2.65 | 2.90 | **1yr** | 2.34 | 2.79 | 3.20 | 3.92 | 4.52 | **1yr** |
| **2yr** | 0.32 | 0.50 | 0.62 | 0.81 | 1.02 | 1.30 | **2yr** | 0.88 | 1.18 | 1.51 | 1.93 | 2.48 | 3.19 | 3.55 | **2yr** | 2.83 | 3.41 | 3.91 | 4.65 | 5.30 | **2yr** |
| **5yr** | 0.37 | 0.58 | 0.72 | 0.97 | 1.24 | 1.60 | **5yr** | 1.07 | 1.46 | 1.88 | 2.42 | 3.12 | 4.05 | 4.55 | **5yr** | 3.58 | 4.38 | 5.01 | 5.90 | 6.66 | **5yr** |
| **10yr** | 0.41 | 0.64 | 0.81 | 1.11 | 1.44 | 1.88 | **10yr** | 1.24 | 1.71 | 2.21 | 2.87 | 3.73 | 4.84 | 5.50 | **10yr** | 4.28 | 5.28 | 6.04 | 7.06 | 7.93 | **10yr** |
| **25yr** | 0.47 | 0.75 | 0.96 | 1.32 | 1.75 | 2.31 | **25yr** | 1.51 | 2.12 | 2.75 | 3.60 | 4.70 | 6.13 | 7.05 | **25yr** | 5.43 | 6.78 | 7.73 | 8.96 | 9.99 | **25yr** |
| **50yr** | 0.53 | 0.85 | 1.09 | 1.52 | 2.05 | 2.73 | **50yr** | 1.77 | 2.50 | 3.25 | 4.28 | 5.62 | 7.35 | 8.53 | **50yr** | 6.50 | 8.20 | 9.33 | 10.73 | 11.91 | **50yr** |
| **100yr** | 0.60 | 0.96 | 1.24 | 1.75 | 2.38 | 3.20 | **100yr** | 2.06 | 2.95 | 3.84 | 5.08 | 6.70 | 8.80 | 10.31 | **100yr** | 7.79 | 9.92 | 11.26 | 12.85 | 14.19 | **100yr** |
| **200yr** | 0.66 | 1.08 | 1.40 | 2.01 | 2.78 | 3.77 | **200yr** | 2.40 | 3.47 | 4.55 | 6.05 | 8.00 | 10.54 | 12.47 | **200yr** | 9.33 | 11.99 | 13.59 | 15.41 | 16.92 | **200yr** |
| **500yr** | 0.78 | 1.29 | 1.68 | 2.44 | 3.41 | 4.68 | **500yr** | 2.94 | 4.32 | 5.67 | 7.60 | 10.12 | 13.39 | 16.04 | **500yr** | 11.85 | 15.43 | 17.44 | 19.59 | 21.37 | **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 | 1.31 | 1.66 | 2.22 | 2.49 | **1yr** | 1.97 | 2.39 | 2.83 | 3.18 | 3.88 | **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 | 3.04 | 3.43 | **2yr** | 2.69 | 3.30 | 3.80 | 4.52 | 5.04 | **2yr** |
| **5yr** | 0.35 | 0.54 | 0.67 | 0.92 | 1.17 | 1.40 | **5yr** | 1.01 | 1.37 | 1.61 | 2.13 | 2.75 | 3.77 | 4.17 | **5yr** | 3.34 | 4.01 | 4.68 | 5.50 | 6.21 | **5yr** |
| **10yr** | 0.38 | 0.59 | 0.73 | 1.02 | 1.32 | 1.60 | **10yr** | 1.14 | 1.56 | 1.81 | 2.40 | 3.08 | 4.35 | 4.84 | **10yr** | 3.85 | 4.65 | 5.40 | 6.37 | 7.15 | **10yr** |
| **25yr** | 0.44 | 0.66 | 0.83 | 1.18 | 1.55 | 1.90 | **25yr** | 1.34 | 1.86 | 2.10 | 2.78 | 3.57 | 4.68 | 5.87 | **25yr** | 4.14 | 5.64 | 6.59 | 7.74 | 8.63 | **25yr** |
| **50yr** | 0.48 | 0.73 | 0.91 | 1.31 | 1.76 | 2.17 | **50yr** | 1.52 | 2.12 | 2.35 | 3.11 | 3.97 | 5.28 | 6.78 | **50yr** | 4.68 | 6.52 | 7.66 | 8.97 | 9.95 | **50yr** |
| **100yr** | 0.53 | 0.81 | 1.01 | 1.46 | 2.00 | 2.47 | **100yr** | 1.73 | 2.41 | 2.63 | 3.46 | 4.41 | 5.93 | 7.82 | **100yr** | 5.25 | 7.52 | 8.90 | 10.41 | 11.47 | **100yr** |
| **200yr** | 0.59 | 0.89 | 1.12 | 1.63 | 2.27 | 2.82 | **200yr** | 1.96 | 2.75 | 2.93 | 3.85 | 4.87 | 6.64 | 9.03 | **200yr** | 5.88 | 8.68 | 10.33 | 12.10 | 13.25 | **200yr** |
| **500yr** | 0.68 | 1.02 | 1.31 | 1.90 | 2.70 | 3.37 | **500yr** | 2.33 | 3.29 | 3.40 | 4.41 | 5.57 | 7.72 | 10.91 | **500yr** | 6.83 | 10.49 | 12.58 | 14.78 | 16.02 | **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 | 0.53 | 0.72 | 0.88 | 1.08 | **1yr** | 0.76 | 1.06 | 1.25 | 1.75 | 2.21 | 2.98 | 3.13 | **1yr** | 2.64 | 3.01 | 3.56 | 4.36 | 5.01 | **1yr** |
| **2yr** | 0.33 | 0.52 | 0.63 | 0.86 | 1.06 | 1.26 | **2yr** | 0.91 | 1.23 | 1.48 | 1.96 | 2.51 | 3.41 | 3.67 | **2yr** | 3.02 | 3.53 | 4.06 | 4.81 | 5.60 | **2yr** |
| **5yr** | 0.40 | 0.61 | 0.76 | 1.04 | 1.33 | 1.61 | **5yr** | 1.15 | 1.57 | 1.88 | 2.53 | 3.24 | 4.32 | 4.92 | **5yr** | 3.82 | 4.74 | 5.34 | 6.33 | 7.11 | **5yr** |
| **10yr** | 0.46 | 0.71 | 0.88 | 1.23 | 1.59 | 1.96 | **10yr** | 1.38 | 1.92 | 2.27 | 3.09 | 3.93 | 5.31 | 6.15 | **10yr** | 4.70 | 5.92 | 6.75 | 7.78 | 8.69 | **10yr** |
| **25yr** | 0.57 | 0.87 | 1.08 | 1.54 | 2.02 | 2.54 | **25yr** | 1.75 | 2.49 | 2.93 | 4.05 | 5.10 | 7.72 | 8.27 | **25yr** | 6.83 | 7.95 | 9.05 | 10.25 | 11.33 | **25yr** |
| **50yr** | 0.66 | 1.01 | 1.25 | 1.80 | 2.43 | 3.09 | **50yr** | 2.09 | 3.02 | 3.57 | 4.96 | 6.24 | 9.65 | 10.36 | **50yr** | 8.54 | 9.97 | 11.30 | 12.62 | 13.86 | **50yr** |
| **100yr** | 0.78 | 1.17 | 1.47 | 2.12 | 2.91 | 3.75 | **100yr** | 2.51 | 3.67 | 4.34 | 6.10 | 7.65 | 12.07 | 12.99 | **100yr** | 10.68 | 12.49 | 14.11 | 15.56 | 16.97 | **100yr** |
| **200yr** | 0.90 | 1.36 | 1.73 | 2.50 | 3.48 | 4.57 | **200yr** | 3.01 | 4.47 | 5.29 | 7.50 | 9.37 | 15.13 | 16.29 | **200yr** | 13.39 | 15.66 | 17.65 | 19.17 | 20.79 | **200yr** |
| **500yr** | 1.12 | 1.66 | 2.14 | 3.11 | 4.43 | 5.92 | **500yr** | 3.82 | 5.79 | 6.85 | 9.90 | 12.28 | 20.41 | 21.99 | **500yr** | 18.07 | 21.14 | 23.73 | 25.28 | 27.19 | **500yr** |

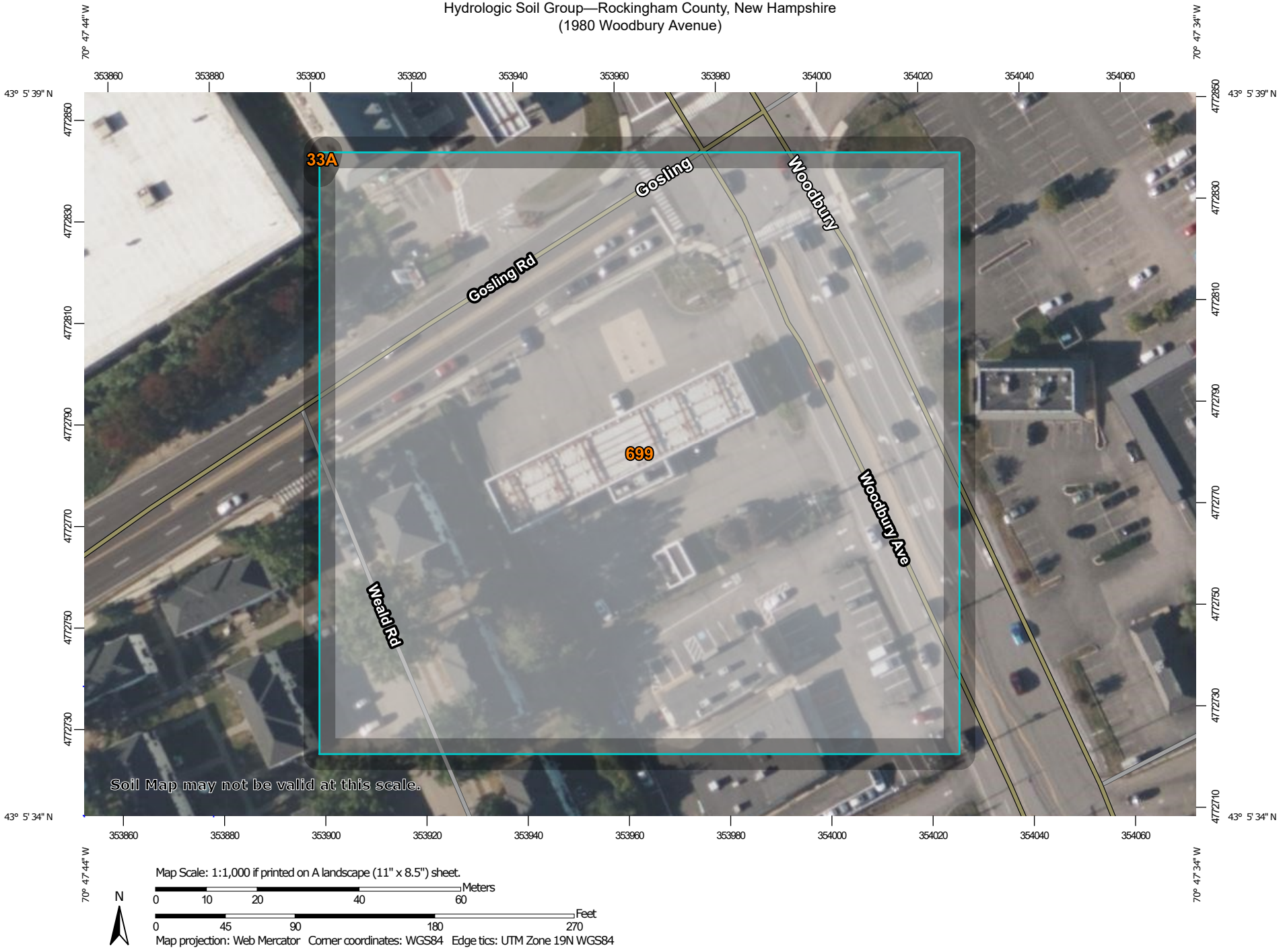
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Northeast Regional Climate Center

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# APPENDIX B – SITE-SPECIFIC SOIL SURVEY & NRCS WEB SOIL REPORT

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Hydrologic Soil Group—Rockingham County, New Hampshire
(1980 Woodbury Avenue)




Map Scale: 1:1,000 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 10 20 40 60

Feet
0 45 90 180 270

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 Rating Polygons**
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**Soil Rating Lines**
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**Soil Rating Points**
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**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.

# Hydrologic Soil Group

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---|---|---|---|---|
| 33A | Scitico silt loam, 0 to 5 percent slopes | C/D | 0.0 | 0.0% |
| 699 | Urban land | | 3.7 | 100.0% |
| **Totals for Area of Interest** | | | **3.7** | **100.0%** |

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

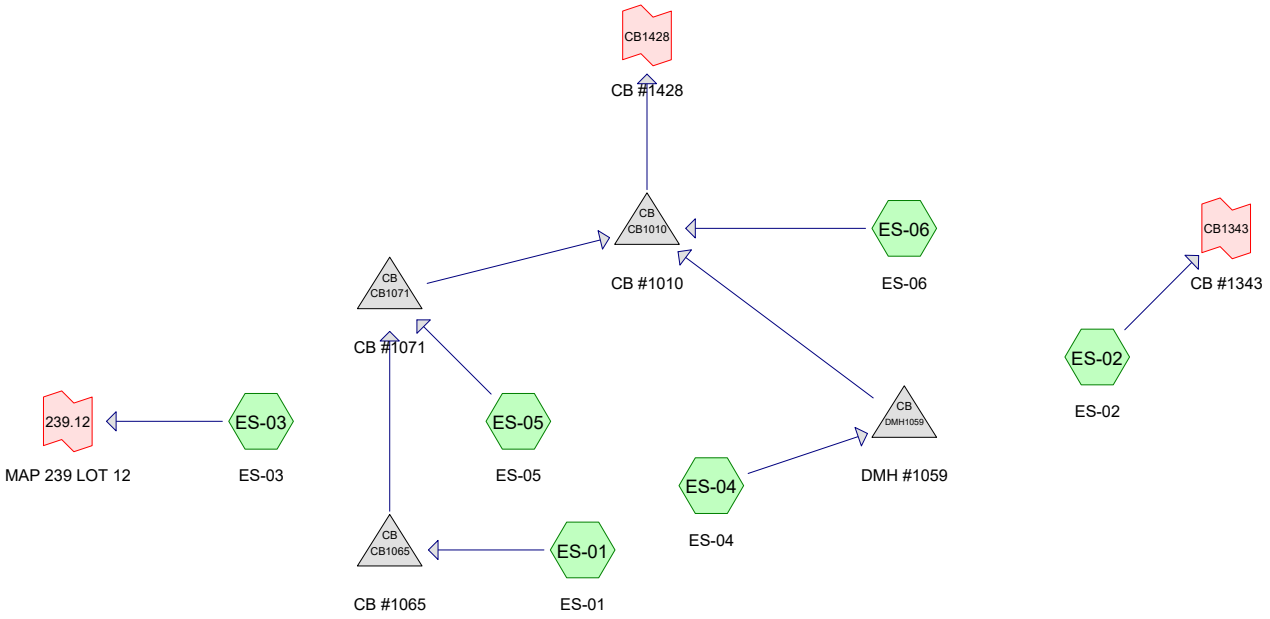
*Component Percent Cutoff: None Specified*

*Tie-break Rule:* Higher

# APPENDIX C – PRE-DEVELOPMENT CALCULATIONS

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**Pre-Development**
**Drainage**




Subcat Reach Pond Link

**Routing Diagram for 46077-16 Drainage Analysis**
Prepared by T F Moran Inc, Printed 11/17/2025
HydroCAD® 10.20-7a s/n 00866 © 2025 HydroCAD Software Solutions LLC

## Area Listing (selected nodes)

| Area (sq-ft) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 7,340 | 74 | >75% Grass cover, Good, HSG C (ES-01, ES-02, ES-03, ES-05, ES-06) |
| 23,929 | 98 | Paved Parking, HSG C (ES-01, ES-02, ES-05, ES-06) |
| 7,130 | 98 | Roofs, HSG C (ES-04) |
| **38,399** | **93** | **TOTAL AREA** |

## Soil Listing (selected nodes)

| Area (sq-ft) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 0 | HSG A | |
| 0 | HSG B | |
| 38,399 | HSG C | ES-01, ES-02, ES-03, ES-04, ES-05, ES-06 |
| 0 | HSG D | |
| 0 | Other | |
| **38,399** | | **TOTAL AREA** |

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points x 5
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 ES-01: ES-01** Runoff Area=12,593 sf 65.85% Impervious Runoff Depth>2.61"
Flow Length=182' Tc=6.0 min CN=90 Runoff=0.8 cfs 2,734 cf

**Subcatchment ES-02: ES-02** Runoff Area=5,652 sf 87.38% Impervious Runoff Depth>3.10"
Flow Length=171' Tc=6.0 min CN=95 Runoff=0.4 cfs 1,462 cf

**Subcatchment ES-03: ES-03** Runoff Area=749 sf 0.00% Impervious Runoff Depth>1.36"
Flow Length=11' Slope=0.2200 '/' Tc=6.0 min CN=74 Runoff=0.0 cfs 85 cf

**Subcatchment ES-04: ES-04** Runoff Area=7,130 sf 100.00% Impervious Runoff Depth>3.43"
Tc=6.0 min CN=98 Runoff=0.6 cfs 2,040 cf

**Subcatchment ES-05: ES-05** Runoff Area=2,495 sf 73.07% Impervious Runoff Depth>2.80"
Flow Length=77' Slope=0.0420 '/' Tc=6.0 min CN=92 Runoff=0.2 cfs 582 cf

**Subcatchment ES-06: ES-06** Runoff Area=9,780 sf 90.74% Impervious Runoff Depth>3.21"
Flow Length=83' Slope=0.0450 '/' Tc=6.0 min CN=96 Runoff=0.8 cfs 2,617 cf

**Pond CB1010: CB #1010** Peak Elev=45.59' Inflow=2.4 cfs 7,973 cf
12.0" Round Culvert n=0.013 L=66.0' S=0.0100 '/' Outflow=2.4 cfs 7,973 cf

**Pond CB1065: CB #1065** Peak Elev=47.57' Inflow=0.8 cfs 2,734 cf
12.0" Round Culvert n=0.013 L=123.0' S=0.0106 '/' Outflow=0.8 cfs 2,734 cf

**Pond CB1071: CB #1071** Peak Elev=46.23' Inflow=1.0 cfs 3,316 cf
12.0" Round Culvert n=0.013 L=46.0' S=0.0109 '/' Outflow=1.0 cfs 3,316 cf

**Pond DMH1059: DMH #1059** Peak Elev=46.81' Inflow=0.6 cfs 2,040 cf
10.0" Round Culvert n=0.013 L=95.0' S=0.0126 '/' Outflow=0.6 cfs 2,040 cf

**Link 239.12: MAP 239 LOT 12** Inflow=0.0 cfs 85 cf
Primary=0.0 cfs 85 cf

**Link CB1343: CB #1343** Inflow=0.4 cfs 1,462 cf
Primary=0.4 cfs 1,462 cf

**Link CB1428: CB #1428** Inflow=2.4 cfs 7,973 cf
Primary=2.4 cfs 7,973 cf

**Total Runoff Area = 38,399 sf Runoff Volume = 9,520 cf Average Runoff Depth = 2.98"**
**19.12% Pervious = 7,340 sf 80.88% Impervious = 31,059 sf**

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points x 5
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 ES-01: ES-01** Runoff Area=12,593 sf 65.85% Impervious Runoff Depth>5.87"
Flow Length=182' Tc=6.0 min CN=90 Runoff=1.8 cfs 6,158 cf

**Subcatchment ES-02: ES-02** Runoff Area=5,652 sf 87.38% Impervious Runoff Depth>6.45"
Flow Length=171' Tc=6.0 min CN=95 Runoff=0.9 cfs 3,039 cf

**Subcatchment ES-03: ES-03** Runoff Area=749 sf 0.00% Impervious Runoff Depth>4.08"
Flow Length=11' Slope=0.2200 '/' Tc=6.0 min CN=74 Runoff=0.1 cfs 255 cf

**Subcatchment ES-04: ES-04** Runoff Area=7,130 sf 100.00% Impervious Runoff Depth>6.81"
Tc=6.0 min CN=98 Runoff=1.1 cfs 4,044 cf

**Subcatchment ES-05: ES-05** Runoff Area=2,495 sf 73.07% Impervious Runoff Depth>6.10"
Flow Length=77' Slope=0.0420 '/' Tc=6.0 min CN=92 Runoff=0.4 cfs 1,268 cf

**Subcatchment ES-06: ES-06** Runoff Area=9,780 sf 90.74% Impervious Runoff Depth>6.57"
Flow Length=83' Slope=0.0450 '/' Tc=6.0 min CN=96 Runoff=1.5 cfs 5,354 cf

**Pond CB1010: CB #1010** Peak Elev=47.12' Inflow=4.8 cfs 16,825 cf
12.0" Round Culvert n=0.013 L=66.0' S=0.0100 '/' Outflow=4.8 cfs 16,825 cf

**Pond CB1065: CB #1065** Peak Elev=48.07' Inflow=1.8 cfs 6,158 cf
12.0" Round Culvert n=0.013 L=123.0' S=0.0106 '/' Outflow=1.8 cfs 6,158 cf

**Pond CB1071: CB #1071** Peak Elev=47.46' Inflow=2.2 cfs 7,426 cf
12.0" Round Culvert n=0.013 L=46.0' S=0.0109 '/' Outflow=2.2 cfs 7,426 cf

**Pond DMH1059: DMH #1059** Peak Elev=47.41' Inflow=1.1 cfs 4,044 cf
10.0" Round Culvert n=0.013 L=95.0' S=0.0126 '/' Outflow=1.1 cfs 4,044 cf

**Link 239.12: MAP 239 LOT 12** Inflow=0.1 cfs 255 cf
Primary=0.1 cfs 255 cf

**Link CB1343: CB #1343** Inflow=0.9 cfs 3,039 cf
Primary=0.9 cfs 3,039 cf

**Link CB1428: CB #1428** Inflow=4.8 cfs 16,825 cf
Primary=4.8 cfs 16,825 cf

**Total Runoff Area = 38,399 sf Runoff Volume = 20,118 cf Average Runoff Depth = 6.29"**
**19.12% Pervious = 7,340 sf 80.88% Impervious = 31,059 sf**

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points x 5
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 ES-01: ES-01** Runoff Area=12,593 sf 65.85% Impervious Runoff Depth>7.24"
Flow Length=182' Tc=6.0 min CN=90 Runoff=2.2 cfs 7,602 cf

**Subcatchment ES-02: ES-02** Runoff Area=5,652 sf 87.38% Impervious Runoff Depth>7.84"
Flow Length=171' Tc=6.0 min CN=95 Runoff=1.0 cfs 3,695 cf

**Subcatchment ES-03: ES-03** Runoff Area=749 sf 0.00% Impervious Runoff Depth>5.33"
Flow Length=11' Slope=0.2200 '/' Tc=6.0 min CN=74 Runoff=0.1 cfs 332 cf

**Subcatchment ES-04: ES-04** Runoff Area=7,130 sf 100.00% Impervious Runoff Depth>8.21"
Tc=6.0 min CN=98 Runoff=1.3 cfs 4,875 cf

**Subcatchment ES-05: ES-05** Runoff Area=2,495 sf 73.07% Impervious Runoff Depth>7.48"
Flow Length=77' Slope=0.0420 '/' Tc=6.0 min CN=92 Runoff=0.5 cfs 1,556 cf

**Subcatchment ES-06: ES-06** Runoff Area=9,780 sf 90.74% Impervious Runoff Depth>7.96"
Flow Length=83' Slope=0.0450 '/' Tc=6.0 min CN=96 Runoff=1.8 cfs 6,491 cf

**Pond CB1010: CB #1010** Peak Elev=48.08' Inflow=5.8 cfs 20,525 cf
12.0" Round Culvert n=0.013 L=66.0' S=0.0100 '/' Outflow=5.8 cfs 20,525 cf

**Pond CB1065: CB #1065** Peak Elev=49.25' Inflow=2.2 cfs 7,602 cf
12.0" Round Culvert n=0.013 L=123.0' S=0.0106 '/' Outflow=2.2 cfs 7,602 cf

**Pond CB1071: CB #1071** Peak Elev=48.61' Inflow=2.7 cfs 9,158 cf
12.0" Round Culvert n=0.013 L=46.0' S=0.0109 '/' Outflow=2.7 cfs 9,158 cf

**Pond DMH1059: DMH #1059** Peak Elev=48.55' Inflow=1.3 cfs 4,875 cf
10.0" Round Culvert n=0.013 L=95.0' S=0.0126 '/' Outflow=1.3 cfs 4,875 cf

**Link 239.12: MAP 239 LOT 12** Inflow=0.1 cfs 332 cf
Primary=0.1 cfs 332 cf

**Link CB1343: CB #1343** Inflow=1.0 cfs 3,695 cf
Primary=1.0 cfs 3,695 cf

**Link CB1428: CB #1428** Inflow=5.8 cfs 20,525 cf
Primary=5.8 cfs 20,525 cf

**Total Runoff Area = 38,399 sf Runoff Volume = 24,552 cf Average Runoff Depth = 7.67"**
**19.12% Pervious = 7,340 sf 80.88% Impervious = 31,059 sf**

# APPENDIX D – PRE-DEVELOPMENT CALCULATIONS (10-YEAR STORM EVENT)

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## Summary for Subcatchment ES-01: ES-01

Runoff = 1.4 cfs @ 12.09 hrs, Volume= 4,643 cf, Depth> 4.42"
Routed to Pond CB1065 : CB #1065

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 4,300 | 74 | >75% Grass cover, Good, HSG C |
| 8,293 | 98 | Paved Parking, HSG C |
| 12,593 | 90 | Weighted Average |
| 4,300 | | 34.15% Pervious Area |
| 8,293 | | 65.85% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.4 | 15 | 0.0500 | 0.18 | | **Sheet Flow, Sheet Flow 1** Grass: Short n= 0.150 P2= 3.67" |
| 1.0 | 85 | 0.0200 | 1.43 | | **Sheet Flow, Sheet Flow 2** Smooth surfaces n= 0.011 P2= 3.67" |
| 0.5 | 82 | 0.0200 | 2.87 | | **Shallow Concentrated Flow, Shallow Concentrated 1** Paved Kv= 20.3 fps |
| 3.1 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 182 | Total | | | |

## Summary for Subcatchment ES-02: ES-02

Runoff = 0.7 cfs @ 12.09 hrs, Volume= 2,346 cf, Depth> 4.98"
Routed to Link CB1343 : CB #1343

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 713 | 74 | >75% Grass cover, Good, HSG C |
| 4,939 | 98 | Paved Parking, HSG C |
| 5,652 | 95 | Weighted Average |
| 713 | | 12.62% Pervious Area |
| 4,939 | | 87.38% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.8 | 7 | 0.0500 | 0.15 | | **Sheet Flow, Sheet Flow 1** Grass: Short n= 0.150 P2= 3.67" |
| 1.0 | 164 | 0.0190 | 2.80 | | **Shallow Concentrated Flow, Shallow Concentrated 1** Paved Kv= 20.3 fps |
| 4.2 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 171 | Total | | | |

## Summary for Subcatchment ES-03: ES-03

Runoff = 0.1 cfs @ 12.09 hrs, Volume= 176 cf, Depth> 2.82"
Routed to Link 239.12 : MAP 239 LOT 12

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 749 | 74 | >75% Grass cover, Good, HSG C |
| 749 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 11 | 0.2200 | 0.31 | | **Sheet Flow, Sheet Flow 1** Grass: Short n= 0.150 P2= 3.67" |
| 5.4 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 11 | Total | | | |

## Summary for Subcatchment ES-04: ES-04

Runoff = 0.9 cfs @ 12.09 hrs, Volume= 3,166 cf, Depth> 5.33"
Routed to Pond DMH1059 : DMH #1059

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 7,130 | 98 | Roofs, HSG C |
| 7,130 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment ES-05: ES-05

Runoff = 0.3 cfs @ 12.09 hrs, Volume= 966 cf, Depth> 4.64"
Routed to Pond CB1071 : CB #1071

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 672 | 74 | >75% Grass cover, Good, HSG C |
| 1,823 | 98 | Paved Parking, HSG C |
| 2,495 | 92 | Weighted Average |
| 672 | | 26.93% Pervious Area |
| 1,823 | | 73.07% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.7 | 77 | 0.0420 | 1.88 | | **Sheet Flow, Sheet Flow 1** Smooth surfaces n= 0.011 P2= 3.67" |
| 5.3 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 77 | Total | | | |

## Summary for Subcatchment ES-06: ES-06

Runoff = 1.2 cfs @ 12.09 hrs, Volume= 4,153 cf, Depth> 5.10"
Routed to Pond CB1010 : CB #1010

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 906 | 74 | >75% Grass cover, Good, HSG C |
| 8,874 | 98 | Paved Parking, HSG C |
| 9,780 | 96 | Weighted Average |
| 906 | | 9.26% Pervious Area |
| 8,874 | | 90.74% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.7 | 83 | 0.0450 | 1.96 | | **Sheet Flow, Sheet Flow 1** Smooth surfaces n= 0.011 P2= 3.67" |
| 5.3 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 83 | Total | | | |

## Summary for Pond CB1010: CB #1010

Inflow Area = 31,998 sf, 81.63% Impervious, Inflow Depth > 4.85" for 10-year event
Inflow = 3.7 cfs @ 12.09 hrs, Volume= 12,929 cf
Outflow = 3.7 cfs @ 12.09 hrs, Volume= 12,929 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.7 cfs @ 12.09 hrs, Volume= 12,929 cf
Routed to Link CB1428 : CB #1428

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 46.30' @ 12.09 hrs
Flood Elev= 49.15'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 44.70' | **12.0" Round Culvert** L= 66.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 44.70' / 44.04' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.6 cfs @ 12.09 hrs HW=46.24' TW=0.00' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 3.6 cfs @ 4.64 fps)

## Summary for Pond CB1065: CB #1065

Inflow Area = 12,593 sf, 65.85% Impervious, Inflow Depth > 4.42" for 10-year event
Inflow = 1.4 cfs @ 12.09 hrs, Volume= 4,643 cf
Outflow = 1.4 cfs @ 12.09 hrs, Volume= 4,643 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.4 cfs @ 12.09 hrs, Volume= 4,643 cf
Routed to Pond CB1071 : CB #1071

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 47.76' @ 12.09 hrs
Flood Elev= 50.40'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 47.10' | **12.0" Round Culvert**<br>L= 123.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 47.10' / 45.80' S= 0.0106 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.4 cfs @ 12.09 hrs HW=47.74' TW=46.60' (Dynamic Tailwater)
**1=Culvert** (Outlet Controls 1.4 cfs @ 3.66 fps)

## Summary for Pond CB1071: CB #1071

Inflow Area = 15,088 sf, 67.05% Impervious, Inflow Depth > 4.46" for 10-year event
Inflow = 1.7 cfs @ 12.09 hrs, Volume= 5,609 cf
Outflow = 1.7 cfs @ 12.09 hrs, Volume= 5,609 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.7 cfs @ 12.09 hrs, Volume= 5,609 cf
Routed to Pond CB1010 : CB #1010

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 46.63' @ 12.09 hrs
Flood Elev= 49.50'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 45.70' | **12.0" Round Culvert**<br>L= 46.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 45.70' / 45.20' S= 0.0109 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.7 cfs @ 12.09 hrs HW=46.60' TW=46.24' (Dynamic Tailwater)
**1=Culvert** (Outlet Controls 1.7 cfs @ 2.94 fps)

## Summary for Pond DMH1059: DMH #1059

Inflow Area = 7,130 sf,100.00% Impervious, Inflow Depth > 5.33" for 10-year event
Inflow = 0.9 cfs @ 12.09 hrs, Volume= 3,166 cf
Outflow = 0.9 cfs @ 12.09 hrs, Volume= 3,166 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.9 cfs @ 12.09 hrs, Volume= 3,166 cf
Routed to Pond CB1010 : CB #1010

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5

Peak Elev= 46.99' @ 12.09 hrs
Flood Elev= 53.10'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 46.40' | **10.0" Round Culvert**<br>L= 95.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 46.40' / 45.20' S= 0.0126 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.55 sf |

**Primary OutFlow** Max=0.9 cfs @ 12.09 hrs HW=46.97' TW=46.23' (Dynamic Tailwater)
└**1=Culvert** (Outlet Controls 0.9 cfs @ 3.01 fps)

## Summary for Link 239.12: MAP 239 LOT 12

Inflow Area = 749 sf, 0.00% Impervious, Inflow Depth > 2.82" for 10-year event
Inflow = 0.1 cfs @ 12.09 hrs, Volume= 176 cf
Primary = 0.1 cfs @ 12.09 hrs, Volume= 176 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

## Summary for Link CB1343: CB #1343

Inflow Area = 5,652 sf, 87.38% Impervious, Inflow Depth > 4.98" for 10-year event
Inflow = 0.7 cfs @ 12.09 hrs, Volume= 2,346 cf
Primary = 0.7 cfs @ 12.09 hrs, Volume= 2,346 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

## Summary for Link CB1428: CB #1428

Inflow Area = 31,998 sf, 81.63% Impervious, Inflow Depth > 4.85" for 10-year event
Inflow = 3.7 cfs @ 12.09 hrs, Volume= 12,929 cf
Primary = 3.7 cfs @ 12.09 hrs, Volume= 12,929 cf, Atten= 0%, Lag= 0.0 min

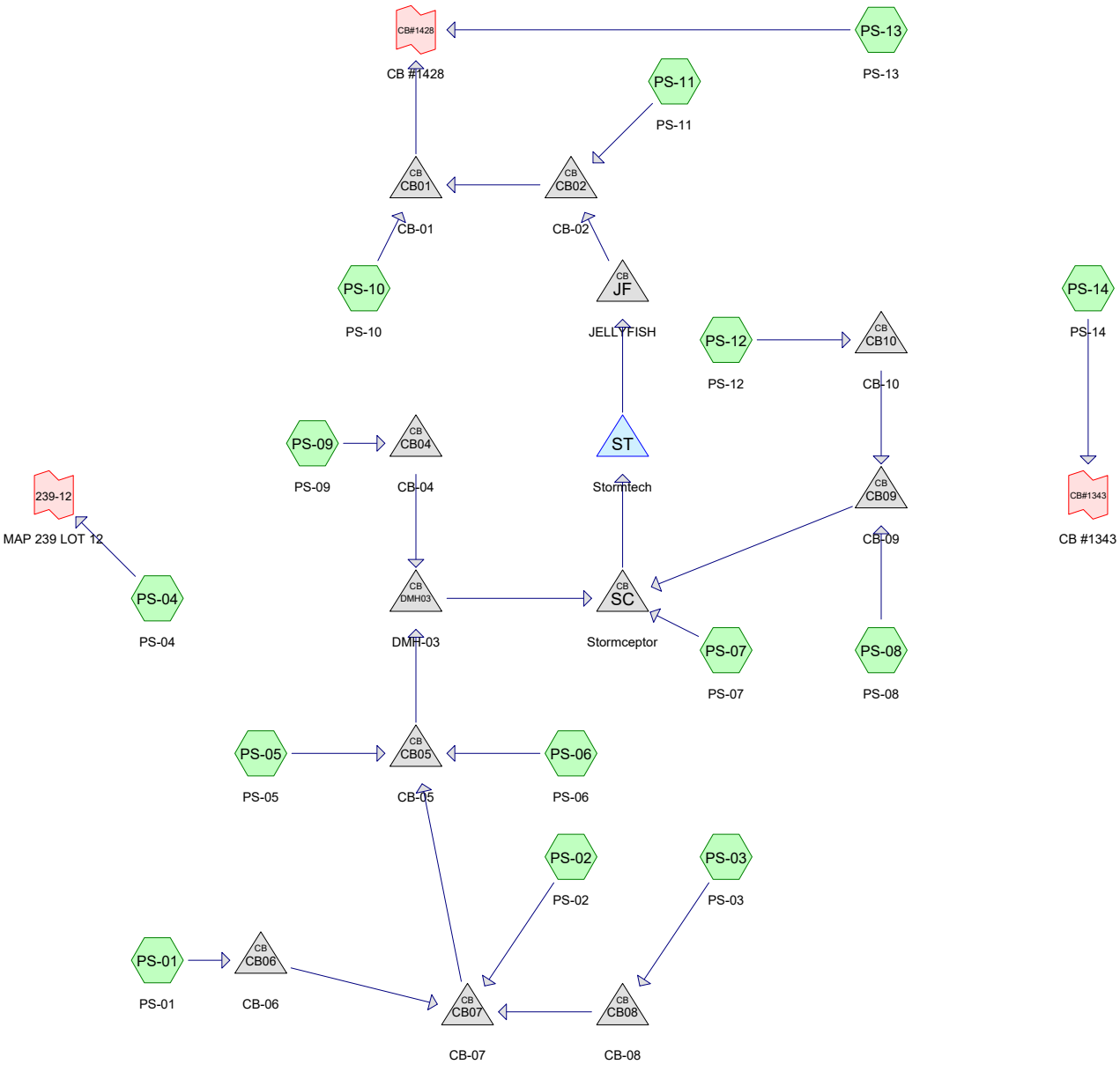
Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

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# APPENDIX E – POST-DEVELOPMENT CALCULATIONS

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**Post-Development Drainage**




Subcat Reach Pond Link

**Routing Diagram for 46077-16 Drainage Analysis**
Prepared by T F Moran Inc, Printed 11/17/2025
HydroCAD® 10.20-7a s/n 00866 © 2025 HydroCAD Software Solutions LLC

## Area Listing (selected nodes)

| Area (sq-ft) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 7,878 | 74 | >75% Grass cover, Good, HSG C (PS-01, PS-02, PS-03, PS-04, PS-06, PS-08, PS-10, PS-13, PS-14) |
| 21,291 | 98 | Paved Parking, HSG C (PS-01, PS-02, PS-03, PS-06, PS-08, PS-09, PS-10, PS-11, PS-12) |
| 9,230 | 98 | Roofs, HSG C (PS-05, PS-07) |
| **38,399** | **93** | **TOTAL AREA** |

## Soil Listing (selected nodes)

| Area (sq-ft) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 0 | HSG A | |
| 0 | HSG B | |
| 38,399 | HSG C | PS-01, PS-02, PS-03, PS-04, PS-05, PS-06, PS-07, PS-08, PS-09, PS-10, PS-11, PS-12, PS-13, PS-14 |
| 0 | HSG D | |
| 0 | Other | |
| **38,399** | | **TOTAL AREA** |

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points x 5
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 PS-01: PS-01** Runoff Area=3,430 sf 78.05% Impervious Runoff Depth>2.90"
Flow Length=57' Tc=6.0 min CN=93 Runoff=0.3 cfs 828 cf

**Subcatchment PS-02: PS-02** Runoff Area=2,499 sf 81.83% Impervious Runoff Depth>3.00"
Flow Length=38' Tc=6.0 min CN=94 Runoff=0.2 cfs 625 cf

**Subcatchment PS-03: PS-03** Runoff Area=2,418 sf 88.83% Impervious Runoff Depth>3.10"
Flow Length=52' Slope=0.0150 '/' Tc=6.0 min CN=95 Runoff=0.2 cfs 625 cf

**Subcatchment PS-04: PS-04** Runoff Area=1,168 sf 0.00% Impervious Runoff Depth>1.35"
Flow Length=100' Slope=0.0050 '/' Tc=23.2 min CN=74 Runoff=0.0 cfs 132 cf

**Subcatchment PS-05: PS-05** Runoff Area=5,500 sf 100.00% Impervious Runoff Depth>3.43"
Tc=6.0 min CN=98 Runoff=0.4 cfs 1,574 cf

**Subcatchment PS-06: PS-06** Runoff Area=3,593 sf 99.36% Impervious Runoff Depth>3.43"
Flow Length=42' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.3 cfs 1,028 cf

**Subcatchment PS-07: PS-07** Runoff Area=3,730 sf 100.00% Impervious Runoff Depth>3.43"
Tc=6.0 min CN=98 Runoff=0.3 cfs 1,067 cf

**Subcatchment PS-08: PS-08** Runoff Area=3,495 sf 93.19% Impervious Runoff Depth>3.21"
Flow Length=90' Slope=0.0200 '/' Tc=6.0 min CN=96 Runoff=0.3 cfs 935 cf

**Subcatchment PS-09: PS-09** Runoff Area=2,460 sf 100.00% Impervious Runoff Depth>3.43"
Flow Length=52' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.2 cfs 704 cf

**Subcatchment PS-10: PS-10** Runoff Area=5,092 sf 44.23% Impervious Runoff Depth>2.16"
Flow Length=88' Slope=0.0800 '/' Tc=6.0 min CN=85 Runoff=0.3 cfs 918 cf

**Subcatchment PS-11: PS-11** Runoff Area=1,140 sf 100.00% Impervious Runoff Depth>3.43"
Flow Length=46' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.1 cfs 326 cf

**Subcatchment PS-12: PS-12** Runoff Area=1,742 sf 100.00% Impervious Runoff Depth>3.43"
Flow Length=83' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.1 cfs 498 cf

**Subcatchment PS-13: PS-13** Runoff Area=1,401 sf 0.00% Impervious Runoff Depth>1.36"
Flow Length=163' Tc=6.0 min CN=74 Runoff=0.0 cfs 158 cf

**Subcatchment PS-14: PS-14** Runoff Area=731 sf 0.00% Impervious Runoff Depth>1.36"
Flow Length=43' Tc=6.0 min CN=74 Runoff=0.0 cfs 83 cf

**Pond CB01: CB-01** Peak Elev=45.57' Inflow=2.2 cfs 9,103 cf
12.0" Round Culvert n=0.013 L=54.0' S=0.0100 '/' Outflow=2.2 cfs 9,103 cf

**Pond CB02: CB-02** Peak Elev=45.94' Inflow=2.0 cfs 8,185 cf
12.0" Round Culvert n=0.013 L=30.0' S=0.0067 '/' Outflow=2.0 cfs 8,185 cf

**Pond CB04: CB-04** Peak Elev=47.26' Inflow=0.2 cfs 704 cf
12.0" Round Culvert n=0.013 L=30.0' S=0.0050 '/' Outflow=0.2 cfs 704 cf

**Pond CB05: CB-05** Peak Elev=47.47' Inflow=1.4 cfs 4,680 cf
12.0" Round Culvert n=0.013 L=40.0' S=0.0063 '/' Outflow=1.4 cfs 4,680 cf

**Pond CB06: CB-06** Peak Elev=47.73' Inflow=0.3 cfs 828 cf
12.0" Round Culvert n=0.013 L=43.0' S=0.0081 '/' Outflow=0.3 cfs 828 cf

**Pond CB07: CB-07** Peak Elev=47.62' Inflow=0.6 cfs 2,078 cf
12.0" Round Culvert n=0.013 L=59.0' S=0.0059 '/' Outflow=0.6 cfs 2,078 cf

**Pond CB08: CB-08** Peak Elev=48.04' Inflow=0.2 cfs 625 cf
12.0" Round Culvert n=0.013 L=67.0' S=0.0104 '/' Outflow=0.2 cfs 625 cf

**Pond CB09: CB-09** Peak Elev=47.15' Inflow=0.4 cfs 1,434 cf
12.0" Round Culvert n=0.013 L=77.0' S=0.0052 '/' Outflow=0.4 cfs 1,434 cf

**Pond CB10: CB-10** Peak Elev=47.18' Inflow=0.1 cfs 498 cf
12.0" Round Culvert n=0.013 L=31.0' S=0.0065 '/' Outflow=0.1 cfs 498 cf

**Pond DMH03: DMH-03** Peak Elev=47.25' Inflow=1.5 cfs 5,384 cf
12.0" Round Culvert n=0.013 L=20.0' S=0.0050 '/' Outflow=1.5 cfs 5,384 cf

**Pond JF: JELLYFISH** Peak Elev=46.23' Inflow=1.9 cfs 7,859 cf
12.0" Round Culvert n=0.013 L=24.0' S=0.0062 '/' Outflow=1.9 cfs 7,859 cf

**Pond SC: Stormceptor** Peak Elev=47.08' Inflow=2.3 cfs 7,885 cf
12.0" Round Culvert n=0.013 L=4.0' S=0.0000 '/' Outflow=2.3 cfs 7,885 cf

**Pond ST: Stormtech** Peak Elev=46.47' Storage=481 cf Inflow=2.3 cfs 7,885 cf
12.0" Round Culvert n=0.013 L=4.0' S=0.0000 '/' Outflow=1.9 cfs 7,859 cf

**Link 239-12: MAP 239 LOT 12** Inflow=0.0 cfs 132 cf
Primary=0.0 cfs 132 cf

**Link CB#1343: CB #1343** Inflow=0.0 cfs 83 cf
Primary=0.0 cfs 83 cf

**Link CB#1428: CB #1428** Inflow=2.3 cfs 9,261 cf
Primary=2.3 cfs 9,261 cf

**Total Runoff Area = 38,399 sf Runoff Volume = 9,502 cf Average Runoff Depth = 2.97"**
**20.52% Pervious = 7,878 sf 79.48% Impervious = 30,521 sf**

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points x 5
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 PS-01: PS-01** Runoff Area=3,430 sf 78.05% Impervious Runoff Depth>6.22"
Flow Length=57' Tc=6.0 min CN=93 Runoff=0.5 cfs 1,777 cf

**Subcatchment PS-02: PS-02** Runoff Area=2,499 sf 81.83% Impervious Runoff Depth>6.33"
Flow Length=38' Tc=6.0 min CN=94 Runoff=0.4 cfs 1,319 cf

**Subcatchment PS-03: PS-03** Runoff Area=2,418 sf 88.83% Impervious Runoff Depth>6.45"
Flow Length=52' Slope=0.0150 '/' Tc=6.0 min CN=95 Runoff=0.4 cfs 1,300 cf

**Subcatchment PS-04: PS-04** Runoff Area=1,168 sf 0.00% Impervious Runoff Depth>4.07"
Flow Length=100' Slope=0.0050 '/' Tc=23.2 min CN=74 Runoff=0.1 cfs 396 cf

**Subcatchment PS-05: PS-05** Runoff Area=5,500 sf 100.00% Impervious Runoff Depth>6.81"
Tc=6.0 min CN=98 Runoff=0.9 cfs 3,120 cf

**Subcatchment PS-06: PS-06** Runoff Area=3,593 sf 99.36% Impervious Runoff Depth>6.81"
Flow Length=42' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.6 cfs 2,038 cf

**Subcatchment PS-07: PS-07** Runoff Area=3,730 sf 100.00% Impervious Runoff Depth>6.81"
Tc=6.0 min CN=98 Runoff=0.6 cfs 2,116 cf

**Subcatchment PS-08: PS-08** Runoff Area=3,495 sf 93.19% Impervious Runoff Depth>6.57"
Flow Length=90' Slope=0.0200 '/' Tc=6.0 min CN=96 Runoff=0.5 cfs 1,913 cf

**Subcatchment PS-09: PS-09** Runoff Area=2,460 sf 100.00% Impervious Runoff Depth>6.81"
Flow Length=52' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.4 cfs 1,395 cf

**Subcatchment PS-10: PS-10** Runoff Area=5,092 sf 44.23% Impervious Runoff Depth>5.30"
Flow Length=88' Slope=0.0800 '/' Tc=6.0 min CN=85 Runoff=0.7 cfs 2,247 cf

**Subcatchment PS-11: PS-11** Runoff Area=1,140 sf 100.00% Impervious Runoff Depth>6.81"
Flow Length=46' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.2 cfs 647 cf

**Subcatchment PS-12: PS-12** Runoff Area=1,742 sf 100.00% Impervious Runoff Depth>6.81"
Flow Length=83' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.3 cfs 988 cf

**Subcatchment PS-13: PS-13** Runoff Area=1,401 sf 0.00% Impervious Runoff Depth>4.08"
Flow Length=163' Tc=6.0 min CN=74 Runoff=0.2 cfs 477 cf

**Subcatchment PS-14: PS-14** Runoff Area=731 sf 0.00% Impervious Runoff Depth>4.08"
Flow Length=43' Tc=6.0 min CN=74 Runoff=0.1 cfs 249 cf

**Pond CB01: CB-01** Peak Elev=46.71' Inflow=4.4 cfs 18,825 cf
12.0" Round Culvert n=0.013 L=54.0' S=0.0100 '/' Outflow=4.4 cfs 18,825 cf

**Pond CB02: CB-02** Peak Elev=47.27' Inflow=3.7 cfs 16,577 cf
12.0" Round Culvert n=0.013 L=30.0' S=0.0067 '/' Outflow=3.7 cfs 16,577 cf

**Pond CB04: CB-04** Peak Elev=49.61' Inflow=0.4 cfs 1,395 cf
12.0" Round Culvert n=0.013 L=30.0' S=0.0050 '/' Outflow=0.4 cfs 1,395 cf

**Pond CB05: CB-05** Peak Elev=50.08' Inflow=2.7 cfs 9,554 cf
12.0" Round Culvert n=0.013 L=40.0' S=0.0063 '/' Outflow=2.7 cfs 9,554 cf

**Pond CB06: CB-06** Peak Elev=49.60' Inflow=0.5 cfs 1,777 cf
12.0" Round Culvert n=0.013 L=43.0' S=0.0081 '/' Outflow=0.5 cfs 1,777 cf

**Pond CB07: CB-07** Peak Elev=50.01' Inflow=1.3 cfs 4,396 cf
12.0" Round Culvert n=0.013 L=59.0' S=0.0059 '/' Outflow=1.3 cfs 4,396 cf

**Pond CB08: CB-08** Peak Elev=49.60' Inflow=0.4 cfs 1,300 cf
12.0" Round Culvert n=0.013 L=67.0' S=0.0104 '/' Outflow=0.4 cfs 1,300 cf

**Pond CB09: CB-09** Peak Elev=49.20' Inflow=0.8 cfs 2,901 cf
12.0" Round Culvert n=0.013 L=77.0' S=0.0052 '/' Outflow=0.8 cfs 2,901 cf

**Pond CB10: CB-10** Peak Elev=49.04' Inflow=0.3 cfs 988 cf
12.0" Round Culvert n=0.013 L=31.0' S=0.0065 '/' Outflow=0.3 cfs 988 cf

**Pond DMH03: DMH-03** Peak Elev=49.76' Inflow=3.1 cfs 10,949 cf
12.0" Round Culvert n=0.013 L=20.0' S=0.0050 '/' Outflow=3.1 cfs 10,949 cf

**Pond JF: JELLYFISH** Peak Elev=47.33' Inflow=3.6 cfs 15,931 cf
12.0" Round Culvert n=0.013 L=24.0' S=0.0062 '/' Outflow=3.6 cfs 15,931 cf

**Pond SC: Stormceptor** Peak Elev=49.01' Inflow=4.4 cfs 15,966 cf
12.0" Round Culvert n=0.013 L=4.0' S=0.0000 '/' Outflow=4.4 cfs 15,966 cf

**Pond ST: Stormtech** Peak Elev=47.59' Storage=1,013 cf Inflow=4.4 cfs 15,966 cf
12.0" Round Culvert n=0.013 L=4.0' S=0.0000 '/' Outflow=3.6 cfs 15,931 cf

**Link 239-12: MAP 239 LOT 12** Inflow=0.1 cfs 396 cf
Primary=0.1 cfs 396 cf

**Link CB#1343: CB #1343** Inflow=0.1 cfs 249 cf
Primary=0.1 cfs 249 cf

**Link CB#1428: CB #1428** Inflow=4.5 cfs 19,301 cf
Primary=4.5 cfs 19,301 cf

**Total Runoff Area = 38,399 sf Runoff Volume = 19,982 cf Average Runoff Depth = 6.24"**
**20.52% Pervious = 7,878 sf 79.48% Impervious = 30,521 sf**

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points x 5
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 PS-01: PS-01** Runoff Area=3,430 sf 78.05% Impervious Runoff Depth>7.60"
Flow Length=57' Tc=6.0 min CN=93 Runoff=0.6 cfs 2,174 cf

**Subcatchment PS-02: PS-02** Runoff Area=2,499 sf 81.83% Impervious Runoff Depth>7.72"
Flow Length=38' Tc=6.0 min CN=94 Runoff=0.5 cfs 1,609 cf

**Subcatchment PS-03: PS-03** Runoff Area=2,418 sf 88.83% Impervious Runoff Depth>7.84"
Flow Length=52' Slope=0.0150 '/' Tc=6.0 min CN=95 Runoff=0.4 cfs 1,581 cf

**Subcatchment PS-04: PS-04** Runoff Area=1,168 sf 0.00% Impervious Runoff Depth>5.31"
Flow Length=100' Slope=0.0050 '/' Tc=23.2 min CN=74 Runoff=0.1 cfs 517 cf

**Subcatchment PS-05: PS-05** Runoff Area=5,500 sf 100.00% Impervious Runoff Depth>8.21"
Tc=6.0 min CN=98 Runoff=1.0 cfs 3,761 cf

**Subcatchment PS-06: PS-06** Runoff Area=3,593 sf 99.36% Impervious Runoff Depth>8.21"
Flow Length=42' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.7 cfs 2,457 cf

**Subcatchment PS-07: PS-07** Runoff Area=3,730 sf 100.00% Impervious Runoff Depth>8.21"
Tc=6.0 min CN=98 Runoff=0.7 cfs 2,550 cf

**Subcatchment PS-08: PS-08** Runoff Area=3,495 sf 93.19% Impervious Runoff Depth>7.96"
Flow Length=90' Slope=0.0200 '/' Tc=6.0 min CN=96 Runoff=0.6 cfs 2,320 cf

**Subcatchment PS-09: PS-09** Runoff Area=2,460 sf 100.00% Impervious Runoff Depth>8.21"
Flow Length=52' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.5 cfs 1,682 cf

**Subcatchment PS-10: PS-10** Runoff Area=5,092 sf 44.23% Impervious Runoff Depth>6.64"
Flow Length=88' Slope=0.0800 '/' Tc=6.0 min CN=85 Runoff=0.9 cfs 2,819 cf

**Subcatchment PS-11: PS-11** Runoff Area=1,140 sf 100.00% Impervious Runoff Depth>8.21"
Flow Length=46' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.2 cfs 779 cf

**Subcatchment PS-12: PS-12** Runoff Area=1,742 sf 100.00% Impervious Runoff Depth>8.21"
Flow Length=83' Slope=0.0150 '/' Tc=6.0 min CN=98 Runoff=0.3 cfs 1,191 cf

**Subcatchment PS-13: PS-13** Runoff Area=1,401 sf 0.00% Impervious Runoff Depth>5.33"
Flow Length=163' Tc=6.0 min CN=74 Runoff=0.2 cfs 622 cf

**Subcatchment PS-14: PS-14** Runoff Area=731 sf 0.00% Impervious Runoff Depth>5.33"
Flow Length=43' Tc=6.0 min CN=74 Runoff=0.1 cfs 324 cf

**Pond CB01: CB-01** Peak Elev=47.23' Inflow=5.1 cfs 22,883 cf
12.0" Round Culvert n=0.013 L=54.0' S=0.0100 '/' Outflow=5.1 cfs 22,883 cf

**Pond CB02: CB-02** Peak Elev=47.81' Inflow=4.3 cfs 20,064 cf
12.0" Round Culvert n=0.013 L=30.0' S=0.0067 '/' Outflow=4.3 cfs 20,064 cf

**Pond CB04: CB-04** Peak Elev=51.23' Inflow=0.5 cfs 1,682 cf
12.0" Round Culvert n=0.013 L=30.0' S=0.0050 '/' Outflow=0.5 cfs 1,682 cf

**Pond CB05: CB-05** Peak Elev=51.91' Inflow=3.2 cfs 11,580 cf
12.0" Round Culvert n=0.013 L=40.0' S=0.0063 '/' Outflow=3.2 cfs 11,580 cf

**Pond CB06: CB-06** Peak Elev=51.17' Inflow=0.6 cfs 2,174 cf
12.0" Round Culvert n=0.013 L=43.0' S=0.0081 '/' Outflow=0.6 cfs 2,174 cf

**Pond CB07: CB-07** Peak Elev=51.74' Inflow=1.5 cfs 5,363 cf
12.0" Round Culvert n=0.013 L=59.0' S=0.0059 '/' Outflow=1.5 cfs 5,363 cf

**Pond CB08: CB-08** Peak Elev=51.16' Inflow=0.4 cfs 1,581 cf
12.0" Round Culvert n=0.013 L=67.0' S=0.0104 '/' Outflow=0.4 cfs 1,581 cf

**Pond CB09: CB-09** Peak Elev=50.86' Inflow=1.0 cfs 3,511 cf
12.0" Round Culvert n=0.013 L=77.0' S=0.0052 '/' Outflow=1.0 cfs 3,511 cf

**Pond CB10: CB-10** Peak Elev=50.43' Inflow=0.3 cfs 1,191 cf
12.0" Round Culvert n=0.013 L=31.0' S=0.0065 '/' Outflow=0.3 cfs 1,191 cf

**Pond DMH03: DMH-03** Peak Elev=51.63' Inflow=3.7 cfs 13,262 cf
12.0" Round Culvert n=0.013 L=20.0' S=0.0050 '/' Outflow=3.7 cfs 13,262 cf

**Pond JF: JELLYFISH** Peak Elev=47.95' Inflow=4.1 cfs 19,285 cf
12.0" Round Culvert n=0.013 L=24.0' S=0.0062 '/' Outflow=4.1 cfs 19,285 cf

**Pond SC: Stormceptor** Peak Elev=50.56' Inflow=5.3 cfs 19,324 cf
12.0" Round Culvert n=0.013 L=4.0' S=0.0000 '/' Outflow=5.3 cfs 19,324 cf

**Pond ST: Stormtech** Peak Elev=48.44' Storage=1,330 cf Inflow=5.3 cfs 19,324 cf
12.0" Round Culvert n=0.013 L=4.0' S=0.0000 '/' Outflow=4.1 cfs 19,285 cf

**Link 239-12: MAP 239 LOT 12** Inflow=0.1 cfs 517 cf
Primary=0.1 cfs 517 cf

**Link CB#1343: CB #1343** Inflow=0.1 cfs 324 cf
Primary=0.1 cfs 324 cf

**Link CB#1428: CB #1428** Inflow=5.3 cfs 23,505 cf
Primary=5.3 cfs 23,505 cf

**Total Runoff Area = 38,399 sf Runoff Volume = 24,385 cf Average Runoff Depth = 7.62"**
**20.52% Pervious = 7,878 sf 79.48% Impervious = 30,521 sf**

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# APPENDIX F – POST-DEVELOPMENT CALCULATIONS (10-YEAR STORM EVENT)

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## Summary for Subcatchment PS-01: PS-01

Runoff = 0.4 cfs @ 12.09 hrs, Volume= 1,359 cf, Depth> 4.76"
Routed to Pond CB06 : CB-06

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 2,677 | 98 | Paved Parking, HSG C |
| 753 | 74 | >75% Grass cover, Good, HSG C |
| 3,430 | 93 | Weighted Average |
| 753 | | 21.95% Pervious Area |
| 2,677 | | 78.05% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.0 | 26 | 0.0600 | 0.22 | | **Sheet Flow, Sheet Flow 1** Grass: Short n= 0.150 P2= 3.67" |
| 0.5 | 31 | 0.0150 | 1.04 | | **Sheet Flow, Sheet Flow 2** Smooth surfaces n= 0.011 P2= 3.67" |
| 3.5 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 57 | Total | | | |

## Summary for Subcatchment PS-02: PS-02

Runoff = 0.3 cfs @ 12.09 hrs, Volume= 1,014 cf, Depth> 4.87"
Routed to Pond CB07 : CB-07

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 2,045 | 98 | Paved Parking, HSG C |
| 454 | 74 | >75% Grass cover, Good, HSG C |
| 2,499 | 94 | Weighted Average |
| 454 | | 18.17% Pervious Area |
| 2,045 | | 81.83% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.8 | 8 | 0.0500 | 0.16 | | **Sheet Flow, Sheet Flow 1** |
| | | | | | Grass: Short n= 0.150 P2= 3.67" |
| 0.1 | 5 | 0.0200 | 0.81 | | **Sheet Flow, Sheet Flow 2** |
| | | | | | Smooth surfaces n= 0.011 P2= 3.67" |
| 1.0 | 10 | 0.0500 | 0.17 | | **Sheet Flow, Sheet Flow 3** |
| | | | | | Grass: Short n= 0.150 P2= 3.67" |
| 0.3 | 15 | 0.0150 | 0.90 | | **Sheet Flow, Sheet Flow 4** |
| | | | | | Smooth surfaces n= 0.011 P2= 3.67" |
| 3.8 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 38 | Total | | | |

## Summary for Subcatchment PS-03: PS-03

Runoff = 0.3 cfs @ 12.09 hrs, Volume= 1,004 cf, Depth> 4.98"
Routed to Pond CB08 : CB-08

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 2,148 | 98 | Paved Parking, HSG C |
| 270 | 74 | >75% Grass cover, Good, HSG C |
| 2,418 | 95 | Weighted Average |
| 270 | | 11.17% Pervious Area |
| 2,148 | | 88.83% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.8 | 52 | 0.0150 | 1.15 | | **Sheet Flow, Sheet Flow 1** |
| | | | | | Smooth surfaces n= 0.011 P2= 3.67" |
| 5.2 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 52 | Total | | | |

## Summary for Subcatchment PS-04: PS-04

Runoff = 0.1 cfs @ 12.33 hrs, Volume= 274 cf, Depth> 2.81"
Routed to Link 239-12 : MAP 239 LOT 12

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 1,168 | 74 | >75% Grass cover, Good, HSG C |
| 1,168 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 23.2 | 100 | 0.0050 | 0.07 | | **Sheet Flow, Sheet Flow 1** Grass: Dense n= 0.240 P2= 3.67" |

## Summary for Subcatchment PS-05: PS-05

Runoff = 0.7 cfs @ 12.09 hrs, Volume= 2,443 cf, Depth> 5.33"
Routed to Pond CB05 : CB-05

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 5,500 | 98 | Roofs, HSG C |
| 5,500 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment PS-06: PS-06

Runoff = 0.4 cfs @ 12.09 hrs, Volume= 1,596 cf, Depth> 5.33"
Routed to Pond CB05 : CB-05

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 3,570 | 98 | Paved Parking, HSG C |
| 23 | 74 | >75% Grass cover, Good, HSG C |
| 3,593 | 98 | Weighted Average |
| 23 | | 0.64% Pervious Area |
| 3,570 | | 99.36% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 42 | 0.0150 | 1.10 | | **Sheet Flow, Sheet Flow 1** Smooth surfaces n= 0.011 P2= 3.67" |
| 5.4 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 42 | Total | | | |

## Summary for Subcatchment PS-07: PS-07

Runoff = 0.5 cfs @ 12.09 hrs, Volume= 1,656 cf, Depth> 5.33"
Routed to Pond SC : Stormceptor

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 3,730 | 98 | Roofs, HSG C |
| 3,730 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment PS-08: PS-08

Runoff = 0.4 cfs @ 12.09 hrs, Volume= 1,484 cf, Depth> 5.10"
Routed to Pond CB09 : CB-09

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 3,257 | 98 | Paved Parking, HSG C |
| 238 | 74 | >75% Grass cover, Good, HSG C |
| 3,495 | 96 | Weighted Average |
| 238 | | 6.81% Pervious Area |
| 3,257 | | 93.19% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.0 | 90 | 0.0200 | 1.44 | | **Sheet Flow, Sheet Flow 1**<br>Smooth surfaces n= 0.011 P2= 3.67" |
| 5.0 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 90 | Total | | | |

## Summary for Subcatchment PS-09: PS-09

Runoff = 0.3 cfs @ 12.09 hrs, Volume= 1,092 cf, Depth> 5.33"
Routed to Pond CB04 : CB-04

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 2,460 | 98 | Paved Parking, HSG C |
| 2,460 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.8 | 52 | 0.0150 | 1.15 | | **Sheet Flow, Sheet Flow 1**<br>Smooth surfaces n= 0.011 P2= 3.67" |
| 5.2 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 52 | Total | | | |

## Summary for Subcatchment PS-10: PS-10

Runoff = 0.5 cfs @ 12.09 hrs, Volume= 1,653 cf, Depth> 3.90"
Routed to Pond CB01 : CB-01

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 2,252 | 98 | Paved Parking, HSG C |
| 1,193 | 74 | >75% Grass cover, Good, HSG C |
| 1,647 | 74 | >75% Grass cover, Good, HSG C |
| 5,092 | 85 | Weighted Average |
| 2,840 | | 55.77% Pervious Area |
| 2,252 | | 44.23% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 88 | 0.0800 | 2.50 | | **Sheet Flow, Sheet Flow 1** Smooth surfaces n= 0.011 P2= 3.67" |
| 5.4 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 88 | Total | | | |

## Summary for Subcatchment PS-11: PS-11

Runoff = 0.1 cfs @ 12.09 hrs, Volume= 506 cf, Depth> 5.33"
Routed to Pond CB02 : CB-02

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 1,140 | 98 | Paved Parking, HSG C |
| 1,140 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.7 | 46 | 0.0150 | 1.12 | | **Sheet Flow, Sheet Flow 1** Smooth surfaces n= 0.011 P2= 3.67" |
| 5.3 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 46 | Total | | | |

## Summary for Subcatchment PS-12: PS-12

Runoff = 0.2 cfs @ 12.09 hrs, Volume= 774 cf, Depth> 5.33"
Routed to Pond CB10 : CB-10

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 1,742 | 98 | Paved Parking, HSG C |
| 1,742 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.1 | 83 | 0.0150 | 1.26 | | **Sheet Flow, Sheet Flow 1**<br>Smooth surfaces n= 0.011 P2= 3.67" |
| 4.9 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 83 | Total | | | |

## Summary for Subcatchment PS-13: PS-13

Runoff = 0.1 cfs @ 12.09 hrs, Volume= 330 cf, Depth> 2.82"
Routed to Link CB#1428 : CB #1428

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 1,401 | 74 | >75% Grass cover, Good, HSG C |
| 1,401 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.1 | 25 | 0.0500 | 0.20 | | **Sheet Flow, Sheet Flow 1**<br>Grass: Short n= 0.150 P2= 3.67" |
| 0.8 | 138 | 0.0200 | 2.87 | | **Shallow Concentrated Flow, Shallow Concentrated 1**<br>Paved Kv= 20.3 fps |
| 3.1 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 163 | Total | | | |

## Summary for Subcatchment PS-14: PS-14

Runoff = 0.1 cfs @ 12.09 hrs, Volume= 172 cf, Depth> 2.82"
Routed to Link CB#1343 : CB #1343

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-year Rainfall=5.57"

| Area (sf) | CN | Description |
|---|---|---|
| 731 | 74 | >75% Grass cover, Good, HSG C |
| 731 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.4 | 30 | 0.0500 | 0.21 | | **Sheet Flow, Sheet Flow 1** Grass: Short n= 0.150 P2= 3.67" |
| 0.2 | 13 | 0.0150 | 0.87 | | **Sheet Flow, Sheet Flow 2** Smooth surfaces n= 0.011 P2= 3.67" |
| 3.4 | | | | | **Direct Entry, Direct Entry** |
| 6.0 | 43 | Total | | | |

## Summary for Pond CB01: CB-01

Inflow Area = 35,099 sf, 86.96% Impervious, Inflow Depth > 4.97" for 10-year event
Inflow = 3.5 cfs @ 12.11 hrs, Volume= 14,549 cf
Outflow = 3.5 cfs @ 12.11 hrs, Volume= 14,549 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.5 cfs @ 12.11 hrs, Volume= 14,549 cf
Routed to Link CB#1428 : CB #1428

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 46.12' @ 12.11 hrs
Flood Elev= 49.15'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 44.70' | **12.0" Round Culvert** L= 54.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 44.70' / 44.16' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.4 cfs @ 12.11 hrs HW=46.07' TW=0.00' (Dynamic Tailwater)
**1=Culvert** (Barrel Controls 3.4 cfs @ 4.29 fps)

## Summary for Pond CB02: CB-02

[57] Hint: Peaked at 46.49' (Flood elevation advised)

Inflow Area = 30,007 sf, 94.21% Impervious, Inflow Depth > 5.16" for 10-year event
Inflow = 3.0 cfs @ 12.12 hrs, Volume= 12,896 cf
Outflow = 3.0 cfs @ 12.12 hrs, Volume= 12,896 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.0 cfs @ 12.12 hrs, Volume= 12,896 cf
Routed to Pond CB01 : CB-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 46.49' @ 12.15 hrs

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 45.00' | **12.0" Round Culvert** L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 45.00' / 44.80' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.0 cfs @ 12.12 hrs HW=46.33' TW=46.05' (Dynamic Tailwater)
**1=Culvert** (Inlet Controls 2.0 cfs @ 2.54 fps)

## Summary for Pond CB04: CB-04

Inflow Area = 2,460 sf,100.00% Impervious, Inflow Depth > 5.33" for 10-year event
Inflow = 0.3 cfs @ 12.09 hrs, Volume= 1,092 cf
Outflow = 0.3 cfs @ 12.09 hrs, Volume= 1,092 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.3 cfs @ 12.09 hrs, Volume= 1,092 cf
Routed to Pond DMH03 : DMH-03

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 48.26' @ 12.10 hrs
Flood Elev= 52.04'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 46.45' | **12.0" Round Culvert**<br>L= 30.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 46.45' / 46.30' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.0 cfs @ 12.09 hrs HW=48.13' TW=48.16' (Dynamic Tailwater)
**1=Culvert** ( Controls 0.0 cfs)

## Summary for Pond CB05: CB-05

[80] Warning: Exceeded Pond CB07 by 0.03' @ 12.10 hrs (0.5 cfs 155 cf)

Inflow Area = 17,440 sf, 91.40% Impervious, Inflow Depth > 5.10" for 10-year event
Inflow = 2.1 cfs @ 12.09 hrs, Volume= 7,415 cf
Outflow = 2.1 cfs @ 12.09 hrs, Volume= 7,415 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.1 cfs @ 12.09 hrs, Volume= 7,415 cf
Routed to Pond DMH03 : DMH-03

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 48.55' @ 12.10 hrs
Flood Elev= 51.89'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 46.55' | **12.0" Round Culvert**<br>L= 40.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 46.55' / 46.30' S= 0.0063 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.9 cfs @ 12.09 hrs HW=48.41' TW=48.16' (Dynamic Tailwater)
**1=Culvert** (Inlet Controls 1.9 cfs @ 2.42 fps)

## Summary for Pond CB06: CB-06

Inflow Area = 3,430 sf, 78.05% Impervious, Inflow Depth > 4.76" for 10-year event
Inflow = 0.4 cfs @ 12.09 hrs, Volume= 1,359 cf
Outflow = 0.4 cfs @ 12.09 hrs, Volume= 1,359 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.4 cfs @ 12.09 hrs, Volume= 1,359 cf
Routed to Pond CB07 : CB-07

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 48.28' @ 12.09 hrs
Flood Elev= 51.40'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 47.35' | **12.0" Round Culvert**<br>L= 43.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 47.35' / 47.00' S= 0.0081 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.0 cfs @ 12.09 hrs HW=48.24' TW=48.42' (Dynamic Tailwater)
↑—**1=Culvert** ( Controls 0.0 cfs)

## Summary for Pond CB07: CB-07

[80] Warning: Exceeded Pond CB06 by 0.25' @ 12.10 hrs (1.8 cfs 440 cf)
[80] Warning: Exceeded Pond CB08 by 0.20' @ 12.10 hrs (0.8 cfs 152 cf)

Inflow Area = 8,347 sf, 82.31% Impervious, Inflow Depth > 4.85" for 10-year event
Inflow = 1.0 cfs @ 12.09 hrs, Volume= 3,377 cf
Outflow = 1.0 cfs @ 12.09 hrs, Volume= 3,377 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.0 cfs @ 12.09 hrs, Volume= 3,377 cf
Routed to Pond CB05 : CB-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 48.53' @ 12.10 hrs
Flood Elev= 52.09'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 47.00' | **12.0" Round Culvert**<br>L= 59.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 47.00' / 46.65' S= 0.0059 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.1 cfs @ 12.09 hrs HW=48.42' TW=48.42' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 0.1 cfs @ 0.15 fps)

## Summary for Pond CB08: CB-08

Inflow Area = 2,418 sf, 88.83% Impervious, Inflow Depth > 4.98" for 10-year event
Inflow = 0.3 cfs @ 12.09 hrs, Volume= 1,004 cf
Outflow = 0.3 cfs @ 12.09 hrs, Volume= 1,004 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.3 cfs @ 12.09 hrs, Volume= 1,004 cf
Routed to Pond CB07 : CB-07

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 48.33' @ 12.09 hrs
Flood Elev= 52.19'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 47.80' | **12.0" Round Culvert**<br>L= 67.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 47.80' / 47.10' S= 0.0104 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.0 cfs @ 12.09 hrs HW=48.30' TW=48.42' (Dynamic Tailwater)
↑—**1=Culvert** ( Controls 0.0 cfs)

## Summary for Pond CB09: CB-09

[80] Warning: Exceeded Pond CB10 by 0.10' @ 12.15 hrs (1.1 cfs 341 cf)

Inflow Area = 5,237 sf, 95.46% Impervious, Inflow Depth > 5.17" for 10-year event
Inflow = 0.6 cfs @ 12.09 hrs, Volume= 2,258 cf
Outflow = 0.6 cfs @ 12.09 hrs, Volume= 2,258 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.6 cfs @ 12.09 hrs, Volume= 2,258 cf
Routed to Pond SC : Stormceptor

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 47.96' @ 12.11 hrs
Flood Elev= 51.82'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 46.50' | **12.0" Round Culvert**<br>L= 77.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 46.50' / 46.10' S= 0.0052 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.1 cfs @ 12.09 hrs HW=47.82' TW=47.82' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 0.1 cfs @ 0.17 fps)

## Summary for Pond CB10: CB-10

Inflow Area = 1,742 sf,100.00% Impervious, Inflow Depth > 5.33" for 10-year event
Inflow = 0.2 cfs @ 12.09 hrs, Volume= 774 cf
Outflow = 0.2 cfs @ 12.09 hrs, Volume= 774 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.2 cfs @ 12.09 hrs, Volume= 774 cf
Routed to Pond CB09 : CB-09

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 47.90' @ 12.11 hrs
Flood Elev= 51.44'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 46.80' | **12.0" Round Culvert**<br>L= 31.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 46.80' / 46.60' S= 0.0065 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.0 cfs @ 12.09 hrs HW=47.78' TW=47.82' (Dynamic Tailwater)
**1=Culvert** ( Controls 0.0 cfs)

## Summary for Pond DMH03: DMH-03

[57] Hint: Peaked at 48.31' (Flood elevation advised)
[80] Warning: Exceeded Pond CB04 by 0.10' @ 12.15 hrs (1.2 cfs 364 cf)

Inflow Area = 19,900 sf, 92.46% Impervious, Inflow Depth > 5.13" for 10-year event
Inflow = 2.4 cfs @ 12.09 hrs, Volume= 8,507 cf
Outflow = 2.4 cfs @ 12.09 hrs, Volume= 8,507 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.4 cfs @ 12.09 hrs, Volume= 8,507 cf
Routed to Pond SC : Stormceptor

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 48.31' @ 12.11 hrs

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 46.20' | **12.0" Round Culvert**<br>L= 20.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 46.20' / 46.10' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.2 cfs @ 12.09 hrs HW=48.16' TW=47.82' (Dynamic Tailwater)
**1=Culvert** (Inlet Controls 2.2 cfs @ 2.81 fps)

## Summary for Pond JF: JELLYFISH

Inflow Area = 28,867 sf, 93.98% Impervious, Inflow Depth > 5.15" for 10-year event
Inflow = 2.8 cfs @ 12.12 hrs, Volume= 12,390 cf
Outflow = 2.8 cfs @ 12.12 hrs, Volume= 12,390 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.8 cfs @ 12.12 hrs, Volume= 12,390 cf
Routed to Pond CB02 : CB-02

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 46.73' @ 12.17 hrs
Flood Elev= 51.46'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 45.25' | **12.0" Round Culvert**<br>L= 24.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 45.25' / 45.10' S= 0.0062 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.0 cfs @ 12.12 hrs HW=46.62' TW=46.34' (Dynamic Tailwater)
**1=Culvert** (Inlet Controls 2.0 cfs @ 2.54 fps)

## Summary for Pond SC: Stormceptor

[57] Hint: Peaked at 47.96' (Flood elevation advised)
[80] Warning: Exceeded Pond CB09 by 0.02' @ 12.10 hrs (0.4 cfs 71 cf)

Inflow Area = 28,867 sf, 93.98% Impervious, Inflow Depth > 5.16" for 10-year event
Inflow = 3.5 cfs @ 12.09 hrs, Volume= 12,422 cf
Outflow = 3.5 cfs @ 12.09 hrs, Volume= 12,422 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.5 cfs @ 12.09 hrs, Volume= 12,422 cf
Routed to Pond ST : Stormtech

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 47.96' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 46.00' | **12.0" Round Culvert**<br>L= 4.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 46.00' / 46.00' S= 0.0000 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.7 cfs @ 12.09 hrs HW=47.82' TW=46.85' (Dynamic Tailwater)
**1=Culvert** (Inlet Controls 3.7 cfs @ 4.73 fps)

## Summary for Pond ST: Stormtech

Inflow Area = 28,867 sf, 93.98% Impervious, Inflow Depth > 5.16" for 10-year event
Inflow = 3.5 cfs @ 12.09 hrs, Volume= 12,422 cf
Outflow = 2.8 cfs @ 12.12 hrs, Volume= 12,390 cf, Atten= 19%, Lag= 1.8 min
Primary = 2.8 cfs @ 12.12 hrs, Volume= 12,390 cf
Routed to Pond JF : JELLYFISH

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 5
Peak Elev= 47.07' @ 12.16 hrs Surf.Area= 661 sf Storage= 774 cf

Plug-Flow detention time= 6.8 min calculated for 12,364 cf (100% of inflow)
Center-of-Mass det. time= 5.1 min ( 759.3 - 754.2 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1A | 45.30' | 656 cf | **20.50'W x 32.23'L x 3.75'H Field A**<br>2,478 cf Overall - 837 cf Embedded = 1,641 cf x 40.0% Voids |
| #2A | 45.80' | 837 cf | **ADS_StormTech SC-800 +Cap** x 16 Inside #1<br>Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf<br>Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap<br>16 Chambers in 4 Rows<br>Cap Storage= 3.4 cf x 2 x 4 rows = 27.4 cf |
| | | 1,493 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 45.30' | **12.0" Round Culvert** |

L= 4.0' CPP, square edge headwall, Ke= 0.500
Inlet / Outlet Invert= 45.30' / 45.30' S= 0.0000 '/' Cc= 0.900
n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.3 cfs @ 12.12 hrs HW=46.98' TW=46.62' (Dynamic Tailwater)
**1=Culvert** (Inlet Controls 2.3 cfs @ 2.89 fps)

## Summary for Link 239-12: MAP 239 LOT 12

Inflow Area = 1,168 sf, 0.00% Impervious, Inflow Depth > 2.81" for 10-year event
Inflow = 0.1 cfs @ 12.33 hrs, Volume= 274 cf
Primary = 0.1 cfs @ 12.33 hrs, Volume= 274 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

## Summary for Link CB#1343: CB #1343

Inflow Area = 731 sf, 0.00% Impervious, Inflow Depth > 2.82" for 10-year event
Inflow = 0.1 cfs @ 12.09 hrs, Volume= 172 cf
Primary = 0.1 cfs @ 12.09 hrs, Volume= 172 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

## Summary for Link CB#1428: CB #1428

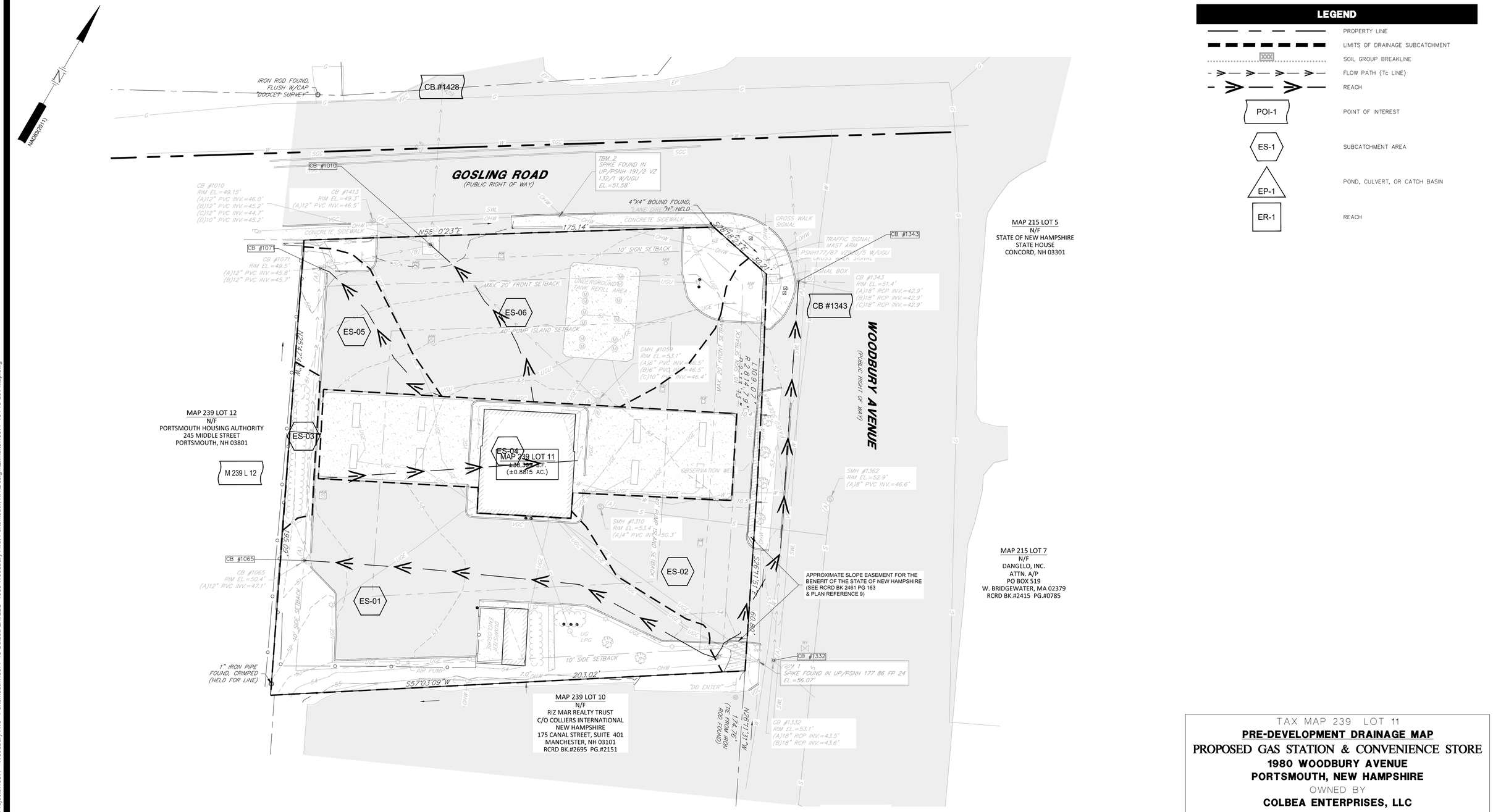
Inflow Area = 36,500 sf, 83.62% Impervious, Inflow Depth > 4.89" for 10-year event
Inflow = 3.6 cfs @ 12.11 hrs, Volume= 14,879 cf
Primary = 3.6 cfs @ 12.11 hrs, Volume= 14,879 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

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# APPENDIX G – DRAINAGE MAPS

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TAX MAP 239 LOT 11

**PRE-DEVELOPMENT DRAINAGE MAP**

# PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**

**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**

HORIZONTAL SCALE 1"=20'

20 10 0 20

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|

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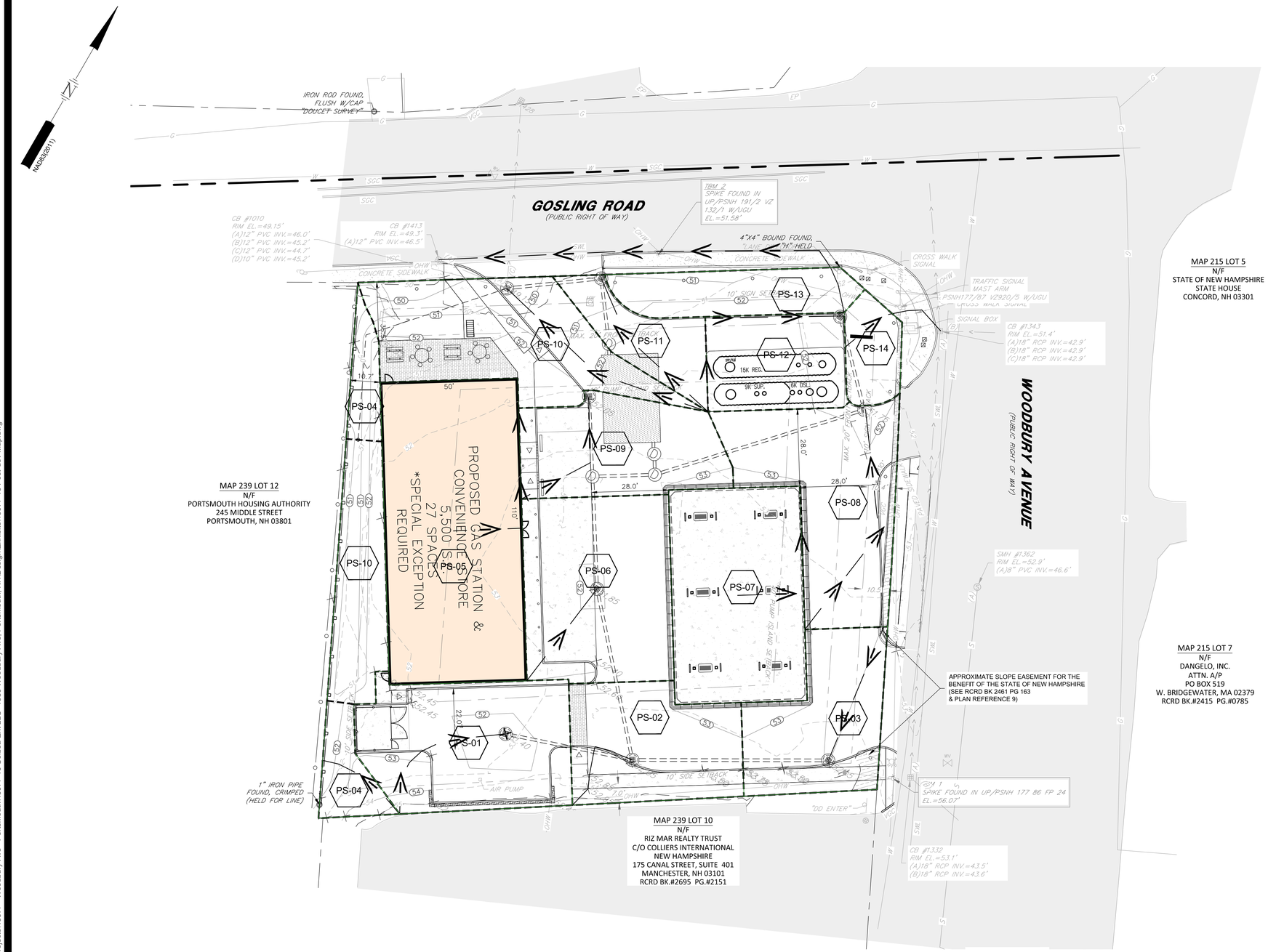
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| FILE | 46077.16 | DR | JKC | FB | 46077-16 PRE-DEV MAP | D-01 |
|---|---|---|---|---|---|---|
| | | CK | CRR | CADFILE | | |

Nov 17, 2025 - 8:53am
\\TFM-BEDFORD\Projects\Civil-Survey\MSC Projects\46077 - Woodbury Ave - Portsmouth\46077-16 Colbea Ent LLC- 1980 Woodbury Ave, Portsmouth, NH\Design\Exhibits\46077-16 Pre-dev Map.dwg




## LEGEND

- PROPERTY LINE
- LIMITS OF DRAINAGE SUBCATCHMENT
- SOIL GROUP BREAKLINE
- FLOW PATH (Tc LINE)
- REACH
- POI-1 — POINT OF INTEREST
- PS-1 — SUBCATCHMENT AREA
- PP-1 — POND, CULVERT, OR CATCH BASIN
- PR-1 — REACH

HORIZONTAL SCALE 1"=20'
20 10 0 20

TAX MAP 239 LOT 11

# POST-DEVELOPMENT DRAINAGE MAP

## PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**
**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**
**SCALE: 1"=20' (22"X34")**

**NOVEMBER 17, 2025**

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|

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| FILE | DR | JKC | FB | | |
|---|---|---|---|---|---|
| 46077.16 | CK | CRR | CADFILE | 46077-16 POST-DEV MAP | D-02 |

Nov 17, 2025 - 8:41am
\\TFM-BEDFORD\Projects\Civil-Survey\MSC Projects\46077 - Woodbury Ave - Portsmouth\46077-16 Colbea Ent LLC- 1980 Woodbury Ave, Portsmouth, NH\Design\Exhibits\46077-16 Post-dev Map.dwg

# APPENDIX H – INSPECTION AND MAINTENANCE MANUAL

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Project #46077.16

# *STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE MANUAL*

**F O R**

# Proposed Gas Station & Convenience Store

**1980 Woodbury Avenue**
**Portsmouth, New Hampshire**

**Tax Map 239, Lot 11**

**Owned by Colbea Enterprises, LLC**

**November 17, 2025**

**Prepared By:**

TFM Since 1968

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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General Inspection and Maintenance Requirements 2

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Inspection and Maintenance Records 5

Owner's Certification 6

Attachment 1 – Inspection and Maintenance Log

Attachment 2 – Deicing Log

Appendix A – Stormwater Inspection & Maintenance Plan

Appendix B – Control of Invasive Plants

Appendix C – Stormtech® Chamber System – Isolator® Row O & M Manual

## Maintenance of Property

TFMoran, Inc., has prepared the following Stormwater Management System Inspection & Maintenance Plan for Colbea Enterprises, LLC at 1980 Woodbury Avenue Portsmouth, New Hampshire. The intent of this plan is to provide the owner, and future property managers/owners of the site with a list of procedures that document the inspection and maintenance requirements of the Stormwater Management System for this development. This includes all temporary and permanent stormwater and erosion control measure during and post construction.

## Plans

Refer to the Site Development Plans prepared by MSC a division of TFMoran, Inc. for Tax Map 239 Lot 11, 1980 Woodbury Avenue, Portsmouth, New Hampshire, dated November 17, 2025. See Appendix A for the "Stormwater Inspection and Maintenance Plan" identifying locations of stormwater practices described hereon.

## Owner Responsibility

The owner shall be responsible for the following inspection and maintenance program which is necessary to keep the Stormwater Management System functioning properly. These measures will help greatly to reduce potential environmental impacts. By following the enclosed procedures, Colbea Enterprises, LLC and its successors 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.

The owner and future owners are the party responsible for the following record keeping activities further identified in this Inspection & Maintenance Manual:

- Conduct reporting, inspection, and maintenance activities in accordance with the "Inspection and Maintenance Checklist Requirements" and if applicable "Regular Inspection and Maintenance Guidance" provided by University of New Hampshire Stormwater Center (UNHSC);
- Document each inspection and maintenance activity with the "Inspection and Maintenance Log" and if applicable "Checklist for Inspection" provided by University of New Hampshire Stormwater Center (UNHSC);
- Photograph each practice that is subject to the "Inspection and Maintenance Checklist Requirements" at each inspection of that stormwater practice;
- Document actions taken if invasive species begin to grow in the stormwater management system; and
- Document each application of deicing material applied to the site with the "Deicing Log"

All record keeping required by the Inspection & Maintenance Manual shall be maintained by the responsible party and be made available to the applicable regulatory agencies (i.e. City of Portsmouth, etc.) upon request. Logs and reports required by this Inspection & Maintenance Manual should be prepared by a qualified inspector with working knowledge of the site. This manual and associated records shall be transferred to any future owners.

All current and future owners must comply with RSA 485-A:17, Env-Wq 1500, the permit, and all conditions contained in the permit.

The following inspection and maintenance program is necessary in order to keep the Stormwater Management System functioning properly. These measures will greatly help to reduce potential environmental impacts. By following the enclosed procedures, Colbea Enterprises, LLC and its successors 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.

## General Inspection and Maintenance Requirements

*Temporary* stormwater, sediment and erosion control measures that require maintenance on the site during construction include, but are not limited, to the following:

- Stabilized construction entrance;
- Litter/trash removal;
- Construction dumpster area;
- Silt sock barriers;
- Inlet protection;
- Gravel.

*Permanent* stormwater, sediment and erosion control measures that require maintenance on the site include, but are not limited, to the following:

- Litter/trash removal;
- Dumpster area maintenance;
- Landscaping and hardscaping;
- Conventional pavement;
- Stormtech Chambers;
- Drainage Inlets (i.e. catch basins, drop inlets, etc.);
- Drainage Structures (i.e. drain manholes, drainage cleanouts, yard drains, etc.)
- Roof gutters and downspouts;
- Culvert pipes;
- Grit/Oil/Water separators;
- Subsurface storage structures; and
- Surface maintenance related to deicing/plowing.

## Inspection and Maintenance Checklist Requirements

By implementing the following procedures, current owners will be able to maintain the functional design of the Stormwater Management System and maximize the systems ability to remove sediment and other contaminants from site-generated stormwater runoff. The owner shall conduct inspection and maintenance activities in accordance with the following checklist:

| | ***Frequency*** | ***Inspect*** | ***Action*** |
|---|---|---|---|
| *Temporary Controls* | | | |
| **Stabilized Construction Entrance** | Weekly | • Inspect adjacent roadway for sediment tracking<br><br>• Inspect stone for sediment accumulation | • Sweep adjacent roadways as soon as sediment is tracked<br><br>• Top dress with additional stone when necessary to prevent tracking |
| **Litter/Trash Removal** | Routinely | • Inspect site especially construction areas | • Remove debris and clean areas as necessary |
| **Construction Dumpster Area** | Routinely | • Dumpster Areas | • Remove any accumulated debris and dispose of properly |
| **Silt Sock Barrier** | Weekly and after measurable rainfall | • Inspect accumulated sediment level, rips and tears | • Repair or replace damaged lengths<br><br>• Remove and dispose accumulated sediment once level reaches 1/3 of barrier |
| **Inlet Protection** | During construction and after measurable rainfall | • Inspect for accumulated sediment | • Empty sediment bag if more than ½ filled with sediment or debris. Replace bag if torn or punctured to ½" diameter or greater on the lower half of the bag |
| **Gravel** | Spring and Fall | • Inspect gravel for ruts and depth | • Replace gravel as necessary, regrade as necessary to maintain design grades, remove any accumulated gravel washed from roadway |

| | ***Frequency*** | ***Inspect*** | ***Action*** |
|---|---|---|---|
| *Permanent Controls* | | | |
| **Litter/Trash Removal** | Routinely | • Inspect site | • Remove debris and clean areas as necessary |
| **Dumpster Area Maintenance** | Routinely | • Dumpster Areas | • Remove any accumulated debris and dispose of properly |

| | ***Frequency*** | ***Inspect*** | ***Action*** |
|---|---|---|---|
| *Permanent Controls* | | | |
| **Landscaping and hardscaping (not including Bioretention Systems)** | Spring | • Mulch/stone: Inspect mulch areas for trash and debris and thickness of mulch | • Remove weeds, invasive species, and debris. Top dress with new mulch or stone when necessary |
| | Spring | • Trees and Shrubs: Inspect for broken, weak or diseased branches and debris | • Prune to maintain shape to avoid splitting, remove broken, weak or diseased branches, replace as necessary |
| | As necessary | • Lawn | • Mow as required |
| | Spring and Fall | • Inspect landscaped areas for debris and litter | • Remove debris and litter as necessary |
| **Conventional Pavement** | Spring and Fall | • Inspect pavement for debris | • Sweeping as required |
| **Stormtech® Chambers** | Spring and Fall | • Inspect isolator row | • Remove accumulated sediment by the JetVac process when sediment reaches an average depth of 3 inches. See the attached Stormtech® Isolator® Row O&M Manual requirements in this document. |
| **Drainage Inlets (Catch Basins / Drop Inlets)** | Spring and Fall | • Inspect for sediment<br>• Inspect for hydrocarbons<br>• Inspect Hoods | • If sump is more than half full of sediment, remove sediment as necessary<br>• Remove and dispose of properly<br>• Repair and replace as necessary |
| **Drainage Structures (Drain Manholes, Drain Cleanouts, Yard Drains, etc.)** | Spring and Fall | • Inspect for accumulated sediment and debris | • Clean any material upon inspection and deposit of properly |
| **Roof Gutters and Downspouts** | Spring and Fall | • Inspect for accumulated sediment and debris | • Clean any material upon inspection and deposit of properly |

| | *Frequency* | *Inspect* | *Action* |
|---|---|---|---|
| *Permanent Controls* | | | |
| **Grit/Oil/Water Separator** | Quarterly | • Inspection for debris or sediment buildup<br><br>• Inspect structure. | • Remove trash and debris and dispose properly<br>• Remove floating oil, grease and petroleum substances using special vacuum hoses; treat as hazardous waste<br>• Removal of sediment and dispose of properly.<br><br>• Repair as necessary. |

## Inspection and Maintenance Records

A detailed, written record of all logs, reports, and photographs required by this Inspection & Maintenance Manual must be kept by the owner.

The attached forms are provided to assist the property manager with the inspection and maintenance of the Stormwater Management System. The “Inspection and Maintenance Log” (Attachment 1) and “Deicing Log” (Attachment 2) on the following pages are a blank copy to aid in record keeping required by this Inspection & Maintenance Manual.

Supplement the “Inspection and Maintenance Log” with the most currently available “Checklist for Inspections” from UNHSC (attached to this Manual for reference). Each inspection or maintenance activity shall include photographs of each practice that is subject to the “Inspection and Maintenance Checklist Requirements” at each inspection of that stormwater practice. Log actions taken if invasive species begin to grow in the stormwater management system as required per the attached “Control of Invasive Plants”.

For all surface maintenance related activities related to deicing/plowing, complete the “Deicing Log” to track the amount and type of deicing materials applied to the site. No winter sanding of is permitted on permeable pavements or porous asphalt. Minimization of salt application for ice control is recommended on, or where, runoff may discharge to these areas. Snow shall be stored in designated snow storage areas which have been designed to drain on-site and receive treatment via the stormwater management system prior to infiltration or discharge.

## Owner's Certification

Contact Information

| | |
|---|---|
| Owner: | Colbea Enterprises, LLC |
| Contact Person | Michael Gazdacko |
| | 695 George Washington Highway Lincoln, RI 02865 |

I have reviewed this document and understand the responsibilities contained. I agree to perform the required maintenance on the stormwater management system.

Owner's Signature (future owner's and successors, if applicable)

Print Name

Title

Date

Any inquiries in regards to the design, function, and/or maintenance of any one of the above mentioned facilities or tasks shall be directed to the project engineer:

TFMoran, Inc. Seacoast Division
170 Commerce Way, Suite 102
Portsmouth, NH 03801
603-431-2222

# ATTACHMENT 1

Inspection and Maintenance Log

Attachment 1

## *Inspection and Maintenance Log*

| BMP/System Component | Date Inspected | Inspector | Cleaning/Repair Needed (list items/comments) | Date of Cleaning/Repair | Performed By |
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# ATTACHMENT 2

Deicing Log

Attachment 2

# *Deicing Log*

| Deicing Material Used | Amount of Deicing Material Applied | Date of Application | Logged By |
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# APPENDIX A

Stormwater Inspection & Maintenance Plan

# OPERATION AND MAINTENANCE PLAN

RESPONSIBLE PARTY

OWNER: COLBEA ENTERPRISES, LLC

ADDRESS: 695 GEORGE WASHINGTON HIGHWAY LINCOLN, RI

1. STORMWATER PRACTICES – SCHEDULE OF MAINTENANCE

THE FOLLOWING MEASURES WILL BE PERFORMED ANNUALLY; ONCE FOLLOWING SNOW-MELT (SPRING):

- PARKING LOT SWEEPING
- SNOW STORAGE AREAS (SAND AND CONTAMINANT REMOVAL)
- GRASS SWALES
- SHEET FLOW AREAS

THE FOLLOWING PRACTICES SHALL BE INSPECTED BI-ANNUALLY FOLLOWING SNOW-MELT (SPRING) AND ONCE FOLLOWING LEAF-DROP (FALL):

- CATCH BASINS/MANHOLES
- OUTLET PIPE/ROOF DRAINS
- STORMWATER BASINS

2. STORMWATER PRACTICES – MAINTENANCE GUIDELINES

PRETREATMENT PRACTICES

CATCH BASINS/MANHOLES
MAINTENANCE REQUIREMENTS:

- TO BE INSPECTED A LEAST TWICE ANNUALLY, ONCE FOLLOWING SNOW-MELT AND ONCE FOLLOWING LEAF-DROP AND CLEANED AS INDICATED BY INSPECTION.
- SEDIMENT SHOULD BE REMOVED ANNUALLY AND WHEN IT APPROACHES HALF THE SUMP DEPTH.
- INSPECT PIPE INLETS AND OUTLETS FOR BLOCKAGES AND REMOVE IF NECESSARY.
- IF FLOATING HYDROCARBONS ARE OBSERVED DURING AN INSPECTION, THE MATERIAL SHOULD BE REMOVED IMMEDIATELY BY SKIMMING, ABSORBENT MATERIALS, OR OTHER METHOD AND DISPOSED IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

CONVEYANCE PRACTICES

SHEET FLOW AREAS
MAINTENANCE REQUIREMENTS:

- INSPECT A LEAST ONCE ANNUALLY FOR DAMAGE, EROSION AND DETERIORATION.
- REPAIR DAMAGES IMMEDIATELY AND REFRESH WITH NEW PAVEMENT, ROCK, OR SEED AS NEEDED.

OUTLET PIPES/ROOF DRAINS
MAINTENANCE REQUIREMENTS:

- TO BE INSPECTED A LEAST TWICE ANNUALLY, ONCE FOLLOWING SNOW-MELT AND ONCE FOLLOWING LEAF-DROP AND CLEANED AS INDICATED BY INSPECTION
- CHECK PIPES FOR BLOCKAGES AND REMOVE SEDIMENT/BLOCKAGES
- INSPECT A LEAST ONCE ANNUALLY FOR DAMAGE, EROSION AND DETERIORATION.
- REPAIR DAMAGES IMMEDIATELY AND REFRESH WITH NEW ROCK OR SEED AS NEEDED.

3. CONTROL OF INVASIVE PLANTS

DURING MAINTENANCE ACTIVITIES, CHECK FOR THE PRESENCE OF INVASIVE PLANTS. IF INVASIVE PLANTS ARE FOUND, THEY SHALL BE CONTROLLED AND REMOVE IN A SAFE MANNER AS DESCRIBED ON THE FOLLOWING PAGES.

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. INVASIVE PLANTS CAN CAUSE HARM BY:

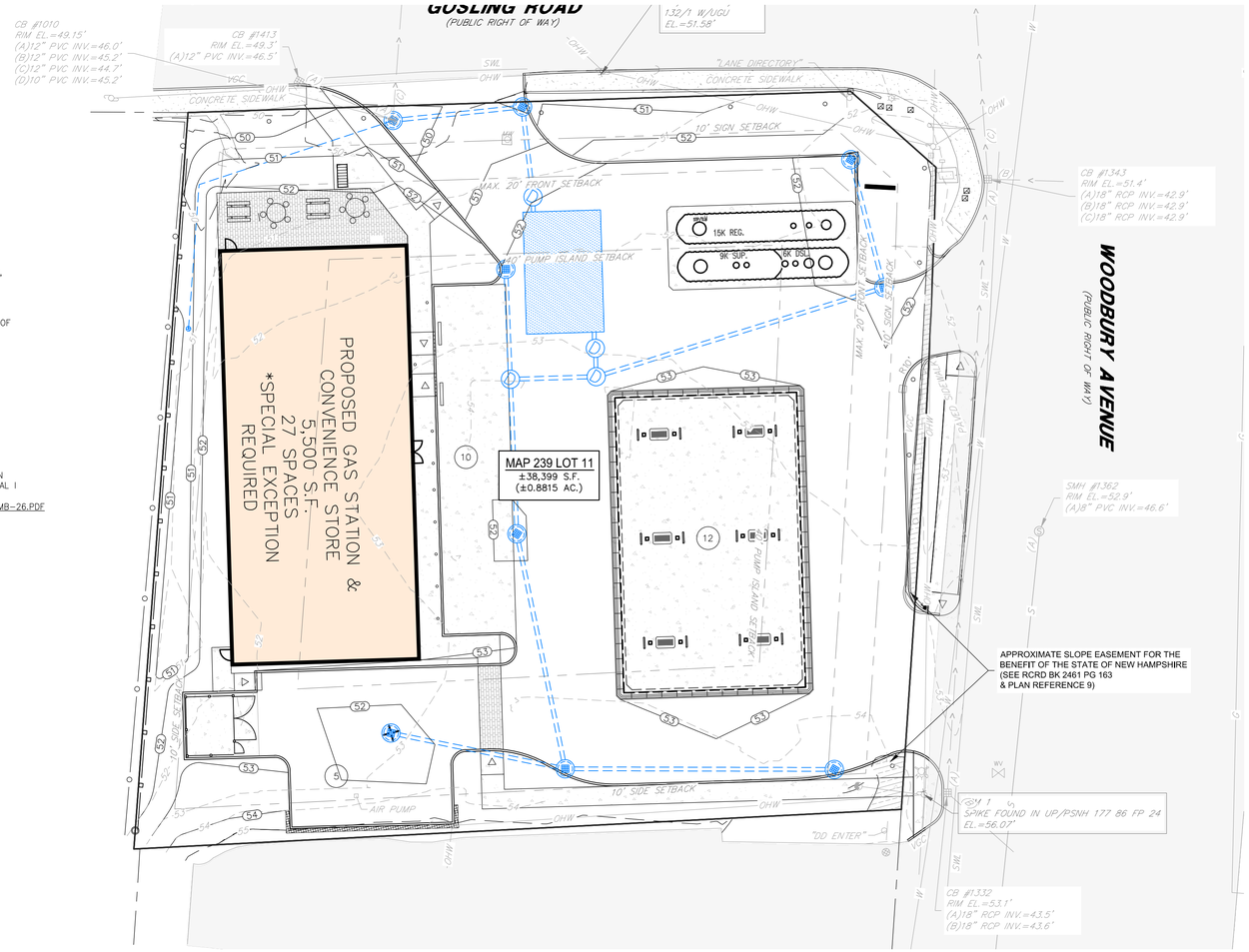
- BECOMING WEEDY AND OVERGROWN;
- KILLING ESTABLISHED SHADE TREES;
- OBSTRUCTING PIPES AND DRAINAGE SYSTEMS
- FORMING DENSE BEDS IN WATER
- LOWERING WATER LEVELS IN LAKES, STREAMS AND WETLANDS
- DESTROYING NATURAL COMMUNITIES
- PROMOTING EROSION ON STREAM BANKS AND HILLSIDES
- RESISTING CONTROL EXCEPT BY HAZARDOUS CHEMICALS.

4. DEICING PLAN

A DEICING LOG SHOULD BE IMPLEMENTED DURING WINTER MONTHS TO KEEP RECORDS OF THE SNOW/ICE MAINTENANCE NEEDED DURING STORM EVENTS. IT IS RECOMMENDED THAT A NEW HAMPSHIRE CERTIFIED GREEN SNOPRO SALT APPLICATOR BE EMPLOYED TO MANAGE THE SNOW AND ICE REMOVAL FOR THE SITE. ADDITIONAL I NFORMATION ON SALT REDUCTION INITIATIVES CAN BE OBTAINED AT:
HTTP://WWW.DES.NH.GOV/ORGANIZATION/DIVISIONS/WATER/WMB/WAS/SALT-REDUCTION-INITIATIVE/DOCUMENTS/WMB-26.PDF

## DEICING LOG

| DATE | OPERATOR | LOCATION | EVENT BEGAN | EVENT END | EVENT TYPE | TOTAL PRECIP. | PAVEMENT TEMP | TEMP. TREND | MATERIAL USED | AMOUNT USED | APPLICATION RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
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HORIZONTAL SCALE 1"=40'
40 20 0 40

## SNOW REMOVAL & DE-ICING NOTES

1. IN THE EVENT THAT THE SNOW STORAGE AREAS PROVIDED ON THE SITE ARE COMPLETELY UTILIZED, EXCESS SNOW SHALL BE TRANSPORTED OFF SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
2. WINTER MAINTENANCE SHALL BE PERFORMED BY A GREEN SNO-PRO CERTIFIED (OR FUNCTIONAL EQUIVALENT CERTIFICATION) CONTRACTOR.
3. SNOW MELT SEDIMENT WILL BE CAPTURED IN GRASS AREAS & CATCH BASIN SUMPS DURING SPRING SNOW MELT. PROPERTY OWNER SHALL INSPECT ONSITE SUMPS AND WATER QUALITY UNITS AND CONTRACT A VAC TRUCK SERVICE TO REMOVE ANY SEDIMENT. ALL SNOW MELT SEDIMENT IN LANDSCAPE AREAS SHALL BE SWEPT UP AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS FOR TRANSPORT AND DISPOSAL TO A PERMITTED LANDFILL.

## STORMWATER SYSTEM ANNUAL REPORTING

THE LANDOWNER SHALL BE RESPONSIBLE FOR SUBMITTING AN ANNUAL REPORT TO THE DPW/EPD BY EACH YEAR THAT ALL STORMWATER MANAGEMENT AND EROSION CONTROL MEASURES ARE FUNCTIONING PER THE APPROVED STORMWATER MANAGEMENT PLAN AND I&M PLAN. THE INSPECTION AND MAINTENANCE LOG AND DEICING LOG SHALL BE INCLUDED WITH THE REPORT. THE ANNUAL REPORT SHALL NOTE IF ANY STORMWATER INFRASTRUCTURE HAS NEEDED ANY REPAIRS OTHER THAN ROUTINE MAINTENANCE AND THE RESULTS OF THOSE REPAIRS. IF THE STORMWATER INFRASTRUCTURE IS NOT FUNCTIONING PER THE APPROVED STORMWATER MANAGEMENT PLAN AND I&M PLAN, THE LANDOWNER SHALL MAKE ANY REPAIRS NECESSARY TO RESTORE THE FUNCTION AS DESIGNED WITHIN 90 DAYS OF DISCOVERING THE DEFICIENCY OR PROVIDE DOCUMENTATION TO DPW/EPD DESCRIBING WHY THE SYSTEM CANNOT BE REPAIRED WITHIN 90 DAYS AND A PROPOSED SCHEDULE FOR SUCH REPAIRS. THE LANDOWNER OF A SITE FOR WHICH A SOURCE CONTROL PLAN IS REQUIRED SHALL UPDATE THE SOURCE CONTROL PLAN AS NECESSARY TO REFLECT ANY CHANGES AND SUBMIT THE UPDATED SOURCE CONTROL PLAN TO DPW/EPD WITH ITS ANNUAL REPORT. IF NO CHANGES HAVE BEEN MADE, THE LANDOWNER SHALL DOCUMENT THIS IN THE ANNUAL REPORT. RECORDS MUST ALSO BE MADE AVAILABLE TO THE CITY OR DPW/EPD UPON REQUEST.

## INSPECTION AND MAINTENANCE LOG

| DATA | INSPECTOR | BMPs CHECKED | MAINTENANCE REQUIRED |
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TAX MAP 239 LOT 11

**INSPECTION & MAINTENANCE PLAN**

PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**
**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| | | | | |

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48 Constitution Drive, Bedford, N.H. 03110

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This plan is not effective unless signed by a duly authorized officer of TFMoran, Inc.

DIG SAFE
811 OR 1-888-DIG-SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

| FILE | DR | JKC | FB | | |
|---|---|---|---|---|---|
| 46077.16 | CK | CRR | CADFILE | 46077-16 I&M PLAN | APPENDIX A |

Nov 17, 2025 - 10:15am
\\TFM-BEDFORD\Projects\Civil-Survey\MSC Projects\46077 - Woodbury Ave - Portsmouth\46077-16 Colbea Ent LLC - 1980 Woodbury Ave, Portsmouth, NH\Design\Exhibits\46077-16 I&M Plan.dwg

# APPENDIX B

Control of Invasive Plants

# CONTROL OF INVASIVE PLANTS

During maintenance activities, check for the presence of invasive plants and remove in a safe manner as described on the following pages. They should be controlled as described on the following pages.

Background:

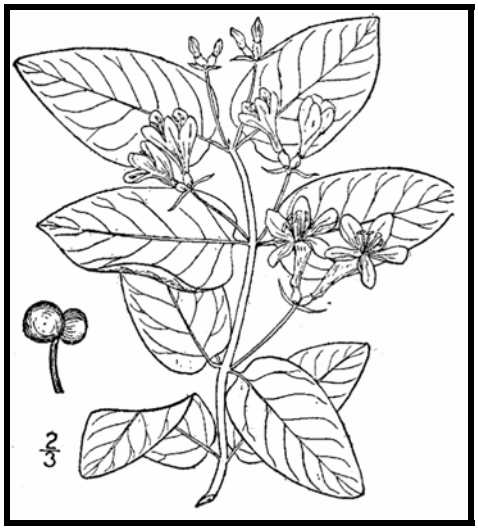
Invasive plants are introduced, alien, or non-native plants, which have been moved by people from their native habitat to a new area. Some exotic plants are imported for human use such as landscaping, erosion control, or food crops. They also can arrive as "hitchhikers" among shipments of other plants, 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.

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**

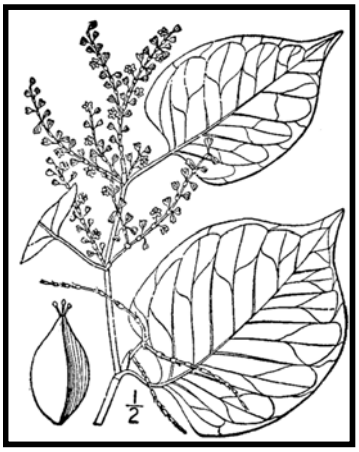
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

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<br>(Acer platanoides)<br>European barberry<br>(Berberis vulgaris)<br>Japanese barberry<br>(Berberis thunbergii)<br>autumn olive<br>(Elaeagnus umbellata)<br>burning bush<br>(Euonymus alatus)<br>Morrow's honeysuckle<br>(Lonicera morrowii)<br>Tatarian honeysuckle<br>(Lonicera tatarica)<br>showy bush honeysuckle<br>(Lonicera x bella)<br>common buckthorn<br>(Rhamnus cathartica)<br>glossy buckthorn<br>(Frangula alnus)</td><td rowspan="2">Fruit and Seeds<br>  </td><td>Prior to fruit/seed ripening<br>Seedlings and small plants<br>▪ Pull or cut and leave on site with roots exposed. No special care needed.<br>Larger plants<br>▪ Use as firewood.<br>▪ Make a brush pile.<br>▪ Chip.<br>▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe<br>Don't remove from site.<br>▪ Burn.<br>▪ Make a covered brush pile.<br>▪ Chip once all fruit has dropped from branches.<br>▪ Leave resulting chips on site and monitor.</td></tr>
<tr><td rowspan="2">oriental bittersweet<br>(Celastrus orbiculatus)<br>multiflora rose<br>(Rosa multiflora)</td><td rowspan="2">Fruits, Seeds, Plant Fragments<br>  </td><td>Prior to fruit/seed ripening<br>Seedlings and small plants<br>▪ Pull or cut and leave on site with roots exposed. No special care needed.<br>Larger plants<br>▪ Make a brush pile.<br>▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe<br>Don't remove from site.<br>▪ Burn.<br>▪ Make a covered brush pile.<br>▪ 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<br>*(Alliaria petiolata)*<br>spotted knapweed<br>*(Centaurea maculosa)*<br>▪ Sap of related knapweed can cause skin irritation and tumors. Wear gloves when handling.<br>black swallow-wort<br>*(Cynanchum nigrum)*<br>▪ May cause skin rash. Wear gloves and long sleeves when handling.<br>pale swallow-wort<br>*(Cynanchum rossicum)*<br>giant hogweed<br>*(Heracleum mantegazzianum)*<br>▪ Can cause major skin rash. Wear gloves and long sleeves when handling.<br>dame's rocket<br>*(Hesperis matronalis)*<br>perennial pepperweed<br>*(Lepidium latifolium)*<br>purple loosestrife<br>*(Lythrum salicaria)*<br>Japanese stilt grass<br>*(Microstegium vimineum)*<br>mile-a-minute weed<br>*(Polygonum perfoliatum)* | **Fruits and Seeds**<br>  | **Prior to flowering**<br>Depends on scale of infestation<br>Small infestation<br>▪ Pull or cut plant and leave on site with roots exposed.<br><br>Large infestation<br>▪ Pull or cut plant and pile. (You can pile onto or cover with plastic sheeting).<br>▪ Monitor. Remove any re-sprouting material.<br><br>**During and following flowering**<br>Do nothing until the following year or remove flowering heads and bag and let rot.<br><br>Small infestation<br>▪ Pull or cut plant and leave on site with roots exposed.<br><br>Large infestation<br>▪ Pull or cut plant and pile remaining material. (You can pile onto plastic or cover with plastic sheeting).<br>▪ Monitor. Remove any re-sprouting material. |
| common reed<br>(*Phragmites australis*)<br>Japanese knotweed<br>*(Polygonum cuspidatum)*<br>Bohemian knotweed<br>*(Polygonum x bohemicum)* | **Fruits, Seeds, Plant Fragments**<br>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**<br>▪ Bag all plant material and let rot.<br>▪ Never pile and use resulting material as compost.<br>▪ Burn.<br><br>**Large infestation**<br>▪ Remove material to unsuitable habitat (dry, hot and sunny or dry and shaded location) and scatter or pile.<br>▪ Monitor and remove any sprouting material.<br>▪ Pile, let dry, and burn. |

January 2010

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# APPENDIX C

Stormtech® Chamber System – Isolator® Row O & M Manual

StormTech
Detention • Retention • Water Quality
An ADS company

# Isolator® Row O&M Manual










THE MOST ADVANCED NAME IN WATER MANAGEMENT SOLUTIONS™

ADS®

# THE ISOLATOR® ROW

## INTRODUCTION

An important component of any Stormwater Pollution Prevention Plan is inspection and maintenance. The StormTech Isolator Row is a technique to inexpensively enhance Total Suspended Solids (TSS) removal and provide easy access for inspection and maintenance.

## THE ISOLATOR ROW

The Isolator Row is a row of StormTech chambers, either SC-160LP, SC-310, SC-310-3, SC-740, DC-780, MC-3500 or MC-4500 models, that is surrounded with filter fabric and connected to a closely located manhole for easy access. The fabric-wrapped chambers provide for settling and filtration of sediment as storm water rises in the Isolator Row and ultimately passes through the filter fabric. The open bottom chambers and perforated sidewalls (SC-310, SC- 310-3 and SC-740 models) allow storm water to flow both vertically and horizontally out of the chambers. Sediments are captured in the Isolator Row protecting the storage areas of the adjacent stone and chambers from sediment accumulation.

Two different fabrics are used for the Isolator Row. A woven geotextile fabric is placed between the stone and the Isolator Row chambers. The tough geotextile provides a media for storm water filtration and provides a durable surface for maintenance operations. It is also designed to prevent scour of the underlying stone and remain intact during high pressure jetting. A non-woven fabric is placed over the chambers to provide a filter media for flows passing through the perforations in the sidewall of the chamber. The non-woven fabric is not required over the SC-160LP, DC-780, MC-3500 or MC-4500 models as these chambers do not have perforated side walls.

The Isolator Row is typically designed to capture the “first flush” and offers the versatility to be sized on a volume basis or flow rate basis. An upstream manhole not only provides access to the Isolator Row but typically includes a high flow weir such that storm water flowrates or volumes that exceed the capacity of the Isolator Row overtop the over flow weir and discharge through a manifold to the other chambers.

The Isolator Row may also be part of a treatment train. By treating storm water prior to entry into the chamber system, the service life can be extended and pollutants such as hydrocarbons can be captured. Pre-treatment best management practices can be as simple as deep sump catch basins, oil-water separators or can be innovative storm water treatment devices. The design of the treatment train and selection of pretreatment devices by the design engineer is often driven by regulatory requirements. Whether pretreatment is used or not, the Isolator Row is recommended by StormTech as an effective means to minimize maintenance requirements and maintenance costs.

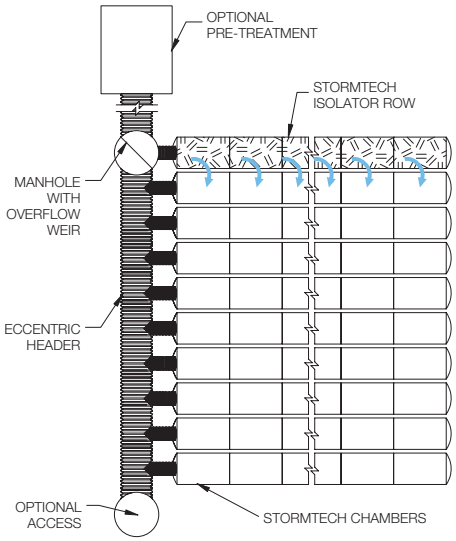
*Note: See the StormTech Design Manual for detailed information on designing inlets for a StormTech system, including the Isolator Row.*



**Looking down the Isolator Row from the manhole opening, woven geotextile is shown between the chamber and stone base.**



**StormTech Isolator Row with Overflow Spillway** (not to scale)





# ISOLATOR ROW INSPECTION/MAINTENANCE

## INSPECTION

The frequency of inspection and maintenance varies by location. A routine inspection schedule needs to be established for each individual location based upon site specific variables. The type of land use (i.e. industrial, commercial, residential), anticipated pollutant load, percent imperviousness, climate, etc. all play a critical role in determining the actual frequency of inspection and maintenance practices.

At a minimum, StormTech recommends annual inspections. Initially, the Isolator Row should be inspected every 6 months for the first year of operation. For subsequent years, the inspection should be adjusted based upon previous observation of sediment deposition.

The Isolator Row incorporates a combination of standard manhole(s) and strategically located inspection ports (as needed). The inspection ports allow for easy access to the system from the surface, eliminating the need to perform a confined space entry for inspection purposes.

If upon visual inspection it is found that sediment has accumulated, a stadia rod should be inserted to determine the depth of sediment. When the average depth of sediment exceeds 3 inches throughout the length of the Isolator Row, clean-out should be performed.

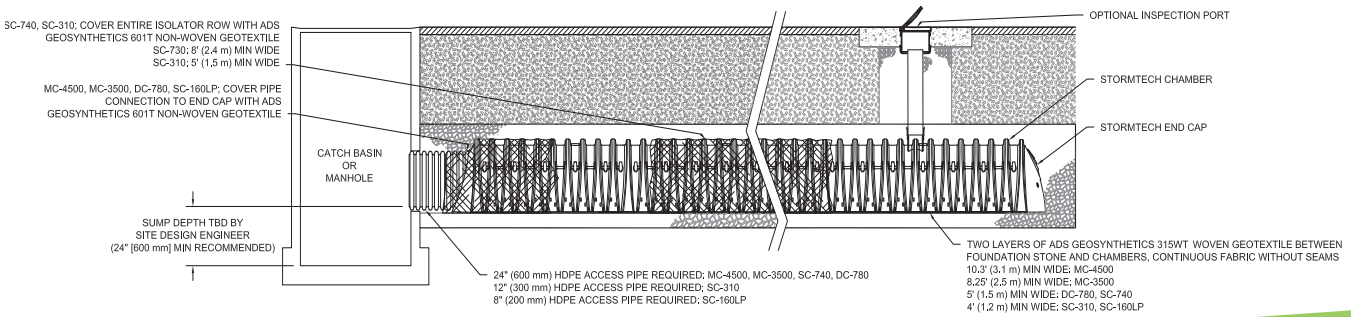
## MAINTENANCE

The Isolator Row was designed to reduce the cost of periodic maintenance. By "isolating" sediments to just one row, costs are dramatically reduced by eliminating the need to clean out each row of the entire storage bed. If inspection indicates the potential need for maintenance, access is provided via a manhole(s) located on the end(s) of the row for cleanout. If entry into the manhole is required, please follow local and OSHA rules for a confined space entries.

Maintenance is accomplished with the JetVac process. The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row while scouring and suspending sediments. As the nozzle is retrieved, the captured pollutants are flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/JetVac combination vehicles. Selection of an appropriate JetVac nozzle will improve maintenance efficiency. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 45" are best. Most JetVac reels have 400 feet of hose allowing maintenance of an Isolator Row up to 50 chambers long. **The JetVac process shall only be performed on StormTech Isolator Rows that have AASHTO class 1 woven geotextile (as specified by StormTech) over their angular base stone.**

**StormTech Isolator Row** (not to scale)

*Note: Non-woven fabric is only required over the inlet pipe connection into the end cap for SC-160LP, DC-780, MC-3500 and MC-4500 chamber models and is not required over the entire Isolator Row.*



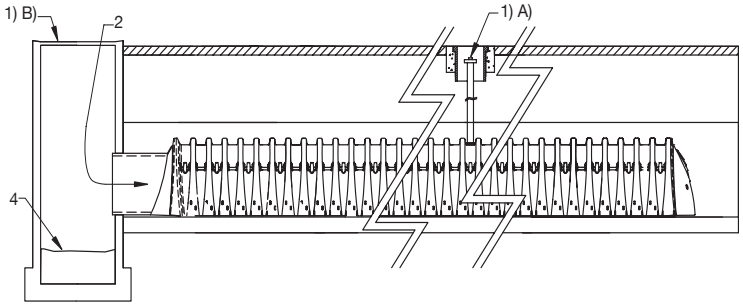
# ISOLATOR ROW STEP BY STEP MAINTENANCE PROCEDURES

**STEP 1**
Inspect Isolator Row for sediment.
- A) Inspection ports (if present)
  - i. Remove lid from floor box frame
  - ii. Remove cap from inspection riser
  - iii. Using a flashlight and stadia rod,measure depth of sediment and record results on maintenance log.
  - iv. If sediment is at or above 3 inch depth, proceed to Step 2. If not, proceed to Step 3.
- B) All Isolator Rows
  - i. Remove cover from manhole at upstream end of Isolator Row
  - ii. Using a flashlight, inspect down Isolator Row through outlet pipe
    1. Mirrors on poles or cameras may be used to avoid a confined space entry
    2. Follow OSHA regulations for confined space entry if entering manhole
  - iii. If sediment is at or above the lower row of sidewall holes (approximately 3 inches), proceed to Step 2. If not, proceed to Step 3.

**STEP 2**
Clean out Isolator Row using the JetVac process.
- A) A fixed floor cleaning nozzle with rear facing nozzle spread of 45 inches or more is preferable
- B) Apply multiple passes of JetVac until backflush water is clean
- C) Vacuum manhole sump as required

**STEP 3**
Replace all caps, lids and covers, record observations and actions.

**STEP 4**
Inspect & clean catch basins and manholes upstream of the StormTech system.




**SAMPLE MAINTENANCE LOG**

| Date | Stadia Rod Readings | | Sediment Depth (1)–(2) | Observations/Actions | Inspector |
|---|---|---|---|---|---|
| | Fixed point to chamber bottom (1) | Fixed point to top of sediment (2) | | | |
| 3/15/11 | 6.3 ft | none | | New installation. Fixed point is CI frame at grade | DJM |
| 9/24/11 | | 6.2 | 0.1 ft | Some grit felt | SM |
| 6/20/13 | | 5.8 | 0.5 ft | Mucky feel, debris visible in manhole and in Isolator Row, maintenance due | NV |
| 7/7/13 | 6.3 ft | | 0 | System jetted and vacuumed | DJM |

ADS "Terms and Conditions of Sale" are available on the ADS website, www.ads-pipe.com
The ADS logo and the Green Stripe are registered trademarks of Advanced Drainage Systems, Inc.
Stormtech® and the Isolator® Row are registered trademarks of StormTech, Inc.
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StormTech® Detention • Retention • Water Quality
A division of ADS

Advanced Drainage Systems, Inc.
4640 Trueman Blvd., Hilliard, OH 43026
1-800-821-6710 www.ads-pipe.com

| Date | Stadia Rod Readings | | Sediment Depth (1)-(2) | Observation/Actions | Inspector |
|---|---|---|---|---|---|
| | Fixed point to chamber bottom (1) | Fixed point to top of Sediment (2) | | | |
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December 09, 2025

Planning & Sustainability
Attn: Peter Britz
1 Junkins Avenue, 3rd Floor
Portsmouth, New Hamshire 03801

Seasons Coner Market
1980 Woodbury Avenue
Portsmouth, New Hampshire 03801
Architect's Project Number: 41-25-20000

# Green Building Statement

This project, commissioned by Colbea Enterprise, LLC., located at 1980 Woodbury Avenue in Portsmouth, New Hampshire, is committed to integrating sustainable design principles consistent with the LEED green building standard. The proposed 5,500-square-foot wood-frame building, featuring HardiePlank siding, a hip roof structure, and a designated mechanical well to house HVAC equipment, has been planned with environmental responsibility and long-term performance as core priorities.

**Energy Efficiency and HVAC Performance**
The project incorporates high-efficiency HVAC systems designed to reduce overall energy consumption while maintaining optimal indoor air quality. The mechanical well allows for enhanced system organization, ease of maintenance, and minimized visual impact. System selections prioritize reduced energy loads, high seasonal efficiency ratings, and the use of modern controls to optimize performance throughout the building's operational lifecycle.

**Energy Efficiency Lighting**
The project incorporates high-efficiency lighting systems to reduce energy consumption and operational costs while enhancing occupant comfort. All interior and exterior lighting fixtures are specified as LED, providing superior luminous efficacy, extended service life, and reduced maintenance compared to conventional lighting technologies. Lighting power densities are designed to meet or exceed the requirements of the applicable energy code.
Lighting controls are integrated throughout the building to further improve energy performance, including occupancy sensors in regularly occupied and intermittently used spaces. These strategies ensure that lighting is used only when needed and at appropriate levels.
Collectively, the use of LED lighting and advanced controls significantly reduces overall electrical demand, lowers greenhouse gas emissions associated with building operation, and supports the project's commitment to sustainable and energy-efficient design.

**Sustainable Site and Building Materials**
The design utilizes durable, low-maintenance exterior materials, such as HardiePlank siding, to enhance building longevity and reduce lifecycle environmental impacts. The aluminum storefront systems will feature low-emissivity glass, which enhances energy efficiency by regulating heat, providing UV protection, and optimizing light transmission, thereby improving overall comfort. Overall construction practices will follow sustainable material selection principles, including responsible sourcing and waste-minimization strategies.

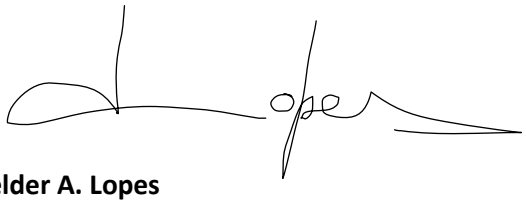
**Water Conservation and Environmental Stewardship**
Low-flow plumbing fixtures and water-conscious site strategies will be deployed to reduce potable water usage. Stormwater management design will align with local regulations and best practices to protect surrounding ecological conditions.

**Indoor Environmental Quality**
The building will utilize low-emitting materials, high-efficiency ventilation, and appropriate filtration to promote healthy interior environments. Daylighting and occupant comfort considerations are integrated into the design where applicable.

Through these measures, this project demonstrates a clear commitment to responsible development, energy stewardship, and alignment with LEED-based sustainable building practices. The project team is dedicated to reducing environmental impact while delivering a durable, efficient, and high-quality facility for long-term community use.

If you have any questions or require additional information, please feel free to contact me at 479-273-7780 X438 or helder.lopes@hfa-ae.com.

Respectfully submitted,



**Helder A. Lopes**
HFA-AE, LTD.
31 Hayward St., Ste. E-1
Franklin, MA 02038
479-273-7780 x438
helder.lopes@hfa-ae.com

# ACCESS AND RIGHT TO PASS/REPASS EASEMENT

This ACCESS AND RIGHT TO PASS/REPASS EASEMENT ("Easement") is made and executed as of this _____ day of _____, 2026, by and among COLBEA ENTERPRISES, LLC, a Rhode Island limited liability company authorized to do business in New Hampshire, having an address of 695 George Washington Highway, Lincoln, RI, 02865 ("COLBEA"), and the CITY OF PORTSMOUTH, a duly incorporated municipality under the laws of New Hampshire, with a mailing address of 1 Junkins Avenue, Portsmouth, NH 03801 ("CITY"), with reference to the facts set forth below. COLBEA and CITY may be referred to collectively as the "parties" or singularly as a "party."

## RECITALS

WHEREAS, COLBEA is the owner of a certain parcel of improved commercial property known and described as Tax Map 239, Lot 11, 1980 Woodbury Avenue, Portsmouth, Rockingham County, State of New Hampshire, as further described by deed that can be found at ***Book 6281, Page 2912***, at the Rockingham Registry of Deeds, and is a corner lot flanked by Gosling Road and Woodbury Avenue (the "Property");

WHEREAS, CITY is the owner of a Right-Of-Way ("SIDEWALK") that runs along the Property on Gosling Road, as well as Woodbury Avenue, Portsmouth, Rockingham County, State of New Hampshire;

WHEREAS, COLBEA desires to provide an access easement relative to widening the aforesaid SIDEWALK along Gosling Road for the benefit of CITY for use by the general public for pedestrian travel to pass/repass over an area of its property, discussed further below.

NOW THEREFORE, in consideration of the recitals and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Grant of Access Easement to CITY. COLBEA grants to CITY an Easement for the public at large to pass/repass on, over, through and across the eight (8') foot paved SIDEWALK along Gosling Road. Said area is more particularly described and identified as "*Proposed 8' Wide Concrete Sidewalk*" on a Plan that can be found at ***Plan*** #_____ at the Rockingham Registry of Deeds (the "Easement Area").

2. Character of Easement. This Easement granted herein is appurtenant and shall inure to the present and future owners of the properties (including any permitted users of the properties). This Easement is to the benefit of CITY hereto, its respective successors in interest,

assigns, agents, contractors, principals, directors, shareholders, tenants, subtenants, customers, employees, guests, and invitees.

3. Use of Easement. No party shall block or obstruct the use of the Easement or use the Easement in a manner which is inconsistent with or detrimental to the use of the Easement, as set forth herein.

4. Maintenance. CITY shall maintain any paved and/or unpaved areas, if applicable, subject to the Easement granted herein as follows:

(a) Maintain the surface in a level, smooth and evenly covered condition with the type of surface and materials originally installed or of similar quality, use and durability;

(b) Remove and/or treat all snow and ice on the paved and/or unpaved areas to the extent reasonably necessary to keep the travel areas clear of snow and ice; and,

(c) Remove all debris and refuse and sweep the paved areas to the extent reasonably necessary to keep the areas in a neat, clean and orderly condition.

5. Eminent Domain. If at any time all or any portion of the Easement Area granted herein shall be taken or threatened to be taken through condemnation, any party hereto who has the benefit of any such Easement granted herein which is taken or threatened to be taken, shall have the right to participate in and represent their own interest in any condemnation proceedings affecting such Easement and the condemnation award shall be allocated as determined pursuant to the condemnation proceeding.

6. General Provisions.

6.1 Binding on Successors. This Easement and all of the covenants and conditions herein contained shall be binding upon the executors, administrators, heirs, assigns and successors of each of the parties hereto.

6.2 Authority. Each party signing this Easement represents and warrants that such party has full authority to do so, that performance of all of the obligations contained herein have been duly authorized by all requisite actions on behalf of such party, and that this Easement binds such party.

6.3 Severability. If any term, provision, covenant or condition of this Easement is held to be invalid, void or otherwise unenforceable, to any extent, by any court of competent jurisdiction, the remainder of this Easement shall not be affected thereby, and each term, provision and covenant shall be valid and enforceable to the fullest extent permitted by law.

6.4 Intent. The intent of this Easement is to provide to the CITY the right to access COLBEA'S property over the Easement Area.

6.5 Entire Agreement. This Easement sets forth the entire understanding and agreement of the parties with respect to all matters discussed herein and supersedes any and all prior agreements, written or oral regarding such matters. The provisions hereof may not be changed or modified except by an instrument in writing, signed by the parties hereto.

6.6 New Hampshire Law. This Easement is being executed, delivered, and is intended to be performed in the State of New Hampshire. To the extent permitted by law, the execution, validity, construction and performance of this Easement shall be construed and enforced in accordance with the laws of the State of New Hampshire. This Agreement shall be deemed made and entered into in Rockingham County.

6.7 Runs with Land. All conditions, covenants and agreements contained herein are made for the direct benefit of CITY and shall burden COLBEA.

[*Remainder of Page Intentionally Left Blank*]

COLBEA

By:_____
*(name/title)*

CITY

By:_____
*(name/title)*

STATE OF NEW HAMPSHIRE

_____, SS.

On this _____ day of _____, 2025, personally appeared the above-named, _____, of COLBEA, and acknowledged the foregoing instrument to be the voluntary act and deed of said Limited Liability Company.

Before me,

_____
Justice of the Peace/Notary Public
My Commission Expires:

STATE OF NEW HAMPSHIRE

_____, SS.

On this _____ day of _____, 2021, personally appeared the above-named _____, of CITY, and acknowledged the foregoing instrument to be the voluntary act and deed of said Domestic Nonprofit Corporation.

Before me,

_____
Justice of the Peace/Notary Public
My Commission Expires:

# PROPOSED GAS STATION & CONVENIENCE STORE

## 1980 WOODBURY AVENUE
## PORTSMOUTH, NEW HAMPSHIRE

## GENERAL INFORMATION

### OWNER & APPLICANT
MAP 239 LOT 11
COLBEA ENTERPRISES, LLC
695 GEORGE WASHINGTON HIGHWAY
LINCOLN, RI 02865

### RESOURCE LIST

PLANNING/ZONING DEPARTMENT
1 JUNKINS AVE, 3RD FLOOR
PORTSMOUTH, NH 03801
(603) 610-7216

BUILDING DEPARTMENT
1 JUNKINS AVE
PORTSMOUTH, NH 03801
(603) 610-7243

PUBLIC WORKS
680 PEVERLY HILL ROAD
PORTSMOUTH, NH 03801
(603) 427-1530

POLICE DEPARTMENT
3 JUNKINS AVE
PORTSMOUTH, NH 03801
(603) 427-1500

FIRE DEPARTMENT
170 COURT STREET
PORTSMOUTH, NH 03801
(603) 427-1515

### ASSOCIATED PROFESSIONALS

ARCHITECT
HARRISON FRENCH & ASSOCIATES
31 HAYWARD STREET; SUITE E-1
FRANKLIN, MA 02038
(401) 265-2535

ENVIRONMENTAL SERVICES
Tg2, SOLUTIONS INC.
20 OLDE CARRIAGE LANE
DOUGLAS, MA 01516
ERIC SIMPSON, P.G., LSP

TRAFFIC ENGINEER
TFMORAN INC.
48 CONSTITUTION DRIVE
BEDFORD, NH 03110
(203) 472-4488
JEN PORTER, PE

LIGHTING DESIGN
LSI INDUSTRIES
10000 ALLIANCE ROAD
CINCINNATI, OH 45242
(513) 372-3368
MIKE ELLISON, TECHNICAL DESIGN SERVICES SPECIALIST

UNDERGROUND FULE TANK STORAGE SYSTEM
GPI - GREENMAN PEDERSEN, INC.
21 DANIEL SQUARE, 2ND FLOOR
PORTSMOUTH, NH 038001
(603) 527-7488
HUSEYIN SEVINCGIL

CANOPY DESIGN
AUSTIN MOHAWK AND COMPANY, LLC
2175 BEECHGROVE PLACE
UTICA, NY 13501
(315) 793-3000
SUSANNE M. WILSON

## VICINITY PLAN




## INDEX OF SHEETS


| SHEET | SHEET TITLE |
|---|---|
| C-00 | COVER |
| C-01 | NOTES & LEGEND |
| S-1 | EXISTING CONDITIONS PLAN |
| C-02 | AERIAL PLAN |
| C-03 | SITE PREPARATION & DEMOLITION PLAN |
| C-04 | SITE LAYOUT PLAN |
| C-05 | GRADING & DRAINAGE PLAN |
| C-06 | UTILITY PLAN |
| C-07 | LANDSCAPE PLAN |
| C-08 | LANDSCAPE DETAILS |
| C-09 | EROSION CONTROL PLAN |
| C-10 | EROSION CONTROL NOTES |
| C-11 & C-12 | TRUCK MOVEMENT PLANS |
| C-13 | SIGN PLAN |
| C-14 TO C-22 | CONSTRUCTION DETAILS |
| | |
| REFERENCE PLANS BY ASSOCIATED PROFESSIONALS | |
| - | LIGHTING PLAN (BY LSI) |
| - | ARCHITECTURAL ELEVATIONS (BY HFA) |
| - | CANOPY PLANS (BY AUSTIN MOHAWK) |


## PERMITS/APPROVALS

| | NUMBER | APPROVED | EXPIRES |
|---|---|---|---|
| PORTSMOUTH PLANNING BOARD SITE PLAN REVIEW APPROVAL | - | - | - |
| PORTSMOUTH ZONING BOARD VARIANCE REQUEST | LU-25-39 | 7.15.2025 | 7.15.2027 |
| NHDES SEWER CONNECTION PERMIT | - | - | - |
| NHDES OIL REMEDIATION & COMPLIANCE AST PERMIT | - | - | - |
| NHDES UNDERGROUND STORAGE TANK (UST) CONSTRUCTION | - | - | - |

TAX MAP 239 LOT 11
**COVER**
PROPOSED GAS STATION & CONVENIENCE STORE
**1980 WOODBURY AVENUE**
**PORTSMOUTH, NEW HAMPSHIRE**
OWNED BY
**COLBEA ENTERPRISES, LLC**

**SCALE: AS NOTED** **NOVEMBER 17, 2025**


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This plan is not effective unless signed by a duly authorized officer of TFMoran, Inc.


DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

THESE PLANS ARE PERMIT DRAWINGS ONLY AND HAVE NOT BEEN DETAILED FOR CONSTRUCTION OR BIDDING.

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| 2 | 2/11/2026 | REVISED PER ADDRESS CHANGE REQUEST | JKC | CRR |
| 1 | 12/22/2025 | REVISED PER TAC COMMENTS | JKC | CRR |


Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
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| FILE | 46077.16 | DR | JKC | FB | | C-00 |
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# LEGEND

| PROPOSED | |
|---|---|
| | PROPERTY LINE |
| | ZONING LINE |
| | EASEMENT |
| | BASELINE |
| | FLOODPLAIN |
| | EDGE OF WATERBODY |
| | EDGE OF WETLAND |
| | SETBACK (WETLAND) |
| | SETBACK (STRUCTURE) |
| | SETBACK (PARKING) |
| | SETBACK (LANDSCAPE) |
| | GRAVEL ROAD |
| EOP | EDGE OF PAVEMENT |
| VGC | VERTICAL GRANITE CURB |
| SGC | SLOPED GRANITE CURB |
| CC | CONCRETE CURB |
| ICC | INTEGRATED CONCRETE CURB |
| BIT | BITUMINOUS ASPHALT CURB |
| CCB | CAPE COD BERM |
| | SAWCUT |
| | BUILDING |
| | BUILDING ROOF OVERHANG |
| | BUILDING FOUNDATION |
| | BUILDING ENTRANCE |
| | OVERHEAD DOOR |
| | TREE LINE |
| | FENCE (CHAIN LINK) |
| X | FENCE (WIRE) |
| | FENCE (STOCKADE) |
| | GUARDRAIL |
| | STONE WALL |
| | RETAINING WALL |
| SF | SILT FENCE |
| SS | SILT SOCK |
| XXXX | SOIL BOUNDARY |
| | LIMIT OF GRADING |
| 100 | CONTOUR |
| TC100.50 BC100.00 OR 100.00 | SPOT GRADE |
| ## | PARKING COUNT |
| DSLY | YELLOW DOUBLE SOLID LINE |
| SSLY | YELLOW SINGLE SOLID LINE |
| SSLW | WHITE SINGLE SOLID LINE |
| SBLW | WHITE SINGLE BROKEN LINE |
| STOP | STOP BAR |
| | CROSSWALK |
| | ACCESSIBLE PARKING SYMBOL |
| | PAVEMENT ARROW |
| | TRAFFIC FLOW ARROW (NOT PAINTED) |
| | SIGN (SINGLE POST) |
| | SIGN (DOUBLE POST) |
| | SIGN (PYLON) |
| | SIGN (MONUMENT) |
| | BOLLARD |
| D | DUMPSTER PAD |

| PROPOSED | |
|---|---|
| | CONCRETE |
| | GRAVEL |
| | HEAVY DUTY PAVEMENT |
| | CONSTRUCTION ENTRANCE |
| | SNOW STORAGE |
| | RIPRAP |
| | INLET PROTECTION |
| | FLOW ARROW |
| D | DRAIN LINE |
| | DRAINAGE SWALE |
| | STORMWATER BMP |
| S | SEWER LINE |
| FM | SEWER FORCE MAIN LINE |
| W | WATER LINE |
| G | GAS LINE |
| OHE | OVERHEAD UTILITY LINE |
| UGE | UNDERGROUND UTILITY LINE |
| | CATCH BASIN |
| | DRAIN INLET |
| | OUTLET CONTROL STRUCTURE |
| | ROOF DRAIN |
| | DRAIN CLEANOUT |
| | DRAIN MANHOLE |
| | FARED END SECTION |
| | SEWER CLEAN OUT |
| S | SEWER MANHOLE |
| | SEWER VENT |
| | DRAIN/SEWER/WATER PLUG OR CAP |
| | HYDRANT |
| | FIRE DEPARTMENT CONNECTION |
| | WATER GATE VALVE |
| | WATER SHUTOFF |
| | THRUST BLOCK |
| W | WATER METER |
| W | WATER MANHOLE |
| W | WELL |
| | GAS GATE VALVE |
| | GAS SHUT OFF |
| G | GAS METER |
| T | TELEPHONE MANHOLE |
| E | ELECTRIC MANHOLE |
| | TRAFFIC CONTROL CABINET |
| | ELECTRIC HANDHOLE |
| E | ELECTRIC PULL BOX |
| E | ELECTRIC METER |
| | FLOOD LIGHT |
| | LIGHT POLE |
| | UTILITY POLE |
| | GUY POLE |
| T | TRANSFORMER PAD |
| B-# | BORING LOCATION |
| TP-# | TEST PIT LOCATION |
| IT-# | INFILTRATION TEST LOCATION |
| MW-# | MONITORING WELL |

# ABBREVIATIONS

## GENERAL

| | |
|---|---|
| ABAN | ABANDON |
| AC | ACRES |
| ADJ | ADJUST |
| APPROX | APPROXIMATE |
| BC | BOTTOM OF CURB |
| BIT | BITUMINOUS |
| BK/PG | BOOK & PAGE |
| BLDG | BUILDING |
| BMP | BEST MANAGEMENT PRACTICE |
| BS | BOTTOM OF SLOPE |
| BW | BOTTOM OF WALL |
| CONC | CONCRETE |
| COORD | COORDINATE |
| DIA | DIAMETER |
| ELEV | ELEVATION |
| EP | EDGE OF PAVEMENT |
| EXIST | EXISTING |
| FFE | FINISHED FLOOR ELEVATION |
| FND | FOUNDATION |
| HP | HIGH POINT |
| INV | INVERT ELEVATION |
| IT | INFILTRATION TEST |
| L | LENGTH |
| LF | LINEAR FEET |
| LSA | LANDSCAPE AREA |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| N/F | NOW OR FORMERLY |
| NHFG | NEW HAMPSHIRE FISH & GAME |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| PAVE | PAVEMENT |
| PERF | PERFORATED |
| PROP | PROPOSED |
| R | RADIUS |
| R&D | REMOVE AND DISPOSE |
| R&R | REMOVE AND RESET |
| REM | REMOVE |
| RET | RETAIN |
| RIM | RIM ELEVATION |
| ROW | RIGHT OF WAY |
| S | SLOPE |
| SF | SQUARE FEET |
| SW | SIDEWALK |
| TBM | TEMPORARY BENCHMARK |
| TC | TOP OF CURB |
| TP | TEST PIT |
| TW | TOP OF WALL |
| TYP | TYPICAL |
| UG | UNDERGROUND |
| WCR | ACCESSIBLE WHEELCHAIR RAMP |
| W/ | WITH |

## UTILITIES

| | |
|---|---|
| CB | CATCH BASIN |
| CIP | CAST IRON PIPE |
| CMP | CORRUGATED METAL PIPE |
| CO | CLEANOUT |
| COND | CONDUIT |
| DCB | DOUBLE CATCH BASIN |
| DIP | DUCTILE IRON PIPE |
| DMH | DRAIN MANHOLE |
| F&C | FRAME AND COVER |
| F&G | FRAME AND GRATE |
| FES | FLARED END SECTION |
| GT | GREASE TRAP |
| HDPE | HIGH DENSITY POLYETHYLENE PIPE |
| HH | HANDHOLE |
| HW | HEADWALL |
| HYD | HYDRANT |
| LP | LIGHT POLE |
| OCS | OUTLET CONTROL STRUCTURE |
| PVC | POLYVINYL CHLORIDE PIPE |
| RCP | REINFORCED CONCRETE PIPE |
| RD | ROOF DRAIN |
| SMH | SEWER MANHOLE |
| SOS | SEDIMENT OIL SEPARATOR |
| TSV | TAPPING SLEEVE, VALVE, AND BOX |
| UP | UTILITY POLE |

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

# GENERAL NOTES

1. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN, INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
2. THE SITE CONTRACTOR SHALL NOTIFY THE ENGINEER ONE WEEK IN ADVANCE OF CONSTRUCTION OF EACH STORMWATER FACILITY TO COORDINATE REQUIRED INSPECTIONS. THE CONTRACTOR SHALL TAKE PROGRESS PHOTOS DURING CONSTRUCTION OF ALL STORMWATER DRAINAGE COMPONENTS AND SEND TO THE ENGINEER.
3. SEE EXISTING CONDITIONS PLAN FOR THE HORIZONTAL AND VERTICAL DATUM. VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION.
4. CONTACT EASEMENT OWNERS PRIOR TO COMMENCING ANY WORK WITHIN EASEMENTS.
5. PRIOR TO COMMENCING ANY SITE WORK, ALL LIMITS OF WORK SHALL BE CLEARLY MARKED IN THE FIELD.
6. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
7. TFMORAN, INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.
8. PRIOR WRITTEN PERMISSION FROM THE LOCAL PERMITTING AUTHORITY IS REQUIRED IF CLOSURE/OBSTRUCTIONS TO ROADS, STREET, WALKWAYS, AND OTHERS IS DEEMED NECESSARY. CONTRACTOR TO PROVIDE ALTERNATE ROUTES AROUND CLOSURES/OBSTRUCTIONS PER LOCAL/STATE/FEDERAL REGULATIONS.
9. REFER TO ARCHITECTURAL PLANS FOR LAYOUT OF BUILDING FOUNDATIONS AND CONCRETE ELEMENTS WHICH ABUT THE BUILDING SUCH AS STAIRS, SIDEWALKS, LOADING DOCK RAMPS, PADS, AND COMPACTOR PADS. DO NOT USE SITE PLANS FOR LAYOUT OF FOUNDATIONS.
10. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.
11. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
12. CONTRACTOR'S GENERAL RESPONSIBILITIES:
    A. BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS, AND STANDARDS AND CONDITIONS OF ALL PROJECT-SPECIFIC PERMITS AND APPROVALS AS LISTED ON THE COVER SHEET TO THESE PLANS OR OTHERWISE REQUIRED.
    B. NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES IN PROPOSED LAYOUT AND IN EXISTING FEATURES.
    C. EMPLOY A LICENSED SURVEYOR TO DETERMINE ALL LINES AND GRADES AND LAYOUT OF SITE ELEMENTS AND BUILDINGS.
    D. THE CONTRACTOR SHALL BE RESPONSIBLE TO BECOME FAMILIAR WITH THE SITE AND ALL SURROUNDING CONDITIONS. NOTIFY ALL APPROPRIATE AUTHORITY OF CONSTRUCTION ACTIVITIES REQUIRING TESTS OR INSPECTIONS IN ADVANCE.
    E. TAKE APPROPRIATE MEASURES TO MINIMIZE NOISE, DUST, AND DEBRIS. CONSTRUCTION ACTIVITIES SHALL BE CARRIED OUT BETWEEN THE HOURS OF 7:00 AM AND 6:00 PM, MONDAY THROUGH FRIDAY IN ACCORDANCE WITH THE APPLICABLE MUNICIPAL ORDINANCES AND REGULATIONS OF THE CITY OF PORTSMOUTH.
    F. MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
    G. IN ACCORDANCE WITH RSA 430:53 AND AGR 3800, THE CONTRACTOR SHALL NOT TRANSPORT INVASIVE SPECIES OFF THE PROPERTY, AND SHALL DISPOSE OF INVASIVE SPECIES ON-SITE IN A LEGAL MANNER.
    H. COORDINATE WITH ALL UTILITY COMPANIES AND CONTACT DIGSAFE (811 OR 888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
    I. PROTECT NEW AND EXISTING BURIED UTILITIES DURING ALL SITE WORK. DAMAGED UTILITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
    J. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMORAN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
    K. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED OR COORDINATE DIMENSIONS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
    L. PROVIDE AN AS-BUILT PLAN AT THE COMPLETION OF THE PROJECT AS REQUIRED BY PORTSMOUTH REGULATIONS.
    M. IF ANY DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS HAVE BEEN MADE, THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER DESCRIBING ALL SUCH DEVIATIONS, AND BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE REQUIRED.
    N. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING DOCUMENTATION TO OWNER AND ENGINEER:
        1) ADVANCE WRITTEN NOTICE AT LEAST ONE WEEK PRIOR TO COMMENCING ANY WORK UNDER THE PERMIT AND NOTIFICATION TO AOT VIA THE START OF CONSTRUCTION FORM.
        2) IF ANY UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS WERE INSTALLED, FOR EACH SUCH SYSTEM:
            A) REPRESENTATIVE PHOTOGRAPHS OF THE SYSTEM AFTER COMPLETION BUT PRIOR TO BACKFILLING; AND
            B) A LETTER SIGNED BY THE ENGINEER WHO OBSERVED THE SYSTEM PRIOR TO BACKFILLING, THAT THE SYSTEM CONFORMS TO THE APPROVED PLANS AND SPECIFICATIONS.
        3) UPON COMPLETION OF CONSTRUCTION, WRITTEN CERTIFICATION THAT:
            A) ALL WORK HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
            B) IF ANY DEVIATIONS FROM THE APPROVED PLANS WERE MADE, WRITTEN DESCRIPTIONS AND AS-BUILT DRAWINGS OF ALL SUCH DEVIATIONS, STAMPED BY A QUALIFIED ENGINEER, SHALL BE PROVIDED.

# GRADING & DRAINAGE NOTES

1. THE CONTRACTOR SHALL ENSURE THAT ALL WORK INCLUDING INSPECTIONS AND TESTS IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NHDES ENV-WQ 1500 AS APPLICABLE.
2. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
4. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR INFORMATION ABOUT SOIL AND GROUNDWATER CONDITIONS. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL ENGINEER'S RECOMMENDED METHODS TO ADDRESS ANY SOIL AND GROUNDWATER ISSUES THAT ARE FOUND ON SITE, INCLUDING AND NOT LIMITED TO DEWATERING METHODS, PERIMETER DRAINS AND TIE INTO STORMWATER MANAGEMENT SYSTEM, ETC.
5. COORDINATE WITH GEOTECHNICAL/STRUCTURAL PLANS FOR SITE PREPARATION AND OTHER BUILDING INFORMATION.
6. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILED LAYOUT AND GRADING AT BUILDING, AND SIZE AND LOCATION OF ALL BUILDING SERVICES, FOOTING DRAINS, AND ROOF DRAIN INFORMATION.
7. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS, AND ALIGNMENTS.
8. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE, RAMPS, AND LOADING AREAS.
9. THE SITE SHALL BE GRADED SO ALL FINISHED PAVEMENT HAS POSITIVE DRAINAGE AND SHALL NOT POND WATER.
10. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
11. ALL SIDEWALK AND OTHER CURB REVEALS SHALL BE 6" WITH A TOLERANCE OF PLUS OR MINUS 3/8". WHERE SIDEWALK IS TO BE FLUSH, THE PAVEMENT REVEAL SHALL BE WITHIN 1/4".
12. THE FINISHED GRADE AT BOTTOM OF ALL ACCESSIBLE RAMPS SHALL BE FLUSH WITH PAVEMENT WITH A TOLERANCE OF PLUS OR MINUS 1/4".
13. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE PRIOR TO INSTALLATION OF FINISHED PAVEMENT.
14. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
15. STORMWATER DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
16. NO FILL SHALL BE PLACED IN ANY WETLAND AREA WITHOUT A WETLANDS PERMIT.
17. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
18. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER, AND MULCH.
19. DENSITY REQUIREMENTS:

| MINIMUM DENSITY* | LOCATION |
|---|---|
| 95%* | BELOW PAVED OR CONCRETE AREAS |
| 95%** | TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL |
| 90%** | BELOW LOAM AND SEED AREAS |

ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT.
* ASTM D-1557
** ASTM D-698.

# UTILITY NOTES

1. LENGTH OF PIPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
2. ALL PROPOSED UTILITY WORK, INCLUDING MATERIAL, INSTALLATION, TERMINATION, EXCAVATION, BEDDING, BACKFILL, COMPACTION, TESTING, CONNECTIONS, AND CONSTRUCTION SHALL BE COORDINATED WITH AND COMPLETED IN ACCORDANCE WITH THE APPROPRIATE REQUIREMENTS, CODES, AND STANDARDS OF ALL CORRESPONDING UTILITY ENTITIES AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
4. COORDINATE ALL WORK ADJACENT TO PROPOSED BUILDINGS WITH ARCHITECTURAL BUILDING DRAWINGS. CONFIRM UTILITY PENETRATIONS AND INVERT ELEVATIONS ARE COORDINATED PRIOR TO INSTALLATION.
5. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
6. THE EXACT LOCATION OF NEW UTILITY CONNECTIONS SHALL BE DETERMINED BY THE CONTRACTOR IN COORDINATION WITH UTILITY COMPANY, COUNTY AGENCY, AND/OR PRIVATE UTILITY COMPANY.
7. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER THE UTILITY INSTALLATION COMPLETE AND OPERATIONAL.
8. ALL UTILITY COMPANIES REQUIRE INDIVIDUAL CONDUITS. CONTRACTOR TO COORDINATE WITH TELEPHONE, CABLE, AND ELECTRIC COMPANIES REGARDING NUMBER, SIZE, AND TYPE OF CONDUITS REQUIRED PRIOR TO INSTALLATION OF ANY CONDUIT.
9. SANITARY SEWER SHALL BE CONSTRUCTED TO THE STANDARDS AND SPECIFICATIONS AS SHOWN ON THESE PLANS. ALL SEWER MAINS AND FITTINGS SHALL BE PVC AND SHALL CONFORM TO ASTM F 679 (SDR 35 MINIMUM). FORCE MAINS AND FITTINGS SHALL CONFORM TO NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. SANITARY MANHOLES SHALL CONFORM TO NHDES WATER DIVISION WASTEWATER ENGINEERING BUREAU STANDARDS AND SPECIFICATIONS SHOWN HEREON.
10. ON-SITE WATER DISTRIBUTION SHALL BE TO CITY OF PORTSMOUTH STANDARDS AND SPECIFICATIONS. WATER MAINS SHALL HAVE A MINIMUM OF 5.5' COVER. WHERE WATER PIPES CROSS SEWER LINES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SHALL BE 10' MINIMUM. WHERE A SANITARY LINE CROSSES A WATER LINE, SEWER LINE MUST BE CONSTRUCTED OF FORCE MAIN MATERIALS (PER ENV-WQ 704.08) FROM BUILDING OR MANHOLE TO MANHOLE, OR SUBSTITUTE RUBBER-GASKETED PRESSURE PIPE FOR THE SAME DISTANCE. WHEN SANITARY LINES PASS BELOW WATER LINES, LAY PIPE SO THAT NO JOINT IN THE SANITARY LINE WILL BE CLOSER THAN 6' HORIZONTALLY TO THE WATER LINE.
11. THRUST BLOCKS SHALL BE PROVIDED AT ALL LOCATIONS WHERE WATER LINE CHANGES DIRECTIONS OR CONNECTS TO ANOTHER WATER LINE.
12. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRING TO ALL SIGNS AND LIGHTS. CONDUIT TO BE A MINIMUM OF 24" BELOW FINISH GRADE.
13. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES.
14. THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL INSPECTIONS, TESTING, AND RELATED SERVICES AND SUBMIT COPIES OF ACCEPTANCE TO THE OWNER, UNLESS OTHERWISE INDICATED.
15. PROVIDE PERMANENT PAVEMENT REPAIR FOR ALL UTILITY TRENCHES IN EXISTING ROAD OR PAVEMENT TO REMAIN. SAW CUT TRENCH, PAVEMENT, AND GRANULAR BASE THICKNESS TO MATCH EXISTING PAVEMENT. OBTAIN ALL PERMITS REQUIRED FOR TRENCHING.
16. UNLESS OTHERWISE SPECIFIED, ALL UNDERGROUND STRUCTURES, PIPES, CHAMBERS, ETC. SHALL BE COVERED WITH A MINIMUM OF 18" OF COMPACTED SOIL BEFORE EXPOSURE TO VEHICLE LOADS.
17. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING:

| | |
|---|---|
| DRAINAGE | MUNICIPAL |
| SEWER | MUNICIPAL |
| WATER | MUNICIPAL |
| GAS | UNITIL |
| ELECTRIC | EVERSOURCE |
| TELEPHONE | COMCAST XFINITY, CONSOLIDATED COMMUNICATIONS, VERIZON, ETC. |
| CABLE | COMCAST XFINITY, CONSOLIDATED COMMUNICATIONS, VERIZON, ETC. |

TAX MAP 239 LOT 11

**NOTES & LEGEND**

# PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**
**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**SCALE:** **NOVEMBER 17, 2025**

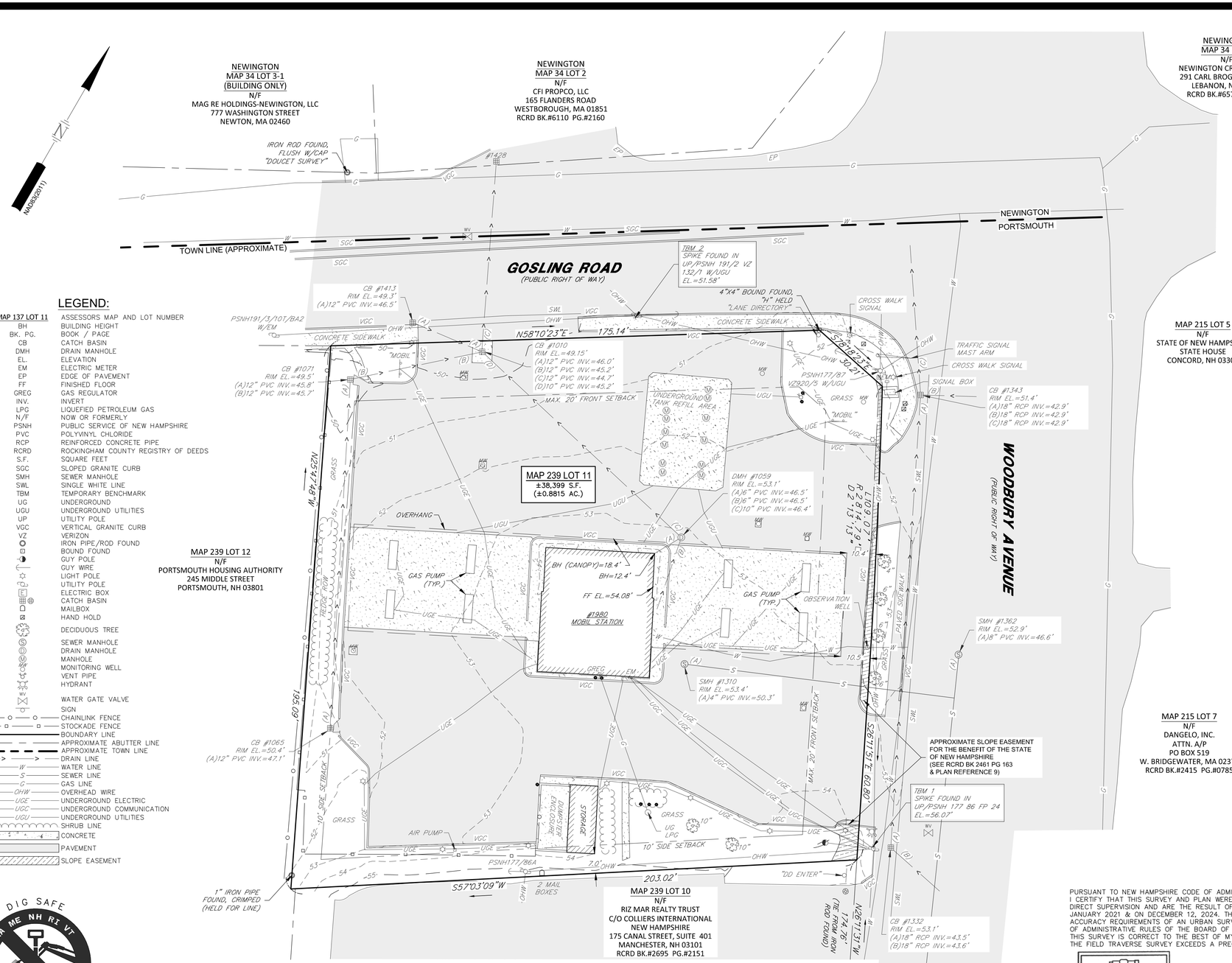
| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| 2 | 2/11/2026 | REVISED PER ADDRESS CHANGE REQUEST | JKC | CRR |
| 1 | 12/22/2025 | REVISED PER TAC COMMENTS | JKC | CRR |

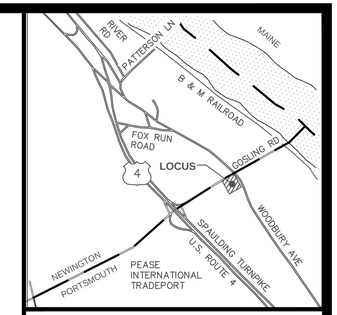
Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
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Phone (603) 431-2222
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Feb 12, 2026 - 10:14am
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# LOCATION PLAN

## LEGEND:

| | |
|---|---|
| MAP 137 LOT 11 | ASSESSORS MAP AND LOT NUMBER |
| BH | BUILDING HEIGHT |
| BK. PG. | BOOK / PAGE |
| CB | CATCH BASIN |
| DMH | DRAIN MANHOLE |
| EL. | ELEVATION |
| EM | ELECTRIC METER |
| EP | EDGE OF PAVEMENT |
| FF | FINISHED FLOOR |
| GREG | GAS REGULATOR |
| INV. | INVERT |
| LPG | LIQUEFIED PETROLEUM GAS |
| N/F | NOW OR FORMERLY |
| PSNH | PUBLIC SERVICE OF NEW HAMPSHIRE |
| PVC | POLYVINYL CHLORIDE |
| RCP | REINFORCED CONCRETE PIPE |
| RCRD | ROCKINGHAM COUNTY REGISTRY OF DEEDS |
| S.F. | SQUARE FEET |
| SGC | SLOPED GRANITE CURB |
| SMH | SEWER MANHOLE |
| SWL | SINGLE WHITE LINE |
| TBM | TEMPORARY BENCHMARK |
| UG | UNDERGROUND |
| UGU | UNDERGROUND UTILITIES |
| UP | UTILITY POLE |
| VGC | VERTICAL GRANITE CURB |
| VZ | VERIZON |
| | IRON PIPE/ROD FOUND |
| | BOUND FOUND |
| | GUY POLE |
| | GUY WIRE |
| | LIGHT POLE |
| | UTILITY POLE |
| | ELECTRIC BOX |
| | CATCH BASIN |
| | MAILBOX |
| | HAND HOLD |
| | DECIDUOUS TREE |
| | SEWER MANHOLE |
| | DRAIN MANHOLE |
| | MANHOLE |
| | MONITORING WELL |
| | VENT PIPE |
| | HYDRANT |
| | WATER GATE VALVE |
| | SIGN |
| | CHAINLINK FENCE |
| | STOCKADE FENCE |
| | BOUNDARY LINE |
| | APPROXIMATE ABUTTER LINE |
| | APPROXIMATE TOWN LINE |
| | DRAIN LINE |
| W | WATER LINE |
| S | SEWER LINE |
| G | GAS LINE |
| OHW | OVERHEAD WIRE |
| UGE | UNDERGROUND ELECTRIC |
| UGC | UNDERGROUND COMMUNICATION |
| UGU | UNDERGROUND UTILITIES |
| | SHRUB LINE |
| | CONCRETE |
| | PAVEMENT |
| | SLOPE EASEMENT |

## NOTES:

1. THE PARCEL IS LOCATED IN THE GATEWAY NEIGHBORHOOD MIXED USE CORRIDOR (G1) ZONING DISTRICT.
2. THE PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 239 AS LOT 11.
3. THE PARCEL IS LOCATED IN ZONE X, "AREA OF MINIMAL FLOOD HAZARD", AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM (NFIP), FLOOD INSURANCE RATE MAP (FIRM) ROCKINGHAM COUNTY, NEW HAMPSHIRE, PANEL 260 OF 681, MAP NUMBER 33015C0260F, WITH A MAP REVISED DATE OF JANUARY 29, 2021.
4. DIMENSIONAL REQUIREMENTS:

| LOT STANDARDS: | REQUIRED: | EXISTING: |
|---|---|---|
| MIN. DEVELOPMENT SITE AREA: | 10,000SF*** | 38,399SF |
| MIN. LOT DEPTH: | NR | ±200FT |
| MIN. STREET FRONTAGE: | 100FT** | 375.22FT |
| MIN. OPEN SPACE: | 10% | 19.0% |
| MINIMUM YARD DIMENSIONS: | | |
| FRONT (MIN./MAX.): | 0FT/20FT | 10.4FT |
| SIDE: | 10FT | 7.0FT |
| REAR: | 15FT | >15FT |
| DESIGN STANDARDS: | | |
| MAX. BUILDING HEIGHT: | 40FT | 18.4FT |
| MAX. BUILDING COVERAGE: | 70% | 19.3% |
| MAX. BUILDING FOOTPRINT: | 10,000SF | 7,402SF |

SEE THE CITY OF PORTSMOUTH ZONING ORDINANCE ARTICLE 5B FOR REGULATIONS/DEVELOPMENT STANDARDS
*PER PORTSMOUTH ZONING ORDINANCE SECTION 10.5B34.60 SMALL COMMERCIAL BUILDING
** PER 10.5B32.30 SPECIAL FRONTAGE REQUIREMENT. FRONTAGE ON WOODBURY AVENUE.
*** PER 10.5B42.40 GENERAL COMMERCIAL DEVELOPMENT

5. OWNER OF RECORD:
MAP 239 LOT 11:
COLBEA ENTERPRISES, LLC
695 GEORGE WASHINGTON HIGHWAY
LINCOLN, RI 02865
RCRD BK.#6281 PG.#2912

6. PARCEL AREA:
MAP 239 LOT 11:
±38,399 S.F.
(±0.8815 ACRES)

7. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH THE CURRENT LEGAL DESCRIPTIONS. IT IS NOT AN ATTEMPT TO DEFINE THE EXTENT OF OWNERSHIP OR DEFINE THE LIMITS OF TITLE.
8. THE PURPOSE OF THIS PLAN IS TO SHOW THE BOUNDARY LINES, TOPOGRAPHY AND CURRENT SITE CONDITIONS OF MAP 239 LOT 11.
9. FIELD SURVEY COMPLETED BY TCE IN JANUARY 2021 AND ON DECEMBER 12, 2024 USING A LEICA TS-16 TOTAL STATION, GS-18 & GS-16 GPS RECEIVERS AND CARLSON DATA COLLECTION SOFTWARE.
10. HORIZONTAL DATUM IS NAD83 (2011) PER REDUNDANT NETWORK RTK GPS OBSERVATIONS. THE VERTICAL DATUM IS NAVD88 PER REDUNDANT NETWORK RTK GPS OBSERVATIONS. THE CONTOUR INTERVAL IS 1 FOOT.
11. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
12. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TFMORAN, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE.

## PLAN REFERENCES:

1. "STATE OF NEW HAMPSHIRE STATE HIGHWAY DEPARTMENT PLAN AND PROFILE OF PROPOSED FEDERAL AID PROJECT NO. SN-FAP 129 (2) WHITE MOUNTAIN HIGHWAY CITY OF PORTSMOUTH COUNTY OF ROCKINGHAM LAYOUT AS-BUILT PLANS" DATED 4-28-40.
2. "STATE OF NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS PLANS OF PROPOSED FEDERAL AID PRIMARY PROJECT FG-F-027-1922) N.H. PROJECT NO. C-3275 CONTRACT I MARKET STREET EXTENSION LAYOUT AS BUILT PLANS CITY OF PORTSMOUTH - TOWN OF NEWINGTON COUNTY OF ROCKINGHAM" DATED 8-18-83.
3. "ALTA/ACSM LAND TITLE SURVEY TOSCO MARKETING COMPANY 97 GOSLING ROAD NEWINGTON, NEW HAMPSHIRE" BY MCENEANEY SURVEY ASSOCIATES, DATED FEB. 10, 2000 WITH REVISION 1 DATED 3/29/00. RCRD PLAN #D-28044.
4. "BOUNDARY & TOPOGRAPHIC PLAN ASSESSORS MAP R-39 - LOT 11 WOODBURY AVE. & GOSLING ROAD PORTSMOUTH, NEW HAMPSHIRE PREPARED FOR MOBIL OIL CORPORATION" BY STORCH ASSOCIATES, DATED 12/6/91. RCRD PLAN #D-21731.
5. "TRAFFIC SIGNAL PLAN DOVER ROAD - GOSLING ROAD FOX RUN MALL NEWINGTON, NEW HAMPSHIRE" BY ANDERSON-NICHOLS ENGINEERS, ENVIRONMENTAL CONSULTANTS ARCHITECTS, DATED FEB. 1, 1982, WITH LAST REVISION 4-23-82.
6. "EASEMENT PLAN OVER LAND OF PORTSMOUTH HOUSING AUTHORITY ASSESSOR'S PARCEL 239-12 GOSLING ROAD, PORTSMOUTH, N.H. IN FAVOR OF THE CITY OF PORTSMOUTH FOR CMA ENGINEERS, INC." BY JAMES VERRA AND ASSOCIATES, INC., DATED 7/27/2016, WITH REVISION 1 DATED 8/8/2016. RCRD PLAN #D-39722.
7. "LOT LINE ELIMINATION PLAN FOR D'ANGELO, INC. WOODBURY AVENUE COUNTY OF ROCKINGHAM PORTSMOUTH, NH" BY RICHARD P. MILLETTE AND ASSOCIATES, DATED DEC. 1982. RCRD PLAN #D-11318.
8. "EXISTING CONDITIONS PLAN GOSLING ROAD & WOODBURY AVENUE PORTSMOUTH & NEWINGTON, N.H. FOR CMA ENGINEERS, INC." BY JAMES VERRA AND ASSOCIATES, INC., DATED 4/14/2016, WITH REVISION 2 7/27/2016. PLAN IS NOT RECORDED.
9. "PROPERTY ACQUIRED BY STATE OF NEW HAMPSHIRE FROM DUNCAN CONSTRUCTION COMPANY, INC. IN PORTSMOUTH, N.H. ROCKINGHAM COUNTY PROJECT: PORTSMOUTH-NEWINGTON, C-3275" DATED AUGUST 15, 1983. RCRD PLAN C-11802.

## BUILDING COVERAGE CALCULATION:

BUILDINGS: 7,402 SF

TOTAL LOT AREA: 38,399 SF

7,402 SF / 38,399 SF = 0.193 X 100 = **19.3%**
(BUILDINGS / TOTAL LOT AREA = BUILDING COVERAGE)

## OPEN SPACE CALCULATION:

OPEN SPACE: (PERVIOUS AREAS) 7,284 SF

TOTAL LOT AREA: 38,399 SF

7,284 SF / 38,399 SF = 0.19 X 100 = **19.0%**
(OPEN SPACE SF / TOTAL LOT AREA = OPEN SPACE %)

20 10 0 20
Graphic Scale in Feet

PURSUANT TO NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES LAN 503.09(24): I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY THOSE UNDER MY DIRECT SUPERVISION AND ARE THE RESULT OF A FIELD SURVEY CONDUCTED IN JANUARY 2021 & ON DECEMBER 12, 2024. THIS SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF AN URBAN SURVEY OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS. THIS SURVEY IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, AND THE FIELD TRAVERSE SURVEY EXCEEDS A PRECISION OF 1:15,000.

STATE OF NEW HAMPSHIRE — No. 01037 — BRENDA M. KOLBOW — LICENSED LAND SURVEYOR — SIGNATURE

LICENSED LAND SURVEYOR

2025-01-14
DATE

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| | | | | |

TAX MAP 239 LOT 11

**EXISTING CONDITIONS PLAN**

**MOBIL STATION**

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

**COUNTY OF ROCKINGHAM**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**SCALE: 1" = 20' (22x34)**
**1" = 40' (11x17)**

**JANUARY 14, 2025**

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
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| 46077-16 | | | 612 | S-1 |
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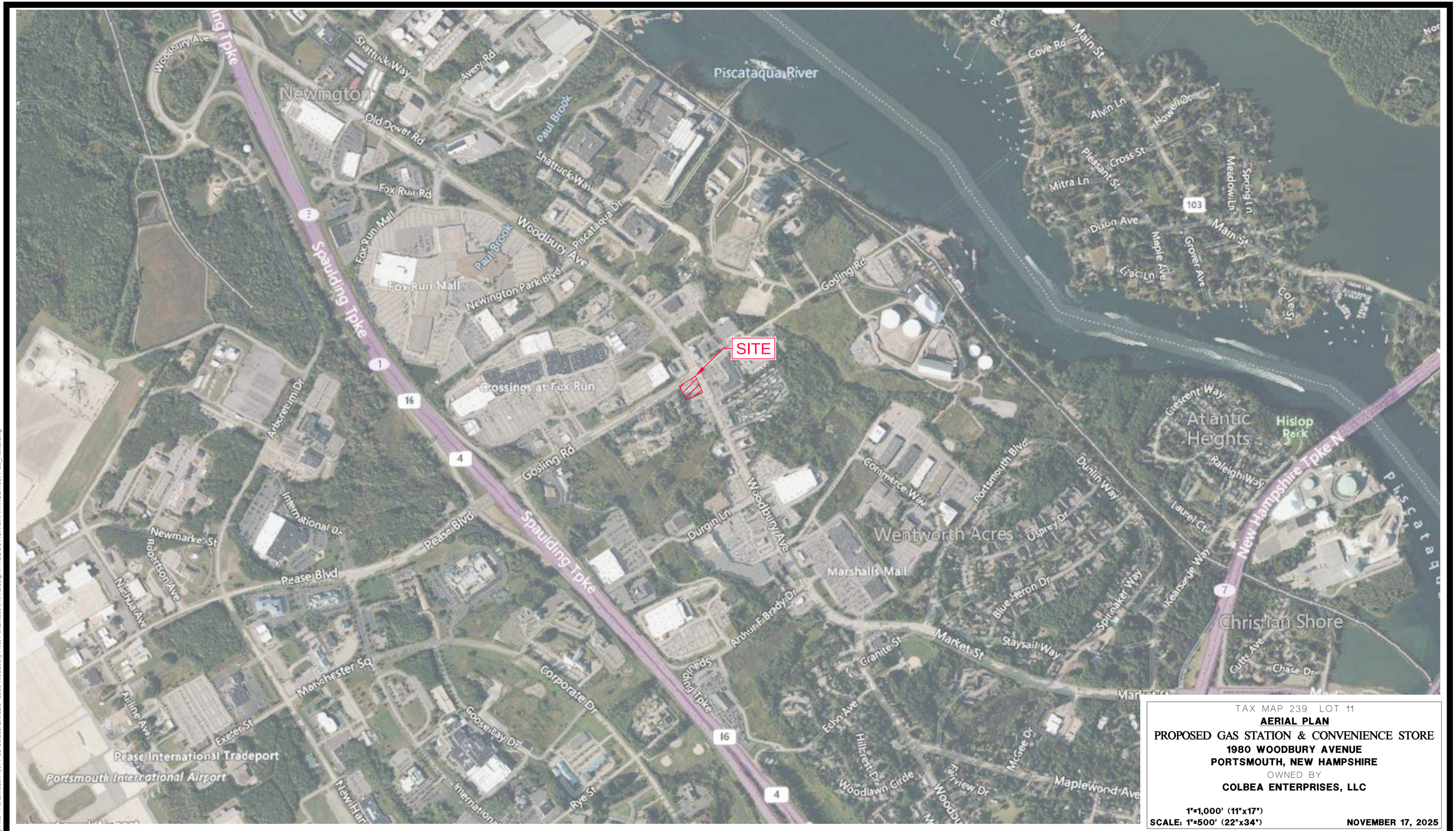
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MA ME NH RI VT
CALL 811 TOLL FREE
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

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Jan 14, 2025 - 10:32am
\\TFM-BEDFORD\Projects\Civil-Survey\MSC Projects\46077 - Woodbury Ave - Portsmouth\46077-15 - Ogunquit Holdings - 1980 Woodbury Ave\Carlson Survey\Dwgs\46077-16 Survey.dwg




TAX MAP 239 LOT 11

**AERIAL PLAN**

PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=1,000' (11"x17")**

**SCALE: 1"=500' (22"x34")** **NOVEMBER 17, 2025**

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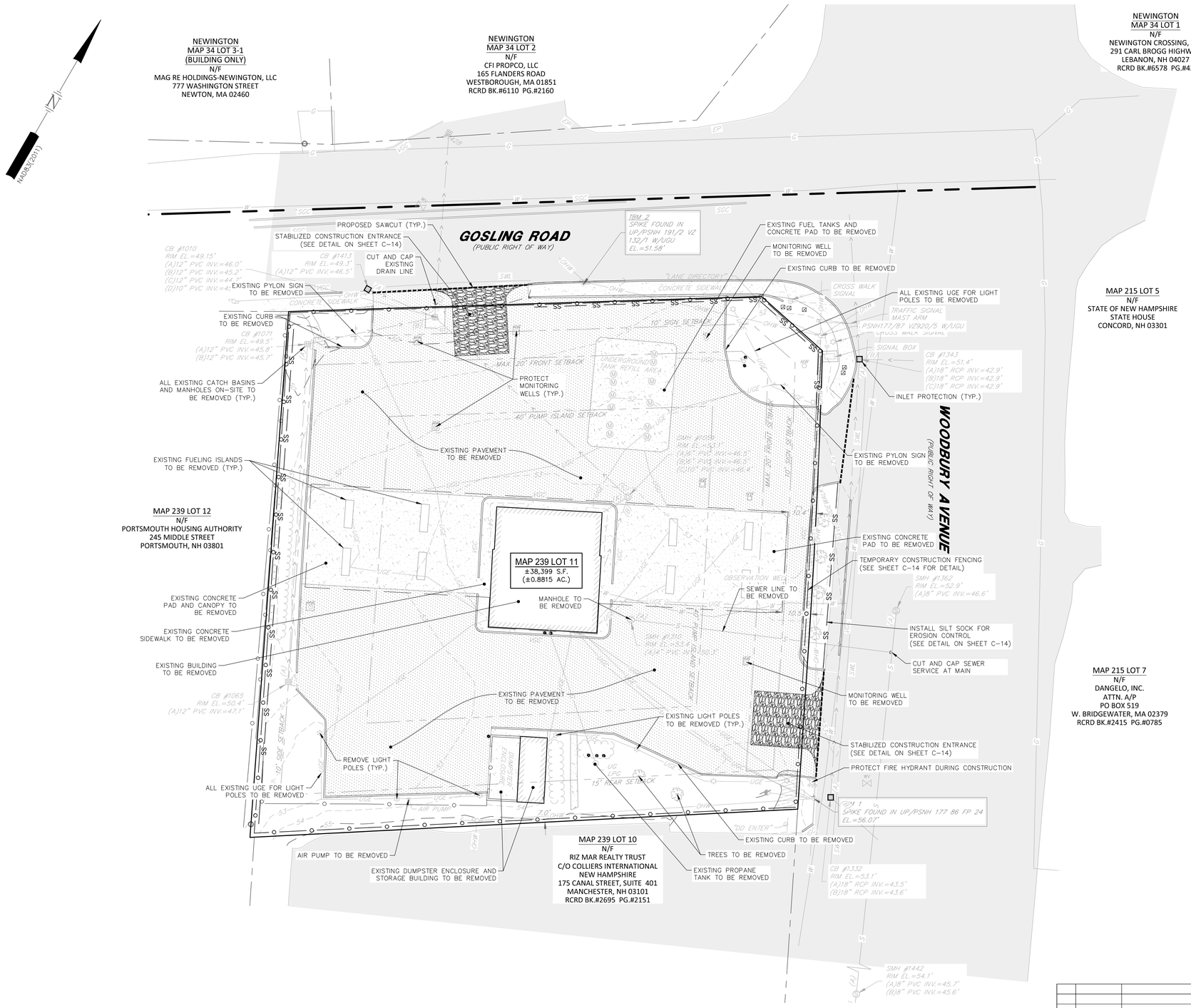
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| 46077.16 | JKC | CRR | FB / CADFILE: 46077-16_AERIAL |

C-02

Feb 12, 2026 - 10:14am
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## NOTES

1. SEE NOTES ON SHEET C-01.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATIONS, SIZE, AND ELEVATIONS OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS PRIOR TO THE START OF ANY DEMOLITION. THE LOCATIONS SHOWN ON THESE PLANS ARE NOT GUARANTEED BY THE OWNER OR THE ENGINEER. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED DEMOLITION TO DETERMINE APPROPRIATE ACTION TO BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO ANTICIPATE CONFLICTS AND REPAIR EXISTING UTILITIES AS NECESSARY TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
4. THE CONTRACTOR SHALL VERIFY ALL SURVEY INFORMATION IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
5. EXISTING UTILITY SERVICES TO BE DISCONTINUED ARE TO BE CAPPED AS REQUIRED BY THE RESPECTIVE UTILITY COMPANIES.
6. CONSTRUCTION DEBRIS AND INVASIVE SPECIES SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
7. PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL PLACE ORANGE CONSTRUCTION FENCING AROUND EACH TREE TO BE RETAINED THROUGHOUT CONSTRUCTION. NO STOCKPILES OF MATERIAL ARE PERMITTED WITHIN THE DRIP LINE OF THE TREES TO BE SAVED.
8. CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY IF ANY TREES ARE DAMAGED DURING CONSTRUCTION.

## CONSTRUCTION SEQUENCE NOTES

TO MINIMIZE EROSION AND SEDIMENTATION DUE TO CONSTRUCTION, CONSTRUCTION SHALL FOLLOW THIS GENERAL CONSTRUCTION SEQUENCE.

MODIFICATIONS TO THE SEQUENCE NECESSARY DUE TO THE CONTRACTOR'S SCHEDULE SHALL INCLUDE APPROPRIATE TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES.

THE CONTRACTOR SHALL SCHEDULE WORK SUCH THAT ANY CONSTRUCTION AREA IS STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE EXCEPT AS NOTED BELOW. NO MORE THAN 5 ACRES OF DISTURBED LAND SHALL BE UNSTABILIZED AT ANY ONE TIME.

THE PROJECT SHALL BE MANAGED SO THAT IT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER ARC 3800 RELATIVE TO INVASIVE SPECIES.

DO NOT TRAFFIC EXPOSED SOIL SURFACE OF INFILTRATION SYSTEMS WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO STORMWATER BMP'S. STORMWATER RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMP'S ARE STABILIZED.

DO NOT PLACE STORMWATER BMP'S INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

AFTER THE INFILTRATION SYSTEM IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE THE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.

1. NOTIFY EASEMENT OWNERS PRIOR TO COMMENCEMENT OF WORK.
2. INSTALL ALL PERIMETER EROSION PROTECTION MEASURES AS INDICATED ON THE PLANS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. STORMWATER TREATMENT PONDS AND SWALES SHALL BE INSTALLED BEFORE ROUGH GRADING THE SITE.
4. DURING CONSTRUCTION EVERY EFFORT SHALL BE MADE TO MANAGE SURFACE RUNOFF QUALITY.
5. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT BARRIERS, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED. (TEMPORARY SEED MIXTURE OF WINTER RYE APPLIED AT A RATE OF 2.5 LBS/1000 SF SHALL BE USED).
6. CONDUCT MAJOR EARTHWORK, INCLUDING CLEARING AND GRUBBING, WITHIN THE LIMITS OF WORK. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
7. ALL STRIPPED TOPSOIL AND OTHER EARTH MATERIALS SHALL BE STOCKPILED OUTSIDE THE IMMEDIATE WORK AND WETLAND AREAS. A SILT BARRIER SHALL BE CONSTRUCTED AROUND THESE PILES IN A MANNER TO PROVIDE ACCESS AND AVOID SEDIMENT OUTSIDE OF THE WORK AREA.
8. CONSTRUCT BUILDING PAD AND COMMENCE NEW BUILDING CONSTRUCTION.
9. CONSTRUCT TEMPORARY CULVERTS AND DIVERSIONS AS REQUIRED.
10. BEGIN PERMANENT AND TEMPORARY INSTALLATION OF SEED AND MULCH.
11. PERFORM EARTHWORK NECESSARY TO ESTABLISH ROUGH GRADING AROUND PARKING FIELDS AND ACCESS DRIVES. MANAGE EXPOSED SOIL SURFACES TO AVOID TRANSPORTING SEDIMENTS INTO WETLANDS. PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
12. INSTALL SUBSURFACE UTILITIES (WATER, SEWER, GAS, ELECTRIC, COMMUNICATIONS, DRAINAGE, DRAINAGE FACILITIES, ETC.).
13. CONSTRUCT PROPOSED ROADWAY, RAIN GARDENS, GRAVEL WETLANDS AND DRAINAGE SWALES. ALL DITCHES, SWALES, AND GRAVEL WETLANDS SHALL BE FULLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
14. COMPLETE BUILDING AND ALL OFF-SITE IMPROVEMENTS.
15. COMPLETE SEEDING AND MULCHING. SEED TO BE APPLIED WITH BROADCAST SPREADER OR BY HYDRO-SEEDING, THEN ROLLED, RAKED, OR DRAGGED TO ASSURE SEED/SOIL CONTACT.
16. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDED AREAS HAVE BECOME FIRMLY ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE.
17. DURING THE COURSE OF THE WORK AND UPON COMPLETION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT DEPOSITS, EITHER ON OR OFF SITE, INCLUDING CATCH BASINS, AND SUMPS, DRAIN PIPES AND DITCHES, CURB LINES, ALONG SILT BARRIERS, ETC. RESULTING FROM SOIL AND/OR CONSTRUCTION OPERATIONS.
18. SEE WINTER CONSTRUCTION SEQUENCE FOR WORK CONDUCTED AFTER OCTOBER 15TH.

TAX MAP 239 LOT 11

# SITE PREPARATION & DEMOLITION PLAN

## PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**
**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**
**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| 2 | 2/11/2026 | REVISED PER ADDRESS CHANGE REQUEST | JKC | CRR |
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| 46077-16_SITEPREP | C-03 | | | |


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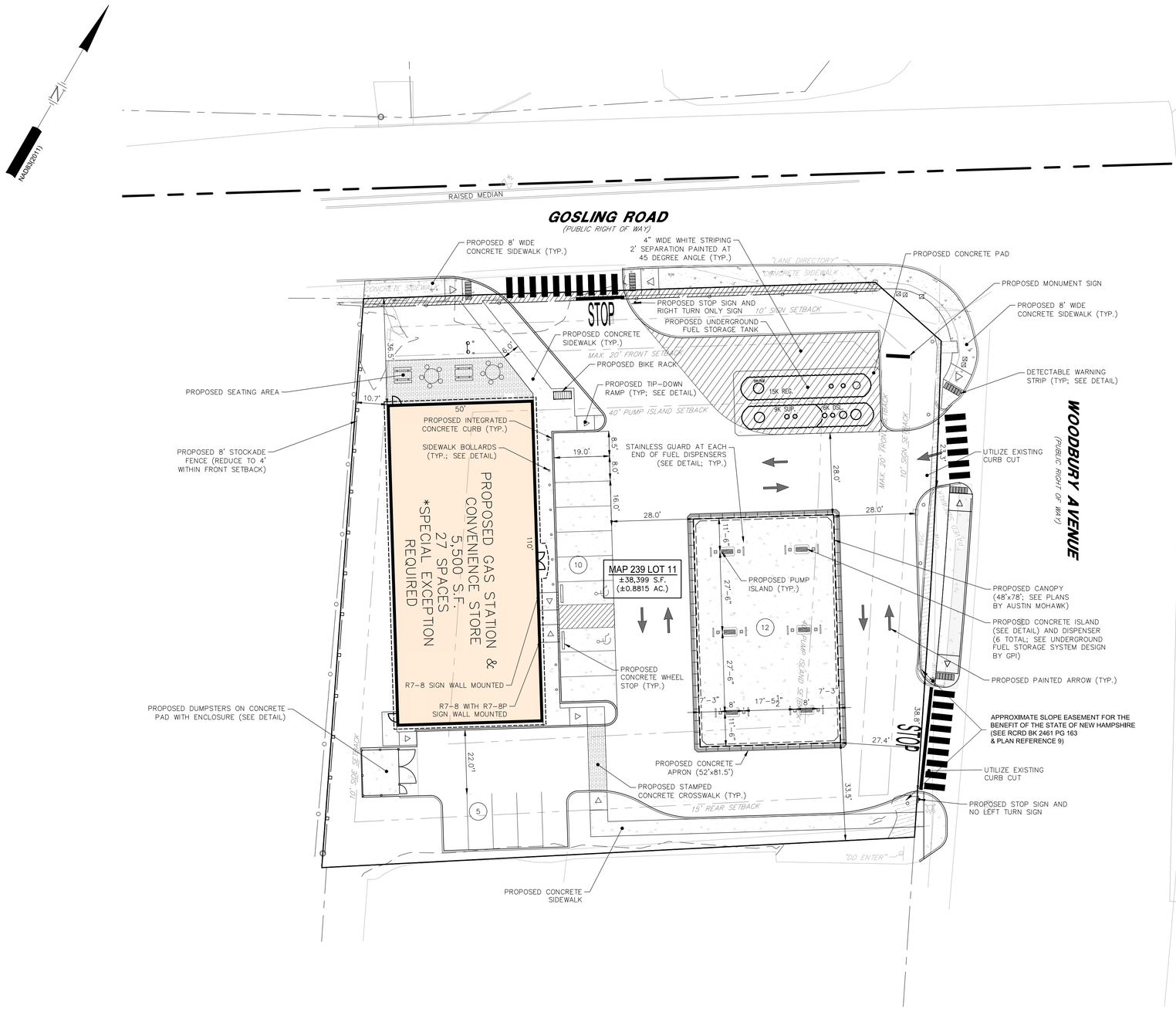
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## SITE DATA

OWNER OF RECORD OF MAP 239 LOT 11: COLBEA ENTERPRISES, LLC – 695 GEORGE WASHINGTON HIGHWAY, LINCOLN, RI 02865
DEED REFERENCE TO PARCEL IS BK 6281 PG 2912
AREA OF PARCEL = 38,399± SF OR 0.8815± ACRES

ZONED: GATEWAY NEIGHBORHOOD MIXED USE CORRIDOR (G1)
EXISTING USE: GAS STATION & CONVENIENCE STORE
PROPOSED USE: GAS STATION & CONVENIENCE STORE

THE PURPOSE OF THIS PLAN IS TO DEPICT CONSTRUCTION OF A 5,500 S.F. CONVENIENCE STORE AND GAS STATION WITH TWELVE FUELING STATIONS AT SIX FUELING ISLANDS. ASSOCIATED IMPROVEMENTS INCLUDE AND ARE NOT LIMITED TO PEDESTRIAN ACCESS, OUTDOOR SEATING, VEHICULAR ACCESS, GRADING, STORMWATER MANAGEMENT SYSTEMS, UTILITIES, LIGHTING, AND LANDSCAPING.

TYPICAL HOURS OF OPERATION: 24 HOURS/DAY.

DIMENSIONAL REQUIREMENTS (CURRENT ZONING)

| | REQUIRED: | PROVIDED: |
|---|---|---|
| MINIMUM LOT DIMENSIONS: | | |
| LOT AREA | 38,399 SF (0.8815± AC) | 38,399 SF (0.8815± AC) |
| LOT FRONTAGE | 375.22 FT | 375.22 FT |
| DEPTH | 200 FT | 200 FT |
| MINIMUM YARD DIMENSIONS: | | |
| FRONT | 0FT/20FT (MIN/MAX) | 27.4 FT |
| SIDE | 10 FT | 10.7 FT |
| REAR | 15 FT | N/A FT |
| MAXIMUM STRUCTURE DIMENSIONS: | | |
| STRUCTURE HEIGHT | 40 FT | 28.67 FT |
| BUILDING COVERAGE | 70% | 24.1% |
| BUILDING FOOTPRINT | 10,000 SF | 5,500 SF |
| COMMUNITY SPACE | 3,839.90 S.F. | 3,912 S.F. |

PARKING REQUIREMENTS

| | | |
|---|---|---|
| PARKING SPACES (SEE CALCULATION) | 16 SPACES | 27 SPACES (INCL. 12 @ PUMPS) |
| ACCESSIBLE SPACES (REQ'D BY ADA) | 1 SPACE | 2 SPACES |
| STANDARD PARKING SPACE SIZE | 8.5 FT X 19 FT | 8.5 FT X 19 FT |
| AISLE WIDTH | 24 FT | 24 FT |

PARKING CALCULATIONS

REQUIRED PARKING RATIO:
MOTOR VEHICLE SERVICE STATION: 2 SPACES + 1 SPACE/400 S.F.

TOTAL REQUIRED = 2 + 5,500 S.F. * 1 SPACE/400 S.F. = 16 SPACES

## NOTES

1. SEE NOTES ON SHEET C-01.
2. ALL PARKING SPACE DIMENSIONS ARE TO THE FACE OF CURB UNLESS NOTED OTHERWISE.
3. LIGHTING, SIGNAGE, LANDSCAPING, AND SCREENING SHALL MEET THE REQUIREMENTS OF THE PORTSMOUTH ZONING ORDINANCE AND SITE PLAN REGULATIONS.
4. SNOW SHALL NOT BE STOCKPILED IN STORMWATER BMP'S, WETLAND BUFFERS, OR WETLANDS. SEE SNOW STORAGE LOCATIONS. IN THE EVENT THAT THE SNOW STORAGE AREAS PROVIDED ON THE SITE ARE COMPLETELY UTILIZED, EXCESS SNOW SHALL BE TRANSPORTED OFF SITE FOR DISPOSAL IN ACCORDANCE WITH NHDES REGULATION. IF SNOW IS STORED WITHIN PARKING AREA, KEEP CATCH BASINS CLEAR. SALT USE SHALL BE MINIMIZED ON ALL PAVED AREAS AND GREEN SNOWPRO CERTIFIED OPERATORS SHALL BE UTILIZED FOR WINTER MAINTENANCE.

TAX MAP 239 LOT 11

**SITE LAYOUT PLAN**

# PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**
**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY
**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**
**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**

HORIZONTAL SCALE 1"=20'
20 10 0 20

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| 2 | 2/11/2026 | REVISED PER ADDRESS CHANGE REQUEST | JKC | CRR |
| 1 | 12/22/2025 | REVISED PER TAC COMMENTS | JKC | CRR |


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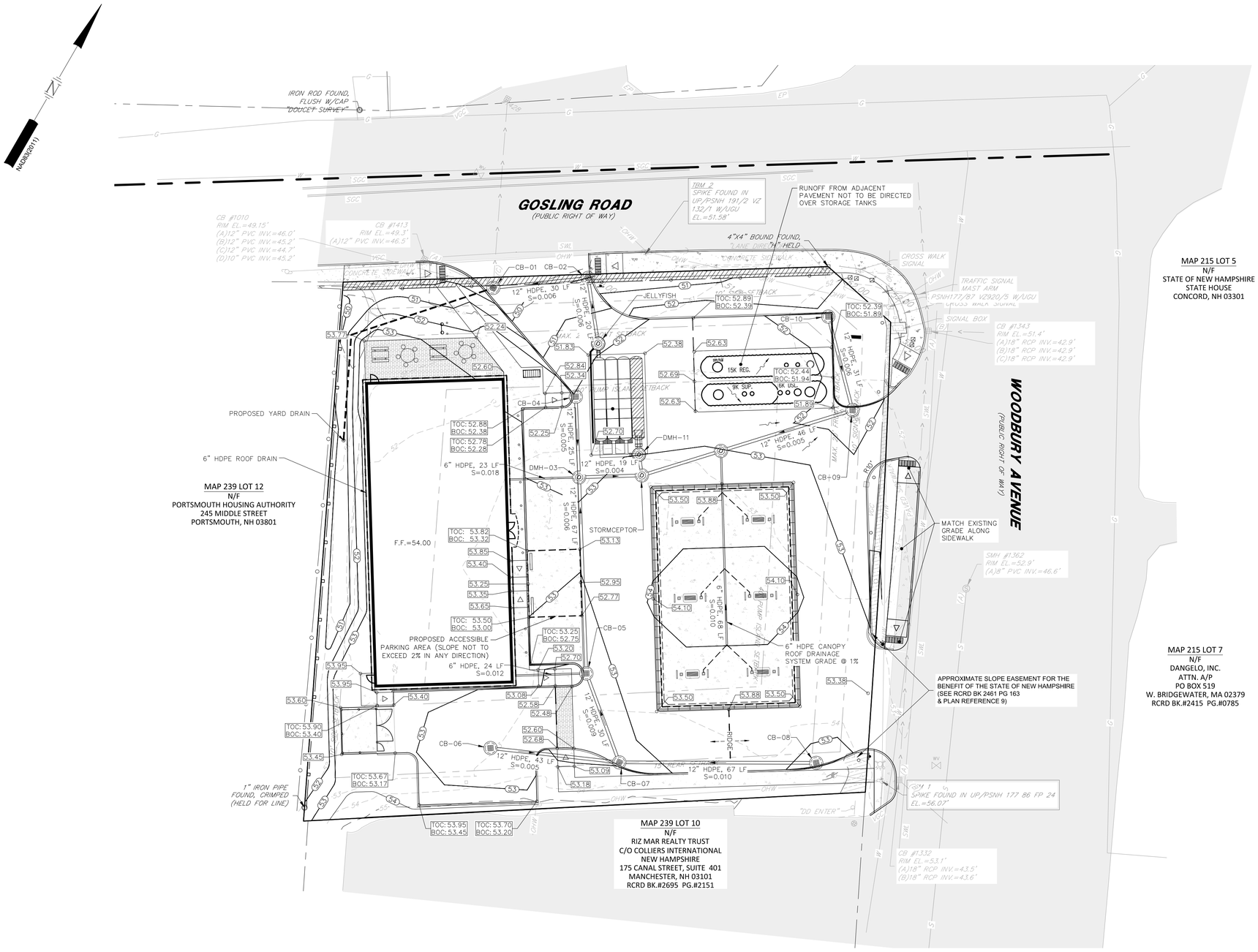
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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



Feb 12, 2026 - 10:15am
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## NOTES

1. SEE NOTES ON SHEET C-01.
2. ALL DOORS AND GARAGE ENTRANCES SHALL BE AT FINISHED FLOOR ELEVATION UNLESS OTHERWISE NOTED.
3. PROPOSED SPOT GRADES ARE PROVIDED TO THE NEAREST 0.05'. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE FINISHED GRADES MEET ADA STANDARDS FOR WHEEL CHAIR RAMPS, ADA SPACES AND ACCESS AISLES, CROSSWALKS, SIDEWALKS, ETC.
4. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
5. LENGTH OF PIPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
6. DRAINAGE PIPES WITH LESS THAN 3' COVER SHALL BE INSULATED (SEE UTILITY TRENCH DETAIL) AND DRAINAGE CATCH BASINS WITH LESS THAN 3.5' OF COVER OVER INVERTS SHALL USE SLAB TOP CATCH BASIN (SEE DETAILS).
7. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT AND ARCHITECTURAL PLANS FOR SUBDRAINAGE SYSTEMS FOR THE BUILDING FOUNDATION. SUBDRAINAGE MUST DAYLIGHT OR TIE INTO THE STORMWATER MANAGEMENT SYSTEM.

| STRUCTURE TABLE | |
|---|---|
| STRUCTURE NAME | STRUCTURE DETAILS |
| CB-01 | RIM = 49.15<br>INV.IN(CB-02) = 44.80 |
| CB-02 | RIM = 50.00<br>INV.IN(JF) = 45.10<br>INV.OUT = 45.00 |
| CB-04 | RIM = 52.06<br>INV.OUT = 46.45 |
| CB-05 | RIM = 52.41<br>INV.IN(CB-07) = 46.70<br>INV.IN(ROOF DRAIN 2) = 46.70<br>INV.OUT = 46.70 |
| CB-06 | RIM = 52.20<br>INV.OUT = 47.35 |
| CB-07 | RIM = 52.62<br>INV.IN(CB-08) = 47.10<br>INV.IN(CB-06) = 47.10<br>INV.OUT = 47.00 |
| CB-08 | RIM = 52.75<br>INV.OUT = 47.80 |
| CB-09 | RIM = 51.67<br>INV.IN(CB-10) = 46.70<br>INV.OUT = 46.60 |
| CB-10 | RIM = 51.67<br>INV.OUT = 46.90 |
| CB-12 | RIM = 53.05<br>INV.IN(CB-09) = 46.35<br>INV.IN(CANOPY DRAIN) = 46.35<br>INV.OUT = 46.25 |
| DMH-03 | RIM = 52.79<br>INV.IN(CB-05) = 46.30<br>INV.IN(CB-04) = 46.30<br>INV.IN(ROOF DRAIN 1) = 46.30<br>INV.OUT = 46.20 |
| DMH-11 | RIM = 52.99<br>INV.IN(Pipe - (15)) = 46.00<br>INV.OUT = 45.90 |
| JELLYFISH | RIM = 51.73<br>INV.IN(Pipe - (18)) = 45.25<br>INV.OUT = 45.25 |
| STORMCEPTOR | RIM = 53.31<br>INV.IN(CB-09 (1)) = 46.10<br>INV.IN(DMH-03) = 46.10<br>INV.OUT = 46.00 |

TAX MAP 239 LOT 11

# GRADING & DRAINAGE PLAN

## PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**

**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**

HORIZONTAL SCALE 1"=20'

20 10 0 20

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| 2 | 2/11/2026 | REVISED PER ADDRESS CHANGE REQUEST | JKC | CRR |
| 1 | 12/22/2025 | REVISED PER TAC COMMENTS | JKC | CRR |


Seacoast Division

TFM

Civil Engineers
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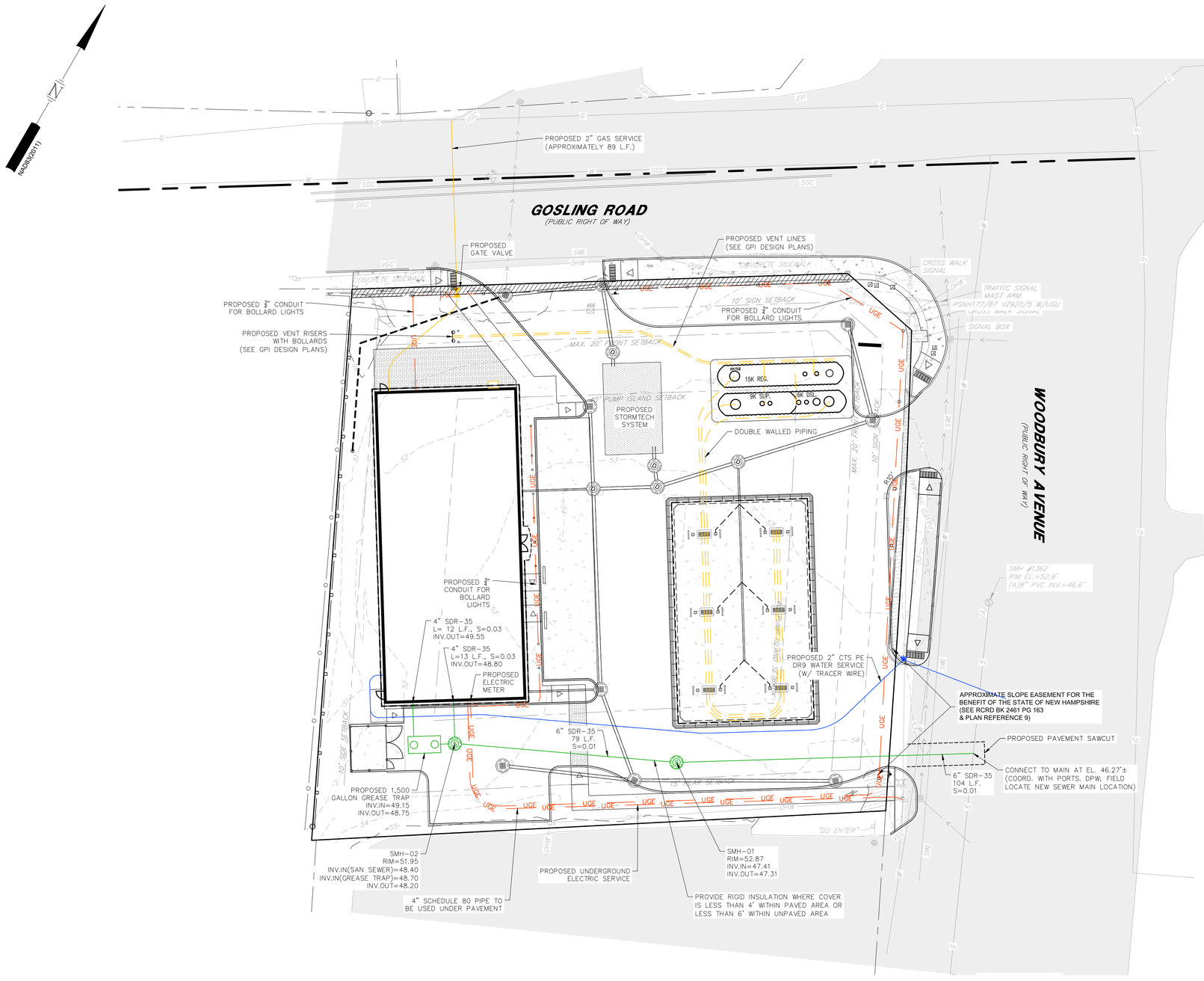
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## NOTES

1. SEE NOTES ON SHEET C-01.
2. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING:

| | |
|---|---|
| DRAINAGE | MUNICIPAL |
| SEWER | MUNICIPAL |
| WATER | MUNICIPAL |
| GAS | UNITIL |
| ELECTRIC | EVERSOURCE |
| TELEPHONE | COMCAST XFINITY, CONSOLIDATED COMMUNICATIONS, VERIZON, ETC. |
| CABLE | COMCAST XFINITY, CONSOLIDATED COMMUNICATIONS, VERIZON, ETC |

TAX MAP 239 LOT 11

# UTILITY PLAN

## PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**
**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY
**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**
**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**

HORIZONTAL SCALE 1"=20'
20 10 0 20

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| 46077.16 | CK | CRR | CADFILE | 46077-16_UTILITY | C-06 |

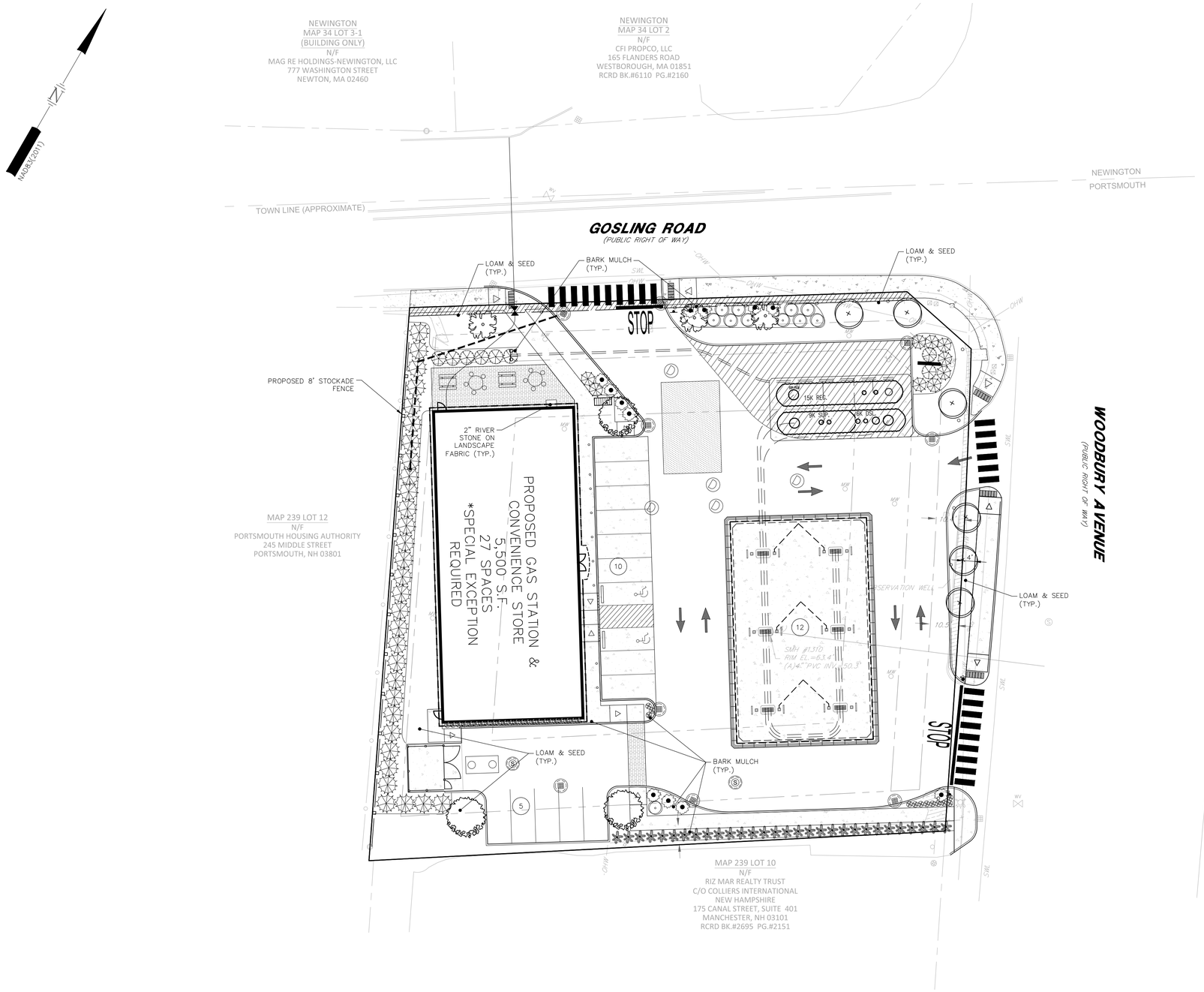
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MAP
NEWINGTO
291 CARL B
LEBANC
RCRD BK.

MAP 215 LC
N/F
STATE OF NEW HA
STATE HOU
CONCORD, NH

MAP 215 LOT 7
N/F
DANGELO, INC.
ATTN. A/P
PO BOX 519
W. BRIDGEWATER, MA
RCRD BK.#2415 PG.#

## LANDSCAPE LEGEND

| SYMBOL | QTY | BOTANICAL NAME<br>COMMON NAME | SIZE | REMARKS | MATURE HEIGHT/ SPREAD | GROWTH HABIT |
|---|---|---|---|---|---|---|
| | 3 | ACER R. 'BOWHALL'<br>BOWHALL RED MAPLE | 2" TO 2 1/2" CAL. | B&B | 40' TO 60'<br>10' TO 15' | UPRIGHT |
| | 3 | AMELANCHIER X GRANDIFLORA 'ROBIN HILL'<br>ROBIN HILL SERVICEBERRY | 2" TO 2 1/2" CAL. | B&B | 15' TO 20'<br>10' TO 15' | UPRIGHT |
| | 6 | MALUS 'RED JEWEL'<br>RED JEWEL CRABAPPLE | 2" TO 2 1/2" CAL. | B&B | 10' TO 15'<br>8' TO 10' | UPRIGHT–OVAL |
| | 9 | CHAMAECYPRIS P. 'F. MOPS'<br>MOP'S THREAD–LEAF FALSECYPRESS | 3 GAL. | CONT. | 3' TO 4'<br>5' TO 6' | MOUNDED |
| | 12 | JUNIPERUS HORIZONTALIS 'BAR HARBOR'<br>BAR HARBOR JUNIPER | 1 GAL. | CONT. | 6" TO 12"<br>6' TO 8' | GROUNDCOVER |
| | 30 | PANICUM VIRGATUM 'SHENANDOAH'<br>SHENANDOAH SWITCH GRASS | 1 GAL. | CONT. | 3' TO 4'<br>3' TO 4' | CLUMPING |
| | 8 | PHYSOCARPUS O. 'TINY WINE'<br>TINY WINE NINEBARK | 3 GAL. | CONT. | 3' TO 4'<br>3' TO 4' | MOUNDED |
| | 11 | SPIRAEA B. 'ANTHONY WATERER'<br>ANTHONY WATERER SPIREA | 3 GAL. | CONT. | 3' TO 4'<br>4' TO 5' | MOUNDED |
| | 31 | THUJA OCCIDENTALIS 'TECHNY'<br>MISSION ARBORVITAE | 5' TO 6' | B&B | 10' TO 15'<br>6' TO 8' | PYRAMIDAL |
| | 36 | HEMEROCALLIS STELLA D'ORO<br>STELLA D'ORO DAY LILY | 1 GAL. | CONT. | 18"<br>18" | GROUNDCOVER |

## LANDSCAPE NOTES

**(SEE DETAILS FOR ADDITIONAL NOTES)**

GENERAL

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES, REGULATIONS, LAWS, AND ORDINANCES HAVING JURISDICTION OVER THIS PROJECT SITE.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND NOTIFY OWNER'S REPRESENTATIVE OF CONFLICTS.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON PLANS BEFORE PRICING THE WORK. ANY DIFFERENCE IN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION. LANDSCAPE QUANTITIES SHOWN ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN LANDSCAPE LEGEND.
4. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO STARTING WORK AND VERIFY THAT THE PLANS IN THE CONTRACTOR'S POSSESSION ARE THE MOST CURRENT PLANS AVAILABLE AND ARE THE APPROVED PLAN SET FOR USE IN CONSTRUCTION.
5. ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) [FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN] IN THE AMERICAN STANDARD FOR NURSERY STOCK (AS AMENDED) [ANSI Z60.1–1996].
6. ALL PLANTS SHALL BE FIRST CLASS AND SHALL BE REPRESENTATIVE OF THEIR NORMAL SPECIES AND/OR VARIETIES. ALL PLANTS MUST HAVE GOOD, HEALTHY, WELL–FORMED UPPER GROWTH AND A LARGE, FIBEROUS, COMPACT ROOT SYSTEM.
7. ALL PLANTS SHALL BE FREE FROM DISEASE AND INSECT PESTS AND SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS PERTAINING TO PLANT DISEASES AND INFESTATIONS.
8. ALL TREES SHALL BE BALLED AND BURLAPPED (B & B) UNLESS OTHERWISE NOTED OR APPROVED BY LANDSCAPE ARCHITECT.
9. ALL LANDSCAPED AREAS INCLUDING LAWNS SHALL BE PROVIDED WITH UNDERGROUND IRRIGATION. SEE IRRIGATION NOTES.
10. IF APPLICABLE, THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING AND STORED FOR FALL PLANTING.
11. ALL INVASIVE PLANT SPECIES FROM THE "NEW HAMPSHIRE PROHIBITED INVASIVE PLANT SPECIES LIST", TO BE REMOVED SHALL BE DONE SO IN ACCORDANCE WITH THE "INVASIVE SPECIES ACT, HB 1258–FN."

GUARANTEE

1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE WORK FOR A PERIOD OF ONE YEAR, BEGINNING AT THE START OF THE MAINTENANCE PERIOD.

## IRRIGATION NOTES

1. THE IRRIGATION SYSTEM SHALL BE DESIGNED BY AN APPROVED IRRIGATION DESIGN/BUILD CONTRACTOR ACCEPTABLE TO THE OWNERS REPRESENATIVE.
2. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE IRRIGATION SYSTEM DESIGN AND SHOP DRAWINGS TO THE OWNER 30 DAYS PRIOR TO THE START OF CONSTRUCTION.
3. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING AND PROPOSED UTILITIES AND NOTIFY THE OWNER'S REPRESENTATIVE OF CONFLICTS.
4. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR A COMPLETE AND OPERABLE IRRIGATION SYSTEM AND SHALL FOLLOW ALL APPLICABLE CODES.
5. REFER TO ARCHITECTURAL PLANS FOR LOCATION OF THE IRRIGATION SYSTEM'S BUILDING CONNECTION AND CONTROLS.
6. FOLLOW ALL MANUFACTURER'S INSTRUCTIONS AND PRODUCT SPECIFICATIONS FOR INSTALLATION.

TAX MAP 239 LOT 11

**LANDSCAPE PLAN**

PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**

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# LANDSCAPE NOTES

GENERAL

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES, REGULATIONS, LAWS, AND ORDINANCES HAVING JURISDICTION OVER THIS PROJECT SITE.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND NOTIFY OWNER'S REPRESENTATIVE OF CONFLICTS.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON PLANS BEFORE PRICING THE WORK. ANY DIFFERENCE IN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION. LANDSCAPE QUANTITIES SHOWN ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN LANDSCAPE LEGEND.
4. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO STARTING WORK AND VERIFY THAT THE PLANS IN THE CONTRACTOR'S POSSESSION ARE THE MOST CURRENT PLANS AVAILABLE AND ARE THE APPROVED PLAN SET FOR USE IN CONSTRUCTION.
5. ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
6. ALL PLANTS SHALL BE FIRST CLASS AND SHALL BE REPRESENTATIVE OF THEIR NORMAL SPECIES AND/OR VARIETIES. ALL PLANTS MUST HAVE GOOD, HEALTHY, WELL-FORMED UPPER GROWTH AND A LARGE, FIBEROUS, COMPACT ROOT SYSTEM.
7. ALL PLANTS SHALL BE FREE FROM DISEASE AND INSECT PESTS AND SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS PERTAINING TO PLANT DISEASES AND INFESTATIONS.
8. ALL TREES SHALL BE BALLED AND BURLAPPED (B & B) UNLESS OTHERWISE NOTED OR APPROVED BY LANDSCAPE ARCHITECT.
9. IF APPLICABLE, THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING AND STORED FOR FALL PLANTING.
10. ALL INVASIVE PLANT SPECIES FROM THE "NEW HAMPSHIRE PROHIBITED INVASIVE PLANT SPECIES LIST", TO BE REMOVED SHALL BE DONE SO IN ACCORDANCE WITH THE "INVASIVE SPECIES ACT, HB 1258-FN."

GUARANTEE

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# LANDSCAPE SPECIFICATIONS

SITE AND SOIL PREPARATION

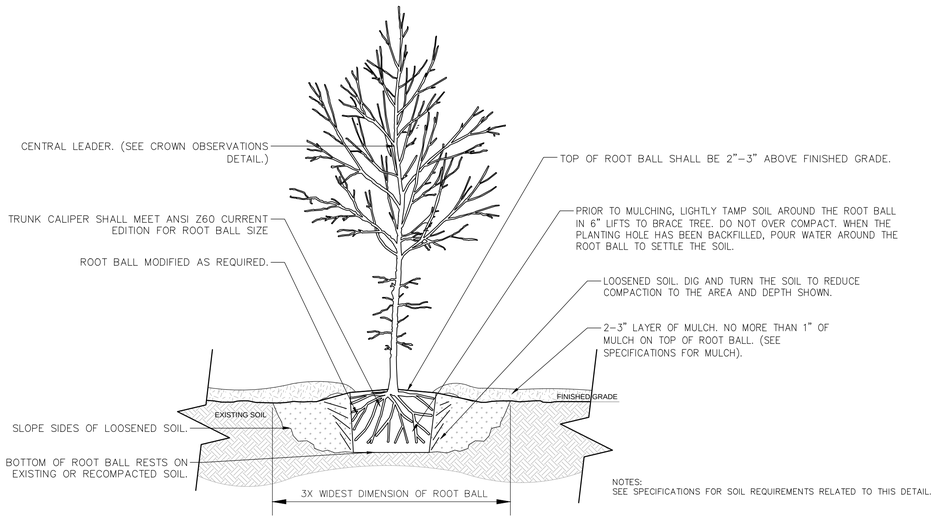
1. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR LEDGE, NOTIFY LANDSCAPE ARCHITECT/ENGINEER BEFORE PLANTING.
2. ALL DISTURBED AREAS & PLANTING AREAS, INCLUDING AREAS TO BE SODDED, SHALL RECEIVE THE FOLLOWING SOIL PREPARATION PRIOR TO PLANTING: A MINIMUM OF 6 INCHES OF LIGHTLY COMPACTED TOPSOIL SHALL BE INSTALLED OVER THE SUBSOIL IF TOPSOIL HAS BEEN REMOVED OR IS NOT PRESENT.
3. LOAM SHALL CONSIST OF LOOSE FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE FROM STONES, LUMPS, STUMPS, OR SIMILAR OBJECTS LARGER THAN TWO INCHES (2") IN GREATEST DIAMETER, SUBSOIL, ROOTS, AND WEEDS. THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.6. LOAM SHALL CONTAIN A MINIMUM OF THREE PERCENT (3%) AND A MAXIMUM OF TWENTY PERCENT (20%) ORGANIC MATTER AS DETERMINED BY LOSS BY IGNITION. NOT MORE THAN SIXTY-FIVE PERCENT (65%) SHALL PASS A NO. 200 SIEVE AS DETERMINED BY THE WASH TEST IN ACCORDANCE WITH ASTM D1140. IN NO INSTANCE SHALL MORE THAN 20% OF THAT MATERIAL PASSING THE #4 SIEVE CONSIST OF CLAY SIZE PARTICLES.
4. NATURAL TOPSOIL NOT CONFORMING TO THE PARAGRAPH ABOVE OR CONTAINING EXCESSIVE AMOUNTS OF CLAY OR SAND SHALL BE TREATED BY THE CONTRACTOR TO MEET THOSE REQUIREMENTS.
5. SUBMIT TEST RESULTS OBTAINED FROM SOURCE TO ENGINEER/LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL, PRIOR TO SPREADING OPERATIONS.
6. APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT TO USE THE TOPSOIL WILL DEPEND UPON THE RESULTS OF THE SOIL TESTS.
7. THE BURDEN OF PROOF OF SOIL AMENDMENT INSTALLATION RESTS WITH THE CONTRACTOR. SOIL TESTS MAY BE REQUIRED AT THE CONTRACTOR'S EXPENSE IN ORDER TO CONFIRM AMENDMENT INSTALLATION.

PLANTING

1. EXCAVATE PITS, PLANTERS, BEDS AND TRENCHES WITH VERTICAL SIDES AND WITH BOTTOM OF EXCAVATION SLIGHTLY RAISED AT CENTER TO PROVIDE PROPER DRAINAGE. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION.
2. ANY LEDGE OR RUBBLE MATERIAL SHALL BE FRACTURED TO A DEPTH OF 3 FEET AND EXCAVATED TO A DEPTH OF 30 INCHES FOR TREE POCKETS AND 18 INCHES FOR SHRUB BEDS. THIS PROCEDURE SHALL BE HANDLED BY THE SITE CONTRACTOR. SITE TOPSOIL SHALL BE DEPOSITED IN ALL EXCAVATED POCKETS.
3. DISPOSE OF SUBSOIL REMOVED FROM PLANTING EXCAVATIONS. DO NOT MIX WITH PLANTING SOIL OR USE AS BACKFILL.
4. FILL EXCAVATIONS FOR TREES AND SHRUBS WITH WATER AND ALLOW TO PERCOLATE OUT BEFORE PLANTING.
5. DISH TOP OF BACKFILL TO ALLOW FOR MULCH – PLANT SAUCERS SHALL BE AS SHOWN ON DETAIL SHEETS; 6' DIAMETER FOR ALL DECIDUOUS TREES, AND FOR EVERGREEN TREES A RADIUS 2' BEYOND THE OUTER MOST BRANCHES.
6. MULCH TREES, SHRUBS, PLANTERS AND BEDS. PROVIDE NOT LESS THAN 3" THICKNESS OF BARK MULCH, 3/8"-2" OF WIDTH, AND WORK INTO TOP OF BACKFILL. FINISH LEVEL WITH ADJACENT FINISH GRADES AS DIRECTED IN THE FIELD.
7. STAKE AND GUY TREES IMMEDIATELY AFTER PLANTING (TREE SUPPORT STAKES SHALL BE 2" X 3" X 8', WOOD STAKES. GUYING WIRE SHALL BE NO. 12 GAUGE GALVANIZED SOFT STEEL WIRE. HOSE FOR COVERING WIRE SHALL BE NEW OR USED TWO PLY RUBBER HOSE NOT LESS THAN 1/2 INCH INSIDE DIAMETER. (PLASTIC "CINCH-TIES" OR EQUIVALENT FASTENING DEVICE MAY BE AN ACCEPTABLE GUY WIRE AND HOSE PROTECTOR SUBSTITUTE.)
8. TREEGATOR WATERING SYSTEM OR APPROVED EQUAL SHALL BE INSTALLED FOR ALL DECIDUOUS TREES AT TIME OF PLANTING AND REMOVED BEFORE FROST. WATERING RATE TO BE APPLIED PER MANUFACTURER'S SPECIFICATIONS.
9. ALL PLANT MATERIALS SHALL HAVE DEAD OR DAMAGED BRANCHES REMOVED AT TIME OF PLANTING. ALL TAGS AND RIBBONS SHALL BE REMOVED AT THIS TIME.
10. TREES TO REMAIN STAKED FOR 1 FULL GROWING SEASON.
11. THE CONTRACTOR SHALL REQUEST A FINAL OBSERVATION BY THE OWNER'S REPRESENTATIVE UPON COMPLETION OF INSTALLATION.

SEEDING

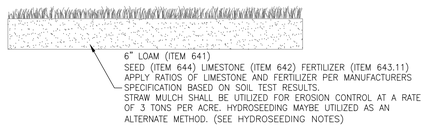
1. SLOPES UP TO AND INCLUDING 3:1 GRADE, SEED WILL BE NEW ENGLAND EROSION CONTROL & RESTORATION MIX PER NEW ENGLAND WETLANDS PLANTS INC., AMHERST, MA.
2. SLOPES STEEPER THAN 3:1 GRADE, SEED WILL BE NEW ENGLAND EROSION CONTROL & RESTORATION MIX PER NEW ENGLAND WETLANDS PLANTS INC., AMHERST, MA. SEE CIVIL FOR ADDITIONAL EROSION CONTROL MEASURES.
3. GENERAL SEED WILL BE NHDOT SPECIFICATION SECTION 644, TABLE 644-1-PARK SEED TYPE 15, INCLUDING NOTES TO TABLE 1, 2 & 3.




SECTION VIEW

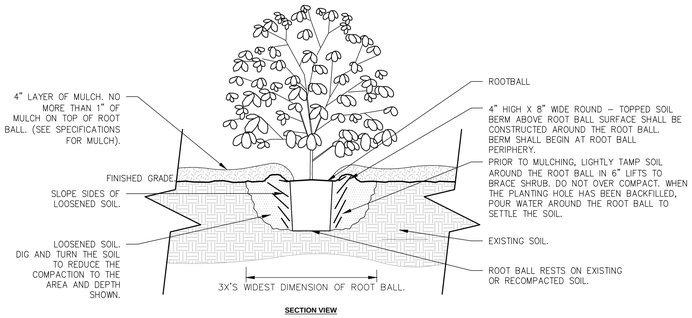
## TREE WITH BERM

NOT TO SCALE




## LOAM & SEED

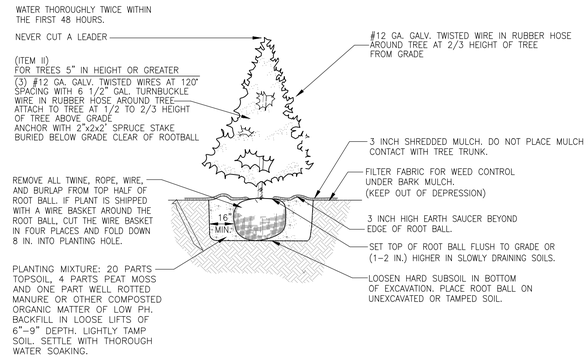
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SECTION VIEW

## SHRUB PLANTING

NOT TO SCALE




## EVERGREEN PLANTING

NOT TO SCALE

HORIZONTAL SCALE 1"=20'

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| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| 2 | 2/11/2026 | REVISED PER ADDRESS CHANGE REQUEST | JKC | CRR |
| 1 | 12/22/2025 | REVISED PER TAC COMMENTS | JKC | CRR |

TAX MAP 239 LOT 11

**LANDSCAPE DETAILS**

PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**

**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**


Seacoast Division

TFM

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
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| 46077.16 | CK | CRR | CADFILE | 46077-16 LANDSCAPE PLAN | C-08 |

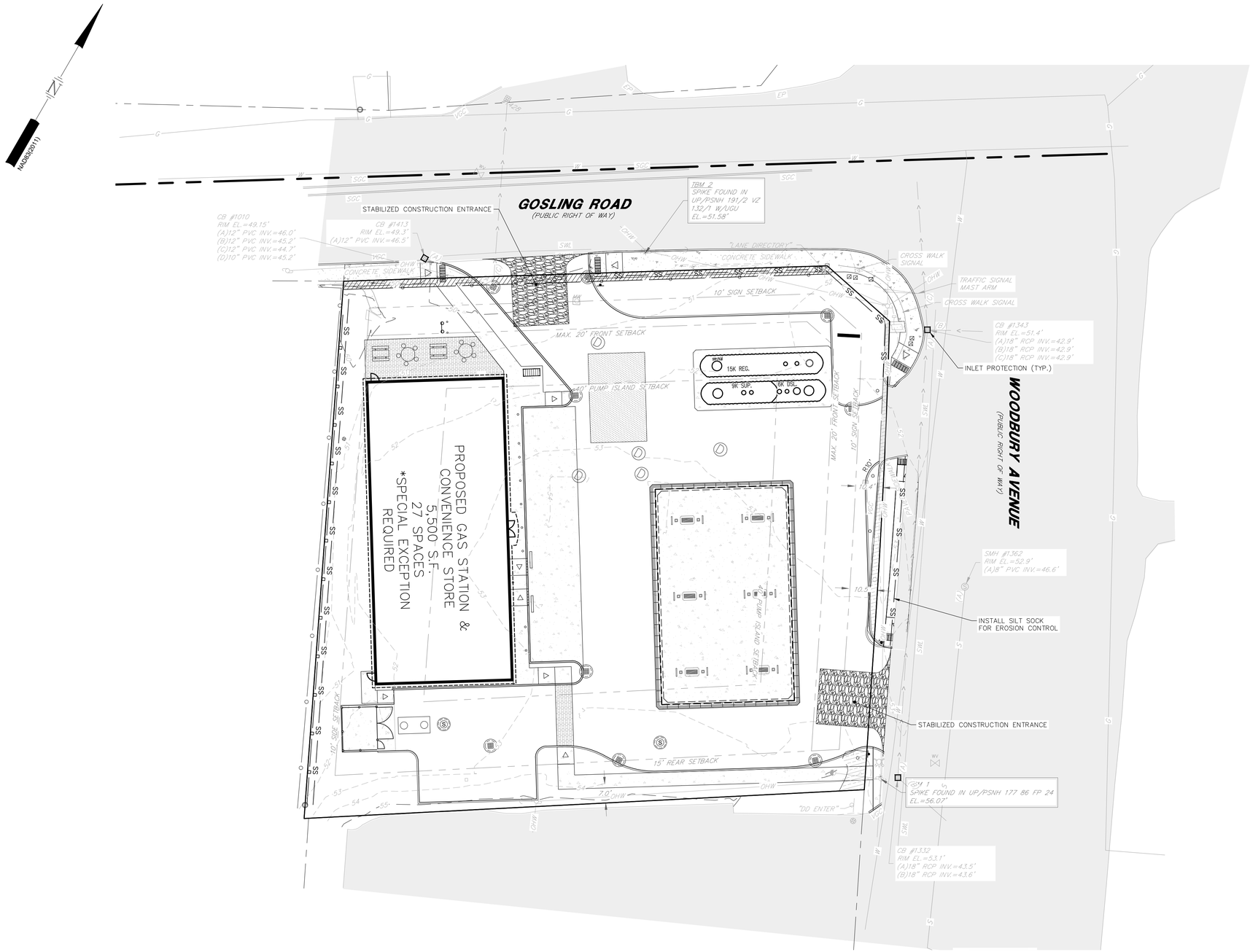

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Feb 12, 2026 - 10:16am
F:\MSC Projects\46077 - Woodbury Ave - Portsmouth\46077-16 Colbea Ent LLC- 1980 Woodbury Ave, Portsmouth, NH\Design\PRODUCTION DRAWINGS\46077-16 Landscape Plan.dwg




## NOTES

1. INSTALL SILT BARRIER ALONG THE PERIMETER OF THE AREA TO BE DISTURBED AS FIRST ORDER OF WORK.
2. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED. INLET PROTECTION BARRIERS SHALL BE IN PLACE AT ALL CATCH BASINS PRIOR TO THE DISTURBANCE OF SOIL.
3. DUST CONTROL SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. IT SHALL BE ACCOMPLISHED BY THE UNIFORM APPLICATION OF CALCIUM CHLORIDE AT THE RATE OF 1-1/2 POUNDS PER SQUARE YARD BY MEANS OF A LIME SPREADER OR OTHER APPROVED METHOD. WATER MAY ALSO BE USED FOR DUST CONTROL, AND APPLIED BY SPRINKLING WITH WATER TRUCK DISTRIBUTORS, AS REQUIRED.
4. THE SITE WILL REQUIRE A USEPA NPDES PERMIT FOR STORMWATER DISCHARGE FOR THE SITE CONSTRUCTION IF THE DISTURBANCE EXCEEDS ONE ACRE. THE CONSTRUCTION SITE OPERATOR SHALL DEVELOP AND IMPLEMENT A CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT WHICH SHALL REMAIN ON SITE AND MADE ACCESSIBLE TO THE PUBLIC. THE SITE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE. A COMPLETED NOTICE OF TERMINATION (NOT) SHALL BE SUBMITTED TO NPDES PERMITTING AUTHORITY WITHIN 30 DAYS AFTER EITHER OF THE FOLLOWING CONDITIONS HAVE BEEN MET: FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE FOR, OR ANOTHER OPERATOR/PERMITTEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
5. SILT PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED IN THIS PLAN SET.
6. CONSTRUCT JUTE MATTING ON ALL SLOPES STEEPER THAN 3:1, DISTURBED AREAS SLOPING TOWARDS WETLANDS AND ALL LOCATIONS SHOWN ON PLAN.
7. INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RAIN STORM OF 0.10" OR GREATER. REPAIR/MODIFY SILT BARRIER AS NECESSARY TO MAXIMIZE FILTER EFFICIENCY. REMOVE SEDIMENT WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
8. PROVIDE SILT BARRIERS AT THE BASE OF CUT AND FILL SLOPES UNTIL COMPLETION OF THE PROJECT OR UNTIL VEGETATION BECOMES ESTABLISHED ON SLOPES. EROSION PROTECTION BELOW FILL SLOPES SHALL BE PLACED IMMEDIATELY AFTER CLEARING, PRIOR TO EMBANKMENT CONSTRUCTION.
9. ALL DISTURBED AREAS SHALL BE REVEGETATED AS QUICKLY AS POSSIBLE. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
10. ALL WORK AREAS TO BE STABILIZED AT THE END OF EACH WORK DAY AND PRIOR TO ANY PREDICTED SIGNIFICANT RAIN EVENT.
11. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    A. BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, ARE INSTALLED IN AREAS TO BE PAVED
    B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
    C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED
    D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
13. ALL CATCH BASINS, MANHOLES, AND DRAIN LINES SHALL BE THOROUGHLY CLEANED OF ALL SEDIMENT AND DEBRIS AFTER ALL AREAS HAVE BEEN STABILIZED.
14. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SLOPE STABILITY DURING CONSTRUCTION.
15. THE EROSION CONTROL PRACTICES SHOWN ON THESE PLANS ARE ILLUSTRATIVE ONLY AND SHALL BE SUPPLEMENTED BY THE SITE CONTRACTOR AS NEEDED.
16. SEE ADDITIONAL NOTES NEXT SHEET.

TAX MAP 239 LOT 11

**EROSION CONTROL PLAN**

PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**SCALE:** **NOVEMBER 17, 2025**

HORIZONTAL SCALE 1"=20'
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## SOIL CHARACTERISTICS

THE SOIL IN THE VICINITY OF THE SITE CONSIST OF URBAN LAND, THE MAJORITY OF THE SOIL IS HSG TYPE C.

## DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 38,399 SQUARE FEET (0.8815 ACRES). CONSTRUCTION SHALL BE PHASED TO LIMIT DISTURBED AREAS TO LESS THAN 5 ACRES.

CRITICAL NOTE: THIS DRAWING IS PROVIDED FOR GENERAL GUIDANCE. ALL SPECIAL EROSION CONTROL MEASURES MUST BE EXECUTED IN ACCORDANCE WITH APPLICABLE CURRENT STATE AND LOCAL REGULATIONS, APPROVED SWPPP, AND PERMIT REQUIREMENTS.

## SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL PERIMETER CONTROLS, STABILIZED CONSTRUCTION ENTRANCE, AND TEMPORARY EROSION CONTROL MEASURES PER APPROVED SITE DEVELOPMENT PLANS, PERMITS, OR SWPPP IF REQUIRED, PRIOR TO EARTH MOVING OPERATIONS.
2. DEMOLISH EXISTING SITE WORK DESIGNATED FOR REMOVAL.
3. COMPLETE MAJOR GRADING OF SITE.
4. CONSTRUCT BUILDING PAD, STORMWATER SYSTEM, AND SITE UTILITIES.
5. CONSTRUCT PARKING AREAS.
6. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND SITE IS STABILIZED, REMOVE ALL INLET PROTECTION, SILT BARRIERS, AND SEDIMENT THAT HAS BEEN TRAPPED BY THESE DEVICES.
7. CONSULT APPLICABLE REGULATIONS, PERMITS, CONDITIONS, AND APPROVED SWPPP FOR CONDITIONS RELATED TO NOTICE OF TERMINATION, IF REQUIRED.

## EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES

STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES AND DISTURBED AREAS WHERE CONSTRUCTION ACTIVITY WILL 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. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

1. BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT BARRIERS. ALL STORM DRAIN INLETS SHALL BE PROVIDED WITH BARRIER FILTERS. STONE RIPRAP SHALL BE PROVIDED AT THE OUTLETS OF DRAINAGE PIPES WHERE EROSIVE VELOCITIES ARE ENCOUNTERED.

## OFF SITE VEHICLE TRACKING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED.

## INSTALLATION, MAINTENANCE, AND INSPECTION OF EROSION AND SEDIMENT CONTROLS

### A. GENERAL

THESE ARE THE GENERAL INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO IMPLEMENT THE PLAN.

1. STABILIZATION OF ALL SWALES, DITCHES, AND PONDS IS REQUIRED PRIOR TO DIRECTING FLOW TO THEM.
2. THE SMALLEST PRACTICAL PORTION OF THE SITE WILL BE DENUDED AT ONE TIME. (5 AC MAX)
3. ALL CONTROL MEASURES WILL BE INSPECTED IN ACCORDANCE WITH APPLICABLE REGULATIONS, PERMITS, AND CONDITIONS AND FOR PROJECTS REQUIRING A NPDES EPA CGP AND DISCHARGING TO A NON-SENSITIVE WATERBODY, AT LEAST EVERY 7 DAYS OR EVERY 14 DAYS AND AFTER A 0.25 INCHES RAIN EVENT OR GREATER.
4. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
5. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT BARRIER WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE BARRIER.
6. ALL DIVERSION DIKES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
7. TEMPORARY SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND UNHEALTHY GROWTH.
8. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION.
9. THE CONTRACTOR'S SITE SUPERINTENDENT WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE, AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

### B. FILTERS / BARRIERS

1. SILT SOCKS

   A. KNOTTED MESH NETTING MATERIAL SHALL BE DELIVERED TO SITE IN A 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" MATERIAL, FILLED WITH COMPOST CONFORMING TO THE FOLLOWING REQUIREMENTS:

| PHYSICAL PROPERTY | TEST | REQUIREMENTS |
|---|---|---|
| PH | TMECC 04.11-A | 5.0 TO 8.0 |
| PARTICLE SIZE | TMECC 02.02-B | 2" SIEVE AND MIN. 60% GREATER THAN THE ⅜" SIEVE |
| MOISTURE CONTENT | | STND TESTING < 60% |

   MATERIAL SHALL BE RELATIVELY FREE OF INERT OR FOREIGN MAN-MADE MATERIALS

   MATERIAL SHALL BE WEED FREE AND DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER, FREE FROM ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH.

   B. SEDIMENT COLLECTED AT THE BASE OF THE SILT SOCK SHALL BE REMOVED ONCE IT HAS REACHED 1/3 OF THE EXPOSED HEIGHT OF THE SILT SOCK.

   C. SILT BARRIER SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREAS HAS BEEN PERMANENTLY STABILIZED.

2. SEQUENCE OF INSTALLATION

   SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.

3. MAINTENANCE

   A. SILT BARRIERS SHALL BE INSPECTED WEEKLY AND 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 BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.

   B. SHOULD THE FABRIC 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 SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY 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 BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFIRM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

### C. MULCHING

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' OF WETLANDS. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS, USUALLY BY CONTACTING THE NATIONAL WEATHER SERVICE, TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.

   B. REQUIRED MULCHING WITHIN A SPECIFIED TIME PERIOD.

   THE TIME PERIOD CAN RANGE FROM 14 TO 21 DAYS OF INACTIVITY ON AN AREA, WHERE THE LENGTH OF TIME VARIES 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.

2. GUIDELINES FOR WINTER MULCH APPLICATION.

   WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON) IT SHALL BE AT A RATE OF 6,000 POUNDS OF HAY OR STRAW PER ACRE. A TACKIFIER MAY BE ADDED TO THE MULCH.

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.

### D. VEGETATIVE PRACTICE

1. AFTER ROUGH GRADING OF THE SUBGRADE HAS BEEN COMPLETED AND APPROVED, THE SUB GRADE SURFACE SHALL BE SCARIFIED TO A DEPTH OF 4". THEN, FURNISH AND INSTALL A LAYER OF LOAM PROVIDING A ROLLED THICKNESS AS SPECIFIED IN THESE PLANS. ANY DEPRESSIONS WHICH MAY OCCUR DURING ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM, REGRADED AND REROLLED UNTIL THE SURFACE IS TRUE TO THE FINISHED LINES AND GRADES. ALL LOAM NECESSARY TO COMPLETE THE WORK UNDER THIS SECTION SHALL BE SUPPLIED BY THE SITE SUBCONTRACTOR.
2. ALL LARGE STIFF CLODS, LUMPS, BRUSH, ROOTS, DEBRIS, GLASS, STUMPS, LITTER, AND OTHER FOREIGN MATERIAL, AS WELL AS STONES OVER 1" IN DIAMETER, SHALL BE REMOVED FROM THE LOAM AND DISPOSED OF OFF SITE. THE LOAM SHALL BE RAKED SMOOTH AND EVEN.
3. THE LOAM SHALL BE PREPARED TO RECEIVE SEED BY REMOVING STONES, FOREIGN OBJECTS AND GRADING TO ELIMINATE WATER POCKETS AND IRREGULARITIES PRIOR TO PLACING SEED. FINISH GRADING SHALL RESULT IN STRAIGHT UNIFORM GRADES AND SMOOTH, EVEN SURFACES WITHOUT IRREGULARITIES TO LOW POINTS.
4. SHAPE THE AREAS TO THE LINES AND GRADES REQUIRED. THE SITE SUBCONTRACTOR'S ATTENTION IS DIRECTED TO THE SCHEDULING OF LOAMING AND SEEDING OF GRADED AREAS TO PERMIT SUFFICIENT TIME FOR THE STABILIZATION OF THESE AREAS. IT SHALL BE THE SITE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE AREAS DURING THE CONSTRUCTION PERIOD AND REGRADE, LOAM AND RESEED ANY DAMAGED AREAS.
5. ALL AREAS DISTURBED BY CONSTRUCTION WITHIN THE PROPERTY LINES AND NOT COVERED BY STRUCTURES, PAVEMENT, OR MULCH SHALL BE LOAMED AND SEEDED.
6. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5.
7. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER.
8. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4 1/2 POUNDS AND 5 1/2 POUNDS PER INCH OF WIDTH.
9. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4" AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH.
10. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE. MULCH THAT BLOWS OR WASHES AWAY SHALL BE REPLACED IMMEDIATELY AND ANCHORED USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.
11. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.
12. THE SITE SUBCONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED, INCLUDING CUTTING, AS SPECIFIED HEREIN AFTER UNDER MAINTENANCE AND PROTECTION.
13. UNLESS OTHERWISE APPROVED, SEEDING SHALL BE DONE DURING THE APPROXIMATE PERIODS OF EARLY SPRING TO SEPTEMBER 30, WHEN SOIL CONDITIONS AND WEATHER ARE SUITABLE FOR SUCH WORK. IN NO CASE SHALL THE WEED CONTENT EXCEED 1 PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. FOR TEMPORARY PLANTINGS AFTER SEPTEMBER 30, TO EARLY SPRING AND FOR TEMPORARY PROTECTION OF DISTURBED AREAS:

    A. FOLLOW ABOVE SLOPE, LOAM DEPTH AND GRADING REQUIREMENTS.
    B. FERTILIZER SHALL BE SPREAD AND WORKED INTO THE SURFACE AT A RATE OF 500 POUNDS PER ACRE.

MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:

| | |
|---|---|
| WINTER RYE (FALL SEEDING) | 2.5 LBS/1,000 SF |
| OATS (SPRING SEEDING) | 2.0 LBS/1,000 SF |
| MULCH | 1.5 TONS/ACRE |

### E. CATCH BASIN INLET PROTECTION

1. INLET BASKET STRUCTURE

   A. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY PRIOR TO DISTURBING PAVEMENT AND SHALL REMAIN IN PLACE AND MAINTAINED UNTIL PAVEMENT BINDER COURSE IS COMPLETE.

   B. MOLD 6X6, 42 LB. WIRE SUPPORT AROUND INLET FRAME AND GRATE AND EXTEND 6" BEYOND SIDES. SECURE FILTER FABRIC TO WIRE SUPPORT.

   C. THE FILTER FABRIC SHALL BE A GEOTEXTILE FABRIC; POLYESTER, POLYPROPYLENE, STABILIZED NYLON, POLYETHYLENE OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:

      GRAB STRENGTH: 45 LB. MINIMUM IN ANY PRINCIPAL DIRECTION (ASTM D1682)
      MULLEN BURST STRENGTH: MIN. 60PSI (ASTM D774)

   D. THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 20 U.S. STANDARD SIEVE AND A MINIMUM PERMEABILITY OF 120 GPM.

   E. THE INLET PROTECTION 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.

   F. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.

### F. WINTER CONSTRUCTION SEQUENCE

1. ALL PROPOSED POST-DEVELOPMENT LANDSCAPED 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 SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT 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 EVENT.
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 WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER OCTOBER 15TH, INCOMPLETE PARKING AREAS WHERE ACTIVE CONSTRUCTION HAS STOPPED FOR THE WINTER ALL TRAVEL SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOWFALL AFTER EACH STORM EVENT.

## TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, SILT BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE APPLICABLE ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN TWENTY ONE (21) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN FOURTEEN (14) DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, SILT BARRIERS AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.

FOR SINGLE/DUPLEX FAMILY SUBDIVISIONS, WHEN LOT DEVELOPMENT IS NOT PART OF THE PERMIT, THEN LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

## WASTE DISPOSAL

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

## SPILL PREVENTION

1. MATERIAL MANAGEMENT PRACTICES
   THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:

   GOOD HOUSEKEEPING:
   THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ON SITE DURING THE CONSTRUCTION PROJECT:

   A. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.

   B. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

   C. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

   D. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.

   E. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

   F. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

   HAZARDOUS PRODUCTS:
   THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:

   A. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.

   B. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.

   C. SURPLUS PRODUCT THAT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

2. PRODUCT SPECIFICATION PRACTICES
   THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:

   PETROLEUM PRODUCTS:

   ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

   FERTILIZERS:
   FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

   PAINTS:
   ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

   CONCRETE TRUCKS:
   CONCRETE TRUCKS WILL DISCHARGE AND WASH OUT SURPLUS CONCRETE OR DRUM WASH WATER IN A CONTAINED AREA DESIGNATED ON SITE.

## SPILL CONTROL PRACTICES

IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

B. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

C. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

D. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

E. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.

F. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND HOW TO CLEANUP THE SPILL IF IT RECURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.

G. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.

## DUST CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL METHODS SHALL INCLUDE, BUT 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.

TAX MAP 239 LOT 11

# EROSION CONTROL NOTES

## PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**
**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**SCALE: NTS** **NOVEMBER 17, 2025**

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
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| | 46077.16 | CK | CRR | CADFILE | 46077-16_EROSION | C-10 |

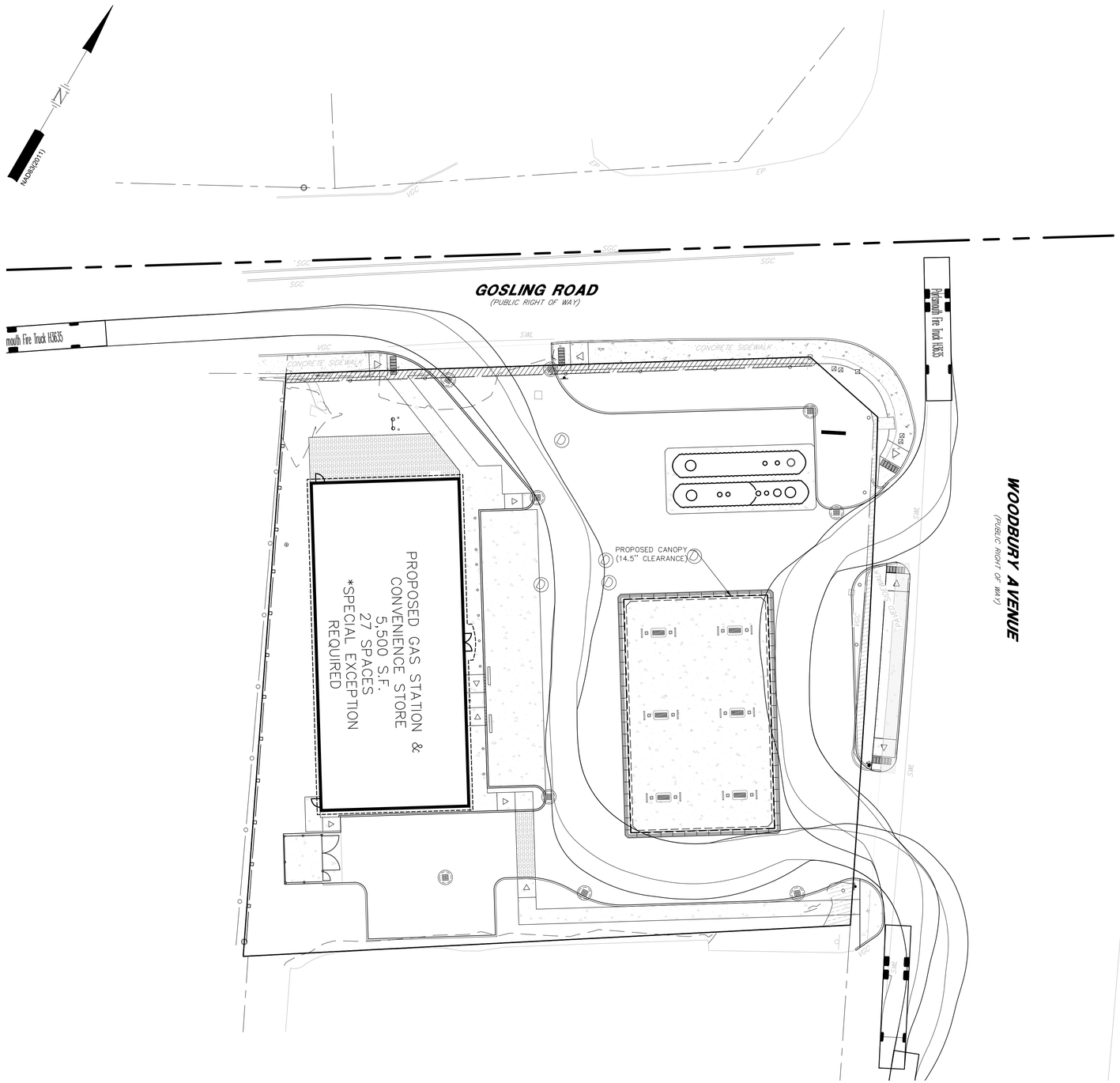

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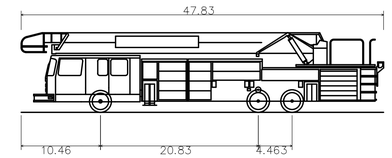
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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION


Feb 12, 2026 - 10:16am
F:\MSC Projects\46077 - Woodbury Ave - Portsmouth\46077-16 Colbea Ent LLC- 1980 Woodbury Ave, Portsmouth, NH\Design\PRODUCTION DRAWINGS\46077-16_Erosion.dwg




| Portsmouth Fire Truck H3635 | |
|---|---|
| Overall Length | 47.830ft |
| Overall Width | 8.500ft |
| Overall Body Height | 10.505ft |
| Min Body Ground Clearance | 0.935ft |
| Max Track Width | 8.500ft |
| Lock-to-lock time | 6.00s |
| Max Steering Angle (Virtual) | 38.00° |

HORIZONTAL SCALE 1"=20'
20 10 0 20

TAX MAP 239 LOT 11

**TRUCK MOVEMENT PLAN**

# PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**

**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**

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| FILE | 46077.16 | DR | JKC | FB | 46077-16_TRUCKMOVE | EX-03 |
|---|---|---|---|---|---|---|
| | | CK | CRR | CADFILE | | |

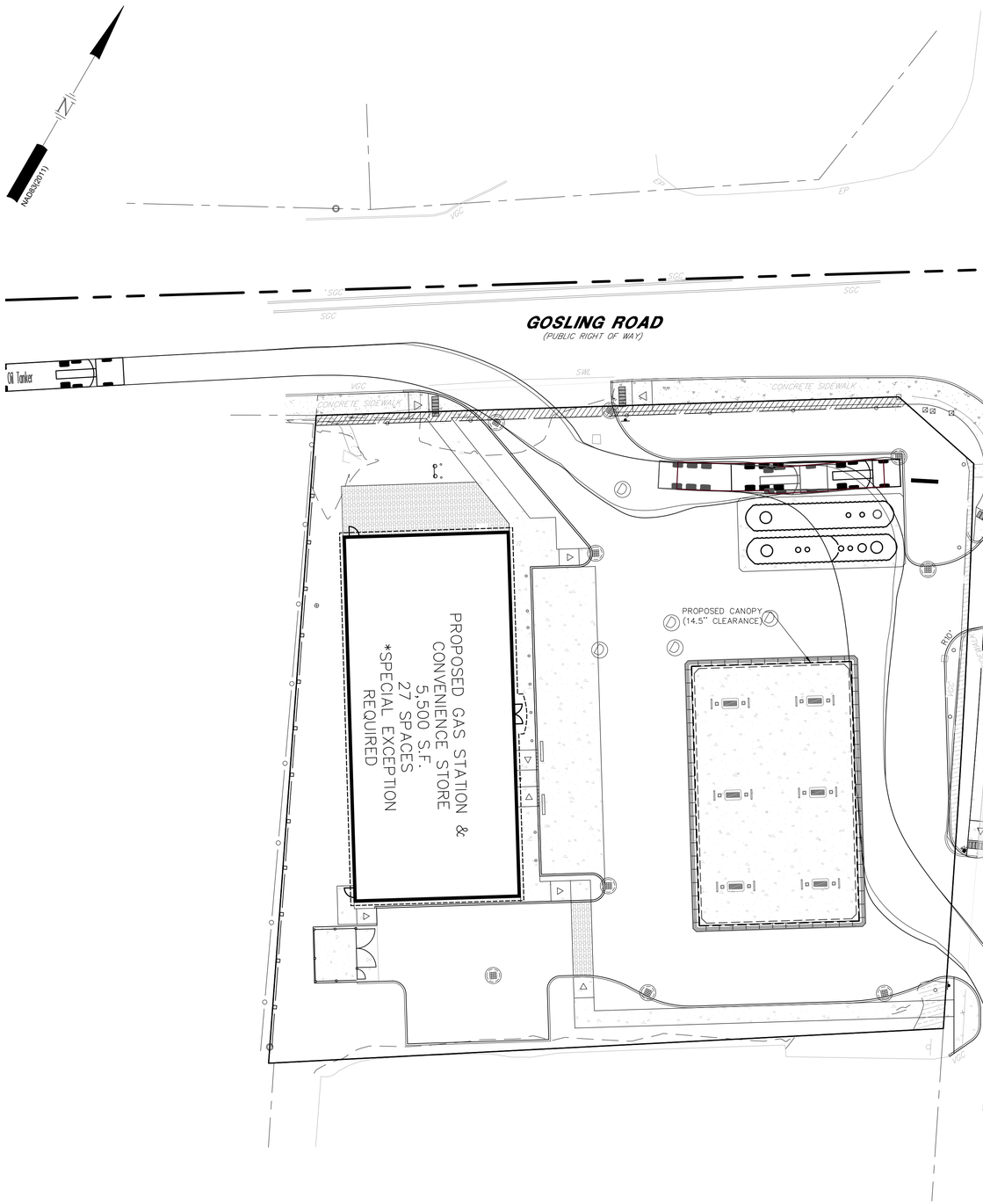

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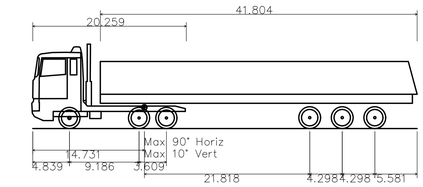
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| Oil Tanker | |
|---|---|
| Overall Length | 50.725ft |
| Overall Width | 8.202ft |
| Overall Body Height | 11.141ft |
| Min Body Ground Clearance | 1.049ft |
| Max Track Width | 8.202ft |
| Lock-to-lock time | 4.00s |
| Curb to Curb Turning Radius | 21.325ft |

TAX MAP 239 LOT 11

**TRUCK MOVEMENT PLAN**

PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

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HORIZONTAL SCALE 1"=20'

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| REV | DATE | DESCRIPTION | DR | CK |
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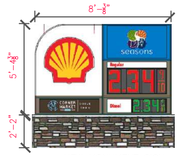

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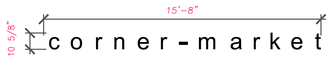

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A NEW MONUMENT SIGN
AREA=61.15 S.F.
(QTY. 1)



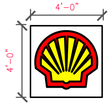

C PROPOSED "SEASONS" SIGN
AREA=84 S.F.
(QTY. 1)




D PROPOSED "CORNER MARKET" SIGN
AREA=13.95 S.F.
(QTY. 1)




E PROPOSED CO-BRAND SIGN
AREA=20.16 S.F.
(QTY. 1)



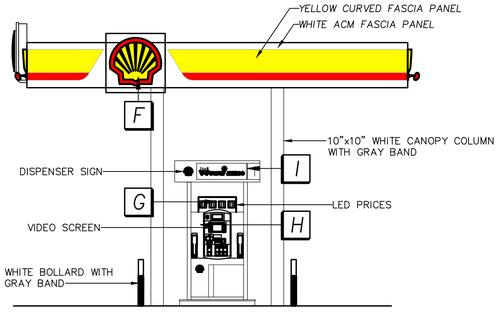

F PROPOSED PECTEN SIGN
AREA=16.0 S.F.
(QTY. 2)




G PROPOSED "WELCOME" SIGN
AREA=2.1 S.F.
(QTY. 1)

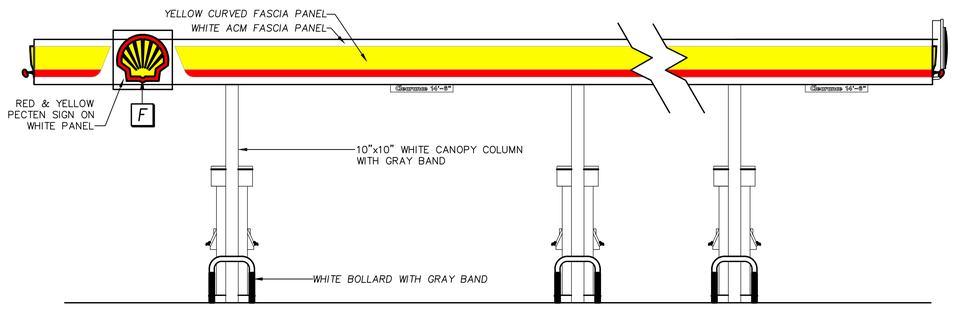
## PROPOSED SIGN SCHEDULE

| MARK | DESCRIPTION | SIZE | AREA (SF) | QUAN. | SIZE (SF) | ILLUMINATION | REMARKS | TYPE |
|---|---|---|---|---|---|---|---|---|
| | | FREESTANDING SIGNS | | | | | | |
| A | NEW MONUMENT SIGN | 7'-7⅞" X 8'-⅜" | 61.15 | 1 | 61.15 | INT | NEW | GROUND |
| | TOTAL FREESTANDING SIGNAGE: 61.15 S.F. | | | | | | | |
| | | WALL SIGNS | | | | | | |
| C | "SEASONS" SIGN | 24' X 3'-6" | 84 | 1 | 84 | INT | NEW | WALL |
| D | "CORNER MARKET" SIGN | 15'-8" X 0'-10⅝" | 13.95 | 1 | 13.95 | NON | NEW | WALL |
| E | CO-BRAND SIGN | 7'-1" X 2'-6" | 20.16 | 1 | 20.16 | INT | NEW | WALL |
| F | PECTEN SIGN | 4' X 4' | 16.0 | 2 | 32.0 | INT | NEW | WALL |
| G | "WELCOME" SIGN | 6" X 4'-3" | 2.1 | 1 | 2.1 | NON | NEW | WALL |
| | TOTAL WALL SIGNAGE: 152.21 S.F. | | | | | | | |




PROPOSED SOUTH CANOPY ELEVATION

SCALE: 3/16"=1'-0"




PROPOSED WEST CANOPY ELEVATION

SCALE: 3/16"=1'-0"

TAX MAP 239 LOT 11

**SIGN PLAN**

# PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**
**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**SCALE: NTS** **NOVEMBER 17, 2025**

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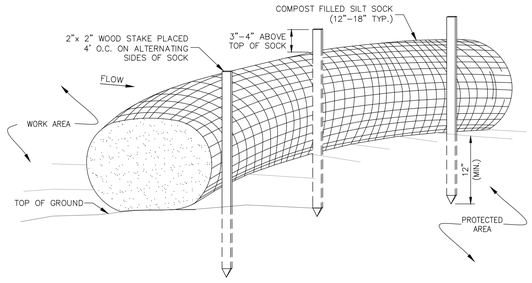
DIG SAFE
CALL NH DIG SAFE
811
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

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|---|---|---|---|---|---|---|
| | 46077.16 | CK | CRR | CADFILE | 46077-16_SIGN | C-13 |

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NOTES

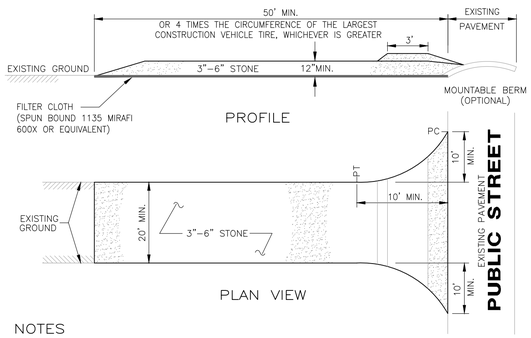
1. SILT SOCK SHALL BE FILTREXx™ SILTSOXX™ OR APPROVED EQUIVALENT.
2. SEE SPECIFICATIONS FOR SOCK SIZE AND COMPOST FILL REQUIREMENTS.

   SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED AS NEEDED.

   COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.

## SILT SOCK

NOT TO SCALE




NOTES

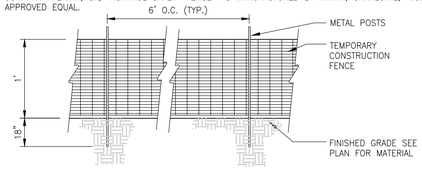
1. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE SURFACE.
2. WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
3. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE 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.
4. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
5. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN STORM EVENT.

## STABALIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

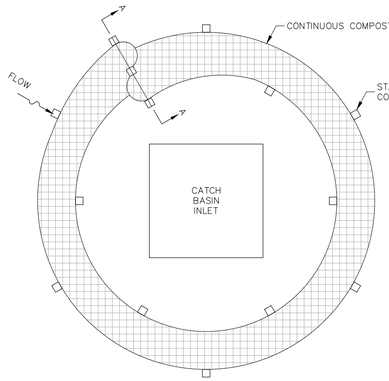
NOTE

1. CONSTRUCTION FENCE TO BE "VISUAL BARRIER FENCE" AS MANUFACTURED BY EXXON CHEMICAL COMPANY ATLANTA, GA; "KONTROL SAFETY FENCE" AS MANUFACTURED BY MIRAFI, CHARLOTTE, N.C. OR APPROVED EQUAL.




## TEMPORARY CONSTRUCTION FENCE

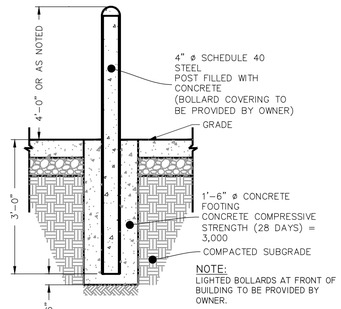
NOT TO SCALE




SECTION A–A

## COMPOST SOCK INLET PROTECTION

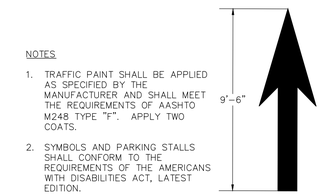
AT CATCH BASIN NOT TO SCALE




NOTE:
LIGHTED BOLLARDS AT FRONT OF BUILDING TO BE PROVIDED BY OWNER.

## BOLLARD DETAIL

NOT TO SCALE

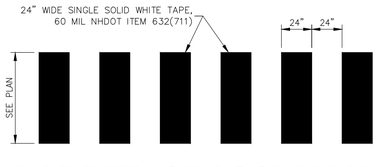



NOTES

1. TRAFFIC PAINT SHALL BE APPLIED AS SPECIFIED BY THE MANUFACTURER AND SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F". APPLY TWO COATS.
2. SYMBOLS AND PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT, LATEST EDITION.

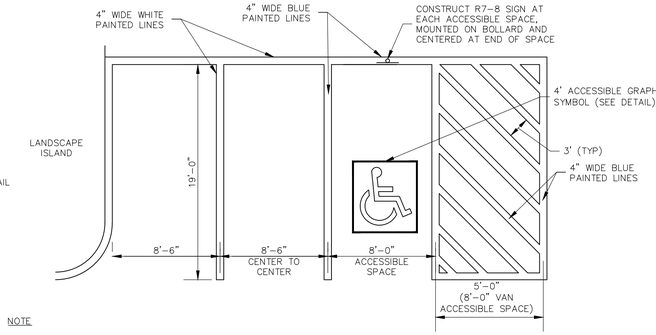
## PAINTED ARROW

NOT TO SCALE




## LADDER CROSSWALK

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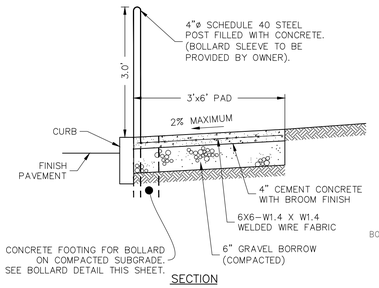



NOTE

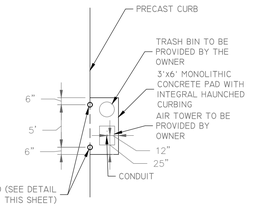
1. TRAFFIC PAINT SHALL BE APPLIED AS SPECIFIED BY THE MANUFACTURER AND SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F". APPLY TWO COATS.
2. SYMBOLS & PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT, LATEST EDITION.
3. ALL PAINTED ISLANDS SHALL BE 4" WIDE DIAGONAL LINES AT 3'–0" OC BORDERED BY 4" WIDE LINES.
4. 2% MAXIMUM CROSS SLOPE ALLOWED IN ACCESSIBLE PARKING SPACES AND ACCESS AISLES.

## TYPICAL PARKING LAYOUT

NOT TO SCALE




SECTION

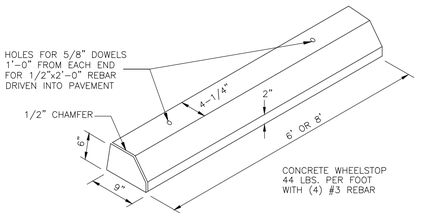



PLAN

NOTES:
1. AIR TOWER AND SIGN INSTALLED BY OWNER.

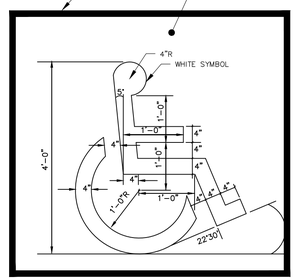
## AIR TOWER FOUNDATION DETAIL

NOT TO SCALE




## CONCRETE WHEEL STOP

NOT TO SCALE

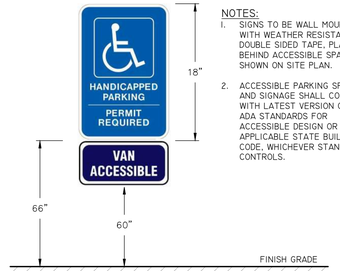



NOTES

1. TRAFFIC PAINT SHALL BE APPLIED AS SPECIFIED BY THE MANUFACTURER AND SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F". APPLY TWO COATS.
2. SYMBOLS AND PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT, LATEST EDITION.

## ACCESSIBLE GRAPHIC SYMBOL

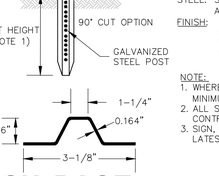
NOT TO SCALE




NOTES:
1. SIGNS TO BE WALL MOUNTED WITH WEATHER RESISTANT DOUBLE SIDED TAPE, PLACED BEHIND ACCESSIBLE SPACES AS SHOWN ON SITE PLAN.
2. ACCESSIBLE PARKING SPACES AND SIGNAGE SHALL COMPLY WITH LATEST VERSION OF THE ADA STANDARDS FOR ACCESSIBLE DESIGN OR THE APPLICABLE STATE BUILDING CODE; WHICHEVER STANDARD CONTROLS.

## ADA SIGN DETAIL

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)
FINISH: SHALL BE PAINTED WITH 2 COATS OF AN APPROVED MEDIUM GREEN BAKED–ON OR AIR–DRIED PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

NOTE:
1. WHERE LEDGE APPLICATION EXISTS, DRILL & GROUT TO A MINIMUM OF 2'.
2. ALL SIGNAGE SHALL FOLLOW THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES STANDARDS AND NHDOT STANDARDS.
3. SIGN, HARDWARE, AND INSTALLATION SHALL CONFORM TO THE LATEST NHDOT STANDARD SPECIFICATIONS.

## SIGN POST

NOT TO SCALE

TAX MAP 239 LOT 11

**CONSTRUCTION DETAILS**

PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**

**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| 2 | 2/11/2026 | REVISED PER ADDRESS CHANGE REQUEST | JKC | CRR |
| 1 | 12/22/2025 | REVISED PER TAC COMMENTS | JKC | CRR |


Seacoast Division

TFM

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431–2222
Fax (603) 431–0910
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|---|---|---|---|---|---|---|
| | | CK | CRR | CADFILE | | |

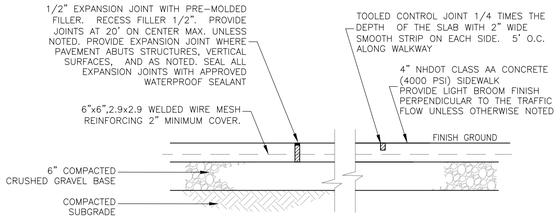

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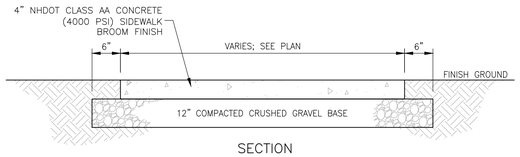
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DIG SAFE
811
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

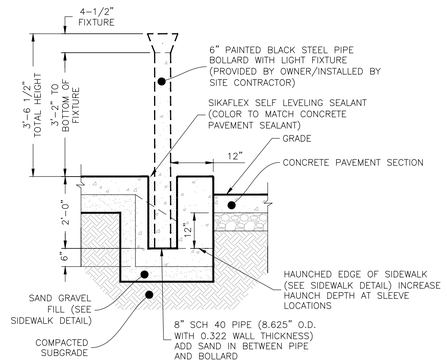

Feb 12, 2026 - 10:17am
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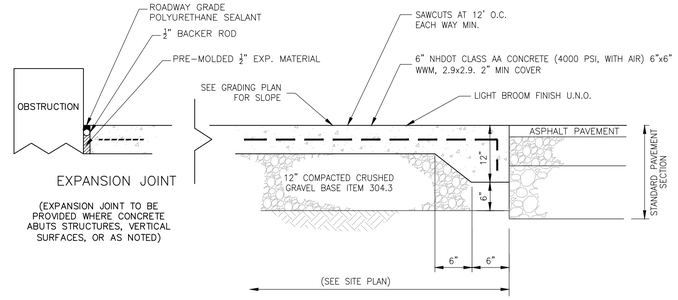

## CONCRETE SIDEWALK

NOT TO SCALE



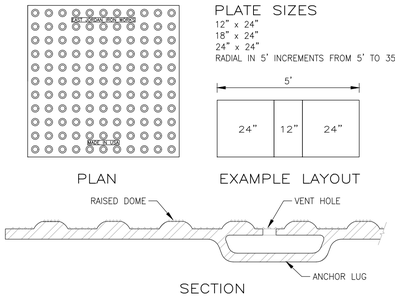

## SIDEWALK LIGHTED BOLLARD DETAIL

NOT TO SCALE




## LIGHT DUTY CONCRETE PAD

NOT TO SCALE




NOTES

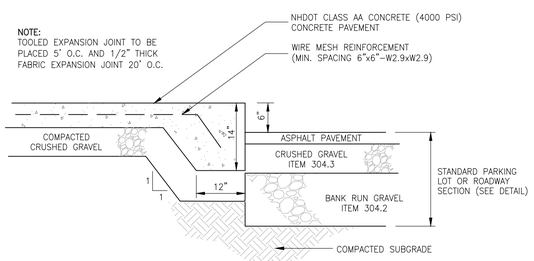
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. USE APPROPRIATE NUMBER AND SIZE OF PLATES TO FILL WIDTH OF WALK (SEE EXAMPLE). FOR CUSTOM SIZING CONTACT MANUFACTURER.
3. FINISH OPTIONS: NATURAL, BLACK ASPHALT DIP, RED, BLACK OR YELLOW COATED.

MANUFACTURER

EAST JORDAN IRON WORKS, INC.
301 SPRING STREET
P.O. BOX 439
EAST JORDAN, MI 49727-0439
(800) 626-4653
FAX (231) 536-4458
WWW.EJIW.COM

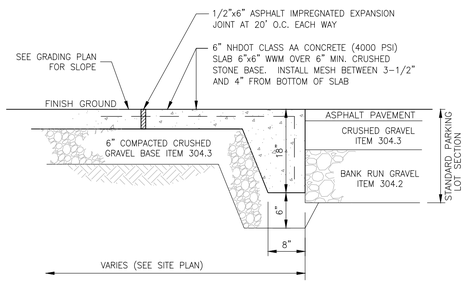
## DETECTABLE WARNING PLATE

NHDOT ITEM 902.1 OR APPROVED EQUAL NOT TO SCALE



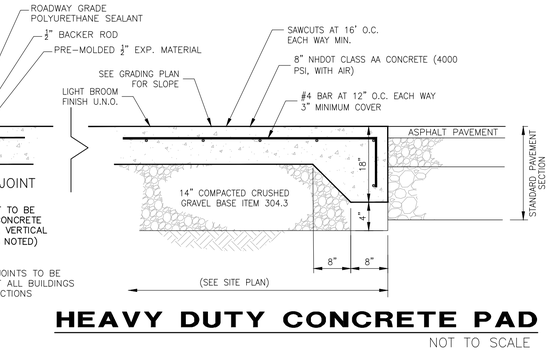

## INTEGRATED CONCRETE CURB AT SIDEWALK

NOT TO SCALE



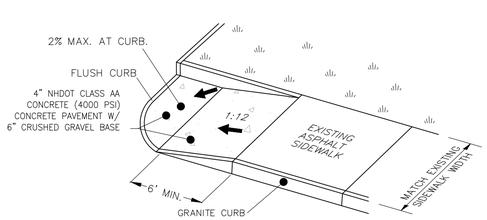

## CONCRETE LOADING APRON

NOT TO SCALE



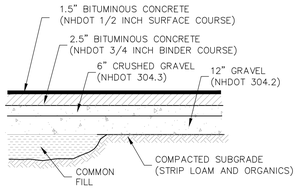

## HEAVY DUTY CONCRETE PAD

NOT TO SCALE




## RAMP AT SIDEWALK INTERSECTION

NOT TO SCALE




STANDARD DUTY PAVEMENT




## ACCESSIBLE RAMP RECESSED IN WALK

NOT TO SCALE

NOTES

1. SEE GRADING & EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
2. PROVIDE CLEAN BUTT TO EXISTING PAVEMENT– USE TACK COAT. A TACK COAT SHALL ALSO BE PLACED BETWEEN GRAVEL COURSE AND SUCCESSIVE LAYERS OF BITUMINOUS CONCRETE. SPECIFICALLY, A TACK COAT SHALL BE PLACED ATOP THE BINDER COURSE PAVEMENT PRIOR TO PLACING THE WEARING COURSE.
3. REMOVE ALL LOAM AND/OR YIELDING MATERIAL BELOW PAVEMENT.
4. ALL PAVEMENT, BASE MATERIALS AND WORKMANSHIP TO BE IN COMPLIANCE WITH N.H.D.O.T. "STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION.
5. BITUMINOUS MATERIALS SHALL CONFORM TO NHDOT SPECIFICATION SECTION 401.
6. BITUMINOUS CONCRETE SHALL BE COMPACTED TO AT LEAST 92.5% OF THEORETICAL MAXIMUM DENSITY AS DETERMINED BY ASTM D2041 OR AASHTO T209. PLACEMENT TEMPERATURES OF BITUMINOUS CONCRETE MIXES, IN GENERAL, RANGE BETWEEN 270 AND 310 DEGREES FAHRENHEIT.
7. PAVEMENT BASE COURSE AGGREGATE SHALL CONFORM TO NHDOT SPECIFICATION SECTION 304, ITEM 304.3 AND COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY.
8. PAVEMENT SUBBASE COURSE AGGREGATE AND AGGREGATE FOR SUBGRADE REPAIR AREAS SHALL BE SUITABLE FOR USE AS STRUCTURAL FILL AND BE PROOF ROLLED AND COMPACTED TO 95% MODIFIED PROCTOR MAXIMUM DRY DENSITY.
9. THE EXPOSED SOIL SUBGRADE SHOULD BE PROOF ROLLED PRIOR TO THE PLACEMENT OF SUBBASE GRAVEL, AND SOFT AREAS SHOULD BE REPAIRED AND REPLACED.
10. ALL PARKING SPACES SHALL BE STANDARD DUTY. ALL OTHER LOCATIONS SHALL BE HEAVY DUTY.
11. ALL PAVEMENT TO MEET AASHTO H-20 LOADING.

## PAVEMENT SECTIONS

NOT TO SCALE

TAX MAP 239 LOT 11

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|---|---|---|---|---|---|---|
| | | CK | CRR | CADFILE | | |


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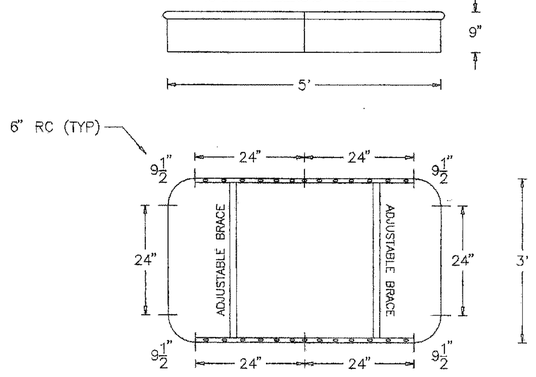
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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



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# STAINLESS STEEL




1 – UNIT REQUIRED

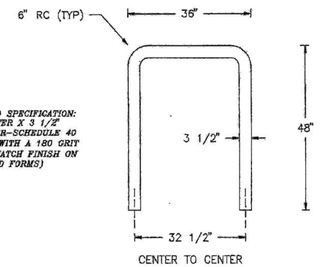
2 – 91" END PIECES – 9" REG.
FABRICATE THIS UNIT IN ONE PIECE

*FOR: J.W. KENNEDY COMPANY*

*FABRICATED FROM: 12 GA. STAINLESS STEEL. TYPE #304, WITH A #4 POLISH ON MATERIAL.*

| BURTCO METAL SYSTEMS | DRAWING: 3' X 5' |
|---|---|
| | SCALE: NOT TO SCALE |
| DWG. BY: D. SHAUGHNESSY | DATE: 2020 |
| MATL: 12 GA. STAINLESS STEEL – 9" HIGH | CHK. BY: SAME |
| | CUSTOMER: JOHN W. KENNEDY CO. |

# STAINLESS STEEL
## 36"W X 48"H
3" I.D. X 3 1/2" O.D. PIPE

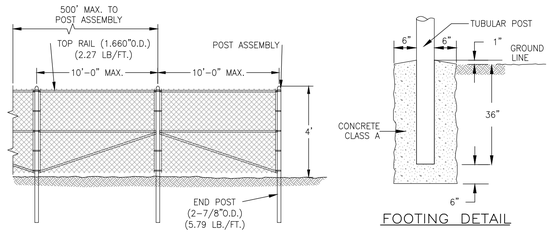



CENTER TO CENTER

*STAINLESS GUARD SPECIFICATION: 3" INSIDE DIAMETER X 3 1/2" OUTSIDE DIAMETER–SCHEDULE 40 STAINLESS PIPE WITH A 180 GRIT (#4 POLISH–TO MATCH FINISH ON STAINLESS ISLAND FORMS)*

1 – UNIT REQUIRED
**FOR: JOHN W. KENNEDY CO.**

| BURTCO METAL SYSTEMS | DRAWING: 36" X 48" |
|---|---|
| | SCALE: NOT TO SCALE |
| DWG. BY: D. SHAUGHNESSY | DATE: 2020 |
| MATL: SCHEDULE 40 STAINLESS STEEL PIPE | CHK. BY: SAME |
| | CUSTOMER: JOHN W. KENNEDY CO. |




ELEVATION

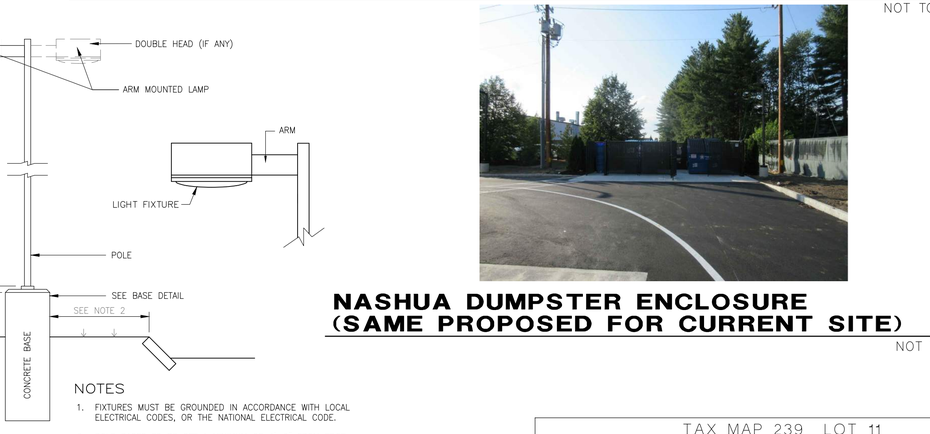



FOOTING DETAIL

ALL END POSTS SHALL HAVE ONE BRACE
ALL CORNER AND INTERMEDIATE BRACE OR PULL POSTS SHALL HAVE TWO BRACES, WITH A MAXIMUM SPACING OF BETWEEN POST ASSEMBLIES OF 500 FEET.

## CHAIN LINK FENCE

NOT TO SCALE




## TRASH ENCLOSURE WITH RECYCLING BIN

NOT TO SCALE

## LED BOLLARD LIGHT (XBVRD)



Crossover LED LIGHTING TECHNOLOGY

**U.S. and international patents pending**

**EXPECTED LIFE** - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

**LEDS** - An array of 24 select high-brightness LEDs (5200K° CW), (3300K° WW), (4100K° NW).

**REFLECTOR/DISTRIBUTION** - Indirect. Photometric data is tested in accordance to IESNA Procedures.

**HOUSING - Crown:** Virtually tamper-proof concealed stainless steel fasteners in the cast aluminum crown assembly.

**Lower Housing:** One-piece, .322 inch seamless, extruded aluminum. Various heights are available in 6" increments starting at a minimum of 30" (maximum height is 60"). Lower housing attaches to cast aluminum base plate with four stainless steel roll pins.

**OPTIONAL ROUGHNECK REINFORCEMENT** - .375" thick zinc plated, steel base plate with welded U shaped reinforcement. 3/8" diameter 302 stainless steel roll pins with 10,000 lb. shear load.

**LENS/GASKET** - One-piece, clear acrylic lens enclosure fully gasketed at top and bottom edge

**ANCHOR BOLTS** - Requires four heavy-duty 3/8" x 10" galvanized steel anchor bolts.

**ELECTRICAL** - Universal voltage power supply (120-277 VAC, 50/60 Hz). 347-480V also available - 400mA is standard. Surge protector meets IEEE C62.41.2-2002, Scenario 1 Location Category C.

**DRIVER** - State-of-the-art driver technology designed specifically LSI LED light sources provides unsurpassed system efficiency. Driver complies with IEC and FCC standards.

**OPERATING TEMPERATURE** - -40°C to +50°C (-40°F to +122°F).

**FINISH** - Each fixture is finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years. Standard colors include bronze, black, platinum plus, buff, white, graphite, satin verde green and metallic silver.

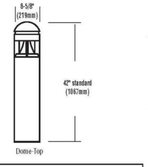
**DECAL STRIPING** - Color-coordinated decal is available in 9 standard decal colors or by custom order from a selection of hundreds. Decal is guaranteed for five years against peeling, cracking, or fading.

**WARRANTY** - LSI LED fixtures carry a limited 5-year warranty.

**PHOTOMETRICS** - Application layouts are available upon request. Contact LSI Applications Group *at lighting.appsutilisi-industries.com.*

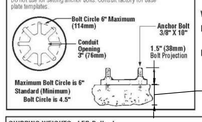
**LISTING** - Listed to U.S. and Canadian safety standards. Suitable for wet locations. DLC - not all possible distributions are DLC approved. Please refer to LSI or DLC web site for specific listings.

**DIMENSIONS**




**BASE DETAIL**

Note: Base plate dimensions may change without notice. Do not use for setting anchor bolts. Consult factory for base plate templates.




8" CONCRETE BASE

Also available in traditional light sources

**SHIPPING WEIGHTS - LED Bollard**

| Catalog # | Est. Weight (kg/lbs.) | Length (mm/in.) | Width (mm/in.) | Height (mm/in.) |
|---|---|---|---|---|
| XBVRF | 25/56 | 1318/51.875 | 311/12.25 | 251/9.875 |
| XBVRD | 25/56 | 1318/51.875 | 311/12.25 | 251/9.875 |
| Anchor Bolts (3/8" x 10") | 1/set | | | |

**LIGHT OUTPUT - XBVR**

| Description | # of LEDS | Output Lumens | Watts |
|---|---|---|---|
| Cool White XBVR/E3 | 24 | 1338 | 38 |
| Neutral White XBVR/E3 | 24 | 1224 | 38 |
| Warm White XBVR/E3 | 24 | 856 | 38 |

**This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.**

American Made · ETL Intertek Suitable for wet locations · ARRA Funding Compliant · DESIGNLIGHTS CONSORTIUM

Project Name _____ Fixture Type _____

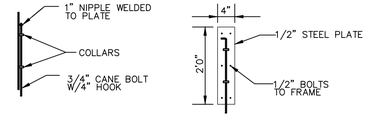
Catalog # _____

08/21/12

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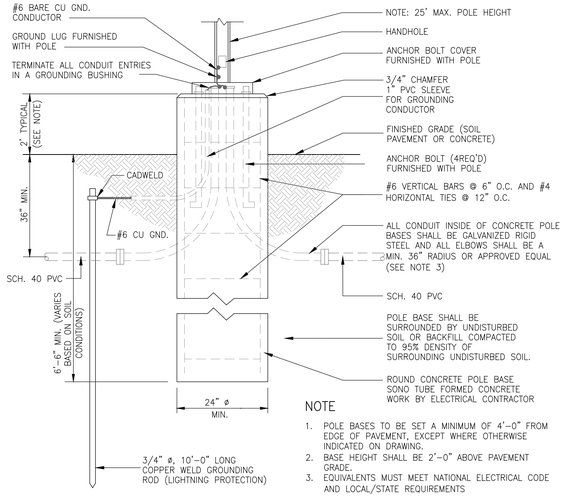
## BOLLARD LIGHT (DECORATIVE)

NOT TO SCALE




## TRASH ENCLOSURE GATE STOP

NOT TO SCALE

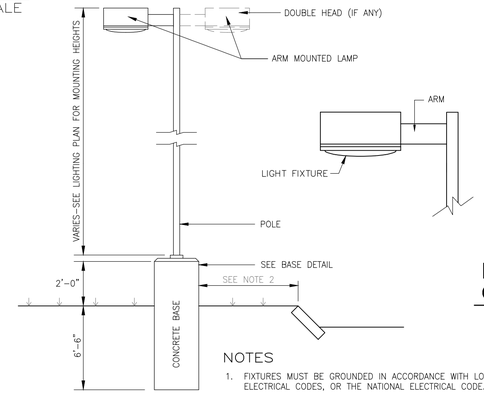



NOTE

1. POLE BASES TO BE SET A MINIMUM OF 4'–0" FROM EDGE OF PAVEMENT, EXCEPT WHERE OTHERWISE INDICATED ON DRAWING.
2. BASE HEIGHT SHALL BE 2'–0" ABOVE PAVEMENT GRADE.
3. EQUIVALENTS MUST MEET NATIONAL ELECTRICAL CODE AND LOCAL/STATE REQUIREMENTS

## LIGHT POLE BASE

NOT TO SCALE




NOTES

1. FIXTURES MUST BE GROUNDED IN ACCORDANCE WITH LOCAL ELECTRICAL CODES, OR THE NATIONAL ELECTRICAL CODE.
2. POLE BASES TO BE SET A MINIMUM OF 4'–0" FROM EDGE OF PAVEMENT, EXCEPT WHERE OTHERWISE INDICATED ON DRAWING. BASE HEIGHT SHALL BE 2'–0" ABOVE PAVEMENT GRADE.
3. LIGHTING SHOWN HERE IS AREA LIGHTING, SUPPLEMENTAL BUILDING–MOUNTED FIXTURES AT DOORWAYS, ETC. MAY BE REQUIRED.
4. SEE LIGHTING PLAN FOR FIXTURE SCHEDULE AND MOUNTING HEIGHTS.

## LIGHT POLE

NOT TO SCALE



## NASHUA DUMPSTER ENCLOSURE (SAME PROPOSED FOR CURRENT SITE)

NOT TO SCALE

TAX MAP 239 LOT 11

**CONSTRUCTION DETAILS**

**PROPOSED GAS STATION & CONVENIENCE STORE**

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**

**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**

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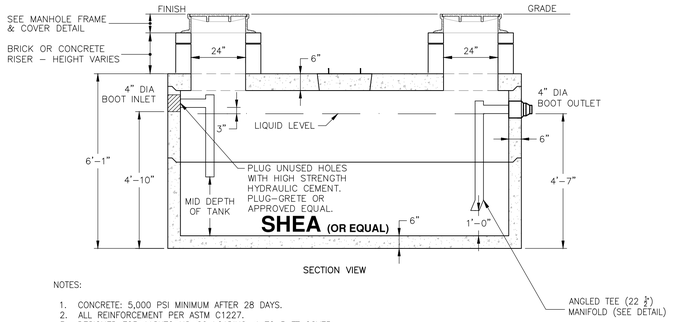
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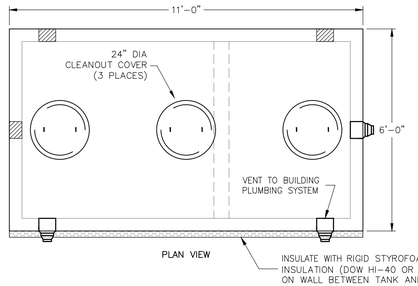


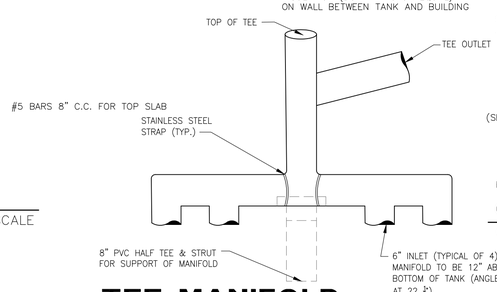

NOTES:

1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
2. ALL REINFORCEMENT PER ASTM C1227.
3. DESIGNED FOR AASHTO HS–20 LOADING, 1 TO 5 FT COVER.
4. TONGUE & GROOVE JOINT SEALED WITH BUTYL RESIN
5. OPTIONAL BAFFLE WALL AVAILABLE.
6. GREASE TRAPS SHALL HAVE A MINIMUM DEPTH OF 4 FEET AND MINIMUM CAPACITY OF 1,000 GALLONS, AND SHALL HAVE SUFFICIENT CAPACITY TO PROVIDE AT LEAST A 36 HOUR DETENTION PERIOD FOR THE KITCHEN FLOW. KITCHEN FLOW SHALL BE CALCULATED IN ACCORDANCE WITH 310 CMR 15.203.
7. THE INLET TEE SHALL EXTEND TO THE MID DEPTH OF THE TANK. THE OUTLET TEE SHALL EXTEND TO WITHIN 12 INCHES OF THE BOTTOM OF THE TANK. TEES SHALL BE SCHEDULE 40 PVC AND PROPERLY SUPPORTED BY A HANGER, STRAP, OR OTHER DEVICE.
8. GREASE TRAPS SHALL BE PROVIDED WITH THREE (3) 20 INCH DIAMETER MANHOLE FRAMES AND COVERS TO GRADE.
9. PROVIDE VENT. CONNECT TO VENT IN BUILDING PLUMBING SYSTEM.

## 1,500 GALLON GREASE TRAP CHAMBER

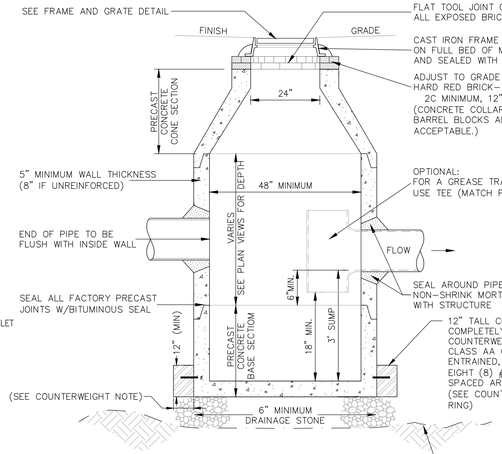
NOT TO SCALE




## TEE MANIFOLD

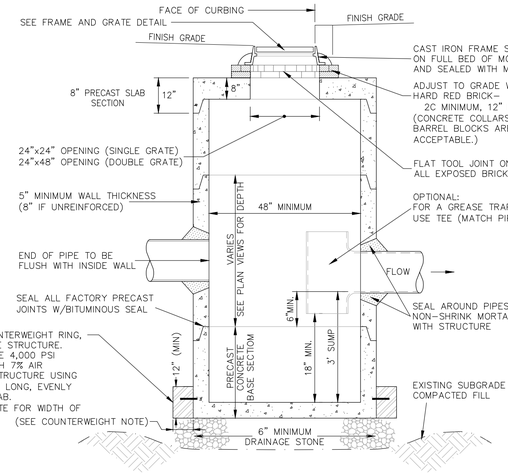
GREASE TRAP — SCALE AS NOTED




NOTE: ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C–478

## CATCH BASIN

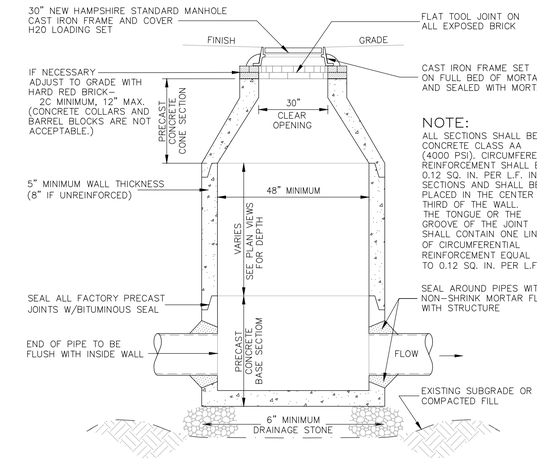
CONCENTRIC CONE — NOT TO SCALE




NOTE: ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C–478

## CATCH BASIN

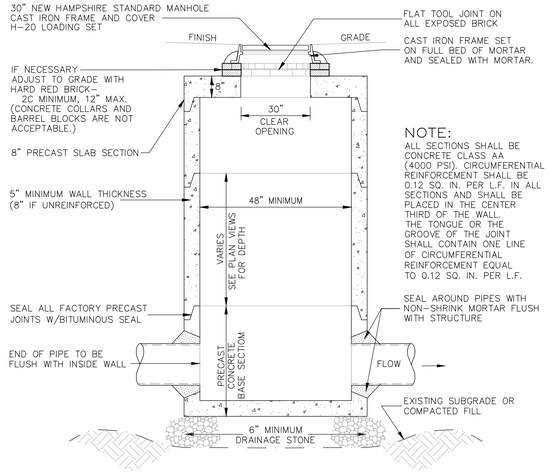
SLAB TOP — NOT TO SCALE




NOTE: ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C–478

## DRAIN MANHOLE

CONCENTRIC CONE — NOT TO SCALE




NOTE: ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C–478

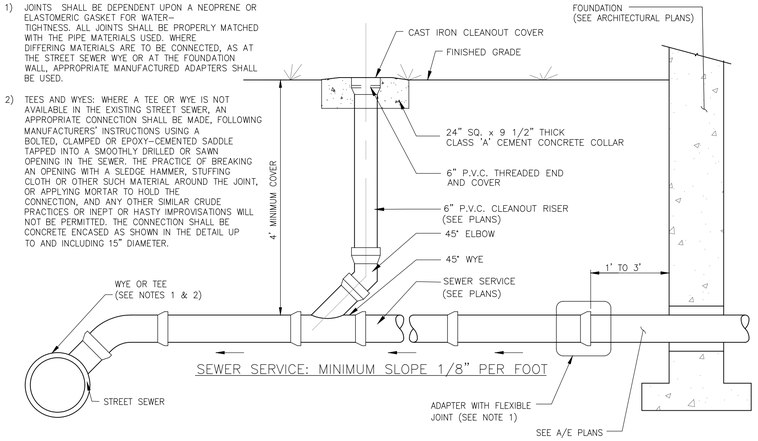
## DRAIN MANHOLE

SLAB TOP — NOT TO SCALE

NOTES:

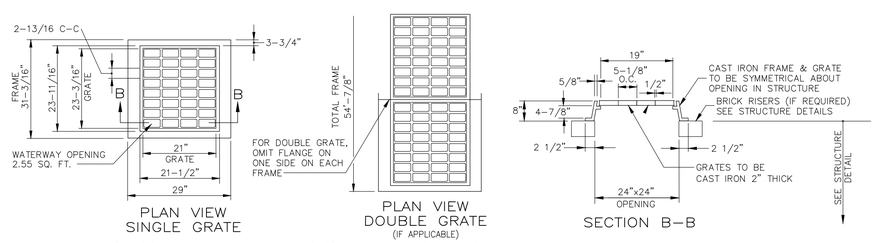
1) JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER–TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.

2) TEES AND WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE, FOLLOWING MANUFACTURERS' INSTRUCTIONS USING A BOLTED, CLAMPED OR EPOXY–CEMENTED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWN OPENING IN THE SEWER. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION, AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED AS SHOWN IN THE DETAIL UP TO AND INCLUDING 15" DIAMETER.




## SEWER SERVICE & CLEANOUT

NOT TO SCALE




## FRAME AND GRATE (NHDOT TYPE B ALT 1)

NOT TO SCALE

TAX MAP 239 LOT 11

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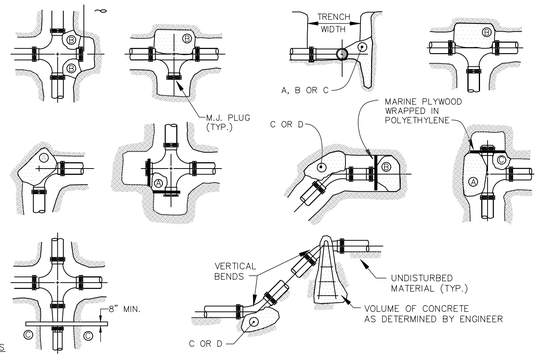
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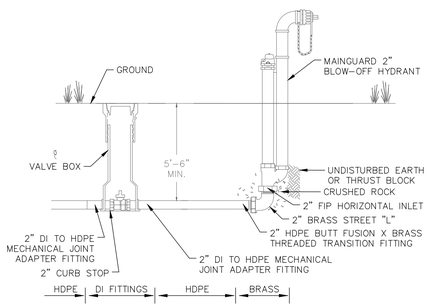



NOTES

1. A MINIMUM 2'x2'x4' PRECAST CONCRETE THRUST BLOCK WITH LIFT HOOKS SHALL BE USED.
2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. INSTALLATION AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE TNWD ESTABLISHED RULES AND PROCEDURES.
4. MATERIAL SPECIFICATIONS:
   A. CEMENT: ASTM C150, PORTLAND TYPE I/II
   B. AGGREGATE: ASTM C33, ¾" INCH MAX SIZE
   C. WATER: POTABLE
   D. REINFORCING STEEL: ASTM A615, GRADE 60,
   E. WELDED WIRE FABRIC: ASTM A185
   F. NO CHEMICAL MIXTURES SHALL BE USED.

## THRUST BLOCKS

NOT TO SCALE

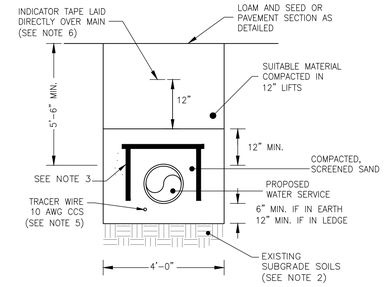



NOTES

1. BLOW-OFF HYDRANT SHALL BE LOCATED WITHIN LANDSCAPED AREA AND OUTSIDE OF THE RIGHT OF WAY.
2. BLOW-OFF HYDRANT SHALL BE A MAIN GARD 77 OR ECLIPES #2 AND MEET TNWD STANDARDS.
3. BLOW-OFF HYDRANT SHALL BE NON-FREEZING, SELF DRAINING TYPE, WITH A DEPTH OF BURY OF 5.5' SET UNDERGROUND IN A METER BOX.
4. BLOW-OFF HYDRANT SHALL BE FURNISHED WITH A 2" FIP INLET, A NON-TURNING OPERATING ROD, AND SHALL OPEN TO THE LEFT.
5. ALL OF THE WORKING PARTS SHALL BE BRONZE-TO-BRONZE DESIGN AND BE SERVICEABLE FROM ABOVE GRADE WITH NO DIGGING.
6. OUTLET SHALL ALSO BE BRONZE AND 2-1/2" NST.
7. HYDRANTS SHALL BE LOCKABLE TO PREVENT UNAUTHORIZED USE.
8. REFER TO WATER MATERIAL MANUFACTURERS APPROVED BY TNWD AND RECOMMENDED BY TFM.

## BLOW OFF HYDRANT

NOT TO SCALE

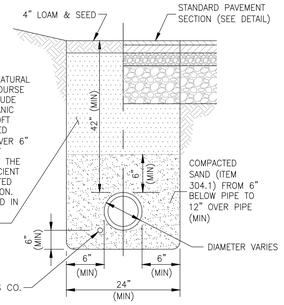



NOTES

1. ALL FITTINGS SHALL BE DR 9.
2. IN LOCATIONS WITH EXISTING FILL SOILS, THE EXISTING SUBGRADE SOILS AT THE BOTTOM OF THE TRENCH SHALL BE OVER-EXCAVATED 2' DEEP AND RECOMPACTED IN 12" LIFTS TO 95% MAXIMUM DENSITY. FOR SOIL PLACED BENEATH PROPOSED WATER LINES, AT LEAST 3 PROCTOR COMPACTION TESTS MUST BE CONDUCTED BY A QUALIFIED TECHNICIAN EVERY 50 FEET FOR EACH 12" LIFT.
3. SUITABLE FILL MATERIAL TO BE FREE OF DEBRIS WITH MAXIMUM AGGREGATE SIZE OF 6-INCHES, WITH NO MORE THAN 12% OF THE MATERIAL PASSING THE NO. 200 SIEVE, IN CONFORMANCE WITH TNWD STANDARD SPECIFICATIONS. COMPACTED IN 12" LIFTS TO 95% MAXIMUM DENSITY USING THE MODIFIED PROCTOR COMPACTION TEST.
4. RIGID STYROFOAM INSULATION (DOW HI-40 OR EQUAL) WITH 6" CLEAN SAND BLANKET AROUND WATER PIPE WHERE WATER AND DRAIN PIPE SEPARATION IS LESS THAN 18".
5. TRACER WIRE SPECIFIED FOR NON-METALLIC WATER LINES SHALL BE INSTALLED BELOW AND TO THE SIDE OF THE PIPE AND PER THE MANUFACTURER REQUIREMENTS. THEY SHALL BE 12 AWG, SOLID COPPER, POLYETHYLENE COATED. TRACER WIRE PRODUCT SHALL BE SELECTED FOR OPEN CUT INSTALLATION TECHNIQUE.
6. INDICATOR TAPE SHALL BE BLUE MARKING TAPE LABELED "WATER" IN THREE-INCH LETTERS AND SHALL BE INSTALLED 12-INCHES ABOVE THE 12- INCH SAND BLANKET.
7. REFER TO WATER MATERIAL MANUFACTURERS APPROVED BY TNWD AND RECOMMENDED BY TFM.

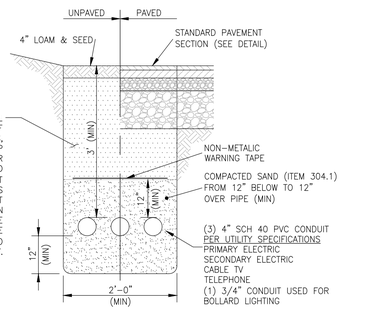
## WATER TRENCH

NOT TO SCALE




## GAS MAIN TRENCH

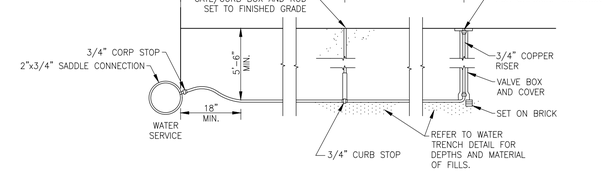
NOT TO SCALE




## ELECTRIC/COMMUNICATIONS TRENCH

NOT TO SCALE

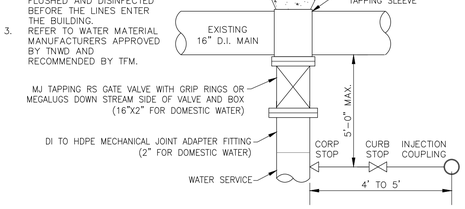
| TEST PRESSURE = 200psi | REACTION TYPE | SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL PIPE SIZE 4" | 6" | 8" | 10" | 12" |
|---|---|---|---|---|---|---|
| | A 90° | 0.89 | 2.19 | 3.82 | 11.14 | 17.24 |
| | B 180° | 0.65 | 1.55 | 2.78 | 8.38 | 12.00 |
| | C 45° | 0.48 | 1.19 | 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 |




SECTION VIEW

NOTES

1. CHLORINATION AND TESTING SHALL CONFORM TO AWWA C651.
2. DOMESTIC LINE MUST BE FLUSHED AND DISINFECTED BEFORE THE LINES ENTER THE BUILDING.
3. REFER TO WATER MATERIAL MANUFACTURERS APPROVED BY TNWD AND RECOMMENDED BY TFM.




PLAN VIEW

## CHLORINE INJECTION CONNECTION

NOT TO SCALE

THE FOLLOWING ARE TNWD ACCEPTABLE MANUFACTURERS FOR WATER MATERIALS:

- DUCTILE IRON PIPE – ATLANTIC STATES, U.S. PIPE AND GRIFFIN
- DUCTILE IRON FITTINGS – TYLER OR APPROVED EQUAL
- WATER SERVICE SHALL BE CTS PE SDR9, MEETING THE REQUIREMENTS OF ASTM D2737, AWWA C901 AND NDF STANDARDS 14 AND 61 IN CONFORMANCE WITH THE TNWD STANDARD SPECIFICATIONS
- JOINT RESTRAINTS – GRIP RINGS BY ROMAC BY EJ PRESCOT OR MEGALUG BY EBBA
- BLOW-OFF HYDRANT – MAINGUARD BY EJ PRESCOTT
- BRASS CORPORATIONS, CURB STOPS, UNIONS, AND FITTINGS – FORD AND MCDONALD
- SADDLES – ROMAC 305-H BY EJ PRESCOTT, FORD, OR MUELLER BR1S

THE FOLLOWING ARE TFM-RECOMMENDED MANUFACTURERS FOR WATER MATERIALS:

- STAINLESS STEEL TAPPING SLEEVE – ROMAC SST BY EJ PRESCOTT
- MECHANICAL JOINT TAPPING SLEEVE – AMERICAN FLOW CONTROL BY EJ PRECSCOTT
- MECHANICAL JOINT ADAPTER FITTING – INTEGRIFUSE BY EJ PRESCOTT
- MECHANICAL JOINT RETAINER GLAND – FORD BY EJ PRESCOTT

## WATER MATERIAL MANUFACTURERS

NOT TO SCALE

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# GENERAL NOTES

1. IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.

2. BARRELS, CONE SECTIONS AND CONCRETE GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE AND SHALL CONFORM ENV-WQ 704.12 & 704.13.

3. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478-06/AASHTO M199-93, RATED FOR HS-20 LOADING WITH CONCRETE STRENGTH OF 4000 PSI OR GREATER.

4. BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.

5. MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.

6. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.

7. ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.

8. SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.

9. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT. APPROVED ELASTOMERIC SEALANTS ARE:

   SIKAFLEX-12-SL

   SONNEBORN BUILING PRODUCTS-SONOLASTIC SL-1

10. THE MINIMUM INTERNAL DIAMETER OF MANHOLES SHALL BE 48 INCHES. FOR SEWERS LARGER THAN 24-INCH DIAMETER, MANHOLE DIAMETERS SHALL BE INCREASED SO AS TO PROVIDE AT LEAST 12-INCHES OF SHELF ON EACH SIDE OF THE SEWER.

11. LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE TO ENV-WQ 704.17.

    (a) ALL MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST IN ACCORDANCE WITH THE ASTM C1244 STARNDARD IN EFFECT WHEN THE TESTING IS PERFORMED.
    (b) THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
        1. THE INITIAL VACUUM GUAGE TEST PRESSURE SHALL BE 10 INCHES Hg.
        2. THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR 1-INCH Hg PRESSURE DROP TO 9 INCHES SHALL BE;
           A. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP.
           B. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP.
           C. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.
    (c) THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (b) ABOVE.
    (d) INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETE.
    (e) FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT

12. ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN OR ANIMALS, UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.

13. BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL COMPLY WITH ASTM C32-05, CLAY OR SHALE, FOR GRADE SS HARD BRICK.

    MORTAR SHALL BE COMPOSED OF PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:
    (a) 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
    (b) 4.5 PARTS SAND, 1 PART CEMENT AND 0.5 PART HYDRATED LIME

    CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150-05. HYDRATED LIME SHALL BE TYPE S CONFORMING TO ASTM C207-06 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES". SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO ASTM C33-03 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES".

14. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED OR PRECAST CONCRETE SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.

15. FRAMES AND COVERS: MANHOLES FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN, CLASS 30, CONFORMING TO ASTM A48/48M AND PROVIDE A 30-INCH CLEAR OPENING. 3-INCH WORD (MINIMUM HEIGHT) LETTERS "SEWER" SHALL BE PLAINLY CAST INTO THE TOP SURFACE. THE CASTING SHALL BE OF EVEN GRAINED CAST IRON, SMOOTH, AND FREE FROM SCALE, LUMPS, BLISTERS, SAND HOLES AND DEFECTS. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION.

16. BEDDING: PRECAST BASES SHALL BE PLACED ON A 6-INCH LAYER OF COMPACTED BEDDING MATERIAL THAT CONFORMS TO ASTM C33-03 NO. 67 STONE AND FREE FROM CLAY, LOAM AND ORGANNIC MATTER. THE EXCAVATION SHALL BE PROPERLY DEWATERED WHILE PLACING BEDDING MATERIAL AND SETTING OF THE BASE OR POURING CONCRETE. WATER-STOPS SHALL BE USED AT THE HORIZONTAL JOINT OF THE CAST-IN-PLACE MANHOLES.

| | |
|---|---|
| 100% PASSING | 1" SCREEN |
| 90-100% PASSING | 3/4" SCREEN |
| 20-55% PASSING | 3/8" SCREEN |
| 0-10% PASSING | #4 SIEVE |
| 0-5% PASSING | #8 SIEVE |

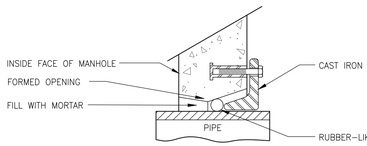
17. FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WIbHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONNECTION: (a) WITHIN 48 INCHES FOR REINFORCED CONCRETE PIPE (RCP). (b) WITHIN 60 INCHES FOR PVC PIPE LARGER THAN 15" DIAMETER.

18. NO FLEXIBLE JOINT SHALL BE REQUIRED FOR DUCTILE IRON PIPE OR PVC PIPE UP THROUGH 15-INCH DIAMETER.

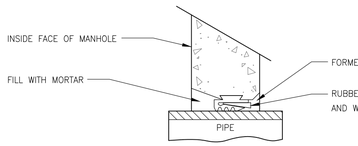
19. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS FOLLOWS:

    A. ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES.
    B. CAST INTO WALL OR SECURED WITH STAINLESS STEEL CLAMPS.
    C. ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH THE SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING.
    D. ON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.

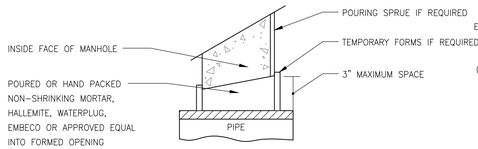
20. THE INVERT OF THE INCOMING PIPE SHALL BE NO MORE THAN 6 INCHES ABOVE THE OUTGOING PIPE UNLESS A DROP ENTRY IS USED.



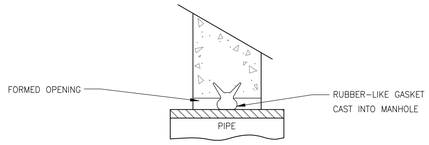

RES-SEAL
(OR ACCEPTABLE SUBSTITUTE)



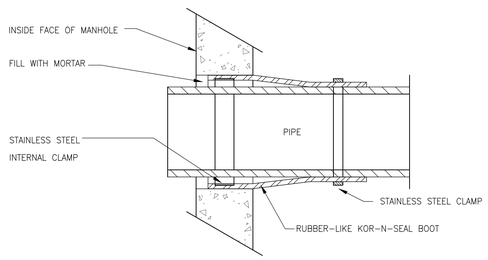

PRESS-WEDGE II
(OR ACCEPTABLE SUBSTITUTE)



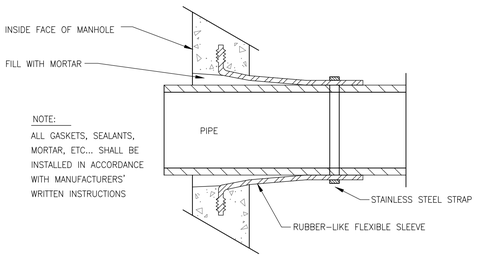

NON-SHRINKING MORTAR
(OR ACCEPTABLE SUBSTITUTE)




A-LOK
(OR ACCEPTABLE SUBSTITUTE)



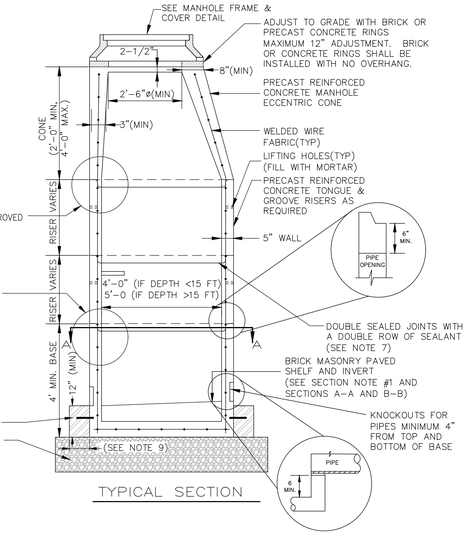

KOR-N-SEAL JOINT SLEEVE
(OR ACCEPTABLE SUBSTITUTE)




NOTE:
ALL GASKETS, SEALANTS, MORTAR, ETC... SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS

LOCK-JOINT FLEXIBLE MANHOLE SLEEVE
(OR ACCEPTABLE SUBSTITUTE)

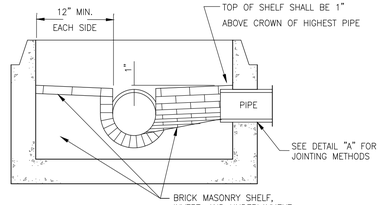
DETAIL "A" - PIPE TO MANHOLE JOINTS



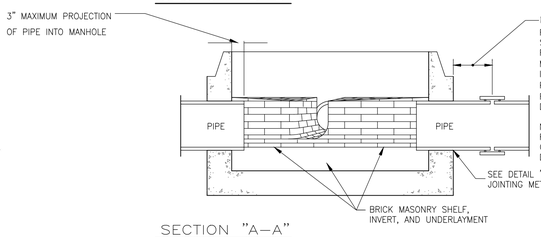

TYPICAL SECTION

NOTES:

1. INVERT AND SHELF TO BE PLACED AFTER LEAKAGE TEST.
2. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT. INVERT BRICKS SHALL BE LAID ON EDGE.
3. BASE SECTION TO BE FULL WALL THICKNESS AND MONOLITHIC TO A POINT 6" ABOVE THE PIPE CROWN.

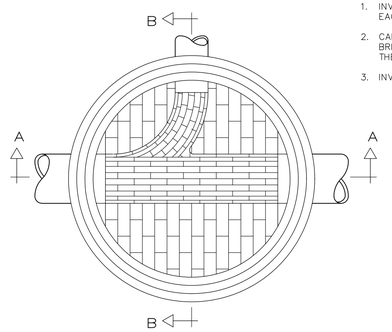



SECTION "B-B"




SECTION "A-A"

NOTES
1. INVERT AND SHELF TO BE PLACED AFTER EACH LEAKAGE TEST.
2. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT.
3. INVERT BRICKS SHALL BE LAID ON EDGE.




TYPICAL MANHOLE - PLAN VIEW

NOTES
1. UNDERLAYMENT OF MANHOLE INVERT AND SHELF SHALL BE BRICK MASONRY PER ENV-WQ 704.12(K).
2. INVERT AND SHELF TO BE PLACED AFTER EACH LEAKAGE TEST.
3. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT.
4. INVERT BRICKS SHALL BE LAID ON EDGE.
5. PRECAST CONCRETE MANHOLES SHALL MEET AASHTO M199-93/ ASTM C478-90B, RATED FOR HS-20 LOADING WITH CONCRETE STRENGTH OF 4000 PSI OR GREATER.
6. ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
7. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT.

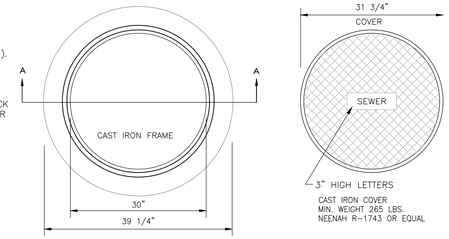
   ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.

   STATE OF NEW HAMPSHIRE APPROVED PRODUCTS
   A) SIKAFLEX-12-SL
   B) SONNEBORN BUILDING PRODUCTS SONOLASTIC SL-1

   MANHOLE STEPS ARE PROHIBITED BY THE TOWN OF TILTON.

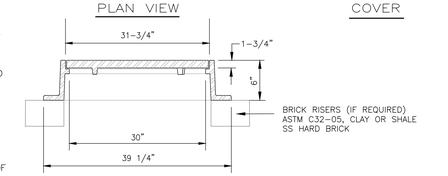
**COUNTERWEIGHT NOTE:**

1. 4' DIAMETER MANHOLES
   a. LESS THAN 4' DEEP
      MUST HAVE 6" WIDE COUNTERBALANCE RINGS.
   b. EQUAL TO OR GREATER THAN 4' AND LESS THAN 13' DEEP
      MUST HAVE 8" WIDE COUNTERBALANCE RINGS.
   c. EQUAL TO OR GREATER THAN 13' DEEP
      MUST HAVE 10" WIDE COUNTERBALANCE RINGS.
2. 5' DIAMETER MANHOLES
   d. LESS THAN 9' DEEP
      MUST HAVE 10" WIDE COUNTERBALANCE RINGS.
   e. EQUAL TO OR GREATER THAN 9' DEEP AND LESS THAN 18' DEEP
      MUST HAVE 12" WIDE COUNTERBALANCE RINGS.
   f. EQUAL TO OR GREATER THAN 18' DEEP
      MUST HAVE 14" WIDE COUNTERBALANCE RINGS.
3. 6' DIAMETER MANHOLES:
   a. LESS THAN 7' DEEP
      MUST HAVE 10" WIDE COUNTERBALANCE RINGS.
   b. EQUAL TO OR GREATER THAN 7' DEEP AND LESS THAN 10' DEEP
      MUST HAVE 12" WIDE COUNTERBALANCE RINGS.
   c. EQUAL TO OR GREATER THAN 10' DEEP AND LESS THAN 17' DEEP
      MUST HAVE 14" WIDE COUNTERBALANCE RINGS.
   d. EQUAL TO OR GREATER THAN 17' DEEP
      MUST HAVE 16" WIDE COUNTERBALANCE RINGS.



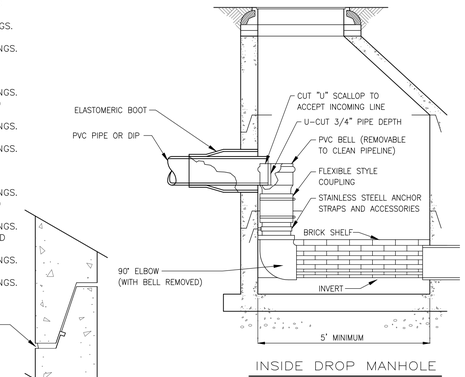

PLAN VIEW

COVER



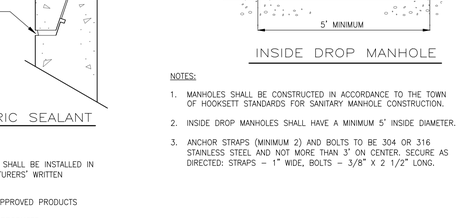

SECTION A-A

MANHOLE FRAME & COVER
HEAVY DUTY




INSIDE DROP MANHOLE

NOTES:
1. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE TO THE TOWN OF HOOKSETT STANDARDS FOR SANITARY MANHOLE CONSTRUCTION.
2. INSIDE DROP MANHOLES SHALL HAVE A MINIMUM 5' INSIDE DIAMETER.
3. ANCHOR STRAPS (MINIMUM 2) AND BOLTS TO BE 304 OR 316 STAINLESS STEEL AND NOT MORE THAN 3' ON CENTER. SECURE AS DIRECTED: STRAPS - 1" WIDE, BOLTS - 3/8" X 2 1/2" LONG.




ELASTOMERIC SEALANT

NOTES:
ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.

STATE OF NEW HAMPSHIRE APPROVED PRODUCTS
A) SIKAFLEX-12-SL
B) SONNEBORN BUILDING PRODUCTS SONOLASTIC SL-1

DETAIL "B" - HORIZONTAL JOINTS

TAX MAP 239 LOT 11

**CONSTRUCTION DETAILS**

**PROPOSED GAS STATION & CONVENIENCE STORE**

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**

**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| 2 | 2/11/2026 | REVISED PER ADDRESS CHANGE REQUEST | JKC | CRR |
| 1 | 12/22/2025 | REVISED PER TAC COMMENTS | JKC | CRR |


Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
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Portsmouth, NH 03801
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| PROJECT | DR | JKC | FB | | |
|---|---|---|---|---|---|
| 46077.16 | CK | CRR | CADFILE | 46077-16_DETAILS | C-19 |


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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION


**STANDARD MANHOLE**
NOT TO SCALE


Feb 12, 2026 - 10:17am
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# SEWER SERVICE NOTES

1) MINIMUM SIZE PIPE FOR SEWER SERVICE SHALL BE FOUR 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" |
| D2680 | *ABS (COMPOSITES WALL) | 8" THROUGH 15" |

*PVC: POLY VINYL CHLORIDE
*ABS: ACRYLONITRILE-BUTADIENE-STYRENE

      2. JOINTS 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.

      ABS TRUSS PIPE AND FITTINGS SHALL CONFORM TO ASTM D-2680, POLYMER COMPOUNDING SHALL BE TO ASTM D-1788 (CLASS 322).

      JOINTS FOR ABS TRUSS PIPE SHALL BE CHEMICAL WELDED COUPLINGS TYPE SC IN ACCORDANCE WITH ASTM D-2680, FORMING A CHEMICAL WELDED JOINT.

   B. DUCTILE-IRON PIPE, FITTINGS AND JOINTS.

      1. DUCTILE IRON PIPE AND FITTINGS 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 MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.
      2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO:
         A21.11 RUBBER GASKETS 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, FOLLOWING MANUFACTURERS' INSTRUCTIONS USING A BOLTED, CLAMPED OR EPOXY-CEMENTED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWN OPENING IN THE SEWER. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION, AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED AS SHOWN IN THE DETAIL UP TO AND INCLUDING 15" DIAMETER.

6) SEWER SERVICE 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 6 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL 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: THE COMPLETED SEWER SERVICE SHALL BE SUBJECTED TO A THIRD PARTY LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS: (PRIOR TO BACKFILLING)

   A. AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE. AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.

   B. THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER, TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS OR, IF TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTIONS FOR LEAKS SHALL BE MADE THROUGH THE CLEANOUT WITH A FLASHLIGHT.

   C. DRY FLUORESCENE DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER, OR IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST DOWN-STREAM MANHOLE.

   LEAKAGE OBSERVED IN ANY ONE OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP IF NECESSARY AND RE-LAID SO AS TO ASSURE WATER TIGHTNESS.

8) ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM 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.

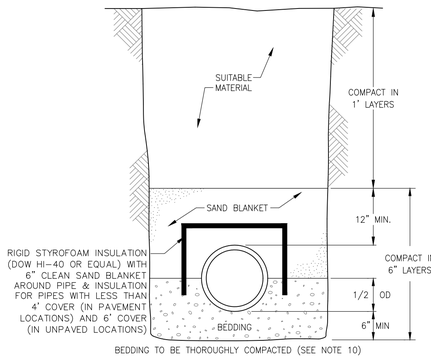
10) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33-67.

| | |
|---|---|
| 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, SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1 1/2 INCH SHALL BE USED.

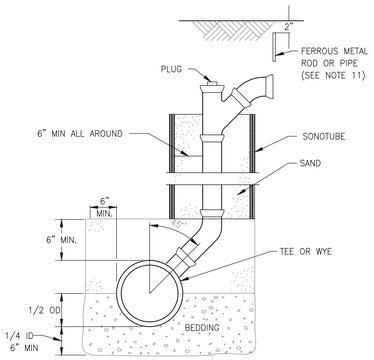
11) LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.

12) CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE SEWER CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.




## TRENCH CROSS-SECTION

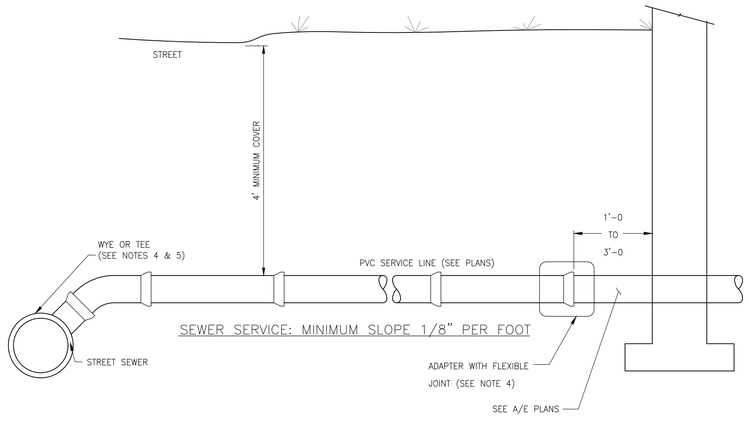
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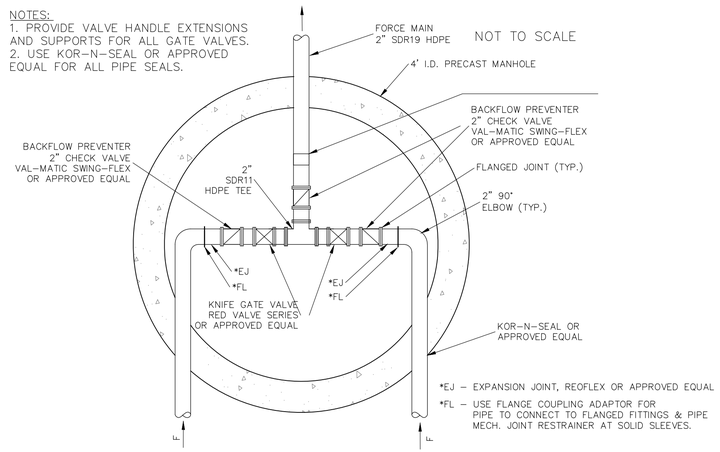

NOTES
1. BACKFILLING TO BE BROUGHT UP EVENLY ON ALL SIDES.
2. SEE NOTE 12.

## CHIMNEY

NOT TO SCALE




## SEWER SERVICE




## VALVE MANHOLE DETAIL

PUMP STATION NOT TO SCALE

# GRAVITY SEWER NOTES

1. MINIMUM SIZE PIPE FOR GRAVITY SEWER SHALL BE 8-INCHES.
2. PIPE AND JOINT MATERIALS FOR PLASTIC SEWER PIPE SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

| ASTM STANDARDS | GENERIC PIPE MATERIAL | SIZES APPROVED |
|---|---|---|
| D3034-04a | *PVC (SOLID WALL) | 8" THROUGH 15" (SDR 35) |
| F679-03 | PVC (SOLID WALL) | 18" THROUGH 27" (T-1 & T-2) |
| F794-03 | PVC (RIBBED WALL) | 8" THROUGH 36" |
| F1760-01(2005)e1 | PVC, RECYCLED | ALL DIAMETERS |

*PVC: POLY VINYL CHLORIDE

3. PLASTIC SEWER PIPE SHALL HAVE A PIPE STIFFNESS RATING OF AT LEAST 46 POUNDS PER SQUARE INCH AT 5 PERCENT PIPE DIAMETER DEFLECTION, AS MEASURED IN ACCORDANCE WITH ASTM D2412-02 DURING MANUFACTURE.
4. JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212-96(a)(2003)e1 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.
5. DUCTILE-IRON PIPE, FITTINGS AND JOINTS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA).

   AWWA C151/A21.51-02 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A-536-84 (2004) DUCTILE IRON CASTINGS.

   AWWA C151/A21.51-02 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.

   JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO AWWA C151/A21.11 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS.

6. CONCRETE PIPE SHALL CONFORM TO AWWA C302-04.
7. PRESTRESSED CONCRETE CYLINDER PIPE AND FITTINGS SHALL CONFORM TO AWWA C301-99.

   JOINTS SEALS FOR CONCRETE CYLINDER PIPE SHALL BE OIL RESISTANT ELASTOMERIC MATERIAL CONFORMING TO ASWWA C301-99 SPECIFICATIONS.

8. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
9. GRAVITY SEWER PIPE TESTING SHALL BE AS FOLLOWS:

   ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.

   LOW PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH:

   ASTM F1417-92(2005) "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW PRESSURE AIR".

   UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE".

10. ALL NEW GRAVITY SEWERS SHALL BE CLEANED AND VISUALLY INSPECTED AND SHALL BE TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE.
11. ALL PLASTIC SEWER PIPE SHALL BE DEFLECTION TESTED NOT LESS THAN 30 DAYS FOLLOWING INSTALLATION.
12. THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5.0 PERCENT OF THE AVERAGE INSIDE DIAMETER.
13. TRENCH CONSTUCTION SHALL CONFORM TO THE FOLLOWING:

   SEWERS SHALL BE BURIED TO A MINIMUM DEPTH OF 6' BELOW GRADE IN ALL ROADWAY LOCATIONS AND TO A MINIMUM DEPTH OF 4 FEET BELOW GRADE IN ALL CROSS COUNTRY LOCATIONS.

   WHERE SEWER LINES CROSS WATER PIPES, A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. AT SEWER/WATER INTERSECTIONS, A MINIMUM OF 6 FEET SHALL BE PROVIDED FROM THE WATER LINE TO THE SEWER PIPE JOINT. 12" SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE REQUIRED BETWEEN SEWER LINES AND ALL OTHER PIPES.

   TRENCH DIMENSIONS FOR SEWER PIPE LESS THAN 15 INCHES IN DIAMETER, THE ALLOWABLE TRENCH WIDTH AT A PLANE 12 INCHES ABOVE THE PIPE SHALL BE NO MORE THAN 36 INCHES AND FOR PIPE 15 INCHES AND LARGER, THE ALLOWABLE WIDTH SHALL BE EQUAL TO THE PIPES OUTSIDE DIAMETER PLUS 24 INCHES.

   PIPE TRENCH BEDDING MATERIAL AND FILL MATERIAL FOR EXCAVATION BELOW GRADE SHALL BE SCREENED GRAVEL OR CRUSHED STONE TO ASTM C33-03 STONE SIZE NO. 67. THE PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND FREE FROM ANY ORGANIC MATERIALS, GRADED SUCH THAT 100 PERCENT PASSED THE 1/2-INCH SIEVE AND A MAXIMUM OF 15 PERCENT PASSES A #200 SIEVE. IN LIEU OF A SAND BLANKET, A STONE ENVELOPE 6 INCHES THICK COMPLETELY AROUND THE PIPE USING 3/4-INCH STONE MAY BE USED.

   PIPE BEDDING MATERIAL SHALL EXTEND FROM A HORIZONTAL PLANE THROUGH THE PIPE AXIS TO 6-INCHES BELOW THE BOTTOM OF THE OUTSIDE SURFACE OF THE PIPE.

   PIPE SAND BLANKET MATERIAL SHALL COVER THE PIPE A MINIMUM OF 12 INCHES ABOVE THE CROWN OF THE OUTSIDE SURFACE.

   COMPACTION SHALL BE IN 12-INCH LAYERS FOR BEDDING AND BLANKET MATERIALS.

   BACKFILL MATERIAL SHALL BE IN 3-FOOT LAYERS TO THE GROUND SURFACE EXCEPT FOR ROAD CONSTRUCTION WHERE THE FINAL 3-FEET SHALL BE COMPACTED IN 12-INCH LAYERS TO THE ROAD BASE SURFACE.

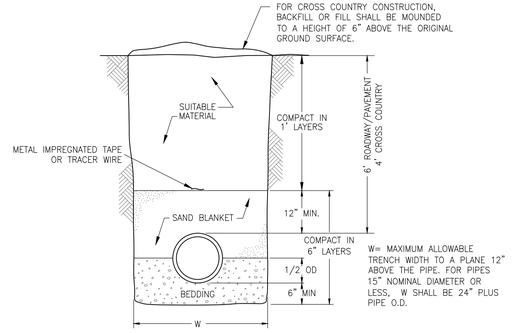
   TRENCH BACKFILL MATERIAL IN ROADWAY LOCATIONS SHALL BE NATURAL MATERIALS EXCAVATED FROM THE TRENCH DURING CONSTRUCTION, EXCLUDING DEBRIS, PAVEMENT PIECES, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT, CLAY, EXCAVATED LEDGE, ROCKS OVER 6 INCHES IN THE LARGEST DIMENSION, OR ANY OTHER UNSUITABLE MATERIAL NOT APPROVED BY THE ENGINEER.

   TRENCH BACKFILL AT CROSS-COUNTRY LOCATIONS 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 AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLE RECONSTRUCTION, WHEN NECESSARY WILL BE PRESERVED. BACKFILL SHALL BE MOUNDED 6-INCHES ABOVE ORIGINAL GROUND.

   BASE COURSE MATERIALS FOR TRENCH REPAIRS SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

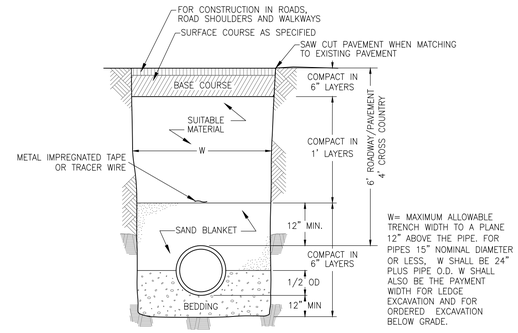
   WHERE SHEETING IS PLACED ALONG SIDE OF THE PIPE AND EXTENDS BELOW MID-DIAMETER, THE SHEETING SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE AND AT LEAST 3 FEET BELOW FINISH GRADE.

   TRENCHES FOR SEWER PIPES WITH SLOPES OVER 0.08 FEET PER FOOT AND TRENCHES FOR SEWER PIPE BELOW THE SEASONAL HIGH GROUND WATER LEVEL SHALL HAVE IMPERVIOUS TRENCH DAMS CONSTRUCTED EVERY 300 FEET TO PREVENT POTENTIAL DISTURBANCE TO PIPE BEDDING AND BLANKET MATERIALS.




## EARTH CONSTRUCTION

NOT TO SCALE




## LEDGE CONSTRUCTION

NOT TO SCALE

TAX MAP 239 LOT 11

**CONSTRUCTION DETAILS**

**PROPOSED GAS STATION & CONVENIENCE STORE**

**1980 WOODBURY AVENUE**

**PORTSMOUTH, NEW HAMPSHIRE**

OWNED BY

**COLBEA ENTERPRISES, LLC**

**1"=40' (11"x17")**

**SCALE: 1"=20' (22"X34")** **NOVEMBER 17, 2025**

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| 2 | 2/11/2026 | REVISED PER ADDRESS CHANGE REQUEST | JKC | CRR |
| 1 | 12/22/2025 | REVISED PER TAC COMMENTS | JKC | CRR |

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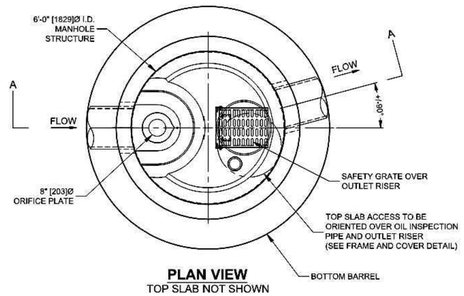
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DIG SAFE NEW HAMPSHIRE — CALL 811 OR 1-888-DIG-SAFE — IT'S THE LAW! — CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

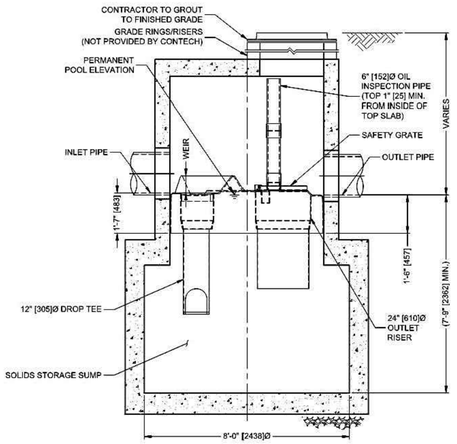
Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
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Fax (603) 431-0910
www.tfmoran.com

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| 46077.16 | JKC | CRR | FB | CADFILE |
| 46077-16_DETAILS | C-20 | | | |

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**PLAN VIEW**
TOP SLAB NOT SHOWN

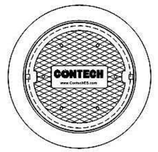



**SECTION A-A**

Stormceptor®
FOR PATENT INFORMATION, GO TO www.ContechES.com/SP

## STORMCEPTOR DESIGN NOTES

THE STANDARD STC2400 CONFIGURATION IS SHOWN.




**FRAME AND COVER**
(MAY VARY)
NOT TO SCALE

## SITE SPECIFIC DATA REQUIREMENTS

| | | | |
|---|---|---|---|
| STRUCTURE ID | | | STORMCEPTOR |
| WATER QUALITY FLOW RATE (cfs [L/s]) | | | |
| PEAK FLOW RATE (cfs [L/s]) | | | 3.5 CFS |
| RETURN PERIOD OF PEAK FLOW (yrs) | | | |
| RIM ELEVATION | | | 52.85 |
| PIPE DATA: | INVERT | MATERIAL | DIAMETER |
| INLET PIPE 1 | 46.10 | HDPE | 12" |
| INLET PIPE 2 | | | |
| OUTLET PIPE | 46.10 | HDPE | 12" |
| 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. STORMCEPTOR 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. STORMCEPTOR 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. STORMCEPTOR 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 STORMCEPTOR 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
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

STC2400
STORMCEPTOR
STANDARD DETAIL

TAX MAP 239 LOT 11

# CONSTRUCTION DETAILS

## PROPOSED GAS STATION & CONVENIENCE STORE

**1980 WOODBURY AVENUE**
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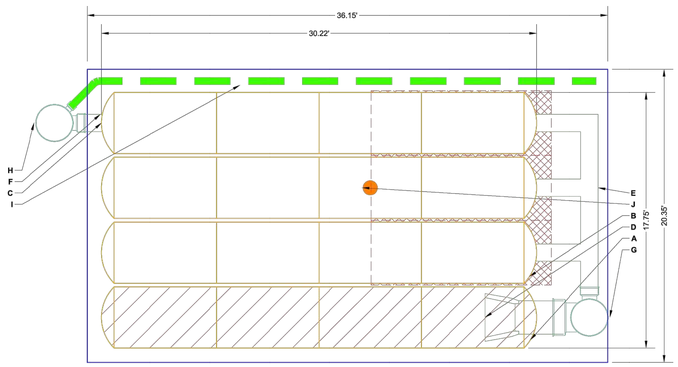
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| PROPOSED LAYOUT | | PROPOSED ELEVATIONS | |
|---|---|---|---|
| 16 | STORMTECH SC-800 CHAMBERS | MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED): | 56.55 |
| 8 | STORMTECH SC-800 END CAPS | MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC): | 50.30 |
| 6 | STONE ABOVE (in) | MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC): | 49.80 |
| 6 | STONE BELOW (in) | MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT): | 49.80 |
| 40 | STONE VOID | MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT): | 49.80 |
| 1606 | INSTALLED SYSTEM VOLUME (CF)<br>(PERIMETER STONE INCLUDED)<br>(COVER STONE INCLUDED)<br>(BASE STONE INCLUDED) | TOP OF STONE:<br>TOP OF SC-800 CHAMBER: | 49.05<br>48.55 |
| | | 12" x 12" TOP MANIFOLD INVERT: | 47.00 |
| | | 24" ISOLATOR ROW PLUS INVERT: | 45.99 |
| 736 | SYSTEM AREA (SF) | 12" BOTTOM CONNECTION INVERT: | 45.93 |
| 113.0 | SYSTEM PERIMETER (ft) | BOTTOM OF SC-800 CHAMBER: | 45.80 |
| 155 | THERMOPLASTIC LINER (SY)<br>(20% OVERAGE) | UNDERDRAIN INVERT:<br>BOTTOM OF STONE: | 45.30<br>45.30 |

*INVERT ABOVE BASE OF CHAMBER

| PART TYPE | ITEM ON LAYOUT | DESCRIPTION | INVERT* | MAX FLOW |
|---|---|---|---|---|
| PREFABRICATED EZ END CAP | A | 24" BOTTOM PREFABRICATED EZ END CAP, PART#: SC800ECEZ / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS | | |
| PRE-CORED END CAP | B | 12" TOP PRE-CORED END CAP, PART#: SC800EPE12TPC / TYP OF ALL 12" TOP CONNECTIONS | | |
| PRE-CORED END CAP | C | 12" BOTTOM PRE-CORED END CAP, PART#: SC800EPE12BPC / TYP OF ALL 12" BOTTOM CONNECTIONS | | |
| FLAMP | D | INSTALL FLAMP ON 24" ACCESS PIPE / PART#: SC80024RAMP | | |
| MANIFOLD | E | 12" x 12" TOP MANIFOLD, ADS N-12 | 14.40" | |
| PIPE CONNECTION | F | 12" BOTTOM CONNECTION | 1.60" | |
| NYLOPLAST (INLET W/ ISO PLUS ROW) | G | 30" DIAMETER (24.00" SUMP MIN) | | 5.8 CFS IN |
| NYLOPLAST (OUTLET) | H | 30" DIAMETER (DESIGN BY ENGINEER) | | 2.0 CFS OUT |
| UNDERDRAIN | I | 6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN | | |
| INSPECTION PORT | J | 4" SEE DETAIL | | |




ISOLATOR ROW PLUS (SEE DETAIL)

PLACE MINIMUM 12.50' OF ADSPLUS625 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

THERMOPLASTIC LINER (SEE TECH NOTE #6.50 PROVIDED BY OTHERS / DESIGN BY OTHERS)

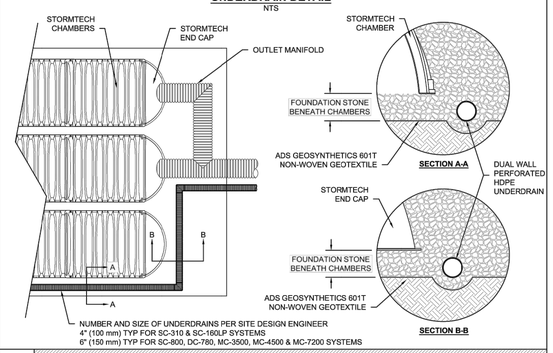
**NOTES**

* THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.

* **NOT FOR CONSTRUCTION**: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

## UNDERDRAIN DETAIL

NTS

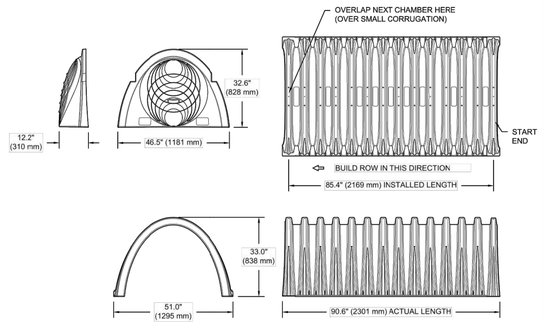



5 UNDERDRAIN DETAIL

SPACE INTENTIONALLY LEFT BLANK

## SC-800 TECHNICAL SPECIFICATION

NTS




**NOMINAL CHAMBER SPECIFICATIONS**

| | | |
|---|---|---|
| SIZE (W X H X INSTALLED LENGTH) | 51.0" X 33.0" X 85.4" | (1295 mm X 838 mm X 2169 mm) |
| CHAMBER STORAGE | 50.6 CUBIC FEET | (1.43 m³) |
| MINIMUM INSTALLED STORAGE* | 78.4 CUBIC FEET | (2.22 m³) |
| WEIGHT | 81.8 lbs. | (37.1 kg) |

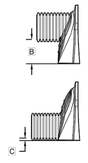
**NOMINAL END CAP SPECIFICATIONS**

| | | |
|---|---|---|
| SIZE (W X H X INSTALLED LENGTH) | 46.5" X 32.6" X 10.5" | (1181 mm X 828 mm X 267 mm) |
| END CAP STORAGE | 3.4 CUBIC FEET | (0.09 m³) |
| MINIMUM INSTALLED STORAGE** | 14.7 CUBIC FEET | (0.42 m³) |
| WEIGHT | 15.7 lbs. | (7.1 kg) |

* ASSUMES 6" (150 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS, 3" (75 mm) BETWEEN CHAMBERS
**ASSUMES 6" (150 mm) STONE ABOVE AND BELOW END CAPS, 3" (150 mm) BETWEEN ROWS, 12" (300 mm) BEYOND END CAPS

PRE-CORED HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "BPC"
PRE-CORED HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "TPC"

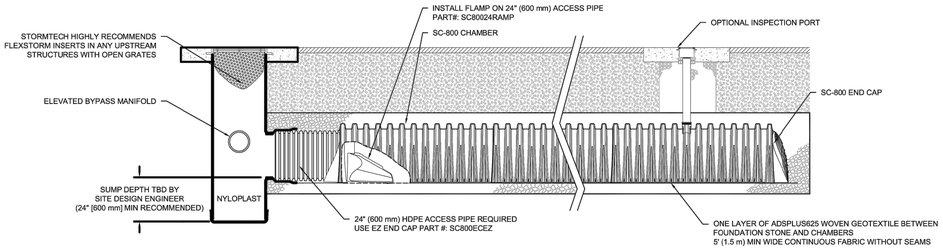
| PART # | STUB | B | C |
|---|---|---|---|
| SC800EPE06TPC | 6" (150 mm) | 21.4" (544 mm) | --- |
| SC800EPE06BPC | | --- | 0.9" (23 mm) |
| SC800EPE08TPC | 8" (200 mm) | 19.2" (488 mm) | --- |
| SC800EPE08BPC | | --- | 1.0" (25 mm) |
| SC800EPE10TPC | 10" (250 mm) | 17.0" (432 mm) | --- |
| SC800EPE10BPC | | --- | 1.2" (30 mm) |
| SC800EPE12TPC | 12" (300 mm) | 14.4" (366 mm) | --- |
| SC800EPE12BPC | | --- | 1.6" (41 mm) |
| SC800EPE15TPC | 15" (375 mm) | 11.3" (287 mm) | --- |
| SC800EPE15BPC | | --- | 1.7" (43 mm) |
| SC800EPE18TPC | 18" (450 mm) | 8.0" (203 mm) | --- |
| SC800EPE18BPC | | --- | 2.0" (51 mm) |
| SC800EPE24BPC | 24" (600 mm) | --- | 2.3" (58 mm) |
| SC800EPE | NONE | SOLID END CAP | |




NOTE: ALL DIMENSIONS ARE NOMINAL

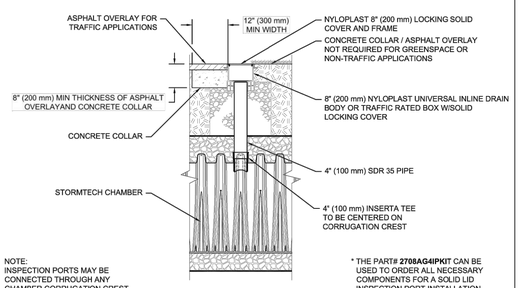
2 SC-800 TECHNICAL SPECIFICATION

## SC-800 ISOLATOR ROW PLUS DETAIL




**SC-800 ISOLATOR ROW PLUS DETAIL**
NTS

3 SC-800 ISOLATOR ROW PLUS DETAIL




NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

* THE PART# **2708AG4IPKIT** CAN BE USED TO ORDER ALL NECESSARY COMPONENTS FOR A SOLID LID INSPECTION PORT INSTALLATION

**4" (100 mm) PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)**
NTS

### INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

### NOTES

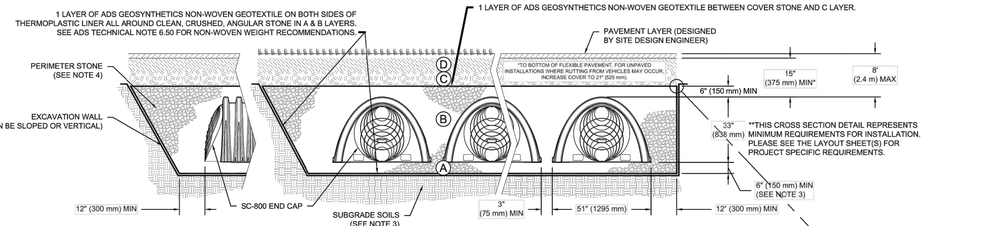
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

4 4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)

## ACCEPTABLE FILL MATERIALS: STORMTECH SC-800 CHAMBER SYSTEMS

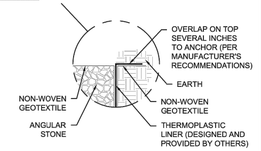
| | MATERIAL LOCATION | DESCRIPTION | AASHTO MATERIAL CLASSIFICATIONS | COMPACTION / DENSITY REQUIREMENT |
|---|---|---|---|---|
| D | **FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER. | ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS. | N/A | PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS. |
| C | **INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 15" (375 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER. | GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE.<br>MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER. | AASHTO M145[1]<br>A-1, A-2-4, A-3<br>OR<br>AASHTO M43[1]<br>3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10 | BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN). |
| B | **EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE. | CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5] | AASHTO M43[1]<br>3, 357, 4, 467, 5, 56, 57 | NO COMPACTION REQUIRED. |
| A | **FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER. | CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5] | AASHTO M43[1]<br>3, 357, 4, 467, 5, 56, 57 | PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3] |

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".




### NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-800 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 700 LBS/FT/% AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.




THERMOPLASTIC LINER DETAIL

1 SC-800 CROSS SECTION DETAIL

1980 WOODBURY AVENUE
PORTSMOUTH, NH, USA

DATE: 02/10/2026
PROJECT #:
REV:
NOT TO SCALE

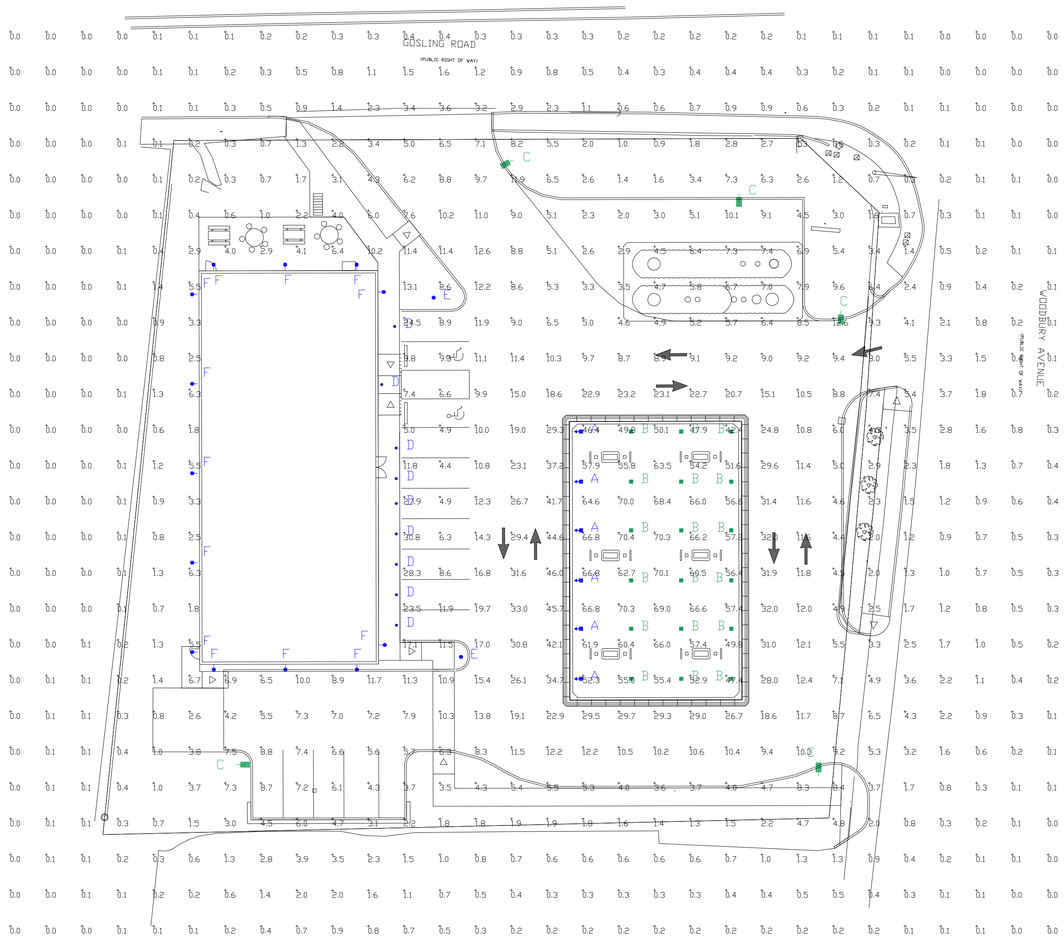
DRAWN: JC
CHECKED: N/A

StormTech® Chamber System

WWW.ADSPIPE.COM

SHEET 1 OF 1

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| Calculation Summary | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min | Grid Z |
| ALL CALC POINTS | Illuminance | Fc | 7.62 | 70.4 | 0.0 | N.A. | N.A. | 0 |
| CANOPY | Illuminance | Fc | 59.53 | 70.4 | 42.4 | 1.40 | 1.66 | |
| INSIDE CURB | Illuminance | Fc | 12.76 | 46.0 | 2.0 | 6.38 | 23.00 | |

| Luminaire Schedule | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Symbol | Qty | Label | Arrangement | Description | Mounting Height | LLF | Arr. Lum. Lumens | Arr. Watts | BUG Rating |
| | 6 | A | Single | SCV-LED-23L-SCFT-50 | 15' | 1.000 | 23422 | 187 | B4-U0-G3 |
| | 18 | B | Single | SCV-LED-13L-SC-50 | 15' | 1.000 | 14195 | 92 | B3-U0-G1 |
| | 5 | C | Single | MRM-LED-18L-SIL-FT-50-70CRI-SINGLE | 14'POLE+2'BASE | 1.000 | 19324 | 135 | B3-U0-G3 |
| | 9 | D | Single | XBVR-ID-LED-24-400-CW-UE | 3.5' | 1.000 | 1338 | 38 | B1-U2-G1 |
| | 2 | E | Single | LXM4-PT-5W-LED-25L-50 | 14'POLE+2'BASE | 1.000 | 27285 | 227.9 | B5-U2-G3 |
| | 13 | F | Single | HBR-17L-40-GWT | 10' | 1.000 | 1563 | 12.8 | B1-U1-G0 |
















## PHOTOMETRIC EVALUATION
## NOT FOR CONSTRUCTION

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

The IES no longer uses the Cutoff Classification System for LED fixtures. The IES classifies LED fixtures with the BUG rating which refers to the Backlight-Uplight-Glare system. An Uplight of "U0" most closely matches the old Full Cutoff rating.

Dimensions of drawings that have been scaled or converted from PDF files or scanned /submitted images are approximate.

Total Project Watts
Total Watts = 4417.197

10000 ALLIANCE RD. CINCINNATI, OHIO 45242 USA
(513) 793-3200 • FAX (513) 793-3203

LIGHTING PROPOSAL LD-163588

SEASONS CORNER MARKET
WOODBURY AVE
PORTSMOUTH,NH

| BY:MWE | DATE:11-14-25 | REV: | SHEET 1 OF 1 |
|---|---|---|---|

SCALE: 1"=20' ARCH D

0 20

110'-0" (OVERALL FOUNDATION)

A206
1

DOWNSPOUT, TYP.

3'-4"

31'-6 3/4"

10'-6"

INTERNAL ROOF ACCESS LADDER

HAND SINK

3-BAY SINK

WATER HEATERS

MOP SINK

3'-5 3/4"

OFFICE 1

OFFICE 2

5'-1 7/8"

9'-4 1/8"

10'-6 1/8"

2" AIR SPACE, TYP.

2'-0"

2'-9 1/2"

SHELVING

7'-11 1/4"

ICE MACHINE

WALK-IN COOLER

(17) COOLER DOORS
30" DOORS

9'-0" (COOLER BOX)

BEER CAVE

(4) 30" Cooler Doors
(1) 36" Service Door

15'-0 1/4"

13'-11 5/8"

WALK-IN FREEZER

(4) FREEZER DOORS
30" DOORS

10'-7 3/4"

2" AIR SPACE, TYP.

CO-BRAND ELEC. PANEL

WOMEN'S

MEN'S

1'-6"

1'-6"

1'-6"

HAND SINK

3-BAY SINK

C19'-5 3/8"

ICE MACHINE

7'-6"

4'-11"

5'-0"

16'-0"

7'-2 1/2"

5'-6"

10'-6"

1'-2 3/4"

3'-4"

50'-0" (OVERALL FOUNDATION)

1 A205

HAND SINK

3'-4"

10'-6 1/2"

8'-0"

8'-4 5/8"

8'-4" x 3'-4"
BEVERAGE COUNTER

5'-0"

FOOD ISLAND

4'-0"

END CAP

SEASONS' WALL

4'-2 5/8"

7'-3 1/2"

3'-6"

3'-6"

3'-6"

4'-0"

6'-0"

4'-0"

4'-0"

4'-0"

END CAP

END CAP

END CAP

END CAP

END CAP

END CAP

END CAP

END CAP

6'-8"

ATTENDANT

16'-0"

14'-6"

1'-6"

16'-0"
(ATTENDANTS COUNTER)

4'-11 3/4"

OPEN AIR COOLER

6'-0"

RECESSED ENTRY MAT

LOW SHELVING

16'-1"

16'-5 3/4"

CO-BRAND
138

5'-7 3/8"

11'-1 3/4" R.O. (V.I.F.)

11'-2" R.O. (V.I.F.)

11'-2" R.O. (V.I.F.)

11'-2" R.O. (V.I.F.)

11'-2" R.O. (V.I.F.)

11'-2" R.O. (V.I.F)

4 1/8"

12'-8 1/2"

12'-0"

12'-0"

12'-0"

12'-0"

12'-0"

12'-0"

6'-6"

6'-1 1/4"

4 1/8"

110'-0" (OVERALL FOUNDATION)

1
A207

1
A101
FLOOR PLAN
1/4" = 1'-0"

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A101-FLOOR PLAN


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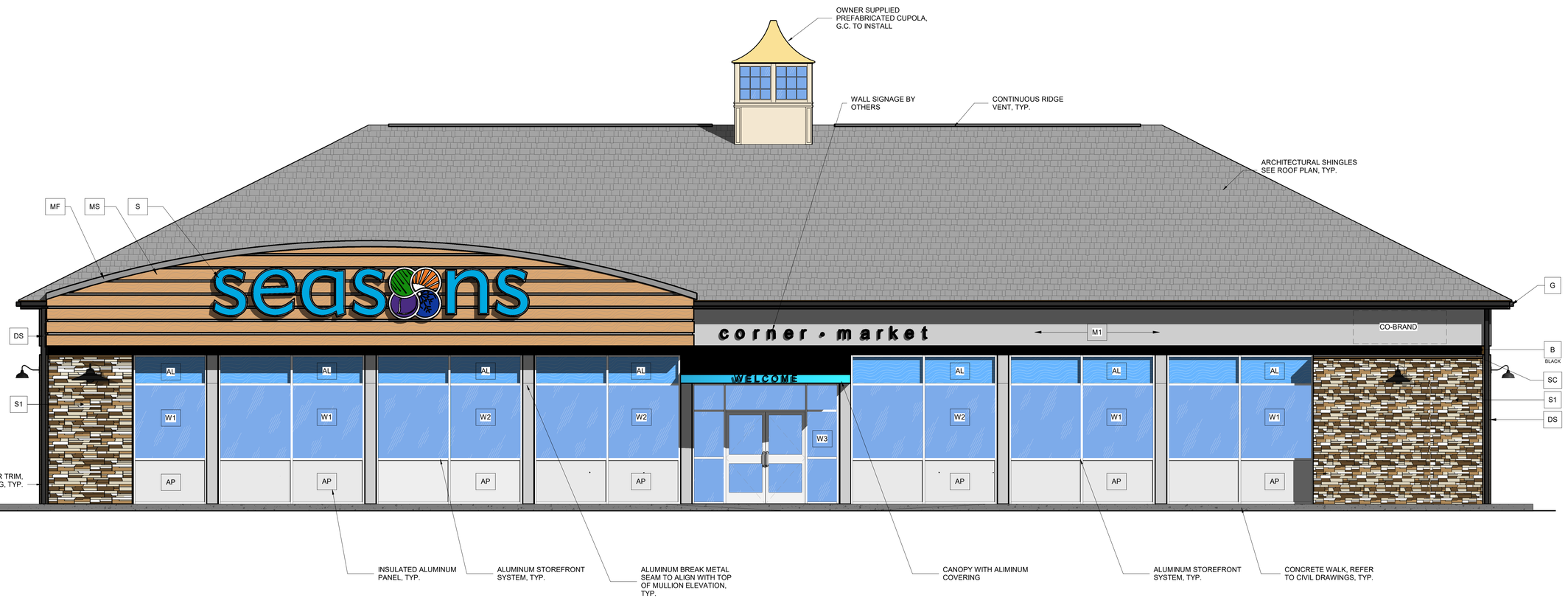
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| DRAWN BY: | MJDC |
| DOCUMENT DATE: | 08/15/25 |

FLOOR PLAN

SHEET:
A101




1 / A207 FRONT ELEVATION

1/4" = 1'-0"

NOTES:

1. REFER TO A601 FOR MATERIAL CALL OUT SPECIFICATION.

2. G.C. IS TO PROVIDE POWER & INSTALL OWNER UED LED ROPE LIGHT (LIGHT WRAPS 4 SIDES OF BUILDING). REFER TO REFLECTED CEILING PLAN FOR ADDITIONAL INFORMATION.

3. ALUMINUM STOREFRONT SYSTEM IS TO BE TEMPERED AS REQUIRED BY CODE, REFER TO "STOREFRONT MATERIAL SPECIFICATIONS" ON SHEET A601 FOR ADDITIONAL INFORMATION.

4. PROVIDE AND INSTALL (2) 8" x 16" SCREENED ALUMINUM VENTS ON BACK SIDE OF SEASONS' ARCH LOCATED AS HIGH AS POSSIBLE.

5. THE GUARDRAIL SYSTEM, COLUMNS, STL PLATES, STL SADDLES, FASCIA BOARDS AND WOOD BEAM AT THE EXTERNAL BASEMENT ACCESS STAIRS SHALL BE PAINTED BLACK

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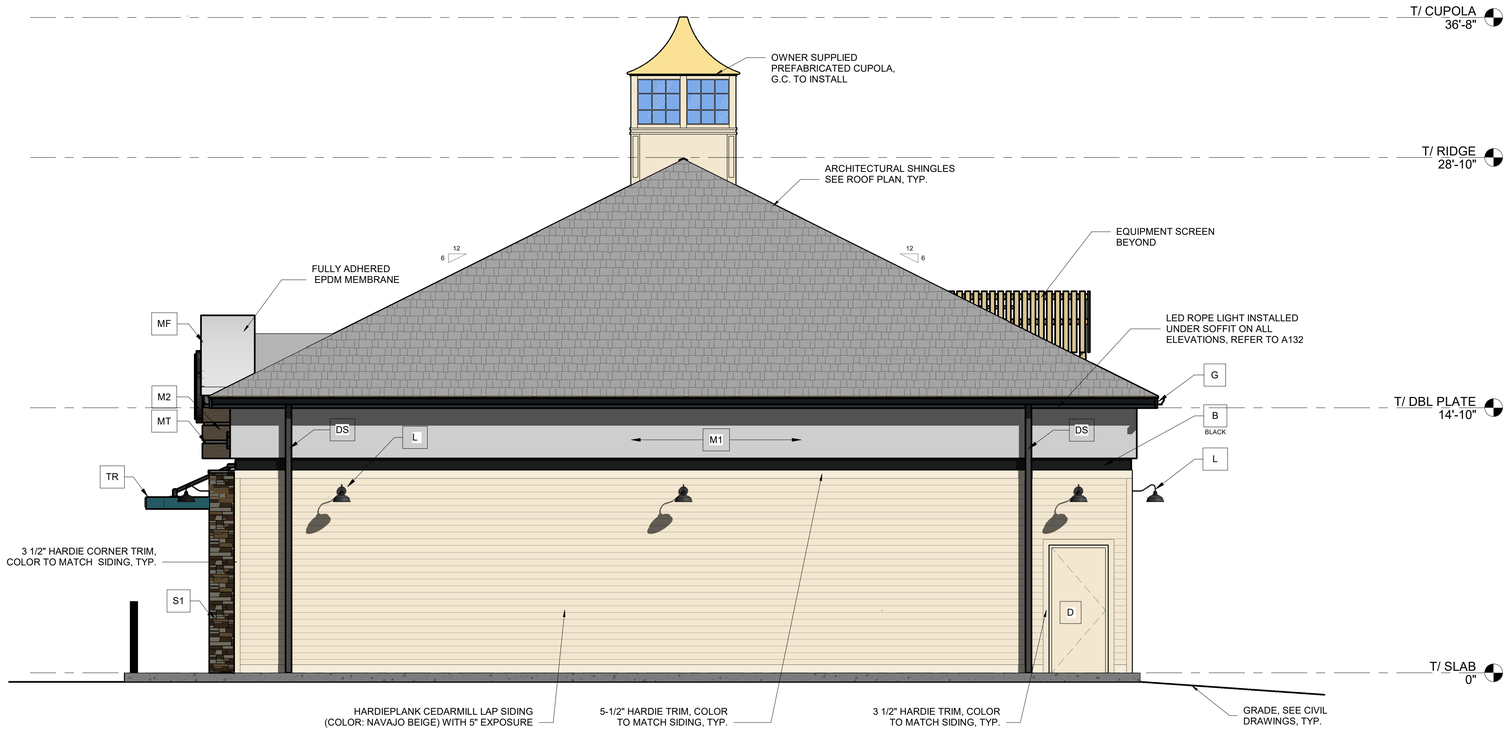
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RENDERED EXTERIOR ELEVATIONS FRONT

SHEET: A207

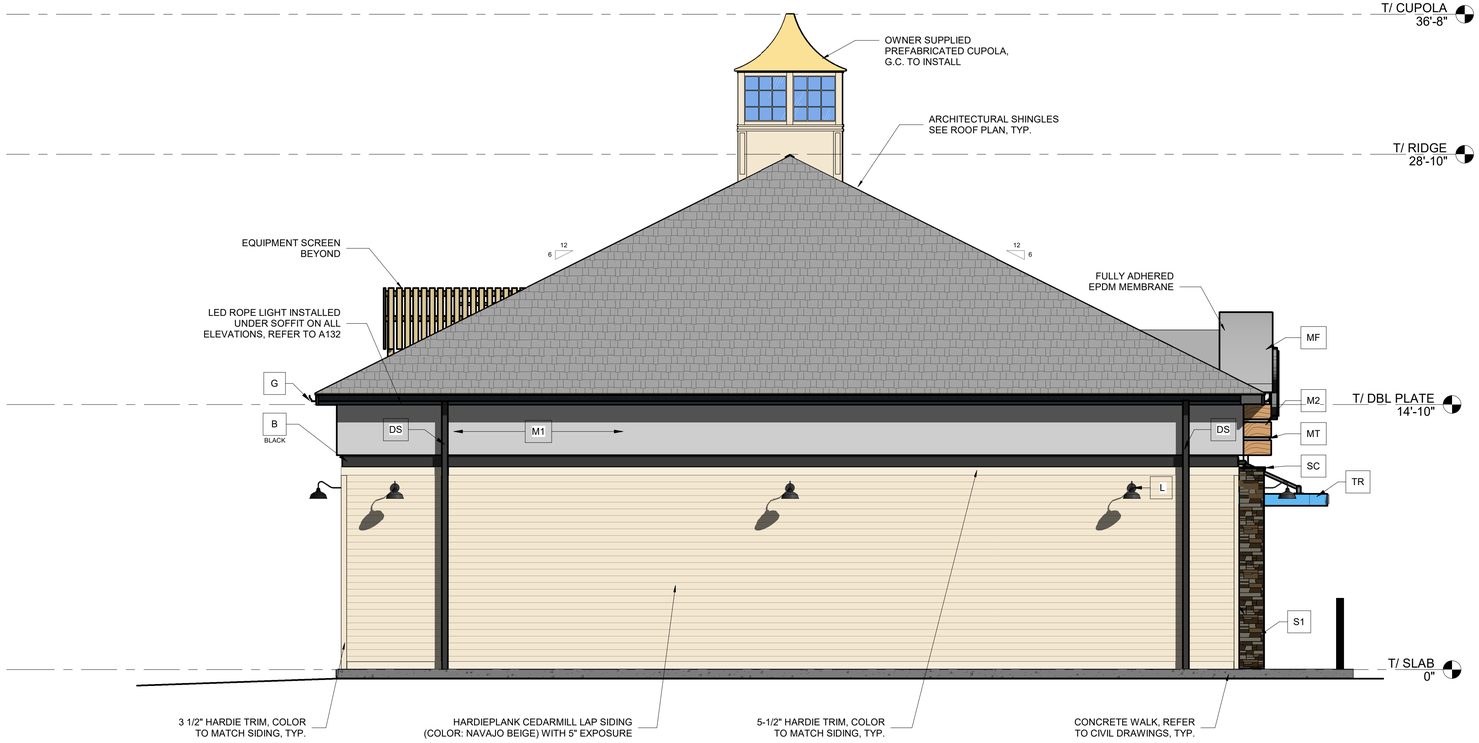
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A207-RENDERED EXTERIOR ELEVATIONS FRONT




1
A205

## RIGHT ELEVATION

1/4" = 1'-0"




2
A205

## LEFT ELEVATION

1/4" = 1'-0"

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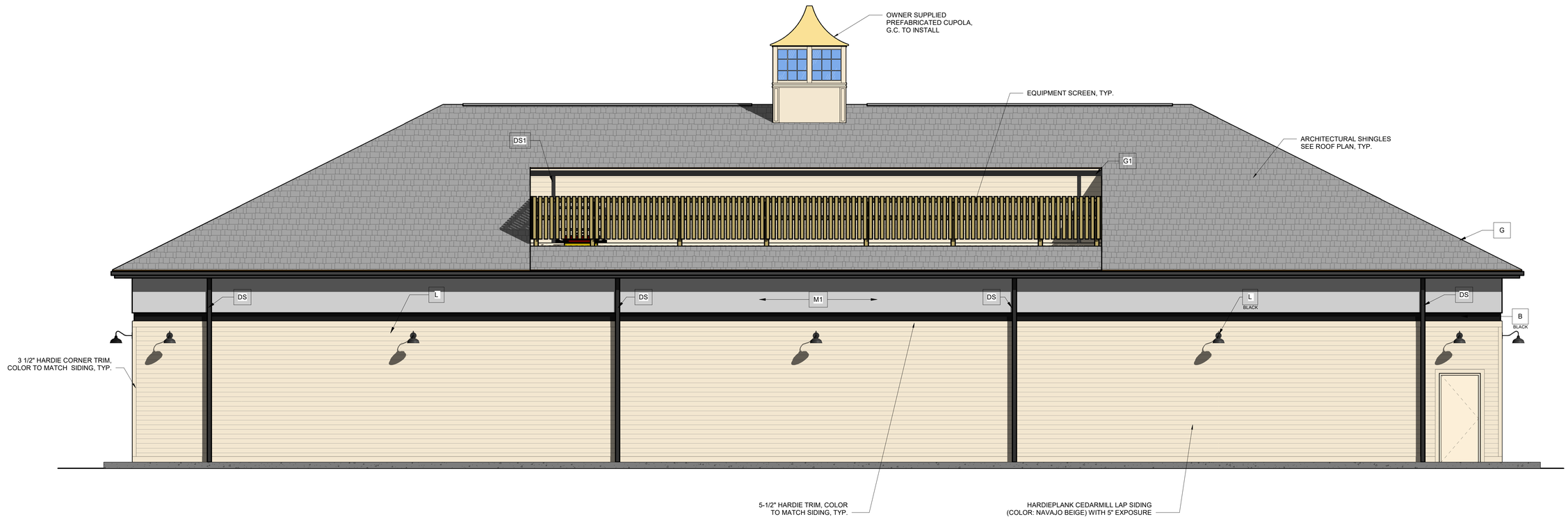
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RENDERED EXTERIOR ELEVATIONS LEFT & RIGHT

SHEET:
A205

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A205-RENDERED EXTERIOR ELEVATIONS LEFT & RIGHT




1
A206

## REAR ELEVATION

1/4" = 1'-0"

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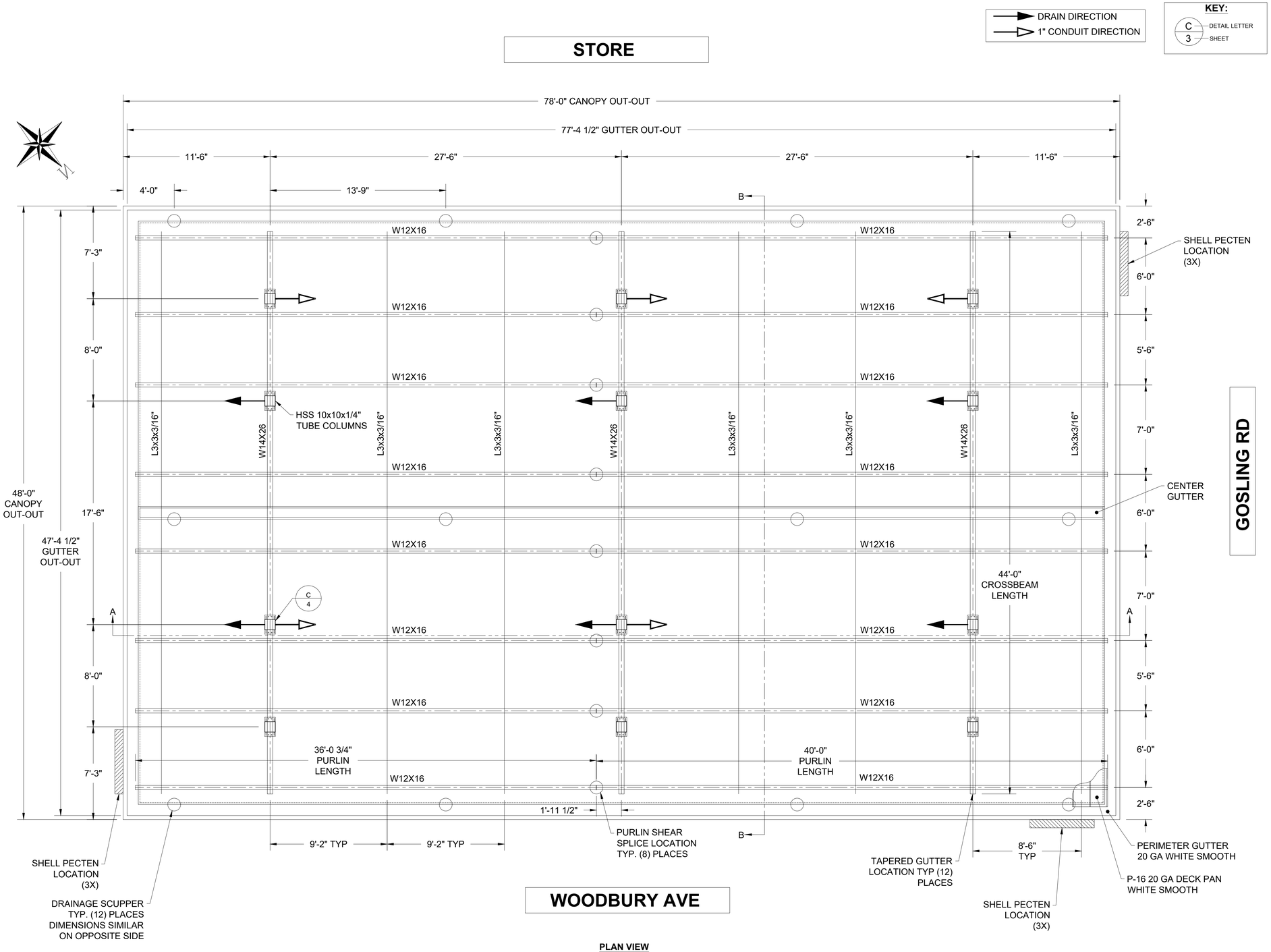
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RENDERED EXTERIOR ELEVATIONS REAR

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A206 RENDERED EXTERIOR ELEVATIONS REAR




**PLAN VIEW**

NOTE:
SECTIONS (A-A) AND (B-B) ARE ON PAGE (2)

# STEEL NOTES:

1. ALL DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE LATEST AISC SPECIFICATIONS DESIGN, FABRICATION, AND ERECTION OF COLD FORMED STEEL SECTIONS SHALL CONFORM TO THE LATEST AISI SPECIFICATIONS.

2. STRUCTURAL MATERIALS:
   WIDE FLANGE SECTIONS - ASTM A992 OR A572 GR 50 (Fy = 50 KSI)
   ANGLES/CHANNELS- ASTM A36 (Fy = 36 KSI)
   HOLLOW STRUCTURAL SECTIONS (TUBE) - ASTM A500 GR B (Fy = 46 KSI)
   PIPE SECTIONS - ASTM A53, GR. B (FY = 35 KSI)
   PLATES - ASTM A36 (Fy = 36 KSI)
   ROOF DECK - ASTM A653, GR. 40 (FY = 40 KSI), GALVANIZED (G60) WITH WITH BAKED ENAMEL FINISH
   STEEL OUTRIGGERS - ASTM A653 GR. CS (FY = 25 KSI), GALVANIZED (G90) PER ASTM 924
   STRUCTURAL BOLTS - ASTM F3125 GR A325
   ANCHOR BOLTS - ASTM F1554 GR. 55; (FY = 55 KSI)

3. WELDING OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH LATEST ANSI/AWS D1.1.

4. FIELD CONNECTIONS SHALL BE BOLTED CONNECTIONS UNLESS SPECIFIED ON DRAWING.

5. ALL STRUCTURAL BOLTED CONNECTIONS SHALL USE ASTM F3125 GR 325 BOLTS. BOLTED JOINTS SHALL BE TIGHTENED TO SNUG TIGHT PER LATEST RCSC SPECIFICATION.

6. STRUCTURAL STEEL SHALL BE SHOP COATED WITH A RED-OXIDE RUST INHIBITIVE PRIMER. FIELD TOUCH-UP, FINISH PAINTING, AND MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE OWNER (UNLESS OTHERWISE SPECIFIED).

# SPECIFIED DESIGN LOADS:

DESIGN LOADS PER 2021 NH STATE BLDG CODE (2021 IBC WITH NYS AMENDMENTS) REQUIREMENTS:

RISK CATEGORY II

CANOPY USE GROUP "M" / CONSTRUCTION TYPE II-B / MEETS REQUIREMENTS OF SECTION 406.7.2

ROOF LIVE LOAD = 30 PSF (ERECTION AND MAINTENANCE ONLY - NO PUBLIC ACCESS)

FLAT ROOF SNOW LOAD = 50 PSF
BASED ON GROUND SNOW LOAD = 50 PSF
Is = 1.0; Ce = 1.0; Ct = 1.2

WIND LOADS:
LATERAL = +/- 25 PSF (MWFRS)(USING 0.6 Wult FOR ASD)
UPLIFT = +/- 20 PSF (MWFRS)(USING 0.6 Wult FOR ASD)
BASED ON 115 MPH ULTIMATE WIND SPEED PER ASCE 7 EXPOSURE "B"
OPEN STRUCTURE (NO INTERNAL PRESSURE)

SEISMIC LOADS:
SITE CLASS "D" ASSUMED; SEISMIC DESIGN CATEGORY "C"
Ie = 1.0
Sds = 0.336G (Ss = 0.328, Fa = 1.538); Sd1 = 0.119G (S1 = 0.075, Fv = 2.4)
SEISMIC FORCE RESISTING SYSTEM IS NON-BLDG INVERTED PENDULUM - CANTILEVERED COLUMN, R = 2
Cs = Sds/(R/Ie) = 0.168; DESIGN BASE SHEAR V = Cs x W = 0.168W = 1.4 KIPS / COL (EQUIVALENT LATERAL FORCE PROCEDURE)

DEAD LOADS:
DECK / GUTTER / LIGHTS - 5 PSF
FASCIA - 15 PLF
STRUCTURAL STEEL - SELF WT
CONCRETE - 145 PCF


AUSTIN MOHAWK
engineered building systems

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FAX: 315.793.9370
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E-MAIL: info@austinmohawk.com


CERTIFIED BY:

LAWRENCE R. PILON, PE
51 MAPLEVIEW DRIVE
PENNELLVILLE, NY 13132
LICENSE # _____

STATE OF NEW HAMPSHIRE — LAWRENCE R PILON No. 9193 LICENSED PROFESSIONAL ENGINEER
25-071 12/5/25

JOB # -

| QUOTE # | DRAWING # |
|---|---|
| Q251158 | 25-071 |

48'-0" X 78'-0" X 12 COLUMN CANOPY

CUSTOMER: COLBEA

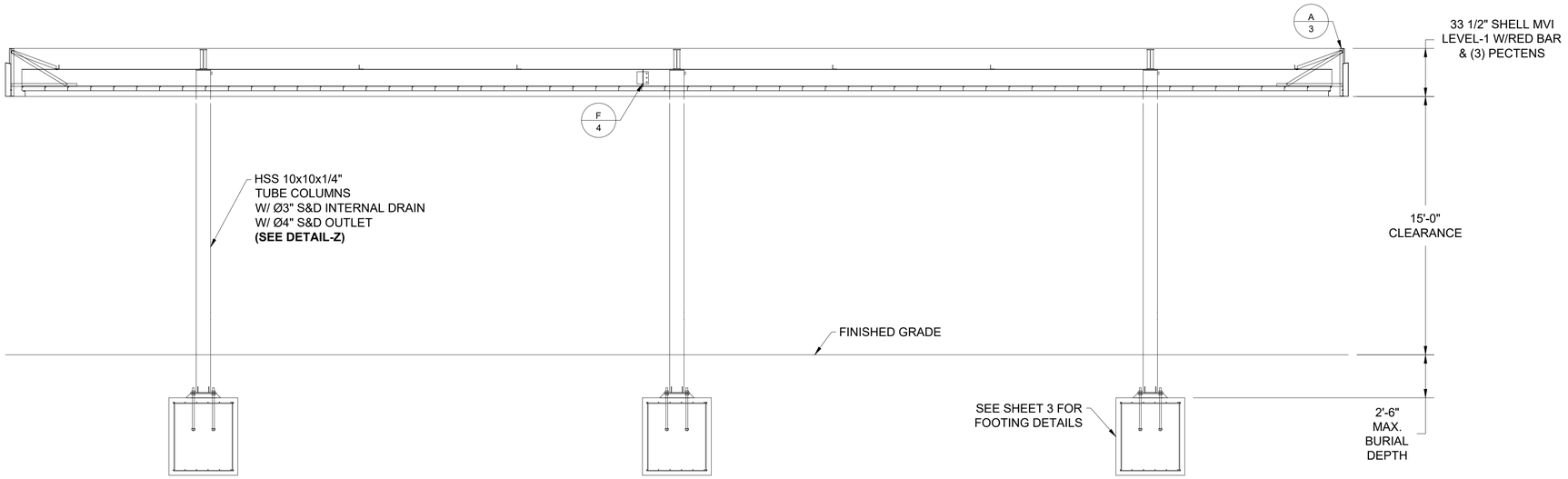
LOCATION: 1980 WOODBURY AVE PORTSMOUTH, NH

| SCALE: N.T.S. | DRAWN BY: DWI |
|---|---|
| DATE: 11.18.25 | SHEET: 1 OF 4 |

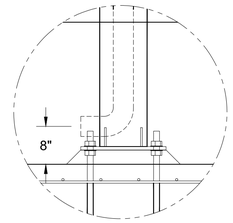

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**KEY:**

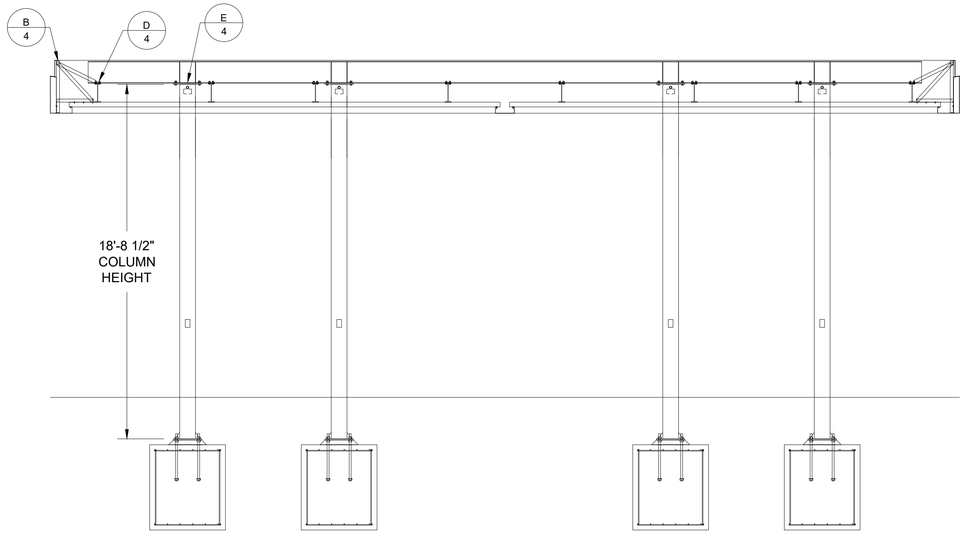
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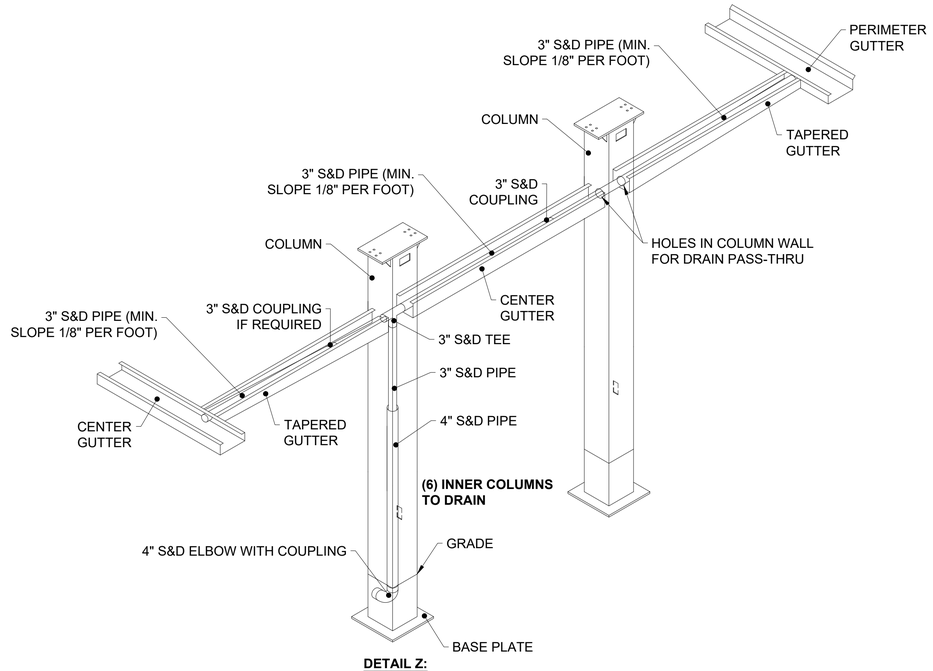

**SECTION A-A**




**DRAIN ELEVATION DETAIL (TYP)**




**SECTION B-B**




**DETAIL Z:**
**INTERNAL DRAIN SYSTEM**

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25-071 12/5/25

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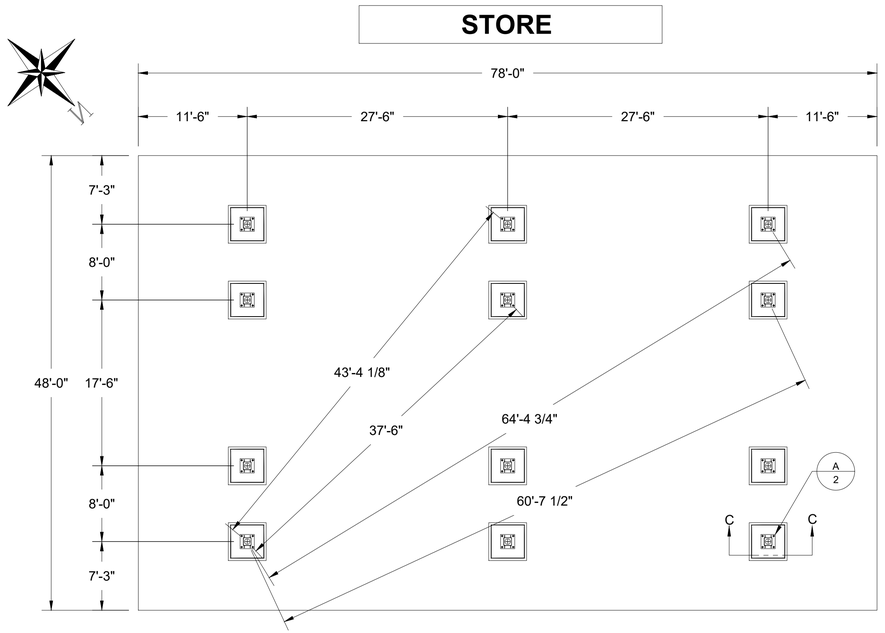
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|---|---|
| Q251158 | 25-071 |

48'-0" X 78'-0" X 12 COLUMN CANOPY

CUSTOMER: COLBEA

LOCATION: 1980 WOODBURY AVE
PORTSMOUTH, NH

| SCALE: N.T.S. | DRAWN BY: DWI |
|---|---|
| DATE: 11.18.25 | SHEET: 2 OF 4 |




GOSLING RD

**KEY:**

C — DETAIL LETTER
3 — SHEET

# FOOTING SPECIFICATIONS:

1) OWNER / GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FOOTING AND ANCHOR BOLT INSTALLATION

2) ALL FOOTINGS SHALL BE CAST ON LEVEL, UNDISTURBED SOIL OR ROCK OR PROPERLY COMPACTED SUBGRADE. BOTTOM OF FOOTING TO BE ABOVE WATER TABLE. FOOTING BASED ON MIN 2000 PSF SOIL BEARING CAPCITY AND 150 PSF PER FOOT OF DEPTH LATERAL BEARING CAPACITY AFTER SITE SOIL IMPROVEMENT HAS BEEN IMPLEMENTED. OWNER/GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL SOIL PARAMETERS.

3) FOOTING CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. FOOTING DESIGN SHALL BE IN ACCORDANCE WITH ACI 318.

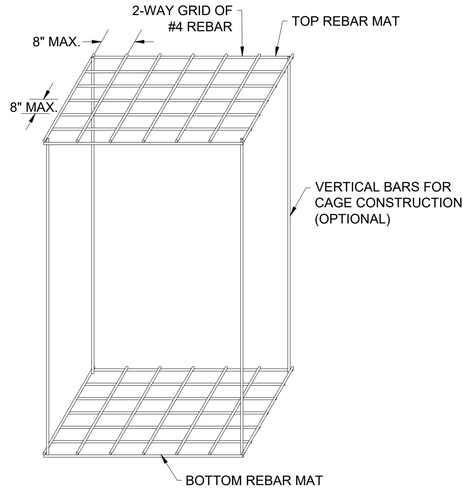
4) THE TOPS OF ALL FOOTINGS MUST BE AT THE SAME ELEVATION, OWNER / GENERAL CONTRACTOR SHALL PROVIDE BURIAL DEPTH FROM HIGH GRADE UNDER CANOPY. WHERE THE TOP OF THE FOOTINGS ARE AT DIFFERENT ELEVATIONS, THE OWNER / GENERAL CONTRACTOR SHALL PROVIDE THE CANOPY MANUFACTURER WITH ALL FOOTING AND GRADE ELEVATIONS PRIOR TO CANOPY FABRICATION. VARIATIONS IN DESIGN ELEVATIONS MAY RESULT IN INADEQUATE CLEARANCE AND UNDER SIZED FOOTINGS.

5) OWNER / GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING NON-SHRINK GROUT UNDER ALL COLUMN BASES AFTER CANOPY IS LEVELED AND SECURED.

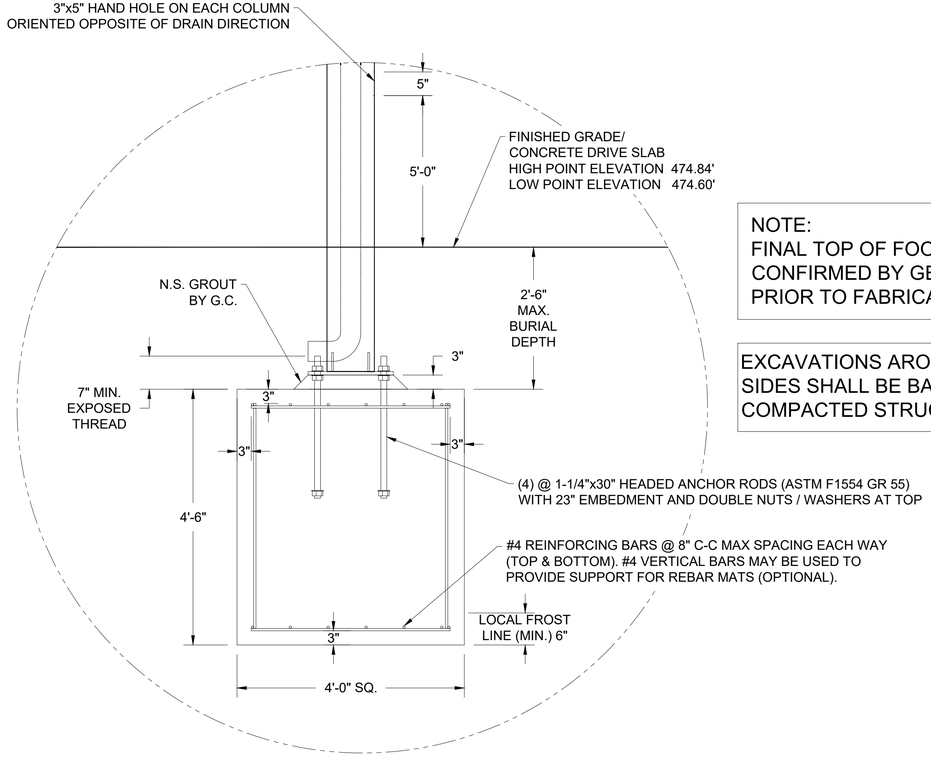
6) FOOTING REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 DEFORMED BILLETSTEEL BARS.

7) FOOTINGS ARE ASSUMED TO BE CONSTRAINED BY CONCRETE FUEL ISLAND AND /OR CONCRETE DRIVE SLAB AT GRADE. WHERE THIS CONDITION DOES NOT EXIST, THE OWNER SHALL NOTIFY CANOPY FABRICATOR.

8) ANCHOR BOLTS SHALL BE PLACED IN ACCORDANCE WITH THIS DRAWING. TEMPLATES SHALL BE USED TO ENSURE PROPER PLACEMENT OF ANCHOR BOLTS. ANCHOR BOLTS ARE TO BE INSTALLED SUCH THAT A MINIMUM OF 7" OF THREAD IS EXPOSED ABOVE TOP OF FOOTING. BOTTOM OF THREADS SHALL NOT END MORE THAN 3/4" ABOVE TOP OF FOOTER.



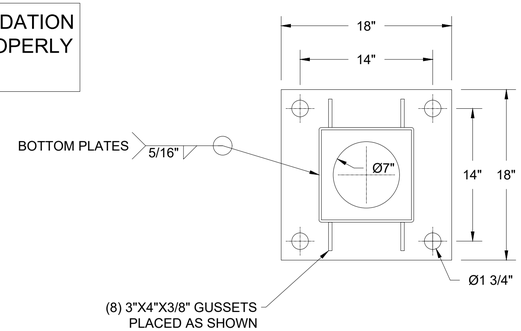

**REBAR CAGE LAYOUT**




**SECTION C-C**

NOTE:
FINAL TOP OF FOOTING ELEVATIONS TO BE CONFIRMED BY GENERAL CONTRACTOR PRIOR TO FABRICATION

EXCAVATIONS AROUND CANOPY FOUNDATION SIDES SHALL BE BACKFILLED WITH PROPERLY COMPACTED STRUCTURAL FILL




**DETAIL A**
**BASEPLATE DETAIL**
**18X18X3/4"**

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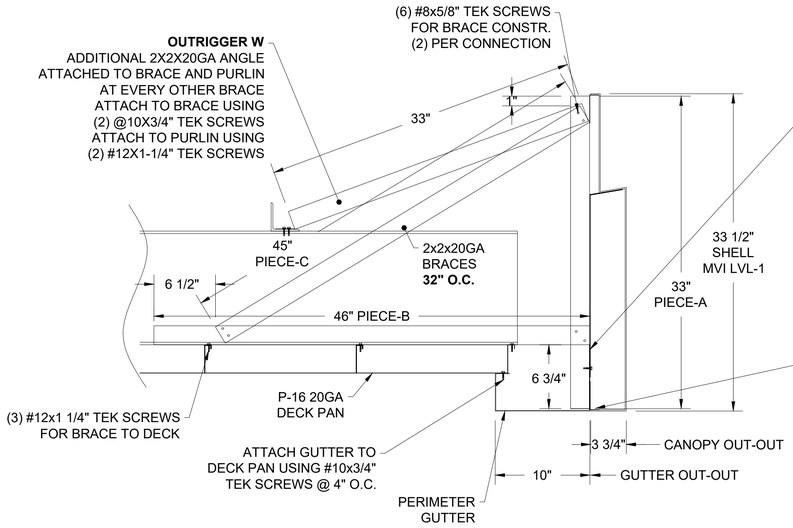
48'-0" X 78'-0" X 12 COLUMN CANOPY

CUSTOMER: COLBEA

LOCATION: 1980 WOODBURY AVE PORTSMOUTH, NH

| SCALE: N.T.S. | DRAWN BY: DWI |
|---|---|
| DATE: 11.18.25 | SHEET: 3 OF 4 |

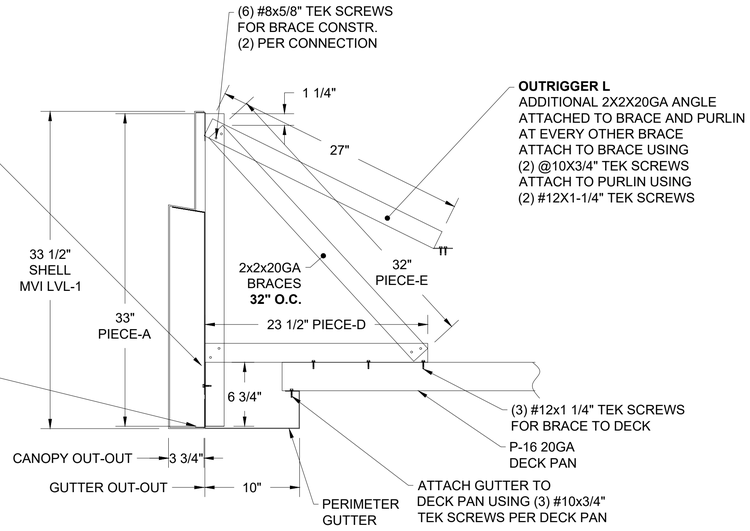
**KEY:**
C — DETAIL LETTER
3 — SHEET



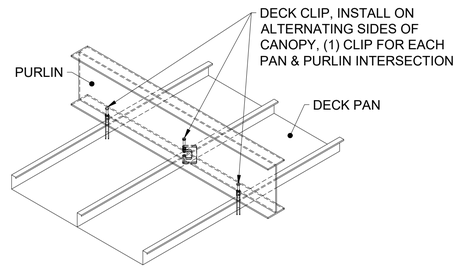

**DETAIL A:**
**48'-0" SIDE FASCIA BRACE DETAIL**

**CAULK JOINT BETWEEN GUTTER TOP EDGE AND BACK OF GALV BACKER AROUND ENTIRE PERIMETER OF CANOPY**

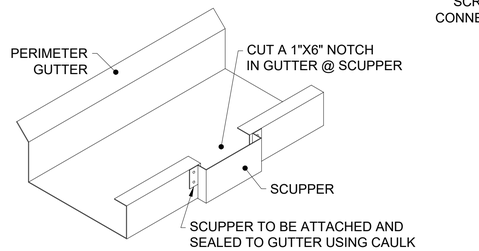
SEE SHELL INSTALL INSTRUCTIONS



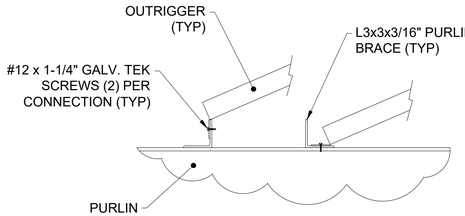

**DETAIL B:**
**78'-0" SIDE FASCIA BRACE DETAIL**



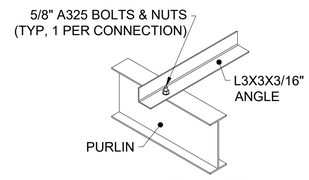

**DECK CLIP DETAIL**



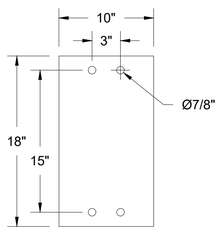

**SCUPPER DETAIL**



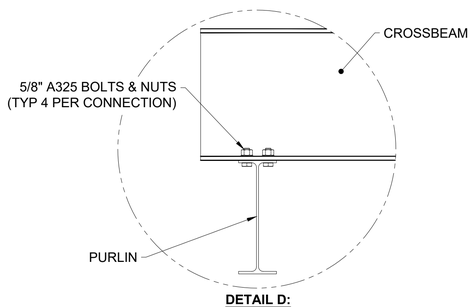

**OUTRIGGER-W TO ANGLE CONNECTION OPTIONS**



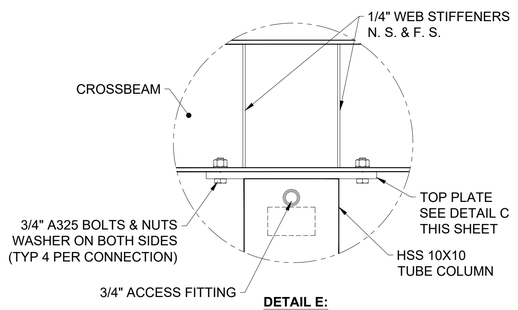

**ANGLE BRACE DETAIL**



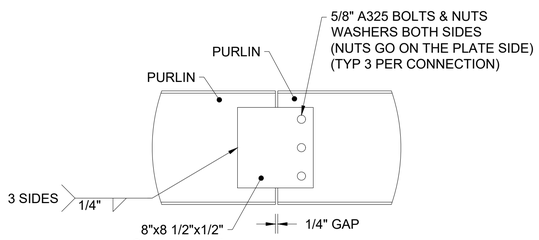

**DETAIL C**
**10 X18X3/4"**
**TOP PLATE**




**DETAIL D:**
**PURLIN TO CROSSBEAM DETAIL**




**DETAIL E:**
**CROSSBEAM TO COLUMN DETAIL**




**DETAIL F:**
**PURLIN SHEAR SPLICE CONNECTION DETAIL**

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25-071 12/8/25

JOB # -

| QUOTE # | DRAWING # |
|---|---|
| Q251158 | 25-071 |

48'-0" X 78'-0" X 12 COLUMN CANOPY

CUSTOMER: COLBEA

LOCATION: 1980 WOODBURY AVE PORTSMOUTH, NH

| SCALE: N.T.S. | DRAWN BY: DWI |
|---|---|
| DATE: 11.18.25 | SHEET: 4 OF 4 |

ALTUS ENGINEERING

Civil
Site Planning
Environmental
Engineering

133 Court Street
Portsmouth, NH
03801-4413

January 20, 2026

Peter Britz, Planning and Sustainability Director
City of Portsmouth Municipal Complex
1 Junkins Avenue
Portsmouth, New Hampshire 03801

**Re: Planning Board submission**
**Assessor's Map 230, Lot 22**
**409 Lafayette Road**
**Altus Project No. 5698**

Dear Peter,

On behalf of Nicola and William Douglass, Owners and Applicants, Altus Engineering submits an application to the Portsmouth Planning Board for a two lot subdivision at 409 Lafayette Road. The Douglass' are proposing to subdivide the ±30,398 SF lot into two residential building lots. The front parcel has street frontage on Lafayette Road. The rear parcel lacks street frontage. Both parcels will be accessed via the existing 50-foot-wide easement to the south of the lots.

On September 16, 2025, the Board of Adjustment granted zoning relief to allow the second lot without street frontage. On January 6th, the Technical Advisory Committee voted to recommend approval with the following stipulations:

1. Install address placard before the back building is built.
   *Note 14 has been added to the Recording Subdivision Plan requiring the installation of the placard.*
2. Work with Assessing Department for map and lot number and add to plan before submittal to the Planning Board.
   *We have contacted both DPW and the Assessing Department. We have added both the Tax Map and Lot as well as the new street address to the Recording Subdivision Plan.*
3. Fix the note about the 4" pvc sewer lateral.
   *The typographical error referencing the incorrect pipe size has been corrected at the sewer service connection.*
4. Show the proposed power hook up for the new lot and review with DPW prior to Planning Board submittal.
   *The proposed electrical service connection location is now shown on the Utility Plan. A request with Eversource has been made to confirm that connection can be made from the pole.*
5. That relevant waivers are requested from the Subdivision Ordinance.
   *It is Altus' opinion that no waivers are required. Altus confirmed the same with Peter Stith.*

Enclosed please find the following for the Planning Board's consideration:

- Subdivision Application Checklist
- Letter of Authorization
- Recorded deed
- Legal opinion regarding access to the rear parcel across the right-of-way
- Subdivision Plans
    - Existing Conditions Plan
    - Subdivision Plan
    - Utilities Plan
    - Detail Sheet
- Fire Truck Turning Template.

Please feel free to call or email me directly should you have any questions or need any additional information.

Respectfully,

**ALTUS ENGINEERING LLC**



Enclosure

eCopy: Nikki and Bill Douglass
Derek Durbin, Esq.

wde/5698 pb cvr ltr.docx

# Findings of Fact | Subdivision Rules and Regulations
## City of Portsmouth Planning Board

Date: February 19, 2026
Property Address: 409 Lafayette Road
Application #: LU-25-126
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**<br>**Does Not Meet** | Applicable standards:<br>The project meets all the applicable Ordinances, Codes, and Regulations. |
| 2 | **SECTION V - REQUIREMENTS FOR FINAL PLAT** | **Meets**<br>**Does Not Meet** | The final plan will be submitted on mylar. The plan includes all of the information required for final approval and meets the standard for recording at the registry of deeds. |
| 3 | **SECTION VI - GENERAL REQUIREMENTS** | **Meets**<br>**Does Not Meet** | The subdivision was granted a variance to deviate from the lot frontage requirements. In all other ways, the application meets the general requirements of the regulations. No new public infrastructure is proposed. |
| 4 | **SECTION VII - DESIGN STANDARDS** | **Meets**<br>**Does Not Meet** | The development does not require the construction of any streets or public ways for access. Drainage improvements for the new house lot will be designed when the lot is developed. Utility services have been designed and reviewed by TAC. |

DRAFT

| | Subdivision Review Criteria | Finding (Meets Standards/ Requirements) | Supporting Information |
|---|---|---|---|
| **5** | **<u>Other Board Findings:</u>** | | |

DRAFT

# 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: Nicola & William Douglass Date Submitted: 12-19-25

Applicant: Same

Phone Number: 603-557-0834 E-mail: nikkidouglass@thedouglassgroup.com

Site Address 1: 409 Lafayette Road Map: 230 Lot: 22

Site Address 2: Portsmouth, NH 03801 Map: ____ Lot: 22

| 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 | N/A |
| ✔ | All application documents, plans, supporting documentation and other materials provided in digital Portable Document Format (PDF) on compact disc, DVD or flash drive. **(III.C.4)** | Uploaded to viewpoint | N/A |

| Requirements for Preliminary/Final Plat | | | | |
|---|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Required for Preliminary / Final Plat** | **Waiver Requested** |
| ✔ | Name and address of record owner, any option holders, descriptive name of subdivision, engineer and/or surveyor or name of person who prepared the plat. **(Section IV.1/V.1)** | See title block and notes on plans | ☑ Preliminary Plat<br>☑ 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**<br>Names and addresses of all adjoining property owners. **(Section IV.2)**<br>**Final Plat**<br>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)** | Filing for preliminary and final at same time. On Subdivision plan | ☑ Preliminary Plat<br>☑ Final Plat | N/A |
| ✔ | North point, date, and bar scale. **(Section IV.3/V3)** | Required on all Plan Sheets | ☑ Preliminary Plat<br>☑ Final Plat | N/A |
| ✔ | Zoning classification and minimum yard dimensions required. **(Section IV.4/V.4)** | Filing for preliminary and final at same time. On Subdivision plan | ☑ Preliminary Plat<br>☑ Final Plat | N/A |
| ✔ | **Preliminary Plat**<br>Scale (not to be smaller than one hundred (100) feet = 1 inch) and location map (at a scale of 1" = 1000'). **(Section IV.5)**<br>**Final Plat**<br>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)** | Filing for preliminary and final at same time. On Subdivision plan | ☑ Preliminary Plat<br>☑ 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)** | Filing for preliminary and final at same time. On Subdivision plan | ☑ Preliminary Plat<br>☑ 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)** | Filing for preliminary and final at same time. On Subdivision plan | ☑ Preliminary Plat<br>☑ 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)** | Filing for preliminary and final at same time. On Subdivision plan | ☑ Preliminary Plat<br>☑ 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)** | See existing conditions survey. All relevant features are depicted on the plans.<br><br>No wetlands are on the property or adjacent to the | ☑ Preliminary Plat<br>☑ Final Plat | |
| ✔ | **Preliminary Plat**<br>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)**<br>**Final Plat**<br>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)** | See existing conditions plan and utilities plan. No hydrants or extensions of public infrastructure is proposed.<br><br>No new streets are proposed.<br><br>Drainage improvements will be included as part of the lot development plans prior to the issuance of a building | ☑ Preliminary Plat<br>☑ 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)** | Not applicable | ☑ Preliminary Plat<br>☑ Final Plat | |
| ✔ | Base flood elevation (BFE) for subdivisions involving greater than five (5) acres or fifty (50) lots. **(Section IV.11)** | Parcel is not in a flood plain.<br><br>development is less than 50 lots. | ☑ Preliminary Plat<br>☑ 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)** | No applicable.<br><br>However, 2 foot contours are shown on the existing conditions survey plan.<br><br>No grading is proposed. | ☑ Preliminary Plat<br>☑ Final Plat | |

| Requirements for Preliminary/Final Plat | | | | |
|---|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Required for Preliminary / Final Plat** | **Waiver Requested** |
| ✔ | Dates and permit numbers of all necessary permits from governmental agencies from which approval is required by Federal or State law. **(Section V.10)** | No State permits are required. Not applicable | ☐ 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)** | Not applicable | ☐ Preliminary Plat ☑ Final Plat | |
| ✔ | Location of all permanent monuments. **(Section V.12)** | On 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)**<br>a. Conformity to Official Plan or Map<br>b. Hazards<br>c. Relation to Topography<br>d. Planned Unit Development | Not applicable.<br>Parcel is not in a flood hazard zone. | |
| ✔ | **2. Lots: (VI.2)**<br>a. Lot Arrangement<br>b. Lot sizes<br>c. Commercial and Industrial Lots | Variance granted for lot configuration without frontage. | |
| ✔ | **3. Streets: (VI.3)**<br>a. Relation to adjoining Street System<br>b. Street Rights-of-Way<br>c. Access<br>d. Parallel Service Roads<br>e. Street Intersection Angles<br>f. Merging Streets<br>g. Street Deflections and Vertical Alignment<br>h. Marginal Access Streets<br>i. Cul-de-Sacs<br>j. Rounding Street Corners<br>k. Street Name Signs<br>l. Street Names<br>m. Block Lengths<br>n. Block Widths<br>o. Grade of Streets<br>p. Grass Strips | Not applicable.<br><br>No new street are proposed. | |
| ✔ | **4. Curbing: (VI.4)** | Not applicable | |
| ✔ | **5. Driveways: (VI.5)** | No new driveways are prop. | |
| ☐ | **6. Drainage Improvements: (VI.6)** | No new drainage is proposed | |
| ☐ | **7. Municipal Water Service: (VI.7)** | House service is shown on the plans | |
| ☐ | **8. Municipal Sewer Service: (VI.8)** | House service is shown on the plans | |
| ☐ | **9. Installation of Utilities: (VI.9)**<br>a. All Districts<br>b. Indicator Tape | Proposed house utility services are shown on the plans. | |
| ✔ | **10. On-Site Water Supply: (VI.10)** | Not applicable | |
| ✔ | **11. On-Site Sewage Disposal Systems: (VI.11)** | Not applicable | |
| ✔ | **12. Open Space: (VI.12)**<br>a. Natural Features<br>b. Buffer Strips<br>c. Parks<br>d. Tree Planting | Not applicable | |
| ✔ | **13. Flood Hazard Areas: (VI.13)**<br>a. Permits<br>b. Minimization of Flood Damage<br>c. Elevation and Flood-Proofing Records<br>d. Alteration of Watercourses | Not applicable.<br><br>Site is not in a flood hazard zone. | |
| ✔ | **14. Erosion and Sedimentation Control (VI.14)** | To be provided with lot develop.plans | |

| ☑ | Required Items for Submittal | Item Location (e.g. Page/line or Plan Sheet/Note #) | Waiver Requested |
|---|---|---|---|
| ☑<br>☑<br>☐ | **15. Easements (VI.15)**<br>a. Utilities<br>b. Drainage | Shown on the subdivision plan | |
| ☑ | **16. Monuments: (VI.16)** | On Subdivision plan | |
| ☑ | **17. Benchmarks: (VI.17)** | on Existing Conditions survey | |
| ☑ | **18. House Numbers (VI.18)** | To be shown on recording mylar | |

| 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).**<br>a. Clearing<br>b. Excavation<br>c. Rough Grade and Preparation of Sub-Grade<br>d. Base Course<br>e. Street Paving<br>f. Side Slopes<br>g. Approval Specifications<br>h. Curbing<br>i. Sidewalks<br>j. Inspection and Methods | Not applicable | |
| ☑ | **2. Storm water Sewers and Other Drainage Appurtenances have been designed according to the design standards required under Section (VII.2).**<br>a. Design<br>b. Standards of Construction | No drainage infrastrucutre is proposed.<br>Stormwater management for lot development to be provided with lo development plan | |
| ☑ | **3. Sanitary Sewers have been designed according to the design standards required under Section (VII.3).**<br>a. Design<br>b. Lift Stations<br>c. Materials<br>d. Construction Standards | House service plan is shown on Utility Plan | |
| ☑ | **4. Water Mains and Fire Hydrants have been designed according to the design standards required under Section (VII.4).**<br>a. Connections to Lots<br>b. Design and Construction<br>c. Materials<br>d. Notification Prior to Construction | House water service is shown on Utility Plan | |

**Applicant's/Representative's Signature:** Eric D. Weinrieb PE **Date:** 12-19-25

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

dotloop signature verification: dtlp.us/A2Gr-821z-sBcp

# Letter of Authorization

Nicola and William Douglas, hereby authorize Altus Engineering, LLC to represent us as the Applicant in all matters concerning engineering and related permitting for Assessors Map 230, Lot 22 located at 409 Lafayette Road 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.

| | | |
|---|---|---|
| Nicola Douglass dotloop verified 11/20/25 3:56 PM EST XNIA-ASFQ-MVPP-VMZO | Nicola Douglass | 11/20/2025 |
| Signature | Print Name | Date |
| William Douglass dotloop verified 11/20/25 3:57 PM EST 4PIX-PFKR-EECQ-GTAJ | William Douglass | 11/20/2025 |
| Witness | Print Name | Date |
| William Douglass dotloop verified 11/20/25 3:57 PM EST 6I3L-WKU4-2D20-6XEQ | William Douglass | 11/20/2025 |
| Signature | Print Name | Date |
| Nicola Douglass dotloop verified 11/20/25 3:56 PM EST YJWG-4MEF-SQBR-W87X | Nicola Douglass | 11/20/2025 |
| Witness | Print Name | Date |

E # 25041466 12/05/2025 10:27:00 AM
Book 6669 Page 1482 Page 1 of 2
Register of Deeds, Rockingham County

Return to:
William K. Douglass
Nicola D. Douglass
45 Artwill Avenue
Portsmouth, NH 03801

| | | |
|---|---|---|
| LCHIP | ROA726129 | 25.00 |
| TRANSFER TAX | RO140564 | 14,250.00 |
| RECORDING | | 14.00 |
| SURCHARGE | | 2.00 |

# WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that **CABN Properties, LLC**, a New Hampshire Limited Liability Company, with a mailing address of 660 Middle Street, Portsmouth, NH 03801, for consideration paid grant(s) to **William K. Douglass and Nicola D. Douglass** with a mailing address of 45 Artwill Avenue, Portsmouth, NH 03801, **as joint tenants with rights of survivorship**, with WARRANTY COVENANTS:

A certain parcel of land, consisting of two tracts, with the buildings thereon, situate on Lafayette Road, so-called, in the City of Portsmouth, County of Strafford and State of New Hampshire, bounded and described as follows:

TRACT I:

A certain plot of land with the buildings thereon, situate on the Easterly side of Lafayette Road in the City of Portsmouth, in the County of Rockingham and State of New Hampshire, bounded and described as follows, viz:

Beginning at the Northwesterly corner of the granted premises on the Easterly side of Lafayette Road, at Land now or formerly of the Screven Memorial Baptist Church; thence running southerly by Lafayette Road one hundred (100) feet to a corner at land of J. Philip McCaffery and Celestine McCaffery; thence turning and running Easterly by McCaffery's land one hundred thirty-five (135) feet to a point; thence turning and running Northerly parallel to Lafayette Road by McCaffery's land one hundred (100) feet to land of Screven Memorial Baptist Church; thence turning and running Westerly by said Church land one hundred thirty-five (135) feet to the point of beginning.

TRACT II:

A certain parcel of land with any buildings thereon, situate in the City of Portsmouth, County of Rockingham and State of New Hampshire, and bounded and described as follows:

Westerly by land now or formerly of Lester A. Pettis and Priscilla M. Pettis, bearing N 21° 15' 21" E, a distance of 100 feet, northerly by Screven Memorial Baptist Church, bearing S 79° 23' 39" E,

a distance of 175.8 feet, more or less; Easterly by the Church of Jesus Christ of Latter Day Saints, bearing S 22° 05' 21" W, a distance of 100.28 feet; Southerly by other land of McCaffrey, bearing N 79° 23' 39" W, a distance of 174.32 feet.

Meaning and intending to describe and convey Lot No. 3 as shown on "Subdivision Plan of Land of J. Philip McCaffery for Great Bay School and Training Center Lafayette Rd. County of Rockingham Portsmouth, N.H." dated December 1981 , revised through January 7, 1982, by Richard P. Millette and Associates, approved by the Portsmouth Planning Board on January 8, 1982 and recorded in the Rockingham County Registry of Deeds as Plan No. D-10590. Said Lot 3 contains 0.70 acres, according to said Plan.

There is also granted herewith an easement right of way for vehicular and pedestrian passage of 50 feet in width; this right of way is to be used in common with the owners of the Pettis land and with the owners of Lots One, Two and Three of said Plan and shall run with the land as shown on aforesaid Millette plan.

Meaning and intending to describe and convey the same premises conveyed to CABN Properties, LLC by deed dated June 27, 2025, and recorded in the Rockingham County Registry of Deeds in Book 6630, Page 1204.

This is not homestead property.

Executed this 4th day of December 2025.

**CABN Properties, LLC**

By: _____
Kevin L. Coyle, duly authorized Member

State of New Hampshire
County of ~~Rockingham~~ Strafford

Then personally appeared before me on this 4th day of December 2025, the said Kevin L. Coyle, duly authorized Member of CABN Properties, LLC and acknowledged the foregoing to be his/her/their voluntary act and deed.

_____
~~Notary Public~~

Jeffrey S. Childers
Notary-Name Printed

My commission expires: 7/14/2026

(seal)

JEFFREY S. CHILDERS
NOTARY PUBLIC
State of New Hampshire
My Comm. Expires July 14, 2026

DURBIN LAW

Derek R. Durbin, Esq.
603.287.4764
derek@durbinlawoffices.com

December 18, 2025

City of Portsmouth Planning Board
Technical Advisory Committee
1 Junkins Avenue
Portsmouth, NH 03801

Re: Opinion Letter - 409 Lafayette Road Access Rights

Dear TAC Members:

This office was asked to prepare an opinion letter regarding the access rights to Proposed Tax Map 230 Lot 22-2, in relation to the proposed subdivision of the property at 409 Lafayette Road (the "Property"). The Property is comprised of two deeded lots of record ("front lot" and "rear lot"), although it is shown as only one parcel of land on the City's tax map. **Exhibit A**. Both deeded parcels of land were commonly owned and taxed as one prior to the recent sale of the lots. The Applicant is proposing is a re-subdivide the parcels into a configuration that is more conforming to the dimensional requirements of the Zoning Ordinance than the current configuration of the lots. The Zoning Board of Adjustment ("ZBA") granted approval to allow for 0' of continuous street frontage for Lot 22-2.

The rear lot originated from a recorded subdivision plan entitled, "Subdivision Plan of Land of J. Philip McCaffery for Great Bay School and Training Center, Lafayette Road, County of Rockingham, Portsmouth NH," dated December 1981, prepared by Richard P. Millette and Associates, recorded in said Registry as Plan #D-10590 (the "Millette Plan"). The Plan depicted a subdivision of the McCaffery property into three lots and also showed the front lot, which was not part of the subdivision, but which had been formerly conveyed by McCaffery to Lester and Priscilla Pettis. The Millette Plan also depicts the 50' right of way across Lot 1 to benefit Lots 2 and 3. Both the front lot and the rear lot comprising the Property have historically been conveyed together with the right of way, "to be used in common with the owners of the Pettis land and with the owners of lots One, Two and Three of said Plan, and shall run with the land as shown on the aforesaid Millette plan." *See* **Exhibit A**. Both lots rely exclusively on the right of way for access from Lafayette Road, with the right of way extending directly to the driveway to the residence located on the front lot per City GIS records. Taken together with the language in the deed contained in historical conveyances, it is clear that both lots comprising the Property are benefitted by the appurtenant easement for access. Technically speaking, access to Lot 22-2 will be achieved through a driveway access across Lot 22-1.

There is no question that the Applicant, CABN Properties, LLC, has the ability to convey the re-subdivided Proposed Tax Map 230, Lot 22-1 and Lot 22-2, with access via the 50' right of way. New Hampshire law is clear that once an easement has become appurtenant to a dominant estate, a conveyance of that estate carries with it the easement belonging to it, whether mentioned in the deed or not. *Burcky v. Knowles*, 120 N.H. 244, 250 (1980). Subsequent minor alterations in lot lines among the dominant or servient properties do not affect the validity or existence of an

easement, so long as the scope and intent of the easement remains the same. *Mansur v. Muskopf*, 159 N.H. 216, 222 (2009). There is no change to the character or use of the established 50' right of way by the subsequent conveyance of the re-subdivided lots, despite the minor reconfiguration of the lot lines. Accordingly, as owner of the dominant estate benefited by the appurtenant easement, the Applicant has unqualified ability to convey title to both lots together with the benefit of the right of way for access.

Should you have any questions, please feel free to contact this office.

Sincerely,



Derek R. Durbin, Esq.

EXHIBIT A



E # 25020228 06/27/2025 10:55:26 AM
Book 6630 Page 1204 Page 1 of 3
Register of Deeds, Rockingham County

| | | |
|---|---|---|
| LCHIP | ROA710626 | 25.00 |
| TRANSFER TAX | RO137011 | 10,425.00 |
| RECORDING | | 18.00 |
| SURCHARGE | | 2.00 |

# QUITCLAIM DEED

**KNOW ALL PERSONS BY THESE PRESENTS THAT, Scott D. Pettis, as Trustee of the Priscilla H. Pettis Revocable Trust of 2004 u/t/d May 6, 2004,** with a mailing address of 409 Lafayette Road, City of Portsmouth, County of Rockingham and the State of New Hampshire 03801;

For consideration paid, grants to **CABN PROPERTIES, LLC** a New Hampshire Limited Liability Company with an address of 660 Middle Street, City of Portsmouth, County of Rockingham, and State of New Hampshire 03801 with WARRANTY covenants, the following:

**Parcel 1:**

A certain plot of land with the buildings thereon, situate on the Easterly side of Lafayette Road in Portsmouth, in the County of Rockingham and State of New Hampshire, bounded and described as follows, viz:

Beginning at the Northwesterly corner of the granted premises on the Easterly side of Lafayette Road, at Land now or formerly of the Screven Memorial Baptist Church; thence running southerly by Lafayette Road one hundred (100) feet to a corner at land of J. Philip McCaffery and Celestine McCaffery; thence turning and running Easterly by McCaffery's land one hundred thirty-five (135) feet to a point; thence turning and running Northerly parallel to Lafayette Road by McCaffery's land one hundred (100) feet to land of Screven Memorial Baptist Church; thence turning and running Westerly by said Church land one-hundred thirty-five (135) feet to the point of beginning.

**Parcel 2:**

A certain parcel of land with any buildings thereon, situate in Portsmouth, County of Rockingham and State of New Hampshire, and bounded and described as follows, and identified as lot Three on Subdivision Plan of Land of J. Philip McCaffery for Great Bay School and Training Center, dated December, 1981, with Revision 1 dated January 7, 1982, by Richard P. Millette and Associates, recorded in the Rockingham County Registry of Deeds as Plan D-10590, said land being bounded as follows:

Westerly by land now or formerly of Lester A. Pettis and Priscilla M. Pettis, bearing N 21° 15′ 21″ E, a distance of 100 feet, northerly by Screven Memorial Baptist Church, bearing S 79° 23′ 39″ E, a distance of 175.8 feet, more or less; Easterly by the Church of Jesus Christ of Latter Day Saints, bearing S 22° 05′ 21″ W, a distance of 100.28 feet; Southerly by other land of McCaffrey, bearing N 79° 23′ 39″ W, a distance of 174.32 feet.

There is also granted herewith an easement right of way for vehicular and pedestrian passage of 50 feet in width; this right of way is to be used in common with the owners of the Pettis land and with the owners of lots One, Two and Three of said Plan and shall run with the land as shown on aforesaid Millette plan.

And being Lot No. 3 on "Plan of Land of J. Philip McCaffery for Great Bay School and Training Center by Richard P. Millette and Associates" dated December 1981 and recorded in the Rockingham County Registry of Deeds as Plan No. D-10590.

This is not homestead property.

Meaning and intending to convey the same premises conveyed to Priscilla H. Pettis, Trustee of the Priscilla H. Pettis Revocable Trust of 2004 by deed of Priscilla H. Pettis, dated May 6, 2004 and recorded in the Rockingham County Registry of Deeds at Book 4341 Page 0629.

## CERTIFICATE OF TRUSTEE AUTHORITY

The undersigned is the Trustee under The Priscilla H. Pettis Revocable Trust of 2004 u/t/d May 6, 2004, and thereto has full and absolute power in said Declaration to convey any interest in real estate and improvements thereon held in said Trust and no purchaser or third party shall be bound to inquire whether the Trustee has said power or is properly exercising said power or to see to the application of any Trust asset paid to the Trustee for a conveyance thereof.

Signed this 27th day of June, 2025.

**THE PRISCILLA H. PETTIS REVOCABLE TRUST OF 2004 u/t/d May 6, 2004**

**SCOTT D. PETTIS, Trustee**

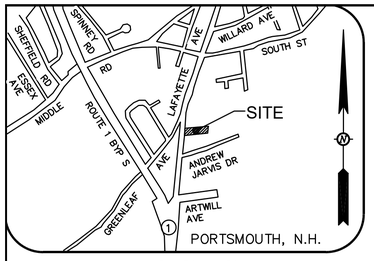
STATE OF NEW HAMPSHIRE
ROCKINGHAM COUNTY

Personally appeared this 27th day of June 2025, Scott D. Pettis, Trustee of The Priscilla H. Pettis Revocable Trust of 2004 u/t/d dated May 6, 2004, who acknowledged that he executed the foregoing instrument, in his capacity, as his free act and deed for the purposes contained herein.

Before me,

ELIZABETH A. MOREAU
Notary Public-New Hampshire
My Commission Expires
March 27, 2029

Notary Public
My commission expires: 3/27/2029
(Seal)



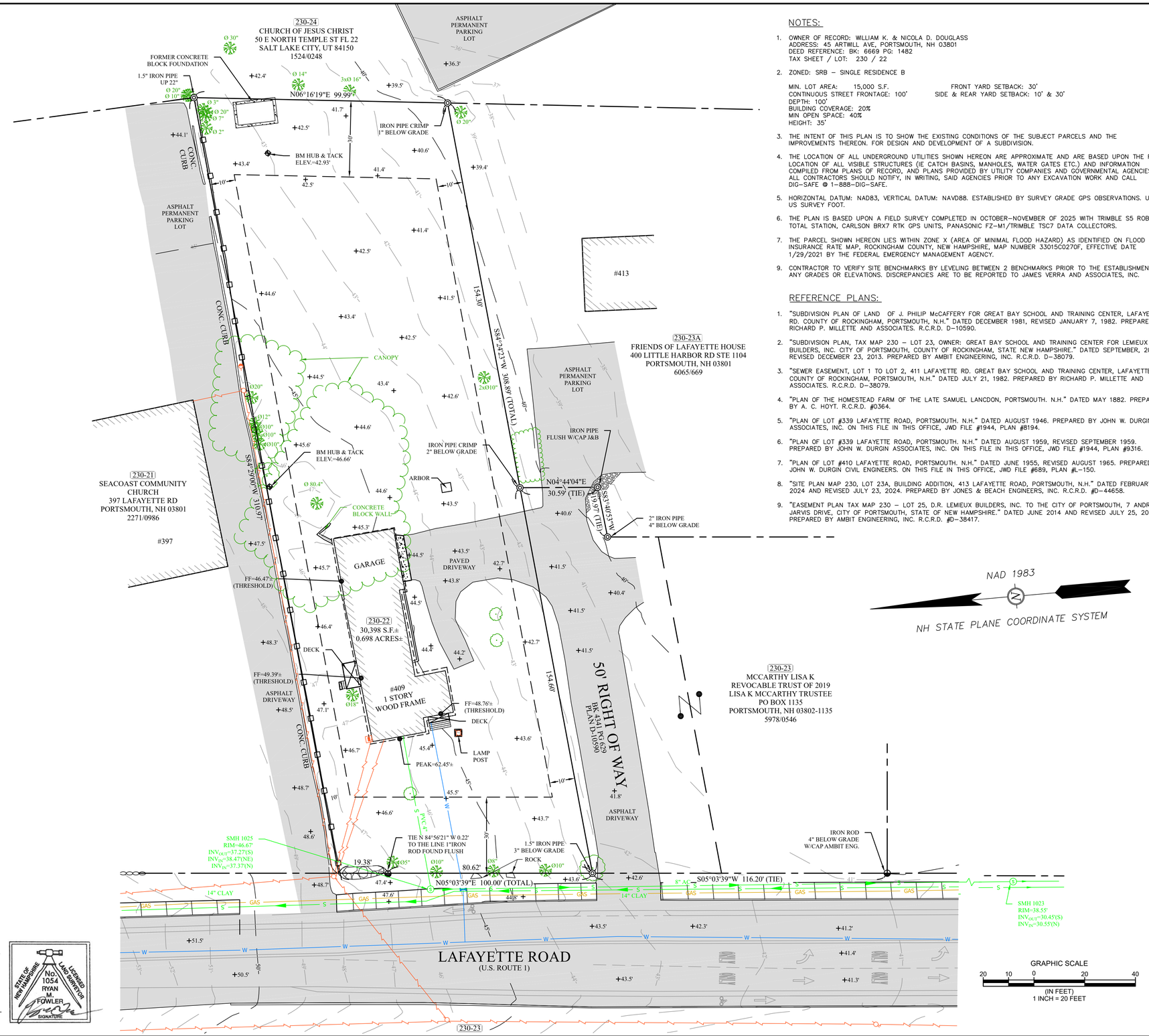

# LOCUS
(1"=1,000')

LEGEND

- CONCRETE AREA
- GRAVEL AREA
- PAVEMENT AREA
- CONCRETE WALKWAY
- W — WATER LINE
- S — SEWER LINE
- OVERHEAD WIRE LINE
- ROAD STRIPE
- ROAD DASHED STRIPE
- 45' — COUNTOR LINE-MAJOR
- 46' — COUNTOR LINE-MINOR
- BOUNDARY ABUTTER LINE
- BOUNDARY SUBJECT LINE
- SETBACK LINE
- WOOD FENCE LINE
- CANOPY
- SHRUB LINE
- DECIDUOUS TREE
- DECIDUOUS SHRUB
- ELECTRIC METER
- GUY WIRE
- UTILILITY POLE
- IRON ROD FOUND
- IRON PIPE FOUND
- + 45.6' — SPOT GRADE ELEVATION
- BENCHMARK SET

ABUTTER ACROSS LAFAYETTE ROAD:

230-25
BIRD DRAHOZAL FAM RV TR
H K BIRD & K E DRAHOZAL TT
57 GEBIG RD
WEST NOTTINGHAM, NH 03291
6537/430




## NOTES:

1. OWNER OF RECORD: WILLIAM K. & NICOLA D. DOUGLASS
   ADDRESS: 45 ARTWILL AVE, PORTSMOUTH, NH 03801
   DEED REFERENCE: BK: 6669 PG: 1482
   TAX SHEET / LOT: 230 / 22
2. ZONED: SRB – SINGLE RESIDENCE B

   MIN. LOT AREA: 15,000 S.F. FRONT YARD SETBACK: 30'
   CONTINUOUS STREET FRONTAGE: 100' SIDE & REAR YARD SETBACK: 10' & 30'
   DEPTH: 100'
   BUILDING COVERAGE: 20%
   MIN OPEN SPACE: 40%
   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 DEVELOPMENT 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 OCTOBER–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 33015C0270F, EFFECTIVE DATE 1/29/2021 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
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.

## REFERENCE PLANS:

1. "SUBDIVISION PLAN OF LAND OF J. PHILIP McCAFFERY FOR GREAT BAY SCHOOL AND TRAINING CENTER, LAFAYETTE RD. COUNTY OF ROCKINGHAM, PORTSMOUTH, N.H." DATED DECEMBER 1981, REVISED JANUARY 7, 1982. PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES. R.C.R.D. D-10590.
2. "SUBDIVISION PLAN, TAX MAP 230 – LOT 23, OWNER: GREAT BAY SCHOOL AND TRAINING CENTER FOR LEMIEUX BUILDERS, INC. CITY OF PORTSMOUTH, COUNTY OF ROCKINGHAM, STATE NEW HAMPSHIRE." DATED SEPTEMBER, 2013, REVISED DECEMBER 23, 2013. PREPARED BY AMBIT ENGINEERING, INC. R.C.R.D. D-38079.
3. "SEWER EASEMENT, LOT 1 TO LOT 2, 411 LAFAYETTE RD. GREAT BAY SCHOOL AND TRAINING CENTER, LAFAYETTE RD. COUNTY OF ROCKINGHAM, PORTSMOUTH, N.H." DATED JULY 21, 1982. PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES. R.C.R.D. D-38079.
4. "PLAN OF THE HOMESTEAD FARM OF THE LATE SAMUEL LANCDON, PORTSMOUTH. N.H." DATED MAY 1882. PREPARED BY A. C. HOYT. R.C.R.D. #0364.
5. "PLAN OF LOT #339 LAFAYETTE ROAD, PORTSMOUTH. N.H." DATED AUGUST 1946. PREPARED BY JOHN W. DURGIN ASSOCIATES, INC. ON THIS FILE IN THIS OFFICE, JWD FILE #1944, PLAN #8194.
6. "PLAN OF LOT #339 LAFAYETTE ROAD, PORTSMOUTH. N.H." DATED AUGUST 1959, REVISED SEPTEMBER 1959. PREPARED BY JOHN W. DURGIN ASSOCIATES, INC. ON THIS FILE IN THIS OFFICE, JWD FILE #1944, PLAN #9316.
7. "PLAN OF LOT #410 LAFAYETTE ROAD, PORTSMOUTH. N.H." DATED JUNE 1955, REVISED AUGUST 1965. PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS. ON THIS FILE IN THIS OFFICE, JWD FILE #689, PLAN #L-150.
8. "SITE PLAN MAP 230, LOT 23A, BUILDING ADDITION, 413 LAFAYETTE ROAD, PORTSMOUTH, N.H." DATED FEBRUARY 28, 2024 AND REVISED JULY 23, 2024. PREPARED BY JONES & BEACH ENGINEERS, INC. R.C.R.D. #D-44658.
9. "EASEMENT PLAN TAX MAP 230 – LOT 25, D.R. LEMIEUX BUILDERS, INC. TO THE CITY OF PORTSMOUTH, 7 ANDREW JARVIS DRIVE, CITY OF PORTSMOUTH, STATE OF NEW HAMPSHIRE." DATED JUNE 2014 AND REVISED JULY 25, 2014. PREPARED BY AMBIT ENGINEERING, INC. R.C.R.D. #D-38417.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

## 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 1/19/2026

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — No. 1054 — RYAN M. FOWLER — SIGNATURE

ALTUS JOB#5698

SURVEYOR:

JAMES VERRA & ASSOCIATES, INC.
100 GRIFFIN ROAD, UNIT C
PORTSMOUTH, N.H., 03801
603-436-3557 - © 2025
www.jvasurveyors.com
JOB NO: 25-2087

ENGINEER:

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ISSUED FOR:
PLANNING BOARD APPROVAL

ISSUE DATE:
01-20-2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | INITIAL SUBMISSION | DK | 12/16/25 |
| 2 | PER TAC COMMENTS | DK | 01/20/26 |

DRAWN BY: DK
APPROVED BY: RMF
DRAWING FILE: 25-2087_EXCON.DWG

SCALE:
22" x 34" – 1" = 20'
11" x 17" – 1" = 40'

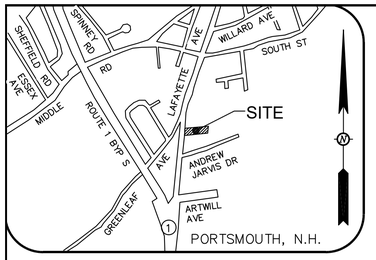
OWNER:
WILLIAM K. & NICOLA D. DOUGLASS
45 ARTWILL AVENUE
PORTSMOUTH, NH 03801

APPLICANT:
WILLIAM K. & NICOLA D. DOUGLASS
45 ARTWILL AVENUE
PORTSMOUTH, NH 03801

PROJECT:
409 LAFAYETTE ROAD, PORTSMOUTH NEW HAMPSHIRE
TAX MAP 230, LOT 22

TITLE:
EXISTING CONDITIONS PLAN

SHEET NUMBER:
V-2



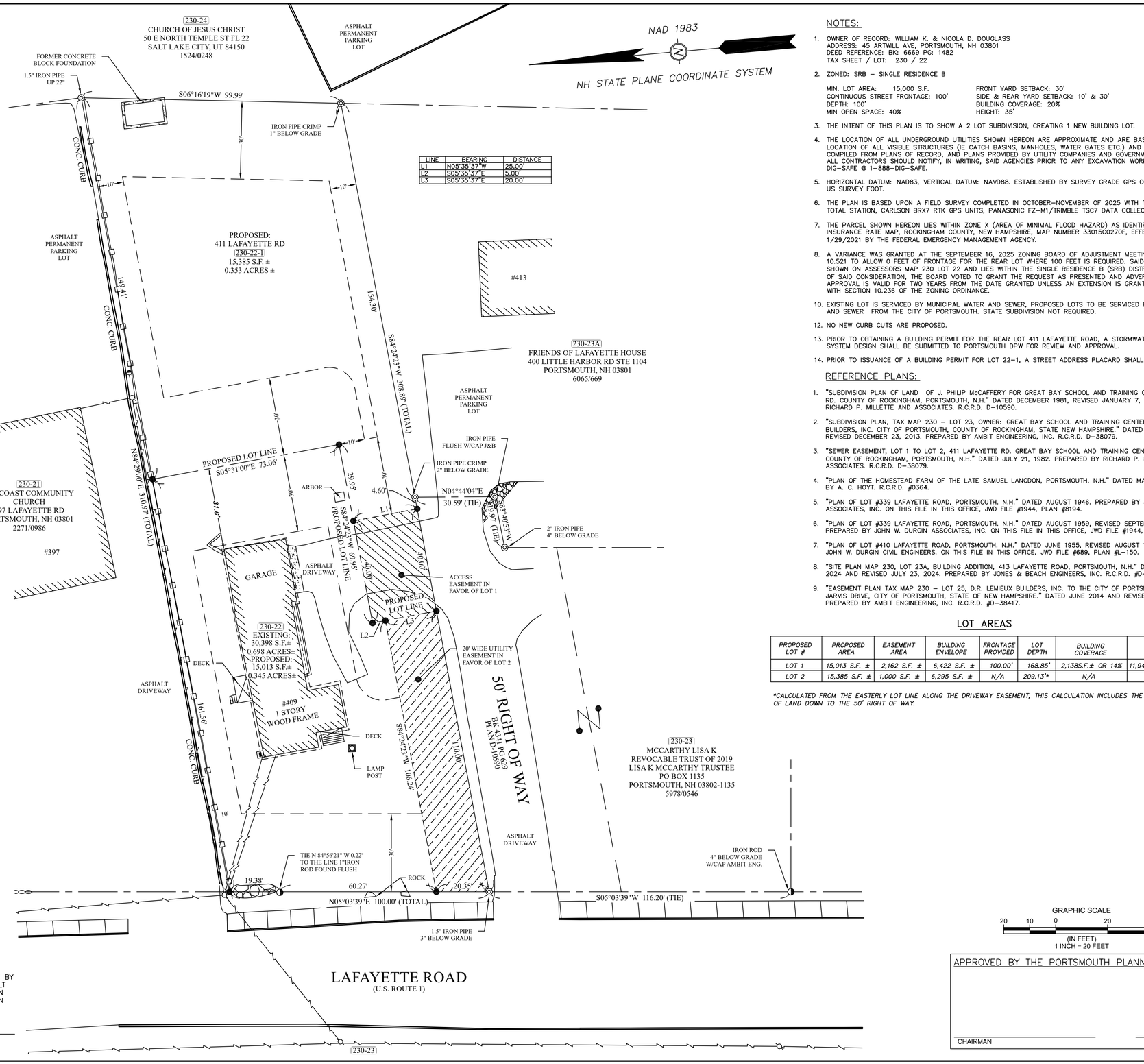

# LOCUS
(1"=1,000')

LEGEND

- CONCRETE AREA
- GRAVEL AREA
- CONCRETE WALKWAY
- OVERHEAD WIRE LINE
- BOUNDARY ABUTTER LINE
- BOUNDARY SUBJECT LINE
- EASEMENT LINE
- SETBACK LINE
- WOOD FENCE LINE
- GUY WIRE
- UTILILITY POLE
- IRON ROD FOUND
- IRON PIPE FOUND
- IRON ROD TO BE SET
- ELECTRIC METER

ABUTTER ACROSS LAFAYETTE ROAD:

230-23
BIRD DRAHOZAL FAM RV TR
H K BIRD & K E DRAHOZAL TT
57 GEBIG RD
WEST NOTTINGHAM, NH 03291
6537/430




| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | N05°35'37"W | 25.00' |
| L2 | S05°35'37"E | 5.00' |
| L3 | S05°35'37"E | 20.00' |

## NOTES:

1. OWNER OF RECORD: WILLIAM K. & NICOLA D. DOUGLASS
   ADDRESS: 45 ARTWILL AVE, PORTSMOUTH, NH 03801
   DEED REFERENCE: BK: 6669 PG: 1482
   TAX SHEET / LOT: 230 / 22
2. ZONED: SRB – SINGLE RESIDENCE B

   MIN. LOT AREA: 15,000 S.F.
   CONTINUOUS STREET FRONTAGE: 100'
   DEPTH: 100'
   MIN OPEN SPACE: 40%
   FRONT YARD SETBACK: 30'
   SIDE & REAR YARD SETBACK: 10' & 30'
   BUILDING COVERAGE: 20%
   HEIGHT: 35'
3. THE INTENT OF THIS PLAN IS TO SHOW A 2 LOT SUBDIVISION, CREATING 1 NEW BUILDING LOT.
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 OCTOBER–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 33015C0270F, EFFECTIVE DATE 1/29/2021 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
8. A VARIANCE WAS GRANTED AT THE SEPTEMBER 16, 2025 ZONING BOARD OF ADJUSTMENT MEETING "FROM SECTION 10.521 TO ALLOW 0 FEET OF FRONTAGE FOR THE REAR LOT WHERE 100 FEET IS REQUIRED. SAID PROPERTY IS SHOWN ON ASSESSORS MAP 230 LOT 22 AND LIES WITHIN THE SINGLE RESIDENCE B (SRB) DISTRICT. AS A RESULT OF SAID CONSIDERATION, THE BOARD VOTED TO GRANT THE REQUEST AS PRESENTED AND ADVERTISED." THE APPROVAL IS VALID FOR TWO YEARS FROM THE DATE GRANTED UNLESS AN EXTENSION IS GRANTED IN ACCORDANCE WITH SECTION 10.236 OF THE ZONING ORDINANCE.
10. EXISTING LOT IS SERVICED BY MUNICIPAL WATER AND SEWER, PROPOSED LOTS TO BE SERVICED BY MUNICIPAL WATER AND SEWER FROM THE CITY OF PORTSMOUTH. STATE SUBDIVISION NOT REQUIRED.
12. NO NEW CURB CUTS ARE PROPOSED.
13. PRIOR TO OBTAINING A BUILDING PERMIT FOR THE REAR LOT 411 LAFAYETTE ROAD, A STORMWATER MANAGEMENT SYSTEM DESIGN SHALL BE SUBMITTED TO PORTSMOUTH DPW FOR REVIEW AND APPROVAL.
14. PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR LOT 22–1, A STREET ADDRESS PLACARD SHALL BE INSTALLED.

## REFERENCE PLANS:

1. "SUBDIVISION PLAN OF LAND OF J. PHILIP McCAFFERY FOR GREAT BAY SCHOOL AND TRAINING CENTER, LAFAYETTE RD. COUNTY OF ROCKINGHAM, PORTSMOUTH, N.H." DATED DECEMBER 1981, REVISED JANUARY 7, 1982. PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES. R.C.R.D. D–10590.
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## LOT AREAS

| PROPOSED LOT # | PROPOSED AREA | EASEMENT AREA | BUILDING ENVELOPE | FRONTAGE PROVIDED | LOT DEPTH | BUILDING COVERAGE | OPEN SPACE |
|---|---|---|---|---|---|---|---|
| LOT 1 | 15,013 S.F. ± | 2,162 S.F. ± | 6,422 S.F. ± | 100.00' | 168.85' | 2,138S.F.± OR 14% | 11,946S.F.± OR 80% |
| LOT 2 | 15,385 S.F. ± | 1,000 S.F. ± | 6,295 S.F. ± | N/A | 209.13'* | N/A | N/A |

*CALCULATED FROM THE EASTERLY LOT LINE ALONG THE DRIVEWAY EASEMENT, THIS CALCULATION INCLUDES THE 25' WIDE STRIP OF LAND DOWN TO THE 50' RIGHT OF WAY.

GRAPHIC SCALE
20 10 0 20 40
(IN FEET)
1 INCH = 20 FEET

STATE OF NEW HAMPSHIRE · NO. 1054 RYAN M. FOWLER · LICENSED LAND SURVEYOR · SIGNATURE

## 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)."

Ryan Fowler

LICENSED LAND SURVEYOR

1/19/2026
DATE

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN

DATE

ALTUS JOB#5698

SURVEYOR:

JVA
JAMES VERRA & ASSOCIATES, INC.
100 GRIFFIN ROAD, UNIT C
PORTSMOUTH, N.H., 03801
603-436-3557 - © 2025
www.jvasurveyors.com

JOB NO: 25–2087

ENGINEER:

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ISSUED FOR:
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01–20–2026

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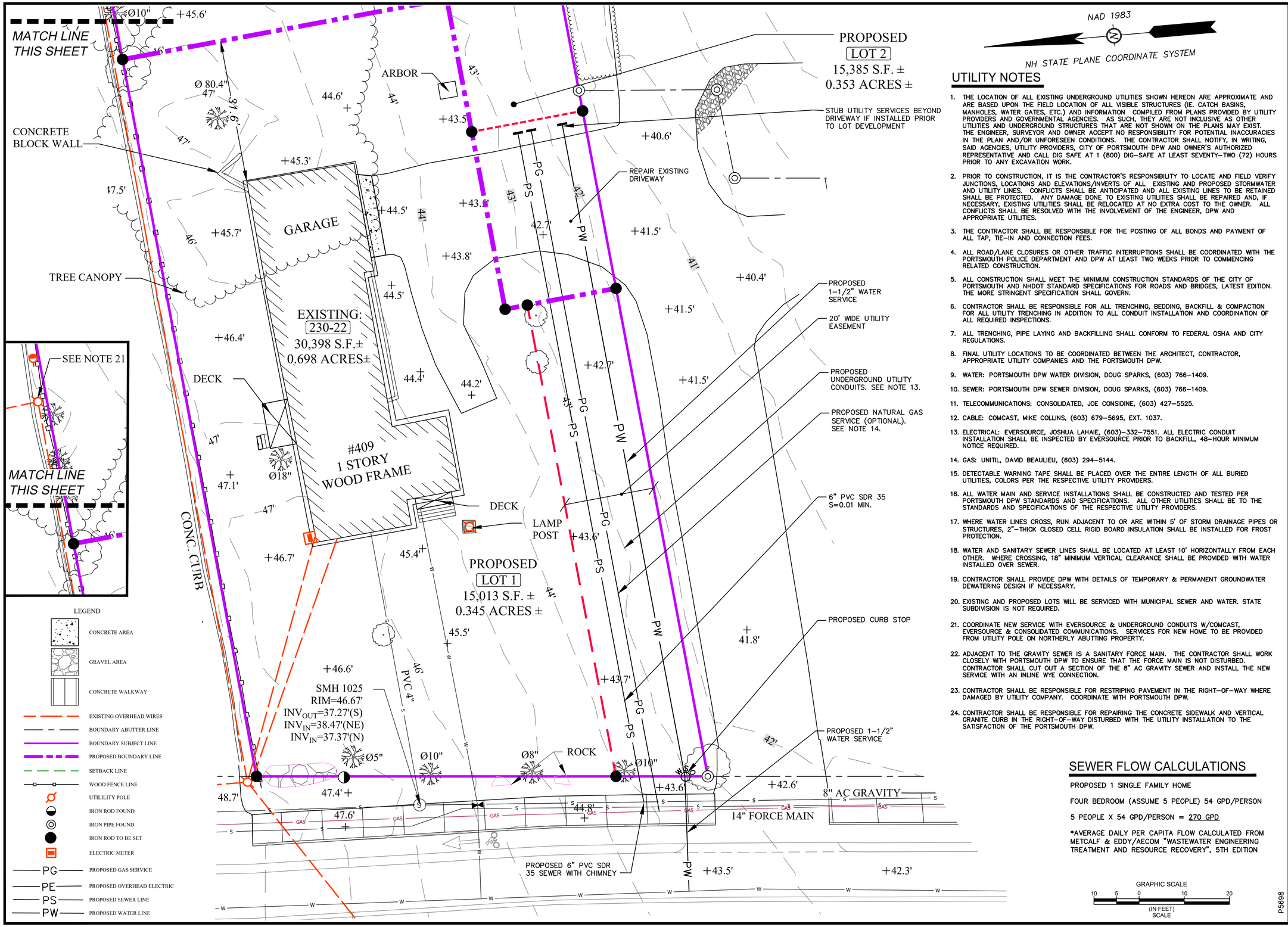
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45 ARTWILL AVENUE
PORTSMOUTH, NH 03801

PROJECT:
409 LAFAYETTE ROAD, PORTSMOUTH NEW HAMPSHIRE
TAX MAP 230, LOT 22

TITLE:
SUBDIVISION PLAN

SHEET NUMBER:
V-1




## 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 (IE. 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, CITY OF PORTSMOUTH 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 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, DPW AND APPROPRIATE UTILITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF ALL BONDS AND PAYMENT OF ALL TAP, TIE-IN AND CONNECTION FEES.
4. ALL ROAD/LANE CLOSURES OR OTHER TRAFFIC INTERRUPTIONS SHALL BE COORDINATED WITH THE PORTSMOUTH POLICE DEPARTMENT AND DPW AT LEAST TWO WEEKS PRIOR TO COMMENCING RELATED CONSTRUCTION.
5. ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE CITY OF PORTSMOUTH AND NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
6. 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.
7. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL CONFORM TO FEDERAL OSHA AND CITY REGULATIONS.
8. FINAL UTILITY LOCATIONS TO BE COORDINATED BETWEEN THE ARCHITECT, CONTRACTOR, APPROPRIATE UTILITY COMPANIES AND THE PORTSMOUTH DPW.
9. WATER: PORTSMOUTH DPW WATER DIVISION, DOUG SPARKS, (603) 766-1409.
10. SEWER: PORTSMOUTH DPW SEWER DIVISION, DOUG SPARKS, (603) 766-1409.
11. TELECOMMUNICATIONS: CONSOLIDATED, JOE CONSIDINE, (603) 427-5525.
12. CABLE: COMCAST, MIKE COLLINS, (603) 679-5695, EXT. 1037.
13. ELECTRICAL: EVERSOURCE, JOSHUA LAHAIE, (603)-332-7551. ALL ELECTRIC CONDUIT INSTALLATION SHALL BE INSPECTED BY EVERSOURCE PRIOR TO BACKFILL, 48-HOUR MINIMUM NOTICE REQUIRED.
14. GAS: UNITIL, DAVID BEAULIEU, (603) 294-5144.
15. DETECTABLE WARNING TAPE SHALL BE PLACED OVER THE ENTIRE LENGTH OF ALL BURIED UTILITIES, COLORS PER THE RESPECTIVE UTILITY PROVIDERS.
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. 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.
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. CONTRACTOR SHALL PROVIDE DPW WITH DETAILS OF TEMPORARY & PERMANENT GROUNDWATER DEWATERING DESIGN IF NECESSARY.
20. EXISTING AND PROPOSED LOTS WILL BE SERVICED WITH MUNICIPAL SEWER AND WATER. STATE SUBDIVISION IS NOT REQUIRED.
21. COORDINATE NEW SERVICE WITH EVERSOURCE & UNDERGROUND CONDUITS W/COMCAST, EVERSOURCE & CONSOLIDATED COMMUNICATIONS. SERVICES FOR NEW HOME TO BE PROVIDED FROM UTILITY POLE ON NORTHERLY ABUTTING PROPERTY.
22. ADJACENT TO THE GRAVITY SEWER IS A SANITARY FORCE MAIN. THE CONTRACTOR SHALL WORK CLOSELY WITH PORTSMOUTH DPW TO ENSURE THAT THE FORCE MAIN IS NOT DISTURBED. CONTRACTOR SHALL CUT OUT A SECTION OF THE 8" AC GRAVITY SEWER AND INSTALL THE NEW SERVICE WITH AN INLINE WYE CONNECTION.
23. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTRIPING PAVEMENT IN THE RIGHT-OF-WAY WHERE DAMAGED BY UTILITY COMPANY. COORDINATE WITH PORTSMOUTH DPW.
24. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING THE CONCRETE SIDEWALK AND VERTICAL GRANITE CURB IN THE RIGHT-OF-WAY DISTURBED WITH THE UTILITY INSTALLATION TO THE SATISFACTION OF THE PORTSMOUTH DPW.

## SEWER FLOW CALCULATIONS

PROPOSED 1 SINGLE FAMILY HOME

FOUR BEDROOM (ASSUME 5 PEOPLE) 54 GPD/PERSON

5 PEOPLE X 54 GPD/PERSON = 270 GPD

*AVERAGE DAILY PER CAPITA FLOW CALCULATED FROM METCALF & EDDY/AECOM "WASTEWATER ENGINEERING TREATMENT AND RESOURCE RECOVERY", 5TH EDITION

GRAPHIC SCALE
10 5 0 10 20
(IN FEET)
SCALE

P5698

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
1/20/26

ISSUED FOR:
PLANNING BOARD APPROVAL

ISSUE DATE:
JANUARY 20, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | EDW | 12-22-25 |
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DRAWN BY: RLH/EDW
APPROVED BY: EDW
DRAWING FILE: 5698 UTIL.DWG

SCALE:
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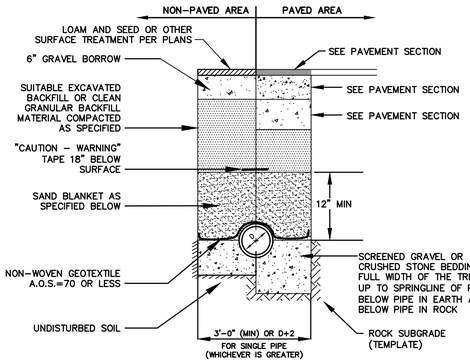
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NICOLA & WILLIAM DOUGLASS
45 ARTWILL AVENUE
PORTSMOUTH, NH 03801

PROJECT:
*409 LAFAYETTE ROAD, PORTSMOUTH NEW HAMPSHIRE*
***TAX MAP 230, LOT 22***

TITLE:
# *UTILITIES PLAN*

SHEET NUMBER:
C-1




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 |

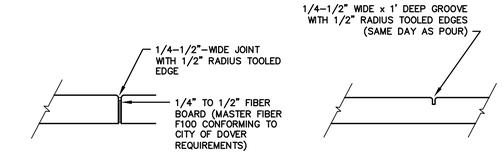
* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

## SEWER TRENCH

NOT TO SCALE

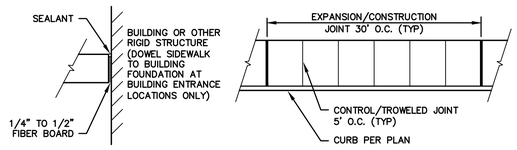
STANDARD TRENCH NOTES

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 CITY'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.



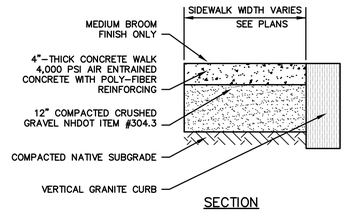

EXPANSION/CONSTRUCTION JOINT

CONTROL/TROWELED JOINT




ISOLATION JOINT

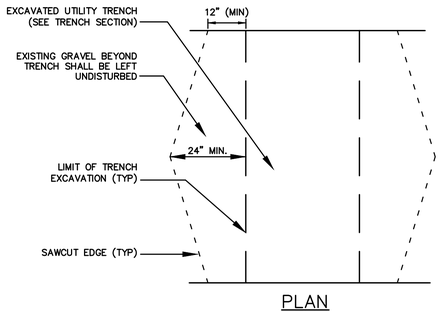
PLAN



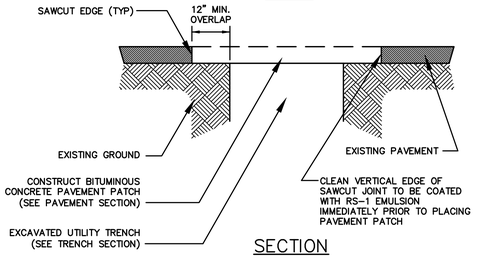

SECTION

## CONCRETE SIDEWALK DETAIL

NOT TO SCALE




PLAN



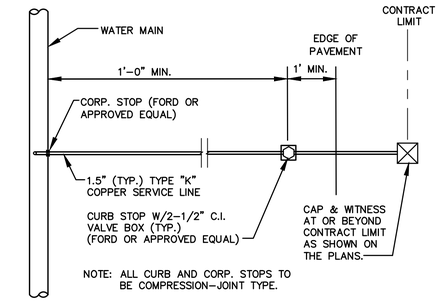

SECTION

NOTES

1. MACHINE CUT EXISTING PAVEMENT.
2. ALL TEMPORARY, DAMAGED OR DEFECTIVE PAVEMENT SHALL BE REMOVED PRIOR TO PLACEMENT OF PERMANENT TRENCH REPAIRS.
3. DIAMOND PATCHES, SHALL BE REQUIRED FOR ALL TRENCHES CROSSING ROADWAY. DIAMOND PATCHES SHALL MEET NHDOT REQUIREMENTS.

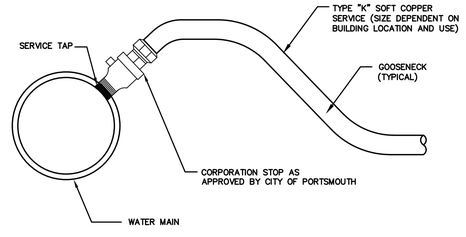
## TYPICAL TRENCH PATCH

NOT TO SCALE



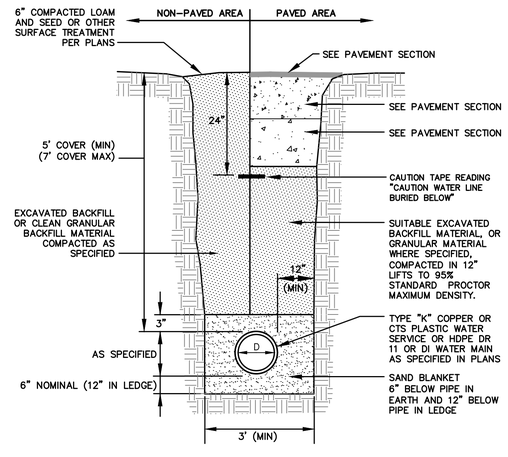

NOTE: ALL CURB AND CORP. STOPS TO BE COMPRESSION-JOINT TYPE.

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

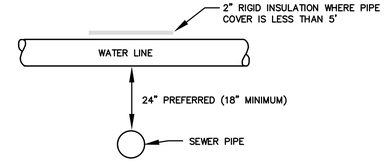
| SIEVE SIZE | % FINER BY WEIGHT |
|---|---|
| 1/2" | 90 – 100 |
| 200 | 0 – 15 |

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 PORTSMOUTH DPW.

## WATER MAIN TRENCH

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

P5698

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 -
12/19/25

ISSUED FOR: TAC

ISSUE DATE: DECEMBER 22, 2025

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | EDW | 12-22-25 |

DRAWN BY: RLH/EDW
APPROVED BY: EDW
DRAWING FILE: 5698 UTIL.DWG

SCALE:
22" x 34" – 1" = 10'
11" x 17" – 1" = 20'

OWNER:
NICOLA & WILLIAM DOUGLASS
45 ARTWILL AVENUE
PORTSMOUTH, NH 03801

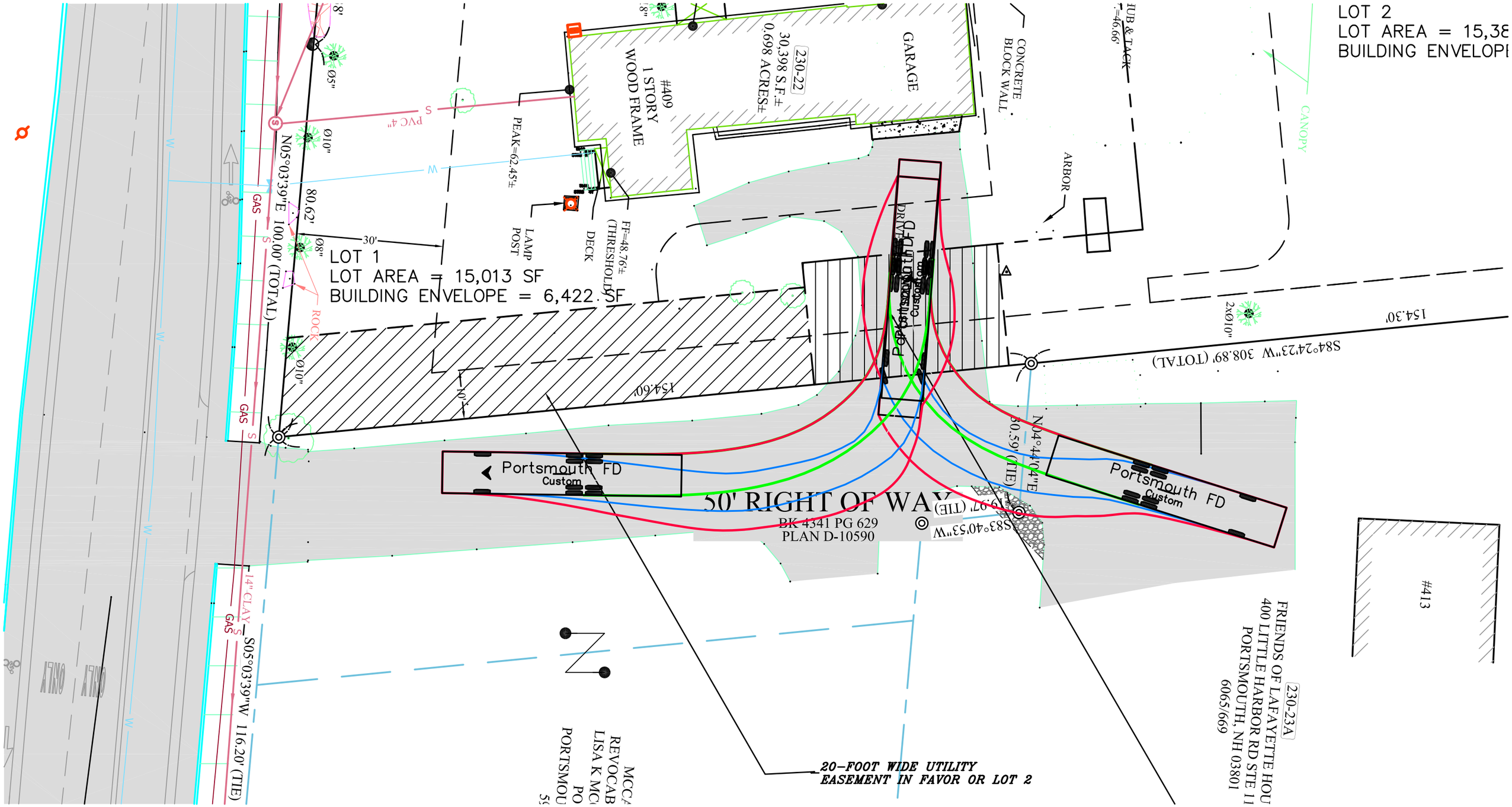
APPLICANT:
NICOLA & WILLIAM DOUGLASS
45 ARTWILL AVENUE
PORTSMOUTH, NH 03801

PROJECT:
*409 LAFAYETTE ROAD, PORTSMOUTH NEW HAMPSHIRE*
***TAX MAP 230, LOT 22***

TITLE:
# DETAIL SHEET

SHEET NUMBER:
C-2

# Portsmouth Fire Truck Turning Template



**CITY OF PORTSMOUTH PLANNING BOARD**
**LOT LINE ADJUSTMENT APPLICATION NARRATIVE**

Aaron Long and Tara Welby, Trustees of the Welby Long Family Revocable Trust
Tax Map 162, Lot 2
255 Thornton Street
Portsmouth, NH 03801
("Applicant")

&

Jeffrey McMahon & Lisa Hagerty-McMahon
Tax Map 162, Lot 1
245 Thornton Street
Portsmouth, NH 03801

Approval of this lot line adjustment application is the last step to consummate a settlement agreement that resolves a boundary dispute between the neighbors named herein, as follows.

Aaron Long and Tara Welby, Trustees of the Welby Long Family Revocable Trust (the "Applicant") own the property located at 255 Thornton Street, Portsmouth, identified as Portsmouth Tax Map 162, Lot 2 (the "Welby-Long Property"). Jeffrey McMahon and Lisa Hagerty-McMahon own the abutting property located at 245 Thornton Street, identified as Portsmouth Tax Map 162, Lot 1 (the "McMahon Property"). The Welby-Long Property is 11,054 square feet (0.254 acre) and contains one single-family dwelling. The McMahon Property is 8,447 square feet (0.194 acre) and contains one single-family dwelling and a detached barn. Both properties are in the General Residence A ("GRA") zoning district.

The Welby-Longs had their property surveyed in 2023 which depicted the Welby-Long Property boundary extending beyond the line of a fence between the two properties. *See* plan entitled, "Plan of Land owned by Welby-Long Family Revocable Trust, for land known as Tax Map 162, Lot 2, located along 255 Thornton Street, Portsmouth, N.H.," prepared by Knight Hill Land Surveying Services, Inc., dated June 26, 2023, and attached as Exhibit A.

The Welby-Longs and the McMahons (together, the "Parties") have disputed the shared boundary between the two properties since at least the summer of 2024. In October 2024, the McMahons commenced litigation to resolve the dispute. The distance between the surveyed property line and the fence, which ran along a curve, was approximately three feet at its widest point. The Parties have reached a settlement to adjust the lot line between the two properties so that the revised lot line lies closer to the line of the old fence, which has since been removed. The Parties intend to obtain a final decree from the Rockingham County Superior Court settling the litigation upon approval of this lot line adjustment application by this Board.

As shown on the Lot Line Adjustment Plan entitled, "Lot Line Revision, 245 & 255 Thornton Street, Portsmouth, New Hampshire, Tax Map 152, Lot 1 & 2, Prepared for and Land of

Jeffrey Paul McMahon & Lisa Hagerty-McMahon and Welby-Long Family Revocable Trust u/t/d August 5, 2011, Aaron G. Long & Tara A. Welby, Trustees," prepared by James Verra & Associates, Inc., dated January 21, 2026, and attached as Exhibit B (the "Plan"), the Parties seek to relocate the shared lot line 3.01 feet to the west toward the Welby-Long Property. The adjusted lot line will run from the rear of the properties to a Norway maple tree, then turn and run to the existing boundary monument on Thornton Street. The purpose of the jog in the relocated lot line is to allow for shared ownership of a Norway maple tree and to prevent a change in frontage to the properties which would necessitate relief from the Zoning Board of Adjustment.

By the lot line adjustment, the McMahon Property will add an area of 454 square feet, identified on the Plan as the "Claimed Area," making it more conforming with the provisions of the City of Portsmouth Zoning Ordinance (the "Ordinance"). The resulting McMahon Property will increase to 8,901 square feet of lot area (0.204 acre). The resulting Welby-Long Property will decrease to 10,600 square feet of lot area (0.243 acre) but will remain in conformance with the minimum lot size set forth in Section 10.521 of the Ordinance. There will be no changes to the existing frontage of either property. Neither lot will be made more nonconforming with the provisions of the Ordinance by the lot line adjustment. The 96 square foot shed located on the Welby-Long Property is exempt from the provisions of the Ordinance in accordance with Section 10.811.

The Applicant seeks a waiver from Section IX, 1 of the Subdivision Rules and Regulations. No work, improvements, or installations of any kind will be conducted within the area to be conveyed by the approved lot line adjustment or in relation to the change in lot lines, nor any changes to any streets shown on the Plan. Accordingly, no Improvement and Installation Bond should be required of the Parties prior to final approval.

The Welby-Longs and the McMahons, especially in recognition of their mutual hard work and collaboration to have brokered each and every term of their agreement with each other, respectfully request approval of the Lot Line Adjustment Application to allow the conveyance of the claimed area to the McMahons in accordance with the final settlement of the Parties.

Respectfully submitted,
By Durbin Law Offices PLLC

January 26, 2026

By: Darcy Peyser, Esq.
144 Washington Street
Portsmouth, NH 03801
darcy@durbinlawoffices.com
603-287-4764

## Findings of Fact | Subdivision Rules and Regulations
## City of Portsmouth Planning Board

Date: February 19, 2026
Property Address: 245-255 Thornton Street
Application #: LU-26-10
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**<br>**Does Not Meet** | The submitted plan meets the requirements for section IV – requirements for preliminary Plat pertinent to a lot line adjustment application. See submitted LLA Plan. |
| 2 | **SECTION V - REQUIREMENTS FOR FINAL PLAT** | **Meets**<br>**Does Not Meet** | The submitted plan meets the requirements for section V – requirements for final Plat pertinent to a lot line adjustment application. See submitted LLA Plan. |
| 3 | **SECTION VI - GENERAL REQUIREMENTS** | **Meets**<br>**Does Not Meet** | The submitted plan meets the requirements for section V – requirements for final Plat pertinent to a lot line adjustment application where to resolve an encroachment/boundary dispute issue. See submitted LLA Plan. |
| 4 | **SECTION VII - DESIGN STANDARDS** | **Meets** | No construction is proposed. This is a simple lot line adjustment application to resolve an |

DRAFT

| | Subdivision Review Criteria | Finding (Meets Standards/ Requirements) | Supporting Information |
|---|---|---|---|
| | | **Does Not Meet** | encroachment/boundary line dispute issue subject to RSA 676:4 I(e)(1). See submitted LLA Plan. |
| **5** | **<u>Other Board Findings:</u>** | | |

DRAFT

# EXHIBIT A

THORNTON STREET

CURB

SIDEWALK

20'±

74.11'
N46°38'45"E

3" X 4" FLAT IRON POST MUSHROOMED OVER FLUSH

15"/20"± DOUBLE MAPLE

PAVER DRIVEWAY

PAVED DRIVEWAY

IRON PIN W/CAP SET FLUSH 5-27-22

3/4" IRON PIPE 0.8'± UNDER BENT EAST (SEE PLAN REF. #3)

1 ST. WD. HOUSE
#255

6.0'±

PAVED DRIVEWAY

6.8'±

NEW 6'± WOOD STOCKADE FENCE

11/2 ST. WD. HOUSE
#275

152.00'
N43°03'27"W

TALL STAKE SET

25.9'±

now or formerly
JEFFREY PAUL MCMAHON
LISA HAGERTY-MCMAHON
MAP 162 LOT 1
RCRD BK. 6214 PG. 1016

149.17'

S42°10'52"E

SHED

TALL STAKE SET

OLD 6'± WOOD FENCE

RCRD PLAN #D-22643

IRON PIN WITH MSC CAP #844 FLUSH

S44°21'49"W
57.10' (SURVEY TIE)

SHED

30"± MAPLE

now or formerly
JEFFREY P. BARTOLINI
ABIGAIL R. ROEMER
MAP 162 LOT 17
RCRD BK. 6274 PG. 1684

IRON PIN W/CAP SET 0.9'± HIGH 6-23-23

S44°21'49"W
71.90'

3'± HIGH RETAINING WALL

NEW 6'± WOOD STOCKADE FENCE

8" DRAIN INLET

6" PLASTIC PIPE DRAIN

REPLACED RUSTED 3/4" IRON PIPE WITH IRON PIN W/CAP SET .3'± HIGH 5-27-22 (HELD PIPE FOR PLAN REF 3 & 4 ROTATION)

now or formerly
JEFFREY COLLINS
RANDI COLLINS
MAP 162 LOT 16-1
RCRD BK. 6274 PG. 1666

now or formerly
SARAH B. CORNELL
SUSAN A. CURRY
MAP 162 LOT 3
RCRD BK. 5720 PG. 204

## PLAN REFERENCES:

1.) "PLAN OF LOT PORTSMOUTH, NH. FOR DANBRY CORP." BY JOHN W. DURGIN, DATED AUG. 1963, FILE #1874 PLAN #L-379.

2.) "STREET PLAT OF SPARHAWK, BURKITT, STARK, CLINTON AND PINE STREETS IN PORTSMOUTH, NH" BY JOHN W. DURGIN ASSOC. INC., DATED JULY, 1980 FILE #108CD PLAN #5874-SP.

3.) "PLAN OF LAND PREPARED FOR EVON MAYO, PORTSMOUTH, NH" BY THOMAS F. MORAN, INC. DATED DECEMBER 14, 1981 FILE #M2139-02.

4.) "LOT LINE REVISION PINE STREET, PORTSMOUTH, NH FOR JOYCE M. MAYO & CITY OF PORTSMOUTH" BY DURGIN, VERRA AND ASSOCIATES, INC., DATED 6-9-93 RECORDED AT RCRD AS PLAN #D-22643.

5.) "TAX MAP 162 LOT 16 EXISTING CONDITIONS PLAN COLLINS 77 MEREDITH WAY PORTSMOUTH NH. OWNED BY RANDI & JEFF COLLINS" BY TFM, DATED MARCH 22, 2022, FILE #47442-00.

6.) "PLAN OF ELM PLACE SITUATED IN PORTSMOUTH NH" DATED 1856, RCRD PLAN #008.

## SITE DATA
### TAX MAP 162 LOT 2

| | |
|---|---|
| **RECORD OWNER:** | WELBY-LONG FAMILY REVOCABLE TRUST<br>AARON G. LONG, TRUSTEE<br>TARA A. WELBY, TRUSTEE<br>255 THORNTON STREET<br>PORTSMOUTH, NH, 03801 |
| **RECORD DEED:** | R.C.R.D. BK. 6411 PG. 2124 |
| **AREA:** | 10,985 SQ. FT./0.2522 AC. |

## LEGEND

- PROPERTY LINE
- EDGE OF PAVEMENT
- IRON PIPE OR PIN
- UTILITY POLE
- WATER SHUTOFF
- OVERHEAD ELECTRIC — OHE —
- UNDERGROUND DRAIN — D —
- WOOD STOCKADE FENCE

## CERTIFICATION

THIS PLAN IS THE RESULT OF FIELD WORK CONDUCTED BY KNIGHT HILL LAND SURVEYING SERVICES, INC. UNDER MY SUPERVISION ON 5-24-2022 AND AGAIN 6-21-23. THE UNADJUSTED ERROR OF CLOSURE FOR TRAVERSE WAS 1/32,600. SEE FIELD BOOK 122 & 123.

STATE OF NEW HAMPSHIRE — No. 802 — G. DAVIDSON HISLOP, JR. — LICENSED LAND SURVEYOR

6-26-2023

G. DAVIDSON HISLOP, JR. LLS 802 DATE

# PLAN OF LAND

owned by

## WELBY-LONG FAMILY REVOCABLE TRUST

for land known as

## TAX MAP 162 LOT 2

located along

## 255 THORNTON STREET

PORTSMOUTH, N.H.

COUNTY OF ROCKINGHAM

JUNE 26, 2023 SCALE 1" = 10' PROJECT # 2279LONG

**PREPARED FOR:**

AARON LONG
255 THORNTON STREET
PORTSMOUTH, NH., 03801
508-212-8395
aaron.long.ma@gmail.com

**PREPARED BY:**

KNIGHT HILL LAND
SURVEYING SERVICES, INC
C/O DAVID HISLOP
34 OLD POST ROAD
NEWINGTON, NH., 03801
603-436-1330
dave@khlandsurveying.com

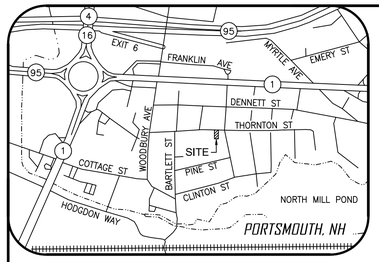
GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )
1 inch = 10 ft.

2279PNTS

EXHIBIT B




LOCUS
1" = 1000'

LEGEND

- OVERHEAD ELECTRIC
- FENCE LINE
- STONE WALL
- BOUNDARY LINE
- BOUNDARY–ABUTTER
- IRON ROD FOUND
- IRON PIPE FOUND
- IRON PIPE FOUND
- MONUMENT TO BE SET

## LOT INFORMATION

| LOT# | EXISTING AREA | EXISTING FRONTAGE | PROPOSED AREA | PROPOSED FRONTAGE | BUILDING AREA | CALCULATED LOT DEPTH |
|---|---|---|---|---|---|---|
| 162–1 | 8,447 S.F.± (0.194 AC±) | 55.13' | 8,901 S.F.± (0.204 AC±) | 55.13' (UNCHANGED) | 1,919 S.F.± | 150.7'± |
| 162–2 | 11,054 S.F.± (0.254 AC±) | 74.15' | 10,600 S.F.± (0.243 AC±) | 74.15' (UNCHANGED) | 1,271 S.F.± | 151.6'± |

161–6
BRIOLAT FAMILY REVOCABLE TRUST – 2020
RANDALL A. BRIOLAT SR. & LINDA A. BRIOLAT TRUSTEES
260 THORNTON ST
PORTSMOUTH, NH 03801
6160/2314

161–7–1
JAMES E. GOULD
250 THORNTON ST
PORTSMOUTH, NH 03801
5180/0501

161–7
JAMES E. GOULD
250 THORNTON ST
PORTSMOUTH, NH 03801
5180/0501

161–8
TIERNAN & MCEACHERN REVOCABLE TRUST
DEAGLAN K. MCEACHERN & LORI A.TIERNAN TRUSTEES
230 THORNTON ST
PORTSMOUTH, NH 03801
6598/2570

EDGE OF PAVEMENT

THORNTON STREET
(PUBLIC WAY - 60' WIDE)

EDGE OF PAVEMENT

SEE DETAIL "A"

75.00' (TIE)
74.15'
55.13'
77.26' (TIE)
N 45°02'21" E
N 45°02'21" E

2.25" IRON PIPE FOUND FLUSH SEE REF. PLAN #1
3"x4" IRON PIN FOUND FLUSH SEE REF. PLAN #1
3/4" IRON PIPE FOUND FLUSH SEE REF. PLAN #1
3"x4" IRON POST FOUND FLUSH, SEE REF. PLAN #2
IRON ROD W/CAP #844 FOUND FLUSH
IRON ROD W/CAP #844 FOUND FLUSH

15' 15'

RAMP
DECK
15"/20"± DOUBLE MAPLE
#255 1 STORY WOOD FRAME
#245 2.5 STORY WOOD FRAME
PAVER DRIVE WAY
139.25'
EXISTING FENCE POST (TYP.)
GARDEN BED
DECK
DECK
PAVED DRIVEWAY
PAVER PATIO
SHED
BARN

162–3
SARAH B. CORNELL
SUSAN A. CURRY
275 THORNTON ST
PORTSMOUTH, NH 03801
5720/0204

N 43°07'40" W 152.05'
N 42°20'37"W 151.15'
S 42°14'40" E
S 42°57'45" E 150.38'

162–2
EXISTING:
11,054 S.F.±
0.254 ACRE±

162–1
EXISTING:
8,447 S.F.±
0.194 ACRE±

EXISTING LOT LINE TO BE ABANDONED

10' 10' 10'

PARCEL "A" AREA TO BE CONVEYED TO LOT 162–1 = 454 S.F.±

159–50
WILLIAM J.ARMSTRONG JR. REVOCABLE TRUST
WILLIAM J. ARMSTRONG JR. TRUSTEE
70 STARK ST
PORTSMOUTH, NH 03801
5463/1641

NAD 1983
NH STATE PLANE COORDINATE SYSTEM

SEE DETAIL "C"

0.63" IRON ROD W/CAP #1037 FOUND FLUSH SEE REF. PLAN #7
3/4" IRON ROD W/CAP FOUND 3" ABOVE SEE REF. PLAN #2
3/4" IRON ROD W/CAP FOUND 9" ABOVE SEE REF. PLAN #2
N 44°14'49" E
19.20'
68.85' (TOTAL)
S 44°20'56" W 57.05' (TOTAL)
40.58' (TIE)
N 44°29'51" E
52.66'
IRON ROD W/CAP #844 FOUND FLUSH SEE REF. PLAN #7
SEE DETAIL "B"
0.63" IRON ROD W/CAP #844, FOUND, BELOW GRADE 2" SEE REF. PLAN #8

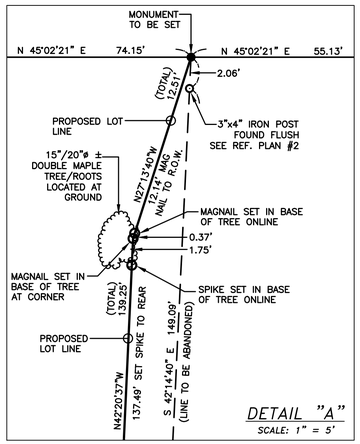
162–16
CHRISTOPHER & STEPHANIE JAY
107 PREBLE WAY
PORTSMOUTH, NH 03801
6550/1854

162–16–1
RANDI & JEFF COLLINS
67 MEREDITH WAY
PORTSMOUTH, NH 03801
6274/1666

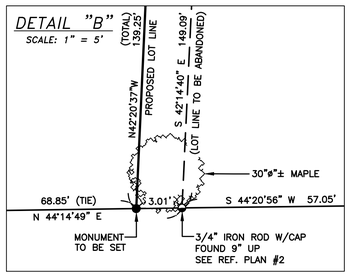
162–17
JEFFREY P. BARTOLINI
ABIGAIL R. ROEMER
55 PINE ST
PORTSMOUTH, NH 03801
6274/1684

162–18
JOYCE M. & ELVIN SR. MAYO
252 DENNETT ST
PORTSMOUTH, NH 03801
2559/1530

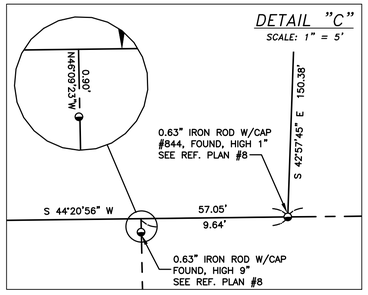
159–49
GLENN A. & MORRISSETTE S. KILLIAN
100 STARK ST
PORTSMOUTH, NH 03801
5349/1445




DETAIL "A"
SCALE: 1" = 5'




DETAIL "B"
SCALE: 1" = 5'




DETAIL "C"
SCALE: 1" = 5'

## NOTES:

1. OWNER OF RECORD: JEFFREY PAUL MCMAHON & LISA HAGERTY–MCMAHON
   ADDRESS: 245 THORNTON ST, PORTSMOUTH, NH 03801
   DEED REFERENCE: BK: 6214 PG: 1016
   TAX SHEET / LOT: 162 / 1

   OWNER OF RECORD: THE WELBY–LONG FAMILY REVOCABLE TRUST, U/T/D AUGUST 5, 2011, AARON G. LONG & TARA A. WELBY TRUSTEES
   ADDRESS: 255 THORNTON ST, PORTSMOUTH, NH 03801
   DEED REFERENCE: BK: 6411 PG: 2124
   TAX SHEET / LOT: 162 / 2
2. ZONED: GENERAL RESIDENCE A (GRA)

   | | |
   |---|---|
   | MIN. LOT AREA: 7,500 SF | FRONT YARD SETBACK: 15' |
   | FRONTAGE: 100' | SIDE YARD SETBACK: 10' |
   | BUILDING COVERAGE: 25% | REAR YARD SETBACK: 20' |
   | LOT COVERAGE: 30% | MINIMUM DEPTH: 70' |
   | HEIGHT: 35' | |
3. THE INTENT OF THIS PLAN IS TO DEPICT A PROPOSED LOT LINE REVISION BETWEEN EXISTING TAX MAP 162, LOTS 1 AND 2, LOCATED AT 245 AND 255 THORNTON STREET IN PORTSMOUTH, NEW HAMPSHIRE. THE PURPOSE OF THIS LOT LINE REVISION IS TO ELIMINATE THE EXISTING COMMON INTERIOR LOT LINE AND ESTABLISH A REVISED BOUNDARY CONFIGURATION THAT REALLOCATES LAND AREA BETWEEN THE TWO EXISTING LOTS. THE REVISION ALSO RESULTS IN A PORTION OF AN EXISTING 15"–20" DIAMETER DOUBLE MAPLE TREE BEING LOCATED ON LOT 162–1. THIS LOT LINE REVISION IS FURTHER INTENDED TO RESOLVE A BOUNDARY DISPUTE BETWEEN RECORD TITLE LINES OF LOTS 162–1 AND 162–2 VS. OWNERSHIP OF LAND. NO NEW BUILDING LOTS ARE BEING CREATED, AND NO CHANGES TO EXISTING FRONTAGE ALONG THORNTON STREET ARE PROPOSED. EXISTING STRUCTURES AND IMPROVEMENTS WILL REMAIN ON THEIR RESPECTIVE LOTS FOLLOWING THE REVISION.
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 AUGUST OF 2025 AND ADDITIONAL FIELD SURVEY TO LOCATE 15"–20" DOUBLE MAPLE TREE ON NOVEMBER 26, 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 33015C0259F, EFFECTIVE DATE 1/29/2021 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
8. EXISTING LOTS ARE BOTH SERVICED BY MUNICIPAL WATER AND SEWER AND ARE TO REMAIN AS–IS.

## REFERENCE PLAN:

1. "PLAN OF LAND OWNED BY WELBY–LONG FAMILY REVOCABLE TRUST PORTSMOUTH, NEW HAMPSHIRE." PREPARED BY KNIGHT HILL LAND SURVEYING SERVICES, INC. DATED JUNE 26, 2023. ON THIS FILE WITH THIS OFFICE, FILE #2279, PLAN # 2279LONG.
2. "PLAN OF LOT PORTSMOUTH, NEW HAMPSHIRE. FOR DENBRY CORP." PREPARED BY JOHN W. DURGIN, C.E. DATED AUGUST 1963. ON THIS FILE WITH THIS OFFICE, FILE #1874, PLAN # L–379.
3. "STREET PLAT OF SPARHAWK, BURKITT, STARK, CLINTON, AND PINE STREETS ON PORTSMOUTH. NEW HAMPSHIRE." PREPARED BY JOHN W. DURGIN, C.E. DATED JULY 1980. ON THIS FILE WITH THIS OFFICE, FILE #108CD, PLAN #5874–SP.
4. "LOT LINE REVISION PINE STREET, PORTSMOUTH, NEW HAMPSHIRE FOR JOYCE M. MAYO & CITY OF PORTSMOUTH." PREPARED BY DURGIN, VERRA AND ASSOCIATES, INC. DATED JUNE 9, 1993. ON THIS FILE WITH THIS OFFICE, FILE #20320, PLAN #20320. R.C.R.D. PLAN D–22643.
5. WORKSHEETS AND FIELD NOTES OF JOHN W. DURGIN. ON THIS FILE WITH THIS OFFICE, JWD FILE #108.
6. "PLAN OF ELM PLACE PORTSMOUTH. NEW HAMPSHIRE." DATED 1856. R.C.R.D. PLAN #008.
7. "SUBDIVISION PLAN. 2 LOT SUBDIVISION. 77 MEREDITH WAY. PORTSMOUTH. NEW HAMPSHIRE. COUNTY OF ROCKINGHAM. OWNED BY RANDI & JEFF COLLINS." PREPARED BY TFMORAN, INC. DATED SEPTEMBER 27, 2022. R.C.R.D. PLAN #D–43717.
8. "PLAN OF LAND PREPARED FOR EVON MAYO. PORTSMOUTH, NH." PREPARED BY TFMORAN INC. DATED DECEMBER 14, 1981. ON THIS FILE WITH THIS OFFICE, FILE #108, PLAN #M2139–02.

# LOT LINE REVISION
# 245 & 255 THORNTON STREET
## PORTSMOUTH, NEW HAMPSHIRE

**TAX MAP 162 LOT 1 & 2**
**PREPARED FOR AND LAND OF:**
**JEFFREY PAUL MCMAHON & LISA HAGERTY-MCMAHON**
**AND**
**THE WELBY-LONG FAMILY REVOCABLE TRUST, U/T/D AUGUST 5, 2011**
**AARON G. LONG & TARA A. WELBY TRUSTEES**

| No. | DATE | REVISION DESCRIPTION | BY | APPR |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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 — 1/21/26 DATE

STATE OF NEW HAMPSHIRE — No. 1054 — RYAN M. FOWLER — LICENSED LAND SURVEYOR — SIGNATURE

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

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN — DATE

JVA
JAMES VERRA & ASSOCIATES, INC.
100 GRIFFIN ROAD, UNIT C
PORTSMOUTH, N.H., 03801
603-436-3557 - ©2025
www.jvasurveyors.com

| DATE: 1/21/2026 | JOB NO. 25-2014 |
|---|---|
| DRWN BY: DK/REL | CHK'D BY: RMF |
| DWG NAME: 25-2014 LLA.DWG | SCALE: 1" = 20' |

SHEET: V-1

# 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: Welby Long Family Rev. Trust / Jeff & Lisa McMahon Date Submitted: 1/26/2026

Applicant: Aaron Long & Tara Welby, Trustees of the Welby Long Family Rev. Trust

Phone Number: (508) 212 8395 E-mail: aaron.long.ma@gmail.com

Site Address 1: 255 Thornton Street Map: 162 Lot: 1

Site Address 2: 245 Thornton Street Map: 162 Lot: 1

| Application Requirements | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page or Plan Sheet/Note #)** | **Waiver Requested** |
| ✔ | Completed Application form. **(III.C.2-3)** | via Viewpoint | 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)** | via Viewpoint | N/A |

| Requirements for Preliminary/Final Plat | | | | |
|---|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Required for Preliminary / Final Plat** | **Waiver Requested** |
| ✔ | Name and address of record owner, any option holders, descriptive name of subdivision, engineer and/or surveyor or name of person who prepared the plat. **(Section IV.1/V.1)** | | ☑ Preliminary Plat<br>☑ 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**<br>Names and addresses of all adjoining property owners. **(Section IV.2)**<br>**Final Plat**<br>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)** | | ☑ Preliminary Plat<br>☑ Final Plat | N/A |
| ✔ | North point, date, and bar scale. **(Section IV.3/V3)** | Required on all Plan Sheets | ☑ Preliminary Plat<br>☑ Final Plat | N/A |
| ✔ | Zoning classification and minimum yard dimensions required. **(Section IV.4/V.4)** | | ☑ Preliminary Plat<br>☑ Final Plat | N/A |
| ✔ | **Preliminary Plat**<br>Scale (not to be smaller than one hundred (100) feet = 1 inch) and location map (at a scale of 1" = 1000'). **(Section IV.5)**<br>**Final Plat**<br>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)** | | ☑ Preliminary Plat<br>☑ 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)** | | ☑ Preliminary Plat<br>☑ 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)** | | ☑ Preliminary Plat<br>☑ 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)** | | ☑ Preliminary Plat<br>☑ 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)** | | ☑ Preliminary Plat<br>☑ Final Plat | |
| ☐ | **Preliminary Plat**<br>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)**<br>**Final Plat**<br>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)** | | ☑ Preliminary Plat<br>☑ 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)** | | ☑ Preliminary Plat<br>☑ Final Plat | |
| ☐ | Base flood elevation (BFE) for subdivisions involving greater than five (5) acres or fifty (50) lots. **(Section IV.11)** | | ☑ Preliminary Plat<br>☑ 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)** | | ☑ Preliminary Plat<br>☑ 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)** | | ☐ Preliminary Plat<br>☑ 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)** | | ☐ Preliminary Plat<br>☑ Final Plat | |
| ☑ | Location of all permanent monuments. **(Section V.12)** | | ☐ Preliminary Plat<br>☑ Final Plat | |

| General Requirements[1] | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☑ | **1. Basic Requirements: (VI.1)** | | |
| ☑ | a. Conformity to Official Plan or Map | | |
| ☐ | b. Hazards | | |
| ☐ | c. Relation to Topography | | |
| ☐ | d. Planned Unit Development | | |
| ☑ | **2. Lots: (VI.2)** | | |
| ☑ | a. Lot Arrangement | | |
| ☑ | b. Lot sizes | | |
| ☐ | c. Commercial and Industrial Lots | | |
| ☑ | **3. Streets: (VI.3)** | | |
| ☑ | a. Relation to adjoining Street System | | |
| ☑ | b. Street Rights-of-Way | | |
| ☑ | c. Access | | |
| ☐ | d. Parallel Service Roads | | |
| ☐ | e. Street Intersection Angles | | |
| ☐ | f. Merging Streets | | |
| ☐ | g. Street Deflections and Vertical Alignment | | |
| ☐ | h. Marginal Access Streets | | |
| ☐ | i. Cul-de-Sacs | | |
| ☐ | j. Rounding Street Corners | | |
| ☐ | k. Street Name Signs | | |
| ☑ | l. Street Names | | |
| ☐ | m. Block Lengths | | |
| ☐ | n. Block Widths | | |
| ☐ | o. Grade of Streets | | |
| ☐ | p. Grass Strips | | |
| ☑ | **4. Curbing: (VI.4)** | | |
| ☑ | **5. Driveways: (VI.5)** | | |
| ☐ | **6. Drainage Improvements: (VI.6)** | | N/A |
| ☐ | **7. Municipal Water Service: (VI.7)** | | N/A |
| ☐ | **8. Municipal Sewer Service: (VI.8)** | | N/A |
| ☐ | **9. Installation of Utilities: (VI.9)** | | N/A |
| ☐ | a. All Districts | | |
| ☐ | b. Indicator Tape | | |
| ☐ | **10. On-Site Water Supply: (VI.10)** | | N/A |
| ☐ | **11. On-Site Sewage Disposal Systems: (VI.11)** | | N/A |
| ☑ | **12. Open Space: (VI.12)** | | |
| ☐ | a. Natural Features | | |
| ☐ | b. Buffer Strips | | |
| ☐ | c. Parks | | |
| ☐ | d. Tree Planting | | |
| ☐ | **13. Flood Hazard Areas: (VI.13)** | | N/A |
| ☐ | a. Permits | | |
| ☐ | b. Minimization of Flood Damage | | |
| ☐ | c. Elevation and Flood-Proofing Records | | |
| ☐ | d. Alteration of Watercourses | | |
| ☐ | **14. Erosion and Sedimentation Control (VI.14)** | | N/A |

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

| 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).**<br>a. Clearing<br>b. Excavation<br>c. Rough Grade and Preparation of Sub-Grade<br>d. Base Course<br>e. Street Paving<br>f. Side Slopes<br>g. Approval Specifications<br>h. Curbing<br>i. Sidewalks<br>j. Inspection and Methods | N/A: no change to street design | |
| ☐ | **2. Storm water Sewers and Other Drainage Appurtenances have been designed according to the design standards required under Section (VII.2).**<br>a. Design<br>b. Standards of Construction | N/A: no change to drainage features | |
| ☐ | **3. Sanitary Sewers have been designed according to the design standards required under Section (VII.3).**<br>a. Design<br>b. Lift Stations<br>c. Materials<br>d. Construction Standards | N/A: no change to sewer designs | |
| ☐ | **4. Water Mains and Fire Hydrants have been designed according to the design standards required under Section (VII.4).**<br>a. Connections to Lots<br>b. Design and Construction<br>c. Materials<br>d. Notification Prior to Construction | N/A: no change to existing mains or hydrants | |

**Applicant's/Representative's Signature:** Darcy Peyser Digitally signed by Darcy Peyser Date: 2026.01.25 13:08:44 -05'00' **Date:** 1/26/2026

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

January 28, 2026

City of Portsmouth Planning Board

**Re: Portsmouth Regional Hospital – Ambulance Bay and Canopy**
**Project Narrative**
**Portsmouth, NH**

The existing Portsmouth Regional Hospital is located at 333 Borthwick Ave, Portsmouth, NH 03801 (Map 240, Lot 2-1). The medical campus is located on the east side of Blue Star Turnpike (I-95), the west side of Borthwick Avenue, and can be accessed via multiple entrances from Borthwick Avenue.

The scope of the proposed **Ambulance Bay and Canopy** project consists of an ambulance garage door replacement and the addition of a widened concrete sidewalk with a new overhead canopy for patients to be transported from ambulances (when backed up under the new canopy) to an existing hospital door … all located on the southeast corner of the existing hospital building.

No new building area is proposed with this project. The proposed sitework is anticipated to consist of minimal asphalt, concrete sidewalk, utility, and landscape removal and replacement, along with the installation of a new overhead canopy with structural foundations and columns to support the new canopy.

Below are our responses to the Conservation Commission's approval conditions from a meeting held on January 14th, 2026:

1. *Applicant shall provide a planting plan prior to submission to the Planning Board for the work site which should include new plantings for the river rock area noted on the plan, the area between the new sidewalk extension and existing building, and a portion of the top of the swale bank that stretches the length of the ambulance garage to the lawn south of the helipad.* **CDG Response: Please refer to the added drawing sheets L1.0 and L2.0 for proposed landscaping located in the river rock area, and the area between new sidewalk extension and existing building.**

   **For the portion of the top of the swale bank, per Gove Environmental Services, Inc.: given the current state of the wetland and the buffer is the natural established condition I think this area is already in a natural state to the extent feasible. The option and potential for supplemental plantings within this limited area were considered; however, given the existing conditions of the wetland and buffer including the dense and established Phragmites population, the location is not viable for plantings that would reasonably result in long-term success. While limited plantings could theoretically provide some degree of buffer protection, it is highly unlikely that any planting effort in this constrained area would result in a noticeable or measurable benefit to the existing functions and values currently provided by the established wetland and its buffer.**

2. *Applicant shall submit a plan to the Planning & Sustainability Department staff for review prior to submission to the Planning Board that shows the existing locations of onsite snow storage areas and plans for mitigating snow storage near wetland resources onsite. If existing snow storage occurs within close proximity to wetland resources, alternative locations shall be sought.* **CDG Response: per the facility: Contractor does not mow the areas indicated where signs are being suggested to be posted. The snow is pushed along the side and any build up is removed offsite. Snow is never pushing into the wetlands.**

3. *Applicant shall show on plans and install permanently prior to the start of construction, wetland boundary markers every fifty feet along the edge of the swale from the box culvert south down to the intersection of Borthwick Avenue.* **CDG Response: Please refer to the attached drawing sheet C3.1 "Wetland Boundary Marker Plan" that depicts the proposed locations of the requested wetland boundary markers.**

4. *Applicant shall note on plans that, during regular maintenance, no mowing shall occur in the area of new plantings along the top of the swale bank.* **CDG Response: Notes have been added to the attached drawing sheet C3.1 "Wetland Boundary Marker Plan" regarding the owner is to not mow beyond the added wetland boundary markers.**

5. *All necessary dredging and maintenance work for the swale onsite shall be completed by the applicant and approved by the City of Portsmouth Department of Public Works as a condition prior to the issuance of a Certificate of Completion for this project.* **CDG Response: We understand the owner of PRH is coordinating the effort regarding the recently completed box culvert project and any dredging in the existing swale. Updates will be shared when they become available.**

6. *It is recommended that staff from the Department of Public Works make themselves available at the Planning Board meeting to speak to Stipulation #5.* **CDG Response: Noted**

# Findings of Fact | Wetland Conditional Use Permit
## City of Portsmouth Planning Board

Date: February 19, 2026
Property Address: 333 Borthwick Avenue
Application #: LU-25-180
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**<br>**Does Not Meet** | This lot is a previously disturbed lot with mostly impervious surfaces for transportation and pedestrian access to the hospital. This project is a safety improvement for patients of the hospital and would create a small increase in impervious surface where landscaping exists today. |
| **2** | *2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.* | **Meets**<br>**Does Not Meet** | The location of proposed work is within the existing ambulance bay. There is no alternative location outside of the wetland buffer. |

DRAFT

| | Zoning Ordinance Sector 10.1017.50 Criteria for Approval | Finding (Meets Criteria for Approval) | Supporting Information |
|---|---|---|---|
| **3** | *3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.* | **Meets**<br><br>**Does Not Meet** | This project proposed an increase in impervious surfaces while also adding new downspouts to proposed canopy to capture additional stormwater runoff. New plantings are proposed near the sidewalk, but additional plantings should be included along the top of the swale bank that stretches the length of the ambulance garage to the lawn south of the helipad. |
| **4** | *4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.* | **Meets**<br><br>**Does Not Meet** | The expansion of impervious surfaces is proposed to occur within a portion of the existing landscape in order to accommodate the new sidewalk. New plantings are proposed adjacent to the new sidewalk. |
| **5** | *5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.* | **Meets**<br><br>**Does Not Meet** | Removal Due to the nature of the use, the applicant is proposing concrete sidewalks and asphalt within the wetland buffer. Additional plantings along the resource should be provided to offset the proposed impacts. |
| **6** | *6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.* | **Meets**<br><br>**Does Not Meet** | It appears as though the vegetated buffer strip is not being impacted as part of this project. Applicant should consider plantings within this area of the buffer to protect the wetland resource. |
| **7** | **<u>Other Board Findings:</u>** | | |

DRAFT

GOVE ENVIRONMENTAL SERVICES, INC.

January 12, 2025

Portsmouth Regional Hospital

Subject: Wetland Delineation Report
Portsmouth Regional Hospital
333 Borthwick Ave, Portsmouth, NH

Dear Chris Akers,

Per your request, this letter serves to verify that Gove Environmental Services, Inc. (GES) conducted a site inspection to re-verify the previously delineated wetlands at Portsmouth Regional Hospital, located at 333 Borthwick Avenue, Portsmouth, New Hampshire.

Wetlands were evaluated in accordance with the following standards:

1. *US Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, Technical Report ERDC/EL TR-12-1 (January 2012).
2. *Field Indicators for Identifying Hydric Soils in New England – Version 4, June 2020*. New England Hydric Soils Technical Committee.
3. *US Army Corps of Engineers National Wetland Plant List, 2022.*
4. *Classification of Wetlands and Deepwater Habitats of the United States.* USFW Manual FWS/OBS–79/31 (1979).

The site inspection was performed by Brenden Walden, NH Certified Wetland Scientist (CWS) #297, on January 6, 2026. The inspection was conducted to re-verify wetlands in proximity to the proposed project area, as outlined on the documentation provided. The inspection area was limited to a portion of the previously identified drainage area located southwest of the hospital, where the wetland boundary results in buffer overlap with the proposed project on the subject property.

No work or disturbance that would alter the previously identified wetland boundary delineated in 2019 was observed during the site assessment. The only change noted was limited vegetation management within the interior of the wetland; however, no evidence of ground-disturbing activities associated with this management was observed.

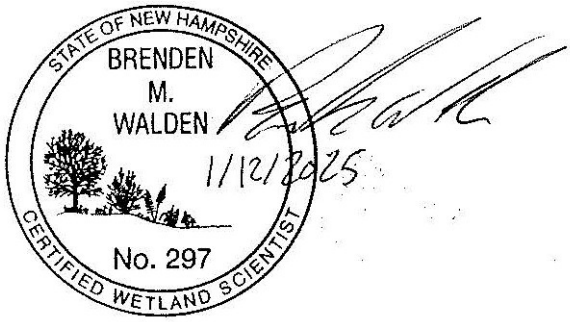
During the site evaluation, a total of six wetland pin flags were re-established to provide a visual reference for the scheduled Conservation Commission site walk. This re-established boundary was intended to assist Commission members in evaluating the location of the wetland boundary relative to the proposed project and associated buffer impacts for City Conditional Use Permitting purposes.

8 Continental Dr Unit H, Exeter, NH 03833-7507
*Ph* (603) 778 0644 / *Fax* (603) 778 0654
*www.gesinc.biz*
*info@gesinc.biz*

A full re-survey of the re-established wetland boundary was not conducted, as it is not necessary. The wetland boundary delineated in 2019 remains suitable for permitting purposes, and the location of this portion of the wetland boundary remains consistent with current delineation standards.

This concludes the wetland delineation letter of findings for the re-evaluation of wetlands at 333 Borthwick Ave, Portsmouth, NH. If I can be of further assistance, please feel free to contact me at bwalden@gesinc.biz.

Sincerely,

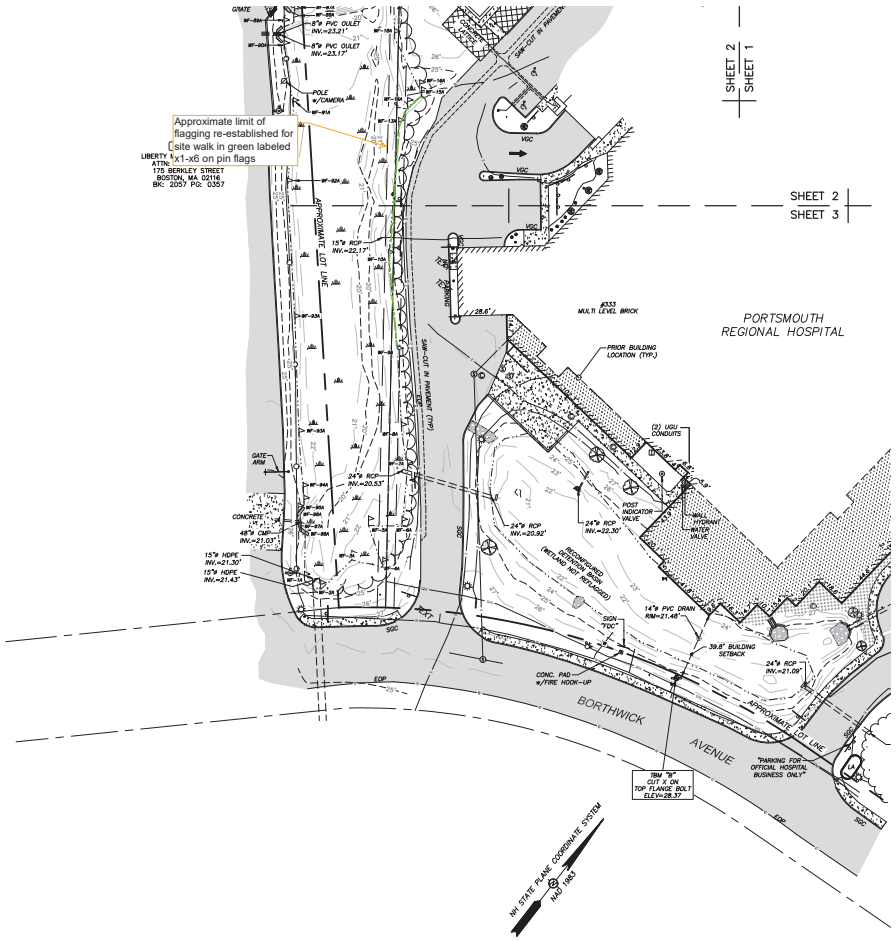



Brenden Walden
President & NH CWS
Gove Environmental Services, Inc.

Enc. Re-Established Wetland Area
Proposed Project Area
Photo Log

GOVE ENVIRONMENTAL SERVICES, INC.
RE-ESTABLISHED WETLAND AREA

8 Continental Dr Unit H, Exeter, NH 03833-7507
*Ph* (603) 778 0644 / *Fax* (603) 778 0654
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*info@gesinc.biz*




GRAPHIC SCALE

30' 0 15' 30' 60' 90'

( IN FEET )

1 inch = 30' ft.

PROPOSED PROJECT AREA

December 26, 2025

City of Portsmouth Conservation Commission

**Re: Portsmouth Regional Hospital – Ambulance Bay and Canopy**
**Project Narrative**
**Portsmouth, NH**

The existing Portsmouth Regional Hospital is located at 333 Borthwick Ave, Portsmouth, NH 03801 (Map 240, Lot 2-1). The medical campus is located on the east side of Blue Star Turnpike (I-95), the west side of Borthwick Avenue, and can be accessed via multiple entrances from Borthwick Avenue.

The scope of the proposed **Ambulance Bay and Canopy** project consists of an ambulance garage door replacement and the addition of a widened concrete sidewalk with a new overhead canopy for patients to be transported from ambulances (when backed up under the new canopy) to an existing hospital door … all located on the southeast corner of the existing hospital building.

No new building area is proposed with this project. The proposed sitework is anticipated to consist of minimal asphalt, concrete sidewalk, utility, and landscape removal and replacement, along with the installation of a new overhead canopy with structural foundations and columns to support the new canopy.

A portion of the proposed project scope is located an existing 100-ft wetland buffer that is offset from the existing wetlands located on the outside of the existing rear hospital loop drive. No work is proposed within the wetlands, and only +/- 730 SF of area is proposed to be disturbed within the wetland buffer. Only +/- 240 SF of additional impervious area (due to widening an existing sidewalk) is proposed with the project scope.

Please note, the overall wetland data has been calculated with older design drawings by others. Only the wetland adjacent to the proposed project was previously delineated and flagged by Gove Environmental Services, Inc., and surveyed by James Verra and Associates, Inc. Refer to attached previous letter and site survey. The wetland flagging will be updated on site by Gove Environmental Services, Inc. for this proposed project.

**Wetlands and 100-foot buffer, Overall Site**

- Subject Parcel: Map 240, Lot2-1 (±20.87 ac)
- Total wetland area onsite: approximately ±2.7 acres
- Total area of 100-foot wetland buffer onsite: approximately ±8.4 acres

**Wetland and 100-foot buffer, Proposed Project Impact**

- Area of inland wetland to be disturbed:
  - Permanent: 0 SF
  - Temporary: 0 SF
  - Total disturbance: 0 SF

- Area of 100-ft wetland buffer to be disturbed:
    - Permanent: ±240 sf (concrete sidewalk widening)
    - Temporary: ±730 sf (construction of widened concrete sidewalk, installation of wider ambulance roll-up door, and installation of new overhead canopy)

Views of existing project area conditions:



Existing ambulance garage roll-up doors. Left garage door to be replaced with wider door to match door to the right:



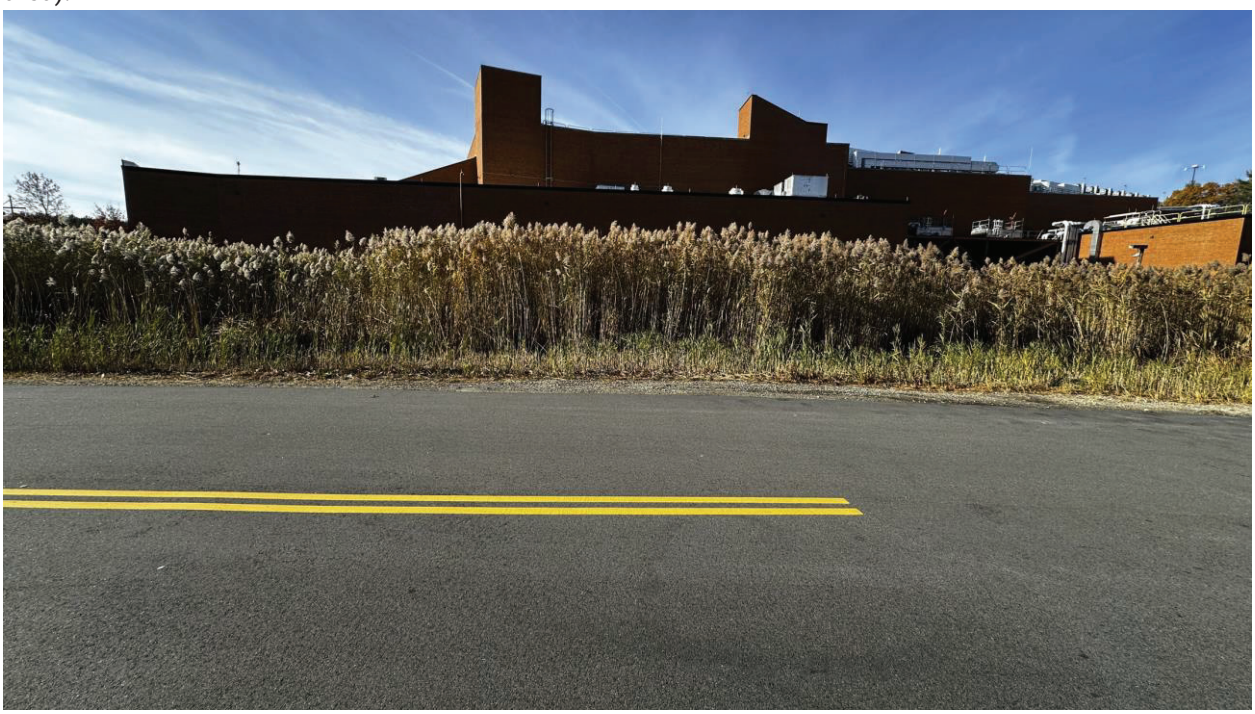
Existing sidewalk to be widened and a new overhead canopy to be installed:



Existing sidewalk to be widened and a new overhead canopy to be installed:



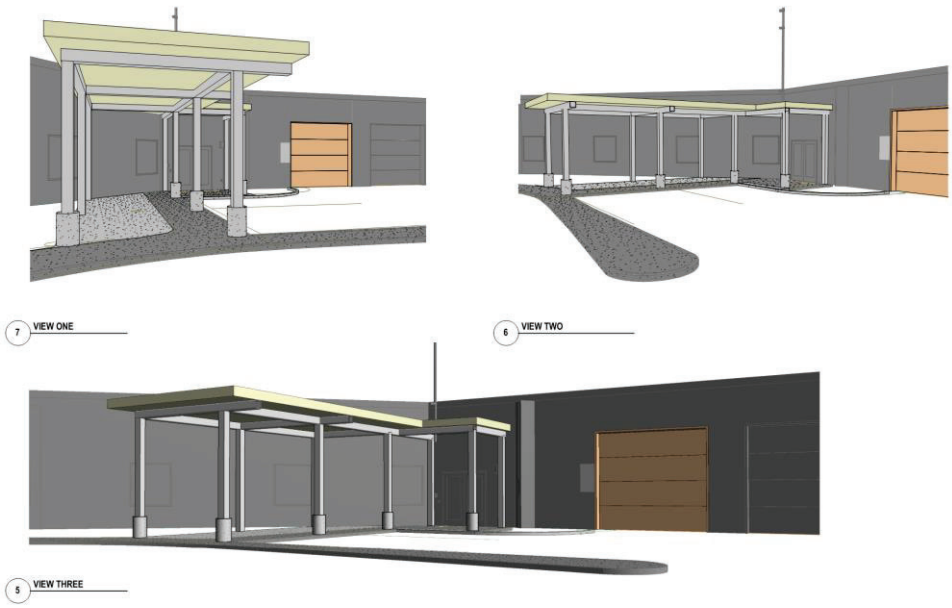

Existing wetlands located along the outside of the rear hospital loop drive (+/-75’ from proposed project area):



Existing wetlands located along the outside of the rear hospital loop drive (+/-’ 75 from proposed project area):



Views of proposed wider garage roll-up door, overhead canopy, and widened sidewalk:




Proposed project area
+/-730 SF of disturance
Wetlands to be reflagged

GOVE ENVIRONMENTAL SERVICES, INC.
PHOTO LOG

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*info@gesinc.biz*

Photo Log
333 Borthwick Ave, Portsmouth
Taken 1/6/2026



Photo 1: Looking north west at the drainage swale, noting some phragmites cutting.



Photo 2: Looking south towards Borthwick Ave at the drainage area.




Photo 3: Looking north at the primary project area.



Photo 4: Looking south at towards Borthwick Ave a the re-established wetland and proximity to the project area.

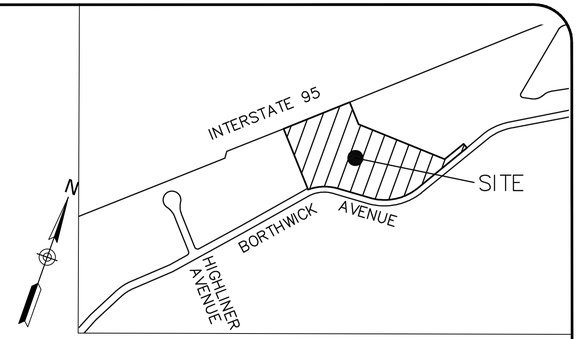
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# CONSTRUCTION DOCUMENTS

# PORTSMOUTH REGIONAL HOSPITAL AMBULANCE BAY & CANOPY

## PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE

CATALYST PROJECT NO. 20250276
01/27/2026




VICINITY MAP
NOT TO SCALE

**SITE DATA**

| | | |
|---|---|---|
| LOT NUMBER: | 0240-0002-0001 | |
| TAX MAP: | 240 | |
| SITE ADDRESS: | 333 BORTHWICK AVE<br>PORTSMOUTH, NH 03801 | |
| SITE ACREAGE: | 20.87 AC. (909,097 SF) | |
| DISTURBED AREA: | 0.01 AC. (764 SF) | |
| DISTURBED AREA IN WETLAND BUFFER: | ±730 SF | |
| EXISTING ZONING: | OR | |
| PROPOSED USE: | HOSPITAL | |
| EXISTING BUILDING HEIGHT: | ± 65'-4" | |
| ALLOWED MAX. BUILDING HEIGHT: | 60' | |
| PROPOSED BUILDING ADDITION: | 0' | |
| HOSPITAL BEDS: | EXISTING: 233 | PROPOSED ADDITION: 0 |
| HOSPITAL / MOB FOOTPRINT: | EXISTING: ±182,616 SF | PROPOSED ADDITION: 0 SF |
| HOSPITAL GROSS FLOOR AREA: | EXISTING: ±436,365 SF | PROPOSED ADDITION: 0 SF |
| ATTACHED MOB GROSS FLOOR AREA: | EXISTING: ± 46,665 SF | PROPOSED ADDITION: 0 SF |

IMPERVIOUS SURFACE AREA

| | |
|---|---|
| EXISTING IMPERVIOUS AREA: | |
| PARKING & DRIVEWAYS: | 319,970 SF |
| OTHER IMPERVIOUS AREA: | 19,506 SF |
| TOTAL: | 339,476 SF |
| PROPOSED IMPERVIOUS AREA ADDED: | 240 SF |
| TOTAL RESULTING IMPERVIOUS AREA: | 339,716 SF |

SETBACKS

| | | |
|---|---|---|
| PRINCIPAL FRONT YARD: | REQUIRED: 50 FT | PROVIDED: 83 FT |
| REAR YARD: | REQUIRED: 50 FT | PROVIDED: 157 FT |
| RIGHT SIDE YARD: | REQUIRED: 75 FT | PROVIDED: 388 FT |
| LEFT SIDE YARD: | REQUIRED: 75 FT | PROVIDED: 83 FT |

MIN. OPEN SPACE ON A LOT

| | |
|---|---|
| REQUIRED: | 30% |
| PROPOSED: | ±39.0% |

MAX. FLOOR-AREA-RATIO (FAR)

| | |
|---|---|
| REQUIRED: | 30% |
| PROPOSED: | ±20.1% |

PARKING SUMMARY

| | |
|---|---|
| EXISTING PARKING PROVIDED: | ±1,277 SPACES |

| | |
|---|---|
| OWNER: | PORTSMOUTH REGIONAL HOSPITAL |
| ADDRESS: | 333 BORTHWICK AVE<br>PORTSMOUTH, NH 03801 |
| PHONE NO.: | 603-436-5110 |
| CONTACT NAME: | JAKE ENCE, VICE PRESIDENT OF OPERATIONS |
| CONTACT E-MAIL ADDRESS: | jacob.ence@hcahealthcare.com |
| PROJECT REPRESENTATIVE: | CATALYST DESIGN GROUP |
| ADDRESS: | 5100 TENNESSEE AVENUE<br>NASHVILLE, TN 37221 |
| PHONE NO.: | 615-622-7200 |
| CONTACT NAME: | CHRIS AKERS, PROJECT MANAGER |
| CONTACT E-MAIL ADDRESS: | cakers@catalyst-dg.com |

RECORDED DOCUMENTS: DEED BOOK 2784 PAGE 1340

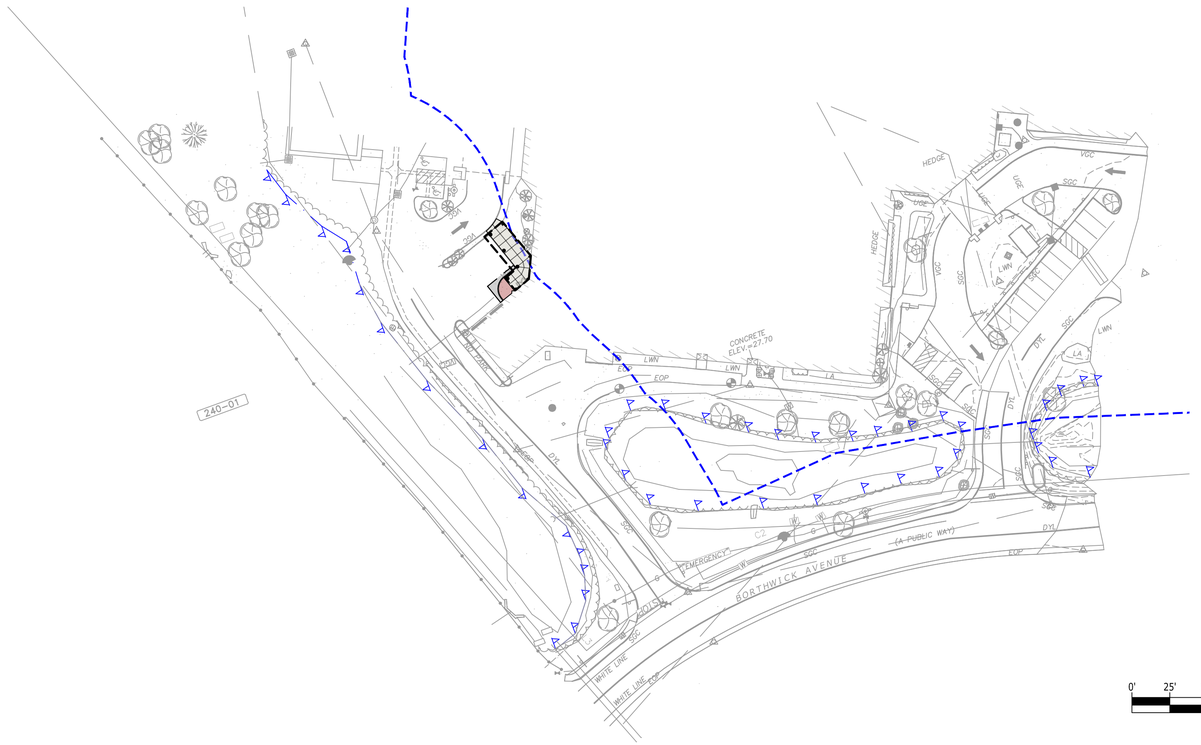
FEMA PANEL:
THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE ACCORDING TO COMMUNITY PANEL NO. 33015C0260F, JANUARY 29, 2021, COMMUNITY NAME: CITY OF PORTSMOUTH.

**ABUTTERS:**

| | |
|---|---|
| ADDRESS: | 255 BORTHWICK AVE<br>PORTSMOUTH, NH 03801 |
| LOT NUMBER: | 0240-0001-0000 |
| TAX MAP: | 240 |
| OWNER: | LIBERTY MUTUAL INSURANCE CO |
| ADDRESS: | BORTHWICK AVE<br>PORTSMOUTH, NH 03801 |
| LOT NUMBER: | 0240-0002-2001 |
| TAX MAP: | 240 |
| OWNER: | CITY OF PORTSMOUTH DPW |
| ADDRESS: | 330 BORTHWICK AVE<br>PORTSMOUTH, NH 03801 |
| LOT NUMBER: | 0240-0002-2200 |
| TAX MAP: | 240 |
| OWNER: | 330 PORTSMOUTH LLC |
| ADDRESS: | BORTHWICK AVE<br>PORTSMOUTH, NH 03801 |
| LOT NUMBER: | 0240-0002-1001 |
| TAX MAP: | 240 |
| OWNER: | CITY OF PORTSMOUTH DPW |

**RESOURCE LIST**

| | |
|---|---|
| NATURAL GAS: | NORTHERN UTILITIES, INC<br>JEFF INGLISH<br>325 WEST ROAD<br>PORTSMOUTH, NH 03801<br>PHONE: (603) 436-0310 |
| ELECTRIC: | PUBLIC SERVICES OF NH/ EVERSOURCE<br>WAYNE BROOKS<br>1700 LAFAYETTE ROAD<br>PORTSMOUTH, NH 03801<br>PHONE: (800) 662-7764 |
| TELEPHONE/ CABLE: | CONSOLIDATED COMMUNICATIONS<br>1575 GREENLOAD ROAD<br>GREENLAND, NH 03840<br>PHONE: (800) 240-5019 |
| WATER/ SANITARY SEWER: | PORTSMOUTH DEPT OF PUBLIC WORKS<br>MIKE JENKINS<br>680 PEVERLY HILL ROAD<br>PORTSMOUTH, NH 03801<br>PHONE: (603) 427-1530 |







N

0' 25' 50' 100' 150'
DRAWING SCALE

| SHEET LIST TABLE | |
|---|---|
| SHEET NUMBER | SHEET TITLE |
| C0.0 | COVER SHEET |
| C1.0 | EXISTING CONDITIONS |
| C2.0 | GENERAL NOTES |
| C3.0 | DEMO, LAYOUT, GRADING & UTILITY PLAN |
| C3.1 | WETLAND BOUNDARY MARKER PLAN |
| C4.0 | SITE DETAILS |
| L1.0 | LANDSCAPE PLAN |
| L2.0 | LANDSCAPE DETAILS |

ARCHITECT

JSA

273 CORPORATE DR STE 100
PORTSMOUTH, NH 03801
603-436-2551

PREPARED FOR

Portsmouth Regional Hospital

333 BORTHWICK AVE
PORTSMOUTH, NH 03801
603-436-5110

CIVIL ENGINEER/LANDSCAPE ARCHITECT

STATE OF NEW HAMPSHIRE
ROBERT ANDREW WISEMAN
LICENSED PROFESSIONAL ENGINEER
01/27/2026

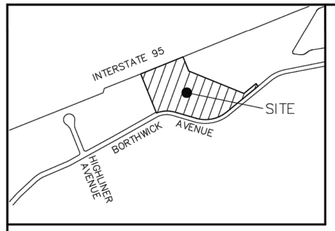
Catalyst DESIGN GROUP

5100 TENNESSEE AVENUE, NASHVILLE, TN 37209
(615) 622-7200 | WWW.CATALYST-DG.COM

LICENSED LANDSCAPE ARCHITECT
JEFFREY CLARK ACKERMAN
154
STATE OF NEW HAMPSHIRE
01/27/2026

COVER SHEET

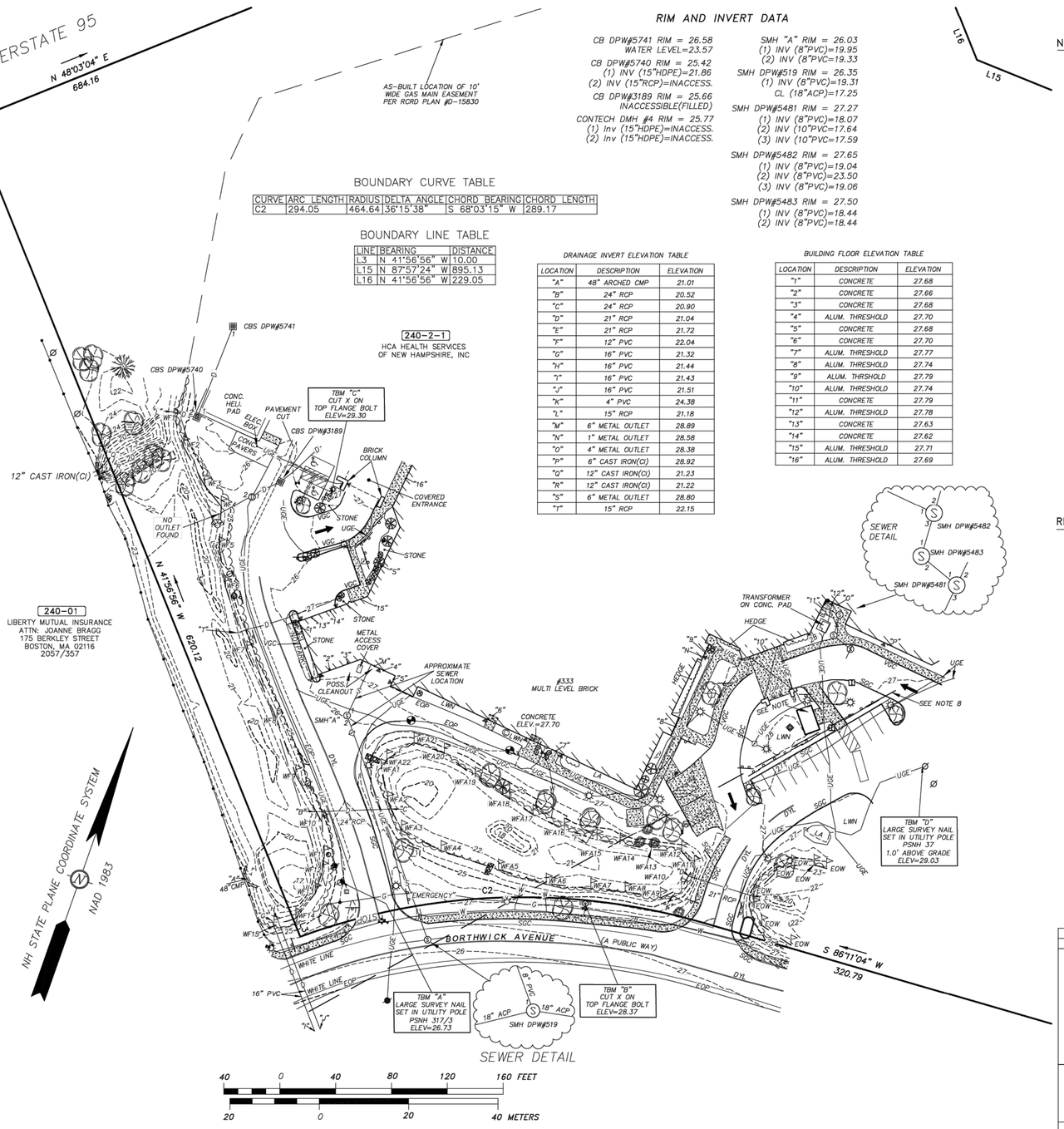
C0.0




LOCUS
(N.T.S.)

## LEGEND:

- IRON ROD (AS NOTED)
- SURVEY NAIL (AS NOTED)
- CHAIN LINK FENCE
- UTILITY POLE
- UTILITY POLE W/TRANSFORMER
- GUY
- LIGHT POLE
- DIRECTED WALL LIGHT
- —OHW— OVERHEAD WIRES
- —OHE— OVERHEAD ELECTRIC
- —OHC— OVERHEAD COMMUNIUCATION WIRES
- —UGC— UNDERGROUND COMMUNICATIONS
- —UGE— UNDERGROUND ELECTRIC
- RCRD ROCKINGHAM COUNTY REGISTRY OF DEEDS
- 240-02-01 TAX SHEET / LOT NO.
- EOP EDGE OF PAVEMENT
- LA LANDSCAPED AREA
- RWS STONE RETAINING WALL
- VGC VERTICAL FACED GRANITE CURB
- SGC SLOPED FACED GRANITE CURB
- PSNH PUBLIC SERVICE CO. OF NH
- HANDICAP SPACE
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- BOLLARD
- SIGN
- DOUBLE POST SIGN
- ELECTRICAL CONDUIT
- ELECTRICAL PANEL
- ELECTRICAL BOX
- ELECTRIC METER
- GAS VALVE
- — W — WATER *LINE*
- — S — SEWER *LINE*
- —D— DRAIN LINE
- — G — GAS LINE
- *BRUSH LINE*
- CONIFEROUS TREE
- DECIDUOUS TREE
- TREE LINE
- CONIFEROUS SHRUB
- DECIDUOUS SHRUB
- TREE STUMP
- MONITORING WELL
- WATER GATE VALVE
- WATER SHUT OFF VALVE
- WATER METER PIT
- HYDRANT
- FIRE CONNECTION
- POST INDICATOR VALVE
- RIP RAP
- CEMENT CONCRETE PAD
- BORING
- CABLE TV VAULT
- DYL DOUBLE YELLOW LINE
- STONE RETAINING WALL




### BOUNDARY CURVE TABLE

| CURVE | ARC LENGTH | RADIUS | DELTA ANGLE | CHORD BEARING | CHORD LENGTH |
|---|---|---|---|---|---|
| C2 | 294.05 | 464.64 | 36°15'38" | S 68°03'15" W | 289.17 |

### BOUNDARY LINE TABLE

| LINE | BEARING | DISTANCE |
|---|---|---|
| L3 | N 41°56'56" W | 10.00 |
| L15 | N 87°57'24" W | 895.13 |
| L16 | N 41°56'56" W | 229.05 |

### RIM AND INVERT DATA

CB DPW#5741 RIM = 26.58
WATER LEVEL=23.57

CB DPW#5740 RIM = 25.42
(1) INV (15"HDPE)=21.86
(2) INV (15"RCP)=INACCESS.

CB DPW#3189 RIM = 25.66
INACCESSIBLE(FILLED)

CONTECH DMH #4 RIM = 25.77
(1) Inv (15"HDPE)=INACCESS.
(2) Inv (15"HDPE)=INACCESS.

SMH "A" RIM = 26.03
(1) INV (8"PVC)=19.95
(2) INV (8"PVC=19.33

SMH DPW#519 RIM = 26.35
(1) INV (8"PVC)=19.31
CL (18"ACP)=17.25

SMH DPW#5481 RIM = 27.27
(1) INV (8"PVC)=18.07
(2) INV (10"PVC=17.64
(3) INV (10"PVC=17.59

SMH DPW#5482 RIM = 27.65
(1) INV (8"PVC)=19.04
(2) INV (8"PVC)=23.50
(3) INV (8"PVC)=19.06

SMH DPW#5483 RIM = 27.50
(1) INV (8"PVC)=18.44
(2) INV (8"PVC)=18.44

### DRAINAGE INVERT ELEVATION TABLE

| LOCATION | DESCRIPTION | ELEVATION |
|---|---|---|
| "A" | 48" ARCHED CMP | 21.01 |
| "B" | 24" RCP | 20.52 |
| "C" | 24" RCP | 20.90 |
| "D" | 21" RCP | 21.04 |
| "E" | 21" RCP | 21.72 |
| "F" | 12" PVC | 22.04 |
| "G" | 16" PVC | 21.32 |
| "H" | 16" PVC | 21.44 |
| "I" | 16" PVC | 21.43 |
| "J" | 16" PVC | 21.51 |
| "K" | 4" PVC | 24.38 |
| "L" | 15" RCP | 21.18 |
| "M" | 6" METAL OUTLET | 28.89 |
| "N" | 1" METAL OUTLET | 28.58 |
| "O" | 4" METAL OUTLET | 28.38 |
| "P" | 6" CAST IRON(CI) | 28.92 |
| "Q" | 12" CAST IRON(CI) | 21.23 |
| "R" | 12" CAST IRON(CI) | 21.22 |
| "S" | 6" METAL OUTLET | 28.80 |
| "T" | 15" RCP | 22.15 |

### BUILDING FLOOR ELEVATION TABLE

| LOCATION | DESCRIPTION | ELEVATION |
|---|---|---|
| "1" | CONCRETE | 27.68 |
| "2" | CONCRETE | 27.66 |
| "3" | CONCRETE | 27.68 |
| "4" | ALUM. THRESHOLD | 27.70 |
| "5" | CONCRETE | 27.68 |
| "6" | CONCRETE | 27.70 |
| "7" | ALUM. THRESHOLD | 27.77 |
| "8" | ALUM. THRESHOLD | 27.74 |
| "9" | ALUM. THRSHOLD | 27.79 |
| "10" | ALUM. THRESHOLD | 27.74 |
| "11" | CONCRETE | 27.79 |
| "12" | ALUM. THRESHOLD | 27.78 |
| "13" | CONCRETE | 27.63 |
| "14" | CONCRETE | 27.62 |
| "15" | ALUM. THRESHOLD | 27.71 |
| "16" | ALUM. THRESHOLD | 27.69 |

## NOTES:

1. OWNER OF RECORD.....HCA HEALTH SERVICES OF NH., D/B/A PRH 32902
C/O DUCHARME MCMILLEN & ASSOCIATES
ADDRESS.....PO BOX 80610, INDIANAPOLIS, IN 46280
DEED REFERENCE.....2784/1340
TAX SHEET / LOT.....240-02-01
PARCEL AREA.....846,664 S.F 19.44 ACRES
2. ZONED:.....*OFFICE/RESEARCH (OR)* FRONT YARD SETBACK....*50'*
MINIMUM LOT AREA..*3 ACRES* SIDE YARD SETBACK.....*75'*
FRONTAGE.....*300'* REAR YARD SETBACK.....*50'*
3. THE RELATIVE ERROR OF CLOSURE WAS LESS THAN 1 FOOT IN 15,000 FEET.
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 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: NAD 1983 ESTABLISHED BY SURVEY GRADE GPS OBSERVATION AND NGS "OPUS" SOLUTION. REFERENCE FRAME: NAD83 (2011)(EPOCH: 2010.0000), US SURVEY FOOT.*
*VERTICAL DATUM: NAVD 1988. PRIMARY BENCHMARK: CITY OF PORTSMOUTH "ALBA"*
6. *ENGINEER OR 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..*
7. *THE PARCEL SHOWN HEREON LIES WITHIN ZONE X (AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS IDENTIFIED ON FLOOD INSURANCE RATE MAP, ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP NUMBER 33015C0260E, EFFECTIVE DATE MAY 17, 2005 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.*
8. *LIMIT OF 300' EVERSOURCE ELECTRIC EASEMENT.*
9. *BRICK GENERATOR ENCLOSURE. TOP OF CONCRETE ELEV.=27.20*
10. *THE DELINEATION OF THE WETLANDS SHOWN HEREON WAS BY BRENDEN WALDEN NEW HAMPSHIRE CERTIFIED WETLAND SCIENTIST #297, GOVE ENVIRONMENTAL SERVICES, LLC., 8 CONTINENTAL DRIVE, UNIT H, EXETER, NH 03833.*
11. *THE SUBSURFACE UTILITIES SHOWN HEREON WERE IDENTIFIED BY WADE HANSEN, GROUND PENETRATING RADAR SYSTEMS, INC., 5217 MONROE STREET, SUITE A, TOLEDO, OHIO 43623.*
12. *AN EXISTING UNITIL GAS LINE SOUTHWESTERLY OF THE HOSIPTAL IN THE VICINITY OF THE LIBERTY MUTUAL PARCEL & A 6" CLDI WATER LINE IN THE SAME AREA WERE NOT FIELD LOCATED BY GROUND PENETRATING RADAR SYSTEMS, INC.*

## REFERENCE PLANS:

1. *GAS LINE AS-BUILT EASEMENT AND CONSERVATION PLAN, PREPARED FOR HOSPITAL CORPROATION OF AMERICA, PORTSMOUTH, NH, DATED 10/31/85. RCRD PLAN #D-15830.*
2. *SCHILLER S/S-OCEAN ROAD S/S, 115 KV TRANSMISSION LINE #U181, MILE 4, PLANR-6775-A, DATED 7/10/2009, BY NORTHEAST UTILITIES, NOT RECORDED.*
3. *SUBDIVISION OF LAND, FRANETAL REALTY TRUST COMPAMY, OPTIONED TO LIBERTY MUTUAL INSURANCE COMPANY, PORTSMOUTH, NEW HAMPSHIRE, REVISED TO 2/19/71 RCRD PLAN #2190.*

## 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.

James Verra — 11-19-2019
JAMES VERRA — DATE

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — No. 825 JAMES VERRA — SIGNATURE

| REV. NO. | DATE | DESCRIPTION | APPR'D |
|---|---|---|---|
| 0 | 11-08-2019 | FOR REVIEW & COMMENT | JV |

# LIMITED EXISTING CONDITIONS PLAN
## 333 BORTHWICK AVENUE
## PORTSMOUTH, NEW HAMPSHIRE
### ASSESSOR'S PARCEL #240-002-001
*for*
### HCA HEALTH SERVICES OF NEW HAMPSHIRE

JAMES VERRA and ASSOCIATES, INC.
101 SHATTUCK WAY
SUITE 8
NEWINGTON, N.H., 03801-7876
603-436-3557

GTD — PROJECT JV
GTD — DRAWN BY

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| | |
|---|---|
| DATE: | 11-19-2019 |
| JOB NO: | 23834 |
| SCALE: | 1" = 40' |
| DWG NAME: | 23834 |
| PLAN NO: | 23834 |
| SHEET: | 1 of 1 |

Catalyst DESIGN GROUP
5100 TENNESSEE AVENUE, NASHVILLE, TN 37209
(615) 622-7200 | WWW.CATALYST-DG.COM

PORTSMOUTH REGIONAL HOSPITAL
333 BORTHWICK AVE
PORTSMOUTH, NH 03801
603-436-5110

CONSTRUCTION DOCUMENTS
PORTSMOUTH REGIONAL HOSPITAL
AMBULANCE BAY & CANOPY
333 BORTHWICK AVE
PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE

| NO. | DATE | DESCRIPTION |
|---|---|---|

DRAWING TITLE
EXISTING CONDITIONS

PROJECT NUMBER
20250276

DRAWING NUMBER
C1.0

P:\2025\20250276_jsa - hca prh - ambulance bay and canopy\dwg\construction\20250276_EXI.dwg-C1.0 EXISTING CONDITIONS Jan 28, 2026 randerson

## PROJECT NOTES

1. SUBJECT PROPERTY SHOWN ON TAX MAP 240, AS PARCEL 0240-0002-0001 OF THE ROCKINGHAM COUNTY, NEW HAMPSHIRE, TAX MAPS.
2. SITE EXISTING CONDITIONS ARE TAKEN FROM SURVEY BY JAMES VERRA & ASSOCIATES, INC. DATED NOVEMBER 8, 2019. CATALYST DESIGN GROUP SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF OR OMISSIONS FROM THE EXISTING CONDITIONS OR ERRORS RESULTING THEREFROM.
3. CATALYST DESIGN GROUP RECOMMENDS THAT CONSTRUCTION STAKING SERVICES BE PROVIDED BY A SURVEYOR LICENSED IN THE STATE OF THE PROJECT.
4. THE CONTRACTOR SHALL REVIEW THE SITE CONDITIONS PRIOR TO CONSTRUCTION AND INFORM THE ENGINEER OF ANY INCONSISTENCIES BETWEEN OBSERVED SITE CONDITIONS AND THE SURVEY OR EXISTING CONDITIONS PLAN.
5. DIMENSIONS PROVIDED ON THE PLAN ARE TAKEN TO THE FACE OF CURBS, EDGE OF CONCRETE OR EDGE OF BUILDING, UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS AND PERMITS PRIOR TO INITIATING CONSTRUCTION AND SHALL ADHERE TO PERMIT REQUIREMENTS AS WORK PROCEEDS.
7. SITE CONTROL SHALL BE BASED OFF THE REFERENCE POINT(S) AND SURVEY DATUM PROVIDED. SEE THE ARCHITECTURAL PLANS FOR LAYOUT CONTROL OF BUILDING ADDITIONS.
8. THE CONTRACTOR SHALL SUBMIT A REQUEST FOR UTILITY LOCATION (811) AND HAVE THE UTILITIES MARKED BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE FAMILIAR WITH UTILITY LOCATIONS, PROTECT UTILITIES WHICH REMAIN IN SERVICE, AND REPAIR ANY DAMAGE TO UTILITY SYSTEMS PER THE UTILITY PROVIDER REQUIREMENTS.
9. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO PUBLIC ROADWAYS, CURBS AND SIDEWALKS IN ACCORDANCE WITH THE LOCAL REQUIREMENTS AT THE CONTRACTOR'S EXPENSE.
10. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY WORK UNACCEPTABLE TO THE OWNER'S REPRESENTATIVE OR GOVERNING AGENCIES AT THE CONTRACTOR'S EXPENSE.
11. IN EASEMENTS AND RIGHTS-OF-WAY, CONTRACTOR SHALL PROTECT AND RESTORE SAID PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING AT THE COMMENCEMENT OF CONSTRUCTION EXCEPT AS NOTED.
12. PRIVATE ASPHALT PAVEMENT SECTIONS AND MATERIALS SHALL BE PER STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND GEOTECHNICAL REPORT RECOMMENDATIONS.
13. THE CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS AND PRECAUTIONS.
14. UNLESS OTHERWISE NOTED, SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS FOR REVIEW. DESIGN DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS. THE ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH LOCAL/STATE SPECIFICATIONS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL OF THE DEVIATION.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTING AND MAINTAINING AS-BUILT INFORMATION AS CONSTRUCTION PROGRESSES AND/OR AT THE COMPLETION OF APPLICABLE SCOPES OF WORK. PROVIDE AS-BUILT DATA IN A USEABLE FORMAT TO THE OWNER AND ENGINEER FOR THEIR RECORDS AND FOR SUBMITTAL TO GOVERNING AUTHORITIES, WHERE REQUIRED. ESTABLISH AND CONFIRM APPLICABLE AS-BUILT REQUIREMENTS FOR ALL SCOPE ITEMS PRIOR TO CONSTRUCTION BASED ON OWNER'S REQUIREMENTS, JURISDICTIONAL STANDARDS, AND THE PROJECT SPECIFICATIONS. AS-BUILT DATA SHALL BE COLLECTED BY A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF NEW HAMPSHIRE, WHOSE SERVICES ARE ENGAGED AND PAID FOR BY THE CONTRACTOR.
16. ALL JURISDICTIONAL SPECIFICATIONS, DOCUMENTS, AND DETAILS REFERENCED SHALL BE THE LATEST REVISION IN EFFECT AT THE TIME OF PERMIT APPROVAL.
17. CONTRACTOR SHALL REPAIR ALL OFF-SITE CONSTRUCTION OR STAGING AREAS TO EQUAL AND/OR BETTER CONDITION THAN AT THE START OF CONSTRUCTION.

## DEMOLITION NOTES

1. THE CONTRACTOR SHALL REQUEST UTILITY LOCATIONS (811) AND VERIFY LOCATIONS OF ALL OTHER PRIVATE UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES FROM DAMAGE AND REPAIR PER PROVIDER REQUIREMENTS AT THE CONTRACTOR'S EXPENSE IF DAMAGED. COORDINATE ALL WORK AROUND EXISTING UTILITIES WITH CORRESPONDING PROVIDER.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION REQUIRED TO ACCOMPLISH THE PROPOSED WORK.
3. THE CONTRACTOR SHALL PROTECT PROPERTY BOUNDARY PINS AND SURVEY CONTROL POINTS FROM DAMAGE.
4. THE CONTRACTOR SHALL COMPLY WITH EROSION PREVENTION AND SEDIMENT CONTROL REQUIREMENTS AND INSTALL NECESSARY EPSC MEASURES AND CONSTRUCTION ENTRANCE/EXIT PRIOR TO DISTURBING EXISTING VEGETATION. THE CONTRACTOR SHALL USE WATER SPRINKLING OR OTHER MEASURES TO CONTROL DUST AND OTHER AIRBORNE DEBRIS RESULTING FROM DEMOLITION.
5. TREE PROTECTION MEASURES SPECIFIED IN THESE PLANS SHALL BE INSTALLED PRIOR TO BEGINNING DEMOLITION OPERATIONS.
6. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FOR DEMOLITION AND TREE REMOVAL PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR MAY BE REQUIRED TO PHASE DEMOLITION TO MAINTAIN EXISTING UTILITY SERVICES, PROPER DRAINAGE, OR ACCESS TO THE SITE OR ADJOINING SITES. THE CONTRACTOR SHALL MINIMIZE THE DISRUPTION OF EXISTING ACTIVE UTILITIES AND TRAFFIC PATTERNS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE AND PROVIDE A DEMOLITION PHASING SCHEDULE WHERE REQUESTED.
8. WHERE ACTIVE UTILITIES OR STORM SEWERS ARE PROPOSED FOR RELOCATION, THESE FEATURES SHOULD NOT BE DEMOLISHED UNTIL NEW OR RELOCATED LINES HAVE BEEN INSTALLED AND ARE OPERATIONAL.
9. THE CONTRACTOR SHALL INCLUDE IN THEIR COST ANY ISOLATION VALVES OR TEMPORARY MEASURES REQUIRED TO ACCOMPLISH RELOCATIONS AND DEMOLITION OF UTILITIES.
10. PAVEMENTS, SIDEWALKS, CURBS, AND OTHER HARD SURFACES SHALL BE EVENLY SAW CUT AT THE LIMITS OF REMOVAL TO PROVIDE A CLEAN EDGE. COORDINATE LIMITS OF REMOVAL WITH PROPOSED CONSTRUCTION INCLUDING GRADING, UTILITY INSTALLATION, PROPOSED LAYOUT, ETC.
11. EXISTING SITE FEATURES NOTED AS BEING ABANDONED MAY BE ABANDONED IN PLACE IF THE ITEMS ARE LOCATED MORE THAN 24" BELOW FINAL SUBGRADES (TO TOP OF PIPE OR OTHER FEATURE) AND NOT LOCATED WITHIN PROPOSED BUILDING FOOTPRINTS OR BELOW PROPOSED RETAINING WALLS. ENDS OF ABANDONED PIPES SHALL BE SEALED WITH CONCRETE.
12. ALL DEMOLISHED MATERIALS SHALL BE REMOVED FROM THE SITE AT THE CONTRACTOR'S COST UNLESS NOTED TO BE PROVIDED TO THE OWNER.
13. CAVITIES LEFT BY DEMOLITION SHALL BE PROPERLY BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, AND THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
14. WHERE EXISTING IRRIGATION LINES ARE LOCATED WITHIN THE AREA OF CONSTRUCTION, THEY SHALL BE PROTECTED OR RE-ROUTED AND CONNECTED TO MAINTAIN OPERATION IN LANDSCAPE AREAS WHICH REMAIN DURING CONSTRUCTION. COORDINATE TEMPORARY MEASURES WITH DESIGN OF NEW SYSTEM AND REMOVE TEMPORARY MEASURES WHEN NO LONGER NEEDED.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR ALL ON-SITE AND OFF-SITE DEWATERING OPERATIONS AND SHALL OBTAIN PERMITS THROUGH THE NECESSARY LOCAL AND STATE AGENCIES AS NEEDED.
16. IF AN EXISTING WELL IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INFORM THE ENGINEER AND ABANDON/REMOVE ANY EXISTING WELLS PER LOCAL/STATE STANDARDS.

## ADA ACCESSIBILITY NOTES

1. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY ARE TO BE CONSTRUCTED PER LOCAL AUTHORITY'S STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS. WHERE THERE ARE NO LOCAL STANDARDS, THE CONTRACTOR SHALL CONSTRUCT CURB RAMPS COMPLYING WITH THE CURRENT VERSION OF THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG), PUBLISHED BY THE UNITED STATES ACCESS BOARD.
2. PRIVATE CURB RAMPS ON THE SITE OUTSIDE OF THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO AMERICANS WITH DISABILITIES ACT (ADA) AND/OR FAIR HOUSING ACT (FHA) STANDARDS, WHERE APPLICABLE.
3. BEFORE PLACING PAVEMENT OR SIDEWALKS, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND/OR FHA) EXIST TO AND FROM ACCESSIBLE DOORS, ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. MAXIMUM GRADES WITHIN ACCESSIBLE PARKING AND ACCESS AISLES SHALL BE 2% IN ANY DIRECTION. WITHIN ACCESSIBLE PATHS, MAXIMUM SLOPES FOR SIDEWALKS SHALL BE LONGITUDINALLY MAXIMUM 5% AND FOR RAMPS SHALL BE LONGITUDINALLY MAXIMUM 8.33% (1:12). CROSS SLOPES SHALL BE MAXIMUM 2%. TURNING SPACES (5'x5' MIN.) SHALL BE MAXIMUM 2% SLOPE IN ANY DIRECTION.
4. CURB RAMPS SHALL HAVE A LANDING AT THE TOP MATCHING THE WIDTH OF THE RAMP AND A MINIMUM DEPTH OF 48". RAMPS SHALL HAVE A 5' X 5' LANDING AT THE TOP AND BOTTOM OF THE RAMP. ALL CURB/ACCESSIBLE RAMP DESIGNS SHALL CONFORM TO ADA STANDARDS OR LOCAL BUILDING CODE STANDARDS, WHICHEVER IS MORE RESTRICTIVE.
5. THE CONTRACTOR SHALL FIELD VERIFY SLOPE MEASUREMENTS ON FINISHED GRADE, SUBGRADE, AND FORMWORK PRIOR TO PLACING PAVEMENT TO VERIFY CONFORMANCE TO ADA SLOPES. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES. WHEN REQUESTED BY THE OWNER, THE ENGINEER WILL MEASURE FINISHED SLOPES IN ACCESSIBLE SPACES AND ALONG ACCESSIBLE ROUTES USING A 2' DIGITAL SLOPE LEVEL.
6. WHERE CONSTRUCTION IS TAKING PLACE WITHIN AN EXISTING DEVELOPMENT OR FACILITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN AN ACCESSIBLE PATH PER ADA AND/OR FHA STANDARDS THROUGHOUT THE CONSTRUCTION PROCESS AS NEEDED.

## TREE PROTECTION NOTES

1. INSTALL TREE PROTECTION PRIOR TO DEMOLITION OR EARTH MOVING OPERATIONS IN ACCORDANCE WITH THE DETAILS AND NOTES PROVIDED IN THESE PLANS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL STAKE THE LIMITS OF CONSTRUCTION TO ENSURE TREE PROTECTION MEASURES ARE INSTALLED IN THE PROPER LOCATIONS.
3. TREE PROTECTION MEASURES SHALL CONSIST OF 48" TALL CHAIN LINK FENCE WITH STEEL TEE POSTS OR ORANGE CONSTRUCTION BARRICADE FENCE. PRIOR TO CONSTRUCTION, TREE PROTECTION FENCE INSTALLATION SHALL BE INSPECTED BY THE OWNER'S REPRESENTATIVE AND GOVERNING AUTHORITY IF REQUIRED.
4. ANY GRADING OR EXCAVATION WITHIN THE PROTECTED ROOT ZONE SHALL BE ACCOMPLISHED BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE DAMAGE.
5. ROOTS EXPOSED DURING CONSTRUCTION OPERATIONS SHALL BE PRUNED FLUSH WITH THE GROUND AND COVERED WITH BACKFILL AS SOON AS POSSIBLE. IF EARTHWORK OPERATIONS WILL DELAY THE PLACEMENT OF BACKFILL, THE ROOTS SHALL BE TEMPORARILY COVERED WITH MULCH AND WATERED UNTIL BACKFILL OPERATIONS CAN BE ACCOMPLISHED.
6. DO NOT STORE EQUIPMENT OR MATERIALS WITHIN THE DRIP LINE OF TREES TO BE PRESERVED.
7. WHEN GRADING OR TRENCHING OPERATIONS ARE REQUIRED WITHIN THE DRIP LINE OF A TREE TO BE PRESERVED, THE ROOTS SHALL FIRST BE CUT USING A "DITCH WITCH" OR SIMILAR EQUIPMENT TO PROVIDE A CLEAN CUT AT THE LIMIT OF DISTURBANCE PRIOR TO USE OF OTHER GRADING MACHINERY. ONCE THE ROOTS HAVE BEEN CUT AS NOTED ALL EQUIPMENT SHALL BE RESTRICTED FROM ENTERING THE AREA BETWEEN THE CUT LINE AND TREE TRUNK. TRENCHES SHALL BE BACKFILLED AND TAMPED TO MINIMIZE SETTLEMENT.
8. BARRICADES SHALL BE INSTALLED WITHIN THE LIMITS OF PROPOSED PAVEMENTS WHEN EXTENDING UNDER THE DRIP LINE OF TREES TO BE PRESERVED UNTIL OPERATIONS TO CONSTRUCT THE PAVED AREAS ARE INITIATED. THEN THE BARRICADES CAN BE RELOCATED TO PROVIDE THE MINIMUM AREA NECESSARY FOR CONSTRUCTION OF THE PROPOSED WORK AND SHALL REMAIN IN PLACE UNTIL ALL WORK IS COMPLETE.
9. PROVIDE WATERING OF SPECIMEN TREES DURING CONSTRUCTION DURING PERIODS OF DROUGHT EXCEEDING SEVEN DAYS. EVENLY DISTRIBUTE WATER OVER THE ENTIRE ROOT ZONE.
10. ROOT ZONE AREAS OF TREES THAT HAVE BEEN COMPACTED DUE TO CONSTRUCTION ACTIVITIES SHALL BE AERATED AT THE DIRECTION OF A QUALIFIED ARBORIST.
11. HOSE DOWN FOLIAGE OF SPECIMEN TREES SUBJECT TO HEAVY ACCUMULATION OF DUST FROM CONSTRUCTION ACTIVITIES.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE GRASS TO LESS THAN 12" IN HEIGHT WITHIN THE AREAS OF TREE PROTECTION DURING THE CONSTRUCTION PERIOD. DO NOT USE HERBICIDES TO CONTROL VEGETATION WITHIN THE TREE PROTECTION AREA.
13. REMOVAL OF TREE PROTECTION FENCING SHALL NOT OCCUR UNTIL APPROVED BY THE GOVERNING AUTHORITY WHERE REQUIRED, OR THE OWNER'S REPRESENTATIVE. ALL REMNANTS OF THE FENCING SHALL BE REMOVED AND RESTORATION OF THE AREAS SHALL BE COMPLETED.

## EROSION CONTROL NOTES

1. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES SHALL BE INSTALLED PER LOCAL AND STATE REQUIREMENTS PRIOR TO ANY EARTH MOVING ACTIVITIES.
2. PROVIDE CONSTRUCTION ENTRANCE/EXIT AS DETAILED ON THE PLANS AND PER LOCAL REQUIREMENTS. MAINTAIN ENTRANCE/EXIT THROUGHOUT CONSTRUCTION AND MAINTAIN THE PUBLIC ROADWAY FREE OF TRACKED MUD AND DIRT.
3. EPSC MEASURES SHALL BE INSTALLED AND INSPECTED BY LOCAL OFFICIALS (IF REQUIRED) PRIOR TO BEGINNING EARTH MOVING OPERATIONS. EPSC MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.
4. LOCATION OF DIVERSION DITCHES, SILT FENCE, AND OTHER MEASURES MAY BE SLIGHTLY ADJUSTED IN THE FIELD TO AVOID TREES AND OTHER EXISTING FEATURES.
5. THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO THE REQUIREMENTS OUTLINED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) DEVELOPED FOR THE SITE, AS WELL AS LOCAL AND STATE REQUIREMENTS. THE CONTRACTOR SHALL ALSO PROVIDE THE CERTIFIED EROSION CONTROL INSPECTOR AND CONTINUAL MAINTENANCE OF THE EPSC MEASURES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
6. AS THE WORK PROGRESSES THE LOCATION AND TYPE OF MEASURES MAY REQUIRE ADJUSTMENTS. TEMPORARY MEASURES MAY BE REQUIRED IN CERTAIN AREAS THAT CAN BE REMOVED DURING THE WORK DAY AND RE-ESTABLISHED WHEN WORK CEASES FOR THE DAY OR PRIOR TO A DAYTIME RAIN EVENT.
7. SEDIMENT SHALL BE REMOVED FROM EROSION PREVENTION AND SEDIMENT CONTROL MEASURES WHEN THE DESIGN CAPACITIES HAVE BEEN REDUCED BY 50% OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE OR GOVERNING AGENCY. PROPERLY DISPOSE OF ACCUMULATED SEDIMENT.
8. THE CONTRACTOR SHALL PROVIDE A RAIN GAUGE AT THE SITE AND DOCUMENT RAINFALL EVENTS DURING THE CONSTRUCTION PERIOD.
9. THE CONTRACTOR SHALL MAINTAIN THE FOLLOWING RECORDS AT THE SITE: DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON PORTIONS OF THE SITE; DATES WHEN STABILIZATION MEASURES ARE INITIATED; INSPECTION RECORDS; AND RAINFALL EVENTS.
10. EXISTING SITE VEGETATION SHALL REMAIN IN PLACE AS LONG AS POSSIBLE AND SHALL NOT BE REMOVED MORE THAN 10 DAYS PRIOR TO THE DATE AT WHICH EARTH MOVING OPERATIONS ARE TO BEGIN UNLESS TEMPORARY COVER IS INSTALLED. DO NOT REMOVE VEGETATION OR TREES UNLESS NECESSARY FOR GRADING OR OTHER PROJECT PURPOSES.
11. THE CONSTRUCTION SHALL BE SEQUENCED TO MINIMIZE THE LENGTH OF TIME SITE SOILS ARE EXPOSED TO EROSION. PROVIDE TEMPORARY COVER AS NECESSARY.
12. EPSC MEASURES SHALL BE REMOVED ONCE PERMANENT VEGETATION IS ESTABLISHED AND WHEN DEEMED NO LONGER NEEDED BY THE OWNER'S REPRESENTATIVE OR GOVERNING AGENCY.

## AS-BUILT REQUIREMENTS

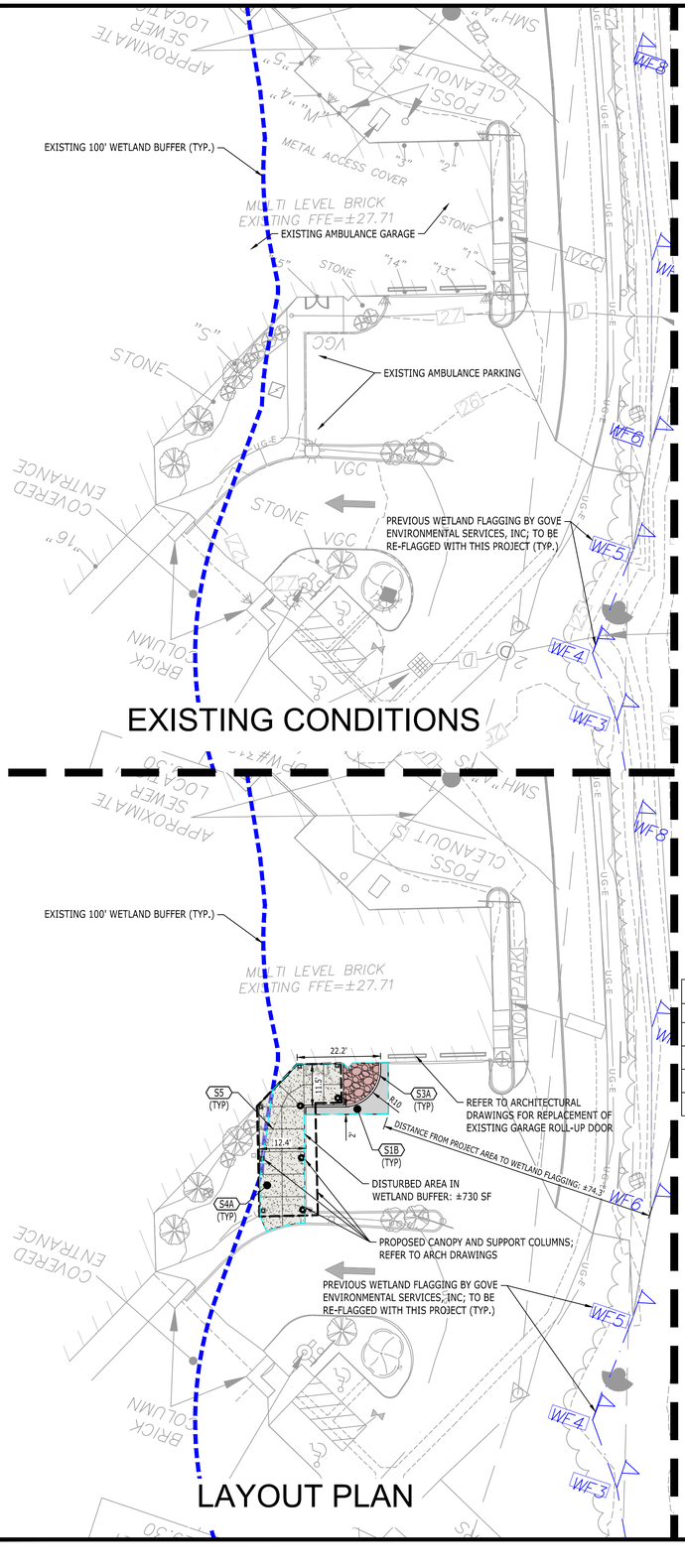
1. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A LICENSED SURVEYOR IN THE STATE OF NEW HAMPSHIRE TO PROVIDE AS-BUILT SURVEY DATA FOR PUBLIC UTILITIES AND PUBLIC/PRIVATE STORMWATER MANAGEMENT INFRASTRUCTURE.
2. AS-BUILT SURVEYS FOR STORMWATER INFRASTRUCTURE SHOULD PROVIDE THE FOLLOWING ITEMS, AT A MINIMUM:
   - 2.1. SPOT ELEVATIONS OF THE EXCAVATED BIORETENTION AND/OR PERMEABLE PAVER SUBGRADE PRIOR TO BACKFILLING WITH SPECIALTY SOIL AND GRAVEL LAYERS.
   - 2.2. SPOT ELEVATIONS OF SUBGRADE FOR UNDERGROUND DETENTION SYSTEMS.
   - 2.3. SPOT ELEVATIONS AND CONTOUR ELEVATIONS NOT TO EXCEED 1' MAX. INTERVAL FOR ALL PERMANENT STORMWATER QUALITY AREAS, DETENTION PONDS, AND ASSOCIATED EMBANKMENTS TO ENSURE PROPER SIZING OF THESE FEATURES.
   - 2.4. SIZE, MATERIAL, ELEVATION INFORMATION FOR ALL STORMWATER PIPES AND STRUCTURES WITHIN THE PUBLIC RIGHT OF WAY.
   - 2.5. SIZE, MATERIAL, ELEVATION INFORMATION FOR ALL PRIVATE STORMWATER QUALITY FEATURES, DETENTION STRUCTURES AND INFRASTRUCTURE DOWNSTREAM OF THESE FEATURES.
   - 2.6. DETAILED INFORMATION FOR ALL OUTLET CONTROL STRUCTURES WITHIN DETENTION PONDS, WATER QUALITY FEATURES, OR UNDERGROUND DETENTION SYSTEMS, INCLUDING ELEVATION AND SIZE INFORMATION FOR ORIFICES, PERFORATED RISERS, WEIRS, TOP OF CASTING, AND INVERTS ASSOCIATED WITH THE STRUCTURE.
   - 2.7. ALL OTHER AS-BUILT INFORMATION REQUIRED BY THE JURISDICTIONAL AUTHORITY OR NOTED ELSEWHERE IN THE PLANS.
3. THE CONTRACTOR SHALL REVIEW LOCAL AUTHORITY'S AS-BUILT REQUIREMENTS AND/OR CONTACT ENGINEER TO CONFIRM AS-BUILT INFORMATION. PHOTOGRAPHIC EVIDENCE OF PROPER INSTALLATION OF STORMWATER MANAGEMENT AND WATER QUALITY INFRASTRUCTURE AND/OR VIDEO INSPECTIONS OF STORMWATER PIPES MAY BE REQUIRED. THE CONTRACTOR SHALL CAPTURE AND RETAIN PHOTOGRAPHIC DOCUMENTATION OF KEY INSTALLATION MILESTONES AS NEEDED. FAILURE TO PROVIDE NECESSARY PHOTOGRAPHIC DOCUMENTATION PRIOR TO BACKFILLING MAY CAUSE DELAYS AND MAY REQUIRE SITE INVESTIGATION THAT COULD INCLUDE RE-EXCAVATION OF COMPLETED INFRASTRUCTURE AT THE CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR SHALL RETAIN AND PROVIDE RECEIPTS FOR ANY FABRICATED STORMWATER MANAGEMENT INFRASTRUCTURE SUCH AS PROPRIETARY WATER QUALITY UNITS, UNDERGROUND DETENTION STRUCTURES, PERMEABLE PAVERS, OR SPECIALTY SOIL MEDIA (WITH APPLICABLE TESTING IF REQUIRED).
5. REFER TO THE STANDARDS OF THE GOVERNING AUTHORITY OR UTILITY DISTRICT FOR AS-BUILT REQUIREMENTS FOR PUBLIC UTILITY INFRASTRUCTURE, INCLUDING METERS AND UTILITY TAPS, WHERE APPLICABLE. SUBMIT AS-BUILT DATA DIRECTLY TO THE LOCAL AUTHORITY AND/OR TO THE ENGINEER FOR REVIEW, AS APPLICABLE.

## STORM SEWER NOTES

1. PUBLIC STORMWATER PIPES, STRUCTURES, AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARD SPECIFICATIONS AND DETAILS. PRIVATE STORMWATER INFRASTRUCTURE SHALL BE CONSTRUCTED PER THE STANDARDS FOUND IN THESE PLANS AND SPECIFICATIONS. PROPRIETARY STORMWATER DETENTION AND WATER QUALITY FEATURES AND PLASTIC PIPES SHALL BE INSTALLED PER THE MANUFACTURER'S PUBLISHED GUIDANCE.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM SEWER PIPE, STRUCTURES, WATER QUALITY STRUCTURES, AND FABRICATED DETENTION STRUCTURES FOR ENGINEER AND OWNER APPROVAL PRIOR TO ORDERING MATERIALS.
3. STORM SEWER PIPE MATERIALS:
   - 3.1. REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III, WALL TYPE 'B' CONFORMING TO ASTM C76 UNLESS OTHERWISE NOTED WITH BELL-AND-SPIGOT AND GASKETED JOINTS WITH ASTM C443 RUBBER GASKETS OR MASTIC SEAL CONFORMING TO ASTM C990. RCP SHALL BE INSTALLED PER THE RECOMMENDATIONS OF ASTM C1479.
     - 3.1.1. CLASS IV RCP PIPE IS REQUIRED FOR FILL HEIGHTS OVER 13' OR WHERE NOTED BY THE ENGINEER.
   - 3.2. HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL BE DUAL-WALL WITH CORRUGATED EXTERIOR AND SMOOTH INTERIOR. HDPE PIPE SHALL CONFORM TO ASTM F2648 OR AASHTO M252/M294 WITH GASKETED SOIL TIGHT JOINTS CONFORMING TO ASTM F477. THERMOPLASTIC PIPING SHALL BE INSTALLED PER ASTM D2321.
   - 3.3. HIGH-PERFORMANCE POLYPROPYLENE (HP) PIPE SHALL BE DUAL-WALL WITH CORRUGATED EXTERIOR AND SMOOTH INTERIOR, CONFORMING TO ASTM F2881 AND AASHTO M330 WITH GASKETED SOIL TIGHT JOINTS CONFORMING TO ASTM F477. THERMOPLASTIC PIPING SHALL BE INSTALLED PER ASTM D2321.
   - 3.4. POLYVINYL CHLORIDE PIPE (PVC) SHALL BE SDR 35 PER ASTM D3034. JOINTS SHALL BE ELASTOMERIC GASKETED, BELL AND SPIGOT, PUSH-ON TYPE PROVIDING A WATER TIGHT SEAL PER ASTM D3212. THERMOPLASTIC PIPING SHALL BE INSTALLED PER ASTM D2321.
4. ALL PIPES SHALL BE INSTALLED, AT A MINIMUM, WITH SOIL TIGHT JOINTS AND CONNECTIONS TO TERMINAL STRUCTURES. COMPLY WITH MANUFACTURER'S SPECIFICATIONS FOR WATER TIGHT INSTALLATIONS WHERE INDICATED ON DRAWINGS.
5. PIPE BEDDING, BACKFILL, AND COMPACTION REQUIREMENTS WITHIN PUBLIC RIGHTS-OF-WAY OR EASEMENTS SHALL BE IN ACCORDANCE WITH LOCAL AND STATE DEPARTMENT OF TRANSPORTATION DETAILS AND SPECIFICATIONS.
6. PIPES UNDER EXISTING PAVEMENT AREAS SHALL BE COMPLETELY BACKFILLED WITH CRUSHED STONE OR PER LOCAL AUTHORITY STANDARD REQUIREMENTS. PAVEMENT SECTIONS SHALL MEET OR EXCEED EXISTING CONDITIONS WITH A SMOOTH TRANSITION.
7. STORM SEWER STRUCTURE MATERIALS:
   - 7.1. STORM INLETS AND MANHOLES SHALL BE PRECAST IN COMPLIANCE WITH THE LOCAL/STATE JURISDICTIONAL AUTHORITY'S STANDARD DETAILS AND SPECIFICATIONS, AND MEET OR EXCEED SPECIFICATIONS OF ASTM C478 AND C913. STRUCTURES SHALL BE TRAFFIC RATED PER H-20 LOADING REQUIREMENTS.
   - 7.2. REFER TO STRUCTURE TABLE FOR CASTING FRAME AND GRATE TYPES. FRAMES AND GRATES TO BE PROVIDED IN ACCORDANCE WITH THE LOCAL/STATE JURISDICTIONAL AUTHORITY'S STANDARD DETAILS AND SPECIFICATIONS AND INSTALLED PER MANUFACTURES RECOMMENDATIONS.
   - 7.3. PIPE CONNECTIONS TO STRUCTURES:
     - 7.3.1. NON-SHRINK GROUT PER ASTM C1107.
     - 7.3.2. WHERE REQUIRED, FLEXIBLE, WATERTIGHT GASKETS SHALL COMPLY WITH ASTM C923.
   - 7.4. FRAMES AND GRATES:
     - 7.4.1. MATERIAL: GRAY IRON CLASS 35 PER ASTM A48 UNLESS OTHERWISE INDICATED.
8. INSTALL REDUCERS AS NECESSARY PER MANUFACTURER'S SPECIFICATIONS TO ACCOMMODATE LARGER PIPE DIAMETERS OR CASTING SIZES.
9. DRAINAGE STRUCTURE SIZES SHOWN IN THE PLANS ARE SCHEMATIC IN NATURE AND MAY VARY BASED ON CONNECTING PIPE SIZES OR ANGLES. FINAL STRUCTURE SIZES WILL BE DETERMINED BY THE PRECASTER BASED ON NATIONAL CONCRETE PIPE ASSOCIATION (NCPA) STANDARDS OR THE MANUFACTURER'S REQUIREMENTS.
10. TOP OF GRATE ELEVATIONS FOR DRAINAGE STRUCTURES SHALL BE PROVIDED PER THE DETAILS AND STRUCTURE TABLES.
11. CONTRACTOR SHALL PLACE STRUCTURES BASED ON THE ACTUAL DIMENSIONS OF ORDERED STRUCTURES AND GRATES TO ALIGN WITH PROPOSED OR EXISTING CURB LINES. DRAINAGE STRUCTURES SHOULD NOT BE INSTALLED BASED SOLELY ON STRUCTURE OR PIPE CENTERLINES.
12. STORM SEWERS SHALL BE CONSTRUCTED STARTING AT THE DOWNSTREAM DISCHARGE OR CONNECTION POINT AND THEN WORKING UPSTREAM. IN EXCEPTIONAL CASES WHERE SITE CONDITIONS OR SCHEDULE CONSTRAINTS REQUIRE CONSTRUCTION IN A DIFFERENT ORDER, THE CONTRACTOR SHALL TAKE SPECIAL CARE TO CONFIRM THAT THE ELEVATION OF THE DOWNSTREAM DISCHARGE OR CONNECTION CONFORMS TO THE PLANS AND THAT MINIMUM SLOPES CAN BE ACHIEVED.
13. COORDINATE THE LOCATION OF SITE DRAINAGE SYSTEMS WITH THE BUILDING ARCHITECTURE AND PLUMBING PLANS FOR COLLECTION OF ROOF DRAINS AND DOWNSPOUTS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
14. ADJUST THE CASTINGS OF ALL EXISTING AND NEW STRUCTURES TO MATCH PROPOSED FINISH GRADE, ENSURING POSITIVE DRAINAGE IS MAINTAINED. SLOPE TOPS OF CASTINGS TO MATCH SLOPES OF SURROUNDING PAVEMENTS AND CURBS.

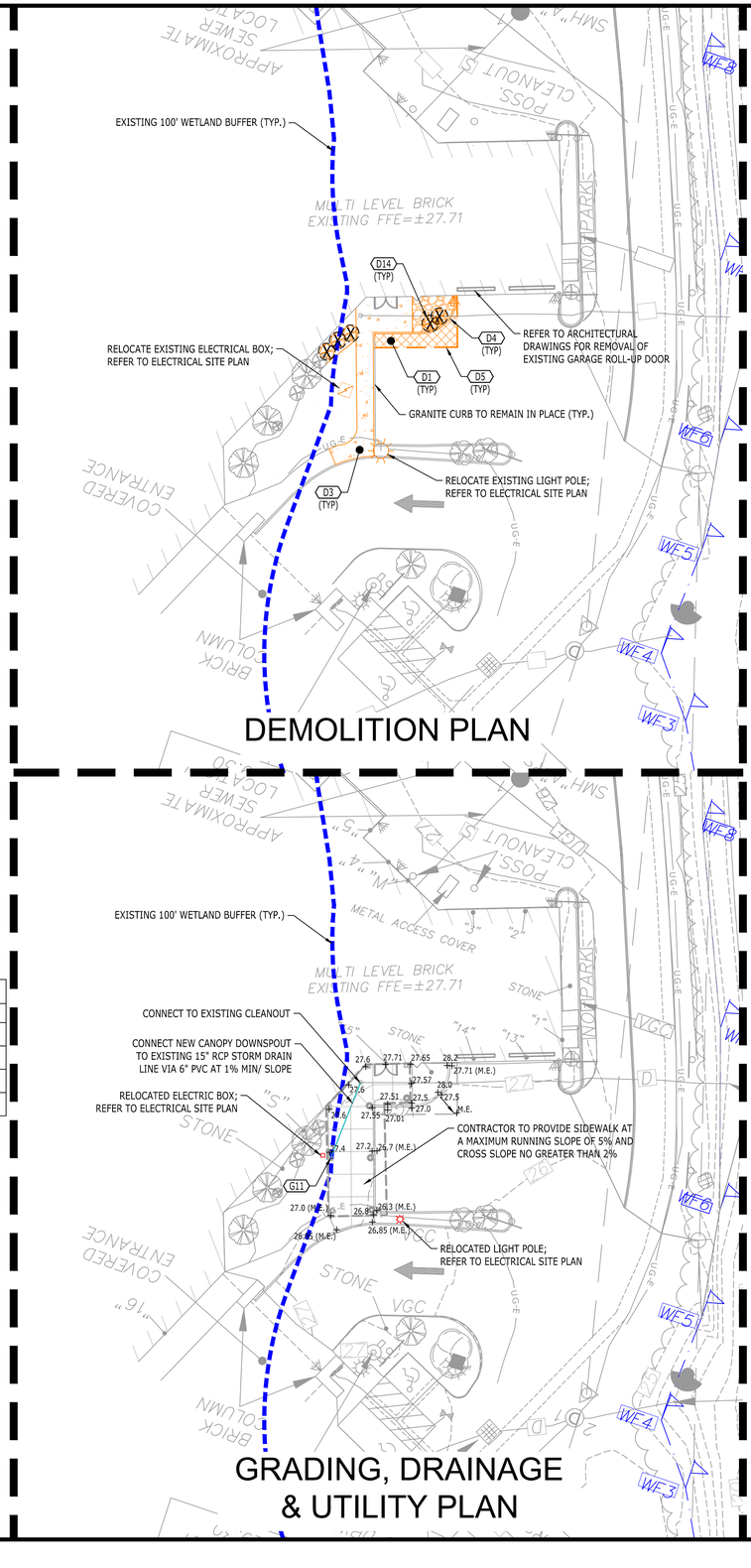
## SITE UTILITY NOTES

1. THE CONTRACTOR SHALL REQUEST UTILITY LOCATIONS (811) AND VERIFY LOCATIONS OF ALL OTHER PRIVATE UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES FROM DAMAGE AND REPAIR PER PROVIDER REQUIREMENTS AT THE CONTRACTOR'S EXPENSE IF DAMAGED. COORDINATE ALL WORK AROUND EXISTING UTILITIES WITH CORRESPONDING PROVIDER.
2. THE CONTRACTOR SHALL COORDINATE WITH THE OWNERS OF EACH UTILITY AND VERIFY THE SCOPE OF INSTALLATIONS OR RELOCATIONS THAT WILL BE REQUIRED AND THE IMPACT EACH COULD HAVE ON THE PROJECT SCHEDULE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEQUENCING OF INSTALLATION OF UTILITIES TO AVOID CONFLICTING HORIZONTAL AND VERTICAL LOCATIONS.
3. ALL PUBLIC WATER AND SEWER MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE TO THE GOVERNING AUTHORITY'S REQUIREMENTS AND SPECIFICATIONS. LIKEWISE, IF THE GOVERNING AUTHORITY HAS MATERIAL REQUIREMENTS FOR PRIVATE (SITE) UTILITIES, CONSTRUCT SITE UTILITIES IN ACCORDANCE WITH APPLICABLE PUBLIC UTILITY SPECIFICATIONS. OTHERWISE, THE FOLLOWING MINIMUM STANDARDS SHALL BE MET:
   - 3.1. PRIVATE GRAVITY SANITARY SEWER MATERIALS:
     - 3.1.1. POLYVINYL CHLORIDE PIPE (PVC) 4" AND GREATER SHALL BE SDR 35 PER ASTM D3034.
       - 3.1.1.1. JOINTS: ELASTOMERIC GASKETED, BELL AND SPIGOT, PUSH-ON TYPE PROVIDING A WATER TIGHT SEAL PER ASTM D3212.
     - 3.1.2. DUCTILE IRON PIPE (DIP) SHALL BE PRESSURE CLASS 350 COMPLYING WITH AWWA C150/C151
       - 3.1.2.1. JOINTS AND FITTINGS: PUSH-ON JOINTS CONFORMING TO AWWA C110/C111. SAME LINING AND COATING AS CONNECTING PIPES..
       - 3.1.2.




# EXISTING CONDITIONS

BASE INFORMATION WAS TAKEN FROM A SURVEY PREPARED BY JAMES VERRA & ASSOCIATES, INC., DATED NOVEMBER 8, 2019. CATALYST DESIGN GROUP AND ANY OF THEIR CONSULTANTS SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND/OR COMPLETENESS OF THAT INFORMATION SHOWN HEREON OR ANY ERRORS OR OMISSIONS RESULTING FROM SUCH.




# DEMOLITION PLAN

| LEGEND | |
|---|---|
| CONCRETE TO REMOVE | |
| ASPHALT PAVEMENT TO REMOVE | |
| REMOVE AND REUSE EXISTING RIVER ROCK | |
| SHRUBS TO BE REMOVED | X |

| DEMOLITION KEYNOTES | |
|---|---|
| CODE | DESCRIPTION |
| D1 | REMOVE EXISTING ASPHALT PAVEMENT |
| D3 | REMOVE EXISTING CONCRETE SIDEWALK |
| D4 | REMOVE AND REUSE EXISTING GRANITE CURB |
| D5 | EVENLY SAWCUT |
| D14 | REMOVE EXISTING SHRUB |




# LAYOUT PLAN

| LEGEND | |
|---|---|
| CONCRETE PAVEMENT | |
| CONCRETE SIDEWALK | |
| HEAVY DUTY PAVEMENT | |
| RIVER ROCK | |
| GRANITE CURB | |

| SITE LAYOUT KEYNOTES | | |
|---|---|---|
| CODE | DESCRIPTION | DET #/SHT # |
| S1B | ASPHALT PAVEMENT - HEAVY DUTY | 1 / C4.0 |
| S3A | GRANITE POST CURB | 3 / C4.0 |
| S4A | CONCRETE SIDEWALK | 2 / C4.0 |
| S5 | SIDEWALK JOINTS | 4 / C4.0 |

**NOTES:**

1. ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS
2. REFER TO L1.0 AND L2.0 FOR LANDSCAPE PLAN AND DETAILS




# GRADING, DRAINAGE & UTILITY PLAN

| LEGEND | |
|---|---|
| STORM PIPE | ST |
| SPOT ELEVATION | +0.00 |
| UNDERGROUND ELECTRIC | |

| GRADING & DRAINAGE KEYNOTES | | |
|---|---|---|
| CODE | DESCRIPTION | DET #/SHT # |
| G11 | BUILDING DOWNSPOUT CONNECTION | 5 / C4.0 |

811 Know what's below. Call before you dig.

0' 10' 20' 40' 60'

DRAWING SCALE


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603-436-5110

ROBERT ANDREW WISEMAN No. 13840 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
01/28/2026

CONSTRUCTION DOCUMENTS
PORTSMOUTH REGIONAL HOSPITAL
AMBULANCE BAY & CANOPY
333 BORTHWICK AVE
PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE

| NO. | DATE | DESCRIPTION |
|---|---|---|

DRAWING TITLE
DEMO, LAYOUT, GRADING & UTILITY PLAN

PROJECT NUMBER
20250276

DRAWING NUMBER
C3.0


P:\2025\20250276_jsa - hca prh - ambulance bay and canopy\dwg\construction\20250276_UTL.dwg-C3.0 DEMO LAYOUT GRADING & UTILITY PLAN Jan 28, 2026 randerson

**Adrian_Boundary Marker City of Portsmouth_revNC_Proof_v2;**
**4.00" dia.;**
**HOLES (2)**

811
Know what's below. Call before you dig.

N

0' 25' 50' 100' 150'
DRAWING SCALE

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STATE OF NEW HAMPSHIRE
ROBERT ANDREW WISEMAN
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LICENSED PROFESSIONAL ENGINEER
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| NO. | DATE | DESCRIPTION |
|---|---|---|

DRAWING TITLE
WETLAND BOUNDARY MARKER PLAN

PROJECT NUMBER
20250276

DRAWING NUMBER
C3.1

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## 7 RESERVED

NOT TO SCALE

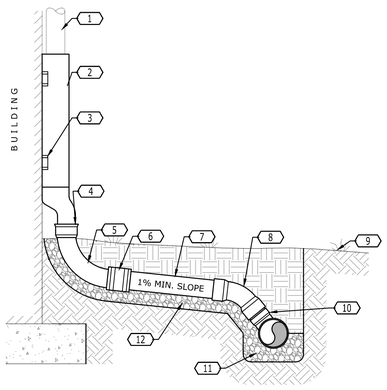
## 8 RESERVED

NOT TO SCALE

## 9 RESERVED

NOT TO SCALE

| KEYNOTES | |
|---|---|
| CODE | DESCRIPTION |
| 1 | DOWNSPOUT |
| 2 | CAST IRON DOWNSPOUT SHOE NEENAH R-4929-O12 OR APPROVED EQUAL, WITH ADAPTER IF REQUIRED. |
| 3 | BOLT DOWNSPOUT SHOE TO BUILDING |
| 4 | MAKE JOINT WITH OAKUM AND HOT LEAD. CONCRETE WILL NOT BE ALLOWED. |
| 5 | 6" CAST IRON BEND |
| 6 | 6" NEOPRENE COMPRESSION CONNECTOR |
| 7 | 6" PVC ROOF LEADER |
| 8 | 6" PVC 1/8 BEND |
| 9 | FINISH GRADE |
| 10 | SANITARY WYE IN EXIST. STORM LINE |
| 11 | CAREFULLY AND THOROUGHLY COMPACT PIPE BEDDING UNDER FITTING |
| 12 | PIPE BEDDING |




## 5 DOWNSPOUT COLLECTOR

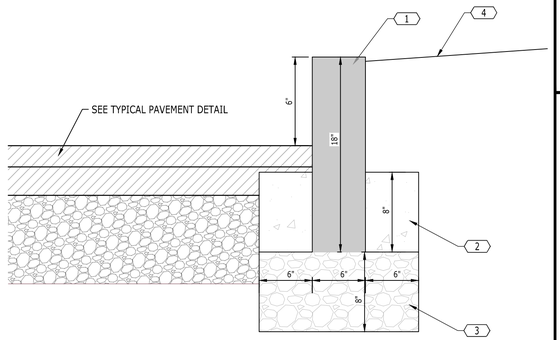
NOT TO SCALE

## 6 RESERVED

NOT TO SCALE

| KEYNOTES | |
|---|---|
| CODE | DESCRIPTION |
| 1 | VERTICAL GRANITE CURB WITH 6" REVEAL |
| 2 | 3,000 PSI (MIN) CONCRETE FULL LENGTH EACH SIDE |
| 3 | 3/4" CRUSHED STONE |
| 4 | PROPOSED FINISH GRADE (REFER TO GRADING PLAN) |

| CURB RADIUS TABLE | |
|---|---|
| RADIUS | MAX LENGTH |
| <20' | USE CURVED CURB |
| 21' | 3' |
| 22'-28' | 4' |
| 29'-35' | 5' |
| 36'-42' | 6' |
| 43'-49' | 7' |
| 50'-56' | 8' |
| 57'-60' | 9' |
| >60' | 10' |



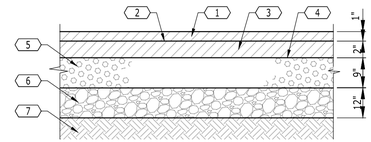

NOTE:
1. ADJOINING STONES SHALL HAVE THE SAME LENGTH.
2. JOINTS BETWEEN STONES SHALL HAVE A MAX SPACING OF 1/2" AND SHALL BE MORTARED.

## 3 6" VERTICAL GRANITE CURB @ PAVEMENT

NOT TO SCALE

| KEYNOTES | |
|---|---|
| CODE | DESCRIPTION |
| 1 | ASPHALTIC WEARING COURSE |
| 2 | TACK COAT AT 0.10 GAL./S.Y. |
| 3 | ASPHALTIC BINDER COURSE |
| 4 | PRIME COAT AT 0.30 GAL./S.Y. |
| 5 | CRUSHED GRAVEL BASE (NHDOT ITEM NO 304.3) |
| 6 | GRAVEL BORROW SUBBASE (NHDOT ITEM NO 304.2) |
| 7 | STABLE/ COMPACTED SUBGRADE |

NOTE:
1. FOR REPAIR OR REPACEMENT OF EXISTING PAVEMENTS, USE THE PAVEMENT SECTIONS SHOWN OR MATCH THE EXISTING SECTION, WHICHEVER IS GREATER.
2. PAVEMENT SECTION PER GEOTECH ENGINEER REPORT PREPARED BY HALEY & ALDRICH, INC., DATED APRIL 2022. FINAL PAVEMENT SECTION TO BE DETERMINED BY ONSITE GEOTECH BASED UPON EXISTING SOIL CONDITIONS.
3. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH NH-DOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.

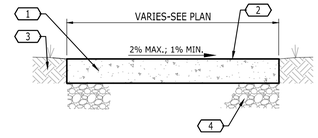



HEAVY DUTY PAVEMENT

## 1 ASPHALT PAVEMENT

NOT TO SCALE

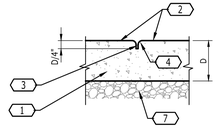
| KEYNOTES | |
|---|---|
| CODE | DESCRIPTION |
| 1 | 3500 PSI CONCRETE, 4" THICK WITH FIBERFORCE 350 FIBER REINFORCEMENT AT A DOSING RATE OF 1.0 LBS/CY.; BROOM FINISH; CROSS SLOPE 2% MAX., 1% MIN. |
| 2 | PROVIDE CONTRACTION AND EXPANSION JOINTS AT SPECIFIED INTERVALS. SEE SIDEWALK JOINTING DETAILS AND PROJECT SPECIFICATIONS. |
| 3 | TOPSOIL; PLACE WITHIN ½" OF WALKWAY SURFACE |
| 4 | 6" COMPACTED CRUSHED GRAVEL (NHDOT 304.3) |



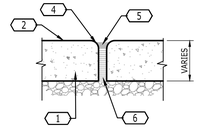

## 2 CONCRETE SIDEWALK

NOT TO SCALE

| KEYNOTES | |
|---|---|
| CODE | DESCRIPTION |
| 1 | CONCRETE SIDEWALK |
| 2 | BROOM FINISH |
| 3 | ¼" HAND-GROOVED JOINT |
| 4 | TOOLED EDGE; ½" RADIUS (TYP.) |
| 5 | ¼" DEPTH POLYURETHANE SEALANT (SIKAFLEX 2c-SL); RECESS ¼" FROM SURFACE. |
| 6 | ½" PREMOLDED EXPANSION JOINT MATERIAL |
| 7 | MINERAL AGGREGATE BASE (TYP.) |




CONTRACTION JOINT




EXPANSION JOINT

**NOTES:**

1. PROVIDE SIDEWALK JOINTS AS FOLLOWS:
   - **1.1. CONTRACTION (CONTROL) JOINTS**
     - 1.1.1. AT 5' MAX. INTERVALS IN TRANSVERSE DIRECTION;
     - 1.1.2. ALONG LONGITUDINAL CENTERLINE OF THE SIDEWALK (FOR SIDEWALKS 6' OR WIDER);
     - 1.1.3. ALIGNING WITH CONTRACTION JOINTS IN ADJOINING CONCRETE PAVEMENT OR CURB.
   - **1.2. EXPANSION JOINTS**
     - 1.2.1. AT 25' MAX. INTERVALS;
     - 1.2.2. AT INTERFACE WITH BUILDINGS, FOUNDATIONS, OR RETAINING WALLS;
     - 1.2.3. BETWEEN SIDEWALK AND SEPARATE CONCRETE CURB;
     - 1.2.4. AT PERIMETER OF DRAINAGE OR UTILITY CASTINGS WITHIN OR ABUTTING THE SIDEWALK;
     - 1.2.5. AT INTERFACE WITH STAIRS, RAMPS, OR CURB RAMPS;
     - 1.2.6. AT INTERFACE WITH INTERSECTING CONCRETE SIDEWALKS;
     - 1.2.7. AT ANY OTHER RIGID OBSTRUCTION, OR AS DIRECTED BY THE ENGINEER;
     - 1.2.8. ALIGNING WITH EXPANSION JOINTS IN ADJOINING CONCRETE PAVEMENT OR CURB.
2. PROVIDE JOINTING AT INTERVALS AS NOTED HEREIN, ON THE PLANS, AND/OR IN THE SPECIFICATIONS. JOINTING INTERVALS MAY BE REDUCED BASED ON SITE GEOMETRY, LOCATION OF OBSTRUCTIONS, ALIGNMENT WITH CURB/SIDEWALK JOINTING, AND OTHER FACTORS. INDIVIDUAL PANELS SHALL NOT EXCEED A LENGTH-TO-WIDTH RATIO OF 1.5 TO 1.
3. SEALED JOINTS SHALL BE FREE FROM DUST AND DEBRIS PRIOR TO APPLYING SEALANT.
4. SUBMIT ALTERNATE SEALANT PRODUCTS TO THE ENGINEER FOR REVIEW PRIOR TO APPLICATION. EXPANSION JOINT CAPS (PLASTIC OR OTHERWISE) SHALL NOT BE CONSIDERED A SUBSTITUTE FOR ELASTOMERIC SEALANT.

## 4 SIDEWALK JOINTS

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**PORTSMOUTH, NH 03801**
**603-436-5110**

STATE OF NEW HAMPSHIRE
ROBERT ANDREW WISEMAN
18
LICENSED PROFESSIONAL ENGINEER
01/28/2026

CONSTRUCTION DOCUMENTS
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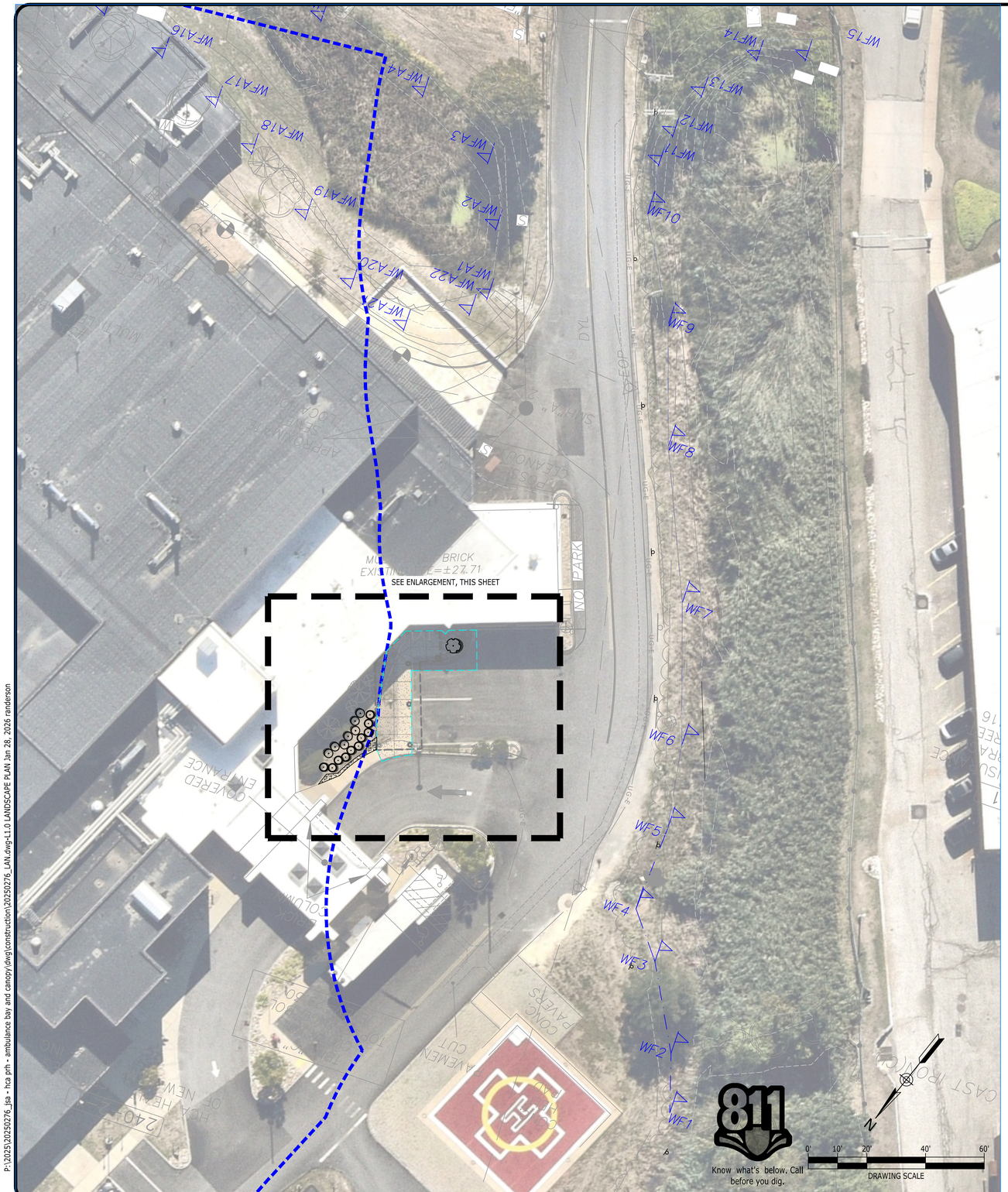
| NO. | DATE | DESCRIPTION |
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DRAWING TITLE
SITE DETAILS

PROJECT NUMBER
20250276

DRAWING NUMBER
C4.0


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| LEGEND | |
|---|---|
| RIVER ROCK | |

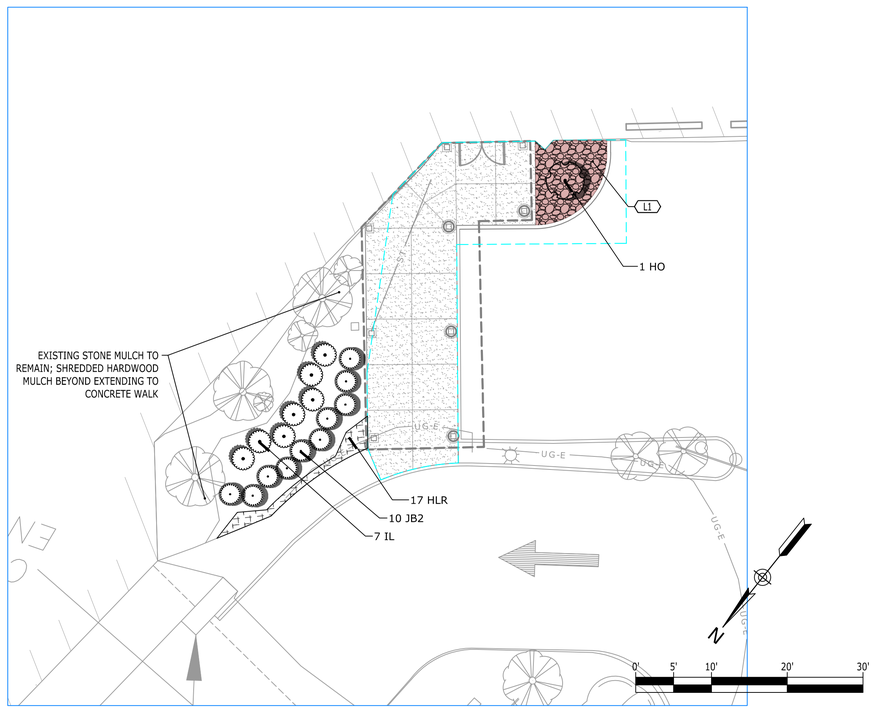
| LANDSCAPE KEYNOTES | | |
|---|---|---|
| CODE | DESCRIPTION | DET #/SHT # |
| L1 | 3-5" ROUND RIVER COBBLES; COLOR TO MATCH EXISTING ON CAMPUS | 3 / L2.0 |

**NOTE**

IF EXISTING IRRIGATION SYSTEM IS INTACT, CONTRACTOR TO ADJUST IRRIGATION HEAD/EMITTER LAYOUT AROUND NEW SITE / LANDSCAPE LAYOUT

## PLANT SCHEDULE

| CODE | QTY | BOTANICAL / COMMON NAME | CONT | SIZE | |
|---|---|---|---|---|---|
| SHRUBS | | | | | |
| HO | 1 | Hydrangea quercifolia `Snow Queen` / Snow Queen Oakleaf Hydrangea | #3 | 15-18" | |
| IL | 7 | Itea virginica `Little Henry` TM / Virginia Sweetspire | #3 | 15-18" | |
| JB2 | 10 | Juniperus conferta `Blue Pacific` / Blue Pacific Juniper | #1 | 12-15" | |
| CODE | QTY | BOTANICAL / COMMON NAME | CONT | SIZE | SPACING |
| GROUND COVERS / PERENNIALS | | | | | |
| HLR | 17 | Heuchera `Lime Rickey` / Lime Ricky Heuchera | #1 | 8-12" | 18" o.c. |




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603-436-5110

JEFFREY [illegible]
LICENSED LANDSCAPE ARCHITECT
154
STATE OF NEW HAMPSHIRE
01/13/2026

CONSTRUCTION DOCUMENTS
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AMBULANCE BAY & CANOPY
333 BORTHWICK AVE
PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE

| NO. | DATE | DESCRIPTION |
|---|---|---|

DRAWING TITLE
LANDSCAPE PLAN

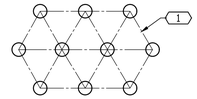
PROJECT NUMBER
20250276

DRAWING NUMBER
L1.0

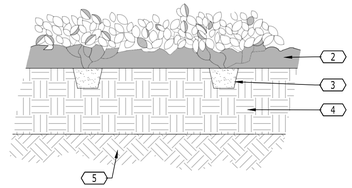
P:\2025\20250276_jsa - hca prh - ambulance bay and canopy\dwg\construction\20250276_LAN.dwg-L1.0 LANDSCAPE PLAN Jan 28, 2026 randerson

## PLANTING NOTES

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2. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO CONFIRM ALL MATERIAL QUANTITIES. IN THE EVENT OF A DISCREPANCY, THE QUANTITIES SHOWN ON THE PLAN SHALL TAKE PRECEDENCE OVER THE MATERIAL SCHEDULE.
3. NO SUBSTITUTIONS AS TO TYPE, SIZE, OR SPACING OF PLANT MATERIALS SPECIFIED ON THIS PLAN MAY BE MADE WITHOUT THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
4. THE CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN, REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
5. ALL PLANTING BEDS TO RECEIVE "CHANCELLOR" HARDWOOD MULCH. MULCH TO BE INSTALLED TO 3" DEPTH UNLESS OTHERWISE INDICATED ON THE PLANTING DETAILS.
6. NEW TREE PLANTINGS TO BE STAKED PER PLANTING DETAILS
7. DIMENSIONS LISTED FOR HEIGHTS, SPREAD AND TRUNK SPECIFICATIONS ON THE PLANT MATERIAL SCHEDULE ARE GENERAL GUIDE FOR THE MINIMUM REQUIRED SIZE OF EACH PLANT.
8. PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL PLANTING BEDS IMMEDIATELY PRIOR TO PLACEMENT OF MULCH FOR WEED CONTROL.
9. ALL DISTURBED AREAS OF THE SITE ARE TO BE SEEDED AND/OR SODDED IN ACCORDANCE WITH THE SPECIFICATIONS.
10. NO EXCAVATION OR PLANTING PIT SHALL BE LEFT OPEN OVERNIGHT.
11. THE LANDSCAPE CONTRACTOR SHALL OBTAIN ANY NECESSARY PERMITS, LICENSES, ETC. AND SHALL GIVE ALL NOTICES AND COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, CODES, RULES AND REGULATIONS DURING THE COURSE OF THE INSTALLATION OF THIS PROJECT.
12. ALL PLANT MATERIALS TO BE NURSERY GROWN AND TO COMPLY WITH THE AMERICAN STANDARD FOR NURSERY STOCK FOR SIZE AND QUALITY.
13. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REFUSE ANY PLANT MATERIAL OR ANY DEFECTIVE WORKMANSHIP.
14. ALL PLANTS SHALL HAVE A WELL-FORMED HEAD WITH MINIMUM CALIPER, HEIGHT AND SPREAD OF THE SIDE BRANCHES AS SHOWN ON THE PLANT LIST. TRUNKS SHALL BE UNDAMAGED AND SHAPE SHALL BE TYPICAL OF THE SPECIES.
15. MEASUREMENT OF CONIFER HEIGHT SHALL INCLUDE NOT MORE THAN FIFTY PERCENT (50%) OF THIS YEARS VERTICAL GROWTH (TOP CANDLE).
16. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR STAKING AND LAYOUT OF PLANTINGS ON THIS PROJECT. THE LANDSCAPE ARCHITECT OR OWNER SHALL BE ADVISED WHEN STAKES ARE READY FOR INSPECTION ON VARIOUS PLANTING AREAS. ALL LAYOUT WORK SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER PRIOR TO OPENING ANY PLANT PITS.
17. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO VERIFY THAT EACH EXCAVATED TREE OR SHRUB PIT WILL PERCOLATE (DRAIN) PRIOR TO ADDING TOPSOIL AND INSTALLING TREES OR SHRUBS. THE CONTRACTOR SHALL FILL THE BOTTOM OF SELECTED HOLES WITH SIX INCHES OF WATER. THIS WATER SHOULD PERCOLATE OUT WITHIN A 24-HOUR PERIOD. THE OWNER OR LANDSCAPE ARCHITECT SHALL VERIFY ACCURACY AND EFFECT OF PERCOLATION TESTING. IF THE SOIL AT A GIVEN AREA DOES NOT DRAIN PROPERLY, A P V C DRAIN OR GRAVEL SUMP SHALL BE INSTALLED OR THE PLANTING RELOCATED.
18. SHOULD THE LANDSCAPE CONTRACTOR ENCOUNTER UNSATISFACTORY SURFACE OR OTHER SUBSURFACE DRAINAGE CONDITIONS, SOIL DEPTH, LATENT SOILS, HARD PAN, STEAM OF OTHER UTILITY LINES OR OTHER CONDITIONS THAT WILL JEOPARDIZE THE HEALTH AND VIGOR OF THE PLANTS, HE MUST ADVISE THE LANDSCAPE ARCHITECT IN WRITING OF THE CONDITIONS PRIOR TO INSTALLING THE PLANTS, OTHERWISE THE LANDSCAPE CONTRACTOR WARRANTS THAT THE PLANTING AREAS ARE SUITABLE PROPER GROWTH AND DEVELOPMENT OF THE PLANTS TO BE INSTALLED.
19. NO MATERIAL SHALL BE PLANTED BEFORE FINISH GRADING HAS BEEN COMPLETED.
20. EXISTING TREES TO BE PRESERVED ARE TO BE BARRICADED BEFORE BEGINNING CONSTRUCTION. IN ACCORDANCE WITH THE TREE PRESERVATION NOTES AND DETAILS ON THE LANDSCAPE PLAN.
21. SELECTIVE CLEARING CONSISTING OF REMOVAL OF VINES, SAPLINGS UNDER 1" DIAMETER AND UNDERBRUSH SHALL BE PERFORMED IN TREE PRESERVATION AREAS INTERNAL TO THE PROJECT AND NOTED ON PLANS.
22. PLANTS IDENTIFIED IN ALTERNATE AREAS ARE TO BE BID SEPARATELY.
23. ALL BEDS ARE TO BE TILLED TO A DEPTH OF 8" WITH THE ADDITION OF: (1) 6 CU. FT. BALE OR SPHAGNUM PEAT MOSS PER 40 SQ. FT. OF BED AREA: (25#) 10-10-10 FERTILIZER PER 1000 SQ. FT. IF AZALEAS, RHODODENDRONS OR PIERIS ARE USED, ADD 1 3 CU. FT. FINELY GROUND "PINE" BARK MULCH PER 25 SQ. FT. OF BED AREA. ALL ADDITIONS ARE TO BE SPREAD AND TILLED INTO THE SOIL UNIFORMLY.
24. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT WHEN THE PLANT MATERIALS ARE AVAILABLE AT THE JOB SITE FOR REVIEW BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.



| KEYNOTES | |
|---|---|
| CODE | DESCRIPTION |
| 1 | ALL GROUNDCOVER BEDS SHALL BE PLANTED USING TRIANGULAR SPACING, UNLESS SHOWN OTHERWISE. REFER TO THE PLANT SCHEDULE FOR SPACING. |
| 2 | 4" HARDWOOD MULCH LAYER |
| 3 | REMOVE PLASTIC POT OR SPLIT PEAT POT |
| 4 | PREPARED SOIL MIXTURE: 1 PART ORGANIC GARDEN SOIL, 1 PART SAND, 2 PARTS NATIVE TOPSOIL, THOROUGHLY BLEND SOIL MIXTURE BEFORE PLACING. |
| 5 | UNDISTURBED SUBGRADE |

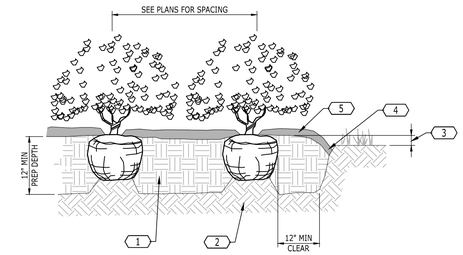


**1 GROUNDCOVER PLANTING**

NOT TO SCALE

| KEYNOTES | |
|---|---|
| CODE | DESCRIPTION |
| 1 | PLANTING MIX AS SPECIFIED |
| 2 | UNDISTURBED SUBGRADE. PROVIDE SUBGRADE PEDESTAL FOR EACH SHRUB INSTALLED, TO AVOID SETTLEMENT. |
| 3 | TOP OF ROOT BALL TO BE 1"-2" HIGHER THAN THE ADJACENT GRADE |
| 4 | "V" TRENCH AROUND PLANTING BED |
| 5 | 3" HARDWOOD MULCH LAYER. CLEAR MULCH FROM WOODY SHRUB STEMS TO PREVENT FUNGAL GROWTH AND DECAY. |

| NOTES |
|---|
| 1. TAMP PLANTING MIX AS PIT IS FILLED AROUND EACH PLANT BALL.<br>2. SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER PLANTING.<br>3. SCARIFY THE ROOT BALL IF ROOT-BOUND IN ITS CONTAINER.<br>4. WHERE SHRUBS APPEAR IN BED AREAS, 3" OF MULCH SHALL BE SPREAD OVER THE ENTIRE AREA WITHIN THE BED EDGE AS INDICATED ON THE PLANS.<br>5. DO NOT PRUNE BEFORE ACCEPTANCE.<br>6. REMOVE BURLAP FROM TOP THIRD OF ROOT BALL OR CAREFULLY REMOVE THE PLASTIC CONTAINER, IF ONE IS USED.<br>7. BACKFILL WITH SOIL MIXTURE AS FOLLOWS: 1 PART COMPOSTED GARDEN SOIL; 1 PART SAND AND 2 PARTS NATIVE TOPSOIL. |



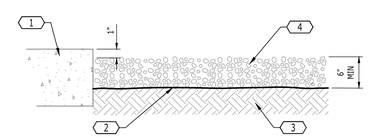

**2 SHRUB PLANTING**

NOT TO SCALE

NOTE:

1. CONTRACTOR SHALL REMOVE AND ERADICATE ALL EXISTING GRASSES AND WEEDS IN D.S. AREAS AS REQUIRED WITH ROUND-UP OR OTHER APPROVED HERBICIDE.
2. SUB-GRADES SHALL BE THOROUGHLY COMPACTED BEFORE GRAVEL IS INSTALLED.
3. CONTRACTOR SHALL SUBMIT A SAMPLE OF THE SPECIFIED AGGREGATE TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
4. GRAVEL SHALL BE SPREAD TO A MINIMUM DEPTH OF 6", RAKED, DAMPENED, ROLLED AND BROOMED TO AN EVEN FINISH.
5. AGGREGATE SHALL BE RINSED THOROUGHLY TO REMOVE DEBRIS.
6. CONTRACTOR SHALL APPLY PRE-EMERGENT HERBICIDE TO WEED-FREE GRAVEL AREAS.

| KEYNOTES | |
|---|---|
| CODE | DESCRIPTION |
| 1 | CURB OR SIDEWALK, WHERE APPLICABLE |
| 2 | LANDSCAPE FABRIC, TYPAR OR EQUIVALENT |
| 3 | COMPACTED SUBGRADE |
| 4 | RIVER STONE, COBBLES OR OTHER AGGREGATE AS SPECIFIED ON THE LANDSCAPE PLAN. |




**3 GRAVEL MULCH BED**

NOT TO SCALE


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PORTSMOUTH REGIONAL HOSPITAL
333 BORTHWICK AVE
PORTSMOUTH, NH 03801
603-436-5110




CONSTRUCTION DOCUMENTS
PORTSMOUTH REGIONAL HOSPITAL
AMBULANCE BAY & CANOPY
333 BORTHWICK AVE
PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE

| NO. | DATE | DESCRIPTION |
|---|---|---|

DRAWING TITLE
LANDSCAPE DETAILS

PROJECT NUMBER
20250276

DRAWING NUMBER
L2.0

P:\2025\20250276_jsa - hca prh - ambulance bay and canopy\dwg\construction\20250276_LAN.dwg-L2.0 LANDSCAPE DETAILS Jan 28, 2026 randerson

# Historic District Commission
# Design Review of New Structures

## *Please See Staff Memo*

HOEFLE, PHOENIX, GORMLEY & ROBERTS, PLLC
ATTORNEYS AT LAW
127 Parrott Avenue | Portsmouth, NH, 03801
Telephone: 603.436.0666 | Facsimile: 603.431.0879 | www.hpgrlaw.com

January 21, 2026

**VIA EMAIL, VIEWPOINT AND HAND DELIVERY**

Rick Chellman, Chair
Portsmouth Planning Board
1 Junkins Ave
Portsmouth, NH 03801

Re: One Year Extension Request
Site Plan/Subdivision Approval 2/20/25
Owner/ Applicant-635 Sagamore Development, LLC
635 Sagamore Ave., Portsmouth NH 03801
LU-22-209

Dear Chair Chellman and Planning Board Members:

The Planning Board issued conditional approval of 635 Sagamore Development LLC's (635 Sagamore) Site Plan Subdivision approval on February 20, 2025. (Notice of Decision ("NOD") attached). Since that time, 635 Sagamore has worked diligently to undertake and complete all conditions precedent in advance of recording the Subdivision Plan and issuance of an executed Site Plan Review Agreement ("SRA"). Upon information and belief, all conditions precedent set forth in the NOD have been met.

635 Sagamore's team has recently been notified by city staff that despite the above, because the former owners of the property, William and Bonnie Hines ("Hines") have a life estate interest to reside in one building or the property, in the event that the city was required to complete all or part of the development, (such as issue a demolition permit(s) for the subject building), it could not do so while the Hines' have a right to reside on the property.

In point of fact, the existing "front" building, where Mr. Hines formerly operated his automobile reconditioning business and where the Hines' reside in an apartment upstairs, is in extremely poor condition. In order to better the Hines' living conditions, 635 Sagamore has cleaned up the property via removal of materials, mold remediation, and apartment repairs.

DANIEL C. HOEFLE | ALEC L. MCEACHERN | PETER V. DOYLE | STEPHEN H. ROBERTS In Memoriam
R. TIMOTHY PHOENIX | KEVIN M. BAUM | MONICA F. KIESER | OF COUNSEL:
LAWRENCE B. GORMLEY | JACOB J.B. MARVELLEY | CHRISTOPHER P. MULLIGAN | SAMUEL R. REID
R. PETER TAYLOR | GREGORY D. ROBBINS | KAREN W. OLIVER | JOHN AHLGREN

Nonetheless, due to its age and condition, the building is of poor quality. Meanwhile, 635 Sagamore is working with the Hines to find more suitable, permanent living arrangements/conditions in lieu of the existing life estate. As a result of the foregoing, the terms and conditions of the NOD, including execution and recording of the plan and execution of the SRA, are meanwhile slightly delayed.

Considering the above, pursuant to Portsmouth Site Review Regulations Section 2.14 *et seq*, good cause exists and 635 Sagamore reasonably requests a one (1) year extension, until February 20, 2027, to vest the Planning Board approval via plan execution and recording, and execution and implementation of the SRA. Upon information and belief, there are no zoning and/or regulation changes that would otherwise require an amendment or denial of the approved project. 635 Sagamore agrees to comply with the specific requirements of Site Review Regulation Section 2.14. In particular, pursuant to Site Plan Review Regulation Section 2.14.5, there are no changes that would materially and negatively affect the approved Site Plan in regard to:

(a) Traffic flow, volume, or congestion;
(b) Pedestrian safety;
(c) Drainage;
(d) Water Availability;
(e) Sewer capacity;
(f) Design Standards;
(g) Landscape elements; and
(h) Zoning Compliance.

635 Sagamore and its team look forward to presenting this request to the Planning Board at its February 19, 2026, meeting, in advance of the one-year anniversary of the February 20, 2025 approval evidenced by the NOD.

Respectfully submitted,

R. Timothy Phoenix

RTP/msw
Encl.
cc: Client
Michael Garrepy
Portsmouth Planning Department
Portsmouth Legal Department

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

**PLANNING BOARD**

February 24, 2025

635 Sagamore Development, LLC
3612 Lafayette Rd Dept 4
Portsmouth, New Hampshire 03801

RE: Site Plan Approval request for property located at 635 Sagamore Avenue, Portsmouth, NH (LU-22-209)

Dear Property Owner:

The Planning Board, at its regularly scheduled meeting of **Thursday, February 20, 2025**, considered your application for Site Plan Review Approval for the demolition of the existing structures and construction of 4 single family dwellings with associated site improvements. Said property is shown on Assessor Map 222 Lot 19 and lies within the Single Residence A (SRA) District. As a result of said consideration, the Board voted 1) that the Site Plan application meets the requirements set forth in the Site Plan Regulations Section 2.9 Evaluation Criteria and to adopt the findings of fact as presented; and 2) 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) *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.*

*2.2) 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.*

*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) Key elevations should be added to the stone infiltration basins under the decks for Units 3 and 4. Add notes to the plan requiring inspection of the subgrade by the City to ensure that the design criteria is met.*

*2.5) The sitework details for both the sand absorption area and the infiltration stone underneath deck specify uncompacted in-situ soil or suitable backfill from subject parcel native material is placed beneath and adjacent to the systems. The Designer should provide gradation, compaction, and infiltration rate requirements for the placement of the fill adjacent, below and down gradient of the infiltration practice. The sand absorption area for unit 3 is in 5-foot fill section. The detail should include a minimum depth of native material below the treatment area as well as down gradient.*

*2.6) Trees to remain shall be clearly marked before site work can commence.*

*2.7) Developer shall pay $20,900 to cover the cost of the installation of the fire hydrant extended to the site, which was installed exclusively for the benefit of this site.*

*2.8) Developer shall provide fair share contribution for catch basin installed up gradient to the Tidewatch intersection. The catch basin was installed partially for the benefit of this site. The fair share contribution is $15,208.*

*2.9) Applicant will revise plan to create additional parking (at least room for 3 vehicles) northeast of unit 2.*

*2.10) Applicant will revise plan to add a 2-3% landing area for one vehicle at the entrance of the driveway while maintaining a transition to an 8% grade into the site.*

*2.11) Applicant will confirm landscaping at maturity along Sagamore Avenue will not impede sight distance.*

**Conditions to be satisfied subsequent to final approval of site plan but prior to the issuance of a certificate of occupancy and release of the surety:**

*2.12) 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;*

*2.13) A stormwater inspection and maintenance report shall be completed annually (or monthly as outlined in O & M manual) and copies shall be submitted for review.*

*2.14) The stormwater infrastructure shall be certified after 1 year with a sufficient bond (with an amount to be determined by DPW) to correct any deficiencies found at that time.*

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 Department for more details about the appeals process.

This site plan approval shall not be effective until a site plan review agreement has been signed satisfying the requirements of Section 2.12 of the City's Site Review Approval Regulations.

Unless otherwise indicated above, applicant is responsible for applying for and securing a building permit from the Inspection Department prior to starting any project work.

The Planning & Sustainability Director must certify that all outstanding conditions of approval have been completed prior to issuance of a building permit unless otherwise indicated above.

This site plan approval shall expire unless a building permit is issued within a period of one (1) year from the date granted by the Planning Board unless an extension is granted by the Planning Board in accordance with Section 2.14 of the Site Review Regulations.

*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 Planning Board Meeting website:*

https://www.cityofportsmouth.com/planportsmouth/planning-board/planning-board-archived-meetings-and-material

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

Very truly yours,



Rick Chellman, Chairman of the Planning Board

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

Peter H. Rice, Director of Public Works
Joseph Coronati, Jones & Beach
R. Timothy Phoenix, Hoefle, Phoenix, Gormley & Roberts, PLLC

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

Date: 2/20/2025
Property Address: 635 Sagamore Avenue
Application #: LU-22-209
Decision: 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 | We received the required zoning relief from the Zoning Board of Adjustments on May 23, 2023. Otherwise, TAC and the City's third party review engineer have reviewed to ensure that the proposed development complies with the requirements of the Zoning Ordinance and the Site Plan Review Regulations. |
| 2 | Provision for the safe development, change or expansion of use of the site. | Meets | The proposed shared driveway for the four units has been designed to accommodate Portsmouth's largest fire truck as well as an SU-30 box truck. Additionally, we are providing an offsite double panel advisory speed limit and blind drive sign as well as a TC-600 radar speed sign just down the street to the south of the proposed site entrance in order to improve traffic safety at the intersection between the proposed shared driveway and Sagamore Ave. TAC |

| | Site Plan Review Regulations Section 2.9 Evaluation Criteria | Finding (Meets Standard/Criteria) | Supporting Information |
|---|---|---|---|
| | | | has reviewed to ensure that the proposed site re-development is safe. |
| 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 | The proposed stormwater management facilities, including a bioretention system with a sediment forebay, several infiltration areas, and a closed drainage system as well as a recently installed catch basin along Sagamore Avenue will ensure that peak rates and volumes of runoff will be reduced toward all offsite points of analysis resultant to this development as compared with the existing condition. Additionally, the stormwater management system has been designed to meet the stormwater treatment and pollutant removal requirements of the City of Portsmouth to the satisfaction of TAC and the City's third party review engineer. |
| 4 | Adequate protection for the quality of groundwater. | Meets | We are providing groundwater recharge practices to hydrologically offset the proposed impervious surfaces. Treatment BMPs have been provided to protect the quality of surface water and groundwater. |
| 5 | Adequate and reliable water supply sources. | Meets | The four units will be supplied by the City's municipal water system. |
| 6 | Adequate and reliable sewage disposal facilities, lines, and connections. | Meets | The four units will be serviced by the City's municipal sanitary sewer 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 | As stated above, the proposed stormwater management system meets the requirements of Section 7.6 of the Site Plan Review Regulations. Peak discharge rates and volumes of runoff toward the analysis points will be reduced post-construction resultant to the stormwater management system, and the pollutant removal thresholds required by these regulations have been met, Additionally, these four units will be ties into the City's sewer system and sewage will be treated at the wastewater treatment plant. Appropriate steps take nfor erosion control include silt fence, rip rap, and stabilized construction entrance. We do not anticipate smoke, soot, particulates, or odor resultant to this |

| | Site Plan Review Regulations Section 2.9 Evaluation Criteria | Finding (Meets Standard/Criteria) | Supporting Information |
|---|---|---|---|
| | | | multi-family residential development. |
| **8** | Adequate provision for fire safety, prevention and control. | **Meets** | A fire hydrant has been installed at the intersection of Sagamore Ave. and the proposed shared driveway for the development and the shared driveway has been designed to accommodate Portsmouth's largest fire truck. |
| **9** | Adequate protection of natural features such as, but not limited to, wetlands. | **Meets** | There are no wetlands or other outstanding natural features on the subject parcel. A 100' buffer to offsite wetlands is being maintained as well. See Note #6 on Sheet C2. The site has been designed to keep tree clearing and ledge removal to the minimum possible. The remaining wooded buffer to the Tidewatch Condominiums in the rear of the site will be enhanced with proposed tree plantings. This is a re-development of the existing Luster King auto detailing business. |
| **10** | Adequate protection of historical features on the site. | **Meets** | There are no known historical features 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** | Significant traffic is not anticipated resultant to this four-unit residential development. A trip generation memorandum prepared by Stephen G. Pernaw was included in the initial TAC submission. In order to improve traffic safety at the proposed intersection, we are proposing to provide a double panel advisory speed limit and blind drive sign as well as a TC-600 radar speed sign to the south of the site entrance. The proposed site entrance for the 20' wide site driveway directly replaces the existing Luster King site entrance and it is our opinion that this is a significant traffic safety improvement due to the width, location, and elevation of the proposed curb cut. |

| | Site Plan Review Regulations Section 2.9 Evaluation Criteria | Finding (Meets Standard/Criteria) | Supporting Information |
|---|---|---|---|
| 12 | Adequate traffic controls and traffic management measures to prevent an unacceptable increase in safety hazards and traffic congestion off-site. | Meets | See response to Comment #11, these issues are addressed in that response. |
| 13 | Adequate insulation from external noise sources. | Meets | The subject parcel is located outside of the Highway Noise Overlay District and from our observation it is not noisy on the subject parcel. Landscape trees and existing vegetation will provide some insulation to noise resulting from traffic on Sagamore Avenue to the extent practicable. |
| 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 | See Note #21 on Sheet C2: "The owner of each unit shall store trash in their garage. Trash will be picked up by a private hauler".<br><br>The proposed private driveway is designed for the turning radii of Portsmouth's largest fire truck. We went through the TAC process and third party review to ensure that the proposed infrastructure is adequate for the proposed development. |
| 15 | Provision of usable and functional open spaces of adequate proportions, including needed recreational facilities that can reasonably be provided on the site | Meets | 80% of the subject parcel will consist of open space post-construction. Lawn space will be provided in front of, between, and behind each of the units. |
| 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 | The proposed site driveway will be tied into the recently installed sidewalk tipdowns along Sagamore Avenue. The proposed site driveway has been designed at the part of the subject parcel with the most available sight distance along Sagamore Avenue. |
| 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 | Stormwater from non-roof impervious surfaces will be treated before leaving the site or recharging t ogroundwater. The peak flow rate and volume of runoff will be reduced post-construction. The stormwater management BMPs that were implemented exceed the pollutant removal requirements of the City of Portsmouth as well. Wastewater will enter the municipal sewer system toward the |