**SITE PLAN REVIEW TECHNICAL ADVISORY COMMITTEE**
**PORTSMOUTH, NEW HAMPSHIRE**

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

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

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

## AGENDA

### I. APPROVAL OF MINUTES

**A.** Approval of the March 3, 2026 Site Plan Review Technical Advisory Committee meeting minutes.

### II. OLD BUSINESS

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

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

**C.** The request of **Hope for Tomorrow Foundation (Owner)**, for property located at **315 Banfield Road** requesting amended Site Plan approval for the construction of a 2,115 s.f. Library addition to the existing 24,150 s.f. St. Patrick Academy School building with associated site improvements. Said property is located on Assessor Map 266 Lot 5 and lies within the Industrial (I) District. (LU-26-18)

### III. NEW BUSINESS

**A.** The request of **Regan Electric CO INC (Owner),** and **Chinburg Development (Applicant)**, for property located at **94 Langdon Street** and **98 Cornwall Street** requesting Site Plan Review approval to merge the two lots, demolish the existing buildings, and construct three (3) single-family dwellings with associated site improvements. Said property is located on Assessor Map 139 Lots 1, 8 and lies within the Mixed Residential Business (MRB) District. (LU-25-175)

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

**C.** The request of **The City of Portsmouth – New Franklin School (Owner)**, for property located at **1 Franklin Drive** requesting Site Plan Review for the construction of three (3) additions to the existing New Franklin Elementary School with associated site, grading, drainage, and utilities improvements. Said property is located on Assessor Map 220 Lot 2 and lies within the Municipal (M ) District. (LU-26-37)

## IV. ADJOURNMENT

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

*https://us06web.zoom.us/webinar/register/WN_pr-ZVJbJQIi0rkXRRxvLMA*

**SITE PLAN REVIEW TECHNICAL ADVISORY COMMITTEE**
**PORTSMOUTH, NEW HAMPSHIRE**

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

**2:00 PM** **March 3, 2026**

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

**MEMBERS ABSENT**:

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

## MINUTES

## I. APPROVAL OF MINUTES

**A.** Approval of the **February 3, 2026** meeting minutes.

*D. Desfosses moved to approve the February 3, 2026 meeting minutes as presented, seconded by Z. Cronin. The motion passed unanimously.*

## II. OLD BUSINESS

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

**SPEAKING TO THE APPLICATION**

[Timestamp 6:25] Engineers Patrick Crimmins and Ben Curcio from Tighe & Bond, and other members of the project team came to present the application. Mr. Crimmins reviewed their responses to staff comments. He said that Tighe & Bond is working on a scope design of the emergency access road and will be completing that this week and it will be shared with City staff.

[Timestamp 8:17] *E. Eby arrived at the meeting.*

[Timestamp 8:25] Mr. Crimmins asked for clarification regarding the proposed pocket park. Chair Stith clarified the definition of a 'pocket park' and suggested including the space as part of the park across the street as long as a crosswalk is provided. Mr. Crimmins continued to review staff comments. He stated that during their review of needed pavement repairs in the area of the power extension, they believe there is an opportunity to place the new duct bank under the new sidewalk they will be constructing. They plan to look at that further with DPW and PSNH for a final electrical layout. He noted they would review the parking lot for areas where stop signs and stop lines should be added.

**PUBLIC HEARING**

[Timestamp 13:40] The public hearing was opened, no one spoke, the public hearing was then closed.

**DISCUSSION AND DECISION OF THE BOARD**

*D. Desfosses made a motion to recommend approval of this application to the Planning Board with the following conditions:*

1. *Pocket Park does not meet the definition of the Community Space type, either place it in a location that meets the definition or remove from the Community Space plan.*

2. *Confirm the rim of PTD1 is above the HGL of the main drain pipe as it runs through PDMH3 to confirm it doesn't need a check valve to avoid backflow and flooding of the garage during design storm events.*

3. *Shift PDMH103 north a bit to ease the flow path of the main flow.*

4. *Remove all portions of the drainage headwall from GSP property not encumbered by the easement. Use a 30" FES directly next to PDMH101 and rotate the assembly east so the plunge pool is within the easement.*

5. *Confirm in writing that the entire run of sanitary sewer from existing SMH 1398 to PSMH1 is currently 8" PVC with proper slope and no visible defects.*

6. *The proposed fire hydrant on the south end of building C should be located about 40'-50' south on the opposite side of the road about 10' past the end of the asphalt sidewalk so that it doesn't block the available parking or the access trail yet to be constructed.*

7. *Full width pavement repairs (mill and repave) need to extend up and completely repair the roadway in the area of the power extension.*

8. *CMMP required.*

9. *Third party oversight of all work in the ROW and all utility work required.*

10. *City arborist to inspect and approve of all plants installed in the ROW.*

11. *Drain manhole covers in the ROW should be ordered without locks. All covers in the ROW shall be ERGO XL.*

12. *Change note on emergency access road plan to show a 14' access road with 2' gravel shoulders either side. Easement is not 'proposed', it exists so note should read: proposed 14' wide access road with shoulders centered in existing easement.*

13. *There seems to be contour lines missing in the wetland crossing area.*

14. *Remove temporary easement lines and confirm the road is buildable using normal slopes or if retaining walls is necessary.*

15. *Add sidewalk to south side of building C to allow access from the road to the parking field.*

16. *The three southernmost street parking spots should be eliminated due to sight line constraints.*

17. *W16-7P sign must be 21"x15".*

18. *Install stop signs and stop lines as needed at three-way angled intersections within parking lot.*

19. *Slope detail is not included in plan. Include slope profile and detail in plan.*

20. *Existing to remain fire hydrant on Portsmouth Blvd, north side, closest to the Homewood Suites northern driveway did not make it on to C-501.*

21. *Atlantic Heights Emergency gate shall be secured by a Knox Brand Padlock.*

*Z. Cronin seconded the motion. The motion passed unanimously.*

**B.** The request of **Sagamore Avenue CBC LLC (Owner),** for property located at **1151 Sagamore Avenue** requesting Site Plan Review approval for the demolition of the existing structure and construction of four (4) standalone condominium single family structures with associated site improvements. Said property is located on Assessor Map 224 Lot 19 and lies within the Mixed Residential Office (MRO) District. (LU-25-178)

**SPEAKING TO THE APPLICATION**

[Timestamp 15:41] Engineers Drew Olehowski and John Chagnon from Haley Ward and Kevin Neville on behalf of the owner came to present the application. Mr. Chagnon handed out a response to staff comments. Mr. Olehowski reviewed their response to staff comments. He noted that they have revised their plan to address comments regarding their drainage plan. Plans were updated as the guardrail at the end of the driveway was replaced with curbing. He discussed the ability to turn around in the driveway and that the site is mainly intended to be used by residents and intermittently by guests.

**PUBLIC HEARING**

[Timestamp 18:39] The public hearing was opened, no one spoke, the public hearing was then closed.

**DISCUSSION AND DECISION OF THE BOARD**

[Timestamp 19:07] P. Britz asked if the curbing instead of the guardrail at the end of the driveway was so that it could be plowed over. Mr. Olehowski agreed and stated a gap would be left for stormwater runoff relief. P. Britz asked about how the plow would turn around and would it have to use someone's driveway. Mr. Olehowski said that was the idea and that the plow driver would have to coordinate with the residents. Z. Cronin asked if the turnaround also pertained to an ambulance getting in and out of the site. Mr. Olehowski stated they didn't provide a firetruck turn around as the buildings will be sprinklered and it was not required. He said the idea was that they would have to back out or use the driveways.

[Timestamp 20:33] P. Britz asked what storm would cause for the use of the emergency spill way in the back. Mr. Olehowski said that they didn't run a test for a storm that would reach that spill way. The infiltration system in the adjacent driveway is sized to accommodate the 50-year storm. They did not check if it was needed, it is for an absolute worst-case scenario such as if something got clogged, none of their models reached that point.

*P. Britz made a motion to recommend approval of this application to the Planning Board as presented. D. Desfosses seconded the motion. The motion passed unanimously.*

**C.** The request of **Atlas Commons LLC (Owner)**, for property located at **581 Lafayette Road** requesting a second extension for Site Plan Approval. Said property is located on Assessor Map 229 Lot 8B and lies within the Gateway Corridor (G1) District. (LU-23-189)

**SPEAKING TO THE APPLICATION**

[Timestamp 22:48] Engineer John Chagnon from Haley Ward came to present the application. Mr. Chagnon handed out a response to staff comments. He reviewed the history of the application. P. Britz asked Mr. Chagnon to note any changes made to the plans since the approval. Mr. Chagnon reviewed the changes made to the parking, utility plan, grading and drainage plan, and landscape

maintenance area. He noted that they worked with the Trees and Greenery Committee on public realm improvements and obtained a wetland permit for the wetland impact. He then reviewed the response to staff comments.

[Timestamp 30:27] E. Eby asked if their parking calculations changed at all from changing from 90-degree spaces to angled spaces. Mr. Chagnon said the parking calculations had been updated for the Planning Board submission and the alternative parking configuration had been taken into account, so they still meet the requirements. E. Eby asked if they worked with the school department on the basketball court in the cul-de-sac. Mr. Chagnon said that they had. E. Eby was concerned about having the pole out in the pavement as it could get in the way of vehicles needing to use the area for a turnaround. TAC members discussed the location of the basketball pole and the history of the basketball hoop in that location. D. Desfosses asked that they shift the location to the side and leave the pole behind the curb. D. Desfosses also noted the square corners of the sidewalks in that area and that they did not follow people's natural walk patterns and asked that the corners be rounded. He also noted that the catch basin needed to have a beehive grate and be approved by DPW before installation.

**PUBLIC HEARING**

[Timestamp 37:13] The public hearing was opened, no one spoke, the public hearing was then closed.

**DISCUSSION AND DECISION OF THE BOARD**

*D. Desfosses made a motion to recommend approval of this application to the Planning Board with the following conditions:*

1. *Applicant will move the Basketball pole out of the pavement.*

2. *Round the corners of the sidewalks to accommodate a natural walking path in the cul-de-sac area.*

3. *Applicant must obtain final approval of the catch basin from DPW.*

*P. Britz seconded the motion. The motion passed unanimously.*

**III. NEW BUSINESS**

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

**SPEAKING TO THE APPLICATION**

[Timestamp 38:49] Engineer Joe Coronati from Jones & Beach Engineers came to present the application. He reviewed the application and noted that the application had gone before the HDC and received approval for the building addition style. He provided a site plan from 1995 that shows the striping of the parking as well as a photo of the site from 2011 showing the parking configuration. He acknowledged that the parking sizes are not compliant and noted that the owners have been operating in this layout of parking more or less since 2007. The proposed addition will not add any more staff or vehicles to the site. He asked TAC members if they preferred that they remove some of the parallel spaces and have them apply for a CUP for fewer than required parking spaces or have them ask for relief from the parking space size requirements and keep the current number of parking spaces. Chair Stith noted that staff need to look at the 1995 plan and see if it was approved by the City as staff were going off the 1988 plan. If the plan was approved by the City and no changes are made the configuration is still valid but if they make changes they will need to comply with the Ordinance.

[Timestamp 46:25] Mr. Coronati reviewed staff comments regarding the dumpster, shoreland permitting, parking, and screening. He noted that they would like to update all of the fencing on the property to 6 ft. high stockade fencing instead of just the east side portion shown on the plans. D. Desfosses asked if Mr. Coronati had seen the abutter letter. Mr. Coronati said that he had not. Chair Stith asked Mr. Coronati to review the letter and noted that the fence in the front yard can only be 4 ft and then it can step up in height to 6 ft. Mr. Coronati discussed the staff comment regarding the water service. D. Desfosses asked if he had gone into the structure and verified that there were two services coming in. Mr. Coronati said that they plan to do so. C. Putney noted that the fire department did not have any contact information and for the owners to reach out.

[Timestamp 53:17] E. Eby asked that even if the plan from the 90's was approved, the fact that the ADA space is not in conformance with standards, that it would need to be upgraded. TAC members further discussed the parking requirements. Chair Stith noted that if they went with 7 spaces, they would need a CUP and would have to come back to TAC with a parking demand analysis. Mr. Coronati said he would have to confirm with the owner and applicant regarding the number of spaces.

**PUBLIC HEARING**

[Timestamp 1:00:53] The public hearing was opened, no one spoke, the public hearing was then closed.

**DISCUSSION AND DECISION OF THE BOARD**

Chair Stith asked again that Mr. Coronati review the abutter letter.

*P. Britz made a motion to postpone the application to the April meeting. D. Desfosses seconded the motion. The motion passed unanimously.*

**B.** The request of **Jeannette MacDonald (Owner)**, for property located at **86 Farm Lane** requesting Preliminary and Final Subdivision approval and Site Plan Review approval to subdivide one lot into three lots with associated site improvements. Said property is

located on Assessor Map 236 Lot 74 and lies within the Single Residence B (SRB) District. (LU-26-16)

**SPEAKING TO THE APPLICATION**

[Timestamp 1:01:53] Engineer Eric Weinrieb from Altus Engineering and Brett Berger from Flipping Bergers, LLC came to present the application. Mr. Weinrieb reviewed the application noting the variances granted by the BOA in May 2025 and the layout developed through a subsequent TAC work session. He reviewed the history of the sewer lines in the area and discussed the continuation of Longmeadow Lane and the need to rename the new street segment they would be creating to avoid confusion as it will not be a contiguous roadway. Mr. Weinrieb reviewed the plans for the new roadway and confirmed they would require PTS approval for the proposed 'no parking' signs. He responded to staff comments regarding easements, the fire hydrant, sewer connection, water services, roadway, and signage.

[Timestamp 1:16:59] D. Desfosses expressed his dislike of the squiggle in the roadway and asked Mr. Weinrieb to consider not having the roadway centered in the right-of-way so that it would be easier to plow, maintain, and back up in. Mr. Weinrieb said changing the road may impact the lot sizes. D. Desfosses clarified that the lot sizes wouldn't be impacted, it would just be moving the pavement into the right-of-way to make it straighter.

**PUBLIC HEARING**

[Timestamp 1:18:31] The public hearing was opened, no one spoke, the public hearing was then closed.

**DISCUSSION AND DECISION OF THE BOARD**

[Timestamp 1:18:53] P. Britz asked what was confining the rain garden on the right side of the property, was it going to flow onto City property. Mr. Weinrieb said it was an abutter to the north and that they were depressing the area lower than what is currently there to make sure it doesn't flood as high as it currently does. They modeled pre-development conditions for 2-, 10-, and 25-year storms and made sure that with the post-development conditions the pond was large enough that the 2-, 10-, and 25-year storms were lower. P. Stith noted that the application also needed Site Plan Review and that Mr. Weinrieb was preparing the checklist and additional materials. TAC members discussed the signage and naming of the new roadway.

*D. Desfosses made a motion to postpone the application to the April meeting. P. Britz seconded the motion. The motion passed unanimously.*

**C.** The request of **Hope for Tomorrow Foundation (Owner)**, for property located at **315 Banfield Road** requesting amended Site Plan approval for the construction of a 2,115 s.f. Library addition to the existing 24,150 s.f. St. Patrick Academy School building with associated site improvements. Said property is located on Assessor Map 266 Lot 5 and lies within the Industrial (I) District. (LU-26-18)

**SPEAKING TO THE APPLICATION**

[Timestamp 1:24:52] Engineer Corey Belden from Altus Engineering, Architect Brian Laroche from Oak Point Associates, and James Melone the head of schools for St. Patrick's Academy came to present the application. Mr. Belden reviewed the application noting that the addition would not increase the number of students enrolled at the school. Mr. Belden responded to staff comments. He stated that they would prefer not to add a sewer cleanout at the new connection point as it will be in the middle of the soccer field. D. Desfosses said that could potentially be waived. TAC members discussed with the applicant whether the proposed addition was an expansion of a nonconforming use that would require a Variance from the BOA. P. Britz stated that their position was that a Variance was needed and that the applicant could appeal the administrative decision to the BOA.

[Timestamp 1:37:16] D. Desfosses stated that the major issue they have is the traffic. Mr. Belden reviewed the staff comment regarding the easement and access path and stated he would cover the traffic concern last. He passed out a site plan showing the easement and access path. He stated that no changes in the plan have impacted the easement area. Mr. Belden stated that they were aware of the queue period at pickup and drop-off times for the school and the backup on Banfield Road it is causing. The school is working to stagger drop-off times between grades and notify parents to not arrive early for their drop-off time to try and minimize impacts. E. Eby emphasized how bad the situation is and that the school needs to find a way to store cars onsite. Mr. Belden stated that they had been using both lanes at the school to queue cars but due to emergency access concerns now only use one lane. TAC members suggested widening to have three lanes wide, creating a storage lot for cars to wait, adding another access drive into the school, or widening Banfield Road and adding turn lanes. Mr. Belden suggested having cars exit and enter by right turn only. TAC members further discussed the issues and safety concerns caused by the traffic from queuing cars.

**PUBLIC HEARING**

[Timestamp 1:51:08] The public hearing was opened, no one spoke, the public hearing was then closed.

**DISCUSSION AND DECISION OF THE BOARD**

[Timestamp 1:51:27] E. Eby stated that the solution had to be more than signs or telling parents when to show up. It must be something physical, where they can store the vehicles to get them off the road or store them in an additional lane on Banfield Road. Due to the rural area and limited connecting streets it is unrealistic to place a restriction on the direction vehicles can use to exit or enter the project site and there would be no way to enforce it unless a median island was built. D. Desfosses recommended that the project team work with E. Eby regarding the traffic before coming back to TAC.

*D. Desfosses made a motion to postpone the application to the April meeting. P. Britz seconded the motion. The motion passed unanimously.*

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

**SPEAKING TO THE APPLICATION**

[Timestamp 1:53:21] Engineer John Chagnon from Haley Ward and Alex Monasterio from the development team came to present the application. Mr. Chagnon handed out a response to staff comments. He reviewed the application noting that one driveway was not optimal because of the requirements for separation of the buildings would push the building envelope to less than desirable and that the building plans were preliminary/conceptual to show what could be done and were not the final designs. He stated that the storm water management design included a Ferguson Arc tank underground stormwater detention system, the system will decrease the stormwater runoff that leaves the site to the west and north. Mr. Chagnon reviewed the responses to staff comments and highlighted responding plan changes including the subdivision plan that was updated to include a proposed 48 sq. ft. easement to the City of Portsmouth. He proceeded to address the abutters public comment noting that the type of soil on the property was not going to impact the reduction of drainage to the north as the area was reduced and all of the impervious runoff will now be collected. Mr. Chagnon stated that the development team would pay close attention to the parking during construction and there was potential to access the site along the back utility corridor during construction.

[Timestamp 2:06:28] P. Britz pushed back on two versus one entrance, as it is a busy intersection and the traffic backs up past where the driveways will be. He felt it would be easier with one driveway. Mr. Chagnon stated that having one shared driveway wouldn't be able to fit additional parking that each building having a separate driveway would allow. TAC members further discussed the feasibility of one versus two driveways.

**PUBLIC HEARING**

[Timestamp 2:10:55] Tom Nies of 419 Richards Avenue appreciated the comments that addressed at least two of his issues. He was still concerned about how pedestrians will be protected in the morning and afternoon during school hours. Mr. Nies thinks something should be done by the construction company to limit deliveries during that time period as the area is heavily traveled by school children twice a day assuming the construction happens during the school year.

**DISCUSSION AND DECISION OF THE BOARD**

[Timestamp 2:12:23] V. Hayes asked if they anticipated building the houses at the same time. Mr. Chagnon responded that it would depend on the market. Ms. Monasterio stated that these homes were intended to be collaboration style homes where buyers can come and pick a plan and they would build it for them. The intent was not to build one and then the second one, they might not be on the exact same timeline but would be in the vicinity of each other. V. Hayes asked if it would be possible to have one construction entrance, to try and limit the amount of points where construction

vehicles are coming and going. Ms. Monasterio said they could take a look at that, and Mr. Chagnon said they can't control if somebody buys the lot and wants to sit on it for five years, but that they would keep it in mind.

*P. Britz made a motion to recommend approval of this application to the Planning Board as presented.*

[Timestamp 2:14:02] Z. Cronin stated that he believed when the sidewalk gets replaced there are permits that state where pedestrians need to walk around. So, that could assuage some of the concerns on pedestrians, especially the schoolchildren.

*Z. Cronin seconded the motion. The motion passed unanimously.*

## IV. ADJOURNMENT

The meeting adjourned at 4:10 PM.

JONES & BEACH ENGINEERS INC.
85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885
603.772.4746 - JonesandBeach.com

March 25, 2026

Portsmouth Technical Review Committee
Attn: Board Members
1 Junkins Avenue, Suite 3rd Floor
Portsmouth, NH 03801

**RE: Response Letter – LU-26-5**
**304 Maplewood Avenue, Portsmouth, NH**
**Tax Map 140, Lot 7**
**JBE Project No. 23169**

Dear Board Members,

We are in receipt of staff comments dated February 27, 2026. Review comments are listed below with our responses in bold.

1. *Existing conditions plan does not show current dumpster location, please update.*
   **RESPONSE: The existing conditions plan has been revised to include the current dumpster location.**

2. *Please provide updated parking calculations – five of the proposed spots are not in compliance with parking standards or the approved site plan on file from 1988. A Conditional Use Permit will be required if parking requirements cannot be met.*
   **RESPONSE: Updated parking calculations are provided on the plans.**

3. *Please reach out to NHDES for shoreland permitting requirements for work within 250' of a tidal waterbody.*
   **RESPONSE: A shoreland permit will be obtained from NHDES.**

4. *Please demonstrate compliance with Section 10.5A44.30 of the Zoning Ordinance and Section 6.9 of the Site Plan Review Regulations.*
   **RESPONSE: Section 10.5A44.30 cannot be complied with as the site's existing parking lot is in front of the building. The site is now compliant with Section 6.9 of the Site Plan Review Regulations with a proposed stockade fence to replace existing chain-link fence thus providing enhanced visual separation between abutting lots.**

5. *Please provide height of the proposed wooden stockade fence.*
   **RESPONSE: The proposed stockade fence height has been labeled.**

6. *Building can have only one water service. Confirm that both are active and determine which needs to be abandoned. If one is for a fire service, indicate that is the case to avoid confusion.*
   **RESPONSE: It is believed that the ¾" service is previously abandoned and is under investigation to be confirmed.**

7. *Detail the drip edge. Based on soil conditions in the area, a larger than normal drip retainment zone is likely necessary.*
   **RESPONSE: Details about the drip edge have been added to the plans.**

8. *Parking configuration does not work.*
   **RESPONSE: Parking configuration has been revised.**

9. *Three parallel parking spaces along sidewalk are on City property and they prevent the five parking spots from backing out of their spots.*
   **RESPONSE: The proposed parking spaces mentioned have been removed.**

10. *HP space and access aisle must be at least 16 feet wide in total, with access aisle connecting to accessible path to accessible entrance.*
    **RESPONSE: HP space and access aisle has been revised.**

11. *Two parking spots to the east of the building will block the existing dumpster.*
    **RESPONSE: The two parking spots to the east of the building have been moved so they don't block the existing dumpster.**

12. *How will solid waste be handled on the property?*
    **RESPONSE: Solid waste will continue to be placed in the dumpster, and the dumpster will remain where it is currently located.**

13. *A 3200 series knox box is required on the front building. www.knoxbox.com*
    **RESPONSE: A 3200 series know box has been added to the front of the building.**

Included with this response letter are the following:

1. One (1) Full Size Plan Set (Folded).

Thank you very much for your time.

Very truly yours,
**JONES & BEACH ENGINEERS, INC.**

Paige Libbey, P.E.
Associate Principal

cc: Robert Graham, 304 Maplewood LLC (via email)

# City of Portsmouth, New Hampshire

## *Site Plan Application Checklist*

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

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

Name of Applicant: 304 Maplewood LLC Date Submitted: 2/13/26

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

Site Address: 304 Maplewood Avenue Map: 140 Lot: 7

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

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

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

| Site Plan Specifications | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | Full size plans shall not be larger than 22 inches by 34 inches with match lines as required, unless approved by the Planning Director.. **(2.5.4.1A)** | Required on all plan sheets | N/A |
| ☒ | Scale: Not less than 1 inch = 60 feet and a graphic bar scale shall be included on all plans. **(2.5.4.1B)** | Required on all plan sheets | N/A |
| ☐ | GIS data should be referenced to the coordinate system New Hampshire State Plane, NAD83 (1996), with units in feet. **(2.5.4.1C)** | | N/A |
| ☒ | Plans shall be drawn to scale and stamped by a NH licensed civil engineer. **(2.5.4.1D)** | Required on all plan sheets | N/A |
| ☐ | Wetlands shall be delineated by a NH certified wetlands scientist and so stamped. **(2.5.4.1E)** | | N/A |
| ☒ | Title (name of development project), north point, scale, legend. **(2.5.4.2A)** | | N/A |
| ☒ | Date plans first submitted, date and explanation of revisions. **(2.5.4.2B)** | | N/A |
| ☒ | Individual plan sheet title that clearly describes the information that is displayed. **(2.5.4.2C)** | Required on all plan sheets | N/A |
| ☐ | Source and date of data displayed on the plan. **(2.5.4.2D)** | | N/A |

| Site Plan Specifications – Required Exhibits and Data | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | **1. Existing Conditions: (2.5.4.3A)**<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. | | |
| ☒ | **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. | | |
| ☒ | **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). | | |
| ☒ | **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). | | |
| ☒ | **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). | | |
| ☒ | **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. | | |

| | | | |
|---|---|---|---|
| ☒ | **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. | | |
| ☒ | **8. Solid Waste Facilities: (2.5.4.3H)** | | |
| | • The size, type and location of solid waste facilities. | | |
| ☒ | **9. Storm water Management: (2.5.4.3I)**<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. | | |
| ☒ | **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. | | |
| ☒ | **11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)** | | |
| ☒ | **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. | | |
| ☒ | **13. Contours and Elevation: (2.5.4.3L)**<br>• Existing/Proposed contours (2 foot minimum) and finished grade elevations. | | |
| ☒ | **14. Open Space: (2.5.4.3M)**<br>• Type, extent and location of all existing/proposed open space. | | |
| ☒ | **15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)** | | |
| ☒ | **16. Character/Civic District (All following information shall be included): (2.5.4.3P)**<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). | | |
| ☒ | **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. | | |

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

| Final Site Plan Approval Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | All local approvals, permits, easements and licenses required, including but not limited to:<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)** | N/A | |
| ☒ | A note shall be provided on the Site Plan stating: "All conditions on this Plan shall remain in effect in perpetuity pursuant to the requirements of the Site Plan Review Regulations." **(2.5.4.2E)** | | N/A |
| ☐ | For site plans that involve land designated as "Special Flood Hazard Areas" (SFHA) by the National Flood Insurance Program (NFIP) confirmation that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. **(2.5.4.2F)** | N/A | |
| ☒ | Plan sheets submitted for recording shall include the following notes:<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:** 2/13/26

**Letter of Authorization**

I, Banfield Realty, LLC, 304 Maplewood Avenue, Portsmouth, NH 03801, owner of property located in Portsmouth, NH, known as Tax Map 266, Lot 7, do hereby authorize Jones & Beach Engineers, Inc., PO Box 219, Stratham, NH, to act on my behalf concerning the previously-mentioned property. The parcel is located on 375 Banfield Road in Portsmouth, NH.

I hereby appoint Jones & Beach Engineers, Inc., as my agent to act on my behalf in the review process, to include any required signatures.

Cynthia Lux — Witness

Banfield Realty, LLC

7-23-20 — Date

MAIL TO
PLEASE RETURN TO:
HALEY, DESMARES, GAGLIARDI & WOELFEL, PC
BOX 33

BK 4849 PG 2483

Return to:
Feniger & Uliasz, LLP
45 Bay Street
Manchester, NH 03104

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ROCKINGHAM COUNTY
REGISTRY OF DEEDS

# WARRANTY DEED

**KNOW ALL MEN BY THESE PRESENTS** that, Murray Hill Properties, Inc., a Maine Corporation having an address of PO Box 21, East Boothbay, Maine 04544, for consideration paid, grants to 304 Maplewood, LLC, a New Hampshire Limited Liability Company having an address of 304 Maplewood Avenue, Portsmouth, NH, with WARRANTY COVENANTS, the following described property:

Two certain tracts or parcels of land with the buildings thereon, situate in the City of Portsmouth, County of Rockingham and State of New Hampshire and known as 304 Maplewood Avenue, being more particularly bound and described as follows:

Tract I: Beginning on Maplewood Avenue at land now or formerly of Clara D. Moore, and running southwesterly by said land of said Moore, 86 feet to land now or formerly of Biagio Donini and Candina Donini (conveyed to the them by Frederick O. Baumgarten, et al by deed dated 05/31/35 and recorded in Volume 906, Page 430 of the Rockingham County Registry of Deeds); thence turning and running northwesterly by said last mentioned land 50' feet 4" to other land of said Doninis; thence turning and running by said last mentioned land northeasterly 42' feet to an angle, and thence northerly 32'7" to Dennett Street; thence turning and running northeasterly by said Dennett Street 23'8" to Maplewood Avenue; thence turning and running by said Maplewood Avenue, southeasterly 51', more or less to the point of beginning.

Tract II: Bounded northeasterly by Maplewood Avenue 72', more or less, northwesterly by land of Frederick O. Baumgarten and Charlotte E. Baumgarten and by land now or formerly of Biagio Donini and C.C. Donini 133 feet, more or less, southwesterly by land now or formerly of John J. Hoyt and land now or formerly of Charles W. Marden, 72 feet, more or less, southeasterly by land now or formerly of Susan B. Marvin, land now or formerly of Lydia L. Pinkham and land of said Charles V. Marden, 133 feet, more or less.

Subject to any and all easements, restrictions and covenants of record.

Meaning and intending to describe and convey the same premises as conveyed to Murray Hill Properties, Inc., by Quitclaim Deed of D. Wayne Moore dated 09/03/02 and recorded in Volume 3964, Page 671 of the Rockingham County Registry of Deeds.

Executed this 24th day of September, 2007.

Murray Hill Properties, Inc.

By: D W Moore

D. Wayne Moore, Duly Authorized

COUNTY OF Lincoln
STATE OF MAINE

On this 24 day of September, 2007, personally appeared before me, D. Wayne Moore, duly authorized President of Murray Hill Properties, Inc., a 9 Corporation, and known to me or satisfactorily proven to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purposes therein contained.

Justice of Peace/Notary Public
My commission expires: _____

Notary
My Commission Ex 2014

| Property ID | Site Address | Owner Name | Owner Name 2 | Owner Address | City | State | Zip |
|---|---|---|---|---|---|---|---|
| 0140-0001-0000 | 28 DEARBORN ST | REGAN BRIAN M | | 28 DEARBORN ST | PORTSMOUTH | NH | 03801 |
| 0140-0002-0000 | 41 DEARBORN ST | GOLDEN JAMES E | MCCARTHY COURTNEY E | 41 DEARBORN ST | PORTSMOUTH | NH | 03801 |
| 0140-0003-0000 | 39 DEARBORN ST | BARDONG SHAWN & MICHIYO | | 39 DEARBORN ST | PORTSMOUTH | NH | 03801 |
| 0140-0004-0000 | 33 DEARBORN ST | STASIUK MICHAEL | | 31/33 DEARBORN ST | PORTSMOUTH | NH | 03801 |
| 0140-0005-0000 | 21 DEARBORN ST | ALATI BRIAN J REV TRUST | ALATI BRIAN J TRUSTEE | 274 NEW CASTLE AVE | PORTSMOUTH | NH | 03801 |
| 0140-0006-0000 | 276 MAPLEWOOD AVE | SALAS RAFAEL | ABRUZESE MARIA RUTH | 276 MAPLEWOOD AVE | PORTSMOUTH | NH | 03801 |
| 0140-0008-0000 | 12 DENNETT ST | ANCTIL S CHRISTOPHER | | 73 EXETER RD | NORTH HAMPTON | NH | 03862 |
| 0140-0009-0000 | 28 DENNETT ST | BENSLEY JOHN E | BENSLEY CYNTHIA S | 28 DENNETT ST | PORTSMOUTH | NH | 03801 |
| 0140-0010-0000 | 38 DENNETT ST | SHOOP ZEHRA N | | PO BOX 277 | KITTERY | ME | 03904 |
| 0140-0011-0000 | 42 DENNETT ST | DEMPSEY GEORGE HENRY LIVING TRUST | | 42 DENNETT ST | PORTSMOUTH | NH | 03801 |
| 0140-0012-0000 | 44 DENNETT ST | DENNETT INVESTMENT GROUP LLC | | 56 DENNETT ST | PORTSMOUTH | NH | 03801 |
| 0140-0013-0000 | 56 DENNETT ST | HOERMAN FAMILY REVOCABLE TRUST OF 2019 | HOERMAN WALTER A AND MARY ELLEN TRUSTEES | 56 DENNETT ST | PORTSMOUTH | NH | 03801 |
| 0141-0004-0000 | 49 DENNETT ST | VIEIRA ROBERT F | VIEIRA DIANE R | 49 DENNETT ST | PORTSMOUTH | NH | 03801 |
| 0141-0005-0000 | 31 DENNETT ST | ABSHIER NICOLE L | | 31 DENNETT ST | PORTSMOUTH | NH | 03801 |
| 0141-0025-0000 | 347 MAPLEWOOD AVE | HEAD PAUL B II | HEAD HOLLY | 347 MAPLEWOOD AVE | PORTSMOUTH | NH | 03801 |
| 0141-0033-0000 | 1 MARSH LN | WHITE L MICHELLE | ZIEBARTH WALTER | 3 MARSH LN | PORTSMOUTH | NH | 03801 |
| 0141-0035-0000 | 293 MAPLEWOOD AVE | 293 MAPLEWOOD AVENUE CONDOMINIUMS | | 295 MAPLEWOOD AVE | PORTSMOUTH | NH | 03801 |
| 0141-0036-0000 | 287 MAPLEWOOD AVE | COOPER EVON | | 16 GARLAND RD | LINCOLN | MA | 01773 |
| 0141-0001-0001 | 334 MAPLEWOOD AVE | JORDAN KATHRYN H | | 55 OAKWOOD DR | PORTSMOUTH | NH | 03801 |
| 0141-0002-0001 | 348 MAPLEWOOD AVE #1 | GLENNEY AARON | | 348 MAPLEWOOD AVE #1 | PORTSMOUTH | NH | 03801 |
| 0141-0002-0002 | 348 MAPLEWOOD AVE #2 | GIBB BRIAN K | | 348 MAPLEWOOD AVE UNIT 2 | PORTSMOUTH | NH | 03801 |
| 0141-0002-0003 | 348 MAPLEWOOD AVE #3 | DENICOLA ROBERT JR | | 348 MAPLEWOOD AVE #3 | PORTSMOUTH | NH | 03801 |
| 0141-0002-0004 | 348 MAPLEWOOD AVE #4 | ABSHIRE DIANA C | | 348 MAPLEWOOD AVE APT 4 | PORTSMOUTH | NH | 03801 |
| 0141-0002-0005 | 348 MAPLEWOOD AVE #5 | STANDISH DEBORAH | | 348 MAPLEWOOD AVE APT 5 | PORTSMOUTH | NH | 03801 |
| 0123-0002-0000 | 248 MAPLEWOOD AVE | MAPLEWOOD AVE LLC | | 30 SPRING ST | PORTSMOUTH | NH | 03801 |
| 0123-0003-0000 | 258 MAPLEWOOD AVE | BVB LLC | | 87 RIDGE RD | YORK | ME | 03909 |
| 0123-0004-0000 | 6 DEARBORN ST | 6-10 DEARBORN STREET LLC | | 3 QUILL LANE STE 107 | BARRINGTON | NH | 03825 |
| 0123-0005-0000 | 22 DEARBORN ST | HUDLIN MELISSA A REV TR | HUDLIN MELISSA A TRUSTEE | 256 WIBIRD ST | PORTSMOUTH | NH | 03801 |
| 0123-0008-0000 | 259 MAPLEWOOD AVE | 259 MAPLEWOOD AVENUE LLC | | 259 MAPLEWOOD AVE | PORTSMOUTH | NH | 03801 |
| 0123-0009-0000 | 235 MAPLEWOOD AVE | JACKSON POINT LLC | | PO BOX 1131 | RYE | NH | 03870 |
| 0141-0001-0000 | 324 MAPLEWOOD AVE | NEILA LLC | | 31 DENNETT ST | PORTSMOUTH | NH | 03801 |
| 0141-0026-0000 | 335 MAPLEWOOD AVE | PETERSEN JAMES F REVOCABLE TRUST | PETERSEN JAMES F TRUSTEE | PO BOX 4516 | PORTSMOUTH | NH | 03802 |
| 0141-0031-0000 | NORTHWEST ST | PUBLIC SERVICE CO OF NH | | PO BOX 270 | HARTFORD | CT | 06141 |
| 0141-0034-0000 | JACKSON HILL ST | 35 PINES LLC | | 295 MAPLEWOOD AVE UNIT 1 | PORTSMOUTH | NH | 03801 |
| 0141-0037-0001 | 273 MAPLEWOOD AVE #1 | NISSENBAUM & CELLETTI RV LV TR | CELLETTI MADELINE M TRUSTEE | 18 WASHINGTON ST | BOXFORD | MA | 01921 |
| 0141-0037-0002 | 273 MAPLEWOOD AVE #2 | CARON JEFFREY | CARON RONDA | 325 THAXTER RD | PORTSMOUTH | NH | 03801 |
| 0141-0037-0003 | 273 MAPLEWOOD AVE #3 | FORTIN ALISON A | | 273 MAPLEWOOD AV UNIT 3 | PORTSMOUTH | NH | 03801 |
| 0141-0037-0004 | 273 MAPLEWOOD AVE #4 | COGSWELL TIMOTHY E | | 273 MAPLEWOOD AVE UNIT 4 | PORTSMOUTH | NH | 03801 |
| 0141-0002-0000 | 348 MAPLEWOOD AVE | OLD FRANKLIN SCHOOL CONDO MASTERCARD | | | | | |
| 0141-0037-0000 | 273 MAPLEWOOD AVE | BOISVERT BRADLEY P | | 20 SHERBURNE RD | PORTSMOUTH | NH | 03801 |
| 0141-0035-0003 | 295 MAPLEWOOD AVE F #3 | SEE AARON & ALLYSON | | 293 MAPLEWOOD AVE UNIT F | PORTSMOUTH | NH | 03801 |
| 0141-0035-0002 | 295 MAPLEWOOD AVE R #2 | BASSI VICTORIA | BOUCHARD CAMERON J | 295 MAPLEWOOD AVE R #2 | PORTSMOUTH | NH | 03801 |
| 0141-0035-0001 | 295 MAPLEWOOD AVE #1 | 35 PINES LLC | | 295 MAPLEWOOD AVE #1 | PORTSMOUTH | NH | 03801 |
| 0141-0032-0000 | 315 MAPLEWOOD AVE | GEREMIA PETER P | | 315 MAPLEWOOD AVE | PORTSMOUTH | NH | 03801 |
| 0140-0012-0002 | 46 DENNETT ST #2 | BURRA STEFANIE A | | 120 TOWNE ST APT #248 | FAIRFIELD | CT | 06902 |
| 0140-0012-0001 | 44 DENNETT ST #1 | NORTH MILL RENTALS LLC | | 294 THORNTON ST | PORTSMOUTH | NH | 03801 |
| 0140-0001-0001 | 30 DEARBORN ST | REGAN SUSAN M | | 30 DEARBORN ST | PORTSMOUTH | NH | 03801 |

Jones & Beach Engineers, Inc., Attn. Joseph Coronati, PO Box 219, Stratham, NH 03885

304 Maplewood LLC, 304 Maplewood Ave., Portsmouth, NH 03801

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41 DEARBORN ST
PORTSMOUTH, NH 03801

BARDONG SHAWN & MICHIYO
39 DEARBORN ST
PORTSMOUTH, NH 03801

STASIUK MICHAEL
31/33 DEARBORN ST
PORTSMOUTH, NH 03801

ALATI BRIAN J REV TRUST ALATI BRIAN J TRUSTEE
274 NEW CASTLE AVE
PORTSMOUTH, NH 03801

SALAS RAFAEL ABRUZESE MARIA RUTH
276 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

ANCTIL S CHRISTOPHER
73 EXETER RD
NORTH HAMPTON, NH 03862

BENSLEY JOHN E BENSLEY CYNTHIA S
28 DENNETT ST
PORTSMOUTH, NH 03801

SHOOP ZEHRA N
PO BOX 277
KITTERY, ME 03904

DEMPSEY GEORGE HENRY LIVING TRUST
42 DENNETT ST
PORTSMOUTH, NH 03801

DENNETT INVESTMENT GROUP LLC
56 DENNETT ST
PORTSMOUTH, NH 03801

HOERMAN FAMILY REVOCABLE TRUST OF 2019
HOERMAN WALTER A AND MARY ELLEN TRUSTEES
56 DENNETT ST
PORTSMOUTH, NH 03801

VIEIRA ROBERT F VIEIRA DIANE R
49 DENNETT ST
PORTSMOUTH, NH 03801

ABSHIER NICOLE L
31 DENNETT ST
PORTSMOUTH, NH 03801

HEAD PAUL B II HEAD HOLLY
347 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

WHITE L MICHELLE ZIEBARTH WALTER
3 MARSH LN
PORTSMOUTH, NH 03801

293 MAPLEWOOD AVENUE CONDOMINIUMS
295 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

COOPER EVON
16 GARLAND RD
LINCOLN, MA 01773

JORDAN KATHRYN H
55 OAKWOOD DR
PORTSMOUTH, NH 03801

GLENNEY AARON
348 MAPLEWOOD AVE #1
PORTSMOUTH, NH 03801

GIBB BRIAN K
348 MAPLEWOOD AVE UNIT 2
PORTSMOUTH, NH 03801

DENICOLA ROBERT JR
348 MAPLEWOOD AVE #3
PORTSMOUTH, NH 03801

ABSHIRE DIANA C
348 MAPLEWOOD AVE APT 4
PORTSMOUTH, NH 03801

STANDISH DEBORAH
348 MAPLEWOOD AVE APT 5
PORTSMOUTH, NH 03801

MAPLEWOOD AVE LLC
30 SPRING ST
PORTSMOUTH, NH 03801

BVB LLC
87 RIDGE RD
YORK, ME 03909

6-10 DEARBORN STREET LLC
3 QUILL LANE STE 107
BARRINGTON, NH 03825

HUDLIN MELISSA A REV TR HUDLIN MELISSA A TRUSTEE
256 WIBIRD ST
PORTSMOUTH, NH 03801

259 MAPLEWOOD AVENUE LLC
259 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

JACKSON POINT LLC
PO BOX 1131
RYE, NH 03870

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NEILA LLC
31 DENNETT ST
PORTSMOUTH, NH 03801

PETERSEN JAMES F REVOCABLE TRUST PETERSEN
JAMES F TRUSTEE
PO BOX 4516
PORTSMOUTH, NH 03802

PUBLIC SERVICE CO OF NH
PO BOX 270
HARTFORD, CT 06141

35 PINES LLC
295 MAPLEWOOD AVE UNIT 1
PORTSMOUTH, NH 03801

NISSENBAUM & CELLETTI RV LV TR CELLETTI
MADELINE M TRUSTEE
18 WASHINGTON ST
BOXFORD, MA 01921

CARON JEFFREY CARON RONDA
325 THAXTER RD
PORTSMOUTH, NH 03801

FORTIN ALISON A
273 MAPLEWOOD AV UNIT 3
PORTSMOUTH, NH 03801

COGSWELL TIMOTHY E
273 MAPLEWOOD AVE UNIT 4
PORTSMOUTH, NH 03801

OLD FRANKLIN SCHOOL CONDO MASTERCARD

BOISVERT BRADLEY P
20 SHERBURNE RD
PORTSMOUTH, NH 03801

SEE AARON & ALLYSON
293 MAPLEWOOD AVE UNIT F
PORTSMOUTH, NH 03801

BASSI VICTORIA BOUCHARD CAMERON J
295 MAPLEWOOD AVE R #2
PORTSMOUTH, NH 03801

35 PINES LLC
295 MAPLEWOOD AVE #1
PORTSMOUTH, NH 03801

GEREMIA PETER P
315 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

BURRA STEFANIE A
120 TOWNE ST APT #248
FAIRFIELD, CT 06902

NORTH MILL RENTALS LLC
294 THORNTON ST
PORTSMOUTH, NH 03801

REGAN SUSAN M
30 DEARBORN ST
PORTSMOUTH, NH 03801

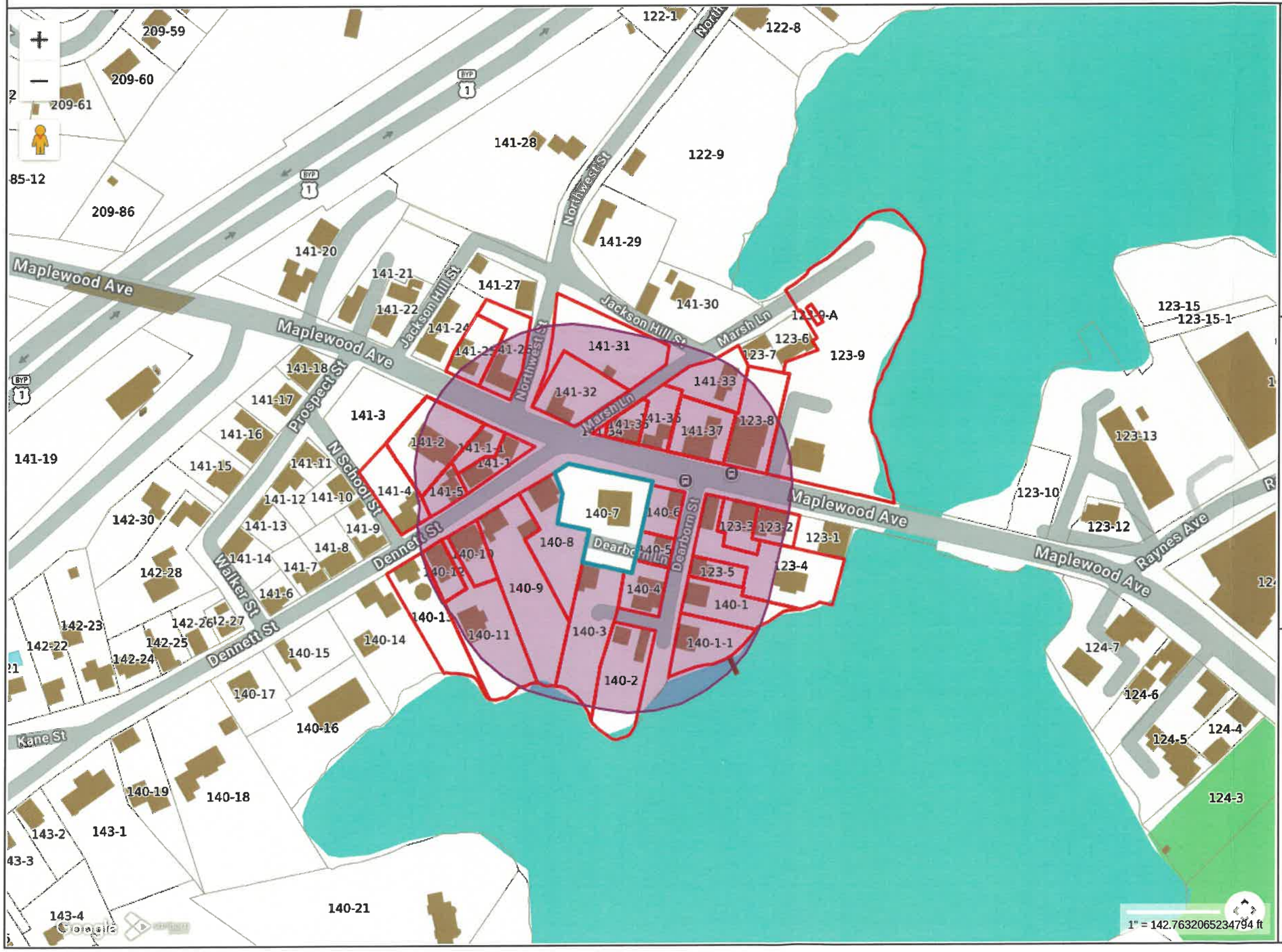
JONES & BEACH ENGINEERS, INC
ATTN. JOSEPH CORONATI
PO BOX 219
STRATHAM, NH 03885

304 MAPLEWOOD LLC
04 MAPLEWOOD AVE.
PORTSMOUTH, NH 03801

Go to avery.com/templates
Use Avery Template 5160

Easy Peel® Address Labels
Bend along line to expose Pop-up Edge®

AVERY® 8460™




**Property Information**

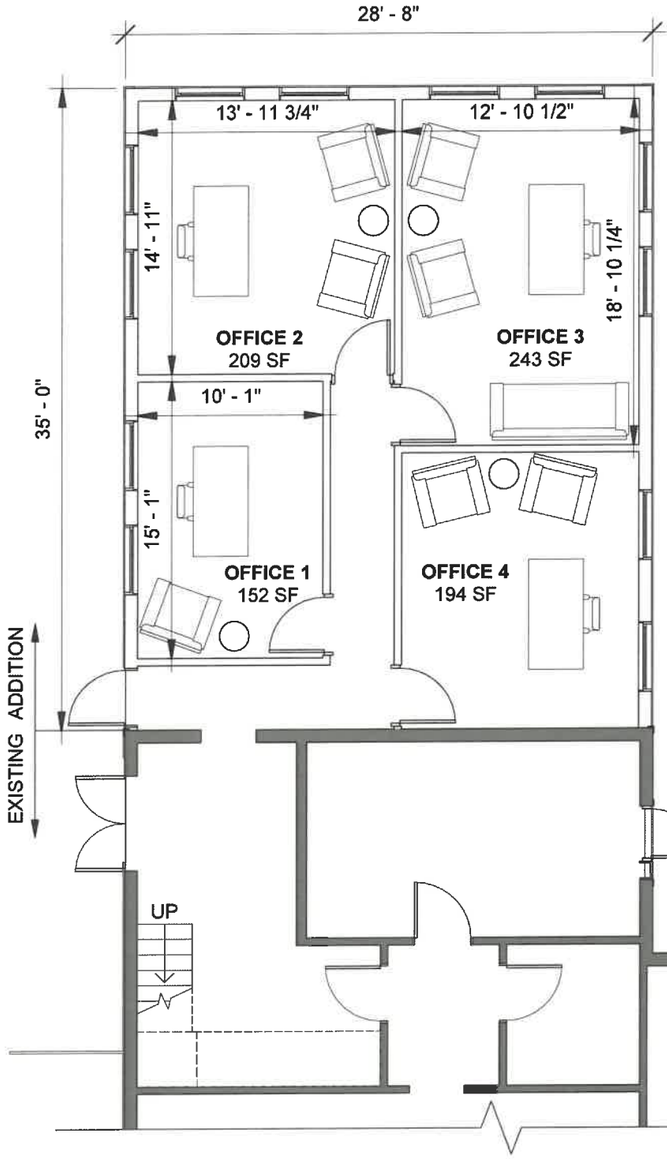
| | |
|---|---|
| **Property ID** | 0140-0007-0000 |
| **Location** | 304 MAPLEWOOD AVE |
| **Owner** | 304 MAPLEWOOD LLC |

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

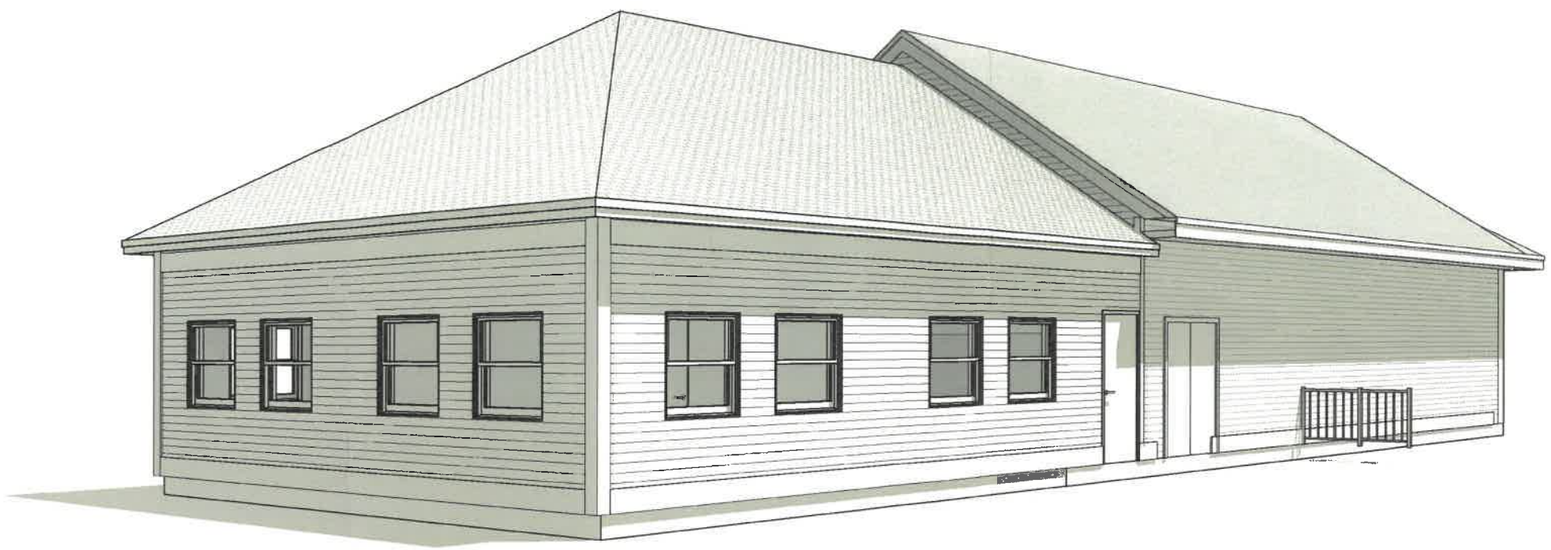
City of Portsmouth, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/23/2025

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




1 FLOOR PLAN
1/8" = 1'-0"



2 3D VIEW - ADDITION

© 2025 Portsmouth Architects

# OFFICE ADDITION
304 MAPLEWOOD AVE
PORTSMOUTH, NH 03801

DRAFT

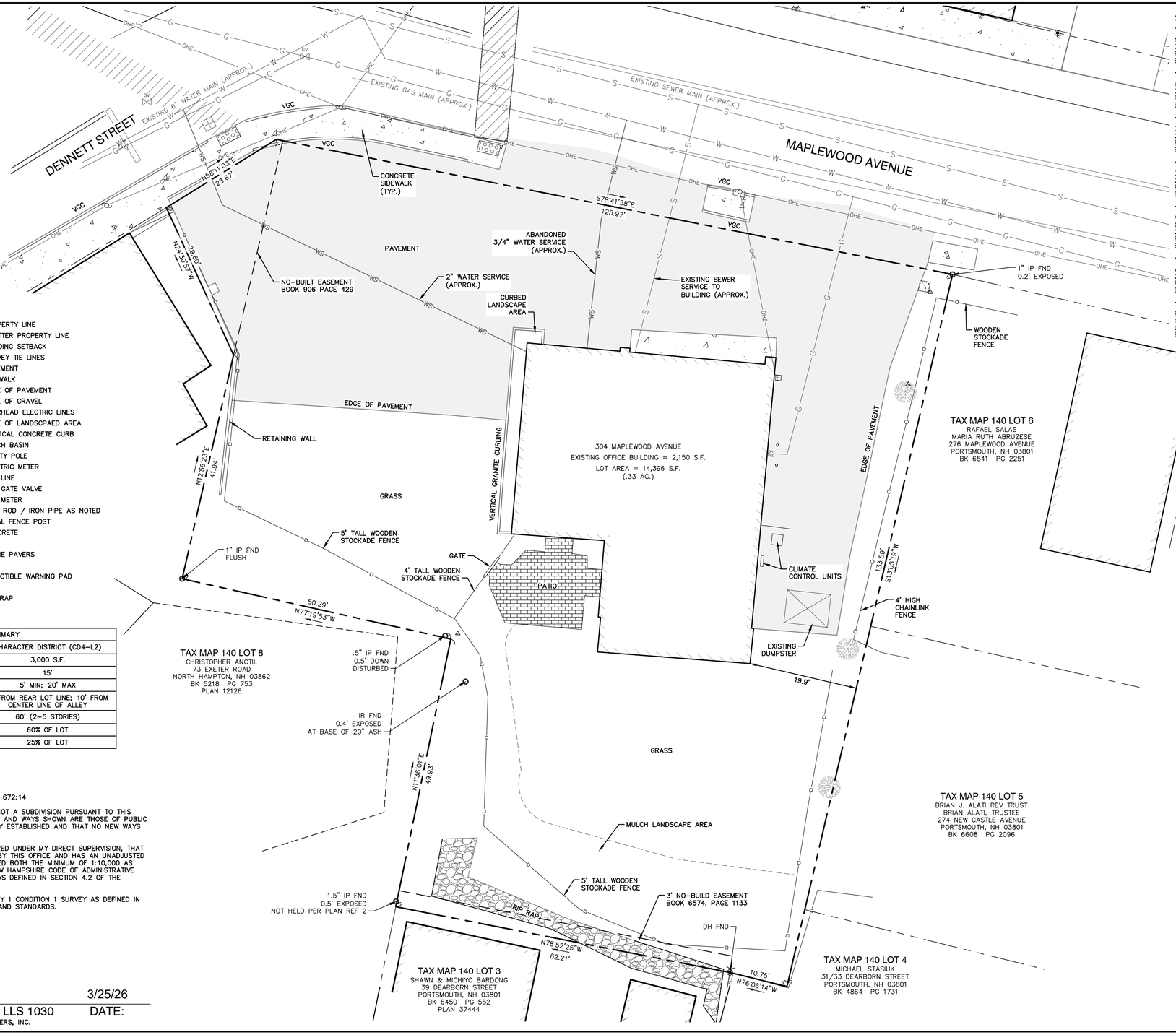
## PROPOSED PLANS
HISTORIC DISTRICT COMMISSION- ADMINISTRATION
APPROVALS, FEBRUARY 2026

4 Market Street
Portsmouth, New Hampshire
603.430.0274
brought to you by
McHENRY ARCHITECTURE

A2

02/04/2026
PA: MM / MG
Project Number: 25081
AS INDICATED

Z:\Active Project Files\25081-304 MAPLEWOOD\Dwgs\2-SD\25081-304 MAPLEWOOD SD.rvt




## LEGEND

- PROPERTY LINE
- ABUTTER PROPERTY LINE
- BUILDING SETBACK
- SURVEY TIE LINES
- EASEMENT
- SIDEWALK
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- OVERHEAD ELECTRIC LINES
- EDGE OF LANDSCPAED AREA
- VGC — VERTICAL CONCRETE CURB
- CATCH BASIN
- UTILITY POLE
- ELECTRIC METER
- GAS LINE
- GV — GAS GATE VALVE
- GAS METER
- IRON ROD / IRON PIPE AS NOTED
- METAL FENCE POST
- CONCRETE
- STONE PAVERS
- DETECTIBLE WARNING PAD
- RIP-RAP

| ZONING SUMMARY | |
|---|---|
| ZONE | CHARACTER DISTRICT (CD4–L2) |
| MINIMUM LOT AREA | 3,000 S.F. |
| MAXIMUM FRONT YARD SETBACK | 15' |
| SIDE YARD SETBACK | 5' MIN; 20' MAX |
| MINIMUM REAR YARD SETBACK | 5' FROM REAR LOT LINE; 10' FROM CENTER LINE OF ALLEY |
| MAXIMUM BUILDING HEIGHT | 60' (2–5 STORIES) |
| MAXIMUM BUILDING COVERAGE | 60% OF LOT |
| MINIMUM OPEN SPACE | 25% OF LOT |

## CERTIFICATION:

PURSUANT TO RSA 676:18–III AND RSA 672:14

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

I CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEED BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 503.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

STATE OF NEW HAMPSHIRE — No. 1030 — MATTHEW J. SALVUCCI — LICENSED LAND SURVEYOR — SIGNATURE

3/25/26

MATTHEW J. SALVUCCI, LLS 1030 DATE:

ON BEHALF OF JONES & BEACH ENGINEERS, INC.

## ABUTTERS NOT SHOWN:

**TAX MAP 141 LOT 1**
NEILA LLC
31 DENNETT STREET
PORTSMOUTH, NH 03801
BK 6415 PG 2630

**TAX MAP 141 LOT 32**
PETER GEREMIA
315 MAPLEWOOD AVENUE
PORTSMOUTH, NH 03801
BK 4829 PG 1699

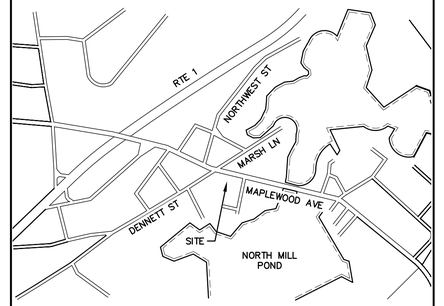
**TAX MAP 141 LOT 34**
35 PINES LLC
295 MAPLEWOOD AVENUE, UNIT 1
PORTSMOUTH, NH 03801
BK 6671 PG 1433

**TAX MAP 141 LOT 35-1**
35 PINES LLC
295 MAPLEWOOD AVENUE #1
PORTSMOUTH, NH 03801
BK 6347 PG 71

**TAX MAP 141 LOT 35-2**
VICTORIA BASSI
CAMERON BOUCHARD
295 MAPLEWOOD AVENUE R #2
PORTSMOUTH, NH 03801
BK 6228 PG 2499

**TAX MAP 141 PG 35-3**
ARRON & ALLYSON SEE
293 MAPLEWOOD AVENUE, UNIT F
PORTSMOUTH, NH 03801
BK 6411 PG 1662

**TAX MAP 141 LOT 36**
EVON COOPER
16 GARLAND ROAD
LINCOLN, MA 01773
BK 3261 PG 0831




LOCUS SCALE: 1"=500'

## NOTES:

1. THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING SITE FEATURES OF TAX MAP 140 LOT 7.
2. WATER, SEWER, AND GAS LINES WERE DRAWN IN BASED OFF OF UTILITIES SHOWN IN PLAN REF. 4 AND SHOULD BE CONSIDERED APPROXIMATE. LOCATION, DEPTH, SIZE, TYPE, EXISTENCE OR NONEXISTENCE OF UNDERGROUND UTILITIES AND/OR UNDERGROUND STORAGE TANKS WAS NOT VERIFIED BY THIS SURVEY. ALL CONTRACTORS SHOULD NOTIFY IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES PRIOR TO ANY EXCAVATION WORK OR CALL DIG–SAFE AT 1–888–DIG–SAFE.
3. THE SUBJECT PARCEL IS NOT LOCATED WITHIN AN AREA HAVING A SPECIAL FLOOD HAZARD ZONE DESIGNATION BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 33015C0259F, WITH EFFECTIVE DATE OF JANUARY, 29, 2021,
4. BASIS OF BEARING: HORIZONTAL – NH STATE PLANE. VERTICAL – NAVD88.
5. CERTAIN DATA HEREON MAY VARY FROM RECORDED DATA DUE TO DIFFERENCES IN DECLINATION, ORIENTATION, AND METHODS OF MEASUREMENT.
6. ALL BOOK AND PAGE NUMBERS REFER TO THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
7. THE TAX MAP AND LOT NUMBERS ARE BASED ON THE TOWN OF PORTSMOUTH. TAX RECORDS AND ARE SUBJECT TO CHANGE.
8. RESEARCH WAS PERFORMED AT THE TOWN OF PORTSMOUTH ASSESSOR'S OFFICE AND THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
9. THIS SURVEY IS NOT A CERTIFICATION TO OWNERSHIP OR TITLE OF LANDS SHOWN. OWNERSHIP AND ENCUMBRANCES ARE MATTERS OF TITLE EXAMINATION NOT OF A BOUNDARY SURVEY. THE INTENT OF THIS PLAN IS TO RETRACE THE BOUNDARY LINES OF DEEDS REFERENCED HEREON. OWNERSHIP OF ADJOINING PROPERTIES IS ACCORDING TO ASSESSOR'S RECORDS. THIS PLAN MAY OR MAY NOT INDICATE ALL ENCUMBRANCES EXPRESSED, IMPLIED OR PRESCRIPTIVE.
10. ANY USE OF THIS PLAN AND OR ACCOMPANYING DESCRIPTIONS SHOULD BE DONE WITH LEGAL COUNSEL, TO BE CERTAIN THAT TITLES ARE CLEAR, THAT INFORMATION IS CURRENT, AND THAT ANY NECESSARY CERTIFICATES ARE IN PLACE FOR A PARTICULAR CONVEYANCE, OR OTHER USES.
11. NO WETLANDS WERE OBSERVED ON THE SUBJECT PREMISES.
12. SURVEY TIE LINES SHOWN HEREON ARE NOT BOUNDARY LINES. THEY SHOULD ONLY BE USED TO LOCATE THE PARCEL SURVEYED FROM THE FOUND MONUMENTS SHOWN AND LOCATED BY THIS SURVEY.
13. WATER, SEWER, AND GAS LINES WERE DRAWN IN BASED OFF OF UTILITIES SHOWN IN PLAN REF. 4 AND SHOULD BE CONSIDERED APPROXIMATE.
14. THE EASTERLY BOUNDARY OF THE SURVEYED PROPERTY WAS DETERMINED USING THE IRON PIPE FOUND ALONG MAPLEWOOD AVENUE. EXISTING FENCES FOR LOTS 5 AND 6 CROSS THIS LINE. TITLE TO LANDS BEYOND THE FENCES IS UNCLEAR.

## PLAN REFERENCES:

1. "LOT LINE RELOCATION PLAN FOR JOHN J. & CATHERINE PAUSON AND HAROLD C. & ASTRID LOUISE PASSER, 12–28 DENNETT STREET, PORTSMOUTH, NH." DATED NOVEMBER 30, 1983. PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES. R.C.R.D. 12123.
2. "PLAN OF LAND PREPARED FOR MICHAEL BRANDZEL & HELEN LONG, TAX MAP 140 LOT 3, 39 DEARBORN STREET, PORTSMOUTH, NH." DATED OCTOBER 1, 2012. PREPARED BY BOUDREAU LAND SURVEYING. R.C.R.D. 37444.
3. "NO–BUILT EASEMENT PLAN, LAND OF SHAWN & MICHIYO BARDONG, TAX MAP 140 LOT 3, 39 DEARBORN STREET, PORTSMOUTH, NH." DATED JUNE 27, 2023. PREPARED BY BOUDREAU LAND SURVEYING. R.C.R.D. 44486.
4. "SITE PLAN, MEDICAL MARKET, 304 MAPLEWOOD AVE. PORTSMOUTH, NH," DATED OCTOBER 28, 1988. PREPARED BY INTERFACE DESIGNS. NOT RECORDED. ON FILE AT THE CITY OF PORTSMOUTH PLANNING DEPARTMENT. THIS PLAN NOTES THAT IS IT BASED UPON A PLAN BUT MOULTON ENGINEERING, WHICH WAS NOT FOUND BY THIS OFFICE.
5. "PLAN OF LOT, NO. 304 MAPLEWOOD AVE., PORTSMOUTH, N.H." DATED JUNE 1960. PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS. NOT RECORDED. ON FILE AT THE CITY OF PORTSMOUTH PLANNING DEPARTMENT.

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )
1 inch = 10 feet

| | | |
|---|---|---|
| Design: XXX | Draft: KDR | Date: 01/14/26 |
| Checked: JAC | Scale: AS SHOWN | Project No.: 23169 |
| Drawing Name: 23169-PLAN.dwg | | |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

PAIGE S. LIBBEY No.16670 — STATE OF NEW HAMPSHIRE — PROFESSIONAL ENGINEER — LICENSED — 03/28/2026

| REV. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| 1 | 3/19/26 | REVISED PLAN SET | KDR |
| 0 | 1/14/26 | ISSUED FOR REVIEW | KDR |

Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
85 Portsmouth Ave. PO Box 219 Stratham, NH 03885
Civil Engineering Services
603-772-4746
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: EXISTING CONDITIONS PLAN

Project: TAX MAP 140, LOT 7
304 MAPLEWOOD AVE, PORTSMOUTH, NH

Owner of Record: 304 MAPLEWOOD, LLC
304 MAPLEWOOD AVE, PORTSMOUTH, NH 03801
BK 4849, PG 2483

DRAWING No.
C1
SHEET 1 OF 3
JBE PROJECT NO. 23169

## ABUTTERS NOT SHOWN:

**TAX MAP 141 LOT 1**
NEILA LLC
31 DENNETT STREET
PORTSMOUTH, NH 03801
BK 6415 PG 2630

**TAX MAP 141 LOT 32**
PETER GEREMIA
315 MAPLEWOOD AVENUE
PORTSMOUTH, NH 03801
BK 4829 PG 1699

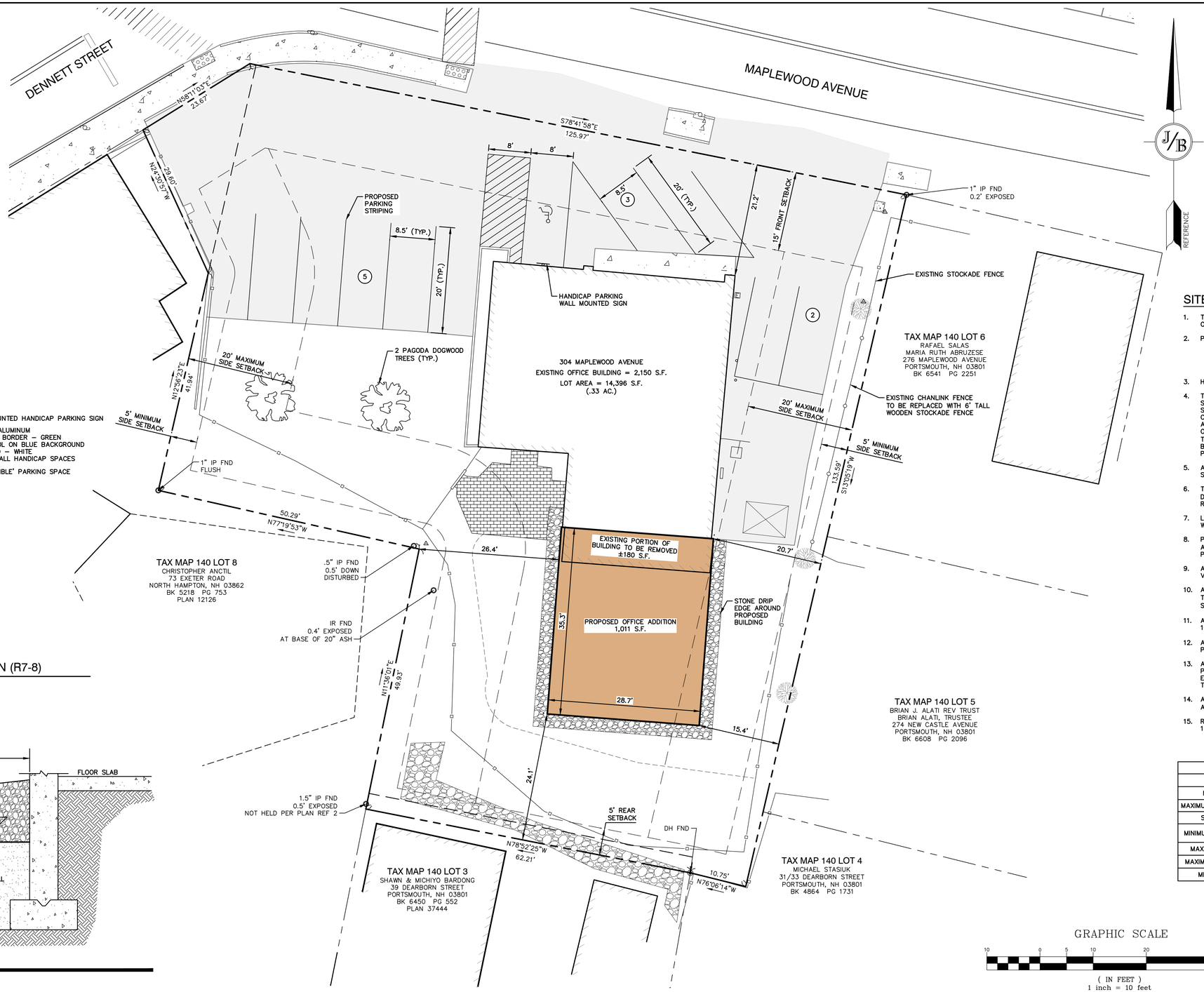
**TAX MAP 141 LOT 34**
35 PINES LLC
295 MAPLEWOOD AVENUE, UNIT 1
PORTSMOUTH, NH 03801
BK 6671 PG 1433

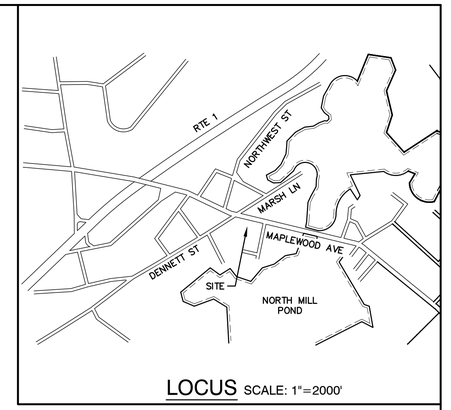
**TAX MAP 141 LOT 35-1**
35 PINES LLC
295 MAPLEWOOD AVENUE #1
PORTSMOUTH, NH 03801
BK 6347 PG 71

**TAX MAP 141 LOT 35-2**
VICTORIA BASSI
CAMERON BOUCHARD
295 MAPLEWOOD AVENUE R #2
PORTSMOUTH, NH 03801
BK 6228 PG 2499

**TAX MAP 141 PG 35-3**
ARRON & ALLYSON SEE
293 MAPLEWOOD AVENUE, UNIT F
PORTSMOUTH, NH 03801
BK 6411 PG 1662

**TAX MAP 141 LOT 36**
EVON COOPER
16 GARLAND ROAD
LINCOLN, MA 01773
BK 3261 PG 0831



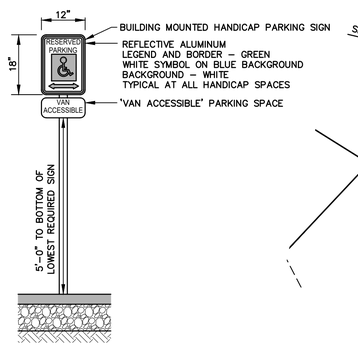




LOCUS SCALE: 1"=2000'

## SITE NOTES:

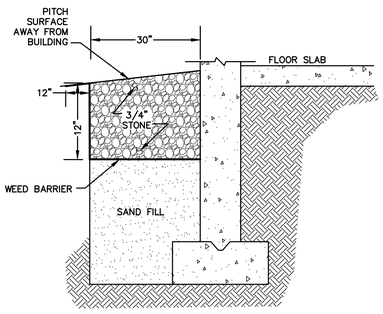
1. THE INTENT OF THIS PLAN IS TO SHOW A PROPOSED OFFICE BUILDING ADDITION TO THE EXISTING OFFICE BUILDING, AND TO SHOW PROPOSED PARKING STRIPING ON THE SITE.
2. PARKING CALCULATIONS: OFFICE USE – PROFESSIONAL, BUSINESS AND FINANCIAL SERVICES
   1 SPACE PER 350 S.F. GROSS FLOOR AREA
   2,981 S.F. GROSS FLOOR AREA / 350 S.F. PER SPACE = 9 SPACES REQUIRED
   9 PARKING SPACES REQUIRED
   10 PARKING SPACES PROVIDED
3. HISTORIC DISTRICT APPROVED ADDITION DESIGN IN FEBRUARY, 2026.
4. THIS PLAN SET HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC., FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS, INCLUDING ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS ON THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS, MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED. CONTRACTOR TO ALWAYS CONTACT DIG SAFE PRIOR TO DIGGING ONSITE OR OFFSITE TO ENSURE SAFETY AND OBEY THE LAW.
5. ALL CONSTRUCTION SHALL CONFORM TO TOWN STANDARDS AND REGULATIONS, AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
6. THE SUBJECT PARCEL IS NOT LOCATED WITHIN AN AREA HAVING A SPECIAL FLOOD HAZARD ZONE DESIGNATION BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 33015C0259F, WITH EFFECTIVE DATE OF JANUARY, 29, 2021,
7. LANDOWNERS ARE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING PERMITTING REQUIRED UNDER THESE REGULATIONS.
8. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.
9. ALL PROPOSED SIGNAGE SHALL CONFORM WITH THE TOWN ZONING REGULATIONS, UNLESS A VARIANCE IS OTHERWISE REQUESTED.
10. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND NHDOT STANDARDS AND SPECIFICATIONS (NON-REFLECTORIZED PAVEMENT MARKINGS), UNLESS OTHERWISE NOTED.
11. ALL PARKING STALLS SHALL BE SEPARATED USING 4" WIDE SOLID STRIPES. STRIPING SHALL BE 100% ACRYLIC TYPE, LOW VOC, FAST DRYING, IN A COLOR OF WHITE.
12. ALL STOP BARS SHALL BE 18" IN WIDTH IN A COLOR OF WHITE; ALL TRAFFIC ARROWS SHALL BE PAINTED IN A COLOR OF WHITE.
13. ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PROVIDED BY THE OWNER. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER PRIOR TO THE START OF CONSTRUCTION. BUILDING DIMENSIONS AND AREAS TO BE TO OUTSIDE OF MASONRY, UNLESS OTHERWISE NOTED.
14. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
15. REFERENCE PREVIOUSLY APPROVED SITE PLAN BY INTERFACE DESIGNS, APPROVED ON DECEMBER 15, 1988.

| ZONING SUMMARY | | |
|---|---|---|
| ZONE | CHARACTER DISTRICT (CD4–L2) – REQUIRED | PROVIDED |
| MINIMUM LOT AREA | 3,000 S.F. | 14,396 S.F. (.33 AC) |
| MAXIMUM FRONT YARD SETBACK | 15' | 21.2' |
| SIDE YARD SETBACK | 5' MIN; 20' MAX | 15.4' |
| MINIMUM REAR YARD SETBACK | 5' FROM REAR LOT LINE; 10' FROM CENTER LINE OF ALLEY | 24.1' |
| MAXIMUM BUILDING HEIGHT | 60' (2–5 STORIES) | 23.0' |
| MAXIMUM BUILDING COVERAGE | 60% OF LOT | 20.7% (2,981 S.F.) |
| MINIMUM OPEN SPACE | 25% OF LOT | 49.7% (7,156 S.F.) |




WALL MOUNTED
HANDICAP PARKING SIGN (R7-8)

NOT TO SCALE




DRIP EDGE DETAIL

NOT TO SCALE

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )
1 inch = 10 feet

CITY OF PORTSMOUTH PLANNING BOARD

CHAIRPERSON DATE

| | |
|---|---|
| Design: XXX | Draft: KDR |
| Checked: JAC | Scale: AS SHOWN |
| Date: 01/14/26 | Project No.: 23169 |
| Drawing Name: 23169-PLAN.dwg | |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

PAIGE S. LIBBEY No.16670 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE 03/31/2026

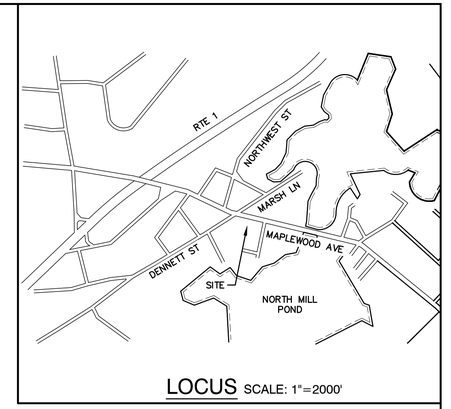
| REV. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| 1 | 3/19/26 | REVISED PLAN SET | KDR |
| 0 | 1/14/26 | ISSUED FOR REVIEW | KDR |

Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
Civil Engineering Services
603-772-4746
E-MAIL: JBE@JONESANDBEACH.COM

| | |
|---|---|
| Plan Name: | AMENDED SITE PLAN |
| Project: | TAX MAP 140, LOT 7<br>304 MAPLEWOOD AVE, PORTSMOUTH, NH |
| Owner of Record: | 304 MAPLEWOOD, LLC<br>304 MAPLEWOOD AVE, PORTSMOUTH, NH 03801<br>BK 4849, PG 2483 |

DRAWING No.
C2
SHEET 2 OF 3
JBE PROJECT NO. 23169




LOCUS SCALE: 1"=2000'

## SHORELAND IMPERVIOUS COVERAGE CALCULATIONS

AREA OF LOT WITHIN 250' SHORELAND PROTECTION ZONE = 7,737 S.F.

| DESCRIPTION | EXISTING | PROPOSED |
|---|---|---|
| BUILDING | 1,069 S.F. | 1,899 S.F. |
| PAVEMENT | 648 S.F. | 648 S.F. |
| PATIO | 240 S.F. | 240 S.F. |
| TOTALS: | 1,957 S.F. | 2,787 S.F. |
| PERCENT COVERAGE IN PROTECTIVE SHORELAND AREA: | 25.3% | 36.0% |

GRAPHIC SCALE

30 0 15 30 60 120

( IN FEET )
1 inch = 30 feet

| | | |
|---|---|---|
| Design: XXX | Draft: KDR | Date: 01/14/26 |
| Checked: JAC | Scale: AS SHOWN | Project No.: 23169 |
| Drawing Name: 23169-PLAN.dwg | | |

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PAIGE S. LIBBEY No.16670 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE 03/30/2026

| REV. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 3/19/26 | REVISED PLAN SET | KDR |
| 0 | 1/14/26 | ISSUED FOR REVIEW | KDR |

Designed and Produced in NH
Jones & Beach Engineers, Inc.
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
Civil Engineering Services
603-772-4746
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: SHORELAND PROTECTION PLAN

Project: TAX MAP 140, LOT 7
304 MAPLEWOOD AVE, PORTSMOUTH, NH

Owner of Record: 304 MAPLEWOOD, LLC
304 MAPLEWOOD AVE, PORTSMOUTH, NH 03801
BK 4849, PG 2483

DRAWING No.

C3

SHEET 3 OF 3
JBE PROJECT NO. 23169

ALTUS ENGINEERING

*Civil*
*Site Planning*
*Environmental*
*Engineering*

133 Court Street
Portsmouth, NH
03801-4413

March 23, 2026

Peter Stith, Planning Manager
City of Portsmouth Municipal Complex
1 Junkins Avenue
Portsmouth, New Hampshire 03801

**Re: Application for Technical Advisory Committee Review**
**Assessor's Map 236, Lot 74**
**86 Farm Lane**
**Altus Project No. 5719**

Dear Peter,

On March 3, 2026, Altus Engineering, LLC (Altus) presented an application for a three-lot residential subdivision to the Technical Advisory Committee (TAC). Tac completed a thorough review of the documents and voted to continue the application to the April 7th meeting.

TAC requested modest changes to the overall design which we believe have satisfactorily addressed with this submission. In summary, the following has been modifed.

- A portion of the roadway alignment has shifted approximately 5-feet towards proposed lot 2 to improve the centerline alignment.
- "Formerly" has been removed from the plans when referencing Longmeadow Lane.
- Lot areas have been checked and updated on the subdivision plan.
- Access easement note regarding the extension of Longmeadow Lane has been revised to clarify sunsetting.
- Water line configuration for the hydrant has been revised per DPW comments.
- Hazardous waste note has been added to the plans regarding the existing sanitary sewer pipe.
- The proposed water service sizes have been changed to 1" diameter.
- Signs have been revised as requested.

The application requires two waivers from the Subdivision Regulations and one from the Site Plan Review Regulations.

There are no wetlands on the lot or within 100-feet of the site.

Enclosed please find the following for consideration at the April 7th Technical Advisory Committee meeting:

Application Plan Package including:

- Letters of Authorization
- Viewpoint application (filed on-line only)
- Subdivision Application Checklist
- Site Plan Review Application Checklist
- Green Statement
- Waiver requests
- Zoning Board of Adjustment Notice of Decision
- Drainage Study
- Stormwater Inspection and Maintenance Manual
- Subdivision Plans and Details

As always, Altus looks forward to working with City staff. Please feel free to call or email me directly should you have any questions or need any additional information in advance of the meeting.

Sincerely,

**ALTUS ENGINEERING, LLC**



Enclosures

eCopy: Jeanette McMaster
Brett Berger

wde/5719.00 cvr ltr.docx

**Letter of Authorization**

Flipping Bergers LLC and Brett Berger, hereby authorize Altus Engineering, LLC to represent us as the Applicant in all matters concerning engineering and related permitting for Assessors Map 236, Lot 74 located at 86 Farm Lane in Portsmouth, New Hampshire. This authorization shall include representation at public hearings and other project-related meetings in addition to any signatures required for Federal, State and Municipal permit applications.

| | | |
|---|---|---|
| Signature | Brett Berger<br>Print Name | 2/10/26<br>Date |
| Witness | Print Name | Date |

# Letter_of_Authorization_Jeanette_MacDonald_v2

Final Audit Report 2026-02-11

| | |
|---|---|
| Created: | 2026-02-11 |
| By: | Brett Berger (brett@flippinbergers.com) |
| Status: | Signed |
| Transaction ID: | CBJCHBCAABAAXK_MtchkaepdF1uGj67REO-kdRt0GR4x |

## "Letter_of_Authorization_Jeanette_MacDonald_v2" History

Document created by Brett Berger (brett@flippinbergers.com)
2026-02-11 - 5:25:30 PM GMT

Document emailed to Jeannette McMaster (jemac86@gmail.com) for signature
2026-02-11 - 5:25:33 PM GMT

Email viewed by Jeannette McMaster (jemac86@gmail.com)
2026-02-11 - 5:58:27 PM GMT

Signer Jeannette McMaster (jemac86@gmail.com) entered name at signing as Jeannette McMaster(MacDonald)
2026-02-11 - 5:59:41 PM GMT

Document e-signed by Jeannette McMaster(MacDonald) (jemac86@gmail.com)
Signature Date: 2026-02-11 - 5:59:43 PM GMT - Time Source: server

Agreement completed.
2026-02-11 - 5:59:43 PM GMT

## Letter of Authorization: 86 Farm Lane

I, Jeannette McMaster (MacDonald), as the owner of the property located at 86 Farm Lane, Portsmouth, NH (assessors Map 236, Lot 74), hereby grant limited authorization to Brett Berger/Flippin Bergers LLC, to communicate and appear before the Technical Advisory Committee, Planning Board, and other municipal or regulatory bodies for purposes related to any application, engineering, subdivision review, and project discussion concerning the Property.

Such authorization includes the ability to present plans, respond to questions, and coordinate with Altus Engineering, LLC and other consultants involved in the subdivision process.

Name: Jeannette McMaster (MacDonald)

Signature: Jeannette McMaster(MacDonald)
Jeannette McMaster(MacDonald) (Feb 11, 2026 12:59:43 EST)

Date: 02/11/2026

# City of Portsmouth, New Hampshire

## *Subdivision Application Checklist*

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

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

Owner: Jeanette McDonald AKA Jeanette McMaster Date Submitted: 2-13-26

Applicant: Flipping Bergers LLC

Phone Number: 9142994438 E-mail: brett@flippingbergers.com

Site Address 1: 86 Farm Lane Map: 236 Lot: 74

Site Address 2: _____ Map: _____ Lot: 74

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

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

| Requirements for Preliminary/Final Plat | | | | |
|---|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Required for Preliminary / Final Plat** | **Waiver Requested** |
| ✔ | **Preliminary Plat**<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)** | Existing conditions survey and 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)** | Existing conditions survey and 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)** | Existing conditions survey and 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)** | Existing conditions survey and 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)** | Existing conditions survey and 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)** | Existing conditions survey and 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)** | Existing conditions survey plan | ☑ 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)** | Subdivision plan,<br>Roadway Plan<br>Utilities Plan<br>Grading, Drainage & Erosion Control Plan | ☑ 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)** | Roadway Plan<br>Grading, Drainage & Erosion Control Plan | ☑ Preliminary Plat<br>☑ Final Plat | |
| ✔ | Base flood elevation (BFE) for subdivisions involving greater than five (5) acres or fifty (50) lots. **(Section IV.11)** | NA - Subdivision plan | ☑ Preliminary Plat<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)** | NA - Existing Conditions Plan<br>Grading, Drainage & Erosion Control 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** |
| ✔ | Dates and permit numbers of all necessary permits from governmental agencies from which approval is required by Federal or State law. **(Section V.10)** | Cover Sheet | ☐ Preliminary Plat ☑ Final Plat | |
| ✔ | For subdivisions involving greater than five (5) acres or fifty (50) lots, the final plat shall show hazard zones and shall include elevation data for flood hazard zones. **(Section V.11)** | NA | ☐ Preliminary Plat ☑ Final Plat | |
| ✔ | Location of all permanent monuments. **(Section V.12)** | Subdivision Plan | ☐ Preliminary Plat ☑ Final Plat | |

| General Requirements[1] | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☑ | **1. Basic Requirements: (VI.1)** | Subdivision Plan | |
| ☑ | a. Conformity to Official Plan or Map | a. meets with zoning relief | |
| ☑ | b. Hazards | b.no in a hazard zone | |
| ☑ | c. Relation to Topography | c. Grading plan | |
| ☑ | d. Planned Unit Development | d. NA | |
| ☐ | **2. Lots: (VI.2)** | a. conforming to neighborhood subdivision plan | |
| ☐ | a. Lot Arrangement | b. variance granted | |
| ☐ | b. Lot sizes | | |
| ☐ | c. Commercial and Industrial Lots | | |
| ☐ | **3. Streets: (VI.3)** | a. new road is within an existing ROW | |
| ☑ | a. Relation to adjoining Street System | b. ROW is existing and meets 50-foot requirement | |
| ☑ | b. Street Rights-of-Way | c. no reserve strips proposed | |
| ☑ | c. Access | d. NA | |
| ☑ | d. Parallel Service Roads | e. existing ROW is nearly perpendicular | |
| ☑ | e. Street Intersection Angles | f. no new ROW proposed | |
| ☑ | f. Merging Streets | g.NA h. NA | |
| ☑ | g. Street Deflections and Vertical Alignment | i. NA - turnaround proposed - waiver requested | |
| ☑ | h. Marginal Access Streets | j. 25' radius - complies | |
| ☑ | i. Cul-de-Sacs | k. Roadway plan | |
| ☑ | j. Rounding Street Corners | | |
| ☑ | k. Street Name Signs | | |
| ☑ | l. Street Names | | |
| ☑ | m. Block Lengths | | |
| ☑ | n. Block Widths | | |
| ☑ | o. Grade of Streets | | |
| ☑ | p. Grass Strips | | |
| ☑ | **4. Curbing: (VI.4)** | Complies | |
| ☑ | **5. Driveways: (VI.5)** | NA | |
| ☑ | **6. Drainage Improvements: (VI.6)** | Grad., Drain. & Erosion Control Plan | |
| ☑ | **7. Municipal Water Service: (VI.7)** | Utilities Plan | |
| ☑ | **8. Municipal Sewer Service: (VI.8)** | only house services required | |
| ☑ | **9. Installation of Utilities: (VI.9)** | Detail sheets | |
| ☑ | a. All Districts | | |
| ☑ | b. Indicator Tape | | |
| ☑ | **10. On-Site Water Supply: (VI.10)** | NA | |
| ☑ | **11. On-Site Sewage Disposal Systems: (VI.11)** | NA | |
| ☑ | **12. Open Space: (VI.12)** | NA | |
| ☑ | a. Natural Features | | |
| ☑ | b. Buffer Strips | | |
| ☑ | c. Parks | | |
| ☑ | d. Tree Planting | | |
| ☑ | **13. Flood Hazard Areas: (VI.13)** | NA - not in a flood hazard zone | |
| ☑ | a. Permits | | |
| ☑ | b. Minimization of Flood Damage | | |
| ☑ | c. Elevation and Flood-Proofing Records | | |
| ☑ | d. Alteration of Watercourses | | |
| ☑ | **14. Erosion and Sedimentation Control (VI.14)** | Grad., Drain. & Erosion Control Plan | |

| ☑ | Required Items for Submittal | Item Location (e.g. Page/line or Plan Sheet/Note #) | Waiver Requested |
|---|---|---|---|
| ✔<br>✔<br>✔ | **15. Easements (VI.15)**<br>a. Utilities<br>b. Drainage | Subdivision plan | |
| ✔ | **16. Monuments: (VI.16)** | Subdivision plan | |
| ✔ | **17. Benchmarks: (VI.17)** | Existing conditions plan | |
| ✔ | **18. House Numbers (VI.18)** | to be provided | |

| Design Standards | | | |
|---|---|---|---|
| | **Required Items for Submittal** | **Indicate compliance and/or provide explanation as to alternative design** | **Waiver Requested** |
| ✔ | **1. Streets have been designed according to the design standards required under Section (VII.1).**<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 | Conforms | |
| ✔ | **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 | Conforms | |
| ✔ | **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 | infrastructure in place.<br>House services proposed | |
| ✔ | **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 | Per discussion with DPW<br>Conforms | |

**Applicant's/Representative's Signature:** Eric D. Weinrieb PE **Date:** 2-13-26

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

# City of Portsmouth, New Hampshire

## *Site Plan Application Checklist*

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

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

Name of Applicant: Flipping Berger's LLC Date Submitted: 3-23-26

Application # (in City's online permitting): LU-26-16

Site Address: 86 Farm Lane Map: 236 Lot: 74

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

| Site Plan Review Application Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | Statement that lists and describes "green" building components and systems. **(2.5.3.1B)** | Submittal materials | |
| ☒ | Existing and proposed gross floor area and dimensions of all buildings and statement of uses and floor area for each floor. **(2.5.3.1C)** | Potential building envelopes on site plan | N/A |
| ☒ | Tax map and lot number, and current zoning of all parcels under Site Plan Review. **(2.5.3.1D)** | Cover sheet and title block of all sheets | N/A |

| Site Plan Review Application Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | Owner's name, address, telephone number, and signature. Name, address, and telephone number of applicant if different from owner. **(2.5.3.1E)** | Letter of Authorization in submittal package, cover sheet | N/A |
| ☒ | Names and addresses (including Tax Map and Lot number and zoning districts) of all direct abutting property owners (including properties located across abutting streets) and holders of existing conservation, preservation or agricultural preservation restrictions affecting the subject property. **(2.5.3.1F)** | Existing Conditions Survey, sheet V-1 | N/A |
| ☒ | Names, addresses and telephone numbers of all professionals involved in the site plan design. **(2.5.3.1G)** | Cover Sheet | N/A |
| ☒ | List of reference plans. **(2.5.3.1H)** | Existing Conditions Plan, subdivision & Easement Plan | N/A |
| ☒ | List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)** | Utilities Plan, Sheet C-6 | N/A |

| Site Plan Specifications | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | Full size plans shall not be larger than 22 inches by 34 inches with match lines as required, unless approved by the Planning Director.. **(2.5.4.1A)** | Required on all plan sheets | N/A |
| ☒ | Scale: Not less than 1 inch = 60 feet and a graphic bar scale shall be included on all plans. **(2.5.4.1B)** | Required on all plan sheets | N/A |
| ☒ | GIS data should be referenced to the coordinate system New Hampshire State Plane, NAD83 (1996), with units in feet. **(2.5.4.1C)** | Note 5 existing conditions plan | N/A |
| ☒ | Plans shall be drawn to scale and stamped by a NH licensed civil engineer. **(2.5.4.1D)** | Required on all plan sheets | N/A |
| ☒ | Wetlands shall be delineated by a NH certified wetlands scientist and so stamped. **(2.5.4.1E)** | N/A | N/A |
| ☒ | Title (name of development project), north point, scale, legend. **(2.5.4.2A)** | All plan sheets | N/A |
| ☒ | Date plans first submitted, date and explanation of revisions. **(2.5.4.2B)** | Title block all plan sheets | N/A |
| ☒ | Individual plan sheet title that clearly describes the information that is displayed. **(2.5.4.2C)** | Required on all plan sheets | N/A |
| ☒ | Source and date of data displayed on the plan. **(2.5.4.2D)** | Existing Conditions and Subdivision plan | N/A |

| Site Plan Specifications – Required Exhibits and Data | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | **1. Existing Conditions: (2.5.4.3A)**<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. | Sheets V-1 & V-2<br>Sheet C-1<br>N/A - ex. house sheet C-1<br>Sheet C-1, Subdivision notes<br><br>Sheet C-1, Subdivision notes<br><br>Sheet C-1, Lot areas & coverage summary<br><br>NA<br><br>Sheet V-1, note 7 | |
| ☒ | **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. | Conceptual site Plan, Sheet C-2 shows potential home locations. Elevations, height, massing, materials, lighting and arch. details have not been determined.<br>Gross floor area has not been determined. | |
| ☒ | **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). | Conceptual Site Plan, sheet C-2, Roadway Plan, Sheet C-4<br><br>Fire truck turning templates on Vehicular Access Plan, sheet 1 of 1 | |
| ☒ | **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). | NA - residential subdivision. all lot development will occur on individual house lots | |
| ☒ | **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). | Sheet C-6, utilities Plan | |
| ☒ | **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. | Sheet C-6, Utilities Plan | |

| | | | |
|---|---|---|---|
| ☒ | **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. | Sheet C-6, Utilities Plan | |
| ☒ | **8. Solid Waste Facilities: (2.5.4.3H)** | NA, individual single family homes | |
| | • The size, type and location of solid waste facilities. | | |
| ☒ | **9. Storm water Management: (2.5.4.3I)**<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. | Sheet C-5, Grading, Drainage & Erosion Control Plan<br>No salt storage to occur on site<br>temporary stockpile areas shown on Sheet C-3 - Demolition & Site Preparation Plan | |
| ☒ | **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. | Single Family homes on individual lots. No street lighting proposed. Modest residential lighting will be associated with lot development | |
| ☒ | **11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)** | NA - no lighting is proposed | |
| ☒ | **12. Landscaping: (2.5.4.3K)**<br>• Identify all undisturbed area, existing vegetation and that which is to be retained;<br>• Location of any irrigation system and water source. | Limits of site work activities are depicted on the Demolition & Site Preparation Plan, Sheet C-3. No irrigation is proposed. | |
| ☒ | **13. Contours and Elevation: (2.5.4.3L)**<br>• Existing/Proposed contours (2 foot minimum) and finished grade elevations. | Existing contours are shown on Sheets V-1 and V-2. Proposed grading on Sheet C-5 Grading, Drainage & Erosion Control Plan | |
| ☒ | **14. Open Space: (2.5.4.3M)**<br>• Type, extent and location of all existing/proposed open space. | NA - no public open space is proposed | |
| ☒ | **15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)** | sheet C-1, Subdivision & Easement Plan | |
| ☒ | **16. Character/Civic District (All following information shall be included): (2.5.4.3P)**<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). | NA | |
| ☒ | **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. | Site is not in a flood hazard zone as noted on sheet V-1, note 7. | |

| Other Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | Traffic Impact Study or Trip Generation Report, as required. **(3.2.1-2)** | 2 new lots proposed, trip generation report not warranted | |
| ☒ | Indicate where Low Impact Development Design practices have been incorporated. **(7.1)** | Green statement, submittal documents | |
| ☒ | Indicate whether the proposed development is located in a wellhead protection or aquifer protection area. Such determination shall be approved by the Director of the Dept. of Public Works. **(7.3.1)** | Development is not within a wellhead protection or aquifer protection zone | |
| ☒ | Stormwater Management and Erosion Control Plan. **(7.4)** | Sheet C-5, Design information, Sheet D-1, erosion control notes | |
| ☒ | Inspection and Maintenance Plan **(7.6.5)** | Submittal documents | |

| Final Site Plan Approval Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | All local approvals, permits, easements and licenses required, including but not limited to:<br>• Waivers;<br>• Driveway permits;<br>• Special exceptions;<br>• Variances granted;<br>• Easements;<br>• Licenses.<br>**(2.5.3.2A)** | Waivers submitted<br>Driveway permits not required<br>Special Exception not required<br>Variances granted 5-27-25, noted on C-1<br>Easements shown on Sheet C-1<br>Licenses not required | |
| ☒ | 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)** | Stormwater computations provided in submittal documents<br>air, water, and land pollutants - NA<br>Traffic generation - 2 new homes proposed. NA<br><br>Residential development - noise. NA<br>Stormwater managment and Erosion control plan provided in narrative, C-4 and Erosion control detail sheet<br>Wetlands NA | |
| ☒ | A document from each of the required private utility service providers indicating approval of the proposed site plan and indicating an ability to provide all required private utilities to the site.<br>**(2.5.3.2D)** | Discussions with Eversource - pending | |

| Final Site Plan Approval Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | A list of any required state and federal permit applications required for the project and the status of same. **(2.5.3.2E)** | No State or Federal permits required | |
| ☒ | A note shall be provided on the Site Plan stating: "All conditions on this Plan shall remain in effect in perpetuity pursuant to the requirements of the Site Plan Review Regulations." **(2.5.4.2E)** | Note added to both the Subdivision and Site Plan | N/A |
| ☒ | For site plans that involve land designated as "Special Flood Hazard Areas" (SFHA) by the National Flood Insurance Program (NFIP) confirmation that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. **(2.5.4.2F)** | NA - not in a flood hazard zone | |
| ☒ | Plan sheets submitted for recording shall include the following notes:<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)** | NA - site plan is conceptual in nature. Waiver requested<br><br>Note B added to the subdivision plan | N/A |

**Applicant's Signature:** Eric D. Weinrieb PE **Date:** 3-18-26

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133 Court Street
Portsmouth, NH
03801-4413

# "Green" Statement
# 3 Lot Residential Subdivision
# Assessor's Map 236, Lot 74
# 86 Farm Lane
# Altus Project 5719
# March 2026

Pursuant to Section 2.5.3.1(a) of the Site Plan Review Regulations, Altus Engineering, LLC respectfully submits the following list of the project's "green" components for the construction of a new three lot residential subdivision off Longmeadow Lane.

- The project is infill in a suburban area. The additional density in a developed landscape that does impact wetlands or wetland buffer is a green site design approach.
- The proposed roadway serving only two homes will be reduced in width to minimize impervious surfaces, reducing the heat island.
- Rain garden/bioretention basins will mitigate any runoff impacts and will provide treatment and promote groundwater recharge.
- The new homes will be code compliant building with components that will meet or exceed all applicable energy codes.

wde/5719 green statment

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133 Court Street
Portsmouth, NH
03801-4413

**REVISED**
**WAIVER REQUESTS**

March 23, 2026

**Re: Assessor's Map 236, Lot 74**
**86 Farm Lane**
**Altus Project No. 5719**

On behalf of Flipping Bergers, LLC, Applicant and Jeanette McMaster, Owner, Altus Engineering, LLC respectfully requests the following waivers from the City of Portsmouth Subdivision Rules and Regulations.

**Section VI GENERAL REQUIREMENTS**

3. Streets
I. Cul-de-Sacs

Requirement:
Cul-de-sacs shall be provided at the closed end with a drive-around roadway having a minimum radius for the outside curbs of at least fifty (50) feet, and a street property line radius of sixty (60) feet. The maximum length of a cul-de-sac shall generally be five hundred (500) feet unless otherwise approved by the Board. The Planning Board may require the dedication of an easement of twenty (20) feet in width from the cul-de sac to the next adjoining street to provide for utilities. No water lines serving the street shall be dead ended, where feasible.

Provided: Hammer head provided in lieu of a cul-de-sac

Requirement: From Exhibit Residential Street Minimum Standards (32-foot paved surface with a 5-foot wide sidewalk

Provided: 22-feet of pavement along roadway.

Both waivers are interconnected. The development will service only two single family homes, generating very little traffic, approximately 19 vehicle trips per day on a weekday. A 22-foot-wide roadway can adequately support the expected traffic. A hammer head turnaround has been provided to allow emergency vehicles to safely turnaround and exit the development. The site is unique as the new roadway is within an existing right-of-way. The roadway has been shifted to avoid disturbance to the abutting property that is utilizing a portion of the City right-of-way. The right-of-way extends to the north into a private development. It is doubtful that the roadway will ever be extended as a continuous road. A fire truck turning template plan is included in the application package that supports the narrower widths proposed. No parking signs along the road are proposed to ensure that vehicles do not block the roadway preventing

emergency vehicle access. Each lot will have ample space for a garage and visitor parking for small gatherings at each home.

Narrower roadways reduce the carbon footprint on the development, reduce stormwater runoff and pollutant loading and reduces the heat island effect on stormwater.

Servicing only 2 single family homes, constructing a sidewalk is necessary to protect pedestrians. Farm Lane and the entire neighborhood does not have a sidewalk system.

At the direction of Public Works, the water line provided to the development will be only 4-inches diameter to avoid stagnation of the potable water and is terminated at the end of the road.

Altus Engineering, LLC also respectfully requests the following waivers from the City of Portsmouth Site Plan review Regulations.

**Section 2.13 Recording of Site Plans**

Requirement:

1. An approved site plan shall be signed by the Planning Board Chairperson (or designee) and shall be recorded at the Rockingham County Registry of Deeds (RCRD). Site Plans are not valid until recorded at the Registry of Deeds.

Provided: Conceptual Site Plan.

Conceptual Site Plan demonstrates how the two new house lots will be constructed. The intent of subdivision approval is to create two new building lots. The people who purchase the lots and build the homes are not yet identified. The subdivision plans depict the buildable area and identify the maximum lot and building coverage. The concept plan shows a possible development scenario. It does not and should not commit the developer or the further homeowner to a specific house configuration or size. All relevant requirements are included on the recording subdivision and easement plan.

Respectfully submitted by,

**ALTUS ENGINEERING, LLC**

wde/5719 waiver.docx

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

**ZONING BOARD OF ADJUSTMENT**

May 29, 2025

Jeannette MacDonald
86 Farm Lane
Portsmouth, New Hampshire 03801

RE: **Board of Adjustment Request for property located at 86 Farm Lane, Portsmouth NH 03801 (LU-25-67)**

Dear Property Owner:

The Zoning Board of Adjustment, at its regularly scheduled meeting of **May 27, 2025**, considered your application for the property located at 86 Farm Lane whereas relief is needed to subdivide the existing property into 3 separate lots. The proposed parent lot requires the following: 1) Variance from Section 10.521 to allow a) 28-foot rear yard setback where 30 feet is required; and b) 23-foot secondary front yard where 30 feet is required. Proposed lot 1 requires the following: 2) Variance from Section 10.521 to allow a) 10,664 s.f. of lot area where 15,000 s.f. is required; b) 10,664 s.f. of lot area per dwelling unit where 15,000 s.f. is required; and c) 75 feet of continuous street frontage where 100 feet is required. Proposed lot 2 requires the following: 3) Variance from Section 10.521 to allow a) 11,250 s.f. of lot area where 15,000 s.f. is required; b) 11,250 s.f. of lot area per dwelling unit where 15,000 s.f. is required; and c) 75 feet of continuous street frontage where 100 feet is required. Said property is shown on Assessor Map 236 Lot 74 and lies within the Single Residence B (SRB) District. As a result of said consideration, the Board voted to **grant** the request as presented with the following **conditions:**

1) The approval shall be contingent upon the Planning Board approval of the subdivision and City Council acceptance of fee simple ownership of the new right-of-area proposed; and

2) The subdivision layout may change as a result of TAC and Planning Board reviews if it does not increase the zoning relief required.

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

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

This approval shall expire unless a building permit is issued within a period of two (2) years from the date granted unless an extension is granted in accordance with Section 10.236 of the Zoning Ordinance.

*The Findings of Fact associated with this decision are available: attached here or as an attachment in the Viewpoint project record associated with this application and on the Zoning Board of Adjustment Meeting website:*

https://www.cityofportsmouth.com/planportsmouth/zoning-board-adjustment/zoning-board-adjustment-archived-meetings-and-material

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

Very truly yours,



Phyllis Eldridge, Chair of the Zoning Board of Adjustment

cc: Shanti Wolph, Chief Building Inspector

Rosann Maurice-Lentz, City Assessor
Derek Durbin, Attorney, Durbin Law Offices PLLC

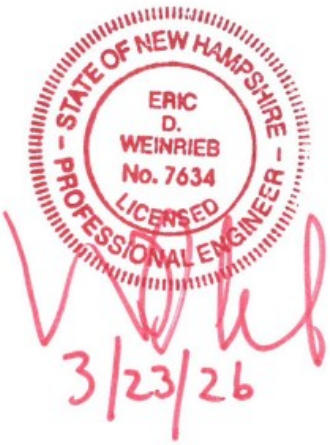
# DRAINAGE ANALYSIS

**FOR**

# 86 FARM LANE SUBDIVISION

## 86 Farm Lane
## Portsmouth, NH 03801

**February 13, 2026**
**Revised March 23, 2026**




*Prepared For:*
**Flipping Berger's, LLC**
71 Bracket Road
Portsmouth, NH 03801

*Prepared By:*
**Altus Engineering, LLC**
133 Court Street
Portsmouth, NH 03801
Phone: (603) 433-2335

ALTUS ENGINEERING

Altus Project 5719

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# Section 1

# Narrative

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# PROJECT DESCRIPTION

Flipping Berger's, LLC is proposing to construct a new subdivision behind an existing single-family residence at 86 Farm Lane in Portsmouth. The ±0.914-acre parcel is identified as Tax Map 236, Lot 74 and is located in the Single Residence B zone. The lot is located on Farm Lane between the Spaulding Turnpike and Woodbury Avenue and hosts a two-story residential home, pool, deck and patio.

The proposal includes the construction of a new 265'-long and 22'-wide public roadway and two new lots. The existing single-family residence is to remain. The existing pool, deck and patio will be removed to allow for the area behind the existing house to be subdivided. The new roadway will be located on City owned property currently identified as *Longmeadow Lane;* which is a paper street. Additional improvements to the site also include new water, electric and stormwater infrastructure.

Stormwater infrastructure will consist of one infiltration pond, one bioretention cell, one drain manhole and one deep sump catch basin. The infiltration pond and bioretention cell are utilizing infiltration to treat stormwater and control flows and each also includes a yard drain to be connected into the City's drainage system to handle flows during large storms. Additionally, the bioretention cell includes a perforated underdrain to collect stormwater after it has been treated. All stormwater runoff from new impervious surfaces will be directed to the infiltration pond, bioretention cell or deep sump catch basin. The proposed buildings will also utilize a stone drip edge to capture runoff from the roof. This proposed stormwater management system will provide adequate stormwater treatment and will meet or reduce peak flows leaving the site for each point of analysis except for at the City owned drainage system analysis point (POA #4), more information is provided under the Post-Development section of this report.

### *Site Soils*

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) web soil survey indicates that soil on this parcel is a mix of Udorthents, Smooth (299) and Urban Land – Canton (799). The Urban Land – Canton is certified as Hydraulic Soil Group A (HSG-A). Udorthents, Smooth, do not have a HSG provided by the NRCS, due to the lack of information regarding this soil type it has been assumed that this soil type is consistent with surrounding soil types and thus is modeled as HSG-A.

Two test pits were completed on the property for the design of the stormwater infrastructure. The test pits logged for the stormwater infrastructure design consisted of dark brown grass matt ranging from 0" to 9" below existing grade, a mix of red/brown loam and sand ranging from 9" to 33", and red/brown clayey loam ranging from 33" to 60". No ledge was observed in either of them. Groundwater was observed between 40" and 50" below existing grade and estimated seasonal high-water table was observed between 24" and 43" below existing grade.

***Pre-Development (Existing Conditions)***

The property is bounded by other residential properties to the northeast, Longmeadow Lane paper street to the southwest, woods to the northwest, and Farm Lane to south-southeast. Of the ±0.914-acre parcel, less than a half-acre has been disturbed by the existing building, pool, patio, deck and associated pavement; the remainder of the lot is a mix of lawn and some woods. There is no stormwater infrastructure currently located on the property or on Farm Lane.

Longmeadow Lane is a 50'-wide paper street is located between 86 & 88 Farm Lane; it extends approx. 800' to the northwest toward the intersection with Woodlawn Circle and Hillcrest Drive. The paper street has been partially developed by abutting residents near Farm Lane, consisting of a grave driveway, fencing, landscaping, a portion of a shed and a portion of driveway. Development of the paper street ends approx. 200' from Farm Lane and transitions into undeveloped woodland. There is an existing drain manhole located within the paper street right-of-way approx. 425' from Farm Lane. There is also an existing sewer system located within the right-of-way that is active.

The existing site hydrology is characterized by three sub-catchments as delineated on the accompanying "Pre-Development Watershed and Soils Plan". Site runoff was analyzed at three Point of Analysis (POA). The analysis area for the site expands beyond the limits of the existing lot and City paper street based on contours obtained by James Verra & Associates, Inc. from the Existing Conditions Plan and from contours provided by City of Portsmouth GIS showing off lot flows contributing to POA's on this site.

POA #1 is located in the southern corner of the analysis area near the intersection of Farm Lane and Clover Lane. The catchment that contributes to POA #1 consists of half of the existing house, the front yard of the existing house, part of Farm Lane and some areas of the adjacent properties. POA #2 is located along the northwest boundary of the analysis area along the 88 Farm Lane property line. The catchment that contributes to POA #2 consists a small portion of the side yard of the existing house and portion of the City's paper street. POA #3 is located in the northwest corner of the existing lot shared with the paper street at a large depression located on the property line that appears to be storing and infiltrating stormwater runoff. This existing natural depression in the land is modeled as Pond #3 in the pre-analysis. The catchment that contributes to POA #3 consists of half of the existing house, the entire backyard including the pool/patio area, a portion of the City's paper street, and the yards/roofs of abutting properties to the northeast that are fronted on Meadow Road. POA #4 is located at the City owned drain manhole located in the paper street right-of-way, no flows from the existing site discharge to the City drainage system.

***Post-Development (Proposed Conditions)***

The post-development conditions were analyzed at the same discharge points as the pre-development conditions. The post-development watersheds are delineated on the accompanying "Post-Development Watershed and Soils Plan". Modifications to the delineated areas and associated ground cover were made to sub-catchments to account for the improvements to the property.

The purpose of this project is to subdivide the existing lot at 86 Farm Lane into three lots and install a new road for the two newly created lots behind the existing home. The existing home is to remain and access is provided by Farm Lane. This project includes the design of the new road but does not include design for the development of the two new lots. Stormwater management areas will be installed on both of the new lots to control stormwater flows from the new lots and road. A drainage easement will granted to the City for maintenance of the stormwater infrastructure.

Impervious areas for the three lots was estimated/assumed to properly size the stormwater infrastructure. The impervious area for Lot 1, which includes the existing home, patio and driveway, is estimated to be 5,685 S.F.

For the two undeveloped lots, conceptual homes and driveways are shown. Conceptual house footprints were determined by sizing the home close to the maximum allowable building footprint (20%) for the lot. Both homes are assumed to have a footprint of 2,000 S.F. which is less than 20% for each lot. Conceptual driveways are designed to meet City of Portsmouth driveway standards and provide access to the conceptual homes.

Based on these assumptions, if the impervious area for any of the lots exceeds the impervious area assumed than an individual stormwater management plan for the lot will be required. Total impervious area assumed for Lot 2 is 2,710 S.F. and for Lot 3 it is 3,220 S.F.

As shown on the attached Post-Development Watershed and Soils Plan, the site was divided into five post-development sub-catchment areas. The catchment (1) that contributes to POA #1 in the pre-development conditions was reduced in size and remains the only catchment contributing to this POA. The catchment (2) that contributes to POA #2 in the pre-development conditions was reduced in size and remains the only catchment contributing to this POA.

The catchment (3) that contributes to POA #3 in the pre-development conditions was reduced in size and remains the only catchment contributing to this POA. This catchment includes the existing natural depression identified in the pre-development conditions that is POA #3. The natural depression will be expanded within the limits of the existing lot and yard drain connected

to the City's drainage system will be installed. No changes to the natural depression shall occur on abutting property. Furthermore, **Table 2** below shows the difference in water elevation in the natural depression from pre to post conditions. This table demonstrates that the water level in the depression will not be adversely affected in post-development conditions.

In the pre-development conditions, no existing flows from the lot are contributing to POA #4, however, post-development conditions redirect a considerable amount of the analysis area to this POA. Catchments 4.1 and 4.2 contribute directly to POA #4 in post-development conditions; these catchments include the majority of the proposed roadway, the bioretention cell and deep sump catch basin. POA #3 indirectly contributes to POA #4 as well, through the utilization of the yard drain to be installed in the natural depression and connected into the closed drainage system discharging to the City's drain manhole (POA #4). No flows from POA #3 are expected to discharge to the City's drainage system up to the 25-year storm. The yard drain is being utilized as an emergency backup to protect abutting properties. Stormwater treatment is being achieved through the use of an infiltration pond, bioretention cell and deep sump catch basins. Stone drip edges may be installed around the homes for Lots 2 and 3 to provide additional stormwater management and treatment but are not required as part of the designed stormwater management.

Site topography, existing features, proposed site improvements, proposed grading, drainage and erosion control measures are shown on the accompanying plan set. Recommended erosion control measures are based upon the latest edition of the "*New Hampshire Stormwater Manual* prepared by NHDES and Comprehensive Environmental, Inc. as amended.

## CALCULATION METHODS

The drainage study was completed using the USDA SCS TR-20 Method within the HydroCAD Stormwater Modeling System. Reservoir routing was performed with the Dynamic Storage Indication method with automated calculation of tailwater conditions. A Type III 24-hour rainfall distribution was utilized in analyzing the data for the 2, 10, & 25 - 24-hour storm events using rainfall data provided by the Northeast Regional Climate Center (NRCC). As the project site lies within a Coastal and Great Bay Community identified by NHDES Alteration of Terrain, all rainfall amounts were increased by 15% to account for potential future increases in rainfall due to climate change. A time span of 0 to 48 hours was analyzed at 0.01-hour increments.

***Disclaimer***

Altus Engineering notes that stormwater modeling is limited in its capacity to precisely predict peak rates of runoff and flood elevations. Results should not be considered to represent actual storm events due to the number of variables and assumptions involved in the modeling effort. Surface roughness coefficients (n), entrance loss coefficients (ke), velocity factors (kv) and times of concentration (Tc) are based on subjective field observations and engineering judgment using available data. For design purposes, curve numbers (Cn) describe the average conditions. However, curve numbers will vary from storm to storm depending on the antecedent runoff conditions (ARC) including saturation and frozen ground. Also, higher water elevations than predicted by modeling could occur if drainage channels, closed drain systems or culverts are not maintained and/or become blocked by debris before and/or during a storm event as this will impact flow capacity of the structures. Structures should be re-evaluated if future changes occur within relevant drainage areas in order to assess any required design modifications.

***Drainage Analysis***

A complete summary of the drainage model is included in the appendix of this report. **Table 1** below compares pre- and post-development peak rates at the Points of Analysis identified on the plans for the 2, 10 & 25-year storm events. **Table 2** below compares the water elevation in the existing natural depression from pre- to post-development conditions for the 2, 10 & 25-year storm events.

**Table 1 - Stormwater Modeling Summary**
**Peak Q (cfs) for Type III 24-Hour Storm Events**

| | 2-Year Storm (3.06-inch) | 10-Year Storm (5.59-inch) | 25-Year Storm (7.08-inch) |
|---|---|---|---|
| **POA 1** | | | |
| PRE | 0.17 | 0.93 | 1.49 |
| POST | 0.02 | 0.07 | 0.11 |
| **CHANGE** | -0.15 | -0.86 | -1.38 |
| **POA 2** | | | |
| PRE | 0.00 | 0.05 | 0.18 |
| POST | 0.00 | 0.02 | 0.08 |
| **CHANGE** | 0.00 | -0.03 | -0.10 |
| **POA 3** | | | |
| PRE | 0.00 | 0.00 | 0.00 |
| POST | 0.00 | 0.00 | 0.00 |
| **CHANGE** | 0.00 | 0.00 | 0.00 |
| **POA 4** | | | |
| PRE | 0.00 | 0.00 | 0.00 |
| POST | 0.18 | 1.86 | 3.44 |
| **CHANGE** | 0.18 | 1.86 | 3.44 |

As the above **Table 1** demonstrates, the proposed peak rates of runoff at all points of analysis will match or be decreased from the existing conditions for POA's #1, 2 & 3. POA #4 will have an increased peak rate of runoff as no runoff contributed to this area in the pre-development conditions. The City drainage system that is receiving the flow at POA #4 is a culvert that is located perpendicular to the paper street and connects a low-lying area on the northeast side of the paper street to the southwest side of the street. Based on the City's GIS layers, this drainage system appears to collect several other upstream catchments, consisting of both closed and open drainage systems. Altus Engineering believes that the City drainage system can handled the minor increase in flow rate at POA #4.

**Table 2 – Stormwater Elevation Comparison**
**Natural Depression Water Elevation for Type III 24-Hour Storm Events**

| Storm Size | Pre-Development Peak Elevation (ft) | Post-Development Peak Elevation (ft) | Change in Elevation (ft) |
|---|---|---|---|
| **2-Year** | 38.04 | 38.00 | -0.04 |
| **10-Year** | 39.00 | 38.48 | -0.52 |
| **25-Year** | 39.69 | 38.96 | -0.73 |

**Table 2** above demonstrates that the water elevation in the modified natural depression will not be adversely affected by the proposed improvements and that water levels will remain close to or less than pre-development conditions.

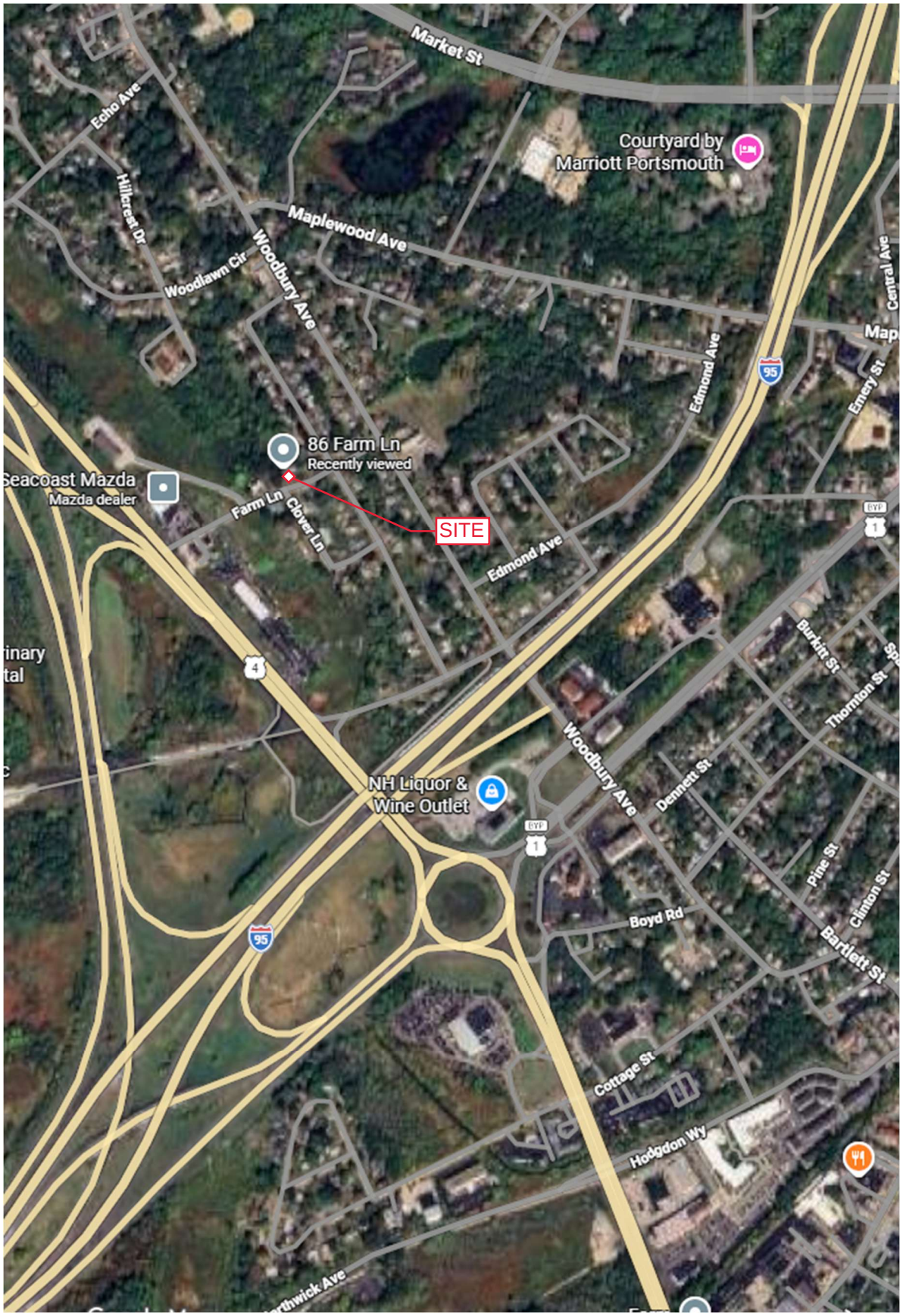
## CONCLUSION

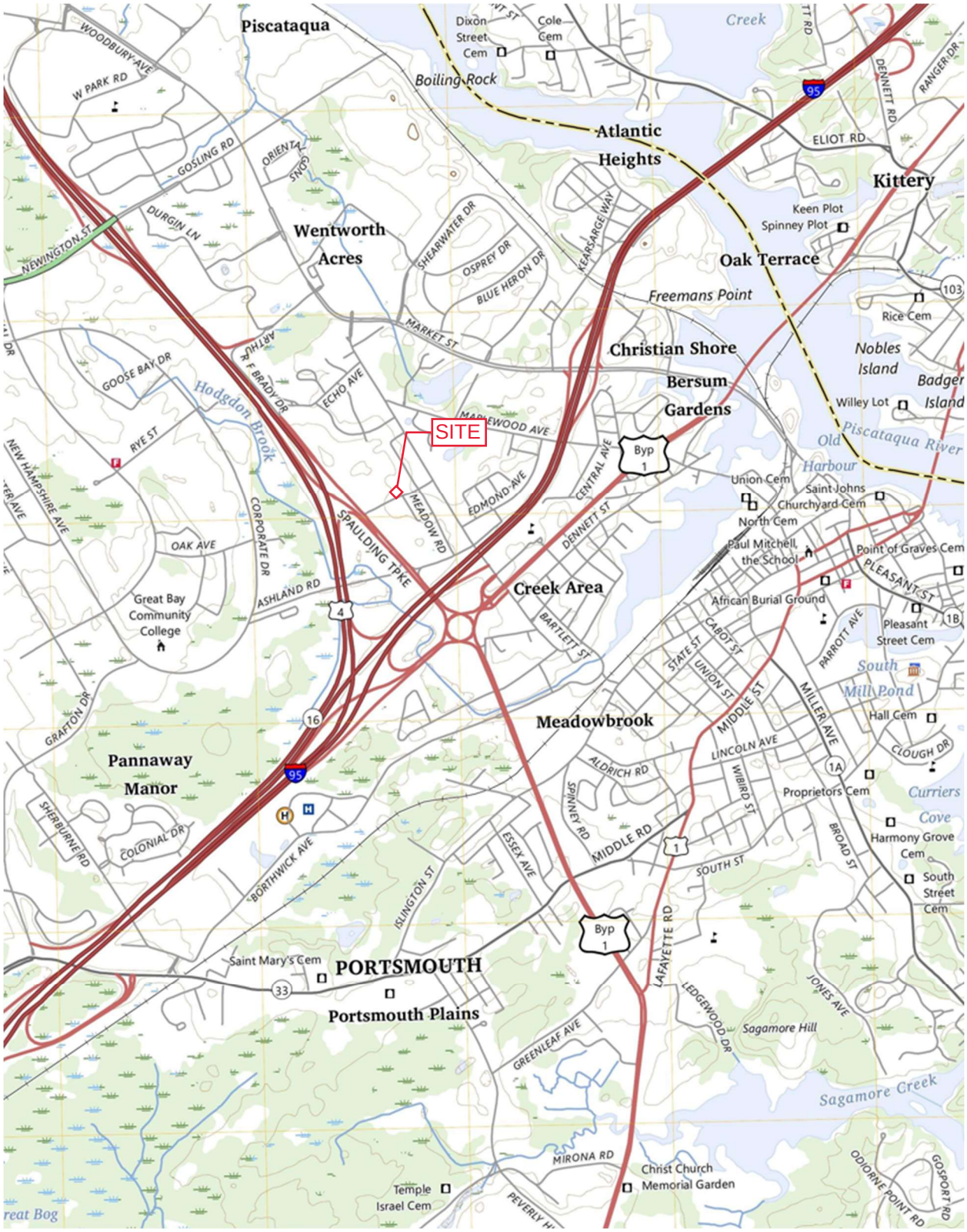
This proposed development of the property located at 86 Farm Lane in Portsmouth, New Hampshire will not have adverse effect on abutting properties and infrastructure as a result of stormwater runoff or siltation. Additionally, runoff from impervious surfaces will be treated using the infiltration pond, bioretention cell and deep sump catch basin to improve the quality of runoff leaving the site. Appropriate steps will be taken to properly mitigate erosion and sedimentation through the use of temporary and permanent Best Management Practices for sediment and erosion control.

# Section 2

# Aerial Photo and USGS Map

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Market St
Echo Ave
Hillcrest Dr
Woodlawn Cir
Woodbury Ave
Maplewood Ave
Courtyard by
Marriott Portsmouth
Edmond Ave
Central Ave
Emery St
95
86 Farm Ln
Recently viewed
Seacoast Mazda
Mazda dealer
Farm Ln
Clover Ln
SITE
Edmond Ave
BYP
1
4
Burkitt St
Thornton St
Woodbury Ave
NH Liquor &
Wine Outlet
Dennett St
Pine St
Clinton St
Boyd Rd
Bartlett St
Cottage St
Hodgdon Wy

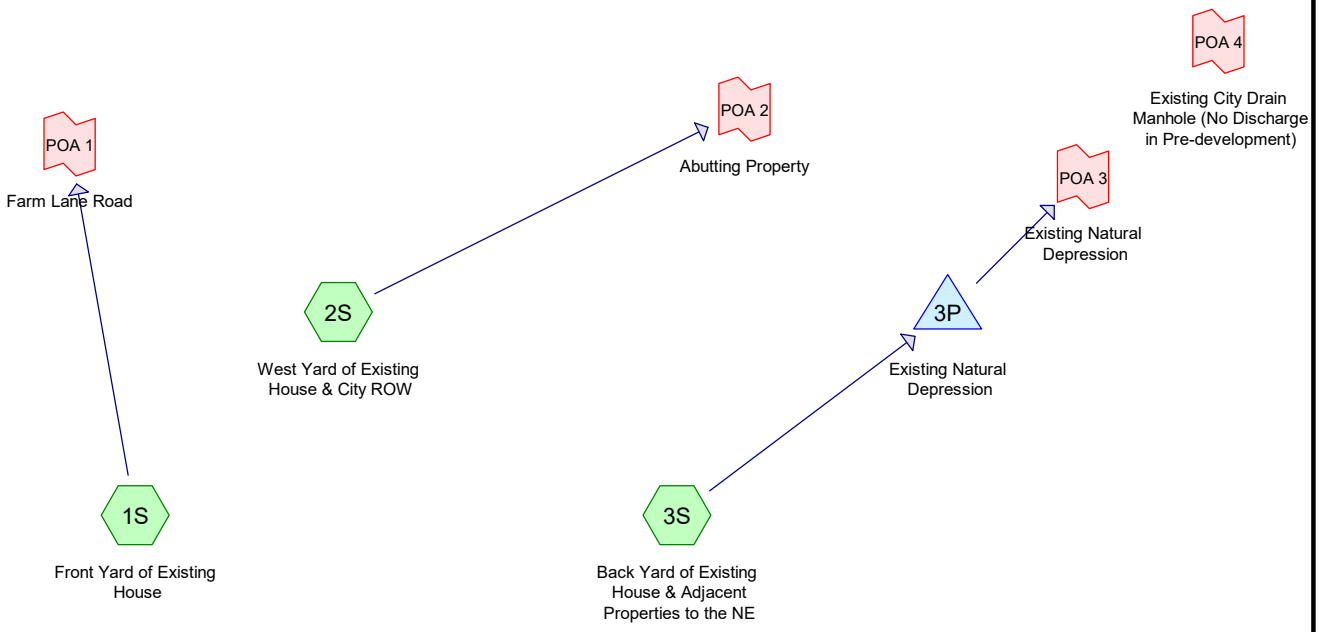

SITE
Piscataqua
Dixon Street Cem
Cole Cem
Creek
Boiling Rock
Atlantic Heights
Kittery
Keen Plot
Spinney Plot
Oak Terrace
Freemans Point
Rice Cem
Wentworth Acres
Christian Shore
Bersum Gardens
Nobles Island
Badger Island
Willey Lot
Old Piscataqua River
Harbour
Union Cem
Saint Johns Churchyard Cem
North Cem
Paul Mitchell the School
Point of Graves Cem
African Burial Ground
Pleasant Street Cem
Creek Area
Meadowbrook
South Mill Pond
Hall Cem
Proprietors Cem
Curriers Cove
Harmony Grove Cem
South Street Cem
Great Bay Community College
Pannaway Manor
PORTSMOUTH
Saint Mary's Cem
Portsmouth Plains
Sagamore Hill
Sagamore Creek
Temple Israel Cem
Christ Church Memorial Garden
Hodgdon Brook
Great Bog
Byp 1
95
16
4
33
1
1A
1B
103
WOODBURY AVE
W PARK RD
GOSLING RD
ORIENTAL SHORES
DURGIN LN
NEWINGTON ST
SHEARWATER DR
OSPREY DR
BLUE HERON DR
KEARSARGE WAY
ELIOT RD
DENNETT RD
RANGER DR
MARKET ST
ARTHUR F BRADY DR
GOOSE BAY DR
RYE ST
ECHO AVE
MAPLEWOOD AVE
EDMOND AVE
MEADOW RD
CENTRAL AVE
DENNETT ST
BARTLETT ST
SPAULDING TPKE
CORPORATE DR
OAK AVE
ASHLAND RD
NEW HAMPSHIRE AVE
GRAFTON DR
COLONIAL DR
SHERBURNE RD
BORTHWICK AVE
ISLINGTON ST
ESSEX AVE
ALDRICH RD
SPINNEY RD
MIDDLE RD
SOUTH ST
WIBIRD ST
BROAD ST
STATE ST
UNION ST
CABOT ST
MIDDLE ST
LINCOLN AVE
MILLER AVE
PARROTT AVE
PLEASANT ST
CLOUGH DR
LAFAYETTE RD
LEDGEWOOD DR
JONES AVE
GREENLEAF AVE
MIRONA RD
PEVERLY HILL RD
ODIORNE POINT RD
GOSPORT RD

# Section 3

# Drainage Calculations

Pre-Development:
2-Year, 24-Hour Summary
10-Year, 24-Hour Complete
25-Year, 24-Hour Summary

ALTUS
ENGINEERING




Subcat Reach Pond Link

**Routing Diagram for 5719-PRE**
Prepared by Altus Engineering, Printed 2/10/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment 1S: Front Yard of Existing** Runoff Area=18,227 sf 43.70% Impervious Runoff Depth=0.50"
Flow Length=296' Tc=6.0 min CN=64 Runoff=0.17 cfs 0.017 af

**Subcatchment 2S: West Yard of Existing** Runoff Area=10,114 sf 11.00% Impervious Runoff Depth=0.01"
Flow Length=215' Tc=6.0 min CN=42 Runoff=0.00 cfs 0.000 af

**Subcatchment 3S: Back Yard of Existing** Runoff Area=69,276 sf 11.36% Impervious Runoff Depth=0.01"
Flow Length=407' Tc=6.0 min CN=43 Runoff=0.00 cfs 0.002 af

**Pond 3P: Existing Natural Depression** Peak Elev=38.04' Storage=19 cf Inflow=0.00 cfs 0.002 af
Outflow=0.00 cfs 0.002 af

**Link POA 1: Farm Lane Road** Inflow=0.17 cfs 0.017 af
Primary=0.17 cfs 0.017 af

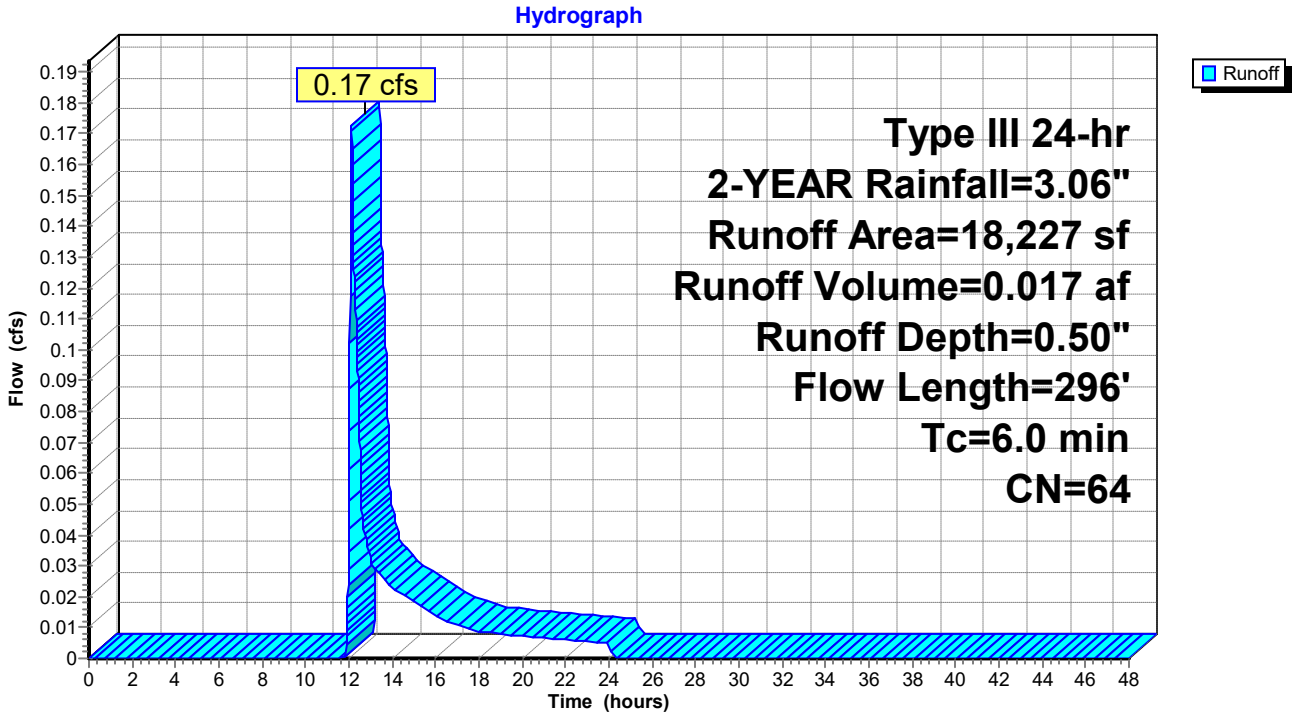
**Link POA 2: Abutting Property** Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

**Link POA 3: Existing Natural Depression** Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

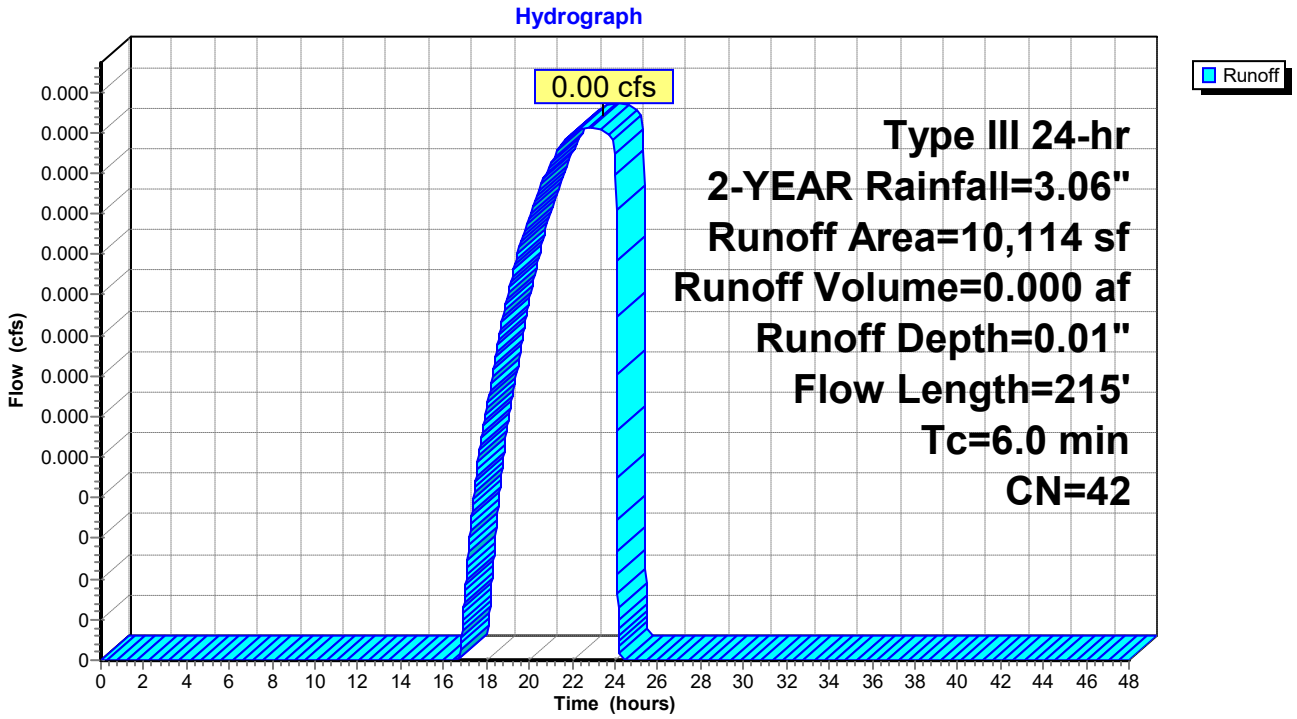
**Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)**
Primary=0.00 cfs 0.000 af

**Total Runoff Area = 2.241 ac Runoff Volume = 0.019 af Average Runoff Depth = 0.10"**
**82.64% Pervious = 1.852 ac 17.36% Impervious = 0.389 ac**

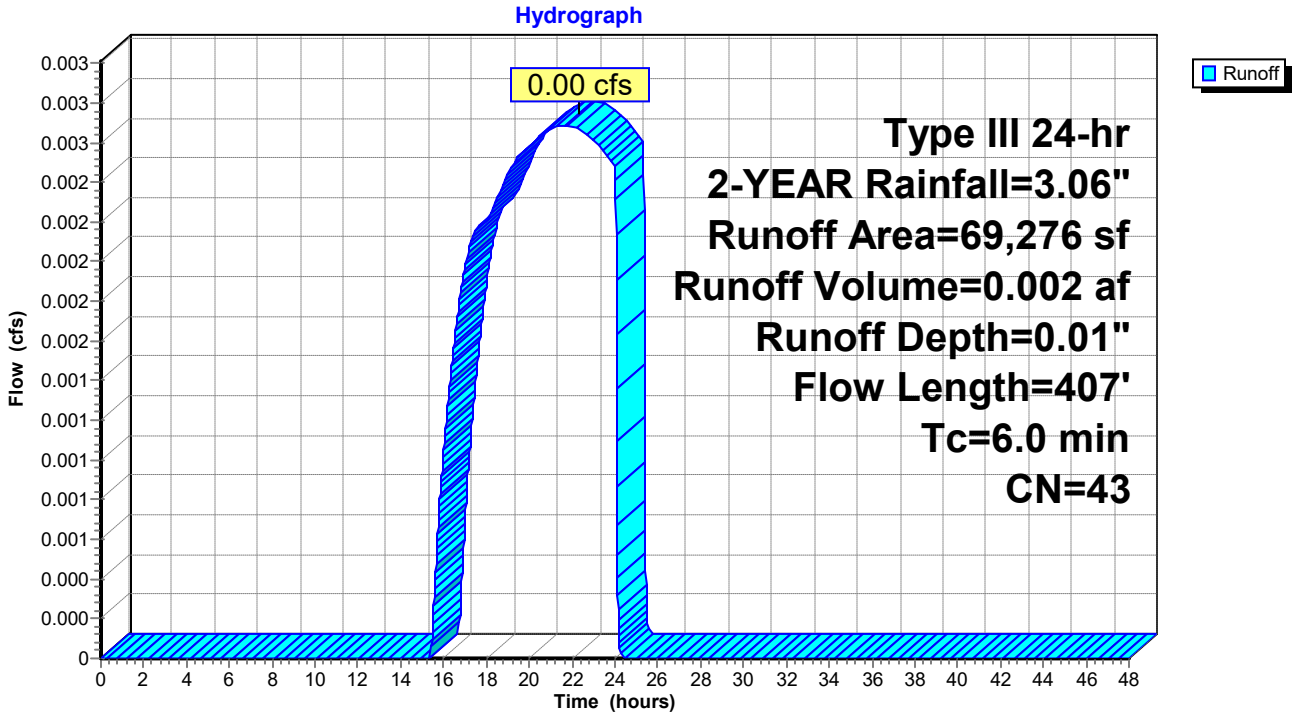
## Subcatchment 1S: Front Yard of Existing House



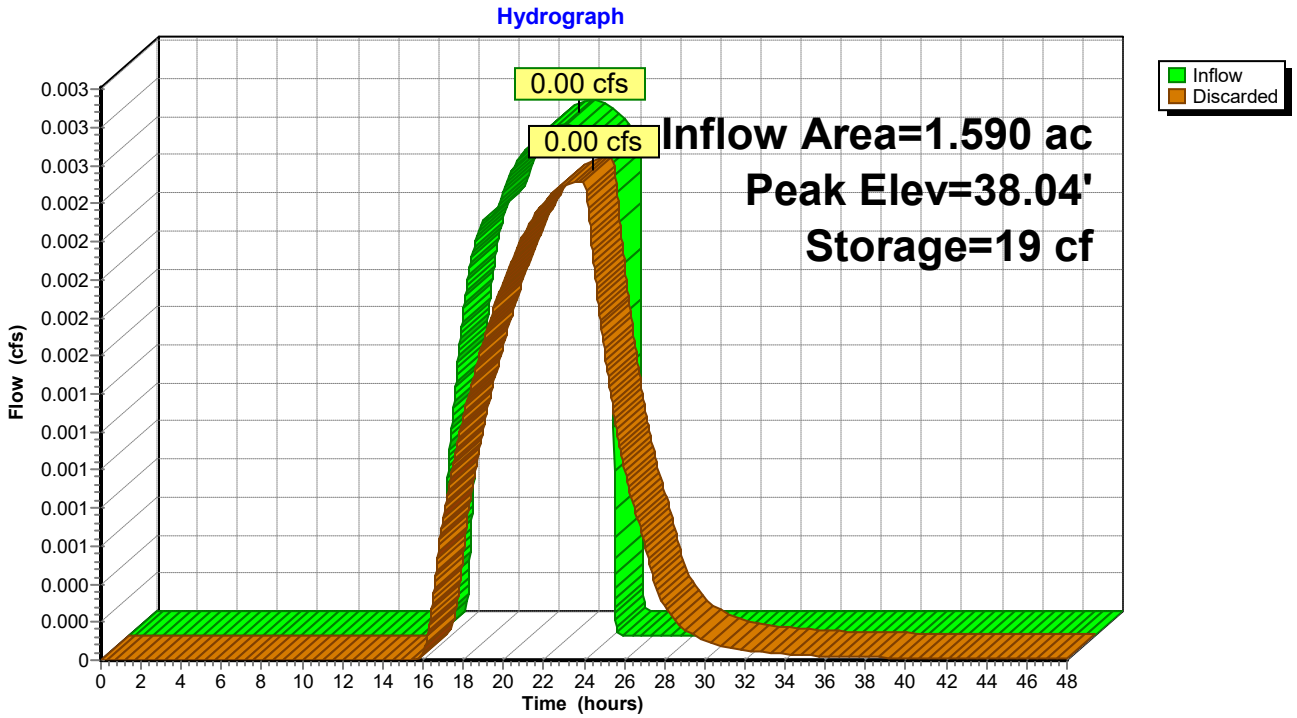

## Subcatchment 2S: West Yard of Existing House & City ROW



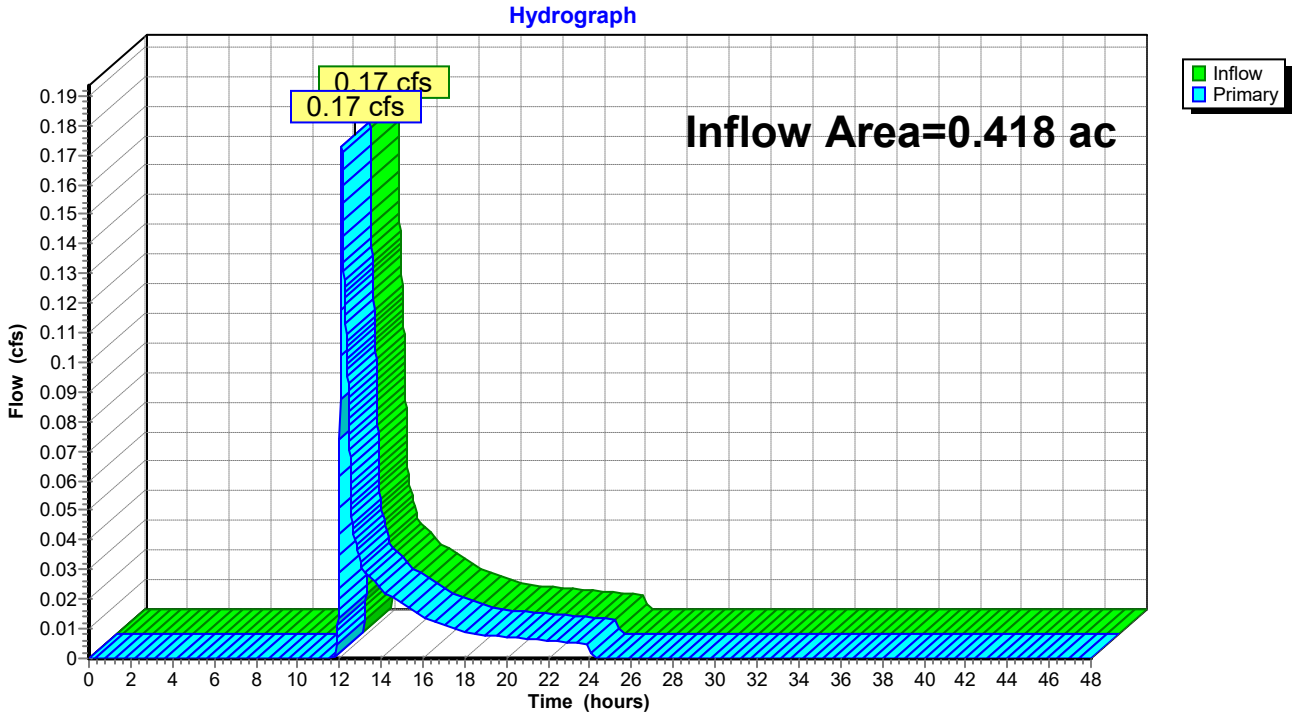
## Subcatchment 3S: Back Yard of Existing House & Adjacent Properties to the NE



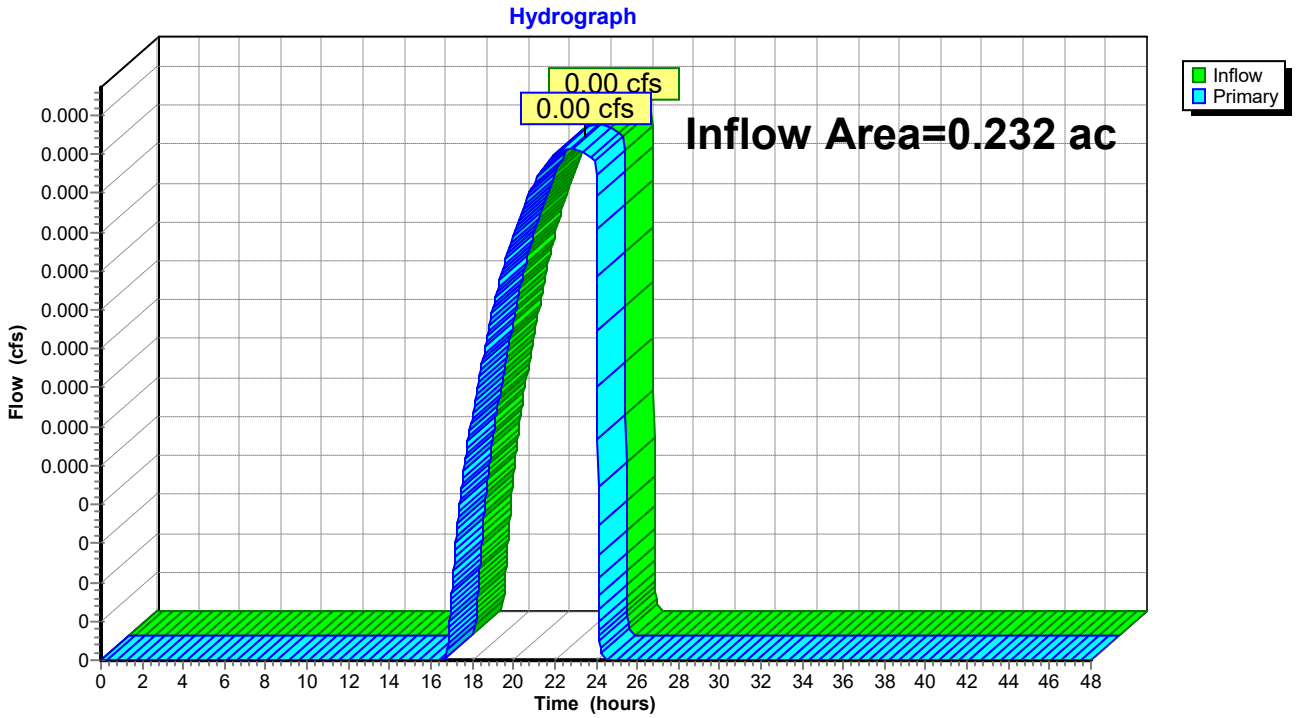

## Pond 3P: Existing Natural Depression



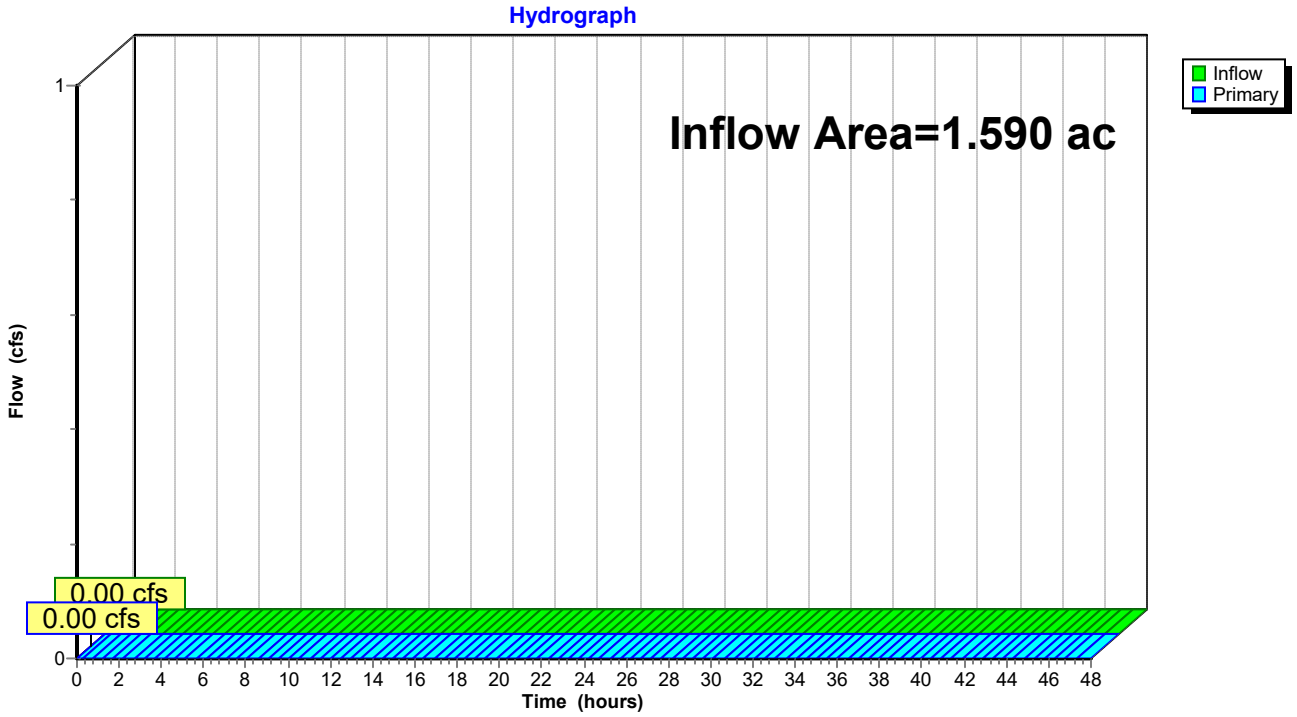
## Link POA 1: Farm Lane Road



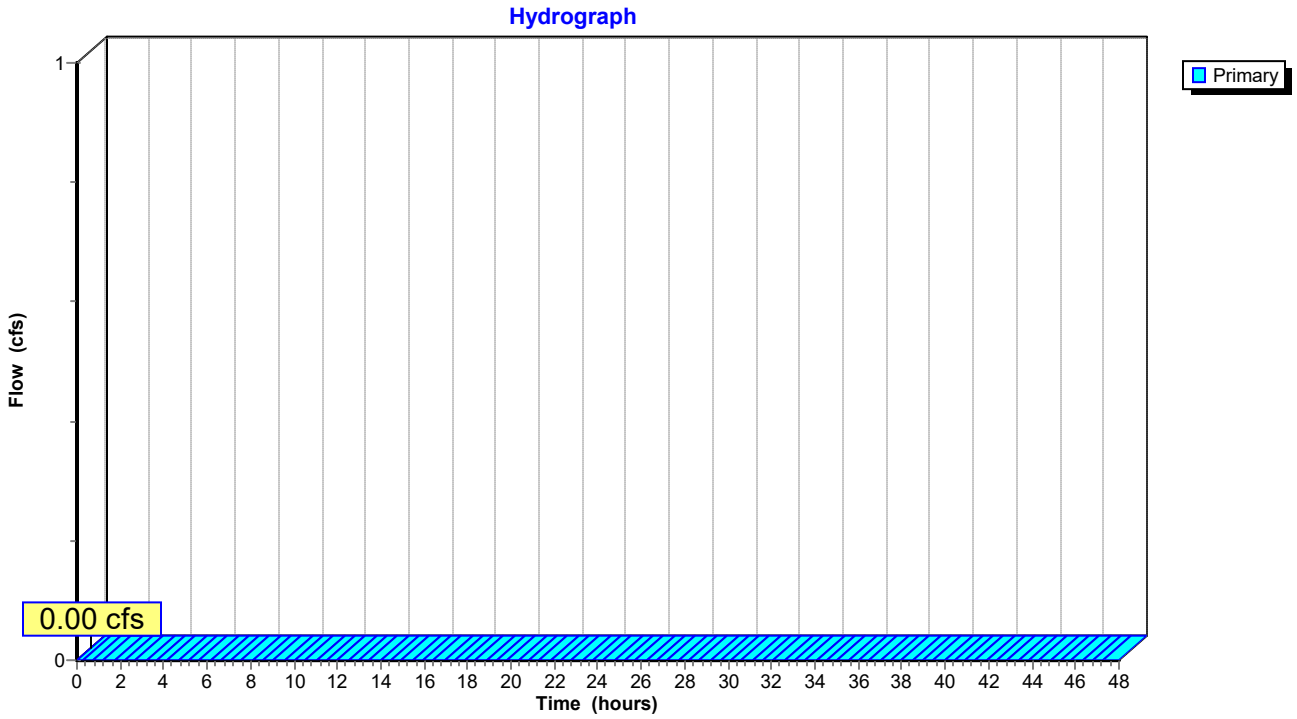

## Link POA 2: Abutting Property

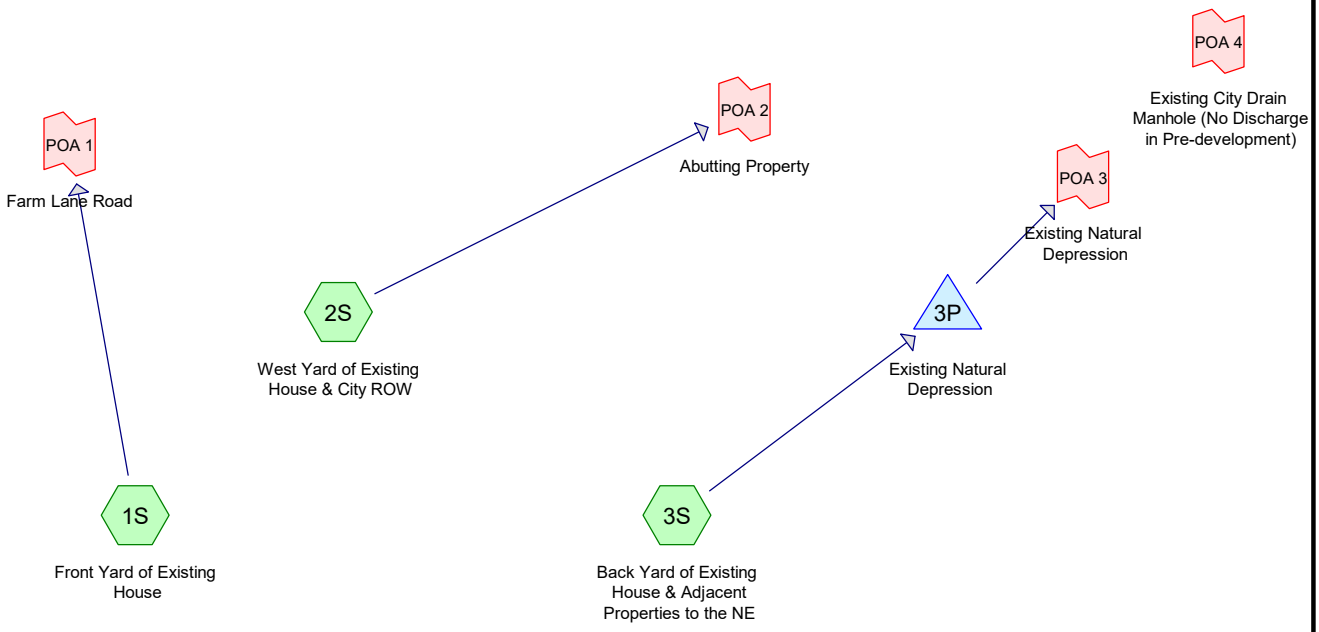


## Link POA 3: Existing Natural Depression




## Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)






Subcat Reach Pond Link

**Routing Diagram for 5719-PRE**
Prepared by Altus Engineering, Printed 2/10/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 1.201 | 39 | >75% Grass cover, Good, HSG A (1S, 2S, 3S) |
| 0.253 | 98 | Paved parking, HSG A (1S, 2S, 3S) |
| 0.136 | 98 | Roofs, HSG A (1S, 2S, 3S) |
| 0.651 | 30 | Woods, Good, HSG A (1S, 2S, 3S) |
| **2.241** | **47** | **TOTAL AREA** |

## Soil Listing (all nodes)

| Area (acres) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 2.241 | HSG A | 1S, 2S, 3S |
| 0.000 | HSG B | |
| 0.000 | HSG C | |
| 0.000 | HSG D | |
| 0.000 | Other | |
| **2.241** | | **TOTAL AREA** |

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment 1S: Front Yard of Existing** Runoff Area=18,227 sf 43.70% Impervious Runoff Depth=1.98"
Flow Length=296' Tc=6.0 min CN=64 Runoff=0.93 cfs 0.069 af

**Subcatchment 2S: West Yard of Existing** Runoff Area=10,114 sf 11.00% Impervious Runoff Depth=0.48"
Flow Length=215' Tc=6.0 min CN=42 Runoff=0.05 cfs 0.009 af

**Subcatchment 3S: Back Yard of Existing** Runoff Area=69,276 sf 11.36% Impervious Runoff Depth=0.53"
Flow Length=407' Tc=6.0 min CN=43 Runoff=0.40 cfs 0.071 af

**Pond 3P: Existing Natural Depression** Peak Elev=39.00' Storage=913 cf Inflow=0.40 cfs 0.071 af
Outflow=0.09 cfs 0.071 af

**Link POA 1: Farm Lane Road** Inflow=0.93 cfs 0.069 af
Primary=0.93 cfs 0.069 af

**Link POA 2: Abutting Property** Inflow=0.05 cfs 0.009 af
Primary=0.05 cfs 0.009 af

**Link POA 3: Existing Natural Depression** Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

**Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)**
Primary=0.00 cfs 0.000 af

**Total Runoff Area = 2.241 ac Runoff Volume = 0.149 af Average Runoff Depth = 0.80"**
**82.64% Pervious = 1.852 ac 17.36% Impervious = 0.389 ac**

## Summary for Subcatchment 1S: Front Yard of Existing House

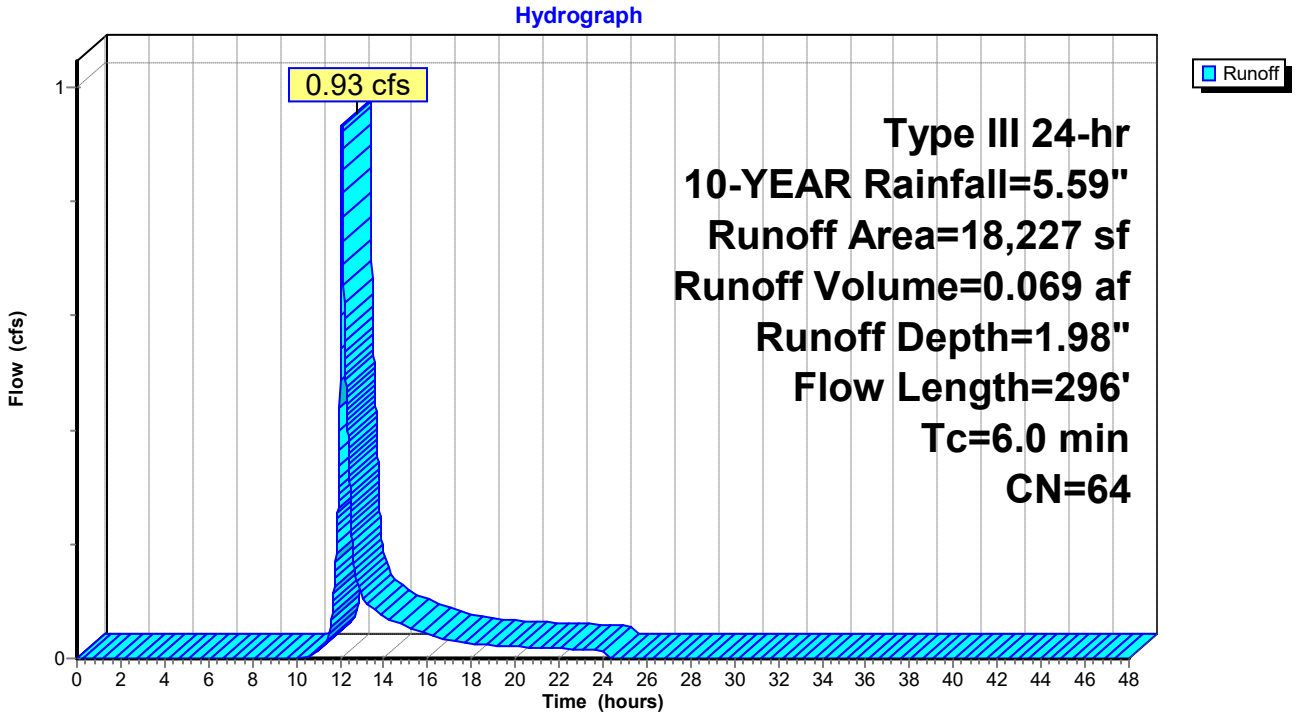
Runoff = 0.93 cfs @ 12.09 hrs, Volume= 0.069 af, Depth= 1.98"
Routed to Link POA 1 : Farm Lane Road

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

| Area (sf) | CN | Description |
|---|---|---|
| 1,635 | 98 | Roofs, HSG A |
| 6,330 | 98 | Paved parking, HSG A |
| 8,838 | 39 | >75% Grass cover, Good, HSG A |
| 1,424 | 30 | Woods, Good, HSG A |
| 18,227 | 64 | Weighted Average |
| 10,262 | | 56.30% Pervious Area |
| 7,965 | | 43.70% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.1 | 13 | 0.5000 | 3.24 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06" |
| 0.4 | 62 | 0.1130 | 2.35 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.2 | 15 | 0.1000 | 1.58 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 0.3 | 30 | 0.0580 | 1.69 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.5 | 110 | 0.0340 | 3.74 | | **Shallow Concentrated Flow,** Paved Kv= 20.3 fps |
| 0.4 | 25 | 0.0200 | 0.99 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.1 | 12 | 0.0210 | 2.33 | | **Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps |
| 0.2 | 21 | 0.0600 | 1.71 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.1 | 8 | 0.0130 | 2.31 | | **Shallow Concentrated Flow,** Paved Kv= 20.3 fps |
| 2.3 | 296 | Total, Increased to minimum Tc = 6.0 min | | | |

## Subcatchment 1S: Front Yard of Existing House



## Summary for Subcatchment 2S: West Yard of Existing House & City ROW

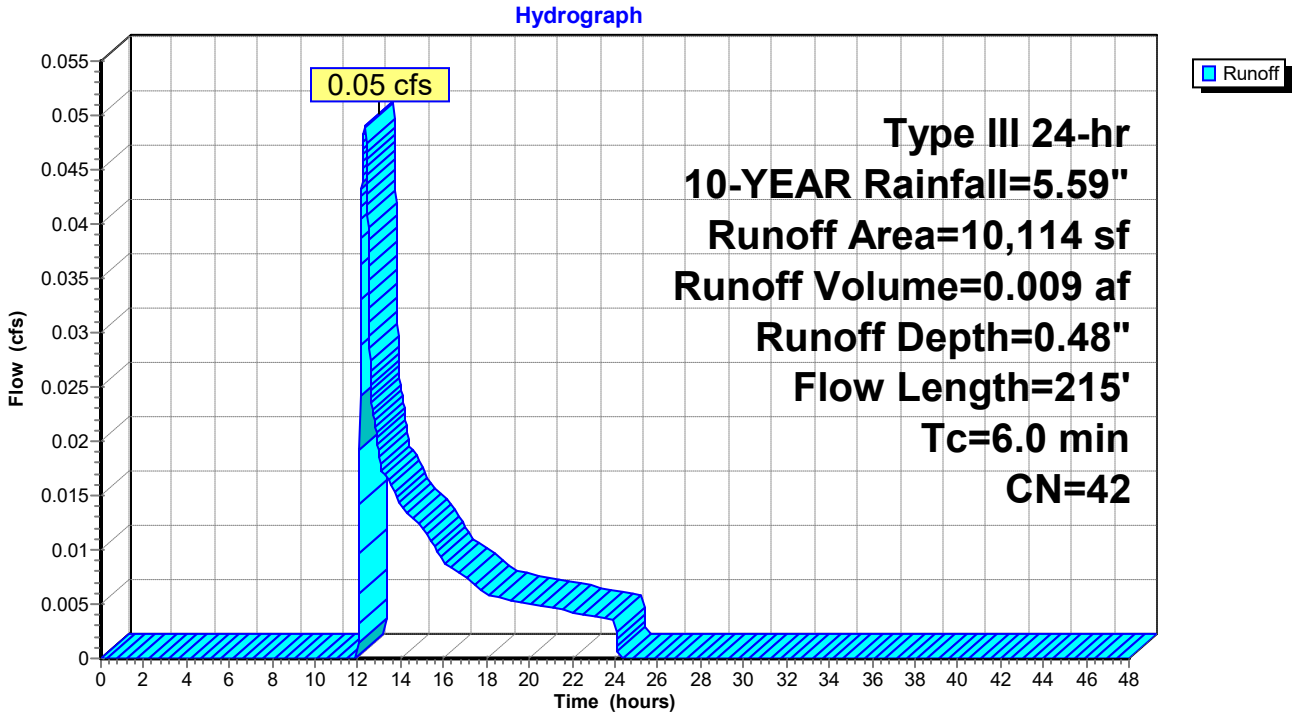
Runoff = 0.05 cfs @ 12.31 hrs, Volume= 0.009 af, Depth= 0.48"
Routed to Link POA 2 : Abutting Property

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

| Area (sf) | CN | Description |
|---|---|---|
| 184 | 98 | Roofs, HSG A |
| 929 | 98 | Paved parking, HSG A |
| 5,516 | 39 | >75% Grass cover, Good, HSG A |
| 3,485 | 30 | Woods, Good, HSG A |
| 10,114 | 42 | Weighted Average |
| 9,001 | | 89.00% Pervious Area |
| 1,113 | | 11.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.1 | 13 | 0.5000 | 3.24 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06" |
| 0.5 | 56 | 0.0850 | 2.04 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.1 | 12 | 0.0420 | 3.30 | | **Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps |
| 0.1 | 12 | 0.0420 | 1.43 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.1 | 11 | 0.0680 | 1.30 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 0.8 | 100 | 0.0880 | 2.08 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.1 | 11 | 0.1590 | 1.99 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 1.8 | 215 | Total, Increased to minimum Tc = 6.0 min | | | |

## Subcatchment 2S: West Yard of Existing House & City ROW



## Summary for Subcatchment 3S: Back Yard of Existing House & Adjacent Properties to the NE

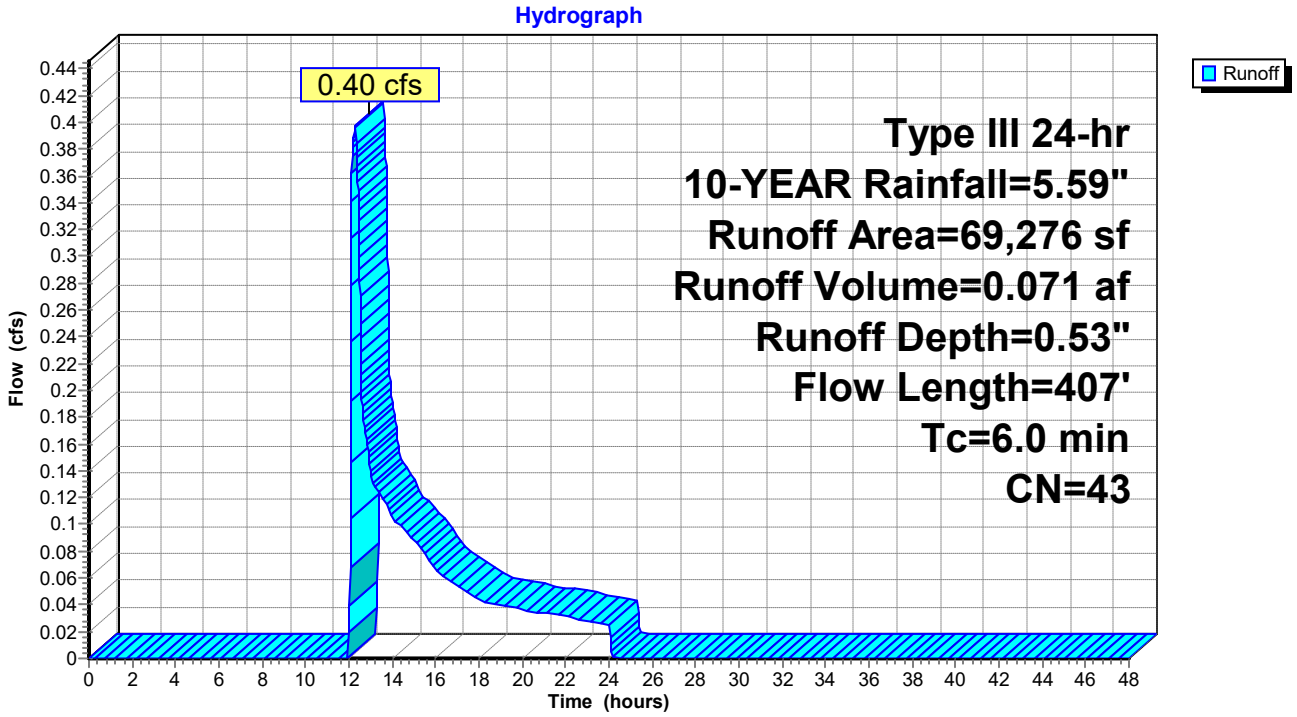
Runoff = 0.40 cfs @ 12.29 hrs, Volume= 0.071 af, Depth= 0.53"
Routed to Pond 3P : Existing Natural Depression

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

| Area (sf) | CN | Description |
|---|---|---|
| 4,095 | 98 | Roofs, HSG A |
| 3,772 | 98 | Paved parking, HSG A |
| 37,970 | 39 | >75% Grass cover, Good, HSG A |
| 23,439 | 30 | Woods, Good, HSG A |
| 69,276 | 43 | Weighted Average |
| 61,409 | | 88.64% Pervious Area |
| 7,867 | | 11.36% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.1 | 10 | 0.5000 | 3.08 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06" |
| 0.5 | 63 | 0.0990 | 2.20 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.5 | 42 | 0.0650 | 1.27 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 0.4 | 50 | 0.0800 | 1.98 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.8 | 48 | 0.0420 | 1.02 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 0.2 | 30 | 0.1170 | 2.39 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 1.0 | 108 | 0.0670 | 1.81 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.9 | 56 | 0.0450 | 1.06 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 4.4 | 407 | Total, Increased to minimum Tc = 6.0 min | | | |

## Subcatchment 3S: Back Yard of Existing House & Adjacent Properties to the NE



## Summary for Pond 3P: Existing Natural Depression

Inflow Area = 1.590 ac, 11.36% Impervious, Inflow Depth = 0.53" for 10-YEAR event
Inflow = 0.40 cfs @ 12.29 hrs, Volume= 0.071 af
Outflow = 0.09 cfs @ 15.09 hrs, Volume= 0.071 af, Atten= 78%, Lag= 168.2 min
Discarded = 0.09 cfs @ 15.09 hrs, Volume= 0.071 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 39.00' @ 15.09 hrs Surf.Area= 1,452 sf Storage= 913 cf

Plug-Flow detention time= 163.4 min calculated for 0.071 af (100% of inflow)
Center-of-Mass det. time= 163.3 min ( 1,104.0 - 940.8 )

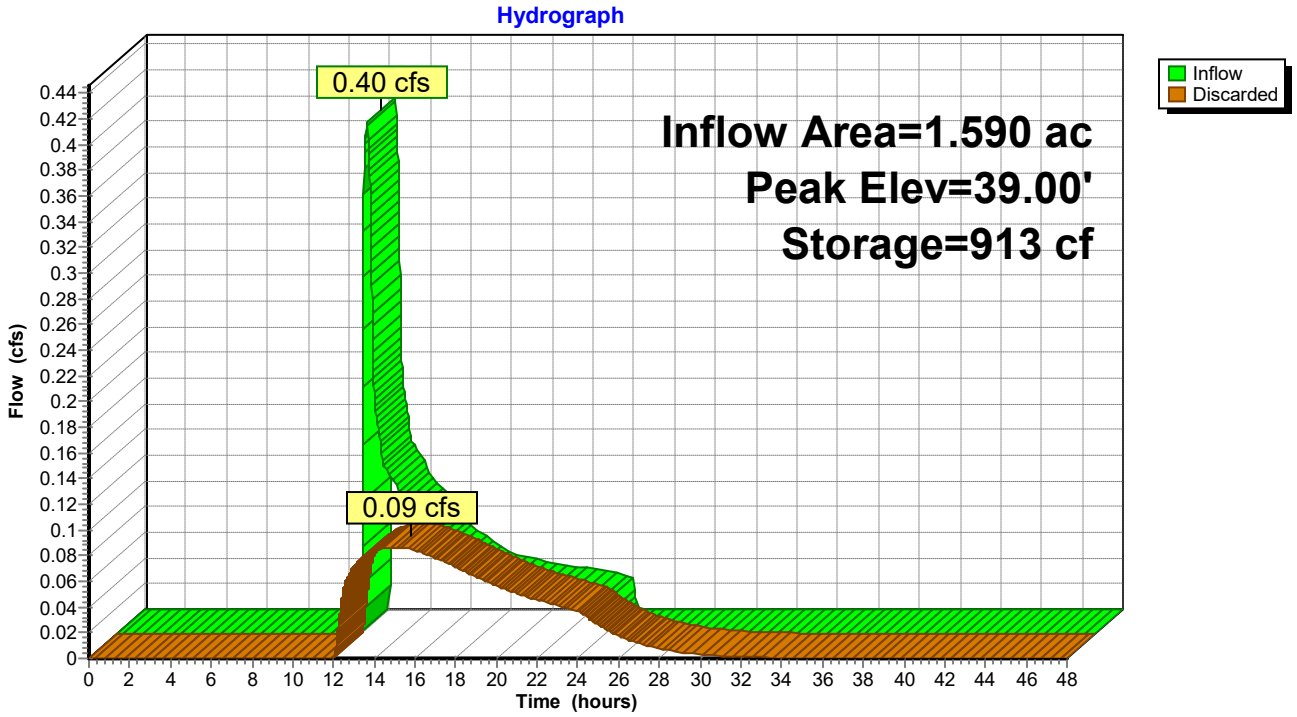
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 38.00' | 3,129 cf | **Existing Natural Depression (Conic)** Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) | Wet.Area (sq-ft) |
|---|---|---|---|---|
| 38.00 | 461 | 0 | 0 | 461 |
| 39.00 | 1,447 | 908 | 908 | 1,453 |
| 40.00 | 3,097 | 2,220 | 3,129 | 3,111 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Discarded | 38.00' | **3.750 in/hr Exfiltration over Wetted area above 38.00'** Excluded Wetted area = 461 sf Phase-In= 0.01' |

**Discarded OutFlow** Max=0.09 cfs @ 15.09 hrs HW=39.00' (Free Discharge)
**1=Exfiltration** (Exfiltration Controls 0.09 cfs)

## Pond 3P: Existing Natural Depression

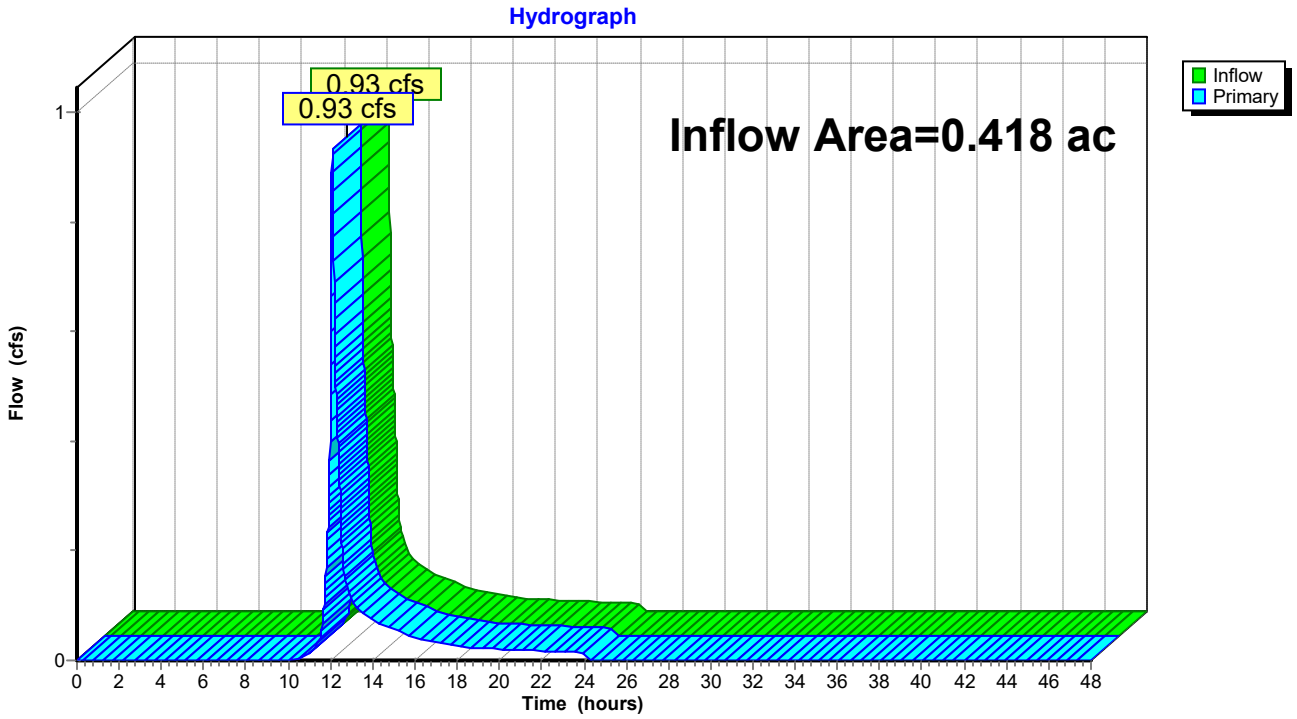


## Summary for Link POA 1: Farm Lane Road

Inflow Area = 0.418 ac, 43.70% Impervious, Inflow Depth = 1.98" for 10-YEAR event
Inflow = 0.93 cfs @ 12.09 hrs, Volume= 0.069 af
Primary = 0.93 cfs @ 12.09 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

## Link POA 1: Farm Lane Road

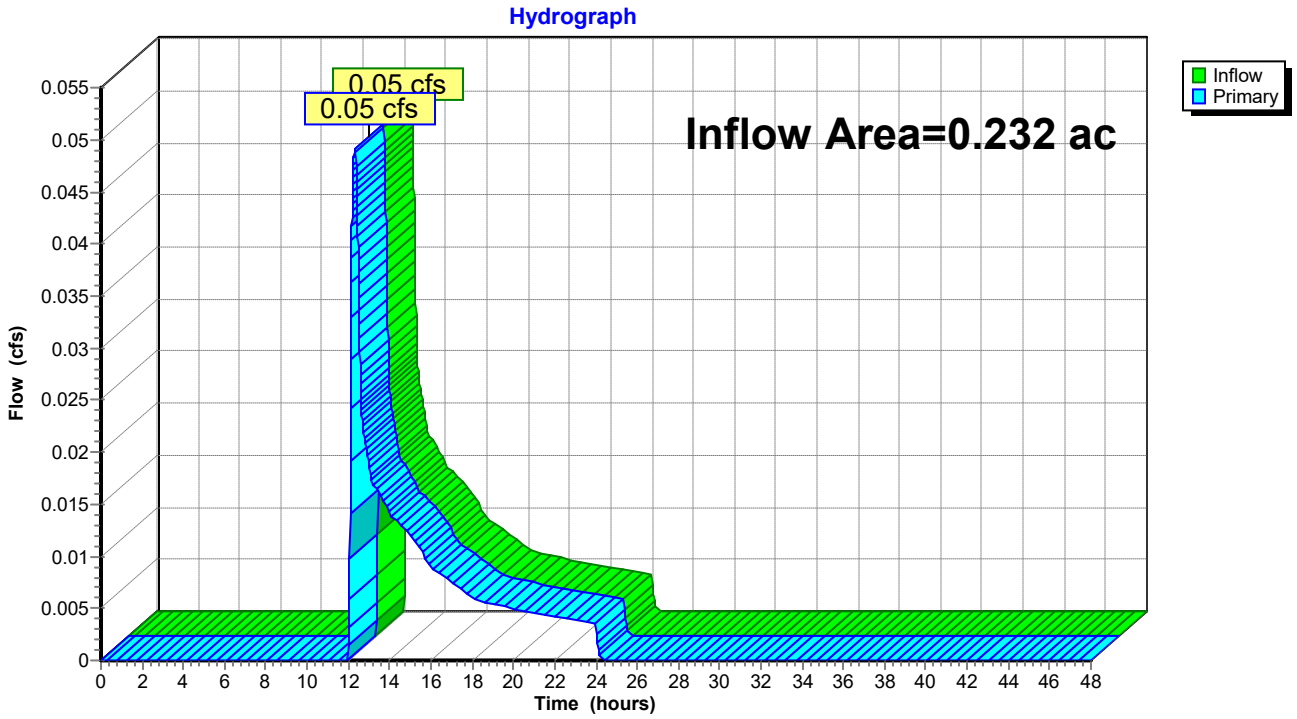


## Summary for Link POA 2: Abutting Property

Inflow Area = 0.232 ac, 11.00% Impervious, Inflow Depth = 0.48" for 10-YEAR event
Inflow = 0.05 cfs @ 12.31 hrs, Volume= 0.009 af
Primary = 0.05 cfs @ 12.31 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

## Link POA 2: Abutting Property

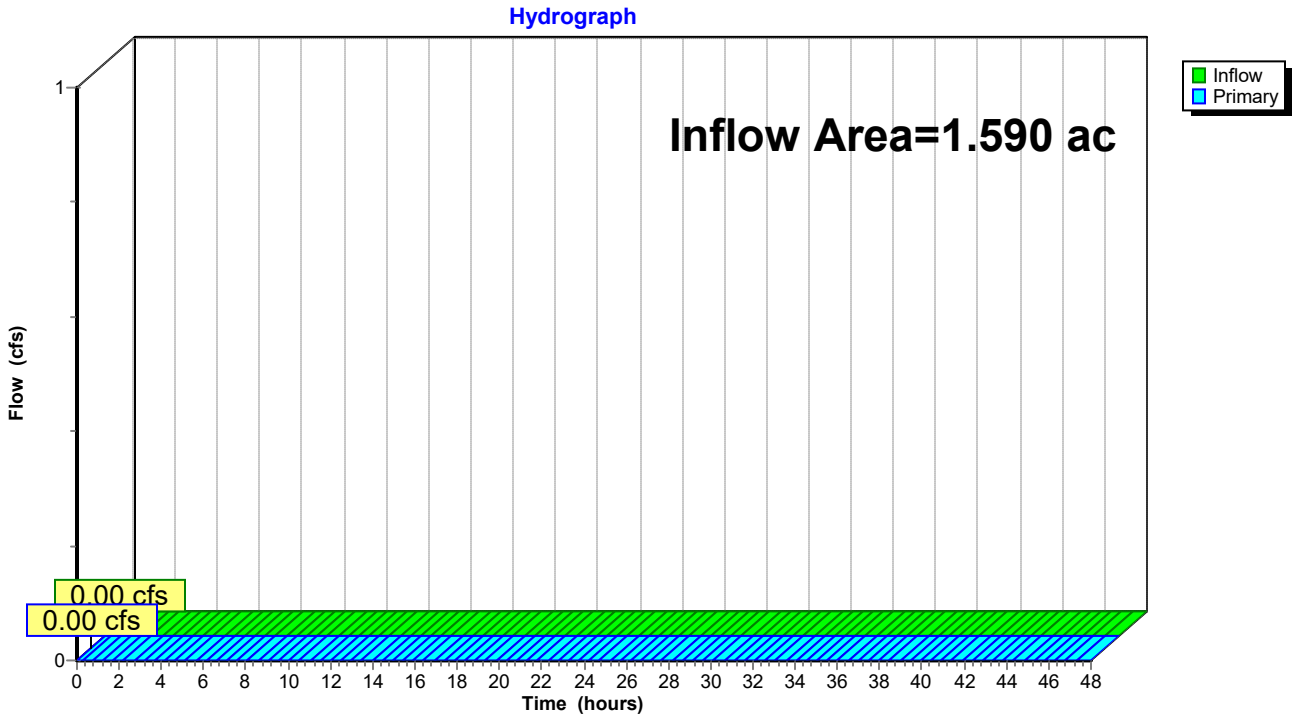


## Summary for Link POA 3: Existing Natural Depression

Inflow Area = 1.590 ac, 11.36% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

## Link POA 3: Existing Natural Depression

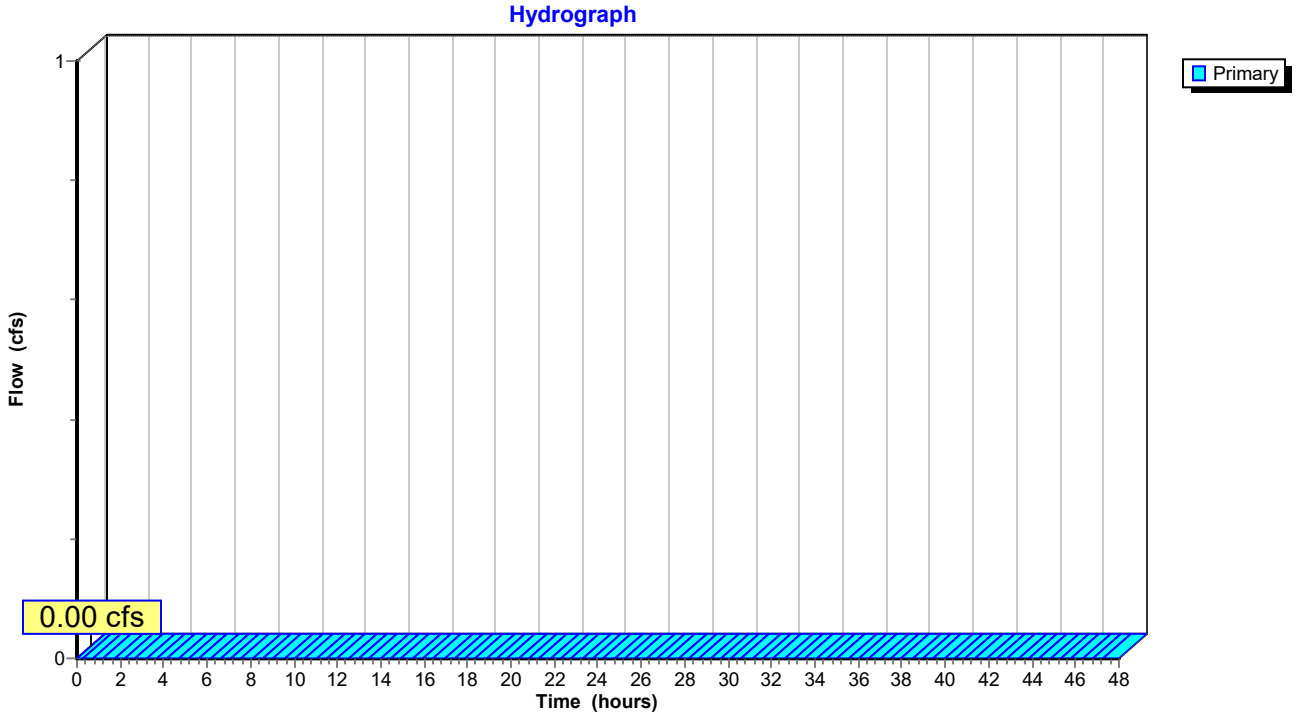


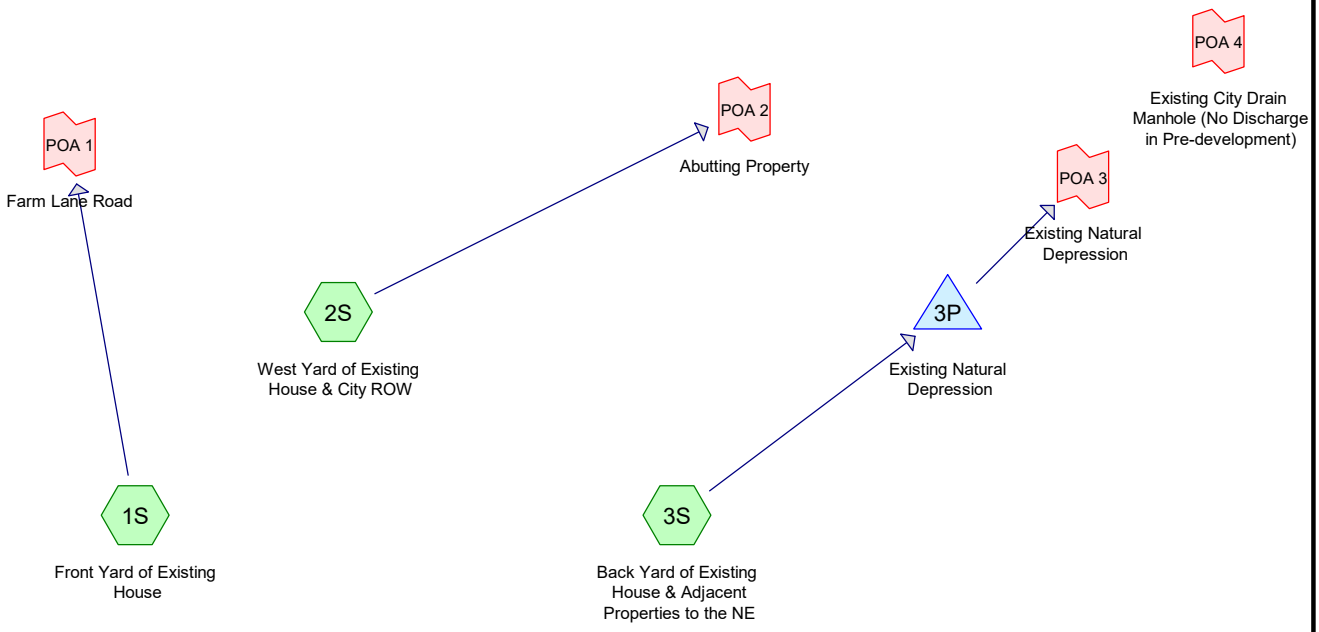
## Summary for Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

### Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)






Subcat Reach Pond Link

**Routing Diagram for 5719-PRE**
Prepared by Altus Engineering, Printed 2/10/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment 1S: Front Yard of Existing** Runoff Area=18,227 sf 43.70% Impervious Runoff Depth=3.06"
Flow Length=296' Tc=6.0 min CN=64 Runoff=1.49 cfs 0.107 af

**Subcatchment 2S: West Yard of Existing** Runoff Area=10,114 sf 11.00% Impervious Runoff Depth=1.03"
Flow Length=215' Tc=6.0 min CN=42 Runoff=0.18 cfs 0.020 af

**Subcatchment 3S: Back Yard of Existing** Runoff Area=69,276 sf 11.36% Impervious Runoff Depth=1.11"
Flow Length=407' Tc=6.0 min CN=43 Runoff=1.43 cfs 0.147 af

**Pond 3P: Existing Natural Depression** Peak Elev=39.69' Storage=2,257 cf Inflow=1.43 cfs 0.147 af
Outflow=0.18 cfs 0.147 af

**Link POA 1: Farm Lane Road** Inflow=1.49 cfs 0.107 af
Primary=1.49 cfs 0.107 af

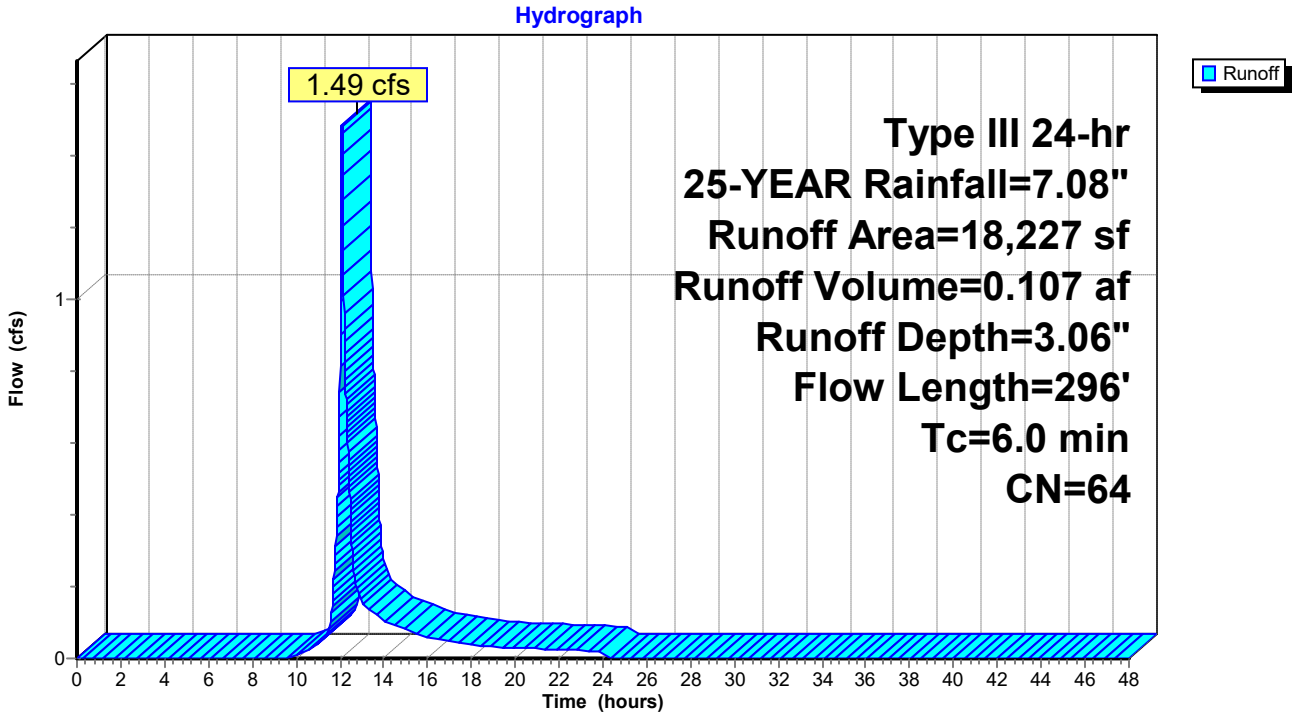
**Link POA 2: Abutting Property** Inflow=0.18 cfs 0.020 af
Primary=0.18 cfs 0.020 af

**Link POA 3: Existing Natural Depression** Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

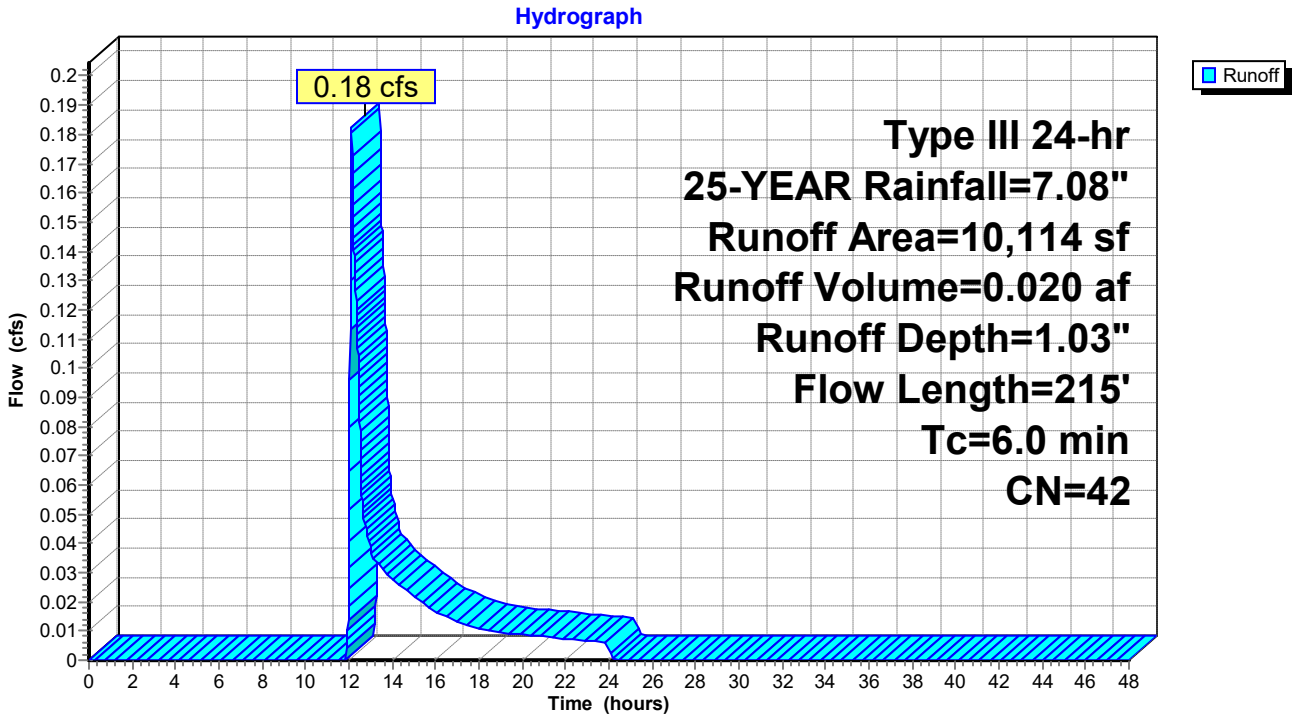
**Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)**
Primary=0.00 cfs 0.000 af

**Total Runoff Area = 2.241 ac Runoff Volume = 0.274 af Average Runoff Depth = 1.47"**
**82.64% Pervious = 1.852 ac 17.36% Impervious = 0.389 ac**

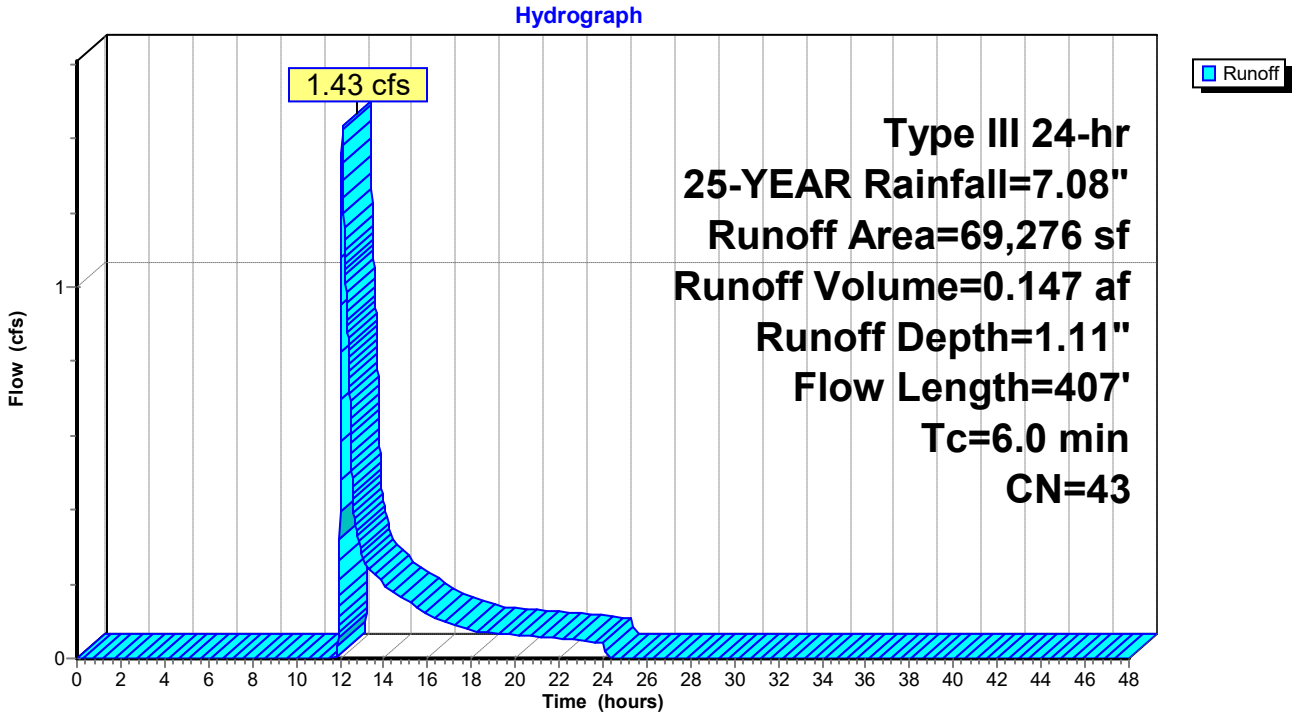
## Subcatchment 1S: Front Yard of Existing House



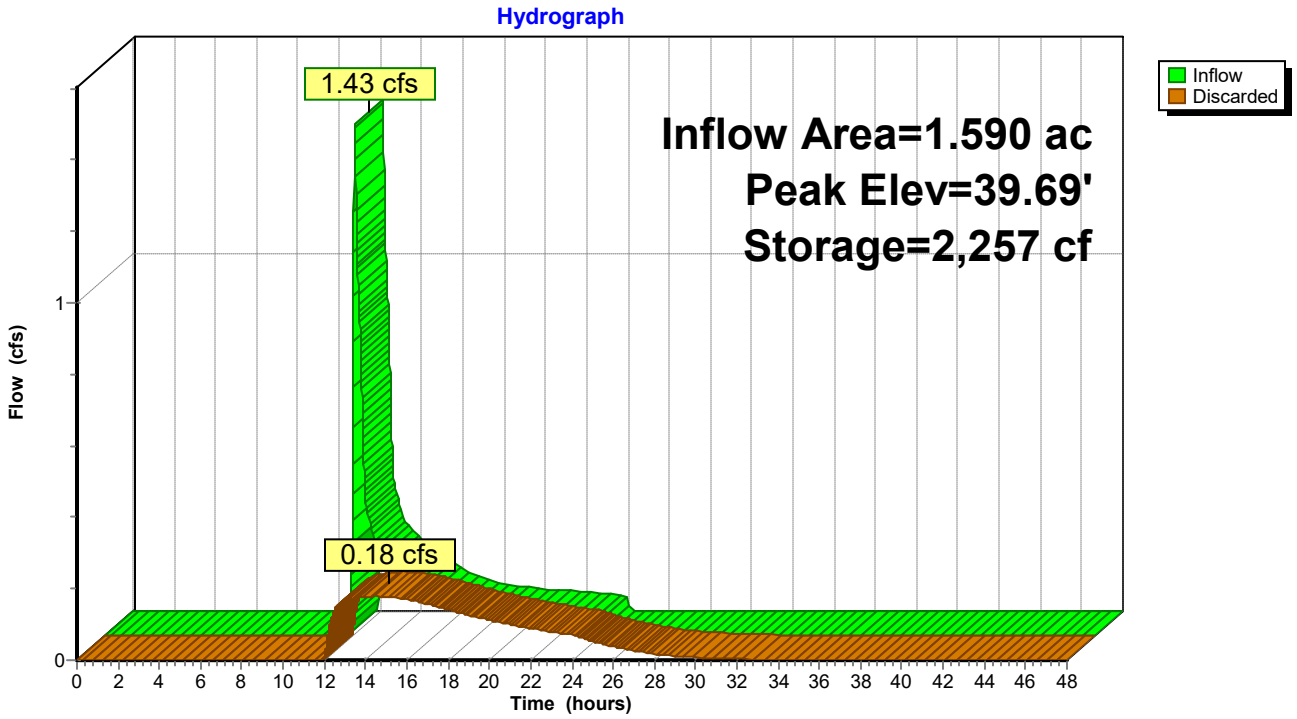

## Subcatchment 2S: West Yard of Existing House & City ROW



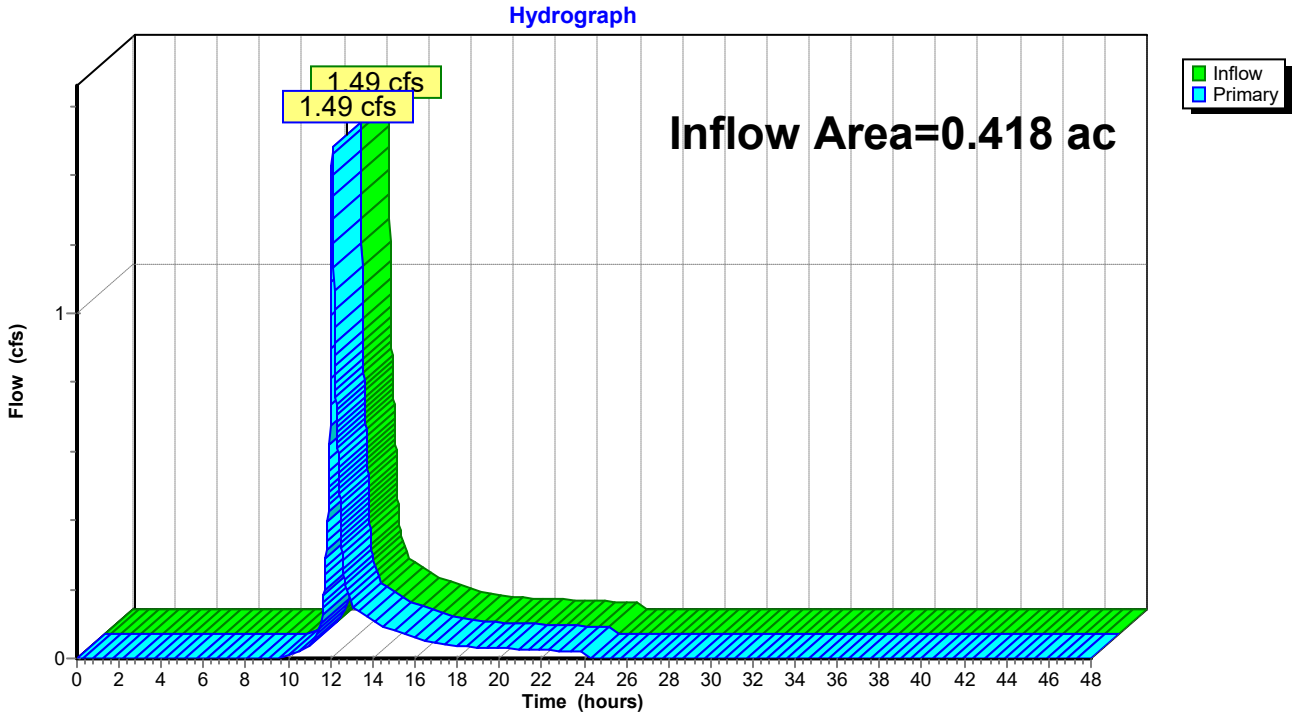
## Subcatchment 3S: Back Yard of Existing House & Adjacent Properties to the NE



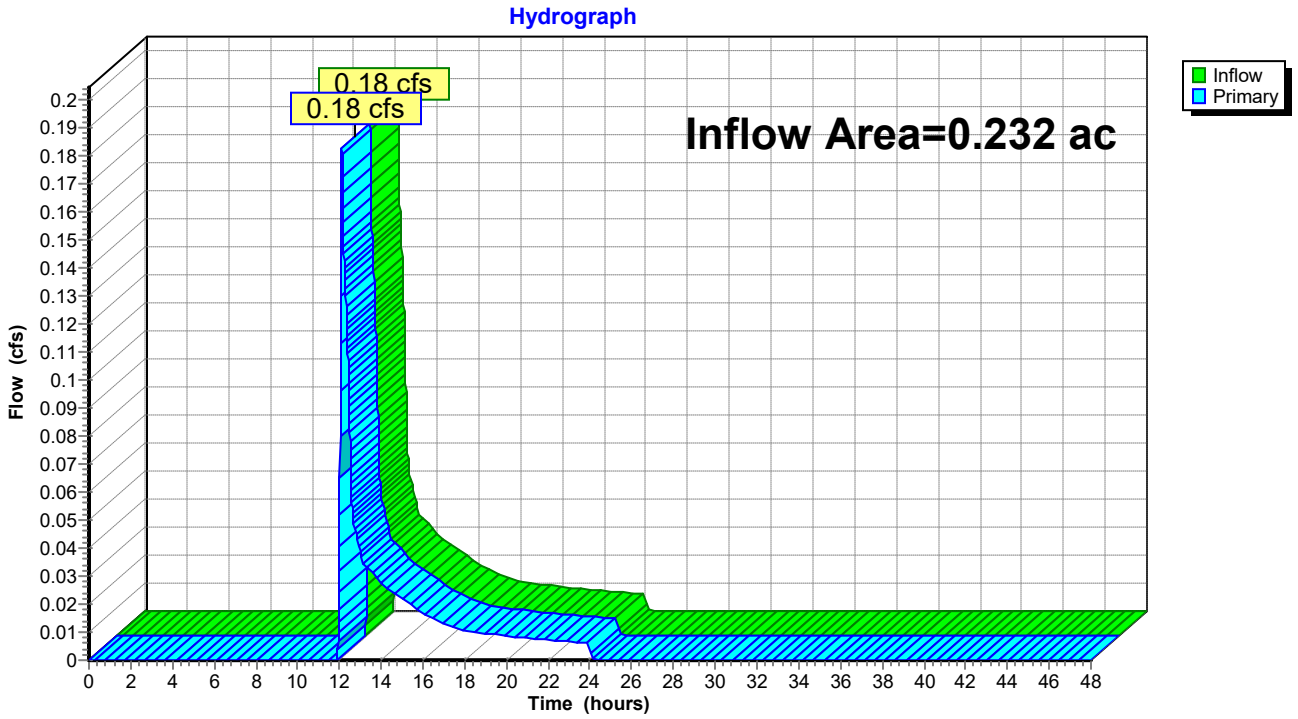

## Pond 3P: Existing Natural Depression



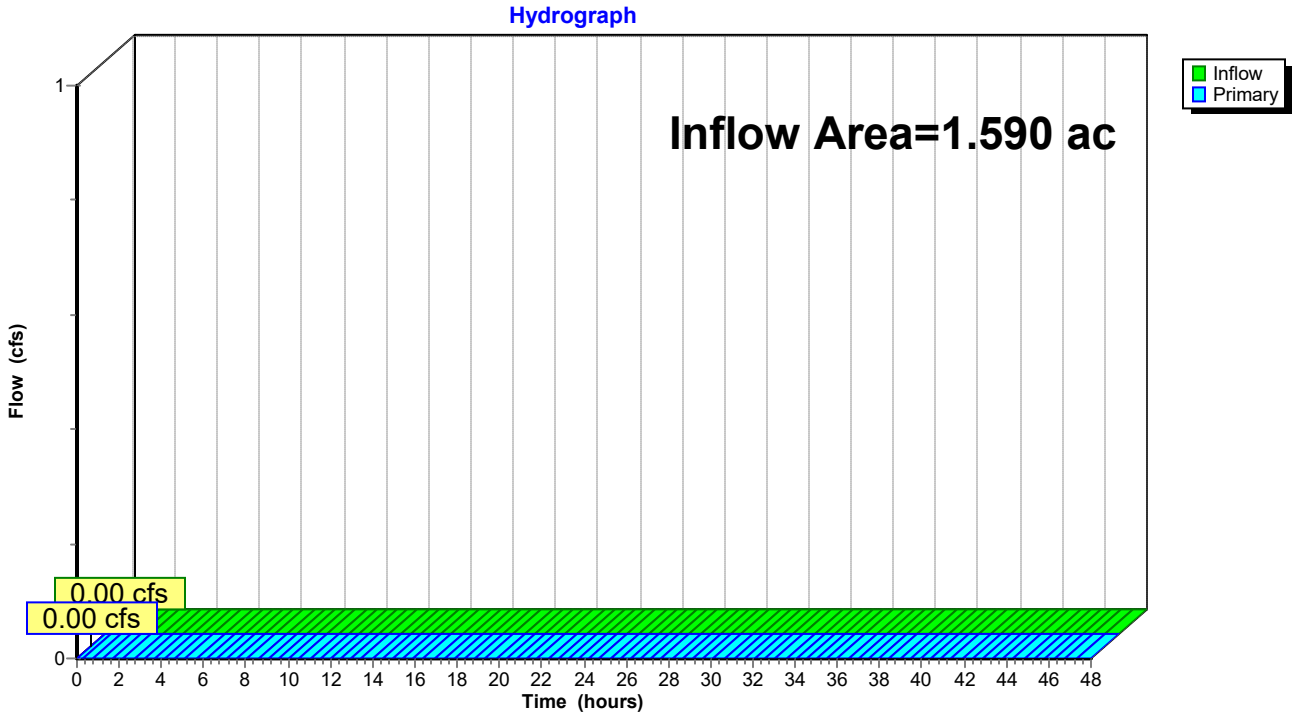
## Link POA 1: Farm Lane Road



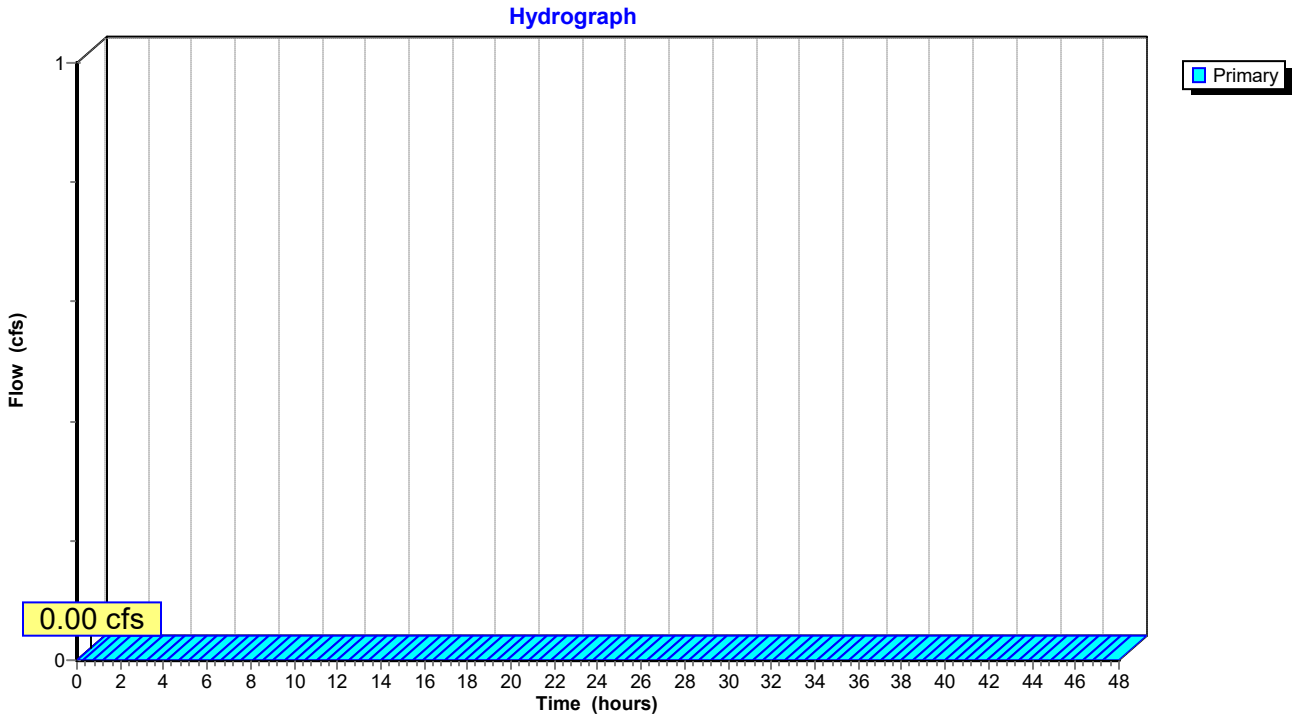

## Link POA 2: Abutting Property



## Link POA 3: Existing Natural Depression




## Link POA 4: Existing City Drain Manhole (No Discharge in Pre-development)

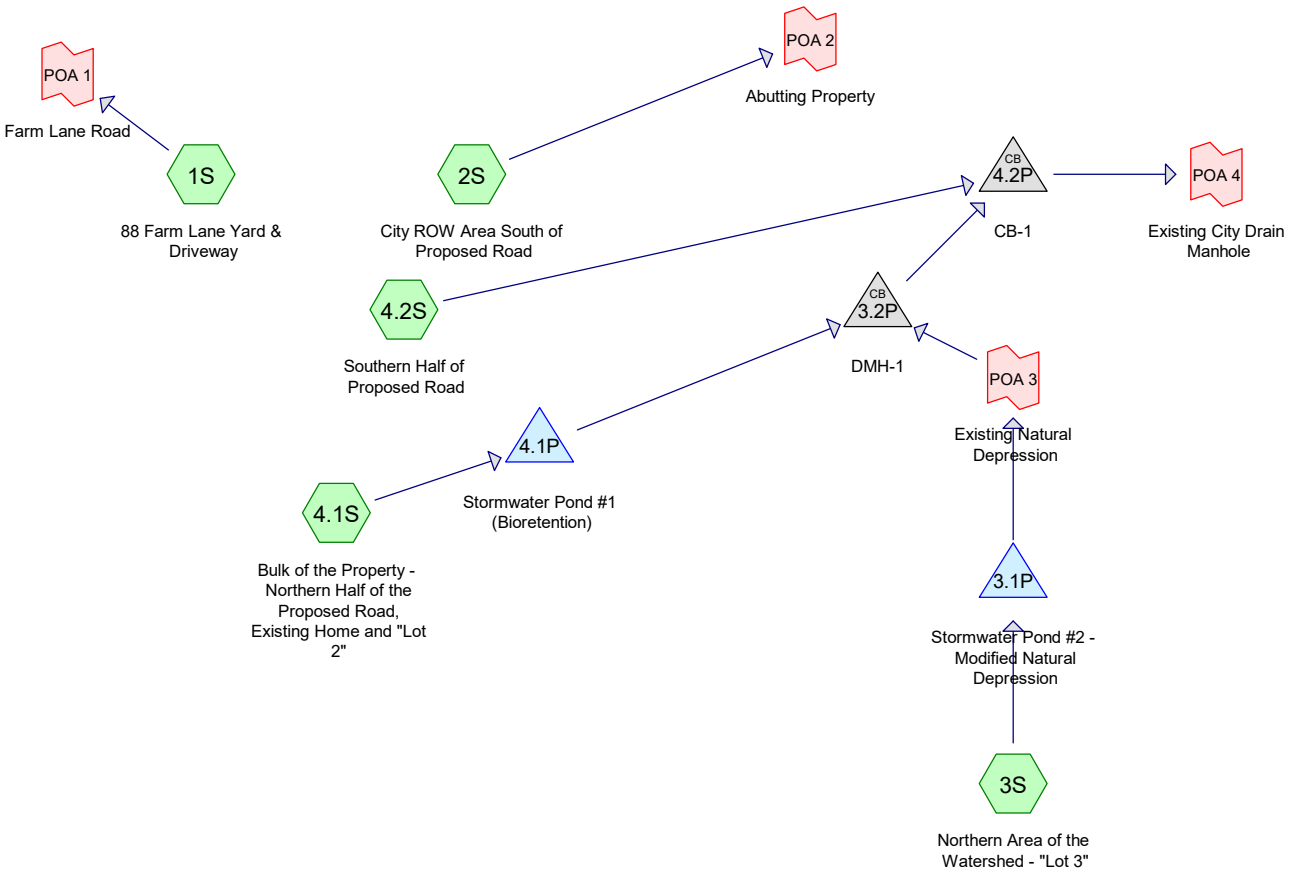


# Section 4

# Drainage Calculations

Post-Development:
2-Year, 24-Hour Summary
10-Year, 24-Hour Complete
25-Year, 24-Hour Summary

ALTUS
ENGINEERING




Subcat Reach Pond Link

**Routing Diagram for 5719-POST**
Prepared by Altus Engineering, Printed 3/23/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment 1S: 88 Farm Lane Yard &** Runoff Area=1,046 sf 57.07% Impervious Runoff Depth=0.80"
Flow Length=25' Tc=6.0 min CN=71 Runoff=0.02 cfs 0.002 af

**Subcatchment 2S: City ROW Area South of** Runoff Area=5,093 sf 6.11% Impervious Runoff Depth=0.00"
Flow Length=136' Tc=6.4 min CN=41 Runoff=0.00 cfs 0.000 af

**Subcatchment 3S: Northern Area of the** Runoff Area=31,903 sf 14.85% Impervious Runoff Depth=0.02"
Flow Length=251' Tc=6.0 min CN=44 Runoff=0.00 cfs 0.001 af

**Subcatchment 4.1S: Bulk of the Property -** Runoff Area=55,097 sf 29.76% Impervious Runoff Depth=0.21"
Flow Length=370' Tc=6.0 min CN=55 Runoff=0.10 cfs 0.022 af

**Subcatchment 4.2S: Southern Half of** Runoff Area=4,478 sf 74.39% Impervious Runoff Depth=1.50"
Flow Length=283' Tc=6.0 min CN=83 Runoff=0.18 cfs 0.013 af

**Pond 3.1P: Stormwater Pond #2 - Modified** Peak Elev=38.00' Storage=34 cf Inflow=0.00 cfs 0.001 af
Discarded=0.00 cfs 0.002 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.002 af

**Pond 3.2P: DMH-1** Peak Elev=34.79' Inflow=0.03 cfs 0.022 af
12.0" Round Culvert n=0.012 L=32.0' S=0.0063 '/' Outflow=0.03 cfs 0.022 af

**Pond 4.1P: Stormwater Pond #1 (Bioretention)** Peak Elev=41.51' Storage=439 cf Inflow=0.10 cfs 0.022 af
Outflow=0.03 cfs 0.022 af

**Pond 4.2P: CB-1** Peak Elev=34.63' Inflow=0.18 cfs 0.035 af
12.0" Round Culvert n=0.012 L=160.0' S=0.0050 '/' Outflow=0.18 cfs 0.035 af

**Link POA 1: Farm Lane Road** Inflow=0.02 cfs 0.002 af
Primary=0.02 cfs 0.002 af

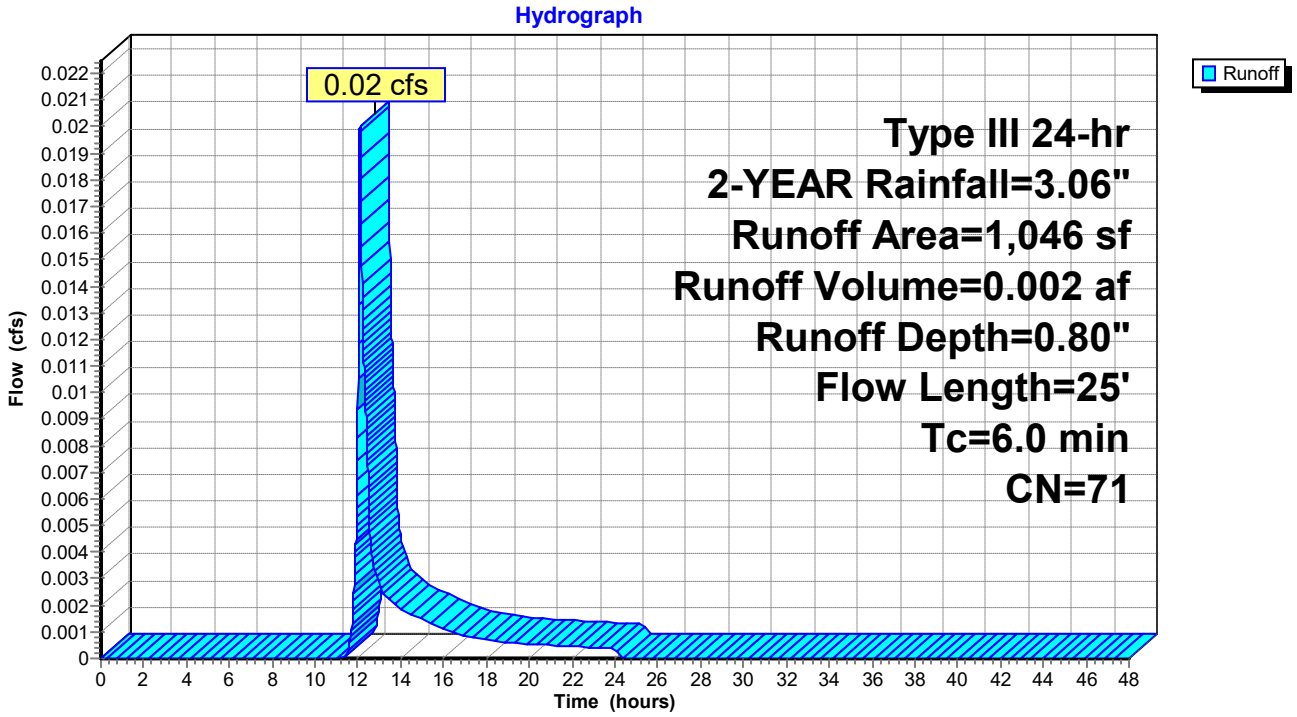
**Link POA 2: Abutting Property** Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

**Link POA 3: Existing Natural Depression** Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

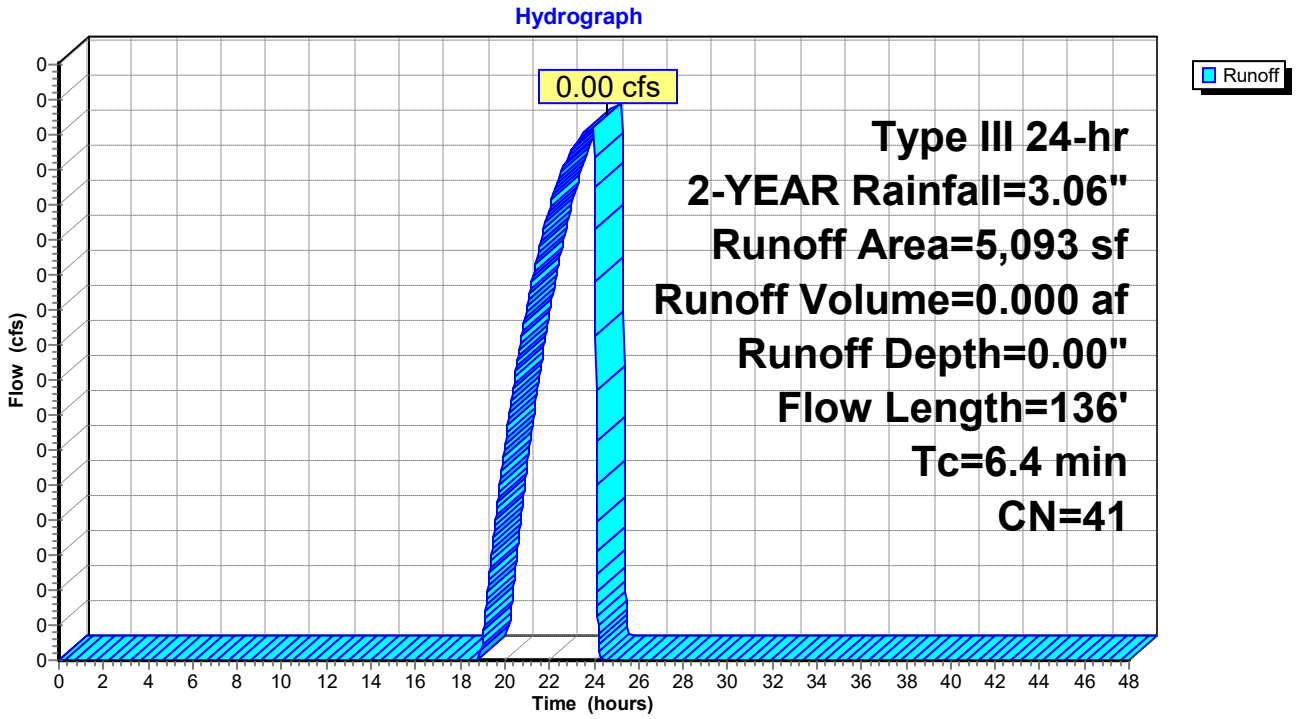
**Link POA 4: Existing City Drain Manhole** Inflow=0.18 cfs 0.035 af
Primary=0.18 cfs 0.035 af

**Total Runoff Area = 2.241 ac Runoff Volume = 0.038 af Average Runoff Depth = 0.20"**
**74.01% Pervious = 1.658 ac 25.99% Impervious = 0.583 ac**

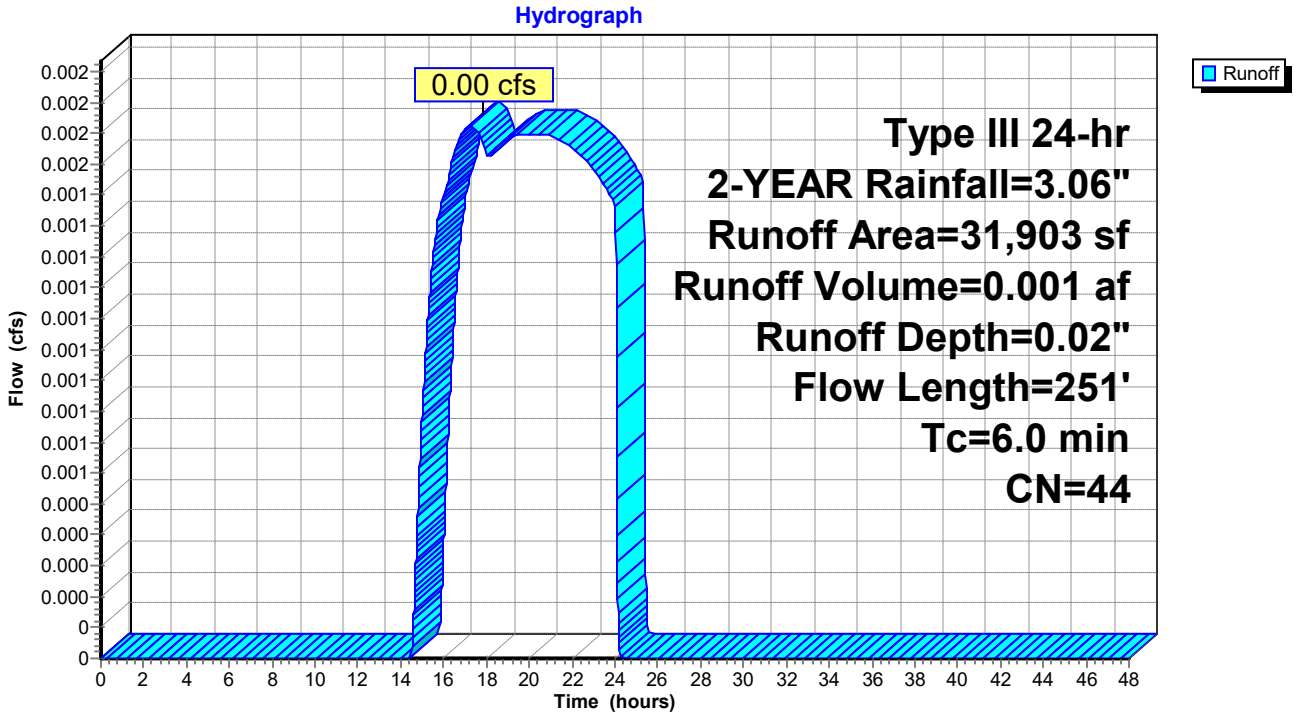
## Subcatchment 1S: 88 Farm Lane Yard & Driveway



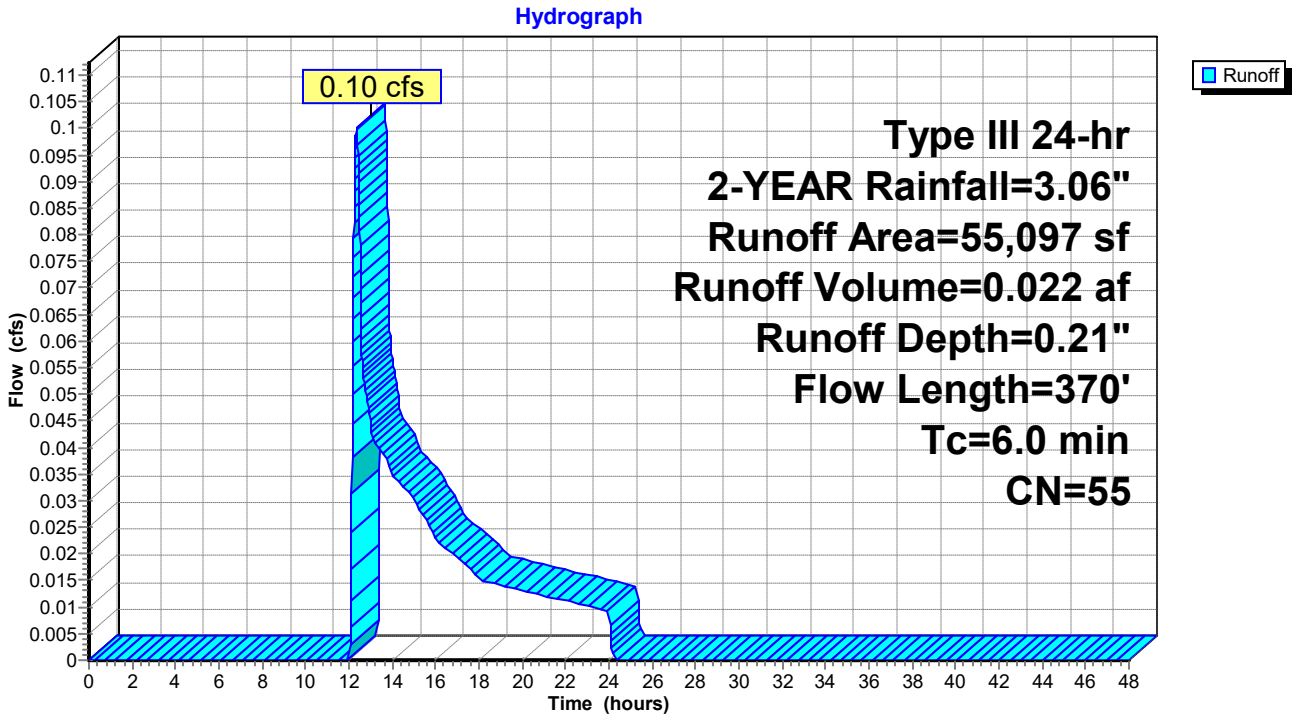

## Subcatchment 2S: City ROW Area South of Proposed Road



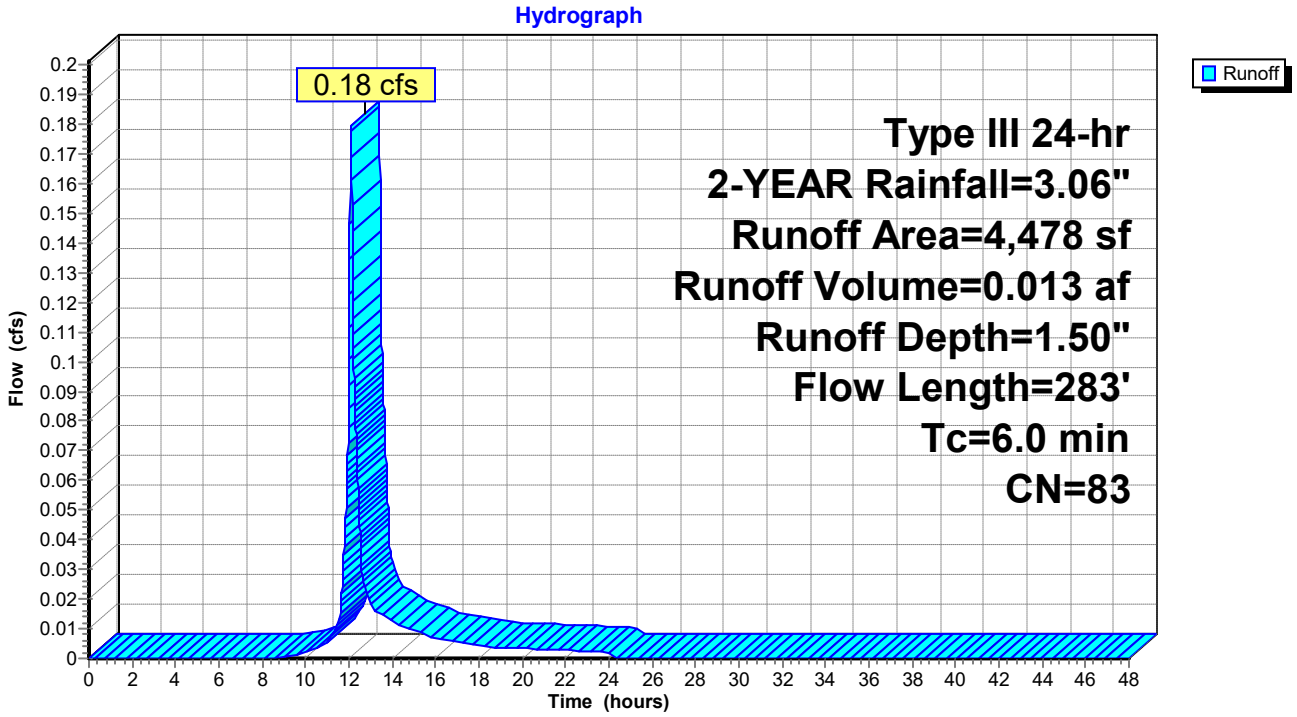
## Subcatchment 3S: Northern Area of the Watershed - "Lot 3"



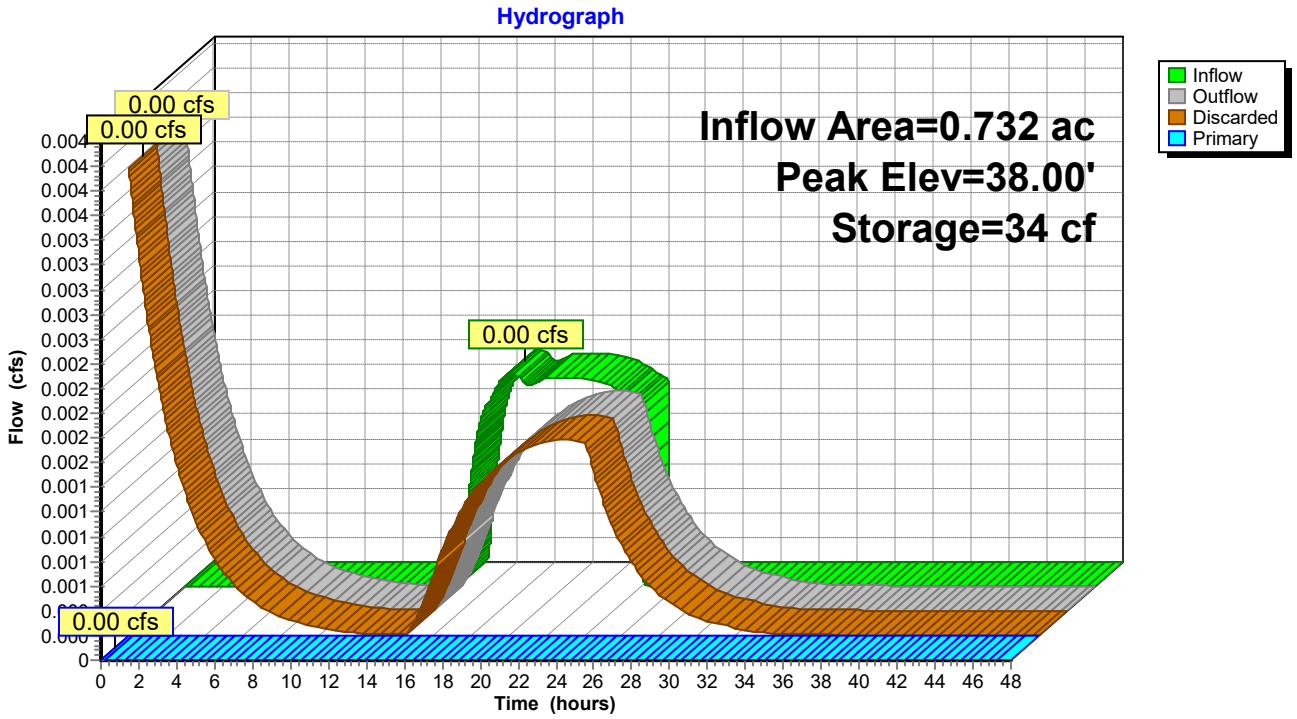

## Subcatchment 4.1S: Bulk of the Property - Northern Half of the Proposed Road, Existing Home and "Lot 2"



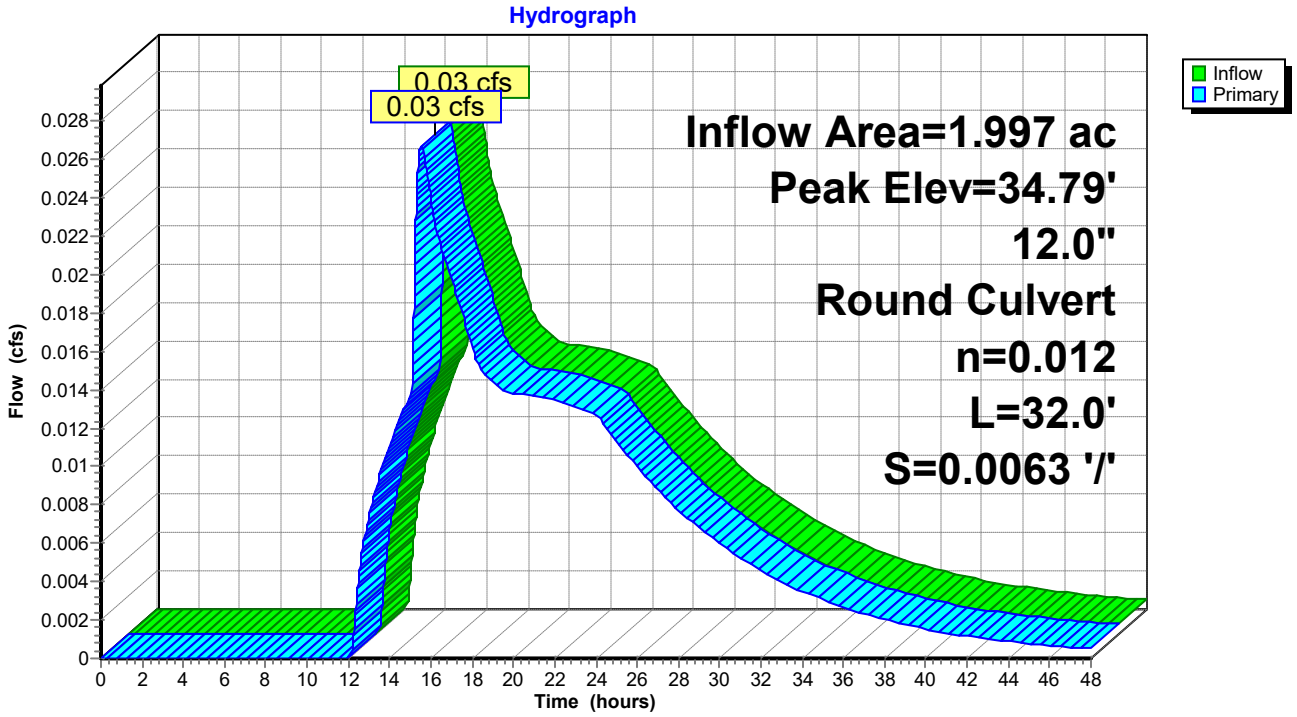
## Subcatchment 4.2S: Southern Half of Proposed Road



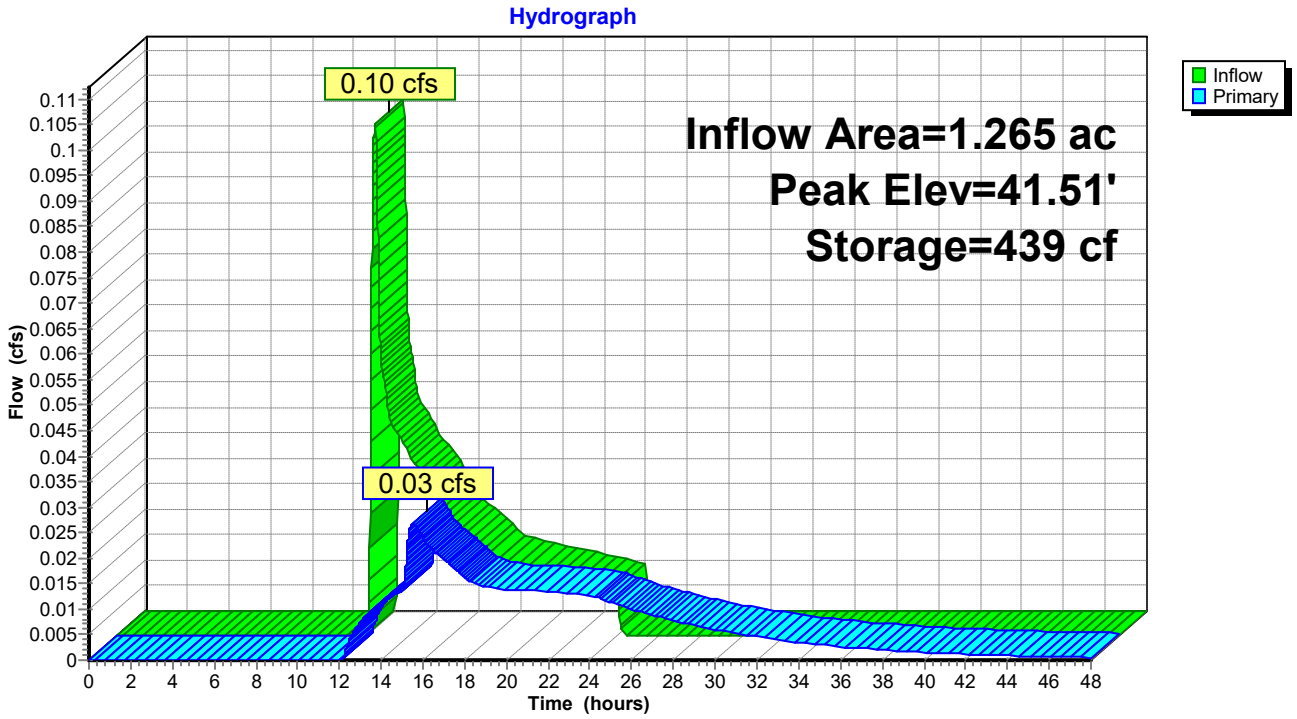

## Pond 3.1P: Stormwater Pond #2 - Modified Natural Depression



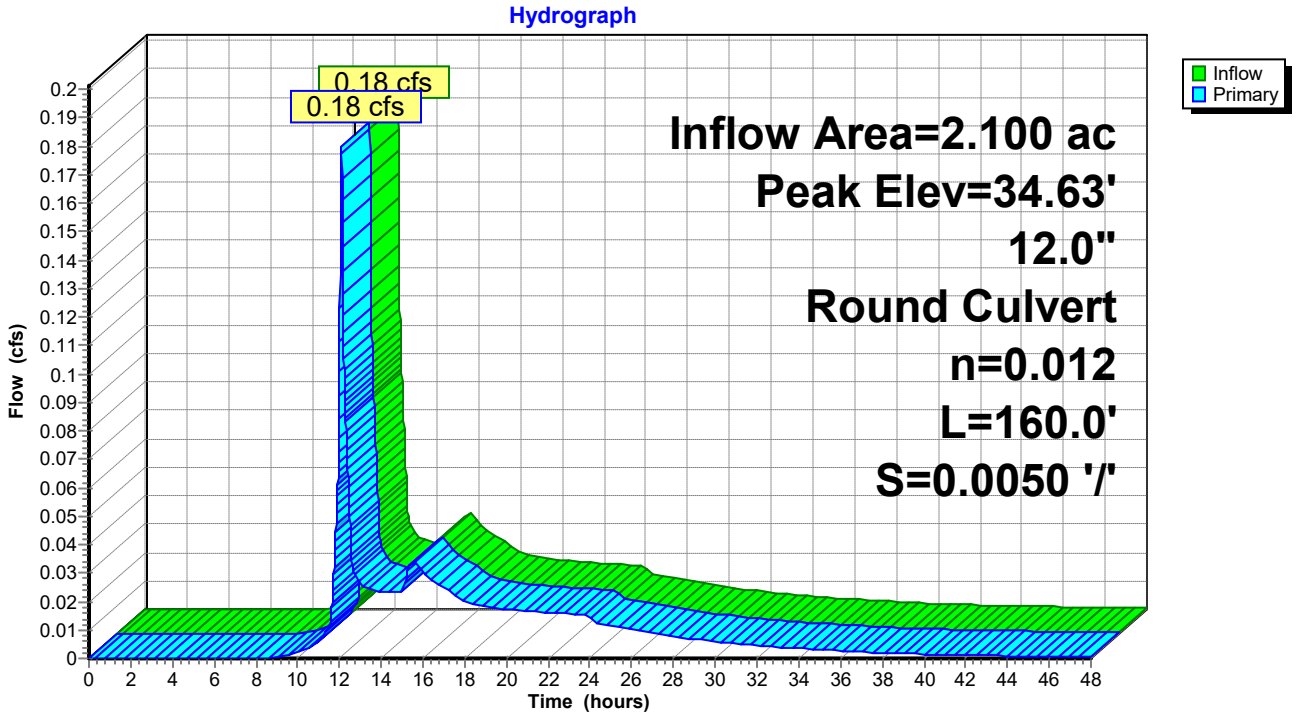
## Pond 3.2P: DMH-1



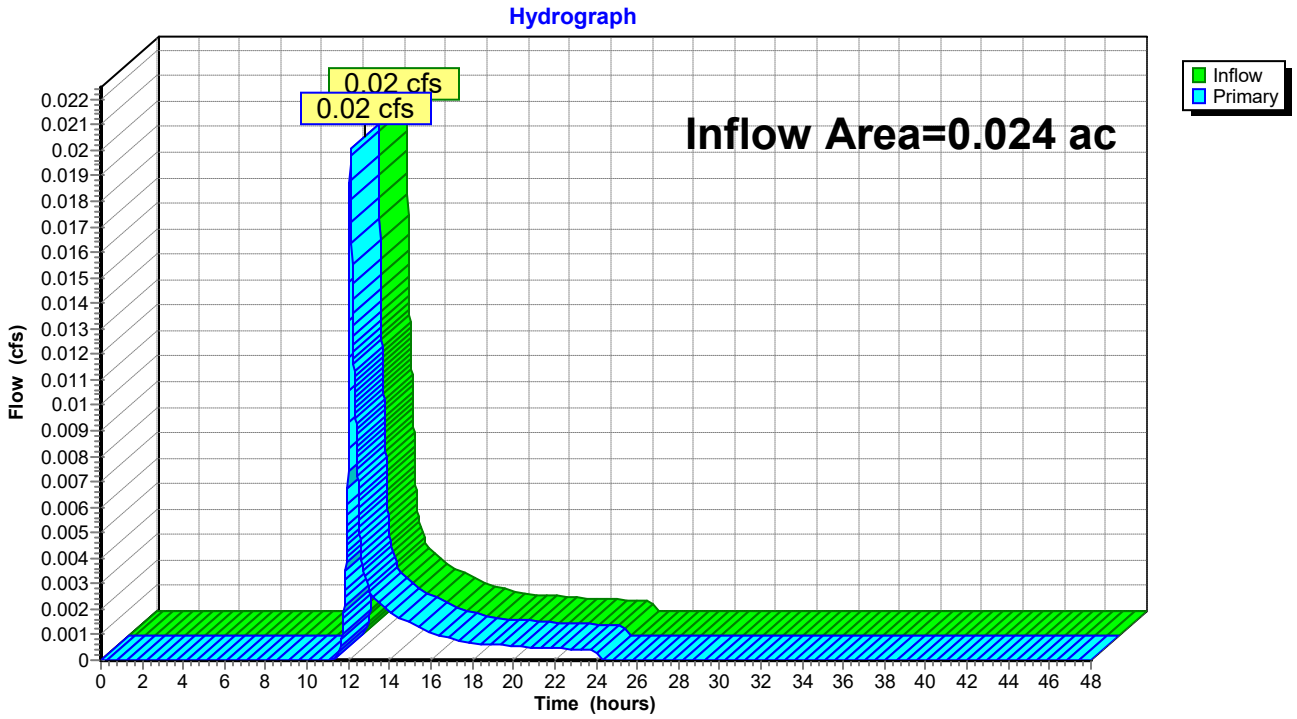

## Pond 4.1P: Stormwater Pond #1 (Bioretention)



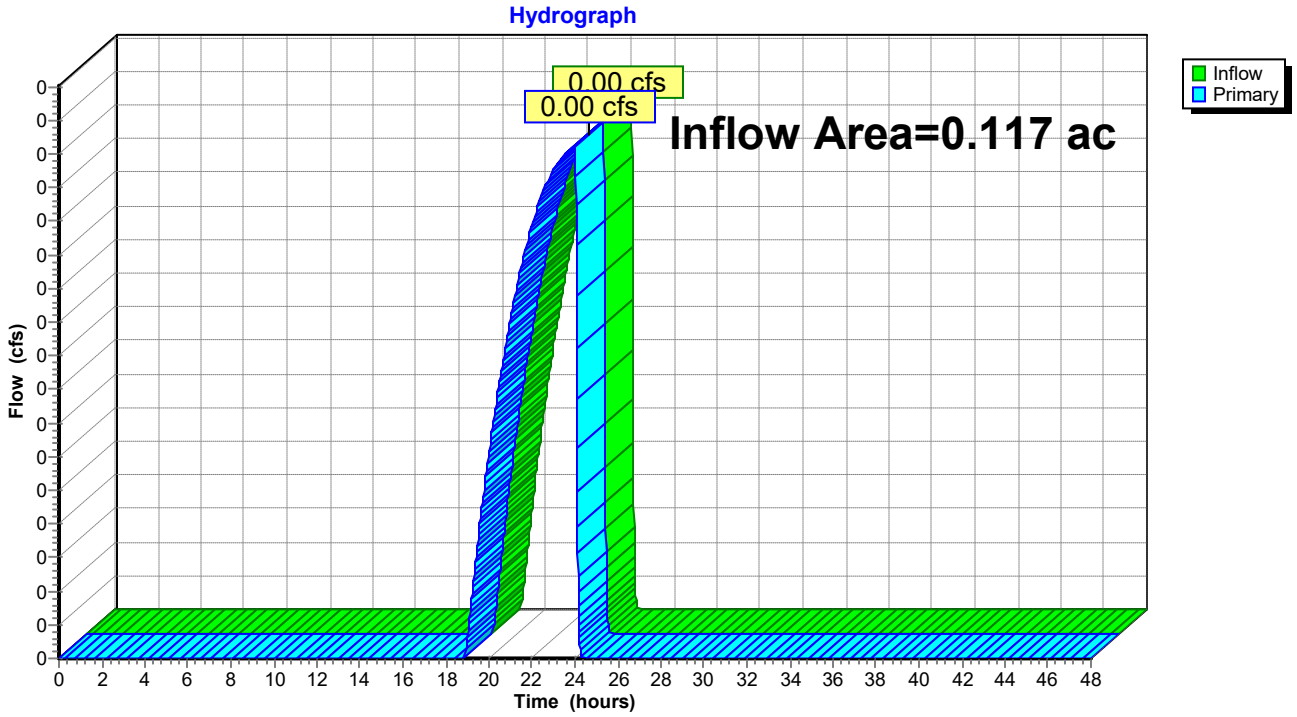
## Pond 4.2P: CB-1



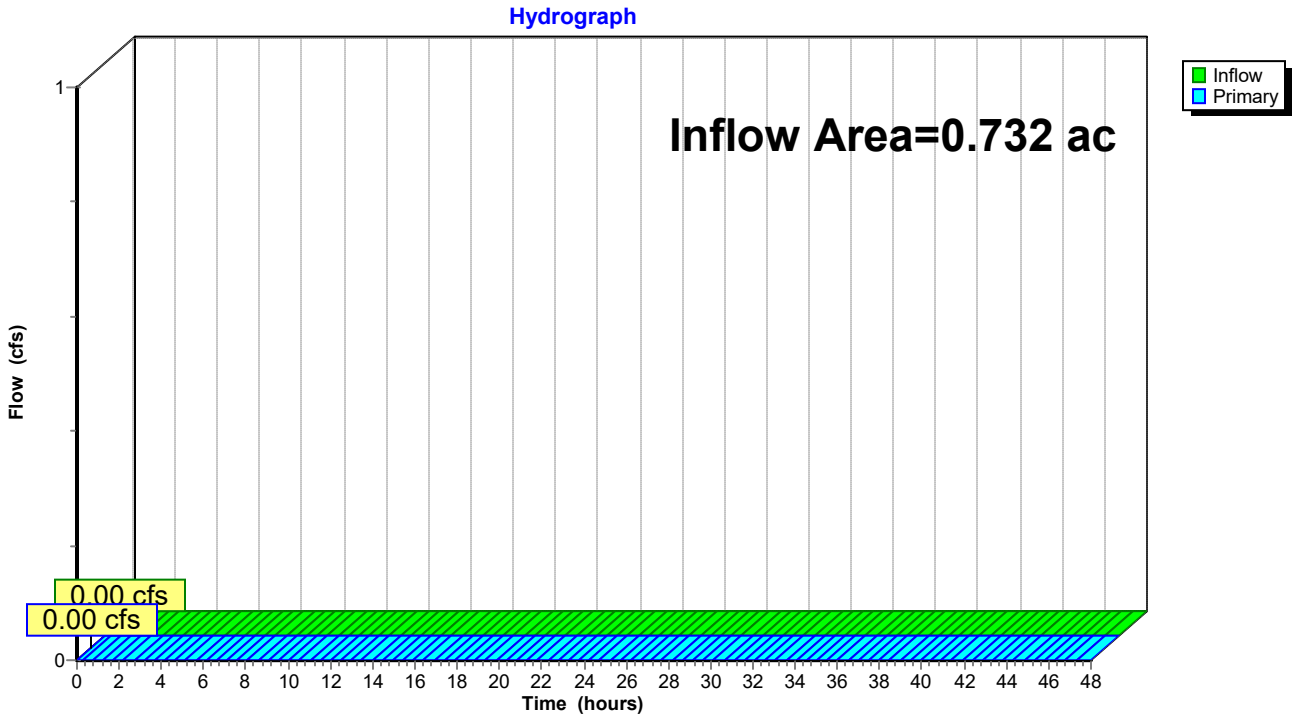

## Link POA 1: Farm Lane Road



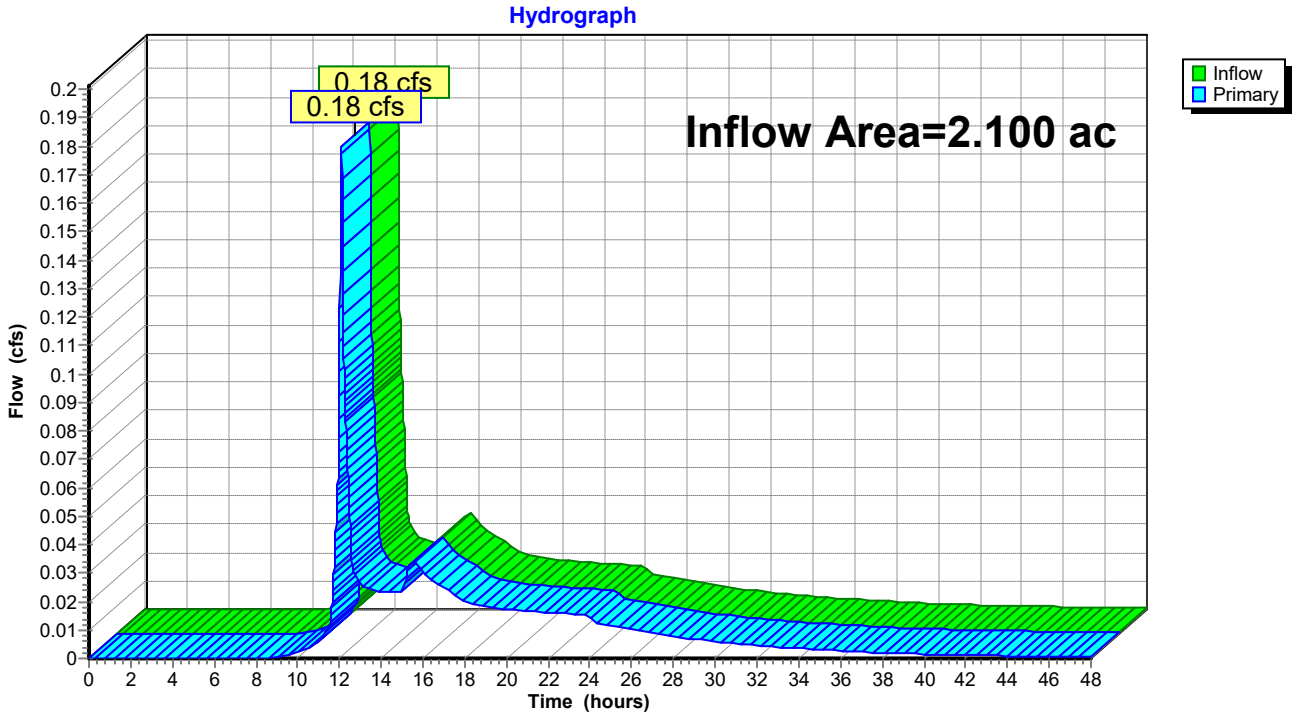
## Link POA 2: Abutting Property

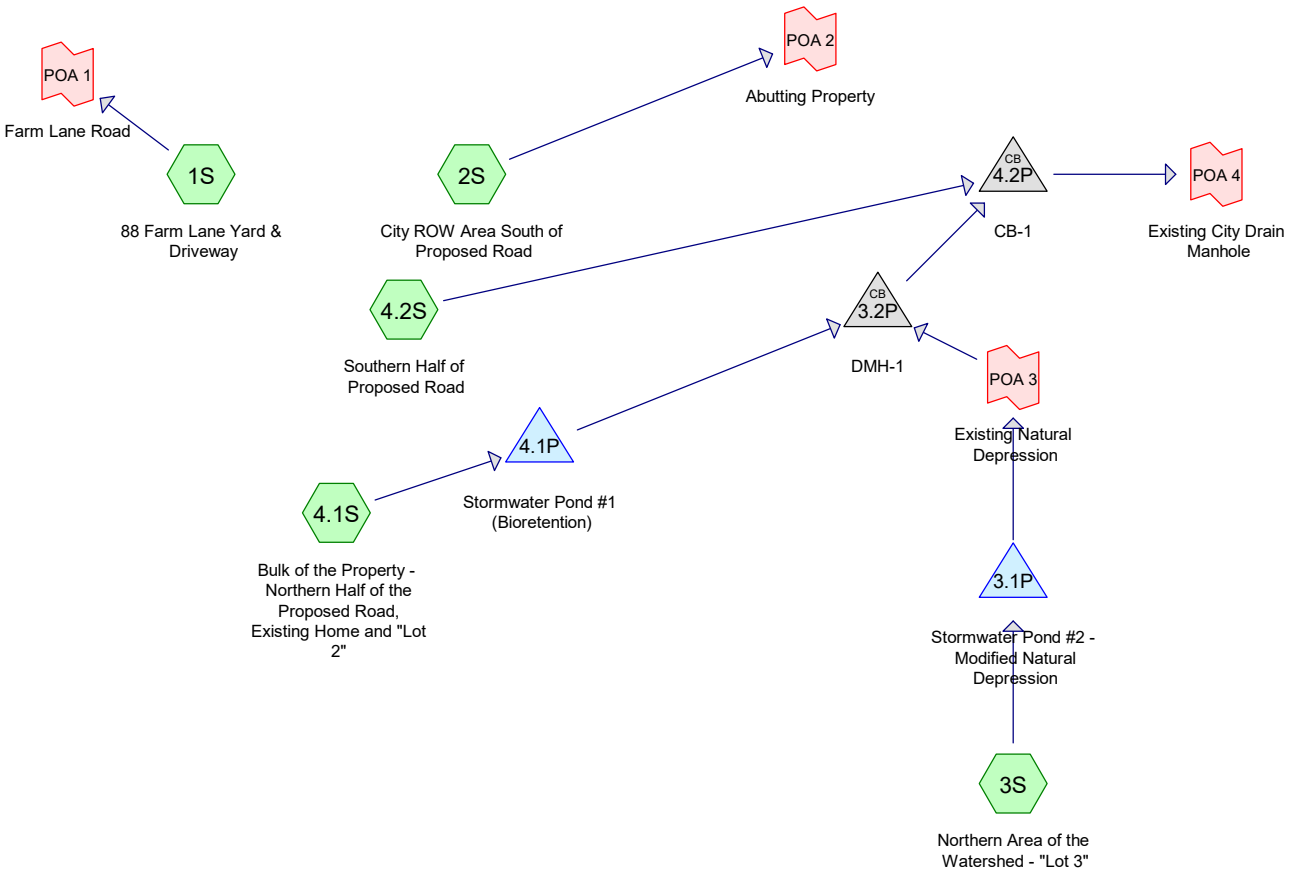



## Link POA 3: Existing Natural Depression



## Link POA 4: Existing City Drain Manhole






Subcat Reach Pond Link

**Routing Diagram for 5719-POST**
Prepared by Altus Engineering, Printed 3/23/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 1.163 | 39 | >75% Grass cover, Good, HSG A (1S, 2S, 3S, 4.1S, 4.2S) |
| 0.355 | 98 | Paved parking, HSG A (1S, 2S, 3S, 4.1S, 4.2S) |
| 0.228 | 98 | Roofs, HSG A (2S, 3S, 4.1S) |
| 0.495 | 30 | Woods, Good, HSG A (1S, 2S, 3S, 4.1S) |
| **2.241** | **52** | **TOTAL AREA** |

## Soil Listing (all nodes)

| Area (acres) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 2.241 | HSG A | 1S, 2S, 3S, 4.1S, 4.2S |
| 0.000 | HSG B | |
| 0.000 | HSG C | |
| 0.000 | HSG D | |
| 0.000 | Other | |
| **2.241** | | **TOTAL AREA** |

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment 1S: 88 Farm Lane Yard &** Runoff Area=1,046 sf 57.07% Impervious Runoff Depth=2.57"
Flow Length=25' Tc=6.0 min CN=71 Runoff=0.07 cfs 0.005 af

**Subcatchment 2S: City ROW Area South of** Runoff Area=5,093 sf 6.11% Impervious Runoff Depth=0.43"
Flow Length=136' Tc=6.4 min CN=41 Runoff=0.02 cfs 0.004 af

**Subcatchment 3S: Northern Area of the** Runoff Area=31,903 sf 14.85% Impervious Runoff Depth=0.59"
Flow Length=251' Tc=6.0 min CN=44 Runoff=0.23 cfs 0.036 af

**Subcatchment 4.1S: Bulk of the Property -** Runoff Area=55,097 sf 29.76% Impervious Runoff Depth=1.29"
Flow Length=370' Tc=6.0 min CN=55 Runoff=1.64 cfs 0.136 af

**Subcatchment 4.2S: Southern Half of** Runoff Area=4,478 sf 74.39% Impervious Runoff Depth=3.71"
Flow Length=283' Tc=6.0 min CN=83 Runoff=0.44 cfs 0.032 af

**Pond 3.1P: Stormwater Pond #2 - Modified** Peak Elev=38.48' Storage=767 cf Inflow=0.23 cfs 0.036 af
Discarded=0.02 cfs 0.037 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.037 af

**Pond 3.2P: DMH-1** Peak Elev=35.53' Inflow=1.49 cfs 0.135 af
12.0" Round Culvert n=0.012 L=32.0' S=0.0063 '/' Outflow=1.49 cfs 0.135 af

**Pond 4.1P: Stormwater Pond #1 (Bioretention)** Peak Elev=41.74' Storage=653 cf Inflow=1.64 cfs 0.136 af
Outflow=1.49 cfs 0.135 af

**Pond 4.2P: CB-1** Peak Elev=35.24' Inflow=1.86 cfs 0.167 af
12.0" Round Culvert n=0.012 L=160.0' S=0.0050 '/' Outflow=1.86 cfs 0.167 af

**Link POA 1: Farm Lane Road** Inflow=0.07 cfs 0.005 af
Primary=0.07 cfs 0.005 af

**Link POA 2: Abutting Property** Inflow=0.02 cfs 0.004 af
Primary=0.02 cfs 0.004 af

**Link POA 3: Existing Natural Depression** Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

**Link POA 4: Existing City Drain Manhole** Inflow=1.86 cfs 0.167 af
Primary=1.86 cfs 0.167 af

**Total Runoff Area = 2.241 ac Runoff Volume = 0.213 af Average Runoff Depth = 1.14"**
**74.01% Pervious = 1.658 ac 25.99% Impervious = 0.583 ac**

## Summary for Subcatchment 1S: 88 Farm Lane Yard & Driveway

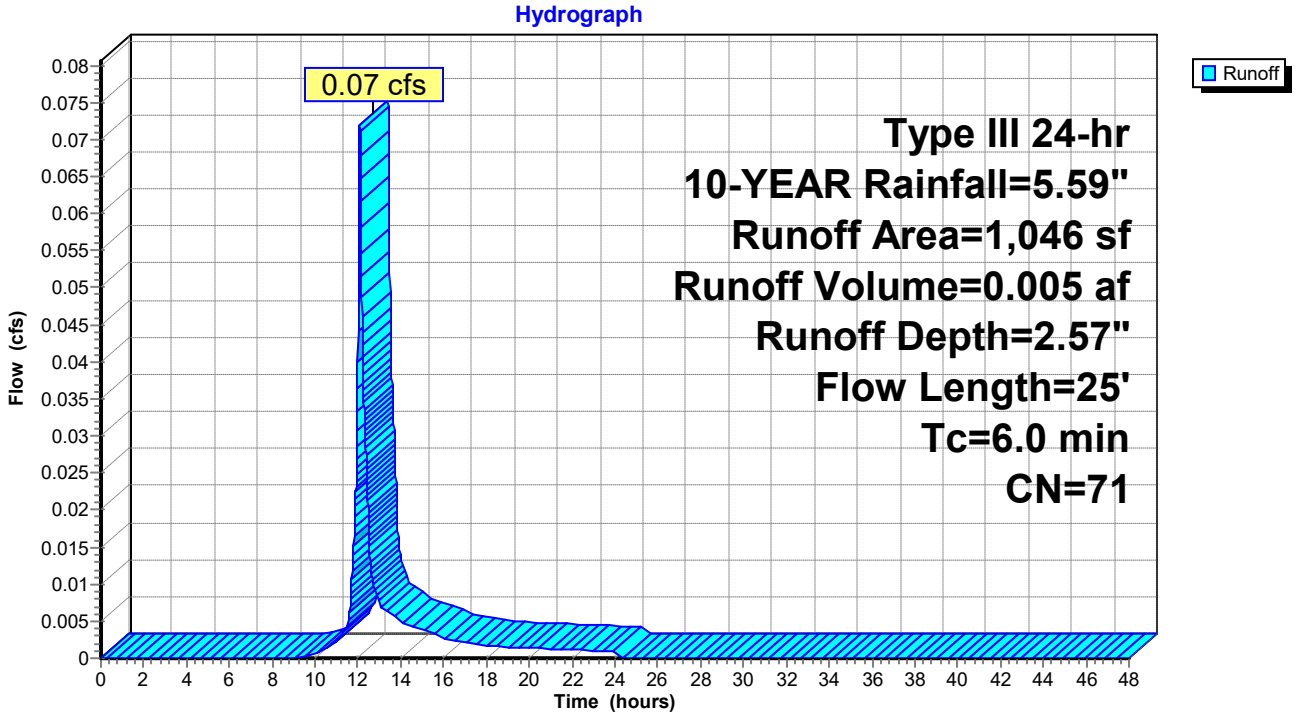
Runoff = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af, Depth= 2.57"
Routed to Link POA 1 : Farm Lane Road

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

| Area (sf) | CN | Description |
|---|---|---|
| 0 | 98 | Roofs, HSG A |
| 597 | 98 | Paved parking, HSG A |
| 274 | 39 | >75% Grass cover, Good, HSG A |
| 175 | 30 | Woods, Good, HSG A |
| 1,046 | 71 | Weighted Average |
| 449 | | 42.93% Pervious Area |
| 597 | | 57.07% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.7 | 14 | 0.0710 | 0.09 | | **Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.06" |
| 0.1 | 11 | 0.0680 | 1.41 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06" |
| 2.8 | 25 | Total, Increased to minimum Tc = 6.0 min | | | |

## Subcatchment 1S: 88 Farm Lane Yard & Driveway



## Summary for Subcatchment 2S: City ROW Area South of Proposed Road

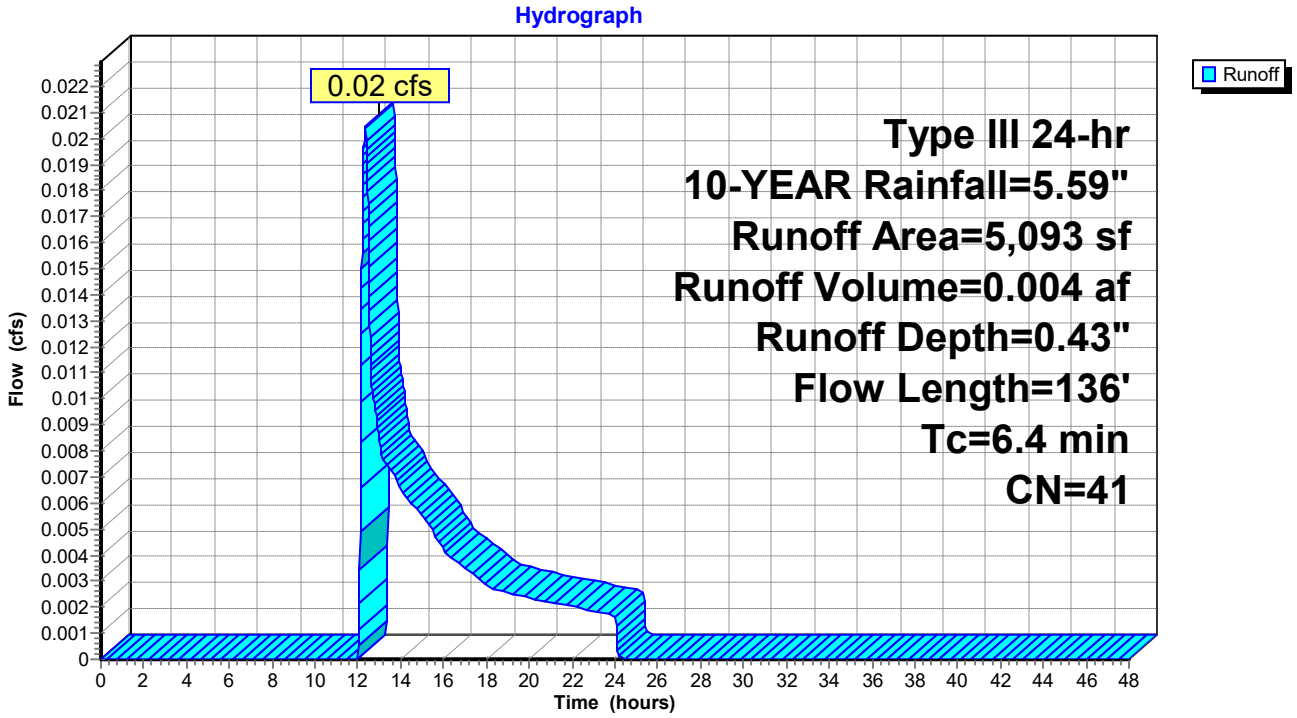
Runoff = 0.02 cfs @ 12.34 hrs, Volume= 0.004 af, Depth= 0.43"
Routed to Link POA 2 : Abutting Property

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

| Area (sf) | CN | Description |
|---|---|---|
| 53 | 98 | Roofs, HSG A |
| 258 | 98 | Paved parking, HSG A |
| 4,029 | 39 | >75% Grass cover, Good, HSG A |
| 753 | 30 | Woods, Good, HSG A |
| 5,093 | 41 | Weighted Average |
| 4,782 | | 93.89% Pervious Area |
| 311 | | 6.11% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.5 | 25 | 0.0400 | 0.08 | | **Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.06" |
| 0.8 | 100 | 0.0880 | 2.08 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.1 | 11 | 0.1590 | 1.99 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 6.4 | 136 | Total | | | |

## Subcatchment 2S: City ROW Area South of Proposed Road



## Summary for Subcatchment 3S: Northern Area of the Watershed - "Lot 3"

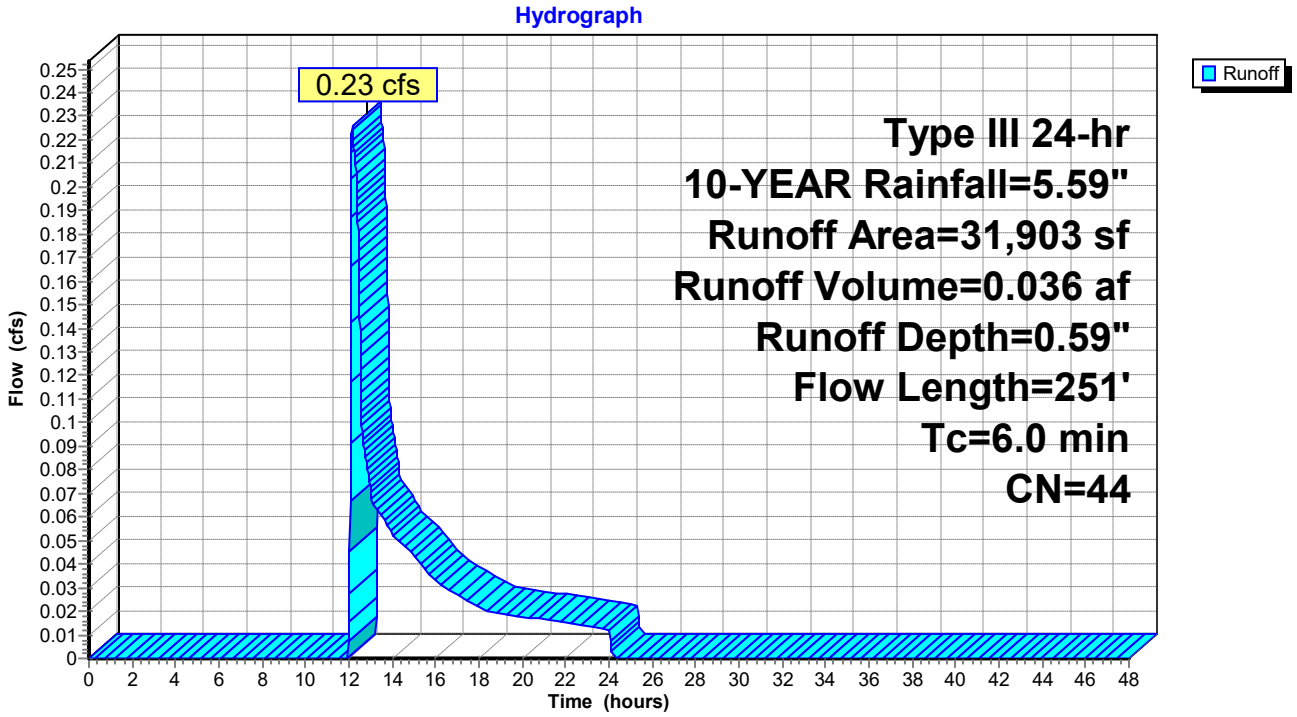
Runoff = 0.23 cfs @ 12.15 hrs, Volume= 0.036 af, Depth= 0.59"
Routed to Pond 3.1P : Stormwater Pond #2 - Modified Natural Depression

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

| Area (sf) | CN | Description |
|---|---|---|
| 3,001 | 98 | Roofs, HSG A |
| 1,736 | 98 | Paved parking, HSG A |
| 14,393 | 39 | >75% Grass cover, Good, HSG A |
| 12,773 | 30 | Woods, Good, HSG A |
| 31,903 | 44 | Weighted Average |
| 27,166 | | 85.15% Pervious Area |
| 4,737 | | 14.85% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.3 | 23 | 0.1740 | 0.29 | | **Sheet Flow,** Grass: Short n= 0.150 P2= 3.06" |
| 0.6 | 73 | 0.0750 | 1.92 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.3 | 32 | 0.1330 | 1.82 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 0.6 | 60 | 0.0630 | 1.76 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 1.0 | 63 | 0.0440 | 1.05 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 3.8 | 251 | Total, Increased to minimum Tc = 6.0 min | | | |

## Subcatchment 3S: Northern Area of the Watershed - "Lot 3"



## ary for Subcatchment 4.1S: Bulk of the Property - Northern Half of the Proposed Road, Existing Home and

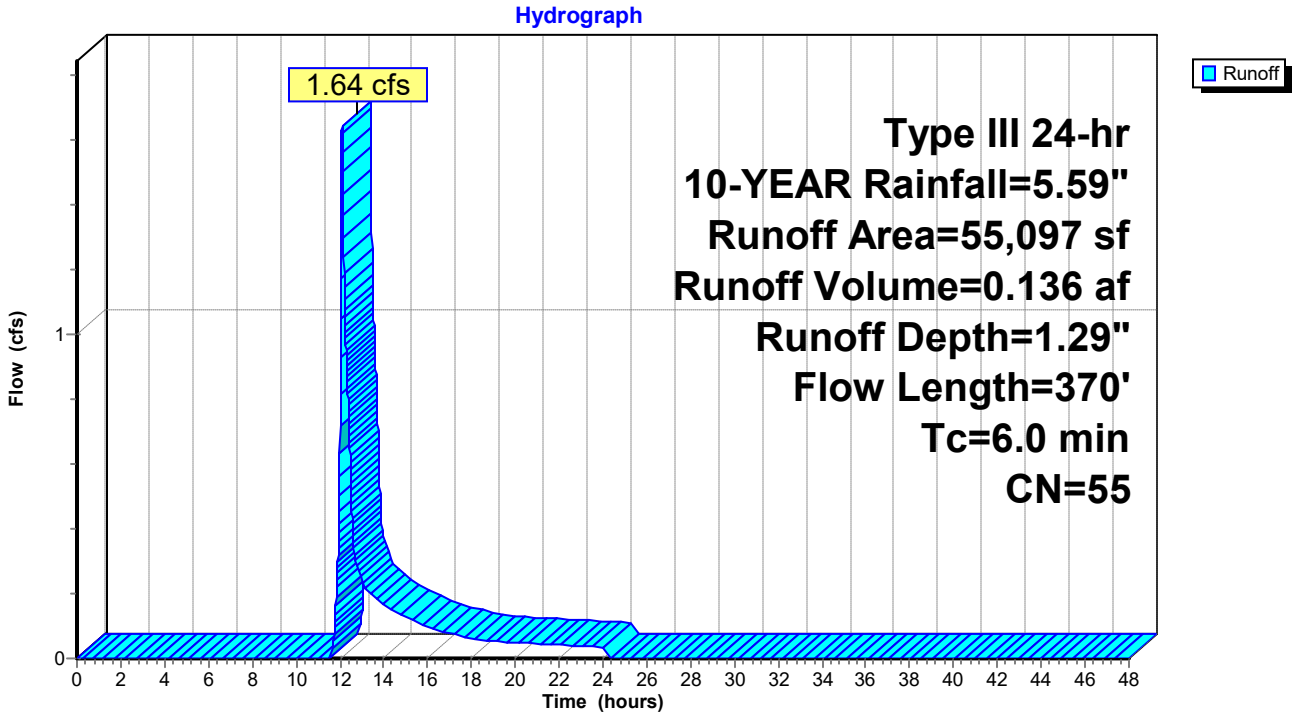
Runoff = 1.64 cfs @ 12.10 hrs, Volume= 0.136 af, Depth= 1.29"
Routed to Pond 4.1P : Stormwater Pond #1 (Bioretention)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

| Area (sf) | CN | Description |
|---|---|---|
| 6,858 | 98 | Roofs, HSG A |
| 9,541 | 98 | Paved parking, HSG A |
| 30,832 | 39 | >75% Grass cover, Good, HSG A |
| 7,866 | 30 | Woods, Good, HSG A |
| 55,097 | 55 | Weighted Average |
| 38,698 | | 70.24% Pervious Area |
| 16,399 | | 29.76% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.1 | 10 | 0.5000 | 3.08 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06" |
| 0.5 | 63 | 0.0990 | 2.20 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.5 | 42 | 0.0650 | 1.27 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 0.4 | 50 | 0.0800 | 1.98 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.3 | 25 | 0.0400 | 1.40 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.4 | 36 | 0.0560 | 1.66 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 0.3 | 31 | 0.0810 | 1.99 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 1.1 | 113 | 0.0580 | 1.69 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 3.6 | 370 | Total, Increased to minimum Tc = 6.0 min | | | |

## Subcatchment 4.1S: Bulk of the Property - Northern Half of the Proposed Road, Existing Home and "Lot 2"



## Summary for Subcatchment 4.2S: Southern Half of Proposed Road

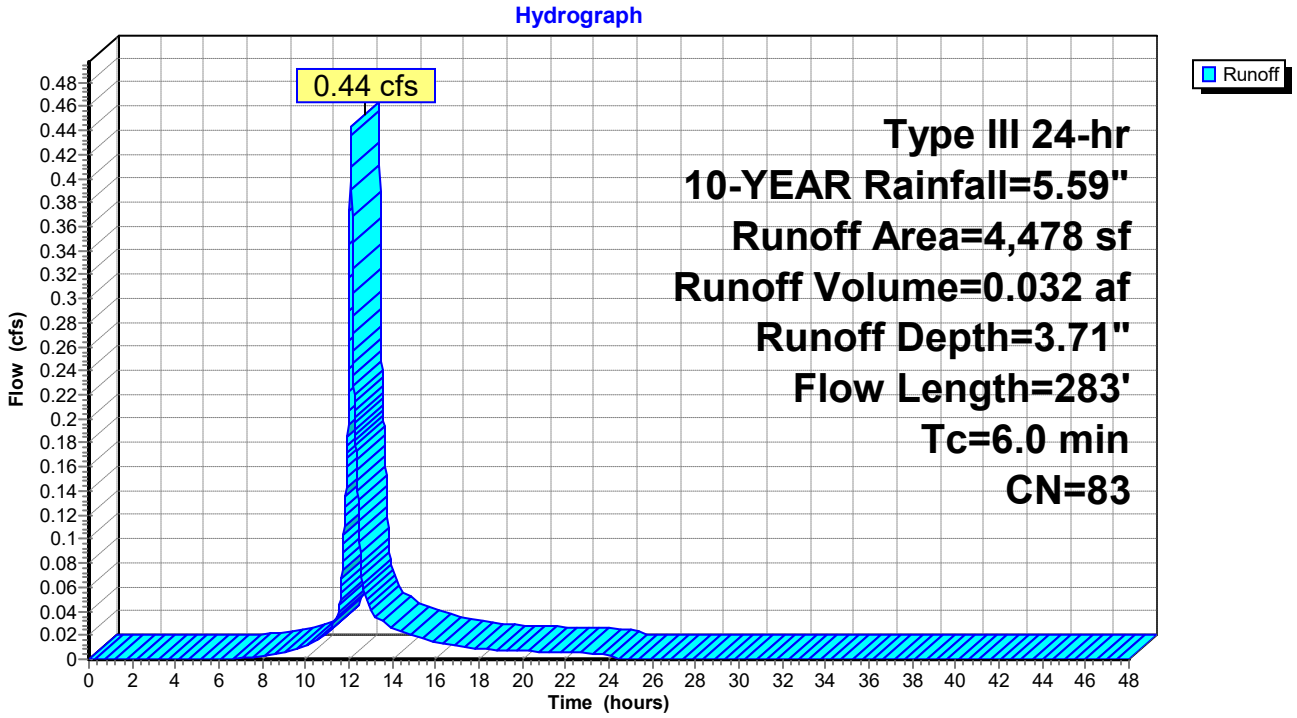
Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.032 af, Depth= 3.71"
Routed to Pond 4.2P : CB-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=5.59"

| Area (sf) | CN | Description |
|---|---|---|
| 0 | 98 | Roofs, HSG A |
| 3,331 | 98 | Paved parking, HSG A |
| 1,147 | 39 | >75% Grass cover, Good, HSG A |
| 0 | 30 | Woods, Good, HSG A |
| 4,478 | 83 | Weighted Average |
| 1,147 | | 25.61% Pervious Area |
| 3,331 | | 74.39% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 33 | 0.0300 | 1.27 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.06" |
| 0.6 | 163 | 0.0490 | 4.49 | | **Shallow Concentrated Flow,** Paved Kv= 20.3 fps |
| 0.5 | 87 | 0.0200 | 2.87 | | **Shallow Concentrated Flow,** Paved Kv= 20.3 fps |
| 1.5 | 283 | Total, Increased to minimum Tc = 6.0 min | | | |

## Subcatchment 4.2S: Southern Half of Proposed Road



## Summary for Pond 3.1P: Stormwater Pond #2 - Modified Natural Depression

Inflow Area = 0.732 ac, 14.85% Impervious, Inflow Depth = 0.59" for 10-YEAR event
Inflow = 0.23 cfs @ 12.15 hrs, Volume= 0.036 af
Outflow = 0.02 cfs @ 17.45 hrs, Volume= 0.037 af, Atten= 89%, Lag= 317.9 min
Discarded = 0.02 cfs @ 17.45 hrs, Volume= 0.037 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link POA 3 : Existing Natural Depression

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Starting Elev= 38.00' Surf.Area= 1,364 sf Storage= 34 cf
Peak Elev= 38.48' @ 17.45 hrs Surf.Area= 1,716 sf Storage= 767 cf (733 cf above start)
Flood Elev= 41.00' Surf.Area= 4,608 sf Storage= 8,345 cf (8,311 cf above start)

Plug-Flow detention time= 464.5 min calculated for 0.036 af (100% of inflow)
Center-of-Mass det. time= 437.2 min ( 1,371.0 - 933.8 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 37.50' | 8,345 cf | **Modified Existing Depression (Conic)** Listed below (Recalc) |

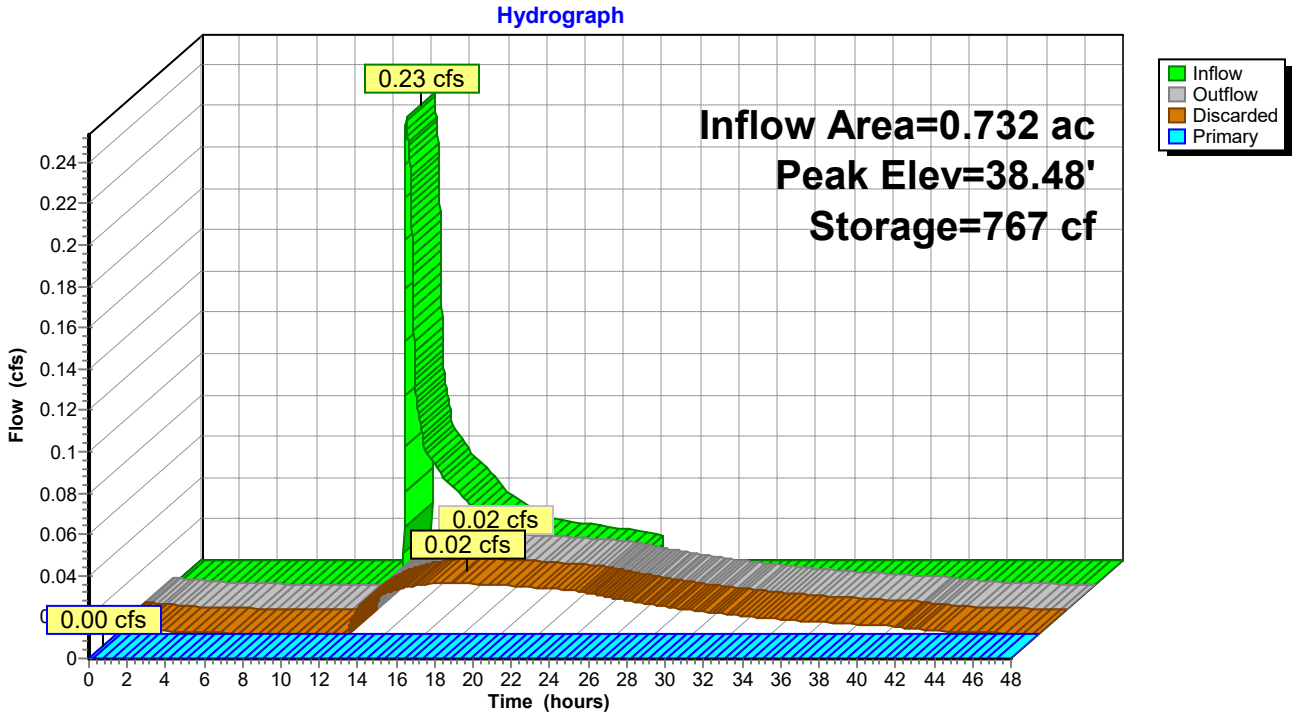
| Elevation (feet) | Surf.Area (sq-ft) | Voids (%) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) | Wet.Area (sq-ft) |
|---|---|---|---|---|---|
| 37.50 | 1,364 | 0.0 | 0 | 0 | 1,364 |
| 38.00 | 1,364 | 5.0 | 34 | 34 | 1,429 |
| 39.00 | 2,148 | 100.0 | 1,741 | 1,775 | 2,227 |
| 40.00 | 3,230 | 100.0 | 2,671 | 4,446 | 3,325 |
| 41.00 | 4,608 | 100.0 | 3,899 | 8,345 | 4,720 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Discarded | 37.50' | **2.500 in/hr Exfiltration through Media to Ground over Wetted area above 37.50'**<br>Excluded Wetted area = 1,364 sf Phase-In= 0.01' |
| #2 | Primary | 37.50' | **12.0" Round Outlet to DMH-1 (Culvert)**<br>L= 9.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 37.50' / 37.40' S= 0.0111 '/' Cc= 0.900<br>n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |
| #3 | Device 2 | 39.50' | **15.0" Horiz. 15" Yard Drain Rim (Orifice)** C= 0.600<br>Limited to weir flow at low heads |

**Discarded OutFlow** Max=0.02 cfs @ 17.45 hrs HW=38.48' (Free Discharge)
↑—**1=Exfiltration through Media to Ground** (Exfiltration Controls 0.02 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=38.00' TW=0.00' (Dynamic Tailwater)
↑—**2=Outlet to DMH-1 (Culvert)** (Passes 0.00 cfs of 0.76 cfs potential flow)
↑—**3=15" Yard Drain Rim (Orifice)** ( Controls 0.00 cfs)

## Pond 3.1P: Stormwater Pond #2 - Modified Natural Depression



## Summary for Pond 3.2P: DMH-1

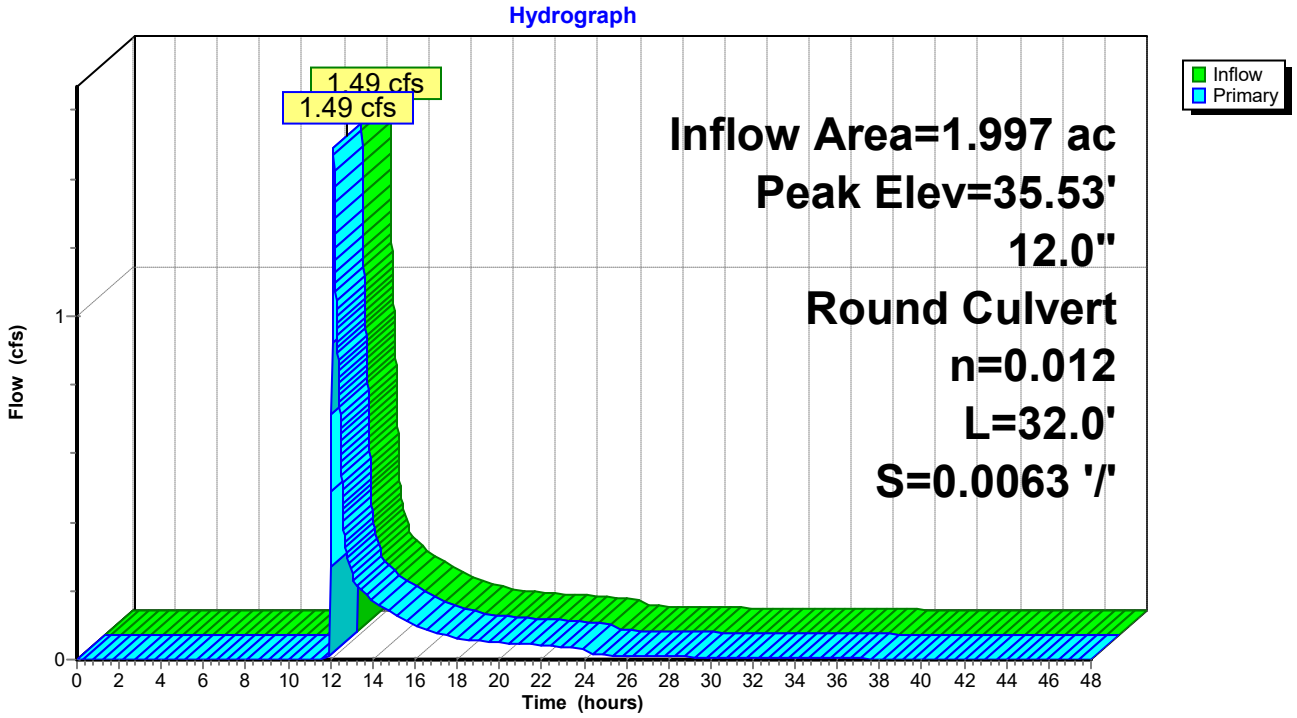
Inflow Area = 1.997 ac, 24.29% Impervious, Inflow Depth > 0.81" for 10-YEAR event
Inflow = 1.49 cfs @ 12.14 hrs, Volume= 0.135 af
Outflow = 1.49 cfs @ 12.14 hrs, Volume= 0.135 af, Atten= 0%, Lag= 0.0 min
Primary = 1.49 cfs @ 12.14 hrs, Volume= 0.135 af
Routed to Pond 4.2P : CB-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 35.53' @ 12.14 hrs
Flood Elev= 42.20'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 34.70' | **12.0" Round Outlet to CB (Culvert)**<br>L= 32.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 34.70' / 34.50' S= 0.0063 '/' Cc= 0.900<br>n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.49 cfs @ 12.14 hrs HW=35.53' TW=35.24' (Dynamic Tailwater)
**1=Outlet to CB (Culvert)** (Outlet Controls 1.49 cfs @ 2.90 fps)

### Pond 3.2P: DMH-1



## Summary for Pond 4.1P: Stormwater Pond #1 (Bioretention)

Inflow Area = 1.265 ac, 29.76% Impervious, Inflow Depth = 1.29" for 10-YEAR event
Inflow = 1.64 cfs @ 12.10 hrs, Volume= 0.136 af
Outflow = 1.49 cfs @ 12.14 hrs, Volume= 0.135 af, Atten= 9%, Lag= 2.4 min
Primary = 1.49 cfs @ 12.14 hrs, Volume= 0.135 af
Routed to Pond 3.2P : DMH-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Starting Elev= 41.00' Surf.Area= 650 sf Storage= 49 cf
Peak Elev= 41.74' @ 12.14 hrs Surf.Area= 1,007 sf Storage= 653 cf (605 cf above start)
Flood Elev= 42.00' Surf.Area= 1,154 sf Storage= 939 cf (890 cf above start)

Plug-Flow detention time= 82.3 min calculated for 0.134 af (99% of inflow)
Center-of-Mass det. time= 74.7 min ( 957.4 - 882.7 )

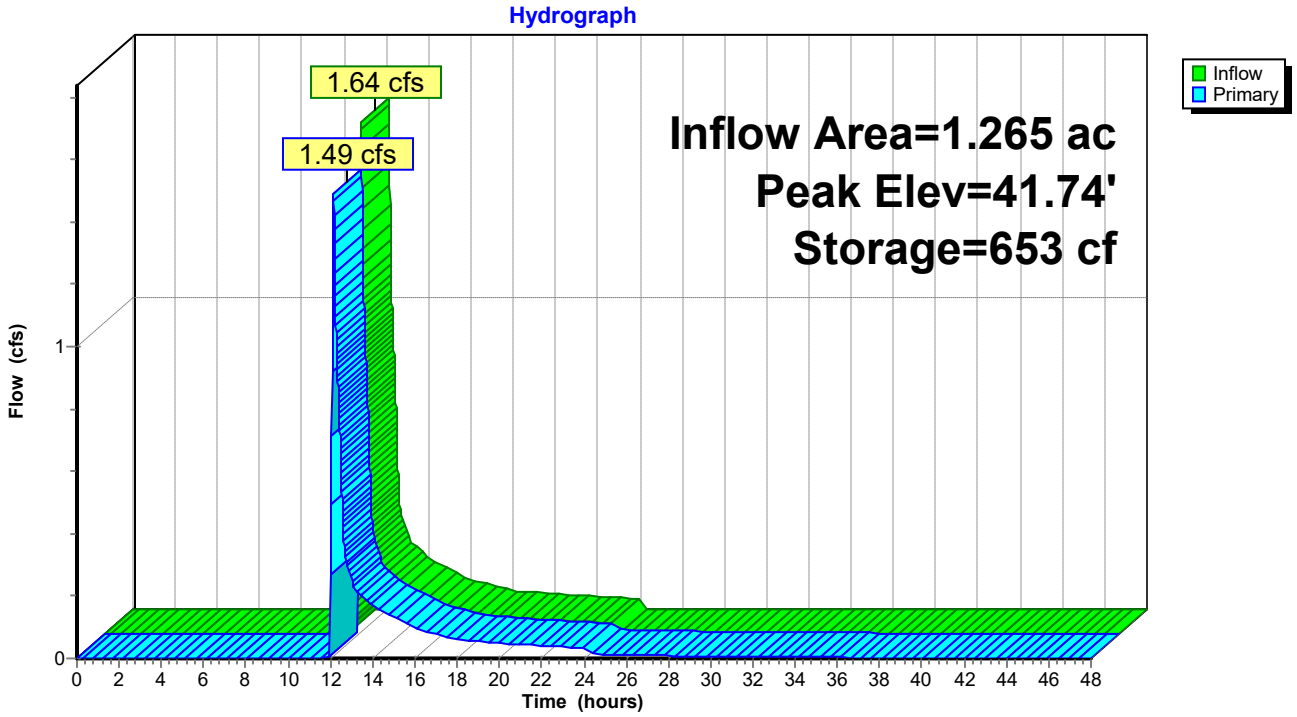
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 39.50' | 939 cf | **Bioretention Cell (Conic)** Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Voids (%) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) | Wet.Area (sq-ft) |
|---|---|---|---|---|---|
| 39.50 | 650 | 0.0 | 0 | 0 | 650 |
| 41.00 | 650 | 5.0 | 49 | 49 | 786 |
| 42.00 | 1,154 | 100.0 | 890 | 939 | 1,300 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 38.00' | **12.0" Round Outlet to DMH (Culvert)**<br>L= 50.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 38.00' / 37.70' S= 0.0060 '/' Cc= 0.900<br>n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |
| #2 | Device 1 | 38.30' | **6.0" Vert. Underdrain (Orifice)** C= 0.600<br>Limited to weir flow at low heads |
| #3 | Device 2 | 41.00' | **2.500 in/hr Exfiltration through Media over Wetted area above 41.00'**<br>Excluded Wetted area = 786 sf Phase-In= 0.01' |
| #4 | Device 1 | 41.50' | **15.0" Horiz. 15" Yard Drain Rim (Orifice)** C= 0.600<br>Limited to weir flow at low heads |

**Primary OutFlow** Max=1.49 cfs @ 12.14 hrs HW=41.74' TW=35.53' (Dynamic Tailwater)
- **1=Outlet to DMH (Culvert)** (Passes 1.49 cfs of 6.52 cfs potential flow)
- **2=Underdrain (Orifice)** (Passes 0.02 cfs of 1.69 cfs potential flow)
  - **3=Exfiltration through Media** (Exfiltration Controls 0.02 cfs)
- **4=15" Yard Drain Rim (Orifice)** (Weir Controls 1.47 cfs @ 1.59 fps)

## Pond 4.1P: Stormwater Pond #1 (Bioretention)



## Summary for Pond 4.2P: CB-1

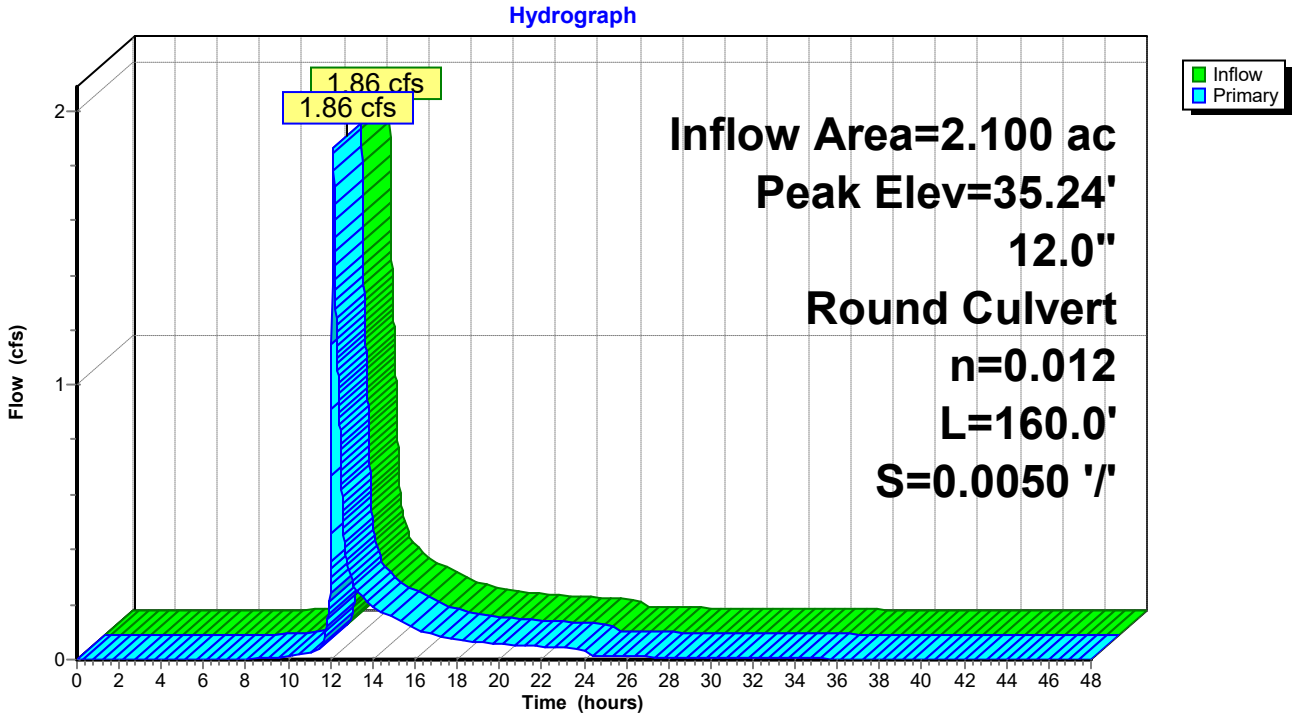
Inflow Area = 2.100 ac, 26.75% Impervious, Inflow Depth > 0.96" for 10-YEAR event
Inflow = 1.86 cfs @ 12.13 hrs, Volume= 0.167 af
Outflow = 1.86 cfs @ 12.13 hrs, Volume= 0.167 af, Atten= 0%, Lag= 0.0 min
Primary = 1.86 cfs @ 12.13 hrs, Volume= 0.167 af
Routed to Link POA 4 : Existing City Drain Manhole

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 35.24' @ 12.13 hrs
Flood Elev= 41.75'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 34.40' | **12.0" Round Outlet Pipe to City DMH (Culvert)**<br>L= 160.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 34.40' / 33.60' S= 0.0050 '/' Cc= 0.900<br>n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.86 cfs @ 12.13 hrs HW=35.24' TW=0.00' (Dynamic Tailwater)
**1=Outlet Pipe to City DMH (Culvert)** (Barrel Controls 1.86 cfs @ 3.57 fps)

## Pond 4.2P: CB-1

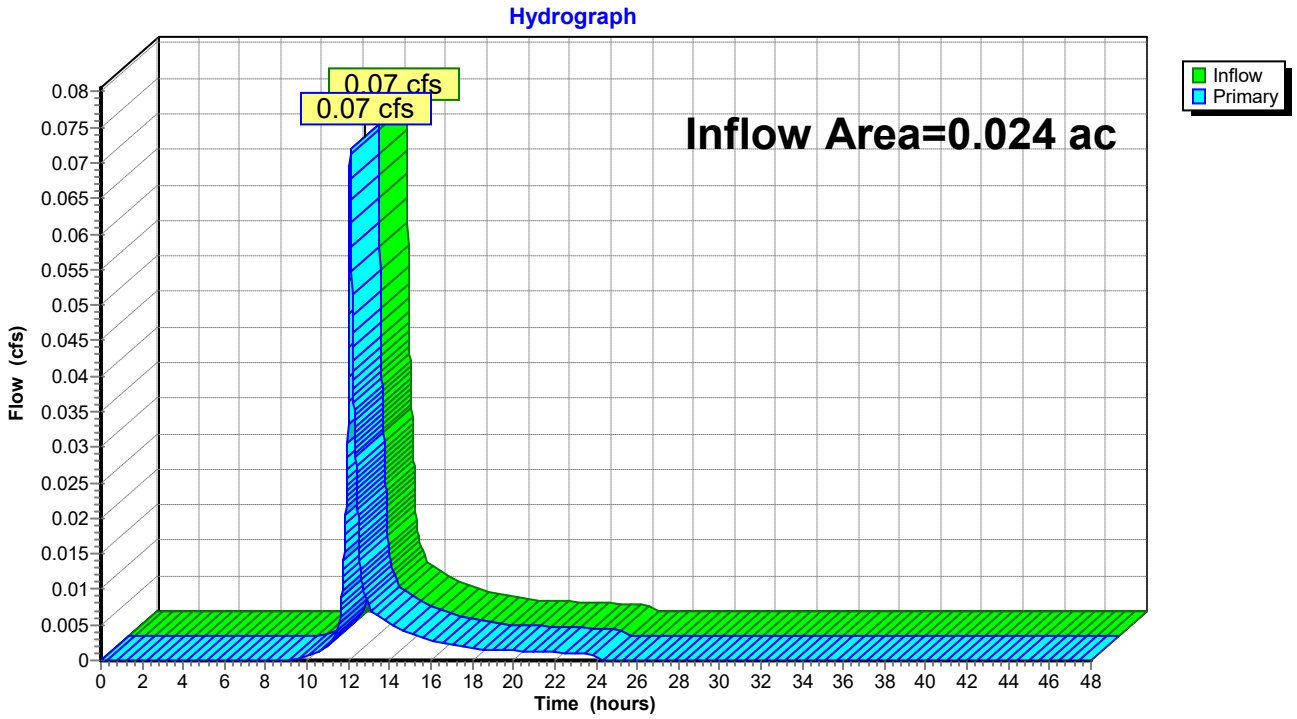


## Summary for Link POA 1: Farm Lane Road

Inflow Area = 0.024 ac, 57.07% Impervious, Inflow Depth = 2.57" for 10-YEAR event
Inflow = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af
Primary = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

## Link POA 1: Farm Lane Road

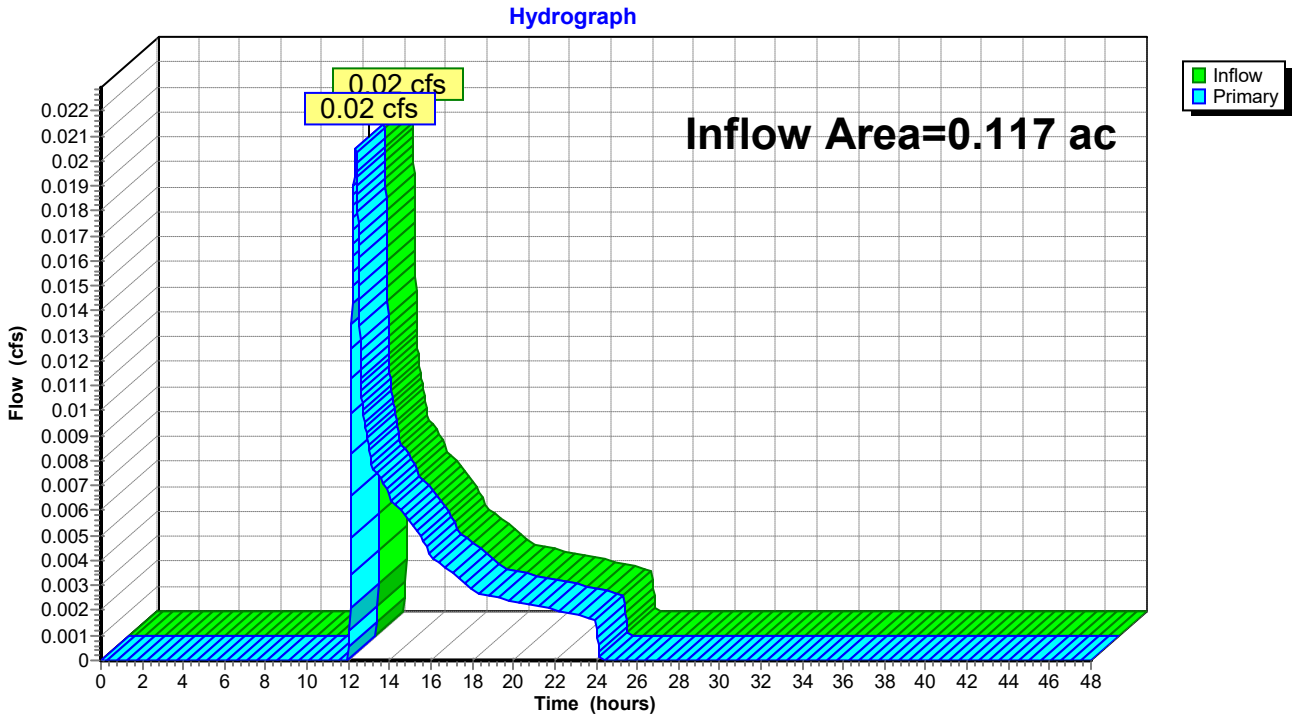


## Summary for Link POA 2: Abutting Property

Inflow Area = 0.117 ac, 6.11% Impervious, Inflow Depth = 0.43" for 10-YEAR event
Inflow = 0.02 cfs @ 12.34 hrs, Volume= 0.004 af
Primary = 0.02 cfs @ 12.34 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

## Link POA 2: Abutting Property

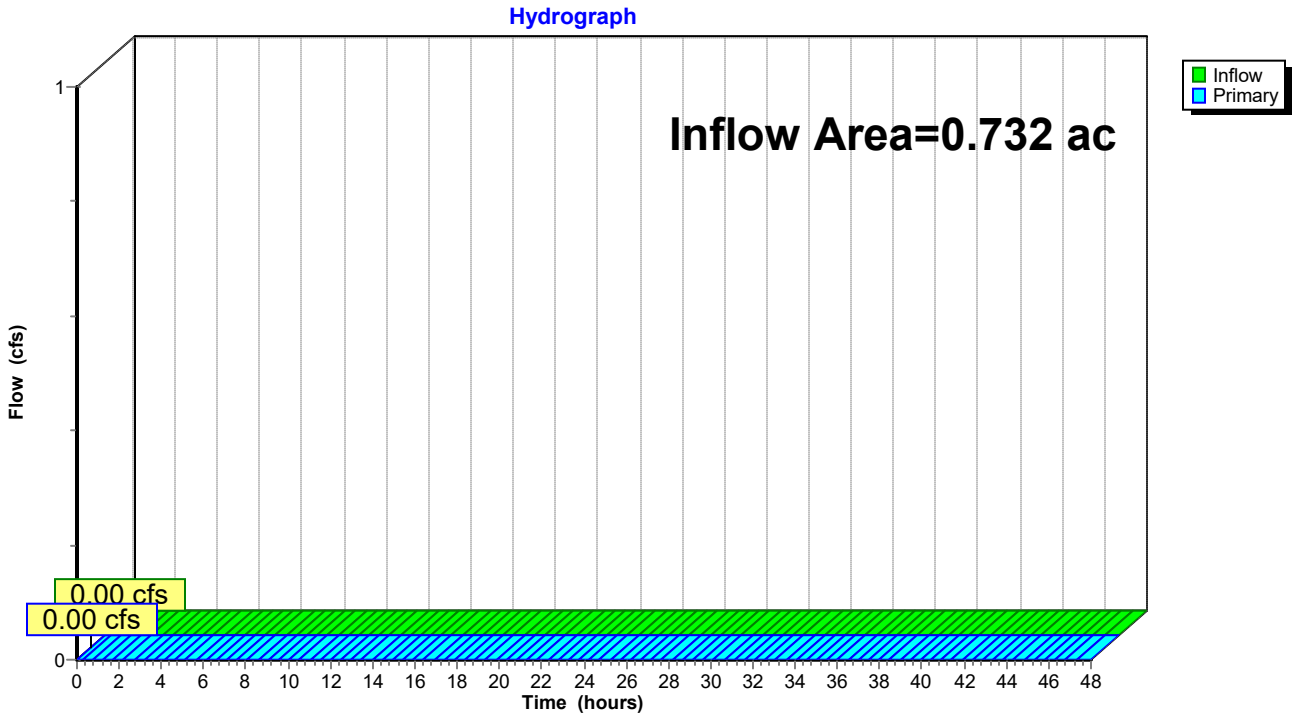


## Summary for Link POA 3: Existing Natural Depression

Inflow Area = 0.732 ac, 14.85% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Routed to Pond 3.2P : DMH-1

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

## Link POA 3: Existing Natural Depression

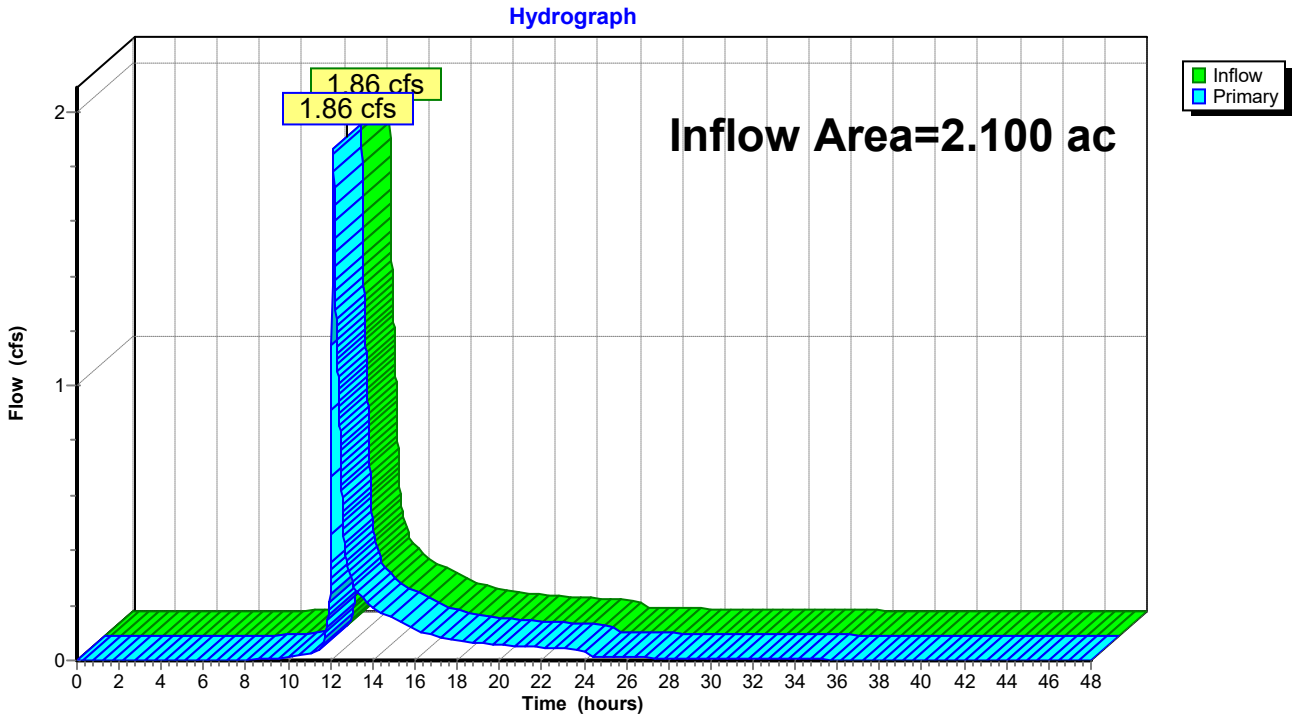


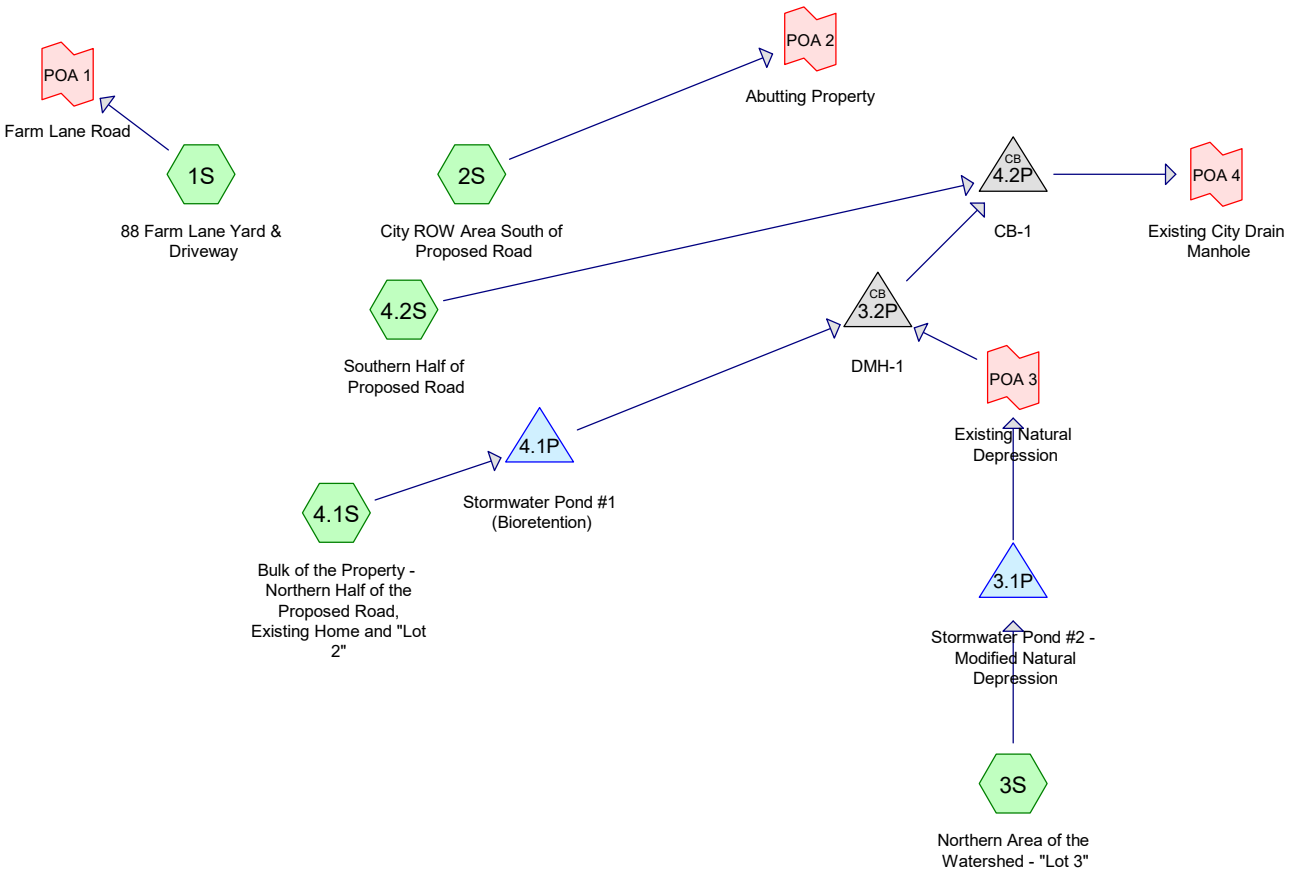
## Summary for Link POA 4: Existing City Drain Manhole

Inflow Area = 2.100 ac, 26.75% Impervious, Inflow Depth > 0.96" for 10-YEAR event
Inflow = 1.86 cfs @ 12.13 hrs, Volume= 0.167 af
Primary = 1.86 cfs @ 12.13 hrs, Volume= 0.167 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

## Link POA 4: Existing City Drain Manhole






Subcat Reach Pond Link

**Routing Diagram for 5719-POST**
Prepared by Altus Engineering, Printed 3/23/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment 1S: 88 Farm Lane Yard &** Runoff Area=1,046 sf 57.07% Impervious Runoff Depth=3.79"
Flow Length=25' Tc=6.0 min CN=71 Runoff=0.11 cfs 0.008 af

**Subcatchment 2S: City ROW Area South of** Runoff Area=5,093 sf 6.11% Impervious Runoff Depth=0.95"
Flow Length=136' Tc=6.4 min CN=41 Runoff=0.08 cfs 0.009 af

**Subcatchment 3S: Northern Area of the** Runoff Area=31,903 sf 14.85% Impervious Runoff Depth=1.19"
Flow Length=251' Tc=6.0 min CN=44 Runoff=0.75 cfs 0.073 af

**Subcatchment 4.1S: Bulk of the Property -** Runoff Area=55,097 sf 29.76% Impervious Runoff Depth=2.17"
Flow Length=370' Tc=6.0 min CN=55 Runoff=3.02 cfs 0.229 af

**Subcatchment 4.2S: Southern Half of** Runoff Area=4,478 sf 74.39% Impervious Runoff Depth=5.10"
Flow Length=283' Tc=6.0 min CN=83 Runoff=0.60 cfs 0.044 af

**Pond 3.1P: Stormwater Pond #2 - Modified** Peak Elev=38.96' Storage=1,682 cf Inflow=0.75 cfs 0.073 af
Discarded=0.05 cfs 0.073 af Primary=0.00 cfs 0.000 af Outflow=0.05 cfs 0.073 af

**Pond 3.2P: DMH-1** Peak Elev=36.90' Inflow=2.89 cfs 0.229 af
12.0" Round Culvert n=0.012 L=32.0' S=0.0063 '/' Outflow=2.89 cfs 0.229 af

**Pond 4.1P: Stormwater Pond #1 (Bioretention)** Peak Elev=41.87' Storage=791 cf Inflow=3.02 cfs 0.229 af
Outflow=2.89 cfs 0.229 af

**Pond 4.2P: CB-1** Peak Elev=36.32' Inflow=3.44 cfs 0.273 af
12.0" Round Culvert n=0.012 L=160.0' S=0.0050 '/' Outflow=3.44 cfs 0.273 af

**Link POA 1: Farm Lane Road** Inflow=0.11 cfs 0.008 af
Primary=0.11 cfs 0.008 af

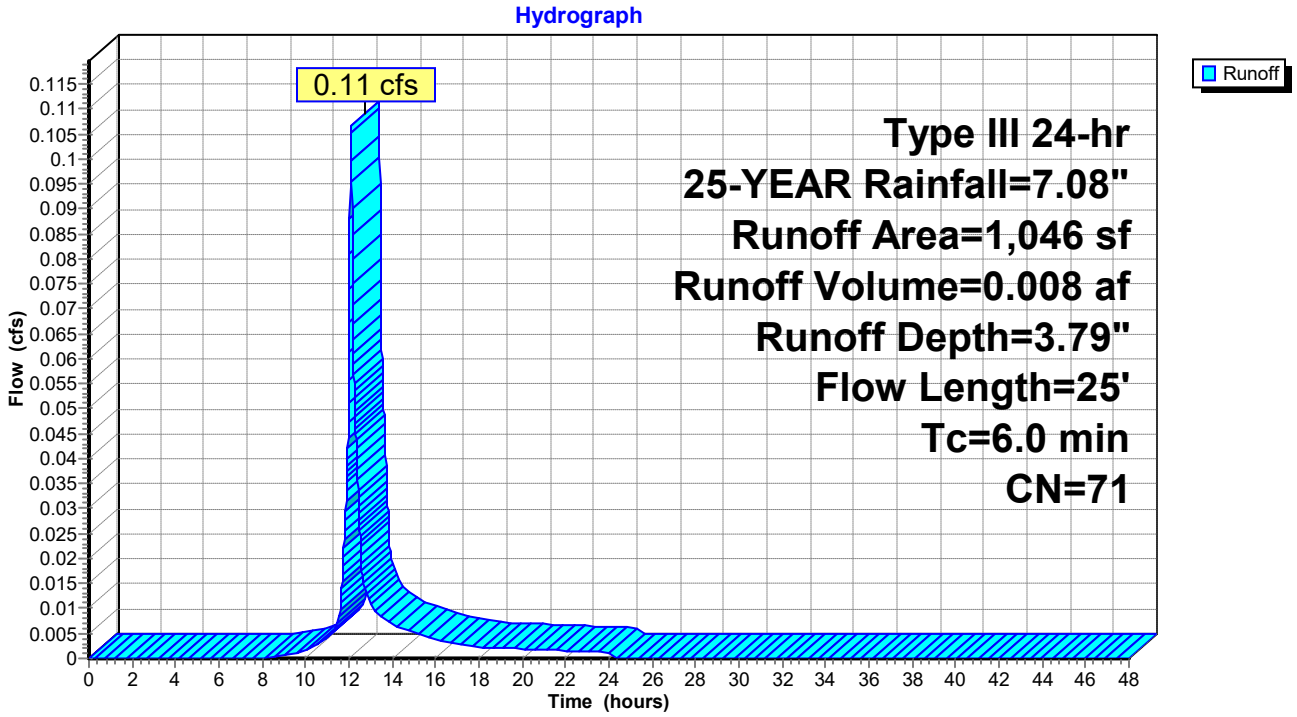
**Link POA 2: Abutting Property** Inflow=0.08 cfs 0.009 af
Primary=0.08 cfs 0.009 af

**Link POA 3: Existing Natural Depression** Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

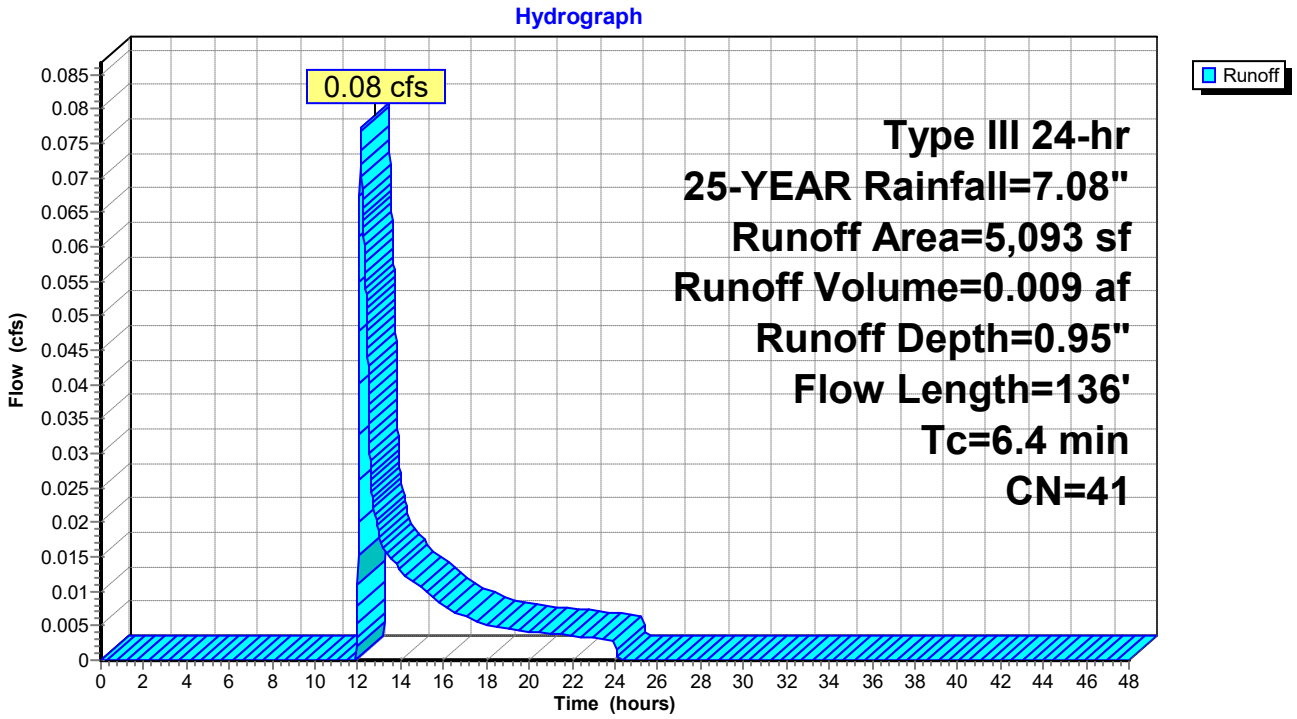
**Link POA 4: Existing City Drain Manhole** Inflow=3.44 cfs 0.273 af
Primary=3.44 cfs 0.273 af

**Total Runoff Area = 2.241 ac Runoff Volume = 0.362 af Average Runoff Depth = 1.94"**
**74.01% Pervious = 1.658 ac 25.99% Impervious = 0.583 ac**

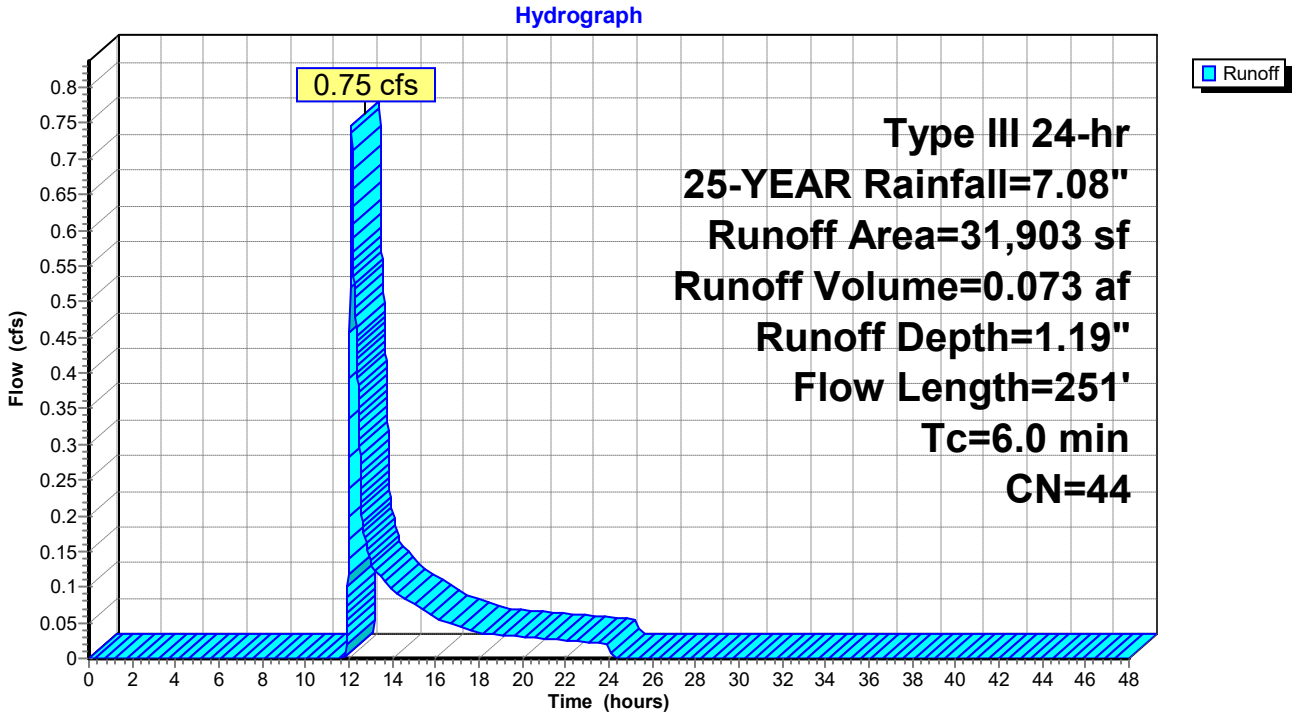
## Subcatchment 1S: 88 Farm Lane Yard & Driveway



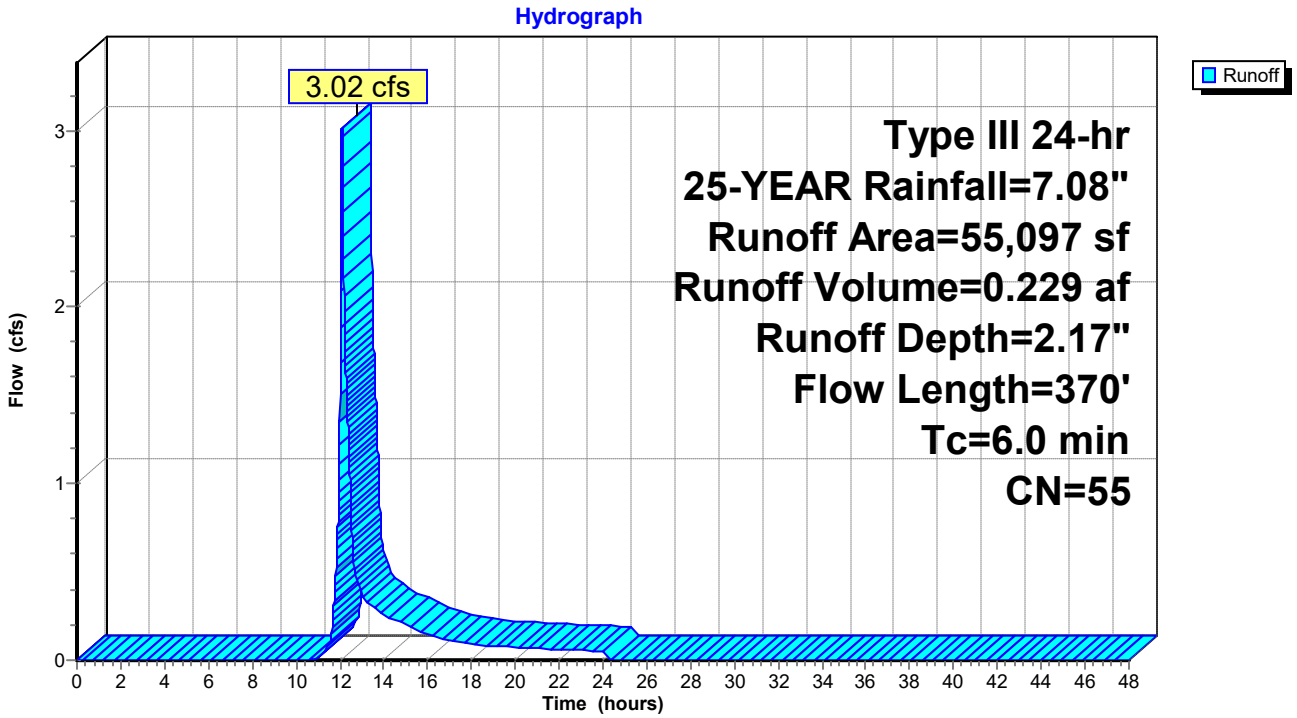

## Subcatchment 2S: City ROW Area South of Proposed Road



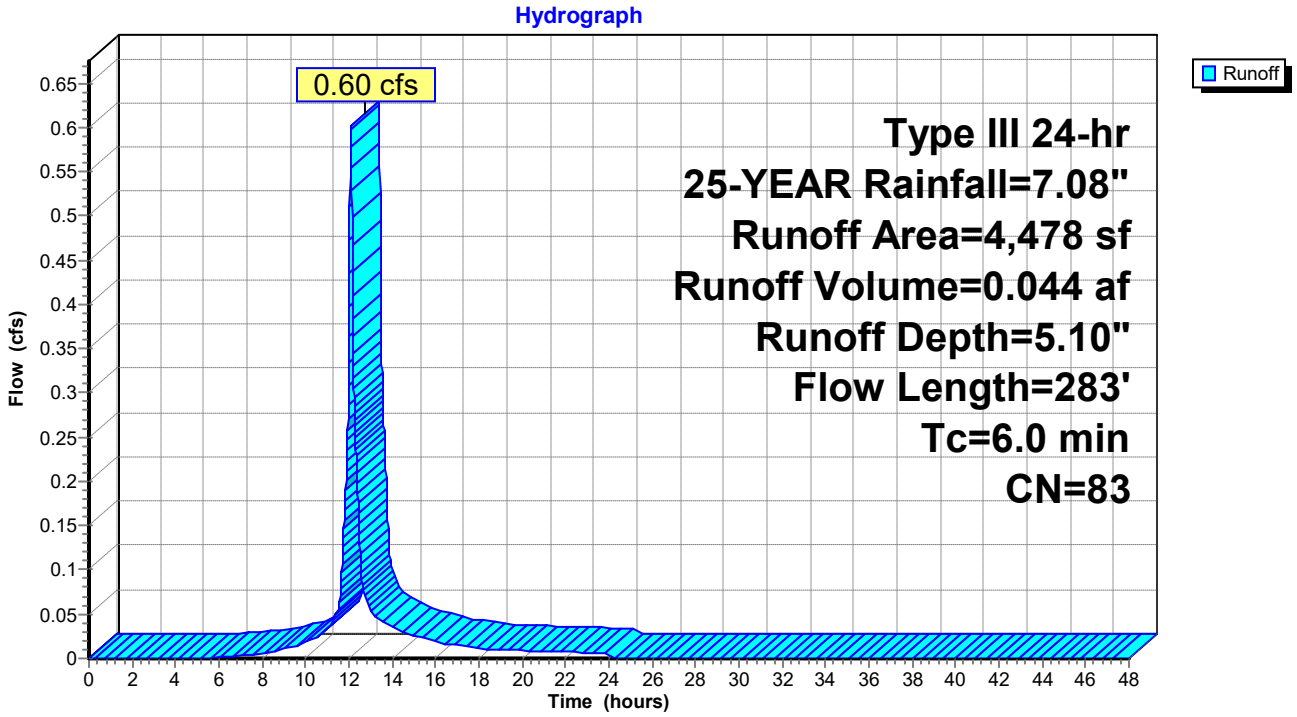
## Subcatchment 3S: Northern Area of the Watershed - "Lot 3"



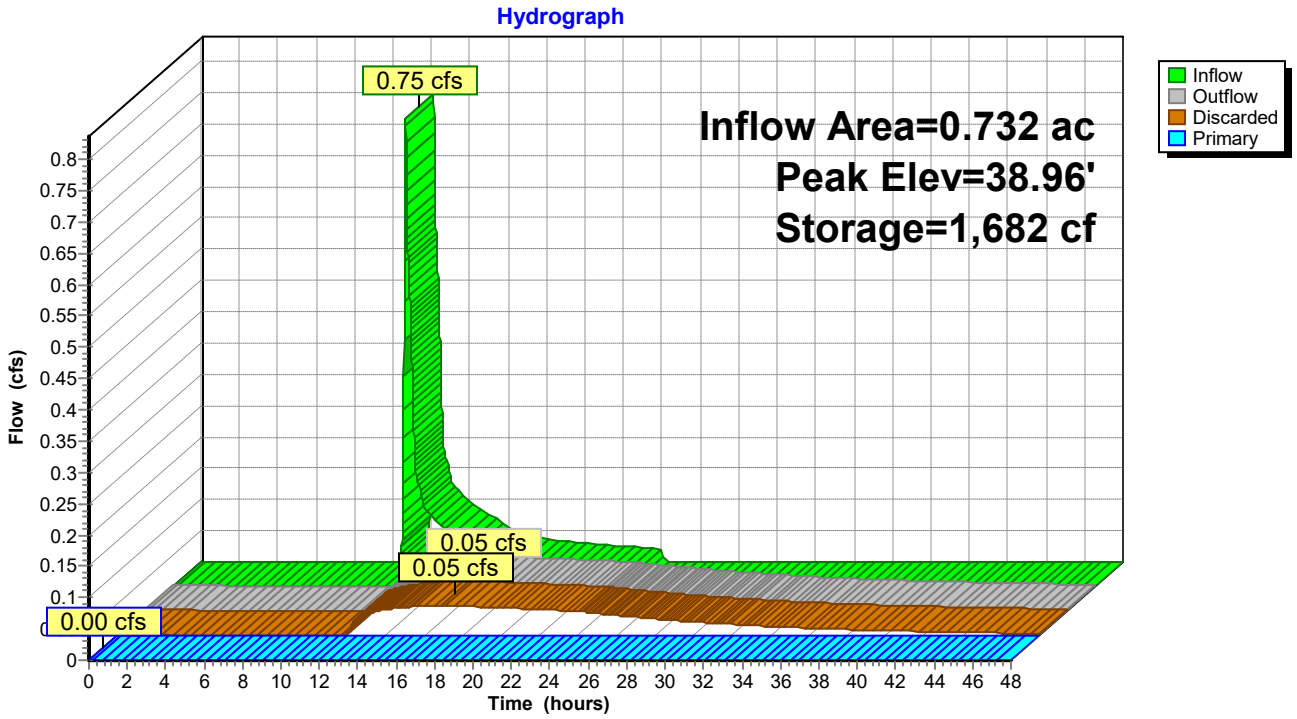

## Subcatchment 4.1S: Bulk of the Property - Northern Half of the Proposed Road, Existing Home and "Lot 2"



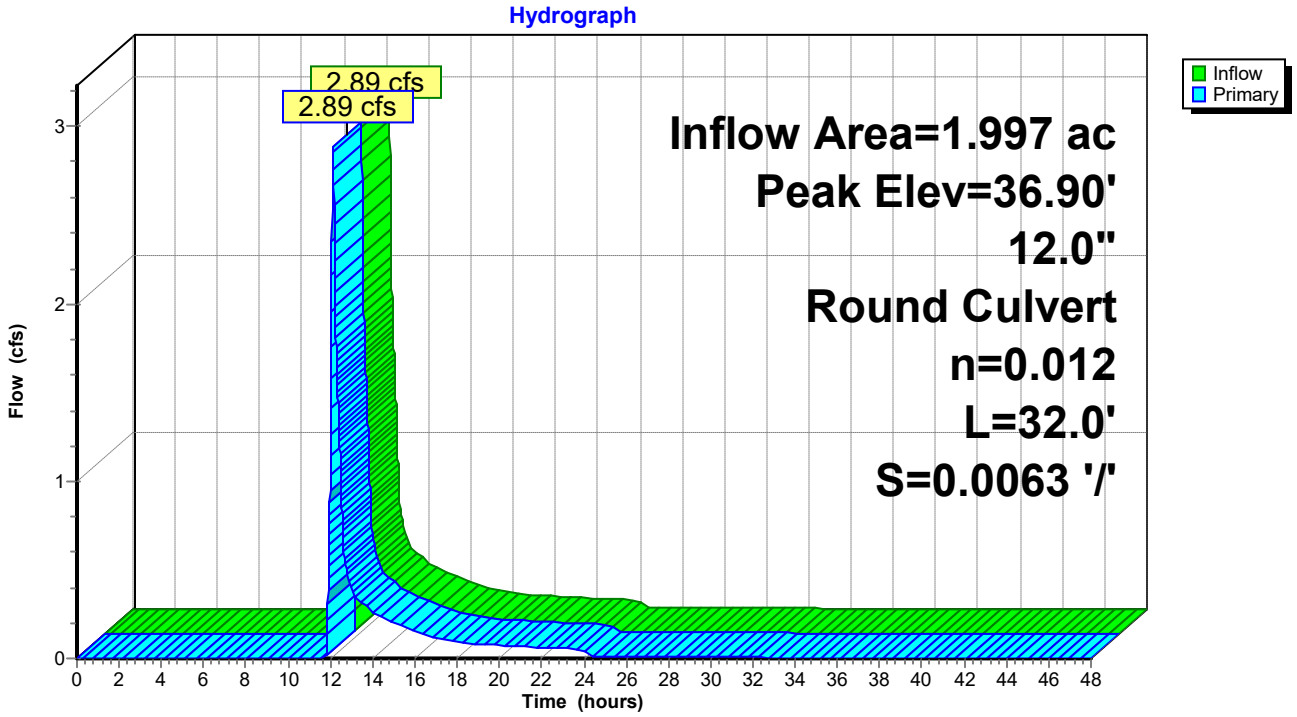
## Subcatchment 4.2S: Southern Half of Proposed Road



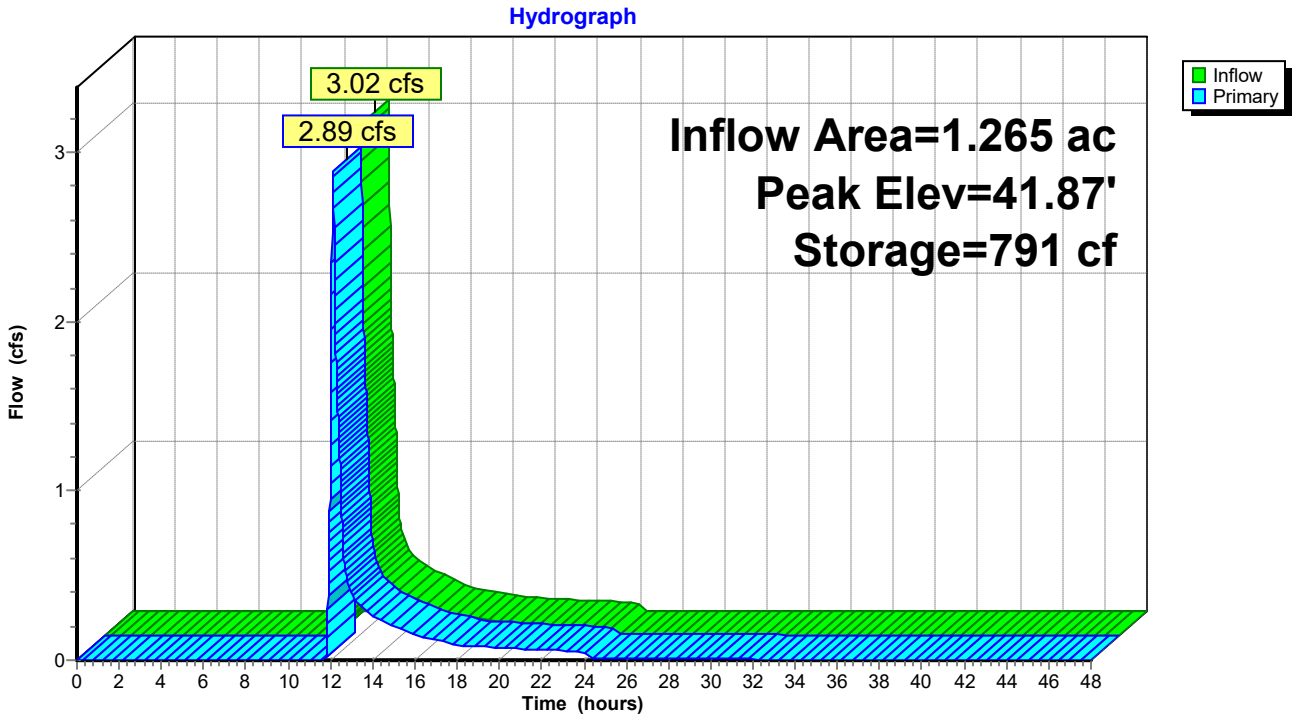

## Pond 3.1P: Stormwater Pond #2 - Modified Natural Depression



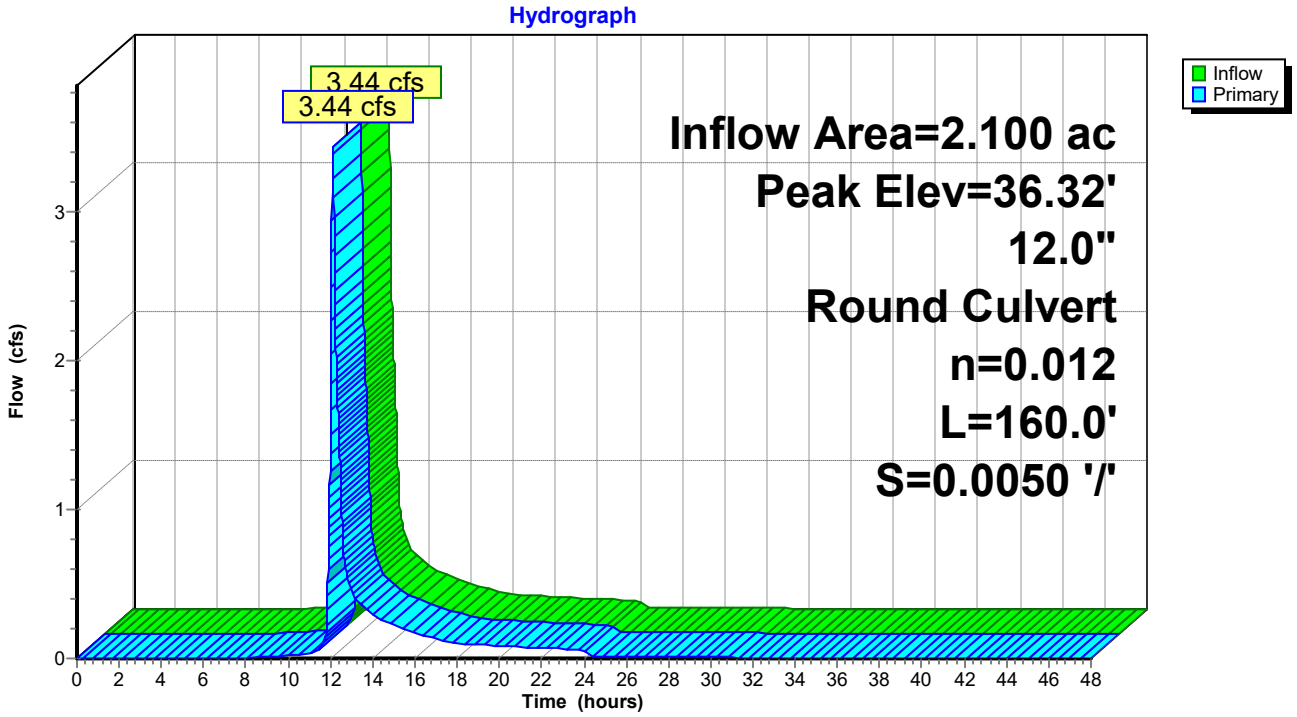
## Pond 3.2P: DMH-1



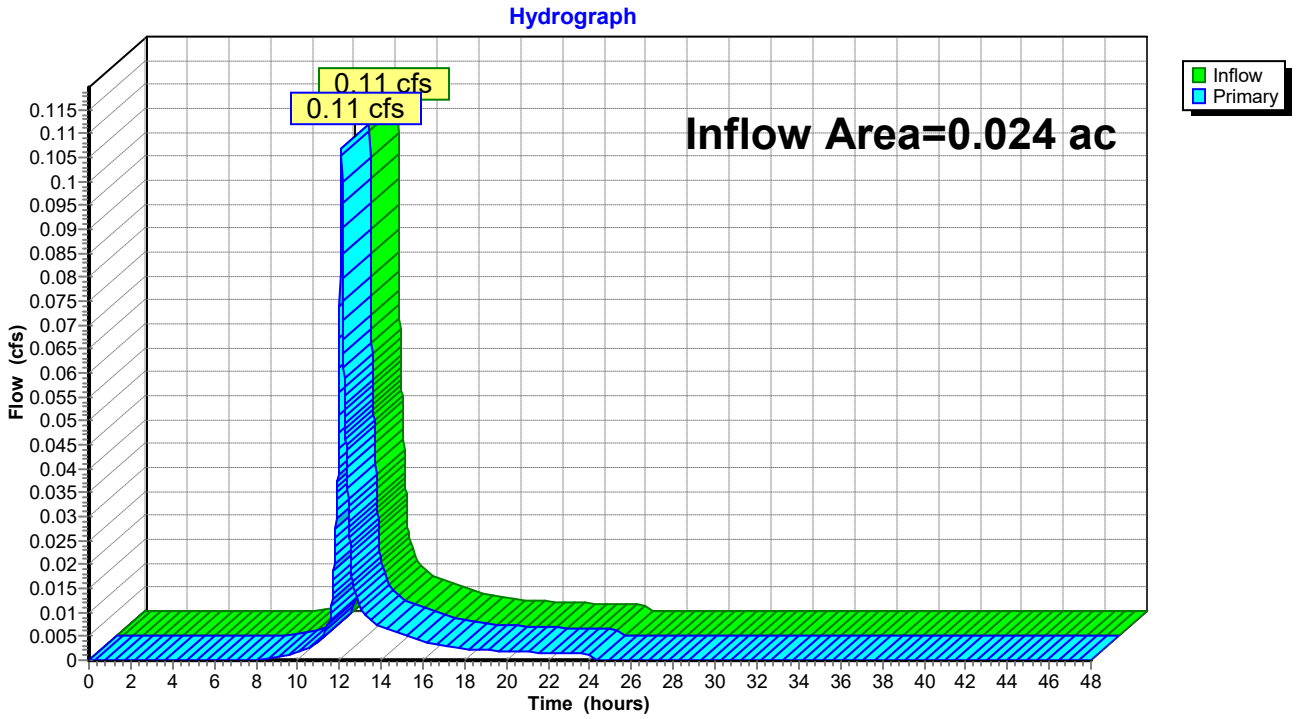

## Pond 4.1P: Stormwater Pond #1 (Bioretention)



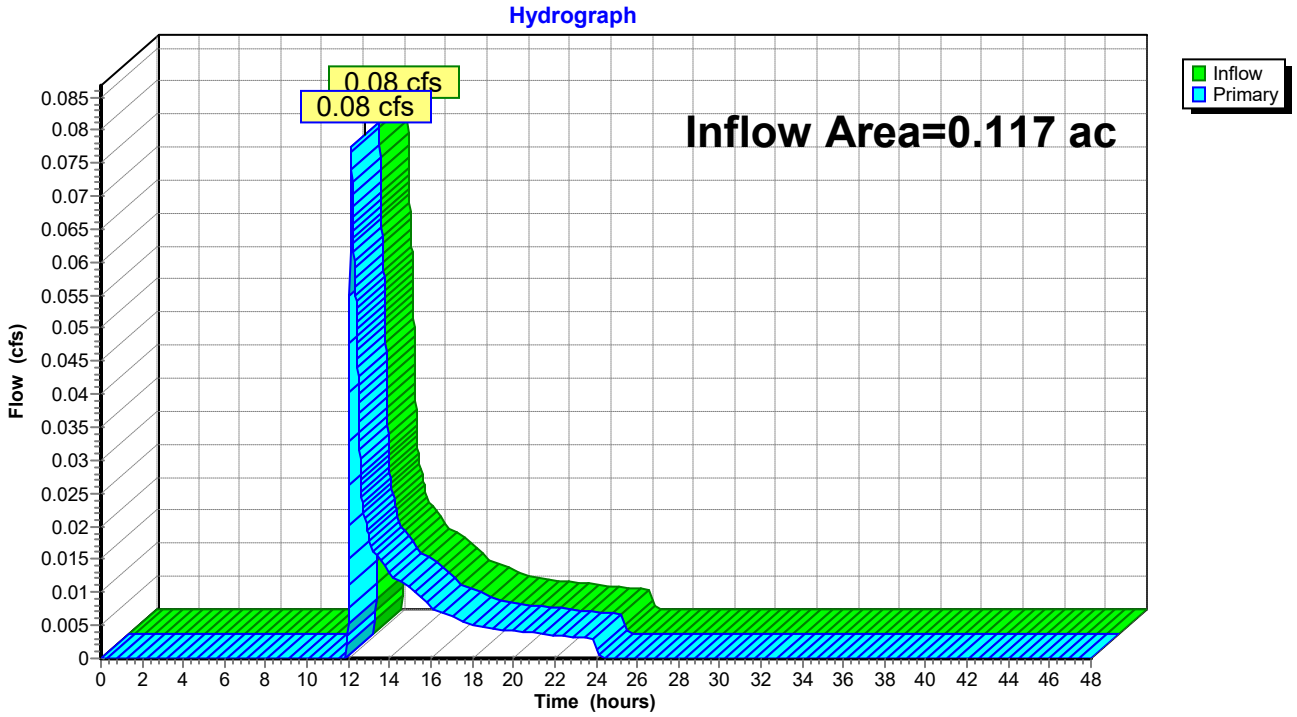
## Pond 4.2P: CB-1



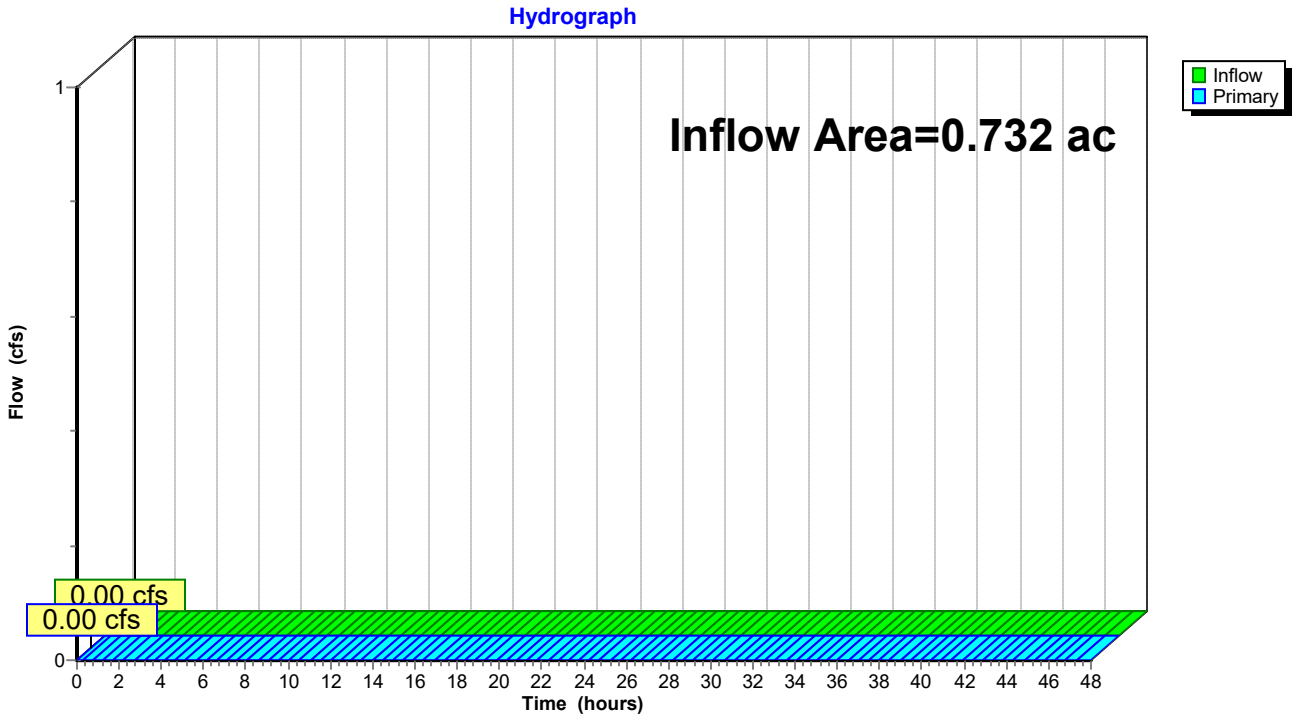

## Link POA 1: Farm Lane Road



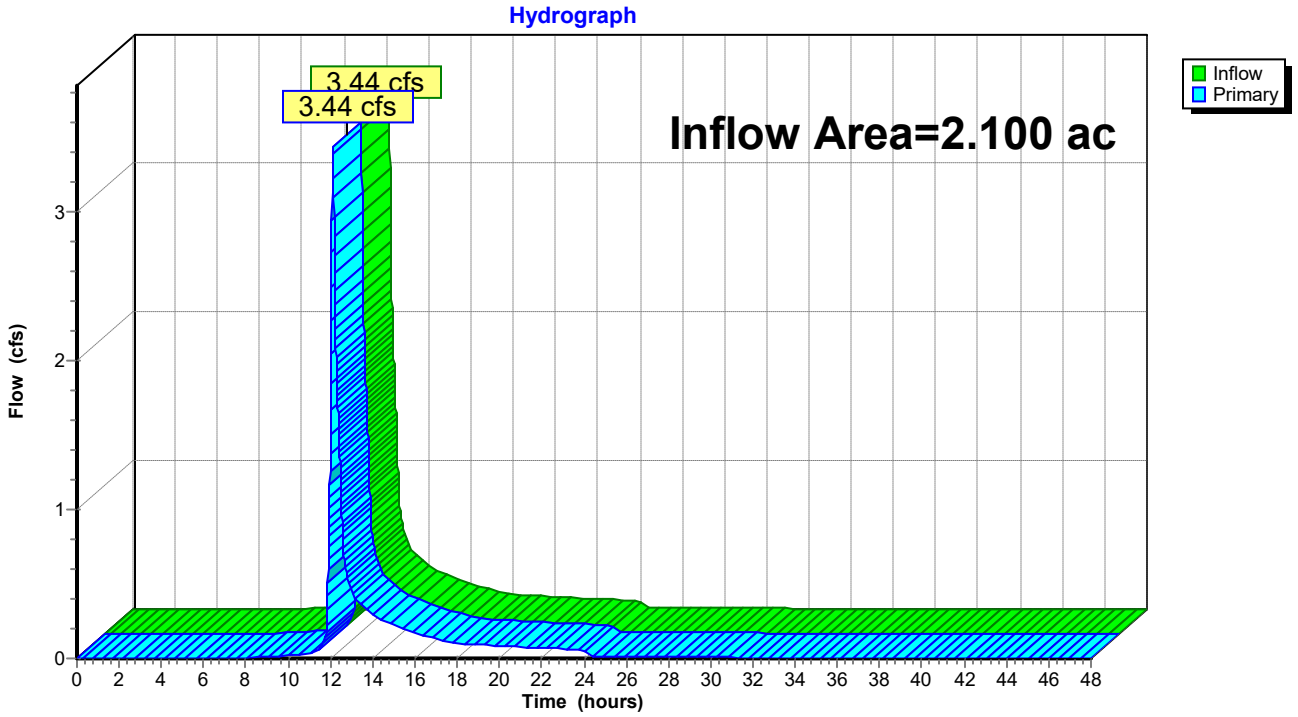
## Link POA 2: Abutting Property




## Link POA 3: Existing Natural Depression



## Link POA 4: Existing City Drain Manhole



# Section 5

# Precipitation Table

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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** | 43.079 degrees North |
| **Longitude** | 70.784 degrees West |
| **Elevation** | 10 feet |
| **Date/Time** | Wed Jan 21 2026 13:34:59 GMT-0500 (Eastern Standard Time) |

PRECIPITATION ESTIMATES INCREASED BY 15% FOR COSTAL COMMUNITY

2- YEAR: 2.66 * 1.15 = 3.06
10 - YEAR: 4.86 * 1.15 = 5.59
25 - YEAR: 6.16 * 1.15 = 7.08
50 - YEAR: 7.38 * 1.15 = 8.49

## Extreme Precipitation Estimates

| | 5min | 10min | 15min | 30min | 60min | 120min | | 1hr | 2hr | 3hr | 6hr | 12hr | 24hr | 48hr | | 1day | 2day | 4day | 7day | 10day | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1yr** | 0.26 | 0.40 | 0.50 | 0.65 | 0.81 | 1.04 | **1yr** | 0.70 | 0.98 | 1.21 | 1.56 | 2.03 | 2.66 | 2.91 | **1yr** | 2.35 | 2.80 | 3.21 | 3.93 | 4.54 | **1yr** |
| **2yr** | 0.32 | 0.50 | 0.62 | 0.81 | 1.02 | 1.30 | **2yr** | 0.88 | 1.18 | 1.51 | 1.94 | 2.48 | 3.20 | 3.56 | **2yr** | 2.84 | 3.42 | 3.93 | 4.67 | 5.31 | **2yr** |
| **5yr** | 0.37 | 0.58 | 0.73 | 0.97 | 1.24 | 1.60 | **5yr** | 1.07 | 1.46 | 1.88 | 2.42 | 3.13 | 4.06 | 4.57 | **5yr** | 3.59 | 4.39 | 5.03 | 5.92 | 6.69 | **5yr** |
| **10yr** | 0.41 | 0.65 | 0.82 | 1.11 | 1.44 | 1.88 | **10yr** | 1.25 | 1.72 | 2.22 | 2.88 | 3.74 | 4.86 | 5.52 | **10yr** | 4.30 | 5.31 | 6.06 | 7.09 | 7.96 | **10yr** |
| **25yr** | 0.48 | 0.76 | 0.96 | 1.33 | 1.76 | 2.32 | **25yr** | 1.52 | 2.13 | 2.76 | 3.61 | 4.72 | 6.16 | 7.08 | **25yr** | 5.45 | 6.81 | 7.77 | 9.00 | 10.03 | **25yr** |
| **50yr** | 0.53 | 0.85 | 1.09 | 1.53 | 2.06 | 2.74 | **50yr** | 1.77 | 2.51 | 3.27 | 4.30 | 5.64 | 7.38 | 8.56 | **50yr** | 6.53 | 8.24 | 9.38 | 10.78 | 11.96 | **50yr** |
| **100yr** | 0.60 | 0.97 | 1.25 | 1.76 | 2.40 | 3.22 | **100yr** | 2.07 | 2.96 | 3.86 | 5.11 | 6.73 | 8.84 | 10.36 | **100yr** | 7.82 | 9.96 | 11.33 | 12.93 | 14.26 | **100yr** |
| **200yr** | 0.67 | 1.09 | 1.41 | 2.03 | 2.80 | 3.80 | **200yr** | 2.41 | 3.49 | 4.58 | 6.09 | 8.05 | 10.59 | 12.52 | **200yr** | 9.37 | 12.04 | 13.69 | 15.50 | 17.00 | **200yr** |
| **500yr** | 0.79 | 1.30 | 1.69 | 2.46 | 3.44 | 4.72 | **500yr** | 2.97 | 4.35 | 5.71 | 7.65 | 10.18 | 13.46 | 16.11 | **500yr** | 11.91 | 15.49 | 17.58 | 19.72 | 21.47 | **500yr** |

## Lower Confidence Limits

| | 5min | 10min | 15min | 30min | 60min | 120min | | 1hr | 2hr | 3hr | 6hr | 12hr | 24hr | 48hr | | 1day | 2day | 4day | 7day | 10day | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1yr** | 0.23 | 0.36 | 0.44 | 0.59 | 0.73 | 0.89 | **1yr** | 0.63 | 0.87 | 0.92 | 1.32 | 1.67 | 2.22 | 2.50 | **1yr** | 1.96 | 2.41 | 2.85 | 3.16 | 3.87 | **1yr** |
| **2yr** | 0.31 | 0.49 | 0.60 | 0.81 | 1.00 | 1.19 | **2yr** | 0.86 | 1.16 | 1.37 | 1.82 | 2.34 | 3.05 | 3.45 | **2yr** | 2.70 | 3.32 | 3.81 | 4.54 | 5.06 | **2yr** |
| **5yr** | 0.35 | 0.54 | 0.67 | 0.92 | 1.17 | 1.40 | **5yr** | 1.01 | 1.37 | 1.61 | 2.12 | 2.74 | 3.78 | 4.19 | **5yr** | 3.35 | 4.03 | 4.71 | 5.53 | 6.23 | **5yr** |
| **10yr** | 0.38 | 0.59 | 0.73 | 1.02 | 1.32 | 1.60 | **10yr** | 1.14 | 1.56 | 1.81 | 2.40 | 3.07 | 4.37 | 4.86 | **10yr** | 3.87 | 4.68 | 5.43 | 6.41 | 7.19 | **10yr** |
| **25yr** | 0.44 | 0.67 | 0.83 | 1.18 | 1.56 | 1.90 | **25yr** | 1.35 | 1.86 | 2.10 | 2.77 | 3.55 | 4.68 | 5.90 | **25yr** | 4.14 | 5.67 | 6.64 | 7.79 | 8.68 | **25yr** |
| **50yr** | 0.48 | 0.73 | 0.91 | 1.31 | 1.76 | 2.17 | **50yr** | 1.52 | 2.12 | 2.35 | 3.09 | 3.96 | 5.28 | 6.82 | **50yr** | 4.67 | 6.56 | 7.73 | 9.04 | 10.02 | **50yr** |
| **100yr** | 0.54 | 0.81 | 1.01 | 1.46 | 2.01 | 2.47 | **100yr** | 1.73 | 2.42 | 2.63 | 3.44 | 4.38 | 5.93 | 7.88 | **100yr** | 5.25 | 7.57 | 8.99 | 10.51 | 11.56 | **100yr** |
| **200yr** | 0.59 | 0.89 | 1.13 | 1.63 | 2.28 | 2.82 | **200yr** | 1.97 | 2.75 | 2.93 | 3.82 | 4.84 | 6.63 | 9.10 | **200yr** | 5.87 | 8.75 | 10.45 | 12.22 | 13.36 | **200yr** |
| **500yr** | 0.69 | 1.02 | 1.31 | 1.91 | 2.71 | 3.37 | **500yr** | 2.34 | 3.29 | 3.41 | 4.37 | 5.53 | 7.70 | 11.00 | **500yr** | 6.81 | 10.58 | 12.75 | 14.95 | 16.16 | **500yr** |

## Upper Confidence Limits

| | 5min | 10min | 15min | 30min | 60min | 120min | | 1hr | 2hr | 3hr | 6hr | 12hr | 24hr | 48hr | | 1day | 2day | 4day | 7day | 10day | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1yr** | 0.28 | 0.44 | 0.54 | 0.72 | 0.89 | 1.08 | **1yr** | 0.76 | 1.06 | 1.26 | 1.74 | 2.21 | 2.99 | 3.14 | **1yr** | 2.65 | 3.02 | 3.58 | 4.37 | 5.04 | **1yr** |
| **2yr** | 0.33 | 0.52 | 0.64 | 0.86 | 1.06 | 1.26 | **2yr** | 0.92 | 1.24 | 1.48 | 1.96 | 2.51 | 3.42 | 3.69 | **2yr** | 3.03 | 3.55 | 4.07 | 4.82 | 5.63 | **2yr** |
| **5yr** | 0.40 | 0.61 | 0.76 | 1.05 | 1.33 | 1.61 | **5yr** | 1.15 | 1.58 | 1.88 | 2.53 | 3.24 | 4.33 | 4.94 | **5yr** | 3.83 | 4.75 | 5.36 | 6.35 | 7.13 | **5yr** |
| **10yr** | 0.47 | 0.72 | 0.89 | 1.24 | 1.60 | 1.97 | **10yr** | 1.38 | 1.92 | 2.27 | 3.10 | 3.94 | 5.33 | 6.17 | **10yr** | 4.72 | 5.93 | 6.77 | 7.81 | 8.72 | **10yr** |
| **25yr** | 0.57 | 0.87 | 1.08 | 1.54 | 2.03 | 2.55 | **25yr** | 1.75 | 2.50 | 2.94 | 4.06 | 5.12 | 7.80 | 8.29 | **25yr** | 6.90 | 7.97 | 9.07 | 10.29 | 11.36 | **25yr** |
| **50yr** | 0.66 | 1.01 | 1.26 | 1.81 | 2.44 | 3.10 | **50yr** | 2.10 | 3.04 | 3.58 | 4.97 | 6.27 | 9.77 | 10.39 | **50yr** | 8.65 | 9.99 | 11.33 | 12.66 | 13.90 | **50yr** |
| **100yr** | 0.78 | 1.18 | 1.48 | 2.14 | 2.93 | 3.77 | **100yr** | 2.53 | 3.69 | 4.35 | 6.12 | 7.69 | 12.24 | 13.01 | **100yr** | 10.83 | 12.51 | 14.15 | 15.61 | 17.02 | **100yr** |
| **200yr** | 0.91 | 1.37 | 1.74 | 2.52 | 3.51 | 4.60 | **200yr** | 3.03 | 4.50 | 5.30 | 7.53 | 9.42 | 15.36 | 16.31 | **200yr** | 13.59 | 15.69 | 17.69 | 19.23 | 20.83 | **200yr** |
| **500yr** | 1.13 | 1.68 | 2.16 | 3.14 | 4.47 | 5.97 | **500yr** | 3.85 | 5.83 | 6.88 | 9.94 | 12.37 | 20.77 | 22.01 | **500yr** | 18.38 | 21.16 | 23.77 | 25.35 | 27.24 | **500yr** |

Powered by ACIS Northeast Regional Climate Center

# Section 6

# NRCS Soils Report

ALTUS ENGINEERING

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Rockingham County, New Hampshire




January 8, 2026

# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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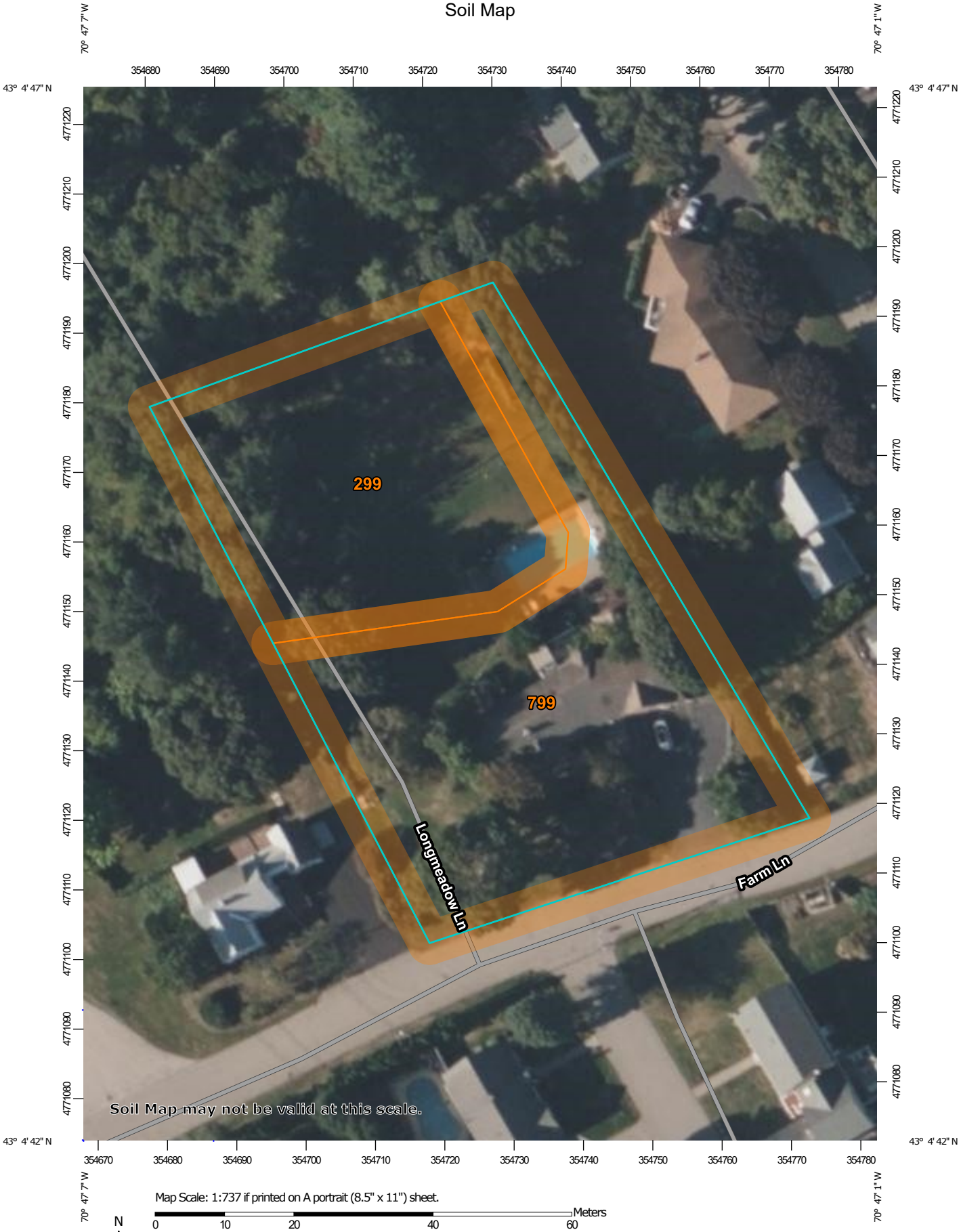
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# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report
## Soil Map




Map Scale: 1:737 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 10 20 40 60

Feet: 0 35 70 140 210

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

## MAP LEGEND

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

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

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

**Water Features**
- Streams and Canals

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

**Background**
- Aerial Photography

## MAP INFORMATION

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

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

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

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

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

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

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

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

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

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

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

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 299 | Udorthents, smoothed | 0.5 | 39.4% |
| 799 | Urban land-Canton complex, 3 to 15 percent slopes | 0.7 | 60.6% |
| **Totals for Area of Interest** | | **1.2** | **100.0%** |

# Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# Rockingham County, New Hampshire

## 299—Udorthents, smoothed

**Map Unit Setting**

*National map unit symbol:* 9cmt
*Elevation:* 0 to 840 feet
*Mean annual precipitation:* 44 to 49 inches
*Mean annual air temperature:* 48 degrees F
*Frost-free period:* 155 to 165 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Udorthents and similar soils:* 100 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Udorthents**

**Properties and qualities**

*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Excessively drained
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None

## 799—Urban land-Canton complex, 3 to 15 percent slopes

**Map Unit Setting**

*National map unit symbol:* 9cq0
*Elevation:* 0 to 1,000 feet
*Mean annual precipitation:* 42 to 46 inches
*Mean annual air temperature:* 45 to 48 degrees F
*Frost-free period:* 120 to 160 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Urban land:* 55 percent
*Canton and similar soils:* 20 percent
*Minor components:* 25 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Canton**

**Setting**

*Parent material:* Till

**Typical profile**

*H1 - 0 to 5 inches:* gravelly fine sandy loam
*H2 - 5 to 21 inches:* gravelly fine sandy loam
*H3 - 21 to 60 inches:* loamy sand

**Properties and qualities**

*Slope:* 3 to 8 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Low
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Low (about 5.3 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 2e
*Hydrologic Soil Group:* A
*Ecological site:* F144AY034CT - Well Drained Till Uplands
*Hydric soil rating:* No

**Minor Components**

**Udorthents**

*Percent of map unit:* 5 percent
*Hydric soil rating:* No

**Squamscott and scitico**

*Percent of map unit:* 4 percent
*Landform:* Marine terraces
*Hydric soil rating:* Yes

**Boxford and eldridge**

*Percent of map unit:* 4 percent
*Hydric soil rating:* No

**Walpole**

*Percent of map unit:* 4 percent
*Landform:* Depressions
*Hydric soil rating:* Yes

**Scituate and newfields**

*Percent of map unit:* 4 percent
*Hydric soil rating:* No

**Chatfield**

*Percent of map unit:* 4 percent
*Hydric soil rating:* No

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# Section 7

# Stormwater Operations & Maintenance Plan Inspection Form Stormwater Management Plan

ALTUS ENGINEERING

# STORMWATER INSPECTION AND MAINTENANCE MANUAL

## 86 Farm Lane Subdivision
### Tax Map 236, Lot 74

**OWNER:**
**Flipping Berger's, LLC.**
**71 Bracket Road**
**Portsmouth, NH 03801**

Proper inspection, maintenance, and repair are key elements in maintaining a successful stormwater management program on a developed property. Routine inspections ensure permit compliance and reduce the potential for deterioration of infrastructure or reduced water quality. The following responsible parties shall be in charge of managing the stormwater facilities:

***RESPONSIBLE PARTIES:***

| | | | |
|---|---|---|---|
| ***Owner***: | *Jeanette MacDonald* | | *-* |
| | *Name* | *Company* | *Phone* |
| ***Inspection:*** | *Flipping Berger's, LLC* | | *(914) 299-4438* |
| | *Name* | *Company* | *Phone* |
| ***Maintenance:*** | *Flipping Berger's, LLC* | | *(603) 299-4438* |
| | *Name* | *Company* | *Phone* |

***NOTES:***

***Photographs of each stormwater BMP are to be taken at each inspection and submitted with the annual inspection reports.***

***Inspection and maintenance responsibilities shall transfer to any future property owner(s).***

***This manual shall be updated as needed to reflect any changes related to any transfer of ownership and/or any delegation of inspection and maintenance responsibilities to another entity***

ALTUS ENGINEERING

## STORMWATER PONDS/CELLS (AKA RAINGARDENS) BIORETENTION & INFILTRATION

*Function* – Bioretention and infiltration ponds provide treatment to runoff prior to directing it to stormwater systems by filtering sediment and suspended solids, trapping them in the bottom of the garden and in the filter media itself. Additional treatment is provided by the native water-tolerant vegetation which removes nutrients and other pollutants through bio-uptake. Stormwater detention and infiltration can also be provided as the filtering process slows runoff, decreases the peak rate of discharge and promotes groundwater recharge.

Bioretention and infiltration ponds shall be managed (Per AGR 3800 and RSA 430:53) to: prevent and control the spread of invasive plant, insect, and fungal species; minimize the adverse environmental and economic effects invasive species cause to agriculture, forests, wetlands, wildlife, and other natural resources of the state; and protect the public from potential health problems attributed to certain invasive species.

*Maintenance*

- Inspect annually and after significant rainfall events.
- If a raingarden does not completely drain within 72-hours following a rainfall event, then a qualified professional shall be retained to assess the condition of the facility to determine measures required to restore its filtration and/or infiltration function(s), including but not limited to removal of accumulated sediments and/or replacement or reconstruction of the filter media. Filter media shall be replaced with material matching the specification on the design drawings or the NHDES Stormwater Manual.
- Replace any riprap dislodged from spillways, inlets and outlets.
- Remove any obstructions, litter and accumulated sediment or debris as warranted but no less than once a year.
- Mowing of any grassed area in or adjacent to a raingarden, including its berm, shall be performed at least twice per year (when areas are not inundated) to keep the vegetation in vigorous condition. The cut grass shall be removed to prevent the decaying organic litter from clogging the filter media or choking other vegetation.
- Select vegetation should be maintained in healthy condition. This may include pruning, removal and replacement of dead or diseased vegetation.
- Remove any invasive species, Per AGR 3800 and RSA 430:53.
- Remove any hard wood growth from raingardens.

## DRAINAGE PIPES

*Function* – Drainage pipes convey stormwater away from buildings, walkways, and parking areas and to surface waters or closed drainage systems.

*Maintenance*

- Drainage pipes shall be inspected semi-annually, or more often as needed, for accumulation of debris and structural integrity. Leaves and other debris shall be removed from the inlet and outlet to insure the functionality of drainage structures. Debris shall be disposed of on site where it will not concentrate back at the drainage structures or at a solid waste disposal facility.

## DEEP SUMP CATCH BASINS

*Function* – Catch basins collect stormwater, primarily from paved surfaces and roofs. Stormwater from paved areas often contains sediment and contaminants. Catch basin sumps serve to trap sediment, trace metals, nutrients and debris. Hooded catch basins trap hydrocarbons and floating debris.

*Maintenance*

- Remove leaves and debris from structure grates on an as-needed basis.
- Sumps shall be inspected and cleaned annually and any removed sediment and debris shall be disposed of at a solid waste disposal facility.

## RIP RAP OUTLETS, SWALES AND BUFFERS

*Function* – Rip rap outlets slow the velocity of runoff, minimizing erosion and maximizing the treatment capabilities of associated buffers. Vegetated buffers, either forested or meadow, slow runoff which promotes and reduces peak rates of runoff. The reduced velocities and the presence of vegetation encourage the filtration of sediment and the limited bio-uptake of nutrients.

*Maintenance*

- Inspect riprap and buffers at least annually for signs of erosion, sediment buildup, or vegetation loss.
- If a meadow buffer, provide periodic mowing as needed to maintain a healthy stand of herbaceous vegetation.
- If a forested buffer, then the buffer should be maintained in an undisturbed condition, unless erosion occurs.
- If erosion of the buffer (forested or meadow) occurs, eroded areas should be repaired and replanted with vegetation similar to the remaining buffer. Corrective action should include eliminating the source of the erosion problem and may require retrofit or reconstruction of the level spreader.
- Remove debris and accumulated sediment and dispose of properly.

## VEGETATIVE SWALES

*Function* – Vegetative swales filter sediment from stormwater, promote infiltration, and the uptake of contaminates. They are designed to treat runoff and dispose of it safely into the natural drainage system.

*Maintenance*

- Timely maintenance is important to keep a swale in good working condition. Mowing of grassed swales shall be monthly to keep the vegetation in vigorous condition. The cut vegetation shall be removed to prevent the decaying organic litter from adding pollutants to the discharge from the swale.
- Fertilizing shall be bi-annual or as recommended from soil testing.
- Inspect swales following significant rainfall events.
- Woody vegetation shall not be allowed to become established in the swales or rock riprap outlet protection and if present shall be removed.
- Accumulated debris disrupts flow and leads to clogging and erosion. Remove debris and litter as necessary.
- Inspect for eroded areas. Determine cause of erosion and correct deficiency as required. Monitor repaired areas.

## LANDSCAPED AREAS - FERTILIZER MANAGEMENT

*Function* – Fertilizer management involves controlling the rate, timing and method of fertilizer application so that the nutrients are taken up by the plants thereby reducing the chance of polluting the surface and ground waters. Fertilizer management can be effective in reducing the amounts of phosphorus and nitrogen in runoff from landscaped areas, particularly lawns.

*Maintenance*

- Have the soil tested by your landscaper or local Soil Conservation Service for nutrient requirements and follow the recommendations.
- Do not apply fertilizer to frozen ground.
- Clean up any fertilizer spills.
- Do not allow fertilizer to be broadcast into water bodies.
- When fertilizing a lawn, water thoroughly, but do not create a situation where water runs off the surface of the lawn.

## LANDSCAPED AREAS - LITTER CONTROL

*Function* – Landscaped areas tend to filter debris and contaminates that may block drainage systems and pollute the surface and ground waters.

*Maintenance*

- Litter Control and lawn maintenance involves removing litter such as trash, leaves, lawn clippings, pet waste, oil and chemicals from streets, parking lots, and lawns before materials are transported into surface waters.
- Litter control shall be implemented as part of the grounds maintenance program.

## CONTROL OF INVASIVE PLANTS

*Function* – Invasive plants are introduced, alien, or non-native plants, which have been moved by people from their native habitat to a new area. Some exotic plants are imported for human use such as landscaping, erosion control, or food crops. They also can arrive as "hitchhikers" among shipments of other plants, seeds, packing materials, or fresh produce. Some exotic plants become invasive and cause harm by:

- becoming weedy and overgrown;
- killing established shade trees;
- obstructing pipes and drainage systems;
- forming dense beds in water;
- lowering water levels in lakes, streams, and wetlands;
- destroying natural communities;
- promoting erosion on stream banks and hillsides; and
- resisting control except by hazardous chemical.

*Maintenance*

During maintenance activities, check for the presence of invasive plants and remove in a safe manner as described in the attached “Methods for Disposing Non-Native Invasive Plants” prepared by the UNH Cooperative Extension.

## GENERAL CLEAN UP

- Upon completion of the project, the contractor shall remove all temporary stormwater structures (i.e., temporary stone check dams, silt fence, temporary diversion swales, catch basin inlet filter, etc.). Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform to the existing grade, prepared, and seeded. Remove any sediment in catch basins and clean drainpipes that may have accumulated during construction.
- Once in operation, all paved areas of the site should be swept at least once annually at the end of winter/early spring prior to significant spring rains.

## APPPENDIX

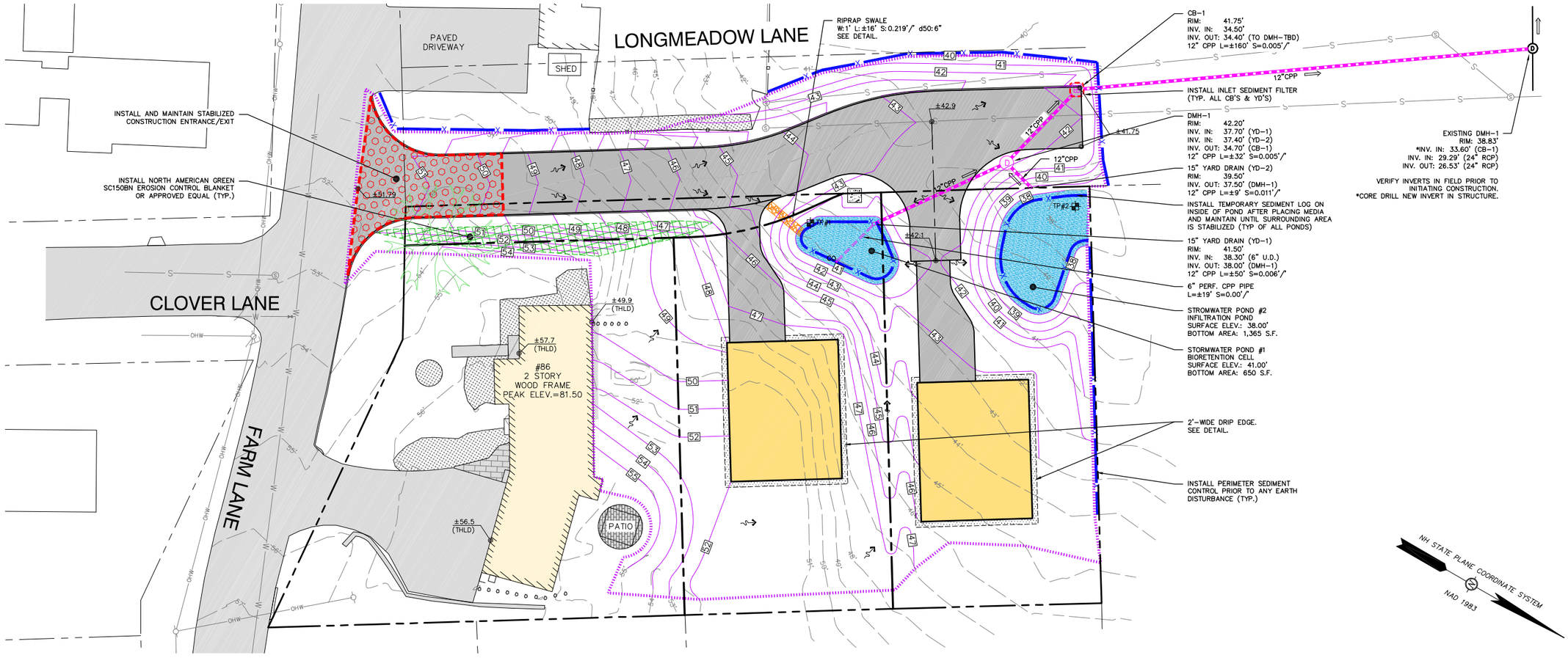
A. Stormwater System Operations and Maintenance Report
B. Stormwater Management Plan

# STORM WATER SYSTEM OPERATION AND MAINTENANCE REPORT

| General Information | | | |
|---|---|---|---|
| **Project Name** | | | |
| **Owner** | | | |
| **Inspector's Name(s)** | | | |
| **Inspector's Contact Information** | | | |
| **Date of Inspection** | | **Start Time:** | **End Time:** |
| **Type of Inspection:** ☐ Annual Report ☐ Post-storm event ☐ Due to a discharge of significant amounts of sediment | | | |
| **Notes:** | | | |

| General Site Questions and Discharges of Significant Amounts of Sediment | | | |
|---|---|---|---|
| **Subject** | | **Status** | **Notes** |
| *A discharge of significant amounts of sediment may be indicated by (but is not limited to) observations of the following. Note whether any are observed during this inspection:* | | | *Notes/ Action taken:* |
| 1 | Do the current site conditions reflect the attached site plan? | ❑Yes ❑No | |
| 2 | Is the site permanently stabilized, temporary erosion and sediment controls are removed, and stormwater discharges from construction activity are eliminated? | ❑Yes ❑No | |
| 3 | Is there evidence of the discharge of significant amounts of sediment to surface waters, or conveyance systems leading to surface waters? | ❑Yes ❑No | |

| Permit Coverage and Plans | | | | |
|---|---|---|---|---|
| **#** | **BMP/Facility** | **Inspected** | **Corrective Action Needed and Notes** | **Date Corrected** |
| | Bioretention Cell/ Infiltration Pond | ❑Yes ❑No | | |
| | Drainage Pipes | ❑Yes ❑No | | |
| | Deep Sump Catch Basins | ❑Yes ❑No | | |
| | Riprap Outlets, Swales and Buffers | ❑Yes ❑No | | |
| | Vegetative Swales | ❑Yes ❑No | | |
| | Site Vegetation & Landscaping | ❑Yes ❑No | | |




## GRADING & DRAINAGE NOTES

1. DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
2. CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
3. A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND THE MUNICIPAL ENGINEER SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
4. ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION. UNLESS OTHERWISE AGREED IN WRITING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING TEMPORARY BENCHMARKS (TBMS) AND PERFORMING ALL CONSTRUCTION SURVEY LAYOUT.
5. PRIOR TO CONSTRUCTION, FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING UTILITIES SCHEDULED TO REMAIN. PRESERVE AND PROTECT UTILITIES TO BE RETAINED.
6. THE LIMITS OF CONSTRUCTION DISTURBANCE SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY TREE CLEARING, STUMPING, GRUBBING OR EARTH MOVING OCCURS. WHERE CONSTRUCTION IS TO TAKE PLACE WITHIN 50' OF A PROPERTY LINE, THE PROPERTY LINE SHALL BE STAKED AT 50' MINIMUM INTERVALS.
7. PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES FOR FOUNDATIONS, PAVEMENT AREAS, UTILITY TRENCHES, AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL. IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER, EXPOSED SUBGRADES ARE SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN GROUND. THIS WILL LIKELY REQUIRE REMOVAL OF A FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATIONS. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST FREEZING.
8. IF SUITABLE, EXCAVATED MATERIALS SHALL BE PLACED AS FILL WITHIN UPLAND AREAS ONLY AND SHALL NOT BE PLACED WITHIN WETLANDS. PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION.
9. DEWATERING ACTIVITIES, IF REQUIRED, SHALL BE DONE IN ACCORDANCE WITH EPA AND NHDES REGULATIONS AND GUIDELINES.
10. DRAINAGE PIPE SHALL BE CORRUGATED POLYETHYLENE PIPE (CPP), TYPE ADS N-12 OR HANCOR H1-Q, OR PVC SDR 35 WHERE SPECIFIED. ALL STORMWATER PIPING REDUCERS, WYES AND TEES SHALL BE CONCENTRIC UNLESS OTHERWISE NOTED.
11. 2" RIGID INSULATION SHALL BE INSTALLED OVER DRAIN PIPES WHERE COVER IS < 2'.
12. ALL CATCH BASIN, MANHOLE AND OTHER DRAINAGE RIMS SHALL BE SET FLUSH WITH OR NO LESS THAN 0.1' BELOW FINISH GRADE. ANY RIM ABOVE SURROUNDING FINISH GRADE SHALL NOT BE ACCEPTED UNLESS OTHERWISE SPECIFIED. ALL DRAINAGE STRUCTURES WITHIN PAVED AREAS SHALL BE H-20 LOADING RATED.
13. IN ORDER TO PROVIDE VISUAL CLARITY ON THE PLANS, DRAINAGE AND OTHER UTILITY STRUCTURES MAY NOT BE DRAWN TO SCALE. SYMBOLS MAY NOT BE INDICATIVE OF THE CENTER OF A STRUCTURE, PARTICULARLY WHEN SHOWN ADJACENT TO A CURB LINE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER SIZING AND LOCATION OF ALL STRUCTURES AND IS DIRECTED TO RESOLVE ANY POTENTIAL DISCREPANCY WITH THE ENGINEER PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL PROTECT ALL RAINGARDENS FROM CONSTRUCTION STORMWATER RUNOFF. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED DURING CONSTRUCTION. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
15. ALL SPOT GRADES ARE AT FINISH GRADE AND BOTTOM OF CURB WHERE APPLICABLE. ADJUST GRADING AT EMERGENCY BUILDING EXITS AS NECESSARY TO ENSURE CODE COMPLIANCE. COORDINATE WITH ARCHITECT IF RAILINGS ARE REQUIRED.
16. UNLESS OTHERWISE NOTED, THE CONTRACTOR MAY CONNECT BUILDING AND RETAINING WALL FOUNDATION DRAINS TO THE NEAREST DRAINAGE STRUCTURE PROVIDED A MINIMUM 1% SLOPE CAN BE MAINTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FOUNDATION DRAINS WITH THE BUILDING AND WALL PLANS.
17. UPON COMPLETION OF CONSTRUCTION, ALL DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.
18. NO SNOW SHALL BE STORED IN ANY STORMWATER POND OR ANY OTHER STORMWATER BMP.
19. SEE SHEET C-3 FOR LEGEND.

## EROSION & SEDIMENT CONTROL NOTES

1. AREA OF DISTURBANCE = ±36,000 S.F. NHDES ALTERATION OF TERRAIN PERMIT NOT REQUIRED, INCLUDING LOT DEVELOPMENT.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN STANDARDS AND SPECIFICATIONS SET FORTH BY THE NH DEPARTMENT OF ENVIRONMENTAL SERVICES.
3. TEMPORARY INLET PROTECTION MEASURES SHALL BE INSTALLED AT ALL CULVERT ENTRANCES AND IN ALL CATCH BASINS WITHIN 100' OF THE PROJECT SITE WHEN SITE WORK WITHIN CONTRIBUTING AREAS IS ACTIVE OR SAID AREAS HAVE NOT BEEN STABILIZED.
4. ALL EROSION CONTROL BLANKETS AND FASTENERS SHALL BE BIDEGRADEABLE.
5. ALL EROSION CONTROL BLANKETS SHALL BE BY NORTH AMERICAN GREEN OR EQUAL AS APPROVED IN WRITING BY THE ENGINEER.
6. ALL SWALES WITH SLOPES OF 5% OR GREATER SHALL BE STABILIZED WITH RIPRAP PER THE DETAILS. ALL OTHER SWALES SHALL BE STABILIZED WITH NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKET.
7. THE STORMWATER PONDS SHOWN IN THIS PLAN SET SHALL BE CONSTRUCTED BEFORE EARTHWORK COMMENCES ON THE REMAINDER OF THE SITE. THE CONTRACTOR MAY USE THE POND AS A SEDIMENTATION POND UNTIL THE SITE IS STABILIZED. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM. SILT SOXX SHALL BE INSTALLED AROUND THE PERIMETER OF THE STORMWATER BASINS.
8. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM; WITH THE EXCEPTION OF DETENTION PONDS SHOULD A SEDIMENTATION POND BE REQUIRED.
9. TEMPORARY SEDIMENT LOG (SILTSOXX OR EQUAL APPROVED BY THE ENGINEER) SHALL BE INSTALLED AROUND THE INLETS OFF ALL CULVERTS AND THE BOTTOM PERIMETERS OF ALL STORMWATER PONDS. THESE MEASURES ARE TO REMAIN IN PLACE UNTIL ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
10. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS.
11. MATERIAL STOCKPILE & CONCRETE WASHOUT LOCATIONS SHOWN ARE CONCEPTUAL. THE CONTRACTOR MAY LOCATE STOCKPILES OR WASHOUT WHERE NECESSARY PROVIDED THAT PERIMETER SEDIMENT CONTROLS ARE PROPERLY INSTALLED.
12. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF LOAM, LIMESTONE, FERTILIZER, SEED, AND HAY MULCH OR EROSION CONTROL BLANKET USING APPROPRIATE SOIL STABILIZATION TECHNIQUES. SEE DETAILS FOR ADDITIONAL INFORMATION.
13. UPON COMPLETION OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED AND ANY AREAS DISTURBED BY THE REMOVAL SMOOTHED AND REVEGETATED.
14. SEE DEMOLITION & SITE PREPARATION PLAN AND DETAIL SHEETS FOR ADDITIONAL SEDIMENT AND EROSION CONTROL NOTES AND DETAILS.

## TEST PIT LOGS

EVALUATED BY ERIC D. WEINRIEB (PERMIT #809) ON JANUARY 14, 2026
WITNESSED BY DAVID DESFOSSES (TEST PIT 1 ONLY)

TEST PIT 1
0-9" 7.5 YR 3/3 – DARK BROWN GRASS MATT AND FINE SANDY LOAM, FRIABLE, GRANULAR
9-24" 7.5 YR 3/4 – DARK BROWN FINE SANDY LOAM, FRIABLE, GRANULAR
24-60" 5 YR 4/3 – REDDISH BROWN CLAYEY LOAM FIRM, MASSIVE WITH PROMINENT MOTTLES THROUGHOUT
60" STOPPED

ESTIMATED SEASONAL HIGH WATER TABLE – 24"
ROOTS – OOC TO 40"
OBSERVED WATER – 40"
LEDGE – NONE

TEST PIT 2
0-8" 10 YR 2/2 – VERY DARK BROWN GRASS MATT AND FINE LOAMY SAND, FRIABLE, GRANULAR
8-17" 5 YR 3/3 – DARK REDDISH BROWN LOAMY SAND, SINGLE GRAIN, LOOSE
17-33" 5 YR 6/4 – LIGHT REDDISH BROWN FINE SAND, SINGLE GRAIN, LOOSE
33-55" 5 YR 4/3 REDDISH BROWN CLAYEY LOAM, FIRM, MASSIVE WITH PROMINENT MOTTLES STARTING AT 43"
55" STOPPED

ESTIMATED SEASONAL HIGH WATER TABLE – 43"
ROOTS – NOT DOCUMENTED
OBSERVED WATER – 50"
LEDGE – NONE

*APPROVED BY THE PORTSMOUTH PLANNING BOARD*

*CHAIRMAN* *DATE*

GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB
No. 7634
LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | PMJ | 02/13/26 |
| 1 | PER TAC COMMENTS | PMJ | 03/23/26 |

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
**86 FARM LANE SUBDIVISION**
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
GRADING, DRAINAGE & EROSION CONTROL PLAN

SHEET NUMBER:
C-5

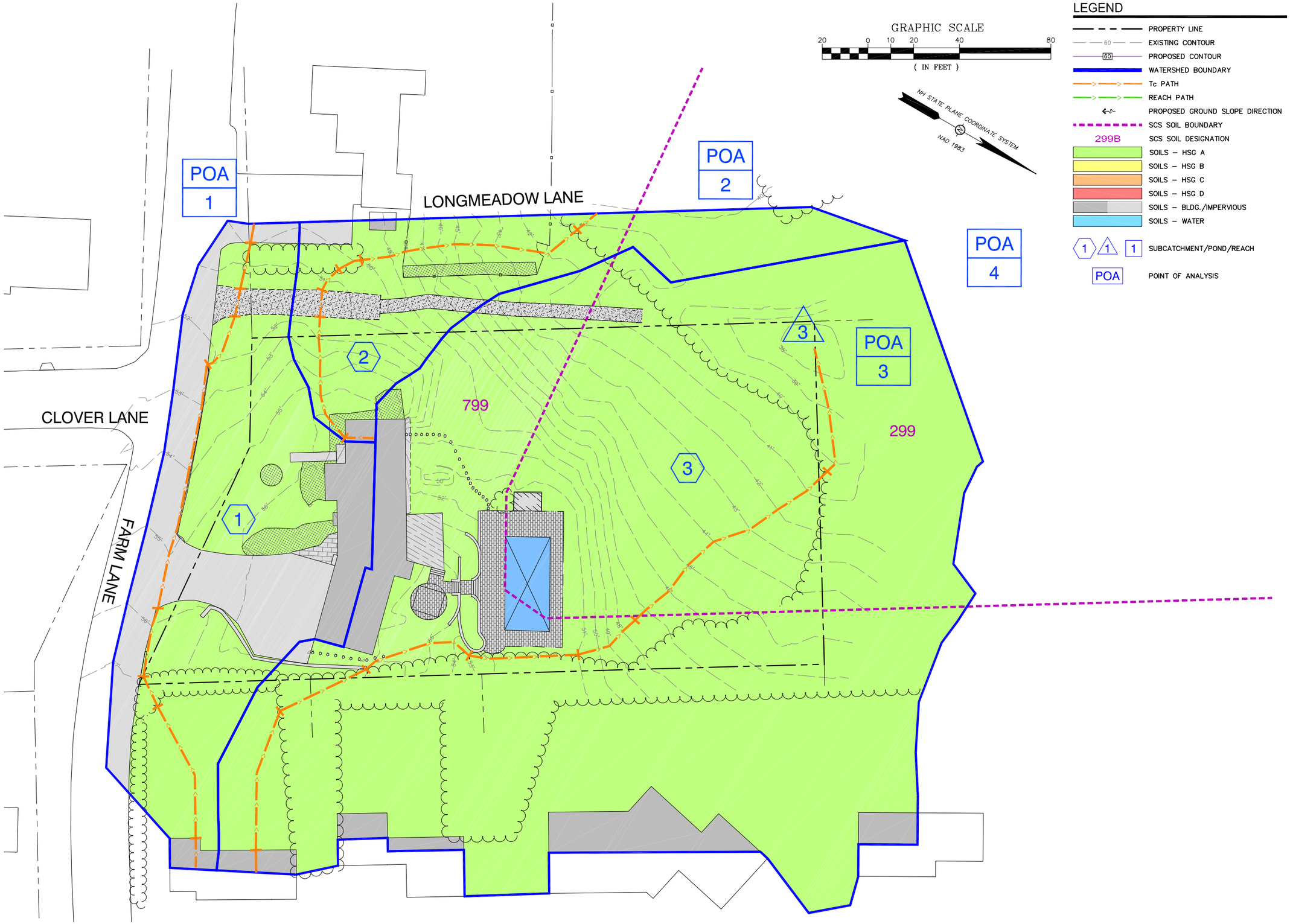
P5719

# Section 8

# Watershed Plans

Pre-Development Watershed and Soils Plan
Post-Development Watershed and Soils Plan

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133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE – ERIC D. WEINREB No. 7634 LICENSED PROFESSIONAL ENGINEER
2/13/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
FEBRUARY 13, 2026

REVISIONS

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|---|---|---|---|
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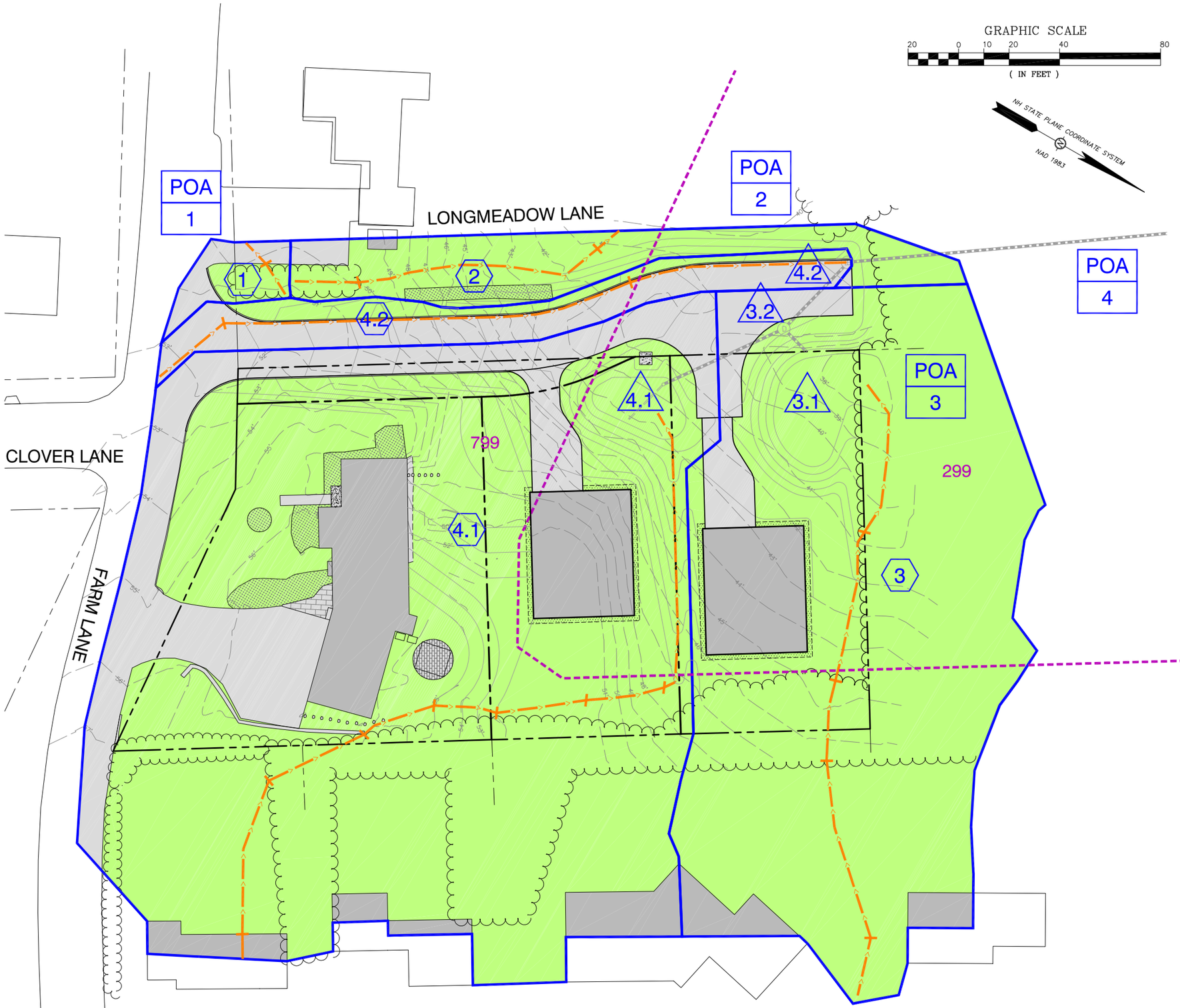
APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE
SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
PRE-DEVELOPMENT WATERSHED & SOILS PLAN

SHEET NUMBER:
WS-1

P5719




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STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER
3/23/26

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DRAWING FILE: 5719-SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
**86 FARM LANE SUBDIVISION**
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
POST-DEVELOPMENT WATERSHED & SOILS PLAN

SHEET NUMBER:
WS-2

P5719

THIS DRAWING SET HAS NOT BEEN
RELEASED FOR CONSTRUCTION

# RESIDENTIAL SUBDIVISION

## 86 FARM LANE
## PORTSMOUTH, NEW HAMPSHIRE

## Assessor's Parcel 236, Lot 74

## ISSUED FOR TAC

**Plan Issue Date:**

February 13, 2026
Revised March 23, 2026

Owner:

JEANETTE MACDONALD
86 Farm Lane
Portsmouth, NH 03801

Applicant:

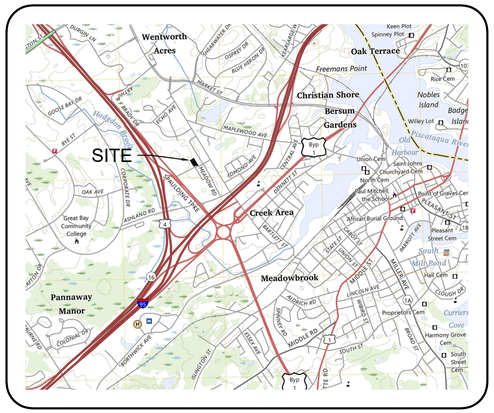
FLIPPING BERGER'S, LLC
71 Brackett Road
Portsmouth, NH 03801
(914) 299-4438

Civil Engineer:

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

Surveyor:

JVA JAMES VERRA & ASSOCIATES, INC.
100 GRIFFIN ROAD, UNIT C,
PORTSMOUTH, N.H., 03801-7876
603-436-3557
JOB NO: 25-2073

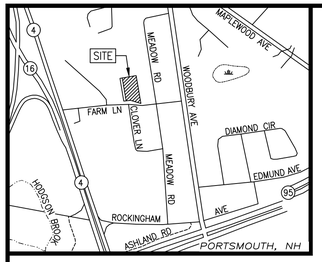



Sheet Index

| Title | Sheet No.: | Rev. | Date |
|---|---|---|---|
| Existing Conditions Plan | V-1 | 1 | 03/16/26 |
| Existing Conditions Plan | V-2 | 1 | 03/16/26 |
| Subdivision & Easement Plan | C-1 | 1 | 03/23/26 |
| Conceptual Site Plan | C-2 | 1 | 03/23/26 |
| Demolition & Site Preparation Plan | C-3 | 1 | 03/23/26 |
| Roadway Plan | C-4 | 1 | 03/23/26 |
| Grading, Drainage & Erosion Control Plan | C-5 | 1 | 03/23/26 |
| Utilities Plan | C-6 | 1 | 03/23/26 |
| Erosion Control Notes & Details | D-1 | 0 | 02/13/26 |
| Detail Sheet | D-2 | 0 | 02/13/26 |
| Detail Sheet | D-3 | 0 | 02/13/26 |
| Detail Sheet | D-4 | 1 | 02/13/26 |
| Detail Sheet | D-5 | 1 | 03/23/26 |
| Detail Sheet | D-6 | 0 | 02/13/26 |
| Vehicular Access Plan | 1 of 1 | 1 | 03/23/26 |

| Permit Summary | Submitted | Received |
|---|---|---|
| Portsmouth Subdivision Approval | 02/13/26 | – |
| Portsmouth Site Plan Review Approval | 03/23/26 | |

P5719




# LOCUS
(N.T.S.)

## ABUTTERS

236-73
NE MARINE AND INDUSTRIAL, INC
200 SPAULDING TURNPIKE
PORTSMOUTH, NH 03801
2342/0694

236-68
SATYAJIT HEERALAL
404 CENTRE ST.
BOSTON, MA 02130
6348/2377

236-67
PETER & LIANNE M. VELEZ
141 MEADOW ROAD
PORTSMOUTH, NH 03801
3777/0273

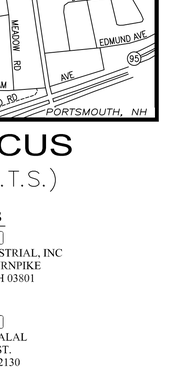
236-66
JONATHAN A. JACKSON
159 MEADOW ROAD
PORTSMOUTH, NH 03801
4125/2573

236-47
KINNALY FAMILTY TRUST OF 2012
EDWARD G. & KAREN KINNALY,
TRUSTEES
PO BOX 834
NEW CASTLE, NH 03854
6344/2213

236-40
WILLIAM J. CHARLAND &
JUDITH M. PINKHAM
45 CLOVER LANE
PORTSMOUTH, NH 03801
5662/2989

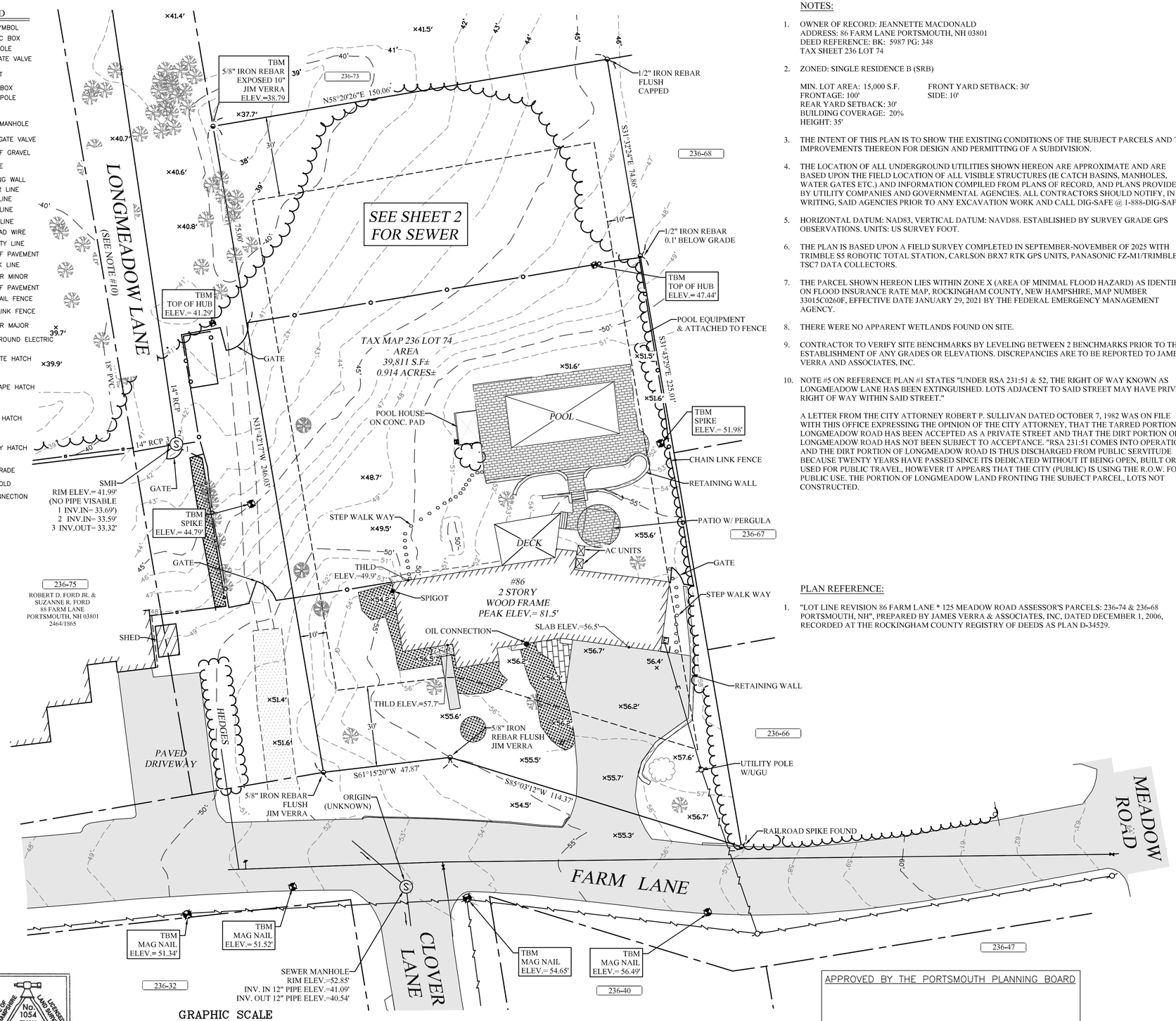
236-32
DENNIS HOSKIN
JEANNE HOSKIN
50 CLOVER LANE
PORTSMOUTH, NH 03801
5394/1195

236-75
ROBERT D. FORD JR. &
SUZANNE R. FORD
88 FARM LANE
PORTSMOUTH, NH 03801
2464/1865




## LEGEND

TREE SYMBOL
ELECTRIC BOX
LIGHT POLE
WATERGATE VALVE
HYDRANT
UTILITY BOX
UTILITY POLE
SIGN
SEWER MANHOLE
WATER GATE VALVE
EDGE OF GRAVEL
TREELINE
RETAINING WALL
ABUTTER LINE
W WATER LINE
S SEWER LINE
SHRUB LINE
OVERHEAD WIRE
PROPERTY LINE
EDGE OF PAVEMENT
SETBACK LINE
CONTOUR MINOR
EDGE OF PAVEMENT
SPLIT RAIL FENCE
CHAIN LINK FENCE
CONTOUR MAJOR
E UNDERGROUND ELECTRIC
CONCRETE HATCH
LANDSCAPE HATCH
GRAVEL HATCH
WALKWAY HATCH
52.1' X SPOT GRADE
THLD THRESHOLD
OIL CONNECTION




## NOTES:

1. OWNER OF RECORD: JEANNETTE MACDONALD
   ADDRESS: 86 FARM LANE PORTSMOUTH, NH 03801
   DEED REFERENCE: BK: 5987 PG: 348
   TAX SHEET 236 LOT 74
2. ZONED: SINGLE RESIDENCE B (SRB)

   MIN. LOT AREA: 15,000 S.F. — FRONT YARD SETBACK: 30'
   FRONTAGE: 100' — SIDE: 10'
   REAR YARD SETBACK: 30'
   BUILDING COVERAGE: 20%
   HEIGHT: 35'
3. THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF THE SUBJECT PARCELS AND THE IMPROVEMENTS THEREON FOR DESIGN AND PERMITTING OF A SUBDIVISION.
4. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE CATCH BASINS, MANHOLES, WATER GATES ETC.) AND INFORMATION COMPILED FROM PLANS OF RECORD, AND PLANS PROVIDED BY UTILITY COMPANIES AND GOVERNMENTAL AGENCIES. ALL CONTRACTORS SHOULD NOTIFY, IN WRITING, SAID AGENCIES PRIOR TO ANY EXCAVATION WORK AND CALL DIG-SAFE @ 1-888-DIG-SAFE.
5. HORIZONTAL DATUM: NAD83, VERTICAL DATUM: NAVD88. ESTABLISHED BY SURVEY GRADE GPS OBSERVATIONS. UNITS: US SURVEY FOOT.
6. THE PLAN IS BASED UPON A FIELD SURVEY COMPLETED IN SEPTEMBER-NOVEMBER OF 2025 WITH TRIMBLE S5 ROBOTIC TOTAL STATION, CARLSON BRX7 RTK GPS UNITS, PANASONIC FZ-M1/TRIMBLE TSC7 DATA COLLECTORS.
7. THE PARCEL SHOWN HEREON LIES WITHIN ZONE X (AREA OF MINIMAL FLOOD HAZARD) AS IDENTIFIED ON FLOOD INSURANCE RATE MAP, ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP NUMBER 33015C0260F, EFFECTIVE DATE JANUARY 29, 2021 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
8. THERE WERE NO APPARENT WETLANDS FOUND ON SITE.
9. CONTRACTOR TO VERIFY SITE BENCHMARKS BY LEVELING BETWEEN 2 BENCHMARKS PRIOR TO THE ESTABLISHMENT OF ANY GRADES OR ELEVATIONS. DISCREPANCIES ARE TO BE REPORTED TO JAMES VERRA AND ASSOCIATES, INC.
10. NOTE #5 ON REFERENCE PLAN #1 STATES "UNDER RSA 231:51 & 52, THE RIGHT OF WAY KNOWN AS LONGMEADOW LANE HAS BEEN EXTINGUISHED. LOTS ADJACENT TO SAID STREET MAY HAVE PRIVATE RIGHT OF WAY WITHIN SAID STREET."

    A LETTER FROM THE CITY ATTORNEY ROBERT P. SULLIVAN DATED OCTOBER 7, 1982 WAS ON FILE WITH THIS OFFICE EXPRESSING THE OPINION OF THE CITY ATTORNEY, THAT THE TARRED PORTION OF LONGMEADOW ROAD HAS BEEN ACCEPTED AS A PRIVATE STREET AND THAT THE DIRT PORTION OF LONGMEADOW ROAD HAS NOT BEEN SUBJECT TO ACCEPTANCE. "RSA 231:51 COMES INTO OPERATION AND THE DIRT PORTION OF LONGMEADOW ROAD IS THUS DISCHARGED FROM PUBLIC SERVITUDE BECAUSE TWENTY YEARS HAVE PASSED SINCE ITS DEDICATED WITHOUT IT BEING OPEN, BUILT OR USED FOR PUBLIC TRAVEL, HOWEVER IT APPEARS THAT THE CITY (PUBLIC) IS USING THE R.O.W. FOR PUBLIC USE. THE PORTION OF LONGMEADOW LAND FRONTING THE SUBJECT PARCEL, LOTS NOT CONSTRUCTED.

## PLAN REFERENCE:

1. "LOT LINE REVISION 86 FARM LANE * 125 MEADOW ROAD ASSESSOR'S PARCELS: 236-74 & 236-68 PORTSMOUTH, NH", PREPARED BY JAMES VERRA & ASSOCIATES, INC, DATED DECEMBER 1, 2006, RECORDED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AS PLAN D-34529.

## SURVEYOR'S CERTIFICATION

"I HEREBY CERTIFY THAT THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN FIFTEEN THOUSAND (1:15,000)."

LICENSED LAND SURVEYOR — DATE: 3/18/26

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — NO. 10541 — RYAN M. FOWLER — SIGNATURE

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

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN — DATE

SURVEYOR:
JVA
JAMES VERRA & ASSOCIATES, INC.
100 GRIFFIN ROAD, UNIT C,
PORTSMOUTH, N.H., 03801-7876
603-436-3557

JOB NO: 25-2073

ENGINEER:
ALTUS ENGINEERING
133 Court Street — Portsmouth, NH 03801
(603) 433-2335 — www.altus-eng.com

ISSUED FOR: SUBMISSION

ISSUE DATE: 2/10/26

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | PER TAC COMMENTS | CWW | 3/16/26 |

DRAWN BY: CWW
APPROVED BY: RMF
DRAWING FILE: 25-2037_EX-CON.DWG

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

APPLICANT:
BRETT BERGER
71 BRACKET ROAD
PORTSMOUTH, NH 03801

OWNER:
JEANNETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

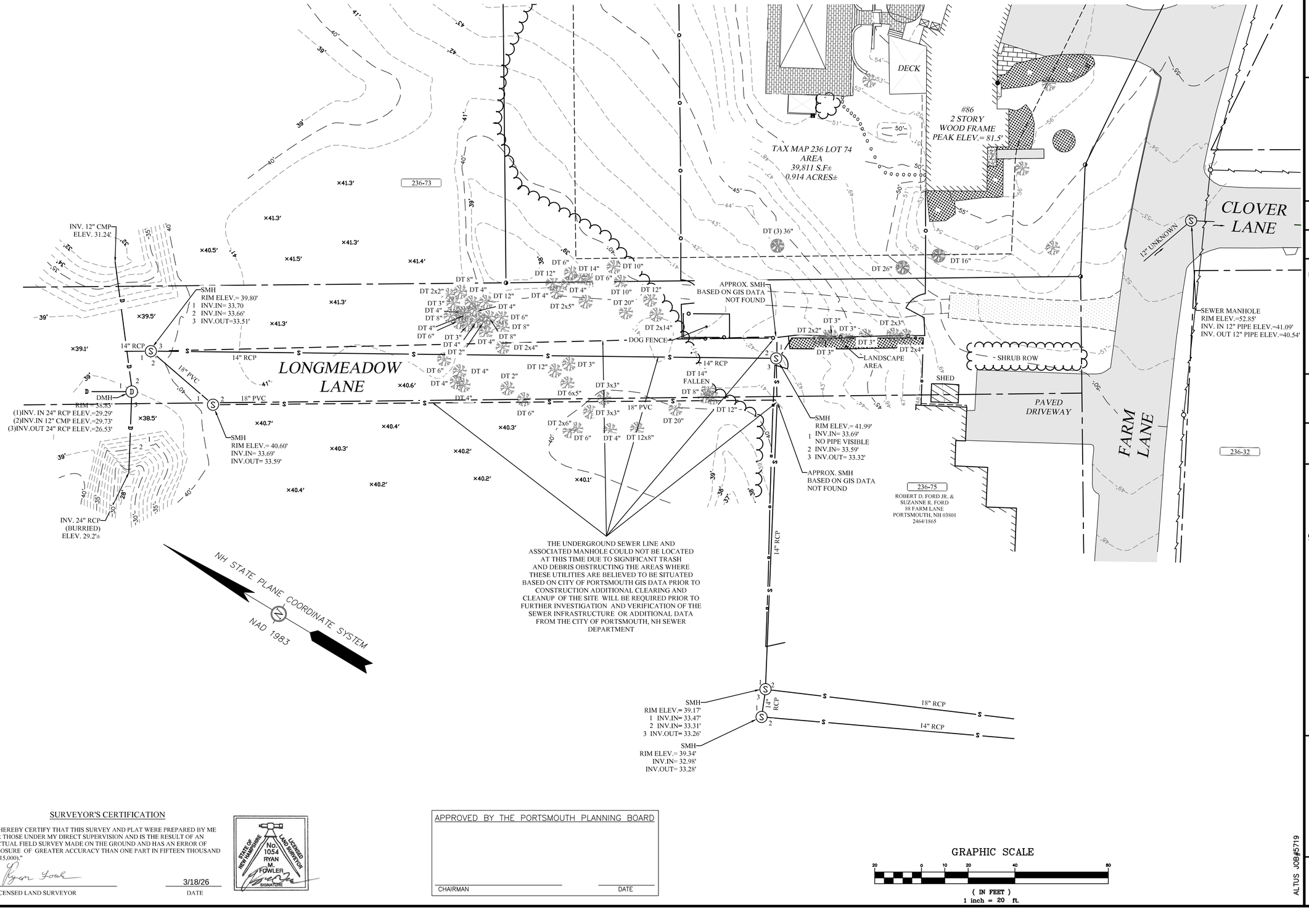
PROJECT:
86
FARM LANE
PORTSMOUTH, NEW
HAMPSHIRE
TAX MAP 236 LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
EXISTING
CONDITIONS
PLAN

SHEET NUMBER:
V-1

ALTUS JOB#5719

J:\2025 PROJECTS\25-2037 ALTUS MCMASTER 86 FARM LN PORTSMOUTH NH_DWG\25-2073_EX.dwg 2026-03-18




## SURVEYOR'S CERTIFICATION

"I HEREBY CERTIFY THAT THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN FIFTEEN THOUSAND (1:15,000)."

LICENSED LAND SURVEYOR

3/18/26
DATE

STATE OF NEW HAMPSHIRE — No. 1054 — RYAN M. FOWLER — LICENSED LAND SURVEYOR — SIGNATURE

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN

DATE

GRAPHIC SCALE

20 0 10 20 40 80

( IN FEET )
1 inch = 20 ft.

J:\2025 PROJECTS\25-2037 ALTUS MCMASTER 86 FARM LN PORTSMOUTH NH_DWG\25-2073_EX.dwg 2026-03-18

ALTUS JOB#5719

SURVEYOR:

JAMES VERRA & ASSOCIATES, INC.
100 GRIFFIN ROAD, UNIT C,
PORTSMOUTH, N.H., 03801-7876
603-436-3557

JOB NO: 25-2073

ENGINEER:

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ISSUED FOR:
SUBMISSION

ISSUE DATE:
2/10/26

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | PER TAC COMMENTS | CWW | 3/16/26 |

DRAWN BY: CWW
APPROVED BY: RMF
DRAWING FILE: 25-2037_EX-CON.DWG

SCALE:
22" x 34" - 1" = 20'
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APPLICANT:

BRETT BERGER
71 BRACKET ROAD
PORTSMOUTH, NH 03801

OWNER:

JEANNETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

PROJECT:

86
FARM LANE
PORTSMOUTH, NEW HAMPSHIRE

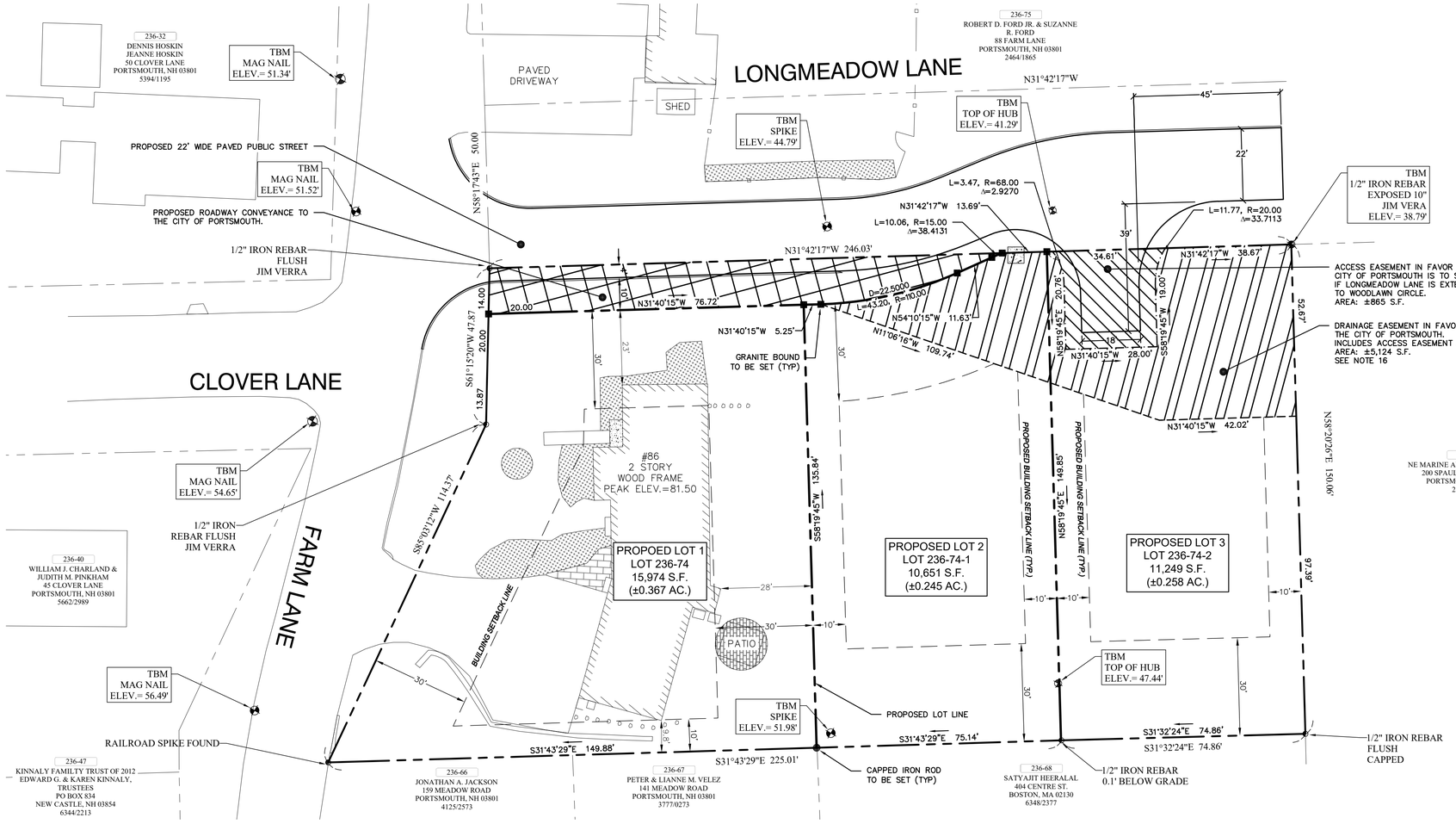
TAX MAP 236 LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

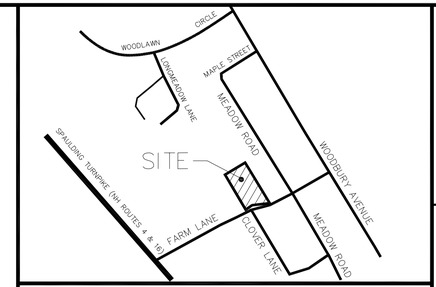
TITLE:

EXISTING CONDITIONS PLAN

SHEET NUMBER:

V-2




LOCUS
NOT TO SCALE

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

*APPROVED BY THE PORTSMOUTH PLANNING BOARD*

*CHAIRMAN* *DATE*

## SUBDIVISION NOTES

1. DESIGN INTENT – THIS PLAN IS INTENDED TO DEPICT A THREE LOT RESIDENTIAL SUBDIVISION SERVICED WITH MUNICIPAL SEWER & WATER ON A NEW PUBLIC ROAD.
2. THE BASE PLAN USED HERE WAS DEVELOPED FROM THE 86 FARM LANE EXISTING CONDITIONS PLANS (V–1 & V–2), DATED 11/11/25, PROVIDED BY JAMES VERRA & ASSOCIATES, INC.
3. ZONE: SRB (SINGLE RESIDENCE B)
4. DIMENSIONAL REQUIREMENTS:

| | |
|---|---|
| LOT AREA: | 15,000 S.F. |
| FRONTAGE: | 100' |
| LOT DEPTH: | 100' |
| FRONT YARD: | 30' |
| SIDE YARD: | 10' |
| REAR YARD: | 30' |
| BUILDING HEIGHT: | 35' (MAX. w/SLOPED ROOF) |
| BUILDING COVERAGE: | 20% MAX. |
| OPEN SPACE: | 40% MIN. |
| WETLAND BUFFER: | NONE (WETLAND LESS THAN 10,000 S.F.) |

5. PARKING REQUIREMENTS: NR (NO REQUIREMENT)
6. PARCEL IS NOT IN A FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP (FIRM), ROCKINGHAM COUNTY, NEW HAMPSHIRE, DATED JANUARY 29, 2021.
7. WAIVERS REQUESTED:
   - 7.1. SECTION IV: ROADWAY WIDTH – 32–FEET IS REQUIRED, 22–FEET IS PROVIDED.
   - 7.2. SECTION VI.3.i: CUL–DE–SAC REQUIRED, TURN AROUND PROVIDED.
   - 7.3. SECTION 2.13: RECORDING OF SITE PLAN, SITE PLAN IS CONCEPTUAL AND NOT TO BE RECORDED BUT SUBDIVISION PLAN IS TO BE RECORDED.
8. AREA OF DISTURBANCE LESS THAN 43,560 S.F., COVERAGE UNDER EPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT IS NOT REQUIRED.
9. NO NEW RESIDENTIAL USES SHALL BE PERMITTED WITHIN THE CITY'S RIGHT–OF–WAY WHICH SHALL BE RESERVED EXCLUSIVELY FOR A ROADWAY AND ASSOCIATED INFRASTRUCTURE.
10. SEE THE ENTIRE SET OF PLANS RELATED TO THIS SUBDIVISION ON FILE WITH THE CITY OF PORTSMOUTH PLANNING DEPARTMENT.
11. SNOW SHALL BE STORED AT THE EDGE OF THE ROAD OR REMOVED OFF SITE TO AN APPROVED LOCATION IF REQUIRED TO MAINTAIN SAFE ACCESS.
12. THIS PLAN SHALL BE RECORDED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
13. ALL CONDITIONS ON THIS PLAN SET SHOULD REMAIN IN EFFECT IN PERPETUITY.
14. ALL IMPROVEMENT SHOWN ON THIS SITE PLAN (SUBDIVISION PLAN) SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN (SUBDIVISION PLAN) WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.
15. PERMANENT STREET ADDRESS SIGNS SHALL BE PLACED IN A HIGHLY VISIBLE LOCATED AT THE END OF EACH DRIVEWAY.
16. HOMEOWNERS SHALL BE RESPONSIBLE FOR MAINTAINING THE DRAINAGE EASEMENT AREAS ON THEIR RESPECTIVE LOTS. EASEMENT TO THE CITY IS FOR USAGE RIGHTS FOR ANY RUNOFF FROM THE NEW ROADWAY.

VARIANCES GRANTED BY ZBA ON MAY 27, 2025:

LOT 236–74:
SECTION 10.521:
- A. TO ALLOW 28–FOOT REAR YARD SETBACK WHERE 30–FEET IS REQUIRED.
- B. TO ALLOW 23–FOOT SECONDARY FRONT YARD WHERE 30–FEET IS REQUIRED.

LOT 236–74–1:
SECTION 10.521:
- C. TO ALLOW 10,664 S.F. OF LOT AREA WHERE 15,000 S.F. IS REQUIRED.
- D. TO ALLOW 10,664 S.F. OF LOT AREA PER DWELLING UNIT WHERE 15,000 S.F. IS REQUIRED.
- E. TO ALLOW 75–FEET OF CONTIUOUS STREET FRONTAGE WHERE 100–FEET IS REQUIRED.

LOT 236–74–2:
SECTION 10.521:
- C. TO ALLOW 11,250 S.F. OF LOT AREA WHERE 15,000 S.F. IS REQUIRED.
- D. TO ALLOW 11,250 S.F. OF LOT AREA PER DWELLING UNIT WHERE 15,000 S.F. IS REQUIRED.
- E. TO ALLOW 75–FEET OF CONTIUOUS STREET FRONTAGE WHERE 100–FEET IS REQUIRED.

## LOT AREAS & COVERAGES SUMMARY

EXISTING LOT AREA:

LOT 236–74: 39,811 S.F.

EXISTING LOT TO BE SUBDIVIDED INTO THREE LOTS.

PROPOSED LOT AREAS:

| | |
|---|---|
| LOT 236–74: | 15,974 S.F. |
| LOT 236–74–1: | 10,651 S.F. |
| LOT 236–74–2: | 11,249 S.F. |
| NEW CITY RIGHT–OF–WAY: | 1,937 S.F. |
| TOTAL: | 39,811 S.F. |

BUILDING COVERAGE:

LOT 236–74:

| | |
|---|---|
| EXISTING: | ±2,960 S.F. / 39,811 S.F. = ±7.4% |
| PROPOSED: | ±2,960 S.F. / 15,974 S.F. = ±18.5% |

PROPOSED BUILDING SIZE UNKNOWN FOR LOTS 236–74–1 & 236–74–2; LOTS WILL HAVE EQUAL TO OR LESS THAN 20% BUILDING COVERAGE.

LOT 236–74–1 MAXIMUM BUILDING FOOTPRINT: 2,130 S.F.
LOT 236–74–2 MAXIMUM BUILDING FOOTPRINT: 2,248 S.F.

OPEN SPACE:

| LOT 236–74 IMPERVIOUS AREAS: | EXISTING | PROPOSED |
|---|---|---|
| HOUSE | ±2,960 S.F. | ±2,960 S.F. |
| DRIVEWAY | ±2,120 S.F. | ±2,120 S.F. |
| WALKWAYS | ±250 S.F. | ±250 S.F. |
| PATIO | ±210 S.F. | ±210 S.F. |
| RETAINING WALL & GRAVELS | ±210 S.F. | ±210 S.F. |
| DECK | ±380 S.F. | ±0 S.F. |
| POOL AREA & HARDSCAPE | ±2,525 S.F. | ±0 S.F. |
| TOTAL | ±8,655 S.F. | ±5,750 S.F. |

LOT 236–74:
EXISTING OPEN SPACE: (39,811 S.F. – 8,655 S.F.) / 39,811 S.F. = (±78.3%)
PROPOSED OPEN SPACE: (15,974 S.F. – 5,750 S.F.) / 15,974 S.F. = (±64.0%)

## PURPOSE OF PLAN:

THE PURPOSE OF THIS PLAN IS TO SHOW THE CONDITIONS OF APPROVAL FOR THE SUBDIVISION AND THE SITE PLAN REVIEW THAT ARE REQUIRED TO BE RECORDED BY THE CITY OF PORTSMOUTH AS PART OF THEIR APPROVAL OF THE DEVELOPMENT. THESE CONDITIONS WILL RUN WITH THE NEW LOTS IN PERPETUITY.

SURVEYOR OF RECORD DATE

PLAN REFERENCES:
1. "LOT LINE REVISION, 86 FARM LANE & 125 MEADOW ROAD, ASSESSOR'S PARCELS: 236–74 & 236–68, PORTSMOUTH, NEW HAMPSHIRE, OWNERS: JEANETTE MACDONALD & WILLIAM A. & CHRIS A. LACEY," LAST REVISED JANUARY 17, 2007 AND PREPARED BY JAMES VERRA AND ASSOC., INC. RCRD PLAN #D–34529.
2. "LAND IN PORTSMOUTH, N.H. PAUL C. & ORVILLE BADGER TO SAMUEL A. & LUCILLE E. MCMASTER" DATED NOVEMBER 1951, AND PREPARED BY JOHN W. DURGIN C.E. NOT RECORDED, AND ON FILE AT JAMES VERRA AND ASSOC., INC. FN:2107 PN: L–25.
3. "PLAN OF LOTS, PORTSMOUTH, N.H. FOR PAUL C. & ORVILLE C. BADGER" FILED MAY 24, 1954 AND PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS. RCRD PLAN #02160.

GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )

STATE OF NEW HAMPSHIRE – ERIC D. WEINREB No. 7634 LICENSED PROFESSIONAL ENGINEER
3/23/26


ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

JVA JAMES VERRA & ASSOCIATES, INC.
100 GRIFFIN ROAD, UNIT C,
PORTSMOUTH, N.H., 03801–7876
603–436–3557


JOB NO: 25–2073

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | PMJ | 02/13/26 |
| 1 | PER TAC COMMENTS | PMJ | 03/23/26 |

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719–SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
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86 FARM LANE
PORTSMOUTH, NH 03801

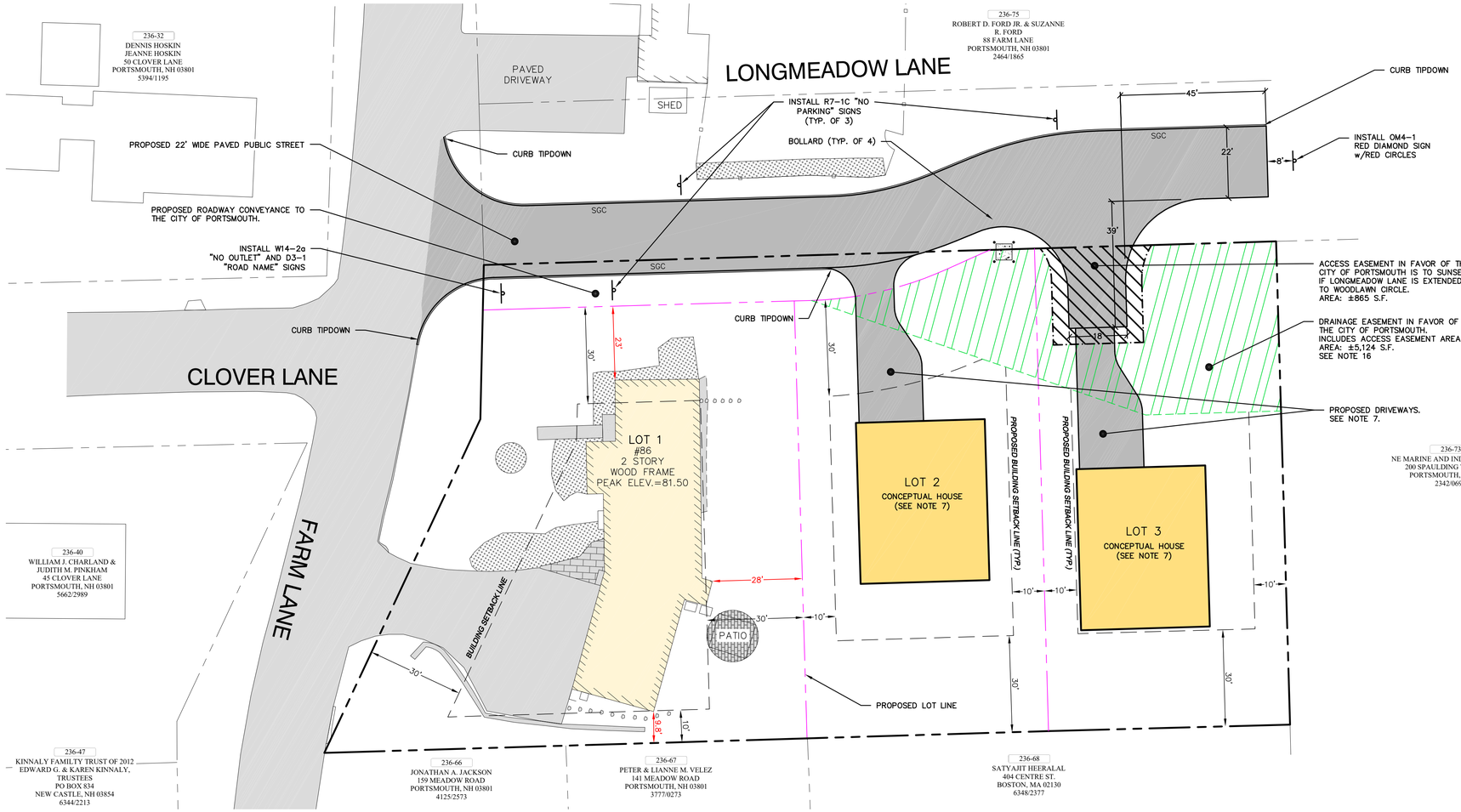
APPLICANT:
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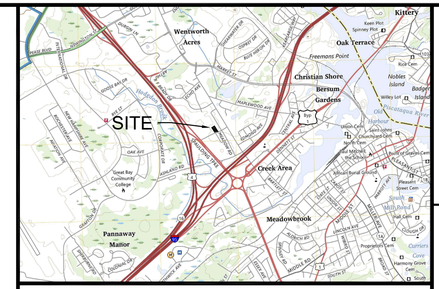
PROJECT:
# 86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
SUBDIVISION & EASEMENT PLAN

SHEET NUMBER:
C-1

P5719




LOCUS
NOT TO SCALE

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

## CONCEPTUAL SITE PLAN NOTES

1. DESIGN INTENT – THIS PLAN IS INTENDED TO DEPICT A THREE LOT RESIDENTIAL SUBDIVISION SERVICED WITH MUNICIPAL SEWER & WATER ON A NEW PUBLIC ROAD.
2. APPROXIMATE LOT AREA: 39,811 S.F. (±0.914 AC.)
3. ZONE: SRB (SINGLE RESIDENCE B)
4. DIMENSIONAL REQUIREMENTS:

| | | EXISTING | LOT 1 | LOT 2 | LOT 3 |
|---|---|---|---|---|---|
| LOT AREA: | ±15,000 S.F. | 39,811 S.F. | 15,974 S.F. | 10,651 S.F. | 11,249 S.F. |
| FRONTAGE: | 100' | ±162' | ±245' | 77.25' | 75.0' |
| LOT DEPTH: | 100' | ±248' | ±98' | ±136' | ±150' |
| FRONT YARD: | 30' | ±34' | ±34' | >30' | >30' |
| SIDE YARD: | 10' | ±37'L/±9.8'R | ±23'L/±9.8'R | >10' | >10' |
| REAR YARD: | 30' | ±178' | ±28' | >30' | >30' |
| BUILDING HEIGHT: | 35' (MAX.–SLOPED ROOF) | ±25' | ±25' | <35' | <35' |
| BUILDING COVERAGE: | 20% MAX. | ±7.4% | ±18.5% | ±18.8% | ±17.8% |
| OPEN SPACE: | 40% MIN. | ±78.2% | ±64.0% | ±74.7% | ±71.5% |
| WETLAND BUFFER: | NO WETLANDS IDENTIFIED | | | | |

5. NO WETLANDS WERE IDENTIFIED WITHIN THE LIMITS OF THE PROJECT AREA, BASED ON THE CITY OF PORTSMOUTH GIS.
6. PARCEL IS NOT IN A FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP (FIRM), ROCKINGHAM COUNTY, NEW HAMPSHIRE, DATED JANUARY 29, 2021.
7. DEVELOPMENT OF LOTS 2 & 3 IS FOR ILLUSTRATIVE PURPOSES ONLY. PROPOSED HOUSES AND DRIVEWAYS SHOWN ON THIS PLAN SET ARE CONCEPTUAL. FINAL BUILDING FOOTPRINTS, ELEVATIONS AND LOCATIONS MAY DIFFER. LOTS SHALL BE GRADED AS SPECIFIED IN THESE PLANS TO DRAIN AS INTENDED.
8. IF IMPERVIOUS ON LOT EXCEEDS THE AREA PROVIDED BELOW, AN INDIVIDUAL STORMWATER MANAGEMENT PLAN FOR THE LOT WILL BE REQUIRED:
   - 8.1. LOT 1: ±5,685 S.F.
   - 8.2. LOT 2: ±2,710 S.F.
   - 8.3. LOT 3: ±3,220 S.F.
9. PERMANENT STREET ADDRESS SIGNS SHALL BE PLACED IN A HIGHLY VISIBLE LOCATION AT THE END OF EACH DRIVEWAY.

*APPROVED BY THE PORTSMOUTH PLANNING BOARD*

*CHAIRMAN* *DATE*

GRAPHIC SCALE

20 0 10 20 40 80

( IN FEET )

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB
No. 7634
LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | PMJ | 02/13/26 |
| 1 | PER TAC COMMENTS | PMJ | 03/23/26 |

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
# 86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

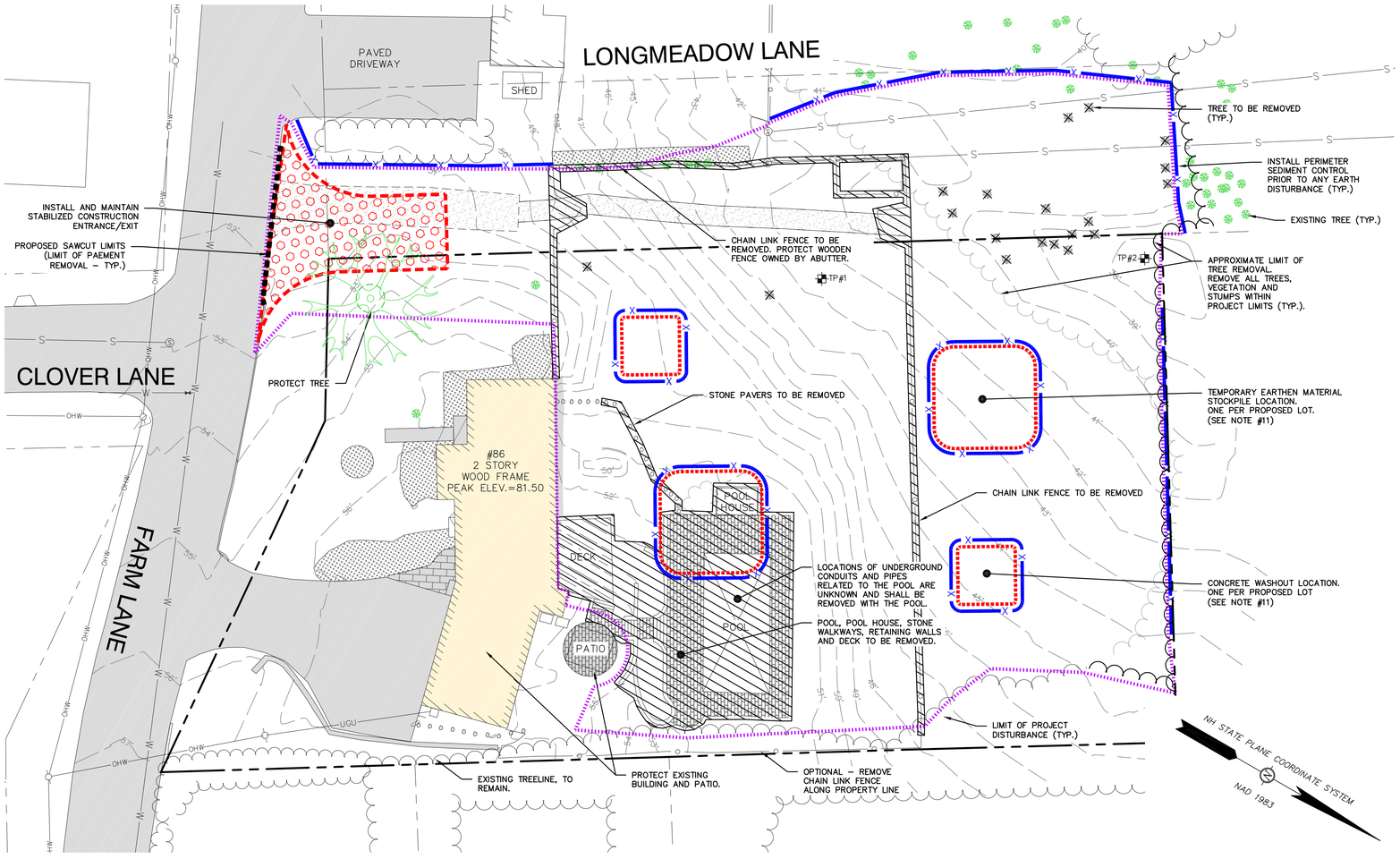
TITLE:
CONCEPTUAL SITE PLAN

SHEET NUMBER:
C-2

P5719

## LEGEND

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- BUILDING SETBACK
- EASEMENT – CITY OF PORTSMOUTH
- 68 EXISTING CONTOUR
- 68 PROPOSED CONTOUR/INTERMEDIATE CONTOUR
- 72.00 EXISTING SPOT GRADE
- 72.00 PROPOSED SPOT GRADE
- VGC SGC EXISTING/PROPOSED BUILDING
- VGC SGC EXISTING PAVEMENT/CURB
- VGC SGC PROP. PAVEMENT/VERTICAL OR SLOPED GRANITE CURB
- EXISTING/PROPOSED PAVEMENT
- (44) [226] PARKING COUNT PER ROW/FOR TOTAL SITE
- EXISTING/PROPOSED GRAVEL
- EXISTING/PROPOSED CONCRETE
- EXISTING/PROPOSED STOCKADE FENCE
- EXISTING/PROPOSED CHAINLINK FENCE
- EXISTING TREE DRIP LINE
- PROPOSED TREE CLEARING LIMIT
- PROPOSED SAWCUT
- SILTFENCE/SEDIMENT BARRIER/CONST. FENCE
- STABILIZED CONSTRUCTION EXIT
- PROPOSED LIMIT OF DISTURBANCE
- OHW UGU EXIST. OVERHEAD/UNDERGROUND UTILITIES/POLE
- OHW PROPOSED OVERHEAD UTILITIES/UTILITY POLE
- UGE&T PROPOSED UNDERGROUND ELECTRIC & COMMUNICATION
- W EXISTING WATERLINE
- PW PROPOSED WATERLINE/GATE VALVE/REDUCER
- PROPOSED THRUST BLOCK/WATER SHUT-OFF/HYDRANT
- S EXISTING SEWER PIPE/MANHOLE
- S PROPOSED SEWER PIPE/MANHOLE/CLEANOUT
- EXISTING DRAINAGE PIPE)/CB/DCB/DMH/FES
- PROPOSED DRAINAGE HARD PIPE/CB/DCB/DMH/FES
- PROPOSED YARD DRAIN/OUTLET STRUCTURE
- PROPOSED CATCH BASIN INLET PROTECTION
- CPP FES HDWL CORRUGATED PLASTIC PIPE/FLARED END SECTION/HEADWALL
- PROPOSED GROUND SLOPE/STONE CHECK DAM
- PROPOSED RIPRAP
- PROPOSED BIORETENTION CELL
- PROPOSED STONE DRIPEDGE
- PROPOSED EROSION CONTROL BLANKET
- TEMPORARY BENCH MARK
- TP# TESTPIT
- EXISTING TREE




## DEMOLITION & SITE PREPARATION NOTES

1. THIS PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR THE DEMOLITION OF EXISTING SITE FEATURES. UNLESS OTHERWISE NOTED TO REMAIN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL BUILDINGS, PAVEMENT, CONCRETE, CURBING, SIGNS, POLES, UTILITIES, FENCES, VEGETATION AND OTHER EXISTING FEATURES AS NECESSARY TO FULLY CONSTRUCT THE PROJECT.
2. ALL MATERIALS SCHEDULED FOR DEMOLITION REMOVAL ON PRIVATE PROPERTY SHALL BECOME PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED.
3. CITY DEMOLITION PERMIT REQUIRED PRIOR TO ANY DEMOLITION ACTIVITIES. CONTRACTOR IS NOTIFIED THAT THIS PERMIT PROCESS MAY REQUIRE A 30-DAY LEAD TIME.
4. LIMITS OF TREE CLEARING & TREES TO REMAIN SHALL BE CLEARLY MARKED PRIOR TO COMMENCING SITE WORK.
5. NO BURNING SHALL BE PERMITTED PER LOCAL REGULATIONS.
6. PERIMETER SEDIMENT CONTROLS SHALL BE INSTALLED AFTER TREE CLEARING OPERATIONS HAVE CEASED AND BEFORE ANY STUMPING, GRUBBING OR OTHER EARTH DISTURBANCE.
7. GRIND STUMPS AND REUSE GRINDINGS FOR EROSION CONTROL WHERE POSSIBLE OR TRUCK OFFSITE. NO STUMPS SHALL BE BURIED ON THE SITE OR LEFT AT ANY DEPTH BELOW ROADWAY OR PARKING LOT SURFACES.
8. NO EARTHWORK SHALL COMMENCE UNTIL ALL APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE PROPERLY MAINTAINED IN GOOD WORKING ORDER FOR THE DURATION OF CONSTRUCTION AND THE SITE IS STABILIZED.
9. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN STANDARDS AND SPECIFICATIONS SET FORTH BY NEW HAMPSHIRE DEPARTMENT ENVIRONMENTAL SERVICES.
10. SHOULD GROUNDWATER BE ENCOUNTERED DURING EXCAVATION, APPROPRIATE BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED TO ENSURE SEDIMENT LADEN WATER IS NOT DISCHARGED INTO THE CITY DRAINAGE SYSTEM, ABUTTING PROPERTIES, WETLANDS OR RIVERS. A DISCHARGE PERMIT SHALL BE OBTAINED PRIOR TO DISCHARGING GROUNDWATER TO THE CITY DRAINAGE SYSTEM.
11. MATERIAL STOCKPILE & CONCRETE WASHOUT LOCATIONS SHOWN ARE CONCEPTUAL. THE CONTRACTOR MAY LOCATE STOCKPILES OR WASHOUT WHERE NECESSARY PROVIDED THAT PERIMETER SEDIMENT CONTROLS ARE PROPERLY INSTALLED.
12. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT EROSION AND PREVENT SEDIMENT, DUST, AND OTHER MATERIALS FROM LEAVING THE SITE. THIS SHALL INCLUDE BUT NOT BE LIMITED TO THE PROACTIVE MANAGEMENT OF STOCKPILES, MATERIALS PROCESSING ACTIVITIES VEHICULAR TRAFFIC, THE EXCAVATION AND PLACEMENT OF EARTH MATERIALS, SPRAYING WATER, SWEEPING PAVED SURFACES, PROVIDING TEMPORARY VEGETATION, AND/OR MULCHING EXPOSED AREAS AND STOCKPILES. THE CONTRACTOR SHALL ENSURE PERMANENT SOIL STABILIZATION.
13. ALL MATERIAL SCHEDULED TO BE REMOVED SHALL BE LEGALLY DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS AND CODES.
14. IF HAZARDOUS MATERIALS ARE ENCOUNTERED DURING DEMOLITION AND CONSTRUCTION ACTIVITIES, THEY SHALL BE ABATED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.
15. CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES SCHEDULED TO REMAIN. WHERE SPECIFIED TO REMAIN, MANHOLE RIMS, CATCH BASIN GRATES, VALVE COVERS, HANDHOLES, ETC. SHALL BE ADJUSTED TO FINISH GRADE UNLESS OTHERWISE SPECIFIED.
16. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (I.E. CATCH BASINS, MANHOLES, WATER GATES ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY COMPANIES AND GOVERNMENTAL AGENCIES. ALL CONTRACTORS SHOULD NOTIFY, IN WRITING, SAID AGENCIES PRIOR TO ANY EXCAVATION WORK AND CALL DIG-SAFE @ 1-888-DIG-SAFE.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY NOTIFICATION OF ALL PARTIES, CORPORATIONS, COMPANIES, INDIVIDUALS AND STATE AND LOCAL AUTHORITIES OWNING AND/OR HAVING JURISDICTION OVER ANY UTILITIES RUNNING TO, THROUGH OR ACROSS AREAS TO BE DISTURBED BY DEMOLITION AND/OR CONSTRUCTION ACTIVITIES WHETHER OR NOT SAID UTILITIES ARE SUBJECT TO DEMOLITION, RELOCATION, MODIFICATION AND/OR CONSTRUCTION.
18. AT NO TIME SHALL ANY UTILITY SERVICE OR VEHICULAR ACCESS TO ADJOINING PROPERTIES BE COMPLETELY INTERRUPTED UNLESS A FULL SHUTDOWN IS COORDINATED WITH ALL AFFECTED PARTIES AND UTILITY PROVIDER(S).
19. ALL UTILITY DISCONNECTIONS, DEMOLITIONS AND RELOCATIONS SHALL BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES, PORTSMOUTH DPW AND ABUTTING PROPERTY OWNERS. UNLESS OTHERWISE SPECIFIED, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELATED EXCAVATION, TRENCHING AND BACKFILLING.
20. CONTRACTOR SHALL SAFELY SECURE THE SITE AND WORK LIMITS DURING NON-WORK HOURS.
21. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN AND DETAIL SHEETS FOR ADDITIONAL NOTES ON TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
22. SEE THIS SHEET FOR LEGEND.
23. SEE SHEET C-6 FOR TEST PIT INFORMATION.

*APPROVED BY THE PORTSMOUTH PLANNING BOARD*

*CHAIRMAN* *DATE*

GRAPHIC SCALE

20 0 10 20 40 80

( IN FEET )


ALTUS ENGINEERING

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STATE OF NEW HAMPSHIRE – ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER – 3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
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| 0 | INITIAL SUBMISSION | PMJ | 02/13/26 |
| 1 | PER TAC COMMENTS | PMJ | 03/23/26 |

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
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86 FARM LANE
PORTSMOUTH, NH 03801

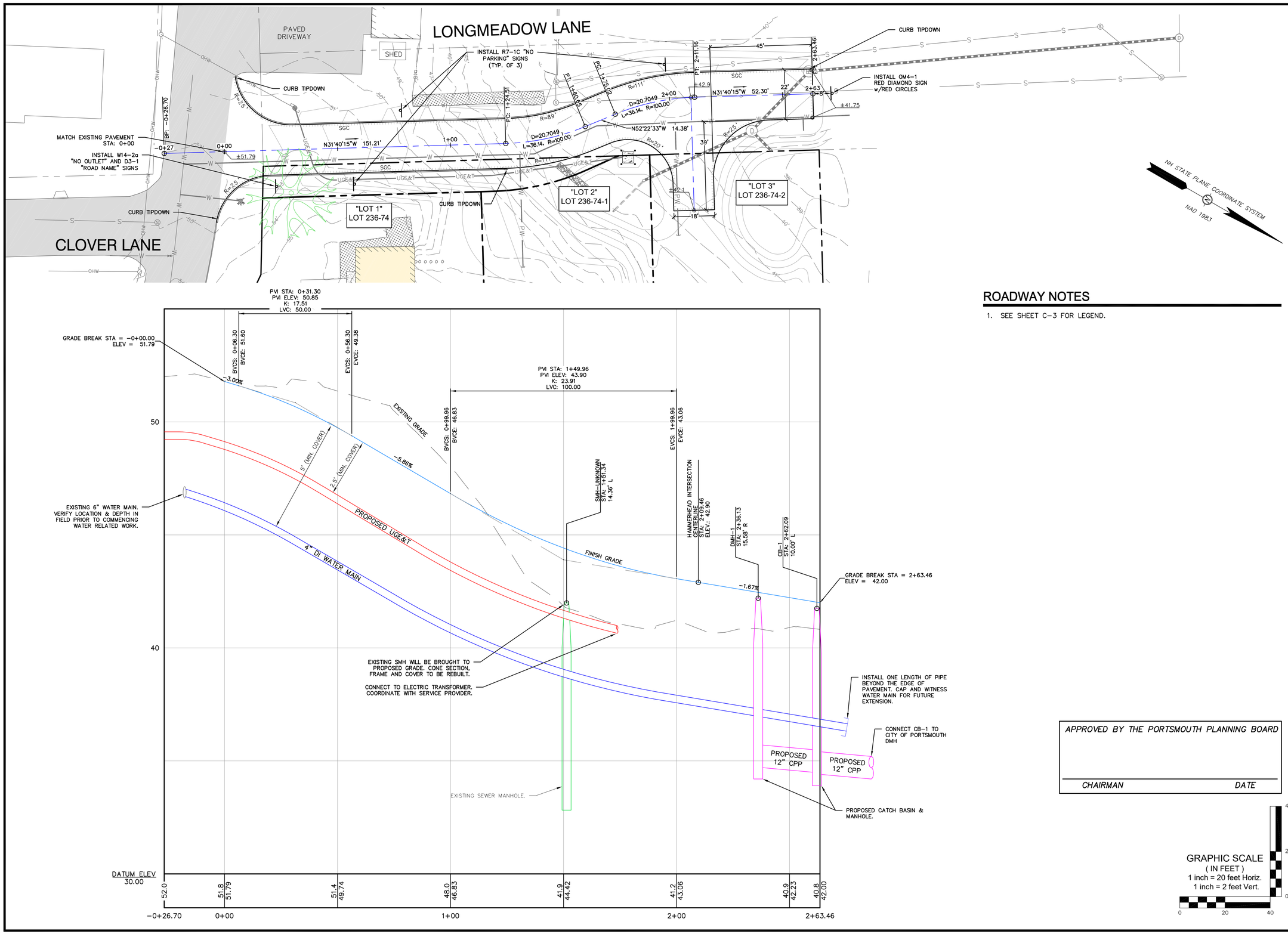
APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
# 86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
DEMOLITION & SITE PREPARATION PLAN

SHEET NUMBER:
C-3

P5719




## ROADWAY NOTES

1. SEE SHEET C-3 FOR LEGEND.

*APPROVED BY THE PORTSMOUTH PLANNING BOARD*

*CHAIRMAN* *DATE*

GRAPHIC SCALE
( IN FEET )
1 inch = 20 feet Horiz.
1 inch = 2 feet Vert.


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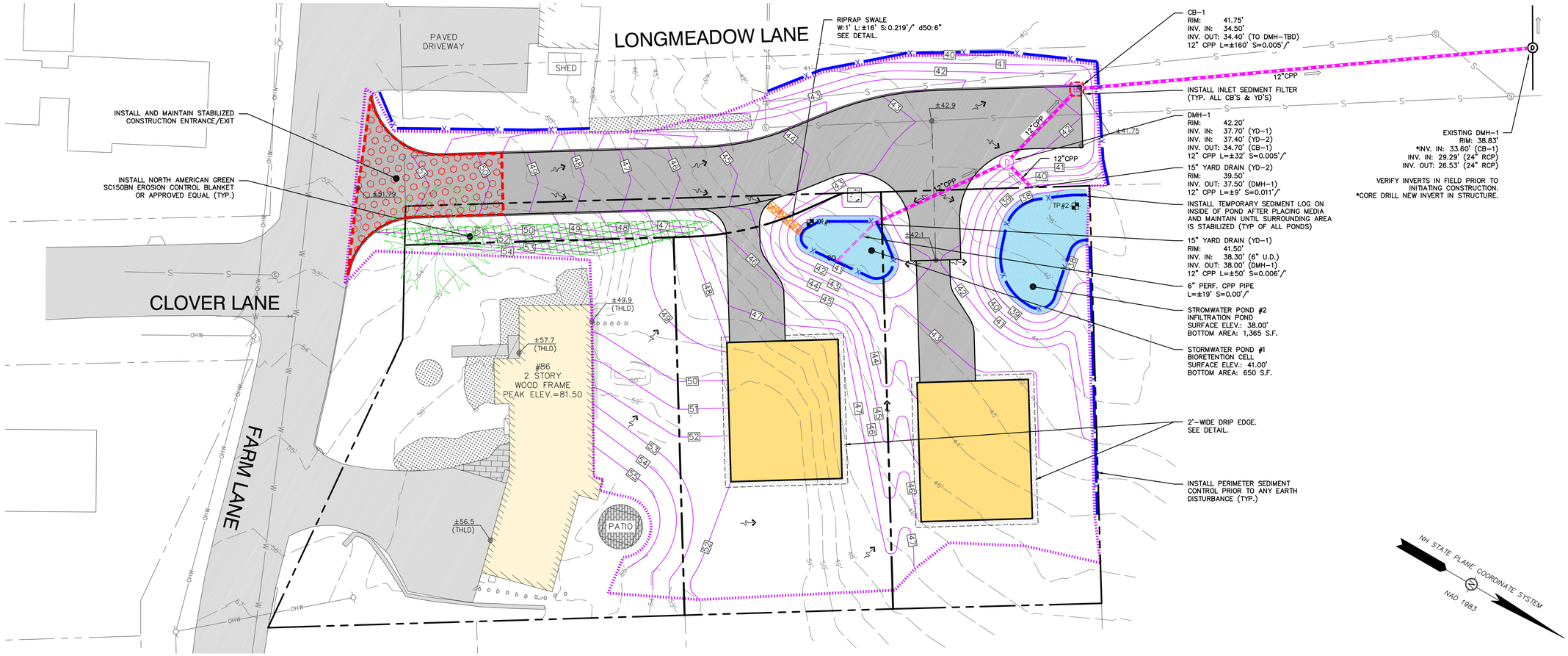
APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
# 86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
ROADWAY PLAN

SHEET NUMBER:
C-4

P5719




## GRADING & DRAINAGE NOTES

1. DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
2. CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
3. A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND THE MUNICIPAL ENGINEER SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
4. ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION. UNLESS OTHERWISE AGREED IN WRITING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING TEMPORARY BENCHMARKS (TBMS) AND PERFORMING ALL CONSTRUCTION SURVEY LAYOUT.
5. PRIOR TO CONSTRUCTION, FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING UTILITIES SCHEDULED TO REMAIN. PRESERVE AND PROTECT UTILITIES TO BE RETAINED.
6. THE LIMITS OF CONSTRUCTION DISTURBANCE SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY TREE CLEARING, STUMPING, GRUBBING OR EARTH MOVING OCCURS. WHERE CONSTRUCTION IS TO TAKE PLACE WITHIN 50' OF A PROPERTY LINE, THE PROPERTY LINE SHALL BE STAKED AT 50' MINIMUM INTERVALS.
7. PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES FOR FOUNDATIONS, PAVEMENT AREAS, UTILITY TRENCHES, AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL. IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER, EXPOSED SUBGRADES ARE SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN GROUND. THIS WILL LIKELY REQUIRE REMOVAL OF A FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATIONS. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST FREEZING.
8. IF SUITABLE, EXCAVATED MATERIALS SHALL BE PLACED AS FILL WITHIN UPLAND AREAS ONLY AND SHALL NOT BE PLACED WITHIN WETLANDS. PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION.
9. DEWATERING ACTIVITIES, IF REQUIRED, SHALL BE DONE IN ACCORDANCE WITH EPA AND NHDES REGULATIONS AND GUIDELINES.
10. DRAINAGE PIPE SHALL BE CORRUGATED POLYETHYLENE PIPE (CPP), TYPE ADS N-12 OR HANCOR H1-Q, OR PVC SDR 35 WHERE SPECIFIED. ALL STORMWATER PIPING REDUCERS, WYES AND TEES SHALL BE CONCENTRIC UNLESS OTHERWISE NOTED.
11. 2" RIGID INSULATION SHALL BE INSTALLED OVER DRAIN PIPES WHERE COVER IS < 2'.
12. ALL CATCH BASIN, MANHOLE AND OTHER DRAINAGE RIMS SHALL BE SET FLUSH WITH OR NO LESS THAN 0.1' BELOW FINISH GRADE. ANY RIM ABOVE SURROUNDING FINISH GRADE SHALL NOT BE ACCEPTED UNLESS OTHERWISE SPECIFIED. ALL DRAINAGE STRUCTURES WITHIN PAVED AREAS SHALL BE H-20 LOADING RATED.
13. IN ORDER TO PROVIDE VISUAL CLARITY ON THE PLANS, DRAINAGE AND OTHER UTILITY STRUCTURES MAY NOT BE DRAWN TO SCALE. SYMBOLS MAY NOT BE INDICATIVE OF THE CENTER OF A STRUCTURE, PARTICULARLY WHEN SHOWN ADJACENT TO A CURB LINE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER SIZING AND LOCATION OF ALL STRUCTURES AND IS DIRECTED TO RESOLVE ANY POTENTIAL DISCREPANCY WITH THE ENGINEER PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL PROTECT ALL RAINGARDENS FROM CONSTRUCTION STORMWATER RUNOFF. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED DURING CONSTRUCTION. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
15. ALL SPOT GRADES ARE AT FINISH GRADE AND BOTTOM OF CURB WHERE APPLICABLE. ADJUST GRADING AT EMERGENCY BUILDING EXITS AS NECESSARY TO ENSURE CODE COMPLIANCE. COORDINATE WITH ARCHITECT IF RAILINGS ARE REQUIRED.
16. UNLESS OTHERWISE NOTED, THE CONTRACTOR MAY CONNECT BUILDING AND RETAINING WALL FOUNDATION DRAINS TO THE NEAREST DRAINAGE STRUCTURE PROVIDED A MINIMUM 1% SLOPE CAN BE MAINTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FOUNDATION DRAINS WITH THE BUILDING AND WALL PLANS.
17. UPON COMPLETION OF CONSTRUCTION, ALL DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.
18. NO SNOW SHALL BE STORED IN ANY STORMWATER POND OR ANY OTHER STORMWATER BMP.
19. SEE SHEET C-3 FOR LEGEND.

## EROSION & SEDIMENT CONTROL NOTES

1. AREA OF DISTURBANCE = ±36,000 S.F. NHDES ALTERATION OF TERRAIN PERMIT NOT REQUIRED, INCLUDING LOT DEVELOPMENT.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN STANDARDS AND SPECIFICATIONS SET FORTH BY THE NH DEPARTMENT OF ENVIRONMENTAL SERVICES.
3. TEMPORARY INLET PROTECTION MEASURES SHALL BE INSTALLED AT ALL CULVERT ENTRANCES AND IN ALL CATCH BASINS WITHIN 100' OF THE PROJECT SITE WHEN SITE WORK WITHIN CONTRIBUTING AREAS IS ACTIVE OR SAID AREAS HAVE NOT BEEN STABILIZED.
4. ALL EROSION CONTROL BLANKETS AND FASTENERS SHALL BE BIDEGRADEABLE.
5. ALL EROSION CONTROL BLANKETS SHALL BE BY NORTH AMERICAN GREEN OR EQUAL AS APPROVED IN WRITING BY THE ENGINEER.
6. ALL SWALES WITH SLOPES OF 5% OR GREATER SHALL BE STABILIZED WITH RIPRAP PER THE DETAILS. ALL OTHER SWALES SHALL BE STABILIZED WITH NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKET.
7. THE STORMWATER PONDS SHOWN IN THIS PLAN SET SHALL BE CONSTRUCTED BEFORE EARTHWORK COMMENCES ON THE REMAINDER OF THE SITE. THE CONTRACTOR MAY USE THE POND AS A SEDIMENTATION POND UNTIL THE SITE IS STABILIZED. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM. SILT SOXX SHALL BE INSTALLED AROUND THE PERIMETER OF THE STORMWATER BASINS.
8. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM; WITH THE EXCEPTION OF DETENTION PONDS SHOULD A SEDIMENTATION POND BE REQUIRED.
9. TEMPORARY SEDIMENT LOG (SILTSOXX OR EQUAL APPROVED BY THE ENGINEER) SHALL BE INSTALLED AROUND THE INLETS OFF ALL CULVERTS AND THE BOTTOM PERIMETERS OF ALL STORMWATER PONDS. THESE MEASURES ARE TO REMAIN IN PLACE UNTIL ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
10. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS.
11. MATERIAL STOCKPILE & CONCRETE WASHOUT LOCATIONS SHOWN ARE CONCEPTUAL. THE CONTRACTOR MAY LOCATE STOCKPILES OR WASHOUT WHERE NECESSARY PROVIDED THAT PERIMETER SEDIMENT CONTROLS ARE PROPERLY INSTALLED.
12. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF LOAM, LIMESTONE, FERTILIZER, SEED, AND HAY MULCH OR EROSION CONTROL BLANKET USING APPROPRIATE SOIL STABILIZATION TECHNIQUES. SEE DETAILS FOR ADDITIONAL INFORMATION.
13. UPON COMPLETION OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED AND ANY AREAS DISTURBED BY THE REMOVAL SMOOTHED AND REVEGETATED.
14. SEE DEMOLITION & SITE PREPARATION PLAN AND DETAIL SHEETS FOR ADDITIONAL SEDIMENT AND EROSION CONTROL NOTES AND DETAILS.

## TEST PIT LOGS

EVALUATED BY ERIC D. WEINRIEB (PERMIT #809) ON JANUARY 14, 2026
WITNESSED BY DAVID DESFOSSES (TEST PIT 1 ONLY)

TEST PIT 1
0-9" 7.5 YR 3/3 – DARK BROWN GRASS MATT AND FINE SANDY LOAM, FRIABLE, GRANULAR
9-24" 7.5 YR 3/4 – DARK BROWN FINE SANDY LOAM, FRIABLE, GRANULAR
24-60" 5 YR 4/3 – REDDISH BROWN CLAYEY LOAM FIRM, MASSIVE WITH PROMINENT MOTTLES THROUGHOUT
60" STOPPED

ESTIMATED SEASONAL HIGH WATER TABLE – 24"
ROOTS – OOC TO 40"
OBSERVED WATER – 40"
LEDGE – NONE

TEST PIT 2
0-8" 10 YR 2/2 – VERY DARK BROWN GRASS MATT AND FINE LOAMY SAND, FRIABLE, GRANULAR
8-17" 5 YR 3/3 – DARK REDDISH BROWN LOAMY SAND, SINGLE GRAIN, LOOSE
17-33" 5 YR 6/4 – LIGHT REDDISH BROWN FINE SAND, SINGLE GRAIN, LOOSE
33-55" 5 YR 4/3 REDDISH BROWN CLAYEY LOAM, FIRM, MASSIVE WITH PROMINENT MOTTLES STARTING AT 43"
55" STOPPED

ESTIMATED SEASONAL HIGH WATER TABLE – 43"
ROOTS – NOT DOCUMENTED
OBSERVED WATER – 50"
LEDGE – NONE

*APPROVED BY THE PORTSMOUTH PLANNING BOARD*

*CHAIRMAN* *DATE*

GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )

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133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB
No. 7634
LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | PMJ | 02/13/26 |
| 1 | PER TAC COMMENTS | PMJ | 03/23/26 |

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

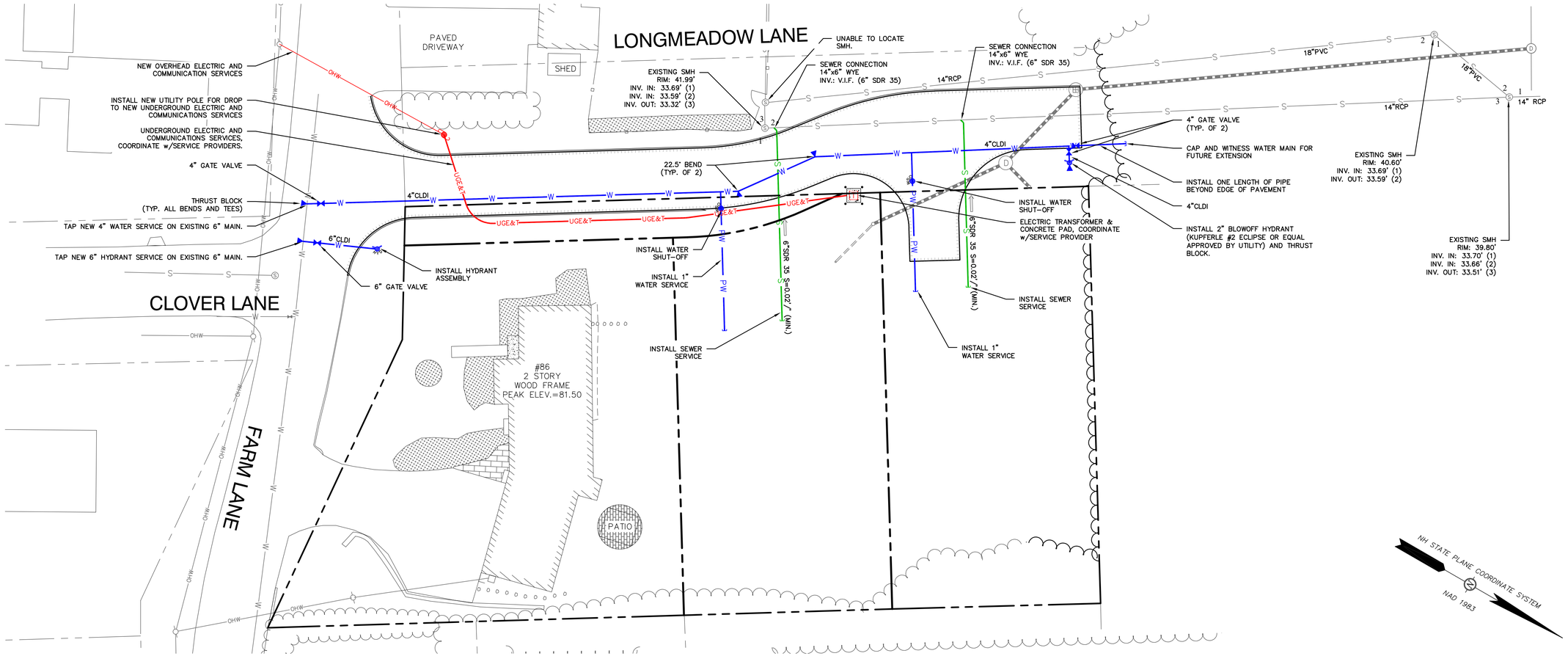
APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
# 86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
GRADING, DRAINAGE & EROSION CONTROL PLAN

SHEET NUMBER:
C-5

P5719




## UTILITY NOTES

1. THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (I.E. CATCH BASINS, MANHOLES, WATER GATES, ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY PROVIDERS AND GOVERNMENTAL AGENCIES. AS SUCH, THEY ARE NOT INCLUSIVE AS OTHER UTILITIES AND UNDERGROUND STRUCTURES THAT ARE NOT SHOWN ON THE PLANS MAY EXIST. THE ENGINEER, SURVEYOR AND OWNER ACCEPT NO RESPONSIBILITY FOR POTENTIAL INACCURACIES IN THE PLAN AND/OR UNFORESEEN CONDITIONS. THE CONTRACTOR SHALL NOTIFY, IN WRITING, SAID AGENCIES, UTILITY PROVIDERS, LOCAL DPW AND OWNER'S AUTHORIZED REPRESENTATIVE AND CALL DIG SAFE AT 1 (800) DIG-SAFE AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION WORK.
2. PRIOR TO CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING AND PROPOSED STORMWATER, WASTEWATER AND UTILITY LINES. CONFLICTS SHALL BE ANTICIPATED AND ALL EXISTING LINES TO BE RETAINED SHALL BE PROTECTED. ANY DAMAGE DONE TO EXISTING UTILITIES SHALL BE REPAIRED AND, IF NECESSARY, EXISTING UTILITIES SHALL BE RELOCATED AT NO EXTRA COST TO THE OWNER. ALL CONFLICTS SHALL BE RESOLVED WITH THE INVOLVEMENT OF THE ENGINEER, LOCAL DPW AND APPROPRIATE UTILITIES.
3. WATER: PORTSMOUTH DPW WATER DIVISION, DOUG SPARKS, (603) 427-1409.
4. SEWER: PORTSMOUTH DPW SEWER DIVISION, DOUG SPARKS, (603) 427-1409.
5. TELECOMMUNICATIONS: CONSOLIDATED, JOE CONSIDINE, (603) 427-5525.
6. CABLE: COMCAST, MIKE COLLINS, (603) 679-5695, EXT. 1037.
7. ELECTRICAL: EVERSOURCE, JOSHUA LAHAIE, (603) 332-7551.
8. GAS: UNITIL, DAVID BEAULIEU, (603) 294-5144
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF ALL BONDS AND PAYMENT OF ALL TAP, TIE-IN AND CONNECTION FEES.
10. THE APPLICANT SHALL AGREE TO PAY FOR THE SERVICES OF A THIRD-PARTY OVERSIGHT ENGINEER, TO BE SELECTED BY THE CITY, TO MONITOR THE INSTALLATION OF UTILITIES INCLUDING SEWER, WATER AND DRAINAGE.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL ROAD/LANE CLOSURES OR OTHER TRAFFIC INTERRUPTIONS THE CITY OF PORTSMOUTH POLICE DEPARTMENT AND/OR DPW AT LEAST TWO WEEKS PRIOR TO COMMENCING RELATED CONSTRUCTION.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING, BEDDING, BACKFILL & COMPACTION FOR ALL UTILITY TRENCHING IN ADDITION TO ALL CONDUIT INSTALLATION AND COORDINATION OF ALL REQUIRED INSPECTIONS.
13. ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE CITY OF PORTSMOUTH AND NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, LASTEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
14. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL CONFORM TO FEDERAL, OSHA, AND LOCAL REGULATIONS.
15. FINAL UTILITY LOCATIONS TO BE COORDINATED BETWEEN THE OWNER, CONTRACTOR, DPW AND APPROPRIATE UTILITY COMPANIES.
16. ALL WATER MAIN AND SERVICE INSTALLATIONS SHALL BE CONSTRUCTED AND TESTED PER PORTSMOUTH DPW STANDARDS AND SPECIFICATIONS. ALL OTHER UTILITIES SHALL BE TO THE STANDARDS AND SPECIFICATIONS OF THE RESPECTIVE UTILITY PROVIDERS.
17. PER PORTSMOUTH DPW SPECIFICATIONS, ALL NEW DUCTILE IRON WATERLINE SHALL BE WRAPPED WITH A WATER TIGHTPOLYETHYLENE WRAPPING FOR THEIR FULL LENGTH, ALL DOMESTIC WATER SERVICES SHALL BE PROVIDED WITH BACKFLOW PREVENTERS AND ALL JOINTS SHALL HAVE THREE (3) WEDGES PER JOINT.
18. WATER AND SANITARY SEWER LINES SHALL BE LOCATED AT LEAST 10' HORIZONTALLY FROM EACH OTHER. WHERE CROSSING, 18" MINIMUM VERTICAL CLEARANCE SHALL BE PROVIDED WITH WATER INSTALLED OVER SEWER.
19. ALL MEANS, METHODS, MATERIALS AND INSTALLATION OF NEW SEWER LATERALS SHALL BE APPROVED AND WITNESSED BY PORTSMOUTH DPW PRIOR TO BACKFILLING. SEWER LATERALS MAY BE CONSTRUCTED IN THE SAME TRENCH PROVIDED THAT A MINIMUM SEPARATION OF 3' IS MAINTAINED AND THE LINES ARE LOCATED ON THEIR RESPECTIVE LOTS IN THEIR ENTIRETY.
20. WHERE WATER LINES CROSS, RUN ADJACENT TO OR ARE WITHIN 5' OF STORM DRAINAGE PIPES OR STRUCTURES, 2"-THICK CLOSED CELL RIGID BOARD INSULATION SHALL BE INSTALLED FOR FROST PROTECTION.
21. THE CONTRACTOR SHALL PROVIDE DPW WITH DETAILS OF TEMPORARY & PERMANENT GROUNDWATER DEWATERING DESIGN IF NECESSARY.
22. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL HANDHOLES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS IN ORDER TO RENDER THE FULL INSTALLATION OF COMPLETE AND OPERATIONAL UTILITY AND DRAINAGE SYSTEMS.
23. UNLESS OTHERWISE DETERMINED BY THE UTILITY PROVIDER, ALL ELECTRICAL TRANSFORMERS AND SWITCHES SHALL REMAIN THE PROPERTY OF THE UTILITY.
24. THE INSTALLATION OF ELECTRIC POWER AND COMMUNICATIONS LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE, COORDINATE WITH UTILITY PROVIDER.
25. THE CONTRACTOR SHALL CONFIRM ALL UTILITY LINE AND CONDUIT SIZES WITH THE MEP PLANS AND SERVICE PROVIDERS PRIOR TO INSTALLATION. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
26. DETECTABLE WARNING TAPE SHALL BE PLACED OVER THE ENTIRE LENGTH OF ALL BURIED UTILITIES. COLORS SHALL MATCH THE RESPECTIVE UTILITY PROVIDERS.
27. SANITARY SEWERS WILL BE CONNECTED TO THE EXISTING 14" AC PIPE. ABESTOS CONCRETE PIPE A HAZARDOUS WASTE. CONTRACTOR SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO ENSURE THAT CONTAMINENTS ARE NOT RELEASED TO THE ENVIRONMENT.
28. SEE SHEET C-3 FOR LEGEND.

*APPROVED BY THE PORTSMOUTH PLANNING BOARD*

*CHAIRMAN* *DATE*

GRAPHIC SCALE

20 0 10 20 40 80

( IN FEET )

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PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
# 86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
## UTILITIES PLAN

SHEET NUMBER:
C-6

P5719

## PROJECT NAME AND LOCATION

Owner:

JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

Applicant:

FLIPPING BERGER'S, LLC
71 BRACKETT ROAD
PORTSMOUTH, NH 03801

## DESCRIPTION

The project consists of the development of two residential properties on Farm Lane. The existing single-family home at 86 Farm Lane is to remain. The proposed buildings will be modern single family homes. Stormwater will be managed and treated with stormwater ponds. Site improvements include underground utilities, landscaping and associated site improvements.

## DISTURBED AREA

The total area to be disturbed on the parcels and for the roadway, lot development, drainage, and utility construction is approximately ±36,000 S.F. The combined disturbed area DOES NOT exceed 43,560 SF (1 acre), thus a SWPPP will NOT be required for compliance with the USEPA-NPDES Construction General Permit. All local requirements for stormwater and erosion control during construction are still required.

## NPDES CONSTRUCTION GENERAL PERMIT

Not required for this project.

## SEQUENCE OF MAJOR ACTIVITIES

1. Hold a pre-construction meeting with City & stake holders.
2. Install temporary erosion control measures, including drain inlet protection, silt fences, and stabilized construction exit/entrance.
3. Remove existing pool, pool house, deck, stone staircases, retaining walls, and chain link fence.
4. Clear and Grub vegetated areas per plan; Strip and stockpile loam. Stockpiles shall be temporarily stabilized with hay bales, mulch and surrounded by a hay bale or silt fence barrier until material is removed and final grading is complete. Remove debris. Remove pavement and structures intended to be removed within the initial work limits.
5. Construct utility infrastructure. Rough grade lot to prepare for site development. Stabilize swales and stormwater managment systems prior to directing flow to them.
6. Construct roadway infrastrucutre and foundations.
7. Loam and see remaining disturbed areas in roadway.
8. Construct buildings.
9. When all construction activity is complete and site is stabilized, remove all silt fences and temporary structures and sediment that has been trapped by these devices.

## NAME OF RECEIVING WATER

The site drainage discharges into an unnamed wetland that eventually discharges to Hodgeson Brook.

## TEMPORARY EROSION & SEDIMENT CONTROL AND STABILIZATION PRACTICES

All work shall be in accordance with state and local permits. Work shall conform to the practices described in the "New Hampshire Stormwater Manual", dated February 2025. As indicated in the sequence of Major Activities, the silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Once construction activity ceases permanently in an area, silt fences and any earth/dikes will be removed once permanent measures are established.

During construction, runoff will be diverted around the site with stabilized channels where possible. Sheet runoff from the site shall be filtered through hay bale barriers, stone check dams, and silt fences. All storm drain inlets shall be provided with hay bale filters or stone check dams. Stone rip rap shall be provided at the outlets of drain pipes and culverts where shown on the drawings.

Stabilize all ditches, swales, stormwater ponds, level spreaders and their contributing areas prior to directing flow to them.

Temporary and permanent vegetation and mulching is an integral component of the erosion and sedimentation control plan. All areas shall be inspected and maintained until vegetative cover is established. These control measures are essential to erosion prevention and also reduce costly rework of graded and shaped areas.

Temporary vegetation shall be maintained in these areas until permanent seeding is applied. Additionally, erosion and sediment control measures shall be maintained until permanent vegetation is established.

## INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

A. GENERAL

These are general inspection and maintenance practices that shall be used to implement the plan:

1. The smallest practical portion of the site shall be denuded at one time, but in no case shall it exceed 5 acres at one time.
2. All control measures shall be inspected at least once each week and following any storm event of 0.25 inches or greater.
3. All measures shall be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours.
4. Built-up sediment shall be removed from silt fence or other barriers when it has reached one-third the height of the fence or bale, or when "bulges" occur.
5. All diversion dikes shall be inspected and any breaches promptly repaired.
6. Temporary seeding and planting shall be inspected for bare spots, washouts, and unhealthy growth.
7. The owner's authorized engineer shall inspect the site on a periodic basis to review compliance with the Plans.
8. All roadways and parking lots shall be stabilized within 72 hours of achieving finished grade.
9. All cut and fill slopes shall be seeded/loamed within 72 hours of achieving finished grade.
10. An area shall be considered stable if one of the following has occurred:
    a. Base coarse gravels have been installed in areas to be paved;
    b. A minimum of 85% vegetated growth as been established;
    c. A minimum of 3 inches of non-erosive material such as stone of riprap has been installed;

    – or –

    d. Erosion control blankets have been properly installed.
11. The length of time of exposure of area disturbed during construction shall not exceed 45 days.

B. MULCHING

Mulch shall be used on highly erodible soils, on critically eroding areas, on areas where conservation of moisture will facilitate plant establishment, and where shown on the plans.

1. Timing – In order for mulch to be effective, it must be in place prior to major storm events. There are two (2) types of standards which shall be used to assure this:
    a. Apply mulch prior to any storm event. This is applicable when working within 100 feet of wetlands. It will be necessary to closely monitor weather predictions, usually by contacting the National Weather Service in Concord, to have adequate warning of significant storms.
    b. Required Mulching within a specified time period. The time period can range from 21 to 28 days of inactivity on a area, the length of time varying with site conditions. Professional judgment shall be used to evaluate the interaction of site conditions (soil erodibility, season of year, extent of disturbance, proximity to sensitive resources, etc.) and the potential impact of erosion on adjacent areas to choose an appropriate time restriction.

## INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (CON'T)

2. Guidelines for Winter Mulch Application –

| Type | Rate per 1,000 s.f. | Use and Comments |
|---|---|---|
| Hay or Straw | 70 to 90 lbs. | Must be dry and free from mold. May be used with plantings. |
| Wood Chips or Bark Mulch | 460 to 920 lbs. | Used mostly with trees and shrub plantings. |
| Jute and Fibrous Matting (Erosion Blanket | As per manufacturer Specifications | Used in slope areas, water courses and other Control areas. |
| Crushed Stone 1/4" to 1-1/2" dia. | Spread more than 1/2" thick | Effective in controlling wind and water erosion. |
| Erosion Control Mix | 2" thick (min) | * The organic matter content is between 80 and 100%, dry weight basis.<br>* Particle size by weight is 100% passing a 6"screen and a minimum of 70 %, maximum of 85%, passing a 0.75" screen.<br>* The organic portion needs to be fibrous and elongated.<br>* Large portions of silts, clays or fine sands are not acceptable in the mix.<br>* Soluble salts content is less than 4.0 mmhos/cm.<br>* The pH should fall between 5.0 and 8.0. |

3. Maintenance – All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied.

C. TEMPORARY GRASS COVER

1. Seedbed Preparation –
   Apply fertilizer at the rate of 600 pounds per acre of 10–10–10. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of three (3) tons per acre.
2. Seeding –
   a. Utilize annual rye grass at a rate of 40 lbs/acre.
   b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.
   c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.
3. Maintenance –
   Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

D. FILTERS

1. Tubular Sediment Barrier
   a. See detail.
   b. Install per manufacturer's requirements.
2. Silt Fence (if used)
   a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements:

| Physical Property | Test | Requirements |
|---|---|---|
| Filtering Efficiency | VTM-51 | 75% minimum |
| Tensile Strength at 20% Maximum Elongation* | VTM-52 | Extra Strength 50 lb/lin in (min) Standard Strength 30 lb/lin in (min) |
| Flow Rate | VTM-51 | 0.3 gal/sf/min (min) |

   * Requirements reduced by 50 percent after six (6) months of installation.

   Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizer to provide a minimum of six (6) months of expected usable construction life at a temperature range of 0 degrees F to 120° F.

   b. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location or as recommended by the manufacturer and driven securely into the ground (minimum of 16 inches).

   c. A trench shall be excavated approximately six (6) inches wide and eight (8) inches deep along the line of posts and upslope from the barrier.

   d. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one (1) inch long, tie wires or hog rings. The wire shall extend no more than 36 inches above the original ground surfaces.

   e. The "standard strength" filter fabric shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.

   f. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of item (g) applying.

   g. The trench shall be backfilled and the soil compacted over the filter fabric.

   h. Silt fences shall be removed when they have served their useful purpose but not before the upslope areas has been permanently stabilized.

3. Sequence of Installation –
   Sediment barriers shall be installed prior to any soil disturbance of the contributing upslope drainage area.
4. Maintenance –
   a. Silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water, the sediment barriers shall be replaced with a temporary stone check dam.
   b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.
   c. Sediment deposits must be removed when deposits reach approximately one-third (1/3) the height of the barrier.
   d. Any sediment deposits remaining in place after the silt fence or other barrier is no longer required shall be removed. The area shall be prepared and seeded.
   e. Additional stone may have to be added to the construction entrance, rock barrier and riprap lined swales, etc., periodically to maintain proper function of the erosion control structure.

E. PERMANENT SEEDING –

1. Bedding – stones larger than 1½", trash, roots, and other debris that will interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 5" to prepare a seedbed and mix fertilizer into the soil.
2. Fertilizer – lime and fertilizer should be applied evenly over the area prior to or at the time of seeding and incorporated into the soil. Kinds and amounts of lime and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:

   Agricultural Limestone @ 100 lbs. per 1,000 s.f.
   10–20–20 fertilizer @ 12 lbs. per 1,000 s.f.
3. Seed Mixture (See Landscape Drawings for additional information):
   3.1. Lawn seed mix shall be a fresh, clean new seed crop. The Contractor shall furnish a dealer's guaranteed statement of the composition of the mixture and the percentage of purity and germination of each variety.
   3.2. Seed mixture shall consist of
      a. 1/3 Kentucky blue,
      b. 1/3 perennial rye, and
      c. 1/3 fine fescue.
   3.1. Turf type tall fescue is unacceptable.
4. Sodding – sodding is done where it is desirable to rapidly establish cover on a disturbed area. Sodding an area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing, and placement of sod shall be performed according to the S.C.S. Handbook. Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt), etc.

## WINTER CONSTRUCTION NOTES

1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and elsewhere seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting. The installation of erosion control blankets or mulch and netting shall not occur over accumulated snow or on frozen ground and shall be completed in advance of thaw or spring melt events;
2. All ditches or swales which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions; and
3. After November 15th, incomplete road or parking surfaces where work has stopped for the winter season shall be protected with a minimum of 3 inches of crushed gravel per NHDOT Item 304.3.

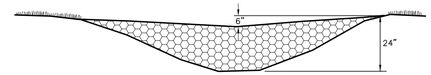
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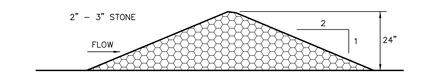
**Long Term Inspection & Maintenance Schedule**

| | Spring | Fall or Yearly | After Major Storm | Every 2-5 Years |
|---|---|---|---|---|
| **Vegetated Areas** | | | | |
| Inspect all slopes and embankments | x | | x | |
| Replant bare areas or areas with sparse growth | x | | x | |
| Armor areas with rill erosion with an appropriate lining or divert the erosive flows to on-site areas able to withstand concentrated flows. | x | | x | |
| **Stormwater Channels** | | | | |
| Inspect ditches, swales and other open stormwater channels | x | x | x | |
| Remove any obstructions and accumulated sediments or debris | x | x | | |
| Control vegetated growth and woody vegetation | | x | | |
| Repair any erosion of the ditch lining | | x | | |
| Mow vegetated ditches | | x | | |
| Remove woody vegetation growing through riprap | | x | | |
| Repair any slumping side slopes | | x | | |
| Replace riprap where underlying filter fabric or underdrain gravel is exposed or where stones have been dislodged | | x | | |
| **Culverts** | | | | |
| Remove accumulated sediments and debris at inlet, outlet and within the conduit | x | x | x | |
| Repair any erosion damage at the culvert's inlet and outlet | x | x | x | |
| Remove woody vegetation growing through riprap | | x | | |
| **Roadways and Parking Surfaces** | | | | |
| Remove accumulated winter sand along roadways | x | | | |
| Sweep pavement to remove sediment | x | | | |
| Grade road shoulders and remove excess sand either manually or by a front-end loader | x | | | |
| Grade gravel roads and gravel shoulders | x | | | |
| Clean out sediment contained in water bars or open-top culverts | x | | | |
| Ensure that stormwater is not impeded by accumulations of material or false ditches in the roadway shoulder | x | | | |
| **Runoff Infiltration Facilities** | | | | |
| Remove dead vegetation and any accumulated sediment (normally at the entrance to the garden) to allow for new growth | x | | | |
| Weed; add additional hardwood mulch to suppress weeds | x | x | | |
| Mow turf three (3) times a growing season | | | | |
| Aerate area with deep tines, if water ponds on the surface for more than 24 hours during the first year or for a length of 72 hours | | x | | |
| **Vegetative Swale** | | | | |
| Mow grass swales monthly | | | | |
| Inspect swale following significant rainfall event | x | x | x | |
| Control vegetated growth and woody vegetation | x | x | | |
| Repair any erosion of the ditch | x | x | | |
| Remove debris and liter as necessary | | | | |

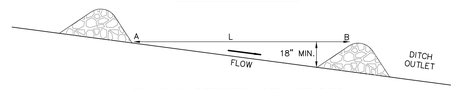
NOTE:
ALL FACILITIES SHOULD BE INSPECTED ON AN ANNUAL BASIS AT A MINIMUM. IN ADDITION, ALL FACILITIES SHOULD BE INSPECTED AFTER A SIGNIFICANT PRECIPITATION EVENT TO ENSURE THE FACILITY IS DRAINING APPROPRIATELY AND TO IDENTIFY ANY DAMAGE THAT OCCURRED AS A RESULT OF THE INCREASED RUNOFF. FOR THE PURPOSE OF THIS STORMWATER MANAGEMENT PROGRAM, A SIGNIFICANT RAINFALL EVENT IS CONSIDERED AN EVENT OF THREE (3) INCHES IN A 24-HOUR PERIOD OR 0.25 INCHES IN A ONE-HOUR PERIOD. IT IS ANTICIPATED THAT A SHORT, INTENSE EVENT IS LIKELY TO HAVE A HIGHER POTENTIAL OF EROSION FOR THIS SITE THAN A LONGER, HIGH VOLUME EVENT.




CROSS-SECTION




STRUCTURE DETAIL




SPACING BETWEEN STRUCTURES

1. L = DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION
2. CHECK DAM SHALL BE CONSTRUCTED OF 2" TO 3" STONE WITH COMPLETE COVERAGE OF DITCH OR SWALE TO INSURE THAT THE CENTER OF THE STRUCTURE IS LOWER THAN THE EDGES.

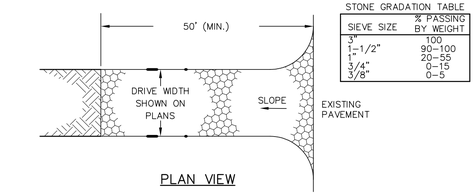
## MAINTENANCE

*TEMPORARY GRADE STABILIZATION STRUCTURES SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED STORMS. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE. WHEN THE STRUCTURES ARE REMOVED, THE DISTURBED PORTION SHOULD BE BROUGHT TO THE EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED, AND MULCHED. WHILE THIS PRACTICE IS NOT INTENDED TO BE USED PRIMARILY FOR SEDIMENT TRAPPING, SOME SEDIMENT WILL ACCUMULATE BEHIND THE STRUCTURES. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE STRUCTURE.*

## CONSTRUCTION SPECIFICATIONS

1. *STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.*
2. *CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.*
3. *SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATE VEGETATIVE BMP.*
4. *STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.*

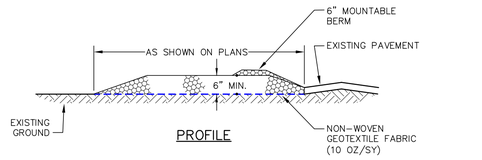
## TEMPORARY EROSION CONTROL CHECK DAM — NOT TO SCALE




PLAN VIEW

STONE GRADATION TABLE

| SIEVE SIZE | % PASSING BY WEIGHT |
|---|---|
| 3" | 100 |
| 1-1/2" | 90–100 |
| 1" | 20–55 |
| 3/4" | 0–15 |
| 3/8" | 0–5 |




PROFILE

## CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – NHDOT STANDARD STONE SIZE #4 – SECTION 703 OF NHDOT STANDARD.
2. LENGTH – DETAILED ON PLANS (50 FOOT MINIMUM) OR AS SHOWN ON PLANS.
3. THICKNESS – SIX (6) INCHES (MINIMUM).
4. WIDTH – FULL DRIVE WIDTH UNLESS OTHERWISE SPECIFIED.
5. FILTER FABRIC – MIRAFI 600X OR EQUAL APPROVED BY ENGINEER.
6. SURFACE WATER CONTROL – ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. STABILIZED CONSTRUCTION EXITS SHALL BE INSTALLED AT ALL ENTRANCES TO PUBLIC RIGHTS-OF-WAY, AT LOCATIONS SHOWN ON THE PLANS, AND/OR WHERE AS DIRECTED BY THE ENGINEER.

## STABILIZED CONSTRUCTION EXIT — NOT TO SCALE

P5719

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133 Court Street Portsmouth, NH 03801
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STATE OF NEW HAMPSHIRE
ERIC D. WEINREB
No. 7634
LICENSED
PROFESSIONAL ENGINEER
2/13/26

NOT FOR CONSTRUCTION

ISSUED FOR:
PRELIMINARY REVIEW

ISSUE DATE:
FEBRUARY 13, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | PMJ | 02/13/26 |

DRAWN BY: RLH/PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-DETAILS.DWG

SCALE:
22" x 34" - NOT TO SCALE
11" x 17" - NOT TO SCALE

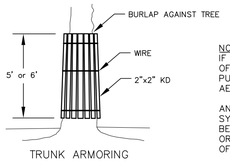
OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKETT ROAD
PORTSMOUTH, NH 03801

PROJECT:
# 86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
# EROSION CONTROL NOTES & DETAILS

SHEET NUMBER:
# D-1

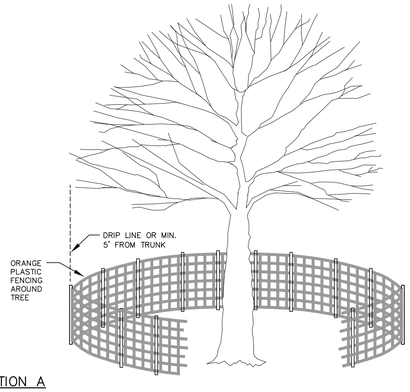



OPTION B

NOTE:
IF SOIL BECOMES COMPATCED OVER THE ROOT ZONE OF ANY TREE, THE GROUND SHOULD BE AERATED BY PUNCHING SMALL HOLES IN IT WITH SUITABLE AERATING EQUIPMENT.

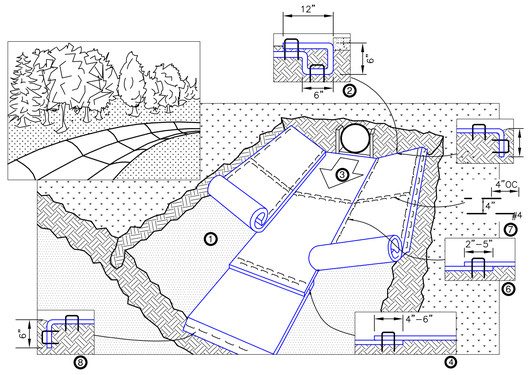
ANY DAMAGE TO THE CROWN, TRUNK OR ROOT SYSTEM OF ANY TREE RETAINED ON SITE SHOULD BE REPAIRED IMMEDIATELY. CONSULT A FORESTER OR TREE SPECIALIST FOR MORE SERIOUS DAMAGE OF TREES.

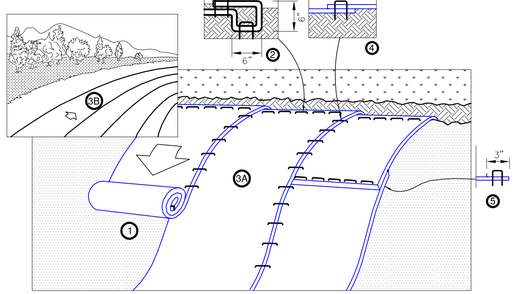
CONTRACTOR TO USE OPTION A OR B WHERE SUITABLE AND/OR AS DIRECTED BY THE ENGINEER.




OPTION A

## TREE PROTECTION DETAILS NOT TO SCALE



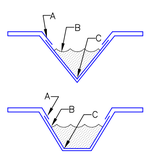

NOTES

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

## EROSION CONTROL BLANKET - SLOPE NOT TO SCALE

NOTES

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (DEPENDING ON BLANKET TYPE) AND STAPLED. TO INSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE BLANKET BEING OVERLAPPED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.




CRITICAL POINTS:

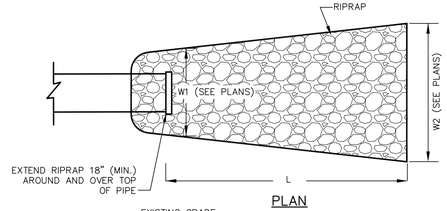
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTES:

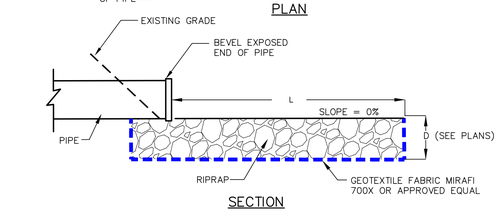
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

## EROSION CONTROL BLANKET - SWALE NOT TO SCALE




PLAN




SECTION

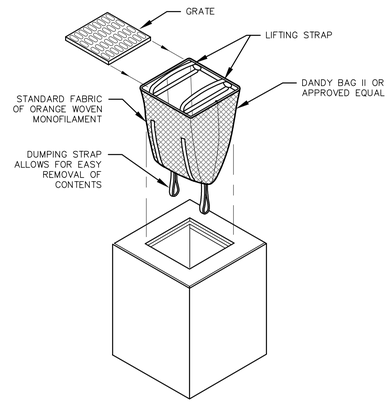
MAINTENANCE

THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

CONSTRUCTION SPECIFICATIONS

1. THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIPRAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK OR GRAVEL USED FOR FILTER OR RIPRAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIPRAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
5. BEVEL EXPOSED END OF PIPE FLUSH WITH GRADE.

## RIPRAP OUTLET PROTECTION NOT TO SCALE




INSTALLATION AND MAINTENANCE:

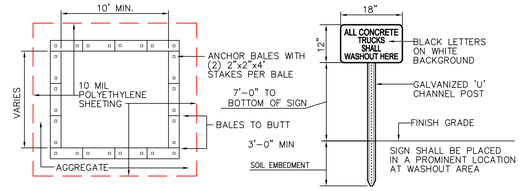
INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO CATCH BASIN INSERT SO THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF THE UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE CATCH BASIN INSERT. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY THE UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

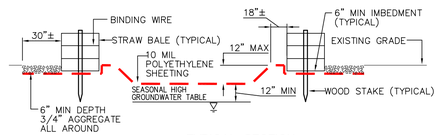
UNACCEPTABLE INLET PROTECTION METHOD:

A SIMPLE SHEET OF GEOTEXTILE UNDER THE GRATE IS NOT ACCEPTABLE.

## STORM DRAIN INLET PROTECTION NOT TO SCALE




PLAN WASHOUT SIGN

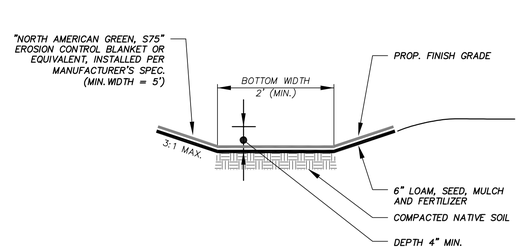



TYPICAL SECTION

NOTES

1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

## CONCRETE WASHOUT NOT TO SCALE




NOTES:

1. THE FOUNDATION AREA OF THE WATERWAY SHALL BE CLEARED AND GRUBBED OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL. MATERIALS REMOVED SHALL BE DISPOSED OF SO THEY WILL NOT INTERFERE WITH THE CONSTRUCTION OR PROPER FUNCTIONING OF THE WATERWAY.
2. THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS SECTION AS REQUIRED TO MEET THE DESIGN CRITERIA. THE WATERWAY SHALL BE FREE OF IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. EARTH FILLS REQUIRED TO MEET SUBGRADE REQUIREMENTS BECAUSE OF OVER EXCAVATION OR TOPOGRAPHY SHALL BE COMPACTED TO THE SAME DENSITY AS THE SURROUNDING SOIL TO PREVENT UNEQUAL SETTLEMENT THAT COULD CAUSE DAMAGE TO THE COMPLETED WATERWAY. EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE WATERWAY.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER AS TO MINIMIZE EROSION AND AIR AND WATER POLLUTION. ALL APPROPRIATE STATE AND LOCAL LAWS AND REGULATIONS SHALL BE COMPLIED WITH FOR INSTALLATION.
5. VEGETATION SHALL BE ESTABLISHED IN THE SWALE OR AN EROSION CONTROL MATTING INSTALLED PRIOR TO ALLOWING STORMWATER RUNOFF TO FLOW THROUGH THE SWALE.
6. MAINTENANCE OF THE VEGETATION IN THE GRASSED WATERWAY IS EXTREMELY IMPORTANT IN ORDER TO PREVENT RILLING, EROSION, AND FAILURE OF THE WATERWAY. MOWING SHALL BE DONE FREQUENTLY ENOUGH TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION AND TO KEEP THE GRASSES IN A VIGOROUS CONDITION. THE VEGETATION SHALL NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE EROSION RESISTANCE IN THE WATERWAY.
7. THE WATERWAY SHOULD BE INSPECTED PERIODICALLY AND AFTER ANY STORM GREATER THAN 0.5" OF RAINFALL IN 24 HOURS TO DETERMINE THE CONDITION OF THE WATERWAY. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND REVEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.
8. APPLY LIME AND FERTILIZER AS NEEDED TO MAINTAIN VIGOROUS GROWTH.

## GRASSED SWALE NOT TO SCALE

P5719

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STATE OF NEW HAMPSHIRE
ERIC D. WEINREB
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2/13/26

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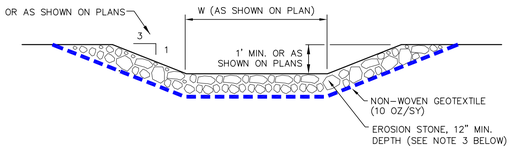
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APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
DETAIL SHEET

SHEET NUMBER:
D-2

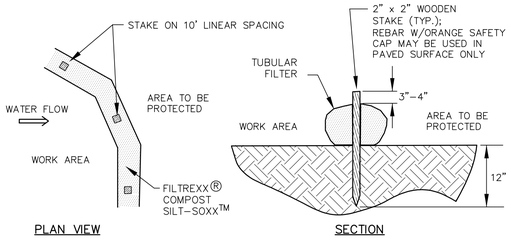



NOTES

1. CONSTRUCT RIP RAP LINED SWALE TO THE WIDTHS AND LENGTHS SHOWN ON THE PLAN.
2. THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIPRAP SHALL BE PREPARED TO LINES AND GRADES SHOWN ON THE PLANS.
3. EROSION STONE USED FOR THE RIP RAP LINED SWALE SHALL MEET THE GRADATION SHOWN ON THE PLANS.
4. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE EROSION STONE. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 18 INCHES.
5. THE EROSION STONE MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

## RIPRAP SWALE

NOT TO SCALE

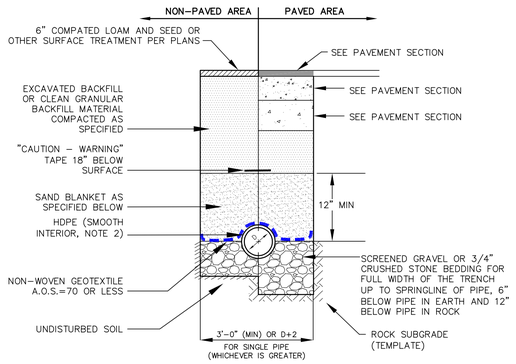



*NOTES:*

*1. SILTSOXX OR APPROVED EQUAL SHALL BE USED FOR TUBULAR SEDIMENT BARRIERS.*
*2. ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS.*
*3. COMPOST/SOIL/ROCK/SEED FILL MATERIAL SHALL BE ADJUSTED AS NECESSARY TO MEET THE REQUIREMENTS OF THE SPECIFIC APPLICATION.*
*4. ALL SEDIMENT TRAPPED BY BARRIER SHALL BE DISPOSED OF PROPERLY.*

## TUBULAR SEDIMENT BARRIER DETAIL

NOT TO SCALE




NOTES

1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.
2. MAINTAIN 12" MINIMUM HORIZONTAL SEPARATION AND WIDEN TRENCH ACCORDINGLY IF MULTIPLE PIPES ARE IN TRENCH.

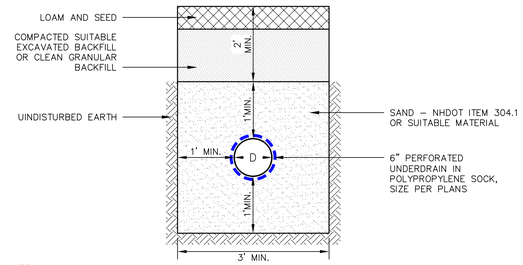
| SAND BLANKET/BARRIER | |
|---|---|
| SIEVE SIZE | % FINER BY WEIGHT |
| 1/2" | 90 – 100 |
| 200 | 0 – 15 |

| SCREENED GRAVEL OR CRUSHED STONE BEDDING* | |
|---|---|
| SIEVE SIZE | % PASSING BY WEIGHT |
| 1" | 100 |
| 3/4" | 90 – 100 |
| 3/8" | 20 – 55 |
| # 4 | 0 – 10 |
| # 8 | 0 – 5 |

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

## DRAINAGE TRENCH

NOT TO SCALE

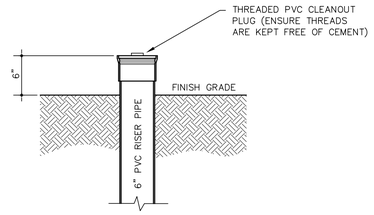



NOTES:

1. ALL MATERIALS ARE TO BE COMPACTED TO 95% OF ASTM D-1557.

## BIO. CELL UNDERDRAIN TRENCH

NOT TO SCALE

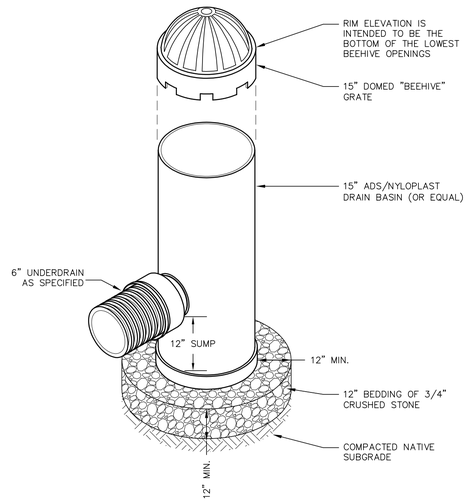



NOTES

1. THIS DETAIL IS INTENDED FOR USE WITH BIORETENTION POND UNDERDRAINS ONLY. SEE OTHER DETAILS FOR CLEANOUTS IN OTHER AREAS.
2. CLEANOUT LOCATIONS ARE MARKED "CO" ON STORMWATER MANAGEMENT PLANS.
3. CLEANOUTS MAY NOT BE SET TO FINISH GRADE WITHOUT APPROVAL FROM THE ENGINEER.

## BIORETENTION U.D. CLEANOUT ("CO")

NOT TO SCALE

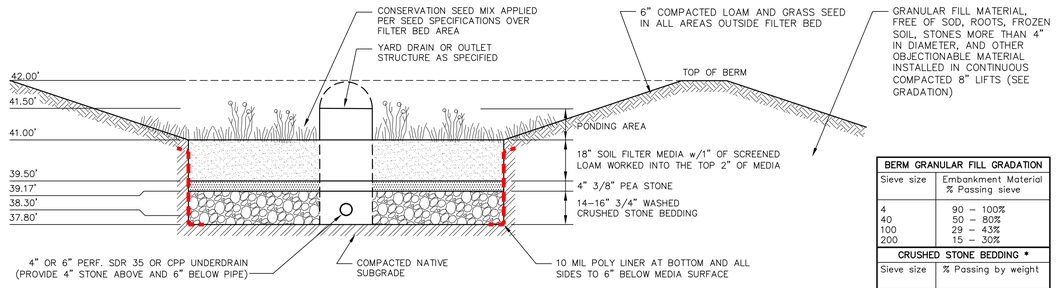



NOTES:

1. FRAMES AND GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN AND DETAILS.
3. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE, N-12HP AND PVC SEWER.
4. INLINE DRAIN TO BE PVC DIAMETER AS SPECIFIED AND AS MANUFACTURED BY ADS OR APPROVED EQUAL.
5. THE CONTRACTOR SHALL INSTALL THE DRAIN BASIN PER THE MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON THE DRAWINGS.
6. INLET AND OUTLET GEOMETRY MAY NOT BE SYMMETRICAL. ALL INLETS AND OUTLET LOCATIONS SHALL CONFORM TO THE LINES AND ANGLES SHOWN ON THE PLANS.

## YARD DRAIN ("YD")

NOT TO SCALE




| BERM GRANULAR FILL GRADATION | |
|---|---|
| Sieve size | Embankment Material % Passing sieve |
| 4 | 90 – 100% |
| 40 | 50 – 80% |
| 100 | 29 – 43% |
| 200 | 15 – 30% |
| **CRUSHED STONE BEDDING *** | |
| Sieve size | % Passing by weight |
| 1" | 100% |
| 3/4" | 90 – 100% |
| 3/8' | 20 – 55% |
| #4 | 0 – 10% |
| #8 | 0 – 5% |

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 NHDOT STANDARD SPECIFICATIONS

| FILTER MEDIA MIXTURES | | | |
|---|---|---|---|
| Component Material | Percent of Mixture by Volume | Gradation of material | |
| | | Sieve No. | Percent by Weight Passing Standard Sieve |
| **Filter Media Option A** | | | |
| ASTM C-33 concrete sand | 50 – 55% | | |
| Loamy sand topsoil, with fines as indicated | 20 – 30% | 200 | 15 to 25% |
| Moderately fine shredded bark or wood fiber mulch, with fines as indicated | 20 – 30% | 200 | < 5% |
| **Filter Media Option B** | | | |
| Moderately fine shredded bark or wood fiber mulch, with fines as indicated | 20 – 30% | 200 | < 5% |
| Loamy coarse sand | 70 – 80% | 10 | 85 – 100% |
| | | 20 | 70 – 100% |
| | | 60 | 15 – 40% |
| | | 200 | 8 – 15% |

NOTES

1. WHEN CONTRACTOR EXCAVATES BIORETENTION POND AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL EITHER OPTION A OR OPTION B AT CONTRACTOR'S DISCRETION.
3. DO NOT PLACE BIORETENTION POND INTO SERVICE UNTIL ITS SIDE SLOPES AND CONTRIBUTING AREAS HAVE BEEN STABILIZED.
4. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES TO THE BIORETENTION POND DURING ANY STAGE OF CONSTRUCTION.
5. DO NOT TRAFFIC EXPOSED SURFACES OF BIORETENTION POND WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATION ACTIVITIES WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE BASIN.
6. POND BERMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STORMWATER POND BERM DETAIL.

MAINTENANCE REQUIREMENTS

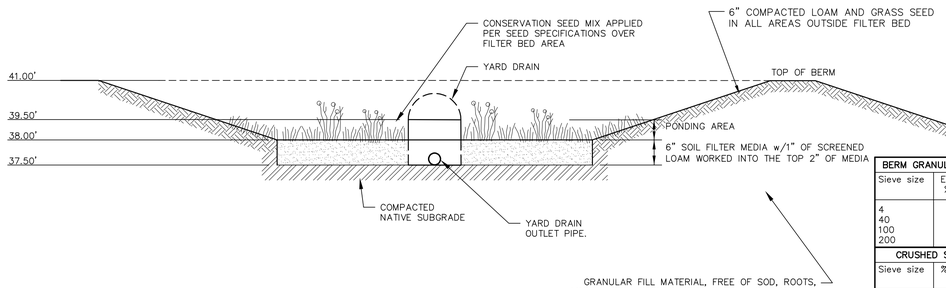
- SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.
- PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.
- AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.
- VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, WEED WHACKING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES. BERM AREAS ARE TO BE MOWED TWICE ANNUALLY.

DESIGN REFERENCES

- UNH STORMWATER CENTER
- EPA (1999A)
- NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, FEBRUARY 2025 AS AMENDED.

## BIORETENTION CELL (STORMWATER POND #1)

NOT TO SCALE




| BERM GRANULAR FILL GRADATION | |
|---|---|
| Sieve size | Embankment Material % Passing sieve |
| 4 | 90 – 100% |
| 40 | 50 – 80% |
| 100 | 29 – 43% |
| 200 | 15 – 30% |
| **CRUSHED STONE BEDDING *** | |
| Sieve size | % Passing by weight |
| 1" | 100% |
| 3/4" | 90 – 100% |
| 3/8' | 20 – 55% |
| #4 | 0 – 10% |
| #8 | 0 – 5% |

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 NHDOT STANDARD SPECIFICATIONS

| FILTER MEDIA MIXTURES | | | |
|---|---|---|---|
| Component Material | Percent of Mixture by Volume | Gradation of material | |
| | | Sieve No. | Percent by Weight Passing Standard Sieve |
| **Filter Media Option A** | | | |
| ASTM C-33 concrete sand | 50 – 55% | | |
| Loamy sand topsoil, with fines as indicated | 20 – 30% | 200 | 15 to 25% |
| Moderately fine shredded bark or wood fiber mulch, with fines as indicated | 20 – 30% | 200 | < 5% |
| **Filter Media Option B** | | | |
| Moderately fine shredded bark or wood fiber mulch, with fines as indicated | 20 – 30% | 200 | < 5% |
| Loamy coarse sand | 70 – 80% | 10 | 85 – 100% |
| | | 20 | 70 – 100% |
| | | 60 | 15 – 40% |
| | | 200 | 8 – 15% |

NOTES

1. WHEN CONTRACTOR EXCAVATES BIORETENTION POND AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL EITHER OPTION A OR OPTION B AT CONTRACTOR'S DISCRETION.
3. DO NOT PLACE BIORETENTION POND INTO SERVICE UNTIL ITS SIDE SLOPES AND CONTRIBUTING AREAS HAVE BEEN STABILIZED.
4. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES TO THE BIORETENTION POND DURING ANY STAGE OF CONSTRUCTION.
5. DO NOT TRAFFIC EXPOSED SURFACES OF BIORETENTION POND WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATION ACTIVITIES WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE BASIN.
6. POND BERMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STORMWATER POND BERM DETAIL.

MAINTENANCE REQUIREMENTS

- SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.
- PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.
- AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.
- VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, WEED WHACKING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES. BERM AREAS ARE TO BE MOWED TWICE ANNUALLY.

DESIGN REFERENCES

- UNH STORMWATER CENTER
- EPA (1999A)
- NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, FEBRUARY 2025 AS AMENDED.

## INFILTRATION POND (STORMWATER POND #2)

NOT TO SCALE

P5719

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ERIC D. WEINREB No. 7634 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE
2/13/26

NOT FOR CONSTRUCTION

ISSUED FOR:
PRELIMINARY REVIEW

ISSUE DATE:
FEBRUARY 13, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | PMJ | 02/13/26 |

DRAWN BY: RLH/PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-DETAILS.DWG

SCALE:
22" x 34" - NOT TO SCALE
11" x 17" - NOT TO SCALE

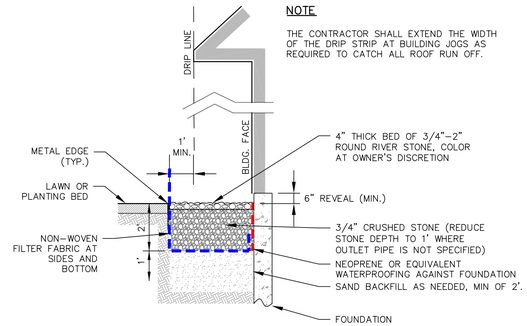
OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
**86 FARM LANE SUBDIVISION**
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

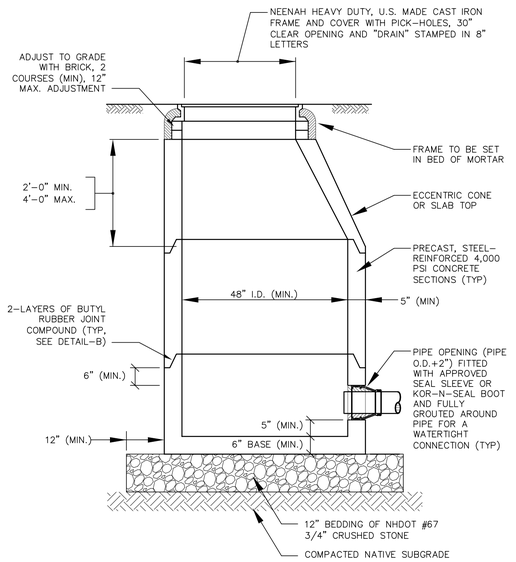
TITLE:
DETAIL SHEET

SHEET NUMBER:
D-3




## STONE DRIP EDGE

NOT TO SCALE

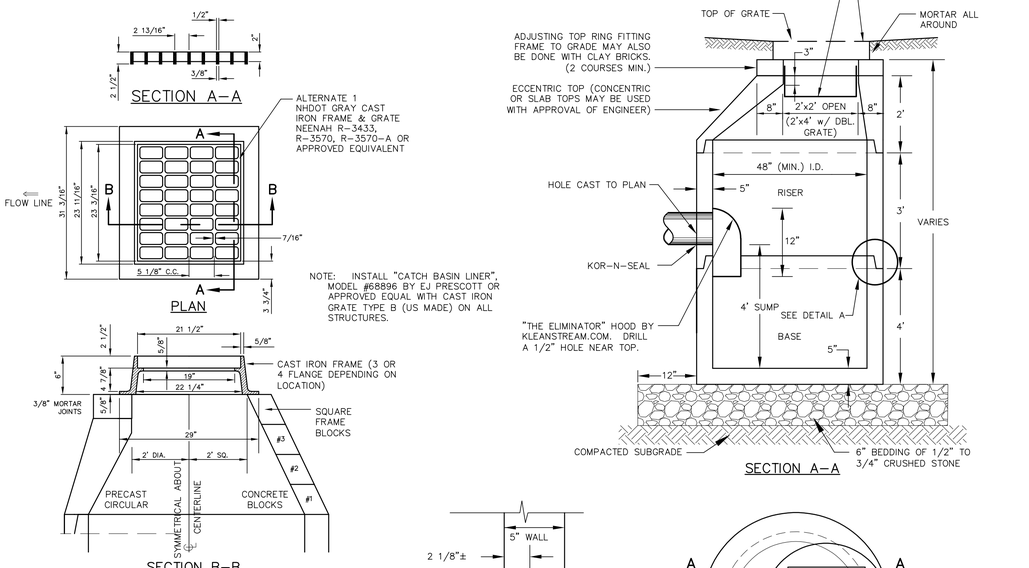



NOTES

1. ALL SECTIONS SHALL BE CONCRETE CLASS AA (4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. ALL MANHOLE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
6. USE H-20 LOADING SLAB TOP SECTION IN LIEU OF ECCENTRIC TOP WHERE PIPE INVERT IS WITHIN 4 FT OF GRADE.
7. NO MANHOLE STEPS.

## DRAIN MANHOLE ("DMH")

NOT TO SCALE



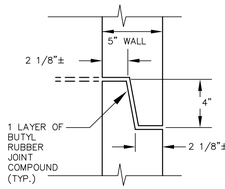

NOTES

1. ALL SECTIONS SHALL BE CONCRETE CLASS AA (4000 PSI).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
6. USE H20 LOADING SLAB TOP SECTION IN LIEU OF ECCENTRIC TOP WHERE PIPE INVERT IS WITHIN 4' OF FINISH GRADE.
7. FRAME AND GRATE DIMENSIONS ARE TYPICAL BUT MAY VARY BASED ON PRODUCT SELECTED OR EQUIVALENT APPROVED BY THE ENGINEER.

## DEEP SUMP CATCH BASIN

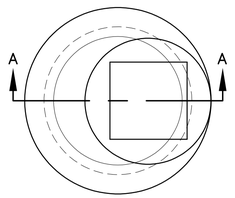
NOT TO SCALE




DETAIL A

(TONGUE & GROOVE JOINT)




PLAN-ECCENTRIC CONE

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB
No. 7634
LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
PRELIMINARY REVIEW

ISSUE DATE:
MARCH 23, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | PMJ | 02/13/26 |
| 1 | PER TAC COMMENTS | PMJ | 03/23/26 |

DRAWN BY: RLH/PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-DETAILS.DWG

SCALE:
22" x 34" - NOT TO SCALE
11" x 17" - NOT TO SCALE

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

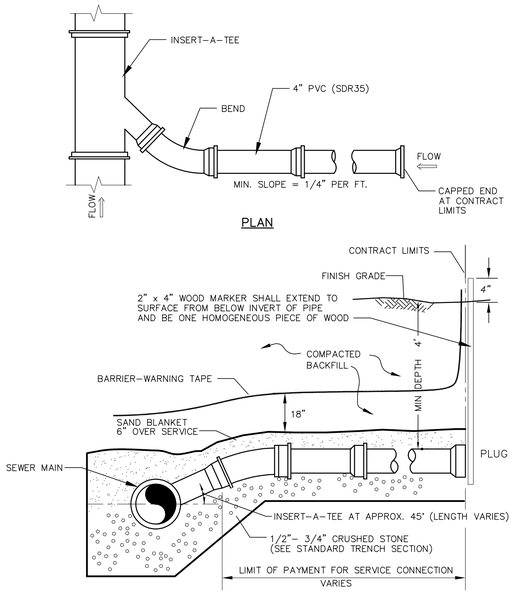
APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
# 86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
## DETAIL SHEET

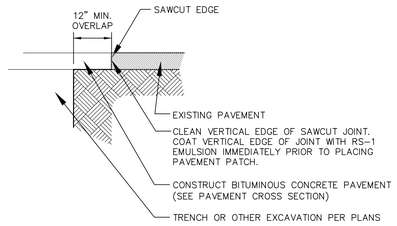
SHEET NUMBER:
# D-4

P5719



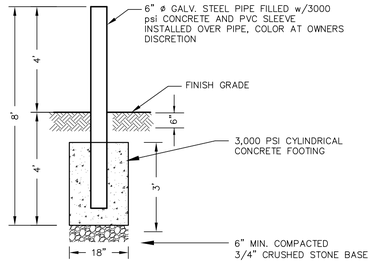

## SEWER SERVICE CONNECTION

NOT TO SCALE



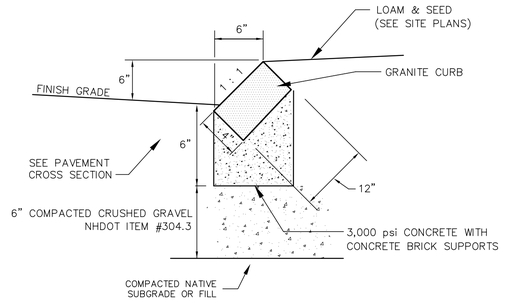

## TYPICAL PAVEMENT SAWCUT

NOT TO SCALE




## BOLLARD

NOT TO SCALE



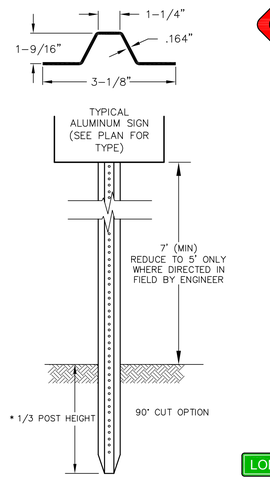

NOTES

1. SEE SITE PLAN FOR LIMITS OF CURBING
2. ADJOINING STONES OF STRAIGHT CURB LAID ON CURVES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH
3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 18"
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES – SEE CHART

| RADIUS FOR STONES WITH SQUARE JOINTS | MAXIMUM LENGTH |
|---|---|
| 16'-28' | 1'-6" |
| 29'-41' | 2' |
| 42'-55' | 3' |
| 56'-68' | 4' |
| 69'-82' | 5' |
| 83'-96' | 6' |
| 97'-110' | 7' |
| OVER 110' | 8' |

## SLOPED GRANITE CURB

NOT TO SCALE

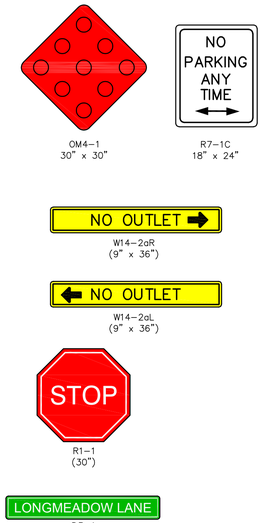



LENGTH: AS REQUIRED

WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)

HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH

STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070 – 1080)

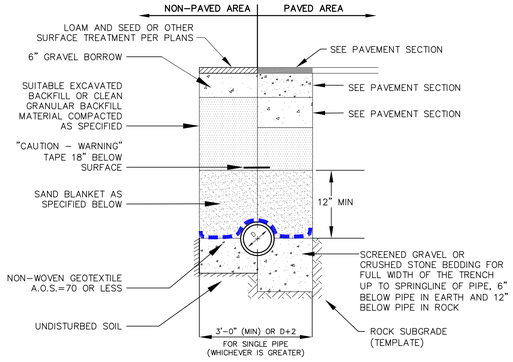



NOTES

1. ALL SIGNS SHALL MEET THE REQUIREMENTS OF AND BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. WHEN PLACED PERPENDICULAR TO A TRAVELLED WAY OR SIDEWALK, SIGN EDGE SHALL BE NO CLOSER THAN 2' TO THE EDGE OF PAVEMENT. GREATER MINIMUM DISTANCE MAY BE REQUIRED IN CERTAIN LOCATIONS.

## SIGN DETAILS

NOT TO SCALE




NOTES

1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.
2. INSULATE GRAVITY SEWER AND FORCEMAINS WHERE THERE IS LESS THAN 5'-0" OF COVER WITH 2" THICK CLOSED CELL RIGID BOARD INSULATION, 18" ON EACH SIDE OF PIPE.
3. MAINTAIN 12" MINIMUM HORIZONTAL SEPARATION AND WIDEN TRENCH ACCORDINGLY IF MULTIPLE PIPES ARE IN TRENCH.

SAND BLANKET/BARRIER

| SIEVE SIZE | % FINER BY WEIGHT |
|---|---|
| 1/2" | 90 – 100 |
| 200 | 0 – 15 |

SCREENED GRAVEL OR CRUSHED STONE BEDDING*

| SIEVE SIZE | % PASSING BY WEIGHT |
|---|---|
| 1" | 100 |
| 3/4" | 90 – 100 |
| 3/8" | 20 – 55 |
| # 4 | 0 – 10 |
| # 8 | 0 – 5 |

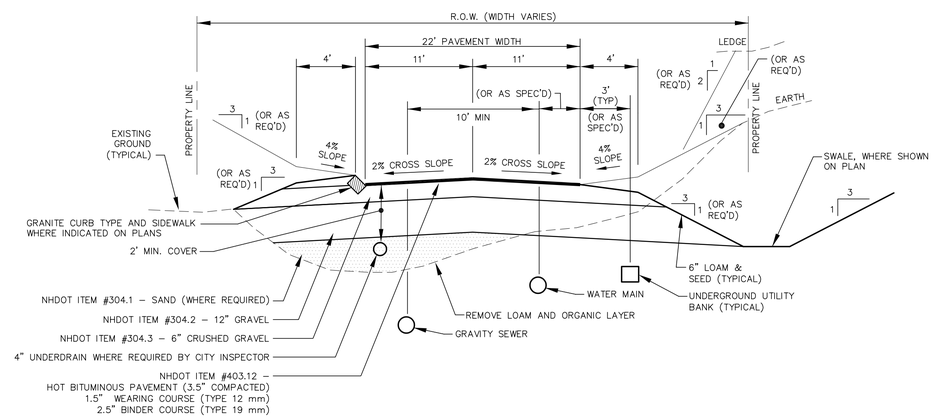
* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

## SEWER TRENCH

NOT TO SCALE

STANDARD TRENCH NOTES

1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN ON THE DRAWING.
2. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING THE GRADATION SHOWN IN THE TRENCH DETAIL. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1-1/2 INCH TO 1/2 INCH SHALL BE USED.
3. SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER MEETING THE GRADATION SHOWN IN THE TRENCH DETAIL. BLANKET MAY BE REPLACED WITH BEDDING MATERIAL FOR CAST-IRON, DUCTILE IRON, AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2" IS IN CONTACT WITH THE PIPE AND THE GEOTEXTILE IS RELOCATED ACCORDINGLY.
4. SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT, OR CLAY, ALL EXCAVATED LEDGE MATERIAL, ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION, AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. IN CROSS COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK, OR PEAT ONLY IF SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLE RECONSTRUCTION WILL BE PRESERVED.
5. BASE COURSE AND PAVEMENT SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES – DIVISIONS 300 AND 400 RESPECTIVELY.
6. W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES IN NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE OUTSIDE DIAMETER (O.D.) ALSO, W SHALL BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
7. FOR CROSS COUNTRY CONSTRUCTION, BACKFILL, FILL AND/OR LOAM SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
8. CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATION REQUIREMENTS FOR CLASS A (3000#) CONCRETE AS FOLLOWS:
   CEMENT: 6.0 BAGS PER CUBIC YARD
   WATER: 5.75 GALLONS PER BAG
   CEMENT MAXIMUM SIZE OF AGGREGATE: 1 INCH
   CONCRETE ENCASEMENT IS NOT ALLOWED FOR PVC PIPE.
9. CONCRETE FULL ENCASEMENT: IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MINIMUM). BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.
10. NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES DESIGN STANDARDS REQUIRE TEN FEET (10') SEPARATION BETWEEN WATER AND SEWER. REFER TO TOWN'S STANDARD SPECIFICATIONS FOR METHODS OF PROTECTION IN AREAS THAT CANNOT MEET THESE REQUIREMENTS.
11. THE CONTRACTOR SHALL INSTALL TRENCH DAMS IN ACCORDANCE WITH NHDES REGULATIONS.
12. ALL GRAVITY SEWER INSTALLATIONS SHALL BE TESTED IN ACCORDANCE WITH NHDES ENV-WQ 704.06.




NOTES

1. EACH GRAVEL BASE COURSE TO BE CONSTRUCTED AT THE PAVEMENT CROSS SLOPE.
2. REMOVE LEDGE 18" BELOW LOWEST WORK BEING INSTALLED.
3. REMOVE ALL LOAM, CLAY, MUCK, ORGANIC, YIELDING OR OTHERWISE UNSTABLE MATERIAL TO A MINIMUM OF 24" BELOW FINISH GRADE. ADDITIONAL DEPTH MAY BE REQUIRED BY THE GEOTECHNICAL REPORT (IF AVAILABLE) OR THE ENGINEER. SUCH ADDITIONAL REMOVAL SHALL REQUIRE THE PLACEMENT OF COMPACTED SAND OR GRAVEL BORROW APPROVED BY THE ENGINEER TO THE BOTTOM OF SUBGRADE.
4. THE OVER-EXCAVATION OF UNSUITABLE MATERIAL BEYOND THAT SPECIFIED ABOVE, THE INSTALLATION OF UNDERDRAINAGE, AND/OR THE INSTALLATION OF GEOTEXTILE FABRIC SHALL BE PROVIDED UPON DETERMINATION OF THE ENGINEER.
5. FILL BELOW PAVEMENT SUBGRADE SHALL BE SAND OR GRANULAR BORROW COMPACTED PER DOT REQUIREMENTS.
6. SITEWORK CONTRACTOR SHALL COORDINATE GEOTECHNICAL ENGINEERING INSPECTIONS PRIOR TO PLACING GRAVELS.
7. SUBGRADE SHALL BE FREE OF VOIDS THAT ALLOW MOVEMENT AND/OR SETTLEMENT OF MATERIALS.
8. SUBGRADE SHALL BE ROLLED WITH A MINIMUM OF SIX PASSES OF A 10-TON VIBRATORY COMPACTOR OPERATING AT PEAK RATED FREQUENCY OR BY OTHER MEANS APPROVED BY THE ENGINEER.
9. SUBGRADE SHALL BE PROOF-ROLLED WITH A FULLY LOADED DUMP TRUCK PRIOR TO PLACEMENT OF SELECT GRAVELS. PROOF-ROLLING SHALL BE WITNESSED AND APPROVED BY THE ENGINEER.
10. BITUMINOUS PAVEMENT SHALL BE COMPACTED TO 90 TO 97 PERCENT OF ITS THEORETICAL MAXIMUM DENSITY AS DETERMINED BY ASTM D-2041. THE BASE AND SUBBASE MATERIALS SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THEIR MAXIMUM DRY DENSITIES AS DETERMINED BY ASTM D-1557. COMPACTION TESTING SHALL BE PERFORMED BY A GEOTECHNICAL ENGINEER FOR ALL MATERIAL COURSES AND THE RESULTS APPROVED BY THE ENGINEER PRIOR TO PLACING THE SUBSEQUENT COURSE.
11. TACK COAT SHALL BE APPLIED BETWEEN SUCCESSIVE LIFTS OF ASPHALT PAVEMENT.

## TYPICAL ROADWAY CROSS SECTION

NOT TO SCALE

P5719

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER
3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR: PRELIMINARY REVIEW

ISSUE DATE: MARCH 23, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | PMJ | 02/13/26 |
| 1 | PER TAC COMMENTS | PMJ | 03/23/26 |

DRAWN BY: RLH/PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-DETAILS.DWG

SCALE:
22" x 34" - NOT TO SCALE
11" x 17" - NOT TO SCALE

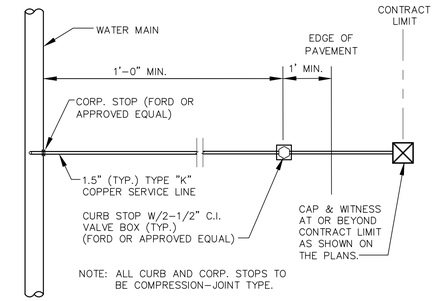
OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

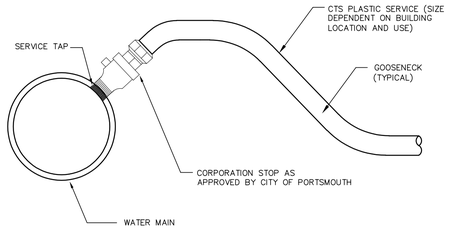
PROJECT:
# 86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
DETAIL SHEET

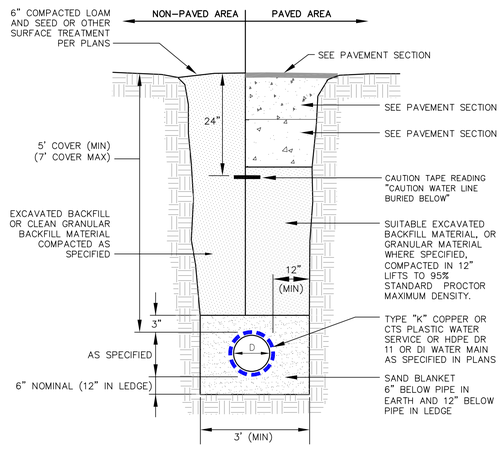
SHEET NUMBER:
D-5




NOTE: ALL MATERIALS AND SPECIFICATIONS SHALL CONFORM TO CITY OF PORTSMOUTH WATER DEPARTMENT STANDARDS AND REQUIREMENTS. VERIFY PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES.




## WATER SERVICE CONNECTION NOT TO SCALE



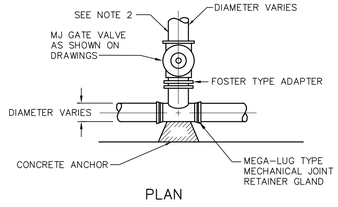

SAND BLANKET/BARRIER

| SIEVE SIZE | % FINER BY WEIGHT |
|---|---|
| 1/2" | 90 – 100 |
| 200 | 0 – 15 |

NOTES

1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.
2. ALL TRENCHING AND BACKFILL SHALL CONFORM WITH THE STANDARDS OF EXETER DPW.

## WATER MAIN TRENCH NOT TO SCALE

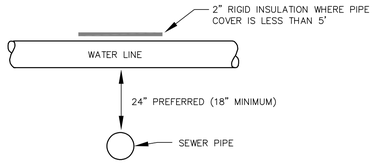



PLAN

NOTES:

1. GATE VALVES SHALL OPEN RIGHT, PER CITY STANDARDS.
2. BRANCH PIPING SHALL BE MECHANICALLY RESTRAINED AS NOTED UNDER THRUST BLOCK DETAIL REQUIREMENTS.

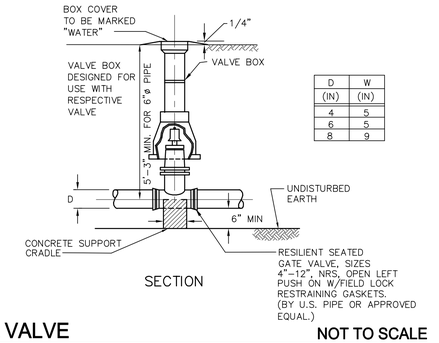
## TEE & GATE VALVE ASSEMBLY NOT TO SCALE




NOTES

1. A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER AND SEWER MAINS. A MINIMUM VERTICAL DISTANCE WITH WATER ABOVE SEWER SHALL BE MAINTAINED.
2. SEWER PIPE JOINTS SHALL BE LOCATED A MINIMUM OF 6 FEET HORIZONTALLY FROM WATER MAIN.
3. IF THE REQUIRED CONFIGURATION CANNOT BE MET, THE SEWER MAIN SHALL BE CONSTRUCTED TO MEET THE NHDES REQUIREMENTS FOR FORCE MAIN CONSTRUCTION.

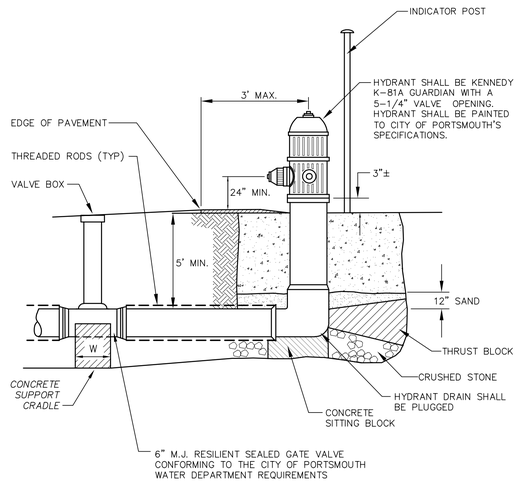
## WATER MAIN / SEWER CROSSING NOT TO SCALE




| D (IN) | W (IN) |
|---|---|
| 4 | 5 |
| 6 | 5 |
| 8 | 9 |

SECTION

## WATER VALVE NOT TO SCALE

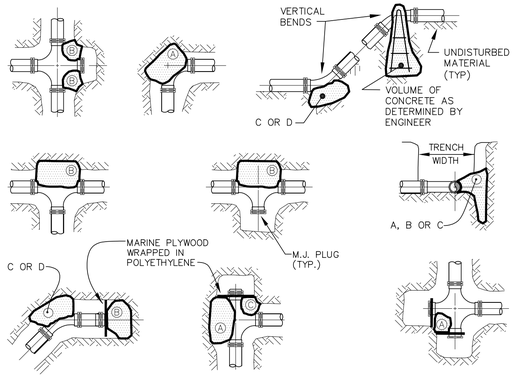



| D (IN) | W (IN) |
|---|---|
| 4 | 5 |
| 6 | 5 |
| 8 | 9 |

NOTES

1. HYDRANT INSTALLATION AND OPERATION TO CONFORM TO REGULATIONS OF THE CITY OF PORTSMOUTH WATER & FIRE DEPARTMENTS.
2. GATE VALVES & HYDRANTS TO OPEN RIGHT (CLOCKWISE).

## FIRE HYDRANT NOT TO SCALE

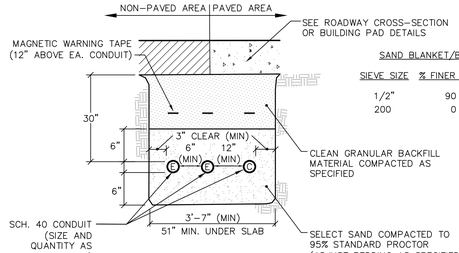



| TEST PRESSURE = 150 psi | SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL | | | | | |
|---|---|---|---|---|---|---|
| | REACTION TYPE | PIPE SIZE | | | | |
| | | 4" | 6" | 8" | 10" | 12" |
| | A 90° | 0.89 | 2.19 | 3.82 | 11.14 | 17.24 |
| | B 180° | 0.65 | 1.55 | 2.78 | 8.38 | 12.00 |
| | C 45° | 0.48 | 1.19 | 2.12 | 6.02 | 9.32 |
| | D 22-1/2° | 0.25 | 0.60 | 1.06 | 3.08 | 4.74 |
| | E 11-1/4° | 0.13 | 0.30 | 0.54 | 1.54 | 2.38 |

NOTES

1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL.
2. NO JOINTS SHALL BE COVERED WITH CONCRETE. POLYETHYLENE (6 MIL) SHALL BE PLACED AROUND FITTINGS PRIOR TO CONCRETE PLACEMENT.
3. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
4. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS.
5. PRECAST THRUST BLOCKS MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER AND LOCAL WATER DEPARTMENT.

## THRUST BLOCKING NOT TO SCALE




SAND BLANKET/BARRIER

| SIEVE SIZE | % FINER BY WEIGHT |
|---|---|
| 1/2" | 90 – 100 |
| 200 | 0 – 15 |

NOTES

1. ALL CONDUIT IS TO BE SCHEDULE 40 PVC, ELECTRICAL GRADE, GRAY IN COLOR AND INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. A 10-FOOT HORIZONTAL SECTION OF RIGID GALVANIZED STEEL CONDUIT WILL BE REQUIRED AT EACH SWEEP, UNLESS IN THE OPINION OF THE SERVICE PROVIDER DESIGNER, THE SWEEP-PVC JOINT IS NOT SUBJECT TO FAILURE DURING PULLING OF THE CABLE. ALL JOINTS ARE TO BE WATERTIGHT.
2. ALL 90 DEGREE SWEEPS WILL BE MADE WITH RIGID GALVANIZED STEEL WITH A MINIMUM RADIUS OF 36 INCHES FOR PRIMARY CABLES AND 24 INCHES FOR SECONDARY CABLES.
3. BACKFILL MAY BE MADE WITH EXCAVATED MATERIAL OR COMPARABLE, UNLESS MATERIAL IS DEEMED UNSUITABLE BY SERVICE PROVIDER. BACKFILL SHALL BE FREE OF FROZEN LUMPS, ROCKS, DEBRIS, AND RUBBISH. ORGANIC MATERIAL SHALL NOT BE USED AS BACKFILL. BACKFILL SHALL BE IN 6-INCH LAYERS AND THOROUGHLY COMPACTED.
4. A SUITABLE PULLING STRING, CAPABLE OF 300 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE SERVICE PROVIDER IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT. A MINIMUM OF TWENTY-FOUR (24") INCHES OF ROPE SLACK SHALL REMAIN AT THE END OF EACH DUCT. PULL ROPE SHALL BE INSTALLED IN ALL CONDUIT FOR FUTURE PULLS. PULL ROPE SHALL BE NYLON ROPE HAVING A MINIMUM TENSILE STRENGTH OF THREE HUNDRED (300#) LBS.
5. SERVICE PROVIDER SHALL BE GIVEN THE OPPORTUNITY TO INSPECT ALL CONDUIT PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS SHOULD SERVICE PROVIDER BE UNABLE TO INSTALL ITS CABLE IN A SUITABLE MANNER.
6. TYPICAL CONDUIT SIZES ARE 3-INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4-INCH FOR THREE PHASE SECONDARY, AND 5-INCH FOR THREE PHASE PRIMARY. HOWEVER, SERVICE PROVIDERS MAY REQUIRE DIFFERENT NUMBERS, TYPES AND SIZES OF CONDUIT THAN THOSE SHOWN HERE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL CONDUIT SIZES, TYPES AND NUMBERS WITH EACH SERVICE PROVIDER PRIOR TO ORDERING THEM.
7. ROUTING OF CONDUIT, LOCATION OF MANHOLES, TRANSFORMERS, CABINETS, HANDHOLES, ETC., SHALL BE DETERMINED BY SERVICE PROVIDER DESIGN PERSONNEL. THE CONTRACTOR SHALL COORDINATE WITH ALL SERVICE PROVIDERS PRIOR TO THE INSTALLATION OF ANY CONDUIT.
8. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE. WHERE REQUIRED BY UTILITY PROVIDER, CONDUIT SHALL BE SUPPORTED IN PLACE USING PIPE STANCHIONS PLACED EVERY FIVE (5') FEET ALONG THE CONDUIT RUN.
9. UNDER A BUILDING SLAB THE CONDUIT SHALL BE ENCASED IN 8" OF CONCRETE ON ALL SIDES.
10. ALL CONDUIT TERMINATIONS SHALL BE CAPPED TO PREVENT DEBRIS FROM ENTERING CONDUIT.

## ELECTRIC / COMMUNICATION TRENCH NOT TO SCALE

P5719

ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com




NOT FOR CONSTRUCTION

ISSUED FOR: PRELIMINARY REVIEW

ISSUE DATE: FEBRUARY 13, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | PMJ | 02/13/26 |

DRAWN BY: RLH/PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-DETAILS.DWG

SCALE:
22" x 34" - NOT TO SCALE
11" x 17" - NOT TO SCALE

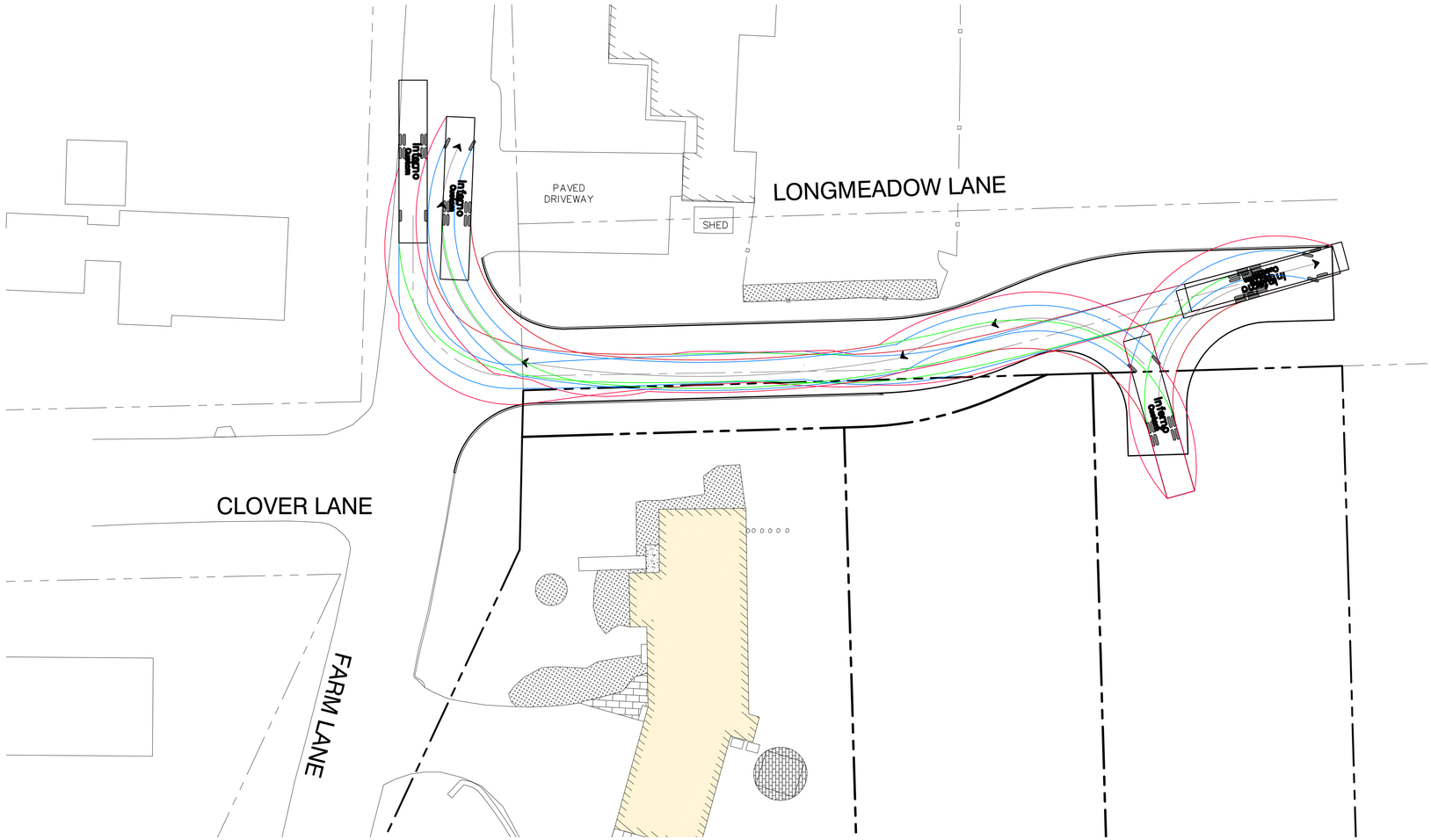
OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
# 86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
DETAIL SHEET

SHEET NUMBER:
D-6

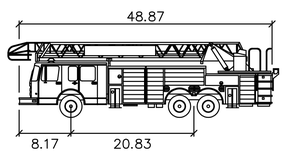



## DESIGN VEHICLE PROFILE

FRONT TRACK

REAR TRACK

VEHICLE BODY/OVERHANG




Inferno Aerial

| | feet |
|---|---|
| Width | : 8.50 |
| Track | : 8.50 |
| Lock to Lock Time | : 6.0 |
| Steering Angle | : 41.0 |

## TURNING MOVEMENT NOTES

1. THE GRAPHIC VEHICLE PROFILE SHOULD NOT BE CONSIDERED A COMPLETELY ACCURATE VISUAL DEPICTION OF THE DESIGN VEHICLE AND IS ONLY INTENDED TO CONVEY A GENERIC REPRESENTATION OF ITS GENERAL APPEARANCE.
2. THE INFERNO AERIAL WAS SELECTED AS THE DESIGN VEHICLE DUE TO IT MEETING THE DIMENSIONS OF THE LARGEST VEHICLE EXPECTED TO ACCESS THE PROJECT SITE. THIS IS INTENDED TO DEMONSTRATE THAT THE PROJECT AS DESIGNED SHOULD BE ABLE TO ADEQUATELY ACCOMMODATE ANY VEHICLE UP TO AND INCLUDING THIS DESIGN VEHICLE.
3. TURNING MOTIONS SHOWN WERE GENERATED USING AUTOTURN SOFTWARE BY TRANSOFT SOLUTIONS, INC.

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

*APPROVED BY THE PORTSMOUTH PLANNING BOARD*

*CHAIRMAN* *DATE*

GRAPHIC SCALE

20 10 20 40 80

( IN FEET )

ALTUS ENGINEERING

133 Court Street
(603) 433-2335
Portsmouth, NH 03801
www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINRIEB
No. 7634
LICENSED
PROFESSIONAL ENGINEER

3/23/26

NOT FOR CONSTRUCTION

ISSUED FOR:
TECHNICAL ADVISORY COMMITTEE

ISSUE DATE:
MARCH 23, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | PMJ | 02/13/26 |
| 1 | PER TAC COMMENTS | PMJ | 03/23/26 |

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5719-SITE.dwg

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER:
JEANETTE MACDONALD
86 FARM LANE
PORTSMOUTH, NH 03801

APPLICANT:
FLIPPING BERGER'S, LLC
71 BRACKET ROAD
PORTSMOUTH, NH 03801

PROJECT:
# 86 FARM LANE SUBDIVISION
TAX MAP 236, LOT 74
86 FARM LANE
PORTSMOUTH, NH 03801

TITLE:
VEHICULAR ACCESS PLAN

SHEET NUMBER:
1 OF 1

P5719

ALTUS ENGINEERING

Civil
Site Planning
Environmental
Engineering

133 Court Street
Portsmouth, NH
03801-4413

March 25, 2026

Mr. Peter Britz, Director of Planning & Sustainability
City of Portsmouth Planning & Sustainability Department
1 Junkins Avenue
Portsmouth, New Hampshire 03801

**Re: Application for Site Plan Amendment**
**Assessor's Map 266, Lot 5**
**St Patrick Academy Library Expansion**
**315 Banfield Road**
**Altus Project #P4801.3**

Mr. Britz:

On behalf of the Hope for Tomorrow Foundation (HFTF) and the Saint Patrick Academy, Altus Engineering, LLC (Altus) is pleased to submit plans the revised materials for the Library Expansion at Saint Patrick Academy. Altus and the Applicant met with TAC on March 3, 2026 and Committee voted to postpone the project until the April 7 meeting.

Four primary comments were presented by TAC and have bene addressed as follows:

1) Sewer line and cleanout – The sewer line has been increased to a 6" line. The cleanout is included at the building but the cleanout in the field is not required.
2) Easement – No changes have been made to previous plans and do not require an easement revision.
3) Variance – A variance request is being submitted on March 25, 2026 for the expansion of use as requested.
4) Traffic Impacts – A Circulation Improvement Plan has been added to the plan set and a narrative included to address operations. Altus has had discussion with the City Traffic Engineer and Deputy Fire Chief to discuss the proposed improvements and feel they will provide a significant improvement to site and reduction to impacts on Banfield Road.

In addition to the revised plans and narrative, Altus has updated the drainage memorandum to include the additional pavement widening on site. The proposed improvements still provide a reduction in peak discharge from the site compared to the pre-development conditions.

Altus looks forward to meeting with the Technical Advisory Committee at the April 7, 2026 meeting. Please feel free to call or email me in advance of the meeting should you have any questions or need any additional information.

Sincerely,
**ALTUS ENGINEERING, LLC**



Cory D. Belden, PE
Principal

wde/4801 TAC work session cvr ltr.doc

Enclosure

Ecopy: James Melone, St Patrick Academy
Bryan Laroche, Oak Point Associates, Inc.

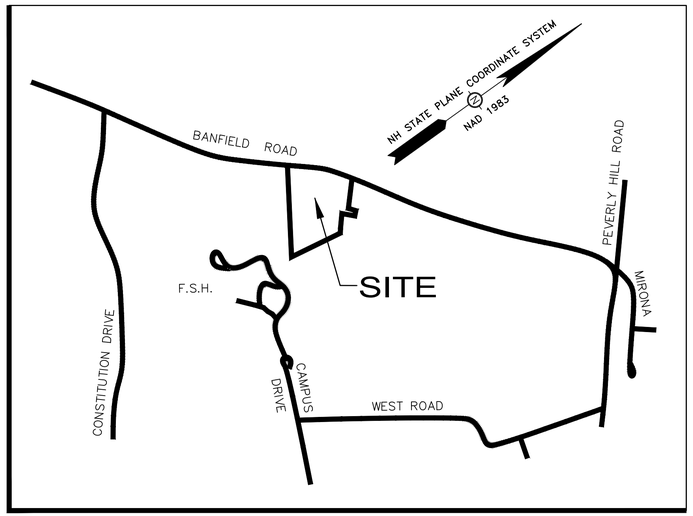
# Site Plan Amendment

## *SAINT PATRICK ACADEMY LIBRARY EXPANSION*

*315 Banfield Road*
*Portsmouth, New Hampshire*
*Assessor's Parcel 266 - 5*

*Plan Issued Date:*

*March 25, 2026* *Technical Advisory Committee*




Locus Map
Scale: Not to Scale

| *Sheet Index Title* | *Sheet No.:* | *Rev.* | *Date* |
|---|---|---|---|
| As–Built Plan (by JVA) | 1 of 1 | 0 | 11/04/21 |
| Overall Site Plan | C–1 | 0 | 02/12/26 |
| Site Plan | C–2 | 0 | 02/12/26 |
| Grading and Utilities Plan | C–3 | 1 | 03/25/26 |
| Circulation Improvement Plan | C–4 | 1 | 03/25/26 |
| Erosion Control Notes & Details | D–1 | 0 | 02/12/26 |
| Detail Sheet | D–2 | 0 | 02/12/26 |
| Detail Sheet | D–3 | 1 | 03/25/26 |
| Architectural Plans by Oak Point Associates | | | |
| Floor Plan | AE101 | 0 | 02/04/26 |
| Roof Plan | AE121 | 0 | 02/04/26 |
| North and West Exterior Elevations | AE201 | 0 | 02/04/26 |
| South Exterior Elevation | AE202 | 0 | 02/04/26 |

*Owner:*

HOPE FOR
TOMORROW FOUNDATION
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801
(603) 436–0739

*Applicant:*

*SAINT PATRICK ACADEMY*
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801
(603) 436–0739

*Civil Engineer:*

ALTUS
ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

*Architect:*

OAK POINT ASSOCIATES
85 MIDDLE STREET
PORTSMOUTH, N.H. 03801
603.431.4849

*Surveyor:*

James Verra and
Associates, Inc.
LAND SURVEYORS
101 SHATTUCK WAY – SUITE 8
NEWINGTON, N.H. 03801– 7876
603–436–3557

## *Permit Summary*

Site Plan Amendment Permit – Submitted February 13, 2026
Building Permit – to be filed by contractor
USEPA CGP / NOI is not required – Site disturbance is less than 1 acre

4801.3DETAILS.DWG

P4801.3

## SEWER TABLE

*SMH #P1*
*RIM EL= 58.57*
*(1) INV IN 6"PCV= 47.08*
*(2) INV OUT 6"PVC= 47.07*

*SMH #5*
*RIM EL= 49.45*
*(1) INV IN 6"PVC= 44.40*
*(2) INV IN 8"PVC= 43.30*
*(3) INV OUT 8"PVC= 43.24*

## DRAIN TABLE

*DMH #1*
*RIM EL= 53.01*
*(1) INV IN 12"HDPE= 48.43*
*(2) INV OUT 12"HDPE= 48.41*

*DMH #2*
*RIM EL= 48.21*
*(1) INV IN 12"HDPE= 43.86*
*(2) INV IN 12"HDPE= 43.56*
*(3) INV OUT 12"HDPE= 44.06*

*OUTLET STRUCTURE B*
*RIM EL= 47.67*
*(1) INV OUT 12"HDPE= 44.12*

*CB #1*
*RIM EL= 54.12*
*(1) INV IN 12"HDPE= 50.6±*
*(2) INV IN 6"PVC= 50.52*
*(3) INV IN 12"HDPE= 49.44*
*(4) INV OUT 12"HDPE= 49.28*

*CB #2*
*RIM EL= 53.60*
*(1) INV OUT 12"HDPE= 49.85*

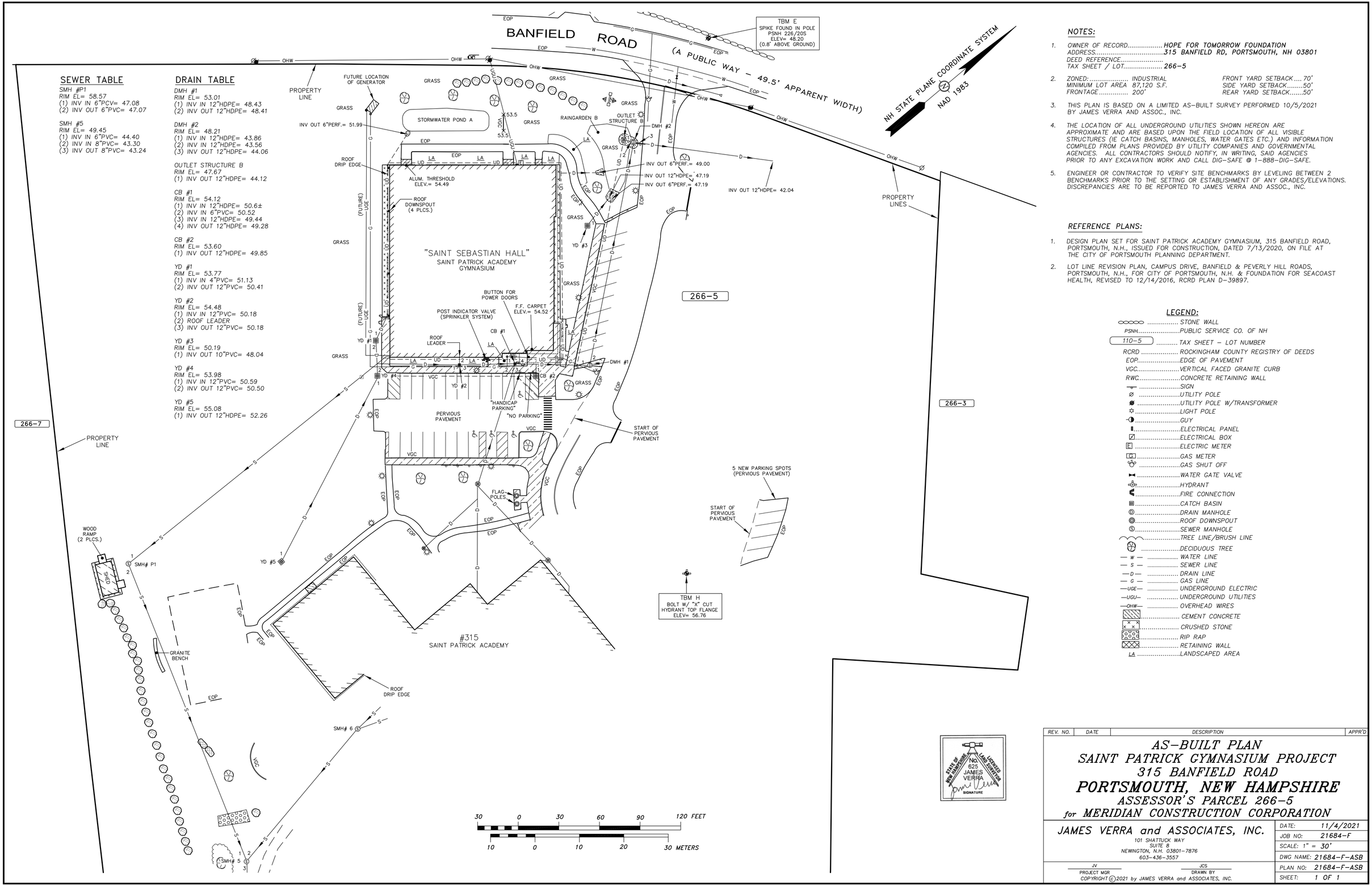
*YD #1*
*RIM EL= 53.77*
*(1) INV IN 4"PVC= 51.13*
*(2) INV OUT 12"PVC= 50.41*

*YD #2*
*RIM EL= 54.48*
*(1) INV IN 12"PVC= 50.18*
*(2) ROOF LEADER*
*(3) INV OUT 12"PVC= 50.18*

*YD #3*
*RIM EL= 50.19*
*(1) INV OUT 10"PVC= 48.04*

*YD #4*
*RIM EL= 53.98*
*(1) INV IN 12"PVC= 50.59*
*(2) INV OUT 12"PVC= 50.50*

*YD #5*
*RIM EL= 55.08*
*(1) INV OUT 12"HDPE= 52.26*




## NOTES:

1. *OWNER OF RECORD.....HOPE FOR TOMORROW FOUNDATION*
   *ADDRESS.....315 BANFIELD RD, PORTSMOUTH, NH 03801*
   *DEED REFERENCE.....*
   *TAX SHEET / LOT.....266-5*
2. *ZONED:..... INDUSTRIAL* — *FRONT YARD SETBACK.... 70'*
   *MINIMUM LOT AREA 87,120 S.F.* — *SIDE YARD SETBACK.....50'*
   *FRONTAGE..... 200'* — *REAR YARD SETBACK.....50'*
3. *THIS PLAN IS BASED ON A LIMITED AS-BUILT SURVEY PERFORMED 10/5/2021 BY JAMES VERRA AND ASSOC., INC.*
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. *ENGINEER OR CONTRACTOR TO VERIFY SITE BENCHMARKS BY LEVELING BETWEEN 2 BENCHMARKS PRIOR TO THE SETTING OR ESTABLISHMENT OF ANY GRADES/ELEVATIONS. DISCREPANCIES ARE TO BE REPORTED TO JAMES VERRA AND ASSOC., INC.*

## REFERENCE PLANS:

1. *DESIGN PLAN SET FOR SAINT PATRICK ACADEMY GYMNASIUM, 315 BANFIELD ROAD, PORTSMOUTH, N.H., ISSUED FOR CONSTRUCTION, DATED 7/13/2020, ON FILE AT THE CITY OF PORTSMOUTH PLANNING DEPARTMENT.*
2. *LOT LINE REVISION PLAN, CAMPUS DRIVE, BANFIELD & PEVERLY HILL ROADS, PORTSMOUTH, N.H., FOR CITY OF PORTSMOUTH, N.H. & FOUNDATION FOR SEACOAST HEALTH, REVISED TO 12/14/2016, RCRD PLAN D-39897.*

## LEGEND:

- ..... *STONE WALL*
- *PSNH*.....*PUBLIC SERVICE CO. OF NH*
- *110-5* ..... *TAX SHEET - LOT NUMBER*
- *RCRD*..... *ROCKINGHAM COUNTY REGISTRY OF DEEDS*
- *EOP*.....*EDGE OF PAVEMENT*
- *VGC*.....*VERTICAL FACED GRANITE CURB*
- *RWC*.....*CONCRETE RETAINING WALL*
- .....*SIGN*
- .....*UTILITY POLE*
- .....*UTILITY POLE W/TRANSFORMER*
- .....*LIGHT POLE*
- .....*GUY*
- .....*ELECTRICAL PANEL*
- .....*ELECTRICAL BOX*
- .....*ELECTRIC METER*
- .....*GAS METER*
- .....*GAS SHUT OFF*
- .....*WATER GATE VALVE*
- .....*HYDRANT*
- .....*FIRE CONNECTION*
- .....*CATCH BASIN*
- .....*DRAIN MANHOLE*
- .....*ROOF DOWNSPOUT*
- .....*SEWER MANHOLE*
- .....*TREE LINE/BRUSH LINE*
- .....*DECIDUOUS TREE*
- *— W —* ..... *WATER LINE*
- *— S —* ..... *SEWER LINE*
- *— D —* ..... *DRAIN LINE*
- *— G —* ..... *GAS LINE*
- *—UGE—* ..... *UNDERGROUND ELECTRIC*
- *—UGU—* ..... *UNDERGROUND UTILITIES*
- *—OHW—* ..... *OVERHEAD WIRES*
- ..... *CEMENT CONCRETE*
- ..... *CRUSHED STONE*
- ..... *RIP RAP*
- ..... *RETAINING WALL*
- *LA* .....*LANDSCAPED AREA*

STATE OF NEW HAMPSHIRE — No. 625 JAMES VERRA — LICENSED LAND SURVEYOR — SIGNATURE

| REV. NO. | DATE | DESCRIPTION | APPR'D |
|---|---|---|---|

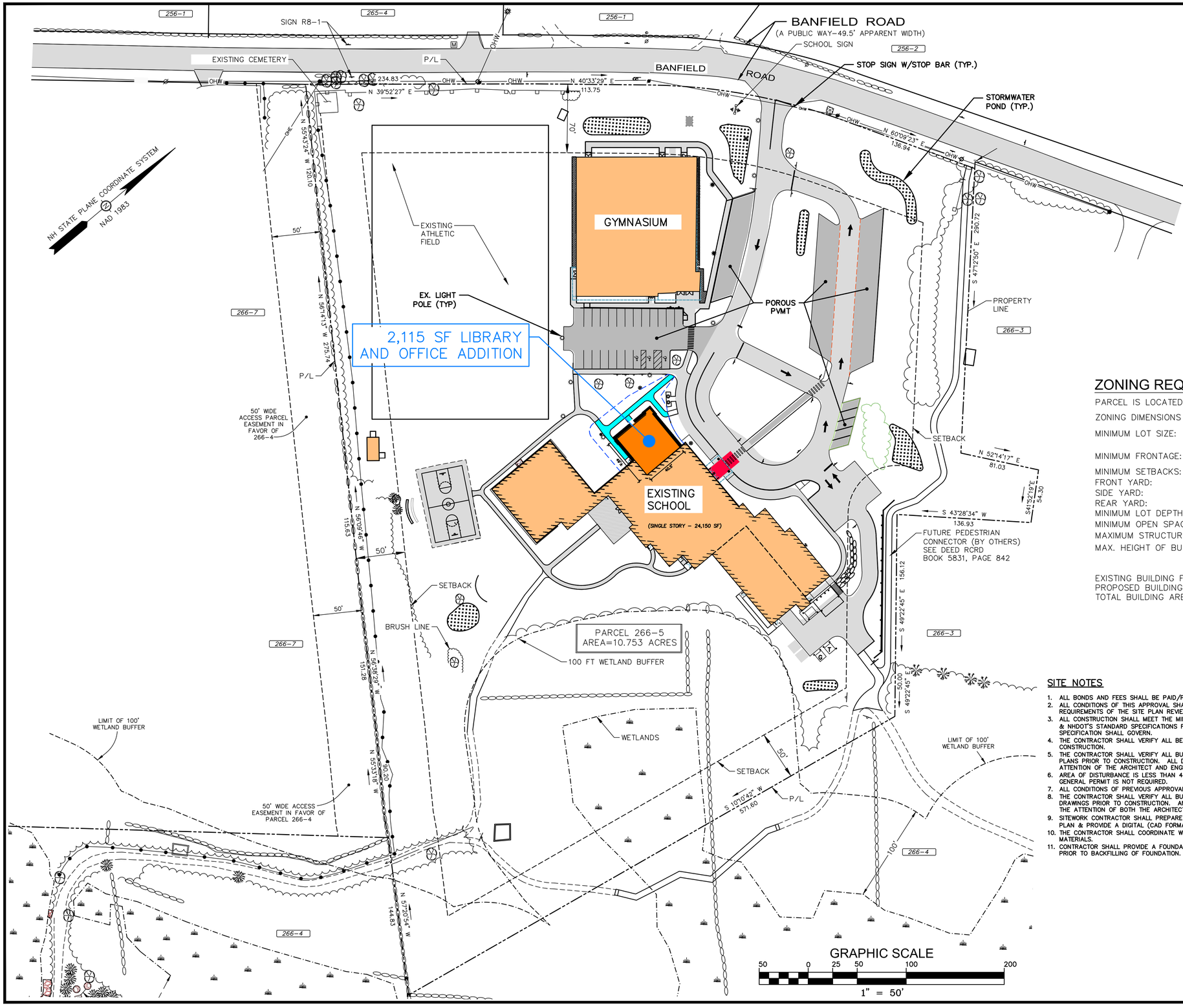
# *AS-BUILT PLAN*
# *SAINT PATRICK GYMNASIUM PROJECT*
# *315 BANFIELD ROAD*
# *PORTSMOUTH, NEW HAMPSHIRE*
## *ASSESSOR'S PARCEL 266-5*
### *for MERIDIAN CONSTRUCTION CORPORATION*


*JAMES VERRA and ASSOCIATES, INC.*
*101 SHATTUCK WAY*
*SUITE 8*
*NEWINGTON, N.H. 03801-7876*
*603-436-3557*


| | |
|---|---|
| *DATE:* | *11/4/2021* |
| *JOB NO:* | *21684-F* |
| *SCALE:* | *1" = 30'* |
| *DWG NAME:* | *21684-F-ASB* |
| *PLAN NO:* | *21684-F-ASB* |
| *SHEET:* | *1 OF 1* |

*JV* — PROJECT MGR — *XCS* — DRAWN BY


*COPYRIGHT ©2021 by JAMES VERRA and ASSOCIATES, INC.*




## ZONING REQUIREMENTS:

PARCEL IS LOCATED IN THE INDUSTRIAL (I) ZONE

| ZONING DIMENSIONS | REQUIRED | PROVIDED |
|---|---|---|
| MINIMUM LOT SIZE: | 87,120 SF (2.0 ACRES) | 468,400 SF (10.75 ACRES) |
| MINIMUM FRONTAGE: | 200' | 695.6' |
| MINIMUM SETBACKS: | | |
| FRONT YARD: | 70' | ±71' |
| SIDE YARD: | 50' | ±68' |
| REAR YARD: | 50' | ±144' |
| MINIMUM LOT DEPTH | 100' | 587' |
| MINIMUM OPEN SPACE: | 20% | ±74% |
| MAXIMUM STRUCTURE COVERAGE: | 50% | 9.3% |
| MAX. HEIGHT OF BUILDING: | 70' | <40' |

| | |
|---|---|
| EXISTING BUILDING FOOTPRINT: | ±41,440 SF |
| PROPOSED BUILDING: | ±2,115 SF |
| TOTAL BUILDING AREA: | ±43,555 SF |

## SITE NOTES

1. ALL BONDS AND FEES SHALL BE PAID/POSTED PRIOR TO INITIATING CONSTRUCTION.
2. ALL CONDITIONS OF THIS APPROVAL SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.
3. ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE CITY OF PORTSMOUTH & NHDOT'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE, LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
4. THE CONTRACTOR SHALL VERIFY ALL BENCHMARKS AND TOPOGRAPHY IN THE FIELD PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL VERIFY ALL BUILDING DIMENSIONS WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PRIOR TO CONSTRUCTION. ALL DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER FOR RESOLUTION.
6. AREA OF DISTURBANCE IS LESS THAN 43,560 SF, COVERAGE UNDER EPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT IS NOT REQUIRED.
7. ALL CONDITIONS OF PREVIOUS APPROVALS SHALL CONTINUE TO APPLY.
8. THE CONTRACTOR SHALL VERIFY ALL BUILDING DIMENSIONS WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO CONSTRUCTION. ANY AND ALL DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF BOTH THE ARCHITECT AND CIVIL ENGINEER FOR RESOLUTION.
9. SITEWORK CONTRACTOR SHALL PREPARE A LICENSED LAND SURVEYOR (LLS) STAMPED AS–BUILT SITE PLAN & PROVIDE A DIGITAL (CAD FORMAT) COPY FOR THE CITY'S G.I.S. DATA BASE.
10. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER REGARDING DROP OFF AND PICK UP TIMES FOR MATERIALS.
11. CONTRACTOR SHALL PROVIDE A FOUNDATION CERTIFICATE TO THE ENGINEER & CITY OF PORTSMOUTH PRIOR TO BACKFILLING OF FOUNDATION.

P4801.3

ENGINEER:
ALTUS ENGINEERING
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE
2/12/26

ISSUED FOR: SITE PLAN AMENDMENT

ISSUE DATE: FEBRUARY 12, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | CDB | 02/12/26 |

DRAWN BY: CDB
APPROVED BY: CDB
DRAWING FILE: 4801.3 DETAILS.DWG

SCALE:
22" x 34" – 1" = 50'
11" x 17" – 1" = 100'

OWNER:
HOPE FOR TOMORROW FOUNDATION
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801
ASSESSOR'S PARCEL 266–5

APPLICANT:
SAINT PATRICK ACADEMY
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801

PROJECT:
SAINT PATRICK ACADEMY
LIBRARY EXPANSION
315 BANFIELD ROAD
PORTSMOUTH, N.H.
ASSESSOR'S PARCEL 266–5

TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
C-1

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

GYMNASIUM

BALL FIELD

EX. DRAIN LINE (TYP)

EX. CATCH BASIN (TYP.)

RELOCATED 5 FT BIT SIDEWALK

5' X 5' CONC LANDING PAD (TYP, SEE DTLS)

NEW SEWER (SEE GRADING AND UTILITY PLAN)

APPROX LIMITS OF DISTURBANCE. RESTORE ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES

"VISITOR"

"HANDICAP PARKING"

CB# 3

MATCH EX. ELEVATION

PROPOSED DRIP EDGE

±56.45'

CB# YD 7

CB# YD 2

FF ELV= 56.97

EX. SIDEWALK

EX. LIGHT POLE TO REMAIN (TYP.)

POSSIBLY MINI-SPLIT CONDENSOR UNIT LOCATION (IF NOT ROOF MOUNTED)

49.1'±

40.5'

PROPOSED LIBRARY ADDITION (2,115± SF)

SMH
RIM=58.9
INV. IN = 46.98
INV. OUT = 46.88

FF CONCRETE (ENTRY)
ELEV= 56.97

FF GRANITE (ENTRY)
ELEV= 56.97
#315
SAINT PATRICK ACADEMY

ROOF OVERHANG

ROCKS & METAL DEBRIS

N 56°09'46" W

SMH# 6

8" GRAVITY SEWER

EX. SMH# 5

GRAPHIC SCALE
20 0 10 20 40 80
1" = 20'

P4801.3

ENGINEER:

ALTUS ENGINEERING

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CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE
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ISSUED FOR:
SITE PLAN AMENDMENT

ISSUE DATE:
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REVISIONS

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|---|---|---|---|
| 0 | INITIAL SUBMISSION | CDB | 02/12/26 |

DRAWN BY: CDB
APPROVED BY: CDB
DRAWING FILE: 4801.3 DETAILS.DWG

SCALE:
22" x 34" – 1" = 10'
11" x 17" – 1" = 20'

OWNER:
HOPE FOR TOMORROW FOUNDATION
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801
ASSESSOR'S PARCEL 266–5

APPLICANT:
SAINT PATRICK ACADEMY
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801

PROJECT:
SAINT PATRICK ACADEMY
LIBRARY EXPANSION
315 BANFIELD ROAD
PORTSMOUTH, N.H.
ASSESSOR'S PARCEL 266–5

TITLE:
SITE PLAN

SHEET NUMBER:
C-2

## DRAIN & SEWER TABLE

CB# 3
RIM ELEV= 54.23
(1) INV IN 12"HDPE= 51.46
(2) INV IN 6"PVC= 51.61
(3) INV OUT 12"HDPE= 51.13

CB# YD 7
RIM ELEV= 55.78
(1) INV OUT 3"PVC= 55.18

SMH# 5
RIM ELEV= 49.45
(1) INV IN 8"HDPE= 43.30
(2) INV OUT 8"HDPE= 43.25

SMH# 6
RIM ELEV= 56.14
(1) INV IN 6"PVC= 49.22
(2) INV IN 6"PVC= 49.14
(3) INV OUT 8"PVC= 49.03

6" PVC SEWER
INV OUT = 49.5

CONNECT TO EXIST 6" SEWER (6" WYE) EL = 48.5±

6" SEWER (PVC) S = 0.02

EX. SIDEWALK

MATCH EX. ELEV = 55.9±

6" SEWER OUT (EL 52.0±) WITH EXTERNAL CLEANOUT

SMH
RIM=58.9
INV. IN = 46.98
INV. OUT = 46.88

EX. LIGHT POLE (TYP.)

56.4±

OPTIONAL CONDENSOR PAD (3' X 4')

RESTORE ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES

FF CONCRETE (ENTRY)
ELEV= 56.97

EX. CATCH BASIN (TYP.)

"VISITOR"

"HANDICAP PARKING"

56.95
(NO STEP)
±56.75

CB# 3

±55.0'

±56.45'

CB# YD 7

FF ELV= 56.97

CB# YD 2

49.7±

56.95±
(NO STEP)

40.5'

4" SINGLE WHITE LINE (TYP)

PROPOSED LIBRARY ADDITION (2,115± SF)

MATCH EX. ELEVATION

ROOF OVERHANG

FF GRANITE (ENTRY)
ELEV= 56.97
#315
SAINT PATRICK ACADEMY

SMH# 6

8" GRAVITY SEWER

EX. SMH# 5

N 56°09'46" W 1

MATCH EX. ELEV = 56.2±

DRIP EDGE, ELEV 56.45 (6" MIN FOUNDATION REVEAL, TYP)

RELOCATE SIGNS IN NEW PAVEMENT AREAS (TYP)

PAINT "FIRE LANE – NO STOPPING" ON ENTRANCE AND LOOP.

EXISTING HYDRANT

ROCKS & METAL DEBRIS

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

GRAPHIC SCALE
20 0 10 20 40 80
1" = 20'

P4801.3


ENGINEER:

ALTUS ENGINEERING

133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com


CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE -

March 25, 2026

ISSUED FOR:
SITE PLAN AMENDMENT

ISSUE DATE:
MARCH 25, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | CDB | 02/12/26 |
| 1 | TAC COMMENTS | CDB | 03/25/26 |

DRAWN BY: CDB
APPROVED BY: CDB
DRAWING FILE: 4801.3 DETAILS.DWG

SCALE:
22" x 34" – 1" = 10'
11" x 17" – 1" = 20'

OWNER:
HOPE FOR TOMORROW FOUNDATION
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801
ASSESSOR'S PARCEL 266–5

APPLICANT:
SAINT PATRICK ACADEMY
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801

PROJECT:
SAINT PATRICK ACADEMY
LIBRARY EXPANSION
315 BANFIELD ROAD
PORTSMOUTH, N.H.
ASSESSOR'S PARCEL 266–5

TITLE:
GRADING AND UTILITIES PLAN

SHEET NUMBER:
C-3

# BANFIELD ROAD
(A PUBLIC WAY–49.5' APPARENT WIDTH)

256–1 | 256–2 | 266–3

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

"NO PARKING ON PAVEMENT"

STRIPE 4" DOUBLE YELLOW

RELOCATE STOP BAR AND SIGN TO NEW EXIT

EXTEND 12" HDPE PIPE AND END SECTION 5 FT

CONVERT EXISTING ENTRANCE/ EXIT TO TWO–LANE ENTRANCE. RESTRIPE DOUBLE YELLOW LINE TO SINGLE WHITE

CONSTRUCT 12 FT WIDE EXIT ONLY LANE WITH 6 FT GRASSED MEDIAN

350' SIGHT DISTANCE IN EACH DIRECTION

INV IN 12"HDPE= 46.77

INV OUT 12"HDPE= 43.00

INV OUT 12"HDPE= 42.04

6 FT WIDE GRASSED MEDIAN ISLAND

"STOP"

RAINGARDEN B

RELOCATE OR INSTALL NEW TREE

EXISTING RAINGARDEN

REMOVE STOP BAR AND SIGN

"DO NOT ENTER"

"NO LEFT TURN"

N 40°33'29" E 113.75

N 60°09'23" E 136.94

S 47°12'50" E 290.72

S 43°28'34" E 136.93

S 47°12'50" W 156.12

PROPOSED GYMNASIUM
17,000 SF±
(SEE ARCHITECTURAL PLANS)

±28.1'

INV OUT 6"PVC= 50.57

INV OUT 12"HDPE= 51.09

19' MIN

24.0

WIDEN PAVEMENT APPROX 6 FT TO PROVIDE 24 FT WIDTH (TWO 12 FT LANES)

DROP OFF / PICK UP PARKING WAITING AREA

RELOCATE SIGNS IN NEW PAVEMENT AREAS (TYP)

FIRE LANE

PAINT "FIRE LANE – NO STOPPING" ON ENTRANCE AND LOOP.

WIDEN PAVEMENT APPROX 9 FT TO PROVIDE 34 FT WIDTH

NO STOPPING

EXISTING HYDRANT

SHED

"VISITOR"

"HANDICAP PARKING"

CB# 3

CB# YD 7

CB# YD 2

FF ELEV= 56.97

49'±

40.5'

4" SINGLE WHITE LINE (TYP)

FF CONCRETE (ENTRY)
ELEV= 56.97

FF GRANITE (ENTRY)
ELEV= 56.97
@15
SAINT PATRICK ACADEMY

ROOF OVERHANG

SMH# 6

DROP OFF / PICK UP AREA

EXISTING PAVED SURFACE

PROPOSED PAVED SURFACE

P4801.3

---

ENGINEER:

ALTUS ENGINEERING

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(603) 433-2335
Portsmouth, NH 03801
www.altus-eng.com

STATE OF NEW HAMPSHIRE – CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER

March 25, 2026

ISSUED FOR:
SITE PLAN AMENDMENT

ISSUE DATE:
MARCH 25, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | CDB | 02/12/26 |
| 1 | TAC COMMENTS | CDB | 03/25/26 |

DRAWN BY: CDB
APPROVED BY: CDB
DRAWING FILE: 4801.3 DETAILS.DWG

SCALE:
22" x 34" – 1" = 30'
11" x 17" – 1" = 60'

OWNER:
HOPE FOR TOMORROW FOUNDATION
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801
ASSESSOR'S PARCEL 266–5

APPLICANT:
SAINT PATRICK ACADEMY
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801

PROJECT:
SAINT PATRICK ACADEMY
LIBRARY EXPANSION
315 BANFIELD ROAD
PORTSMOUTH, N.H.
ASSESSOR'S PARCEL 266–5

TITLE:
CIRCULATION IMPROVEMENT PLAN

SHEET NUMBER:
C-4

# SEDIMENT AND EROSION CONTROL NOTES

## CONSTRUCTION SEQUESNCE / EROSION CONTROL

- PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
- TEMPORARY WATER DIVERSION (SWALES, BASINS, ETC) MUST BE USED AS NECESSARY UNTIL AREAS ARE STABILIZED.
- ALL PAVED AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- ALL DISTURBED AREAS SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE
- ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 43,000 SQUARE FEET AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - ** BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
  - ** A MINIMUM OF 85 PERCENT VEGETATED GROWTH HAS BEEN ESTABLISHED.
  - ** A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED.
  - ** OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

## TEMPORARY EROSION & SEDIMENT CONTROL AND STABILIZATION PRACTICES

All work shall be in accordance with state and local permits. Work shall conform to the practices described in the "New Hampshire Stormwater Manual, Volumes 1 – 3", issued December 2008, as amended. As indicated in the sequence of Major Activities, the silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Once construction activity ceases permanently in an area, silt fences and any earth/dikes will be removed once permanent measures are established.

During construction, runoff will be diverted around the site with stabilized channels where possible. Sheet runoff from the site shall be filtered through hay bale barriers, stone check dams, and silt fences. All storm drain inlets shall be provided with hay bale filters or stone check dams. Stone rip rap shall be provided at the outlets of drain pipes and culverts where shown on the drawings.

Stabilize all ditches, swales, stormwater ponds, level spreaders and their contributing areas prior to directing flow to them.

Temporary and permanent vegetation and mulching is an integral component of the erosion and sedimentation control plan. All areas shall be inspected and maintained until vegetative cover is established. These control measures are essential to erosion prevention and also reduce costly rework of graded and shaped areas.

Temporary vegetation shall be maintained in these areas until permanent seeding is applied. Additionally, erosion and sediment control measures shall be maintained until permanent vegetation is established.

## INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

A. GENERAL

These are general inspection and maintenance practices that shall be used to implement the plan:

1. The smallest practical portion of the site shall be denuded at one time, but in no case shall it exceed 5 acres at one time.
2. All control measures shall be inspected at least once each week and following any storm event of 0.25 inches or greater.
3. All measures shall be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours.
4. Built-up sediment shall be removed from silt fence or other barriers when it has reached one-third the height of the fence or bale, or when "bulges" occur.
5. All diversion dikes shall be inspected and any breaches promptly repaired.
6. Temporary seeding and planting shall be inspected for bare spots, washouts, and unhealthy growth.
7. The owner's authorized engineer shall inspect the site on a periodic basis to review compliance with the Plans.
8. All roadways and parking lots shall be stabilized within 72 hours of achieving finished grade.
9. All cut and fill slopes shall be seeded/loamed within 72 hours of achieving finished grade.
10. An area shall be considered stable if one of the following has occurred:
    a. Base coarse gravels have been installed in areas to be paved;
    b. A minimum of 85% vegetated growth as been established;
    c. A minimum of 3 inches of non-erosive material such as stone of riprap has been installed; – or –
    d. Erosion control blankets have been properly installed.
11. The length of time of exposure of area disturbed during construction shall not exceed 45 days.

B. MULCHING

Mulch shall be used on highly erodible soils, on critically eroding areas, on areas where conservation of moisture will facilitate plant establishment, and where shown on the plans.

1. Timing – In order for mulch to be effective, it must be in place prior to major storm events. There are two (2) types of standards which shall be used to assure this:
    a. Apply mulch prior to any storm event. This is applicable when working within 100 feet of wetlands. It will be necessary to closely monitor weather predictions, usually by contacting the National Weather Service in Concord, to have adequate warning of significant storms.
    b. Required Mulching within a specified time period. The time period can range from 21 to 28 days of inactivity on a area, the length of time varying with site conditions. Professional judgment shall be used to evaluate the interaction of site conditions (soil erodibility, season of year, extent of disturbance, proximity to sensitive resources, etc.) and the potential impact of erosion on adjacent areas to choose an appropriate time restriction.

## INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (CON'T)

2. Guidelines for Winter Mulch Application –

| Type | Rate per 1,000 s.f. | Use and Comments |
|---|---|---|
| Hay or Straw | 70 to 90 lbs. | Must be dry and free from mold. May be used with plantings. |
| Wood Chips or Bark Mulch | 460 to 920 lbs. | Used mostly with trees and shrub plantings. |
| Jute and Fibrous Matting (Erosion Blanket | As per manufacturer Specifications | Used in slope areas, water courses and other Control areas. |
| Crushed Stone 1/4" to 1-1/2" dia. | Spread more than 1/2" thick | Effective in controlling wind and water erosion. |
| Erosion Control Mix | 2" thick (min) | * The organic matter content is between 80 and 100% dry weight basis.<br>* Particle size by weight is 100% passing a 6" screen and a minimum of 70 %, maximum of 85% passing a 0.75" screen.<br>* The organic portion needs to be fibrous and elongated.<br>* Large portions of silts, clays or fine sands are not acceptable in the mix.<br>* Soluble salts content is less than 4.0 mmhos/cm.<br>* The pH should fall between 5.0 and 8.0. |

3. Maintenance – All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied.

C. TEMPORARY GRASS COVER

1. Seedbed Preparation –

Apply fertilizer at the rate of 600 pounds per acre of 10–10–10. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of three (3) tons per acre.

2. Seeding –
    a. Utilize annual rye grass at a rate of 40 lbs/acre.
    b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.
    c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.

3. Maintenance – Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

D. FILTERS

1. Tubular Sediment Barrier
    a. See detail.
    b. Install per manufacturer's requirements.

2. Silt Fence (if used)

a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements:

| Physical Property | Test | Requirements |
|---|---|---|
| Filtering Efficiency | VTM-51 | 75% minimum |
| Tensile Strength at 20% Maximum Elongation* | VTM-52 | Extra Strength 50 lb/lin in (min)<br>Standard Strength 30 lb/lin in (min) |
| Flow Rate | VTM-51 | 0.3 gal/sf/min (min) |

* Requirements reduced by 50 percent after six (6) months of installation.

Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizer to provide a minimum of six (6) months of expected usable construction life at a temperature range of 0 degrees F to 120° F.

b. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location or as recommended by the manufacturer and driven securely into the ground (minimum of 16 inches).

c. A trench shall be excavated approximately six (6) inches wide and eight (8) inches deep along the line of posts and upslope from the barrier.

d. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one (1) inch long, tie wires or hog rings. The wire shall extend no more than 36 inches above the original ground surfaces.

e. The "standard strength" filter fabric shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.

f. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of item (g) applying.

g. The trench shall be backfilled and the soil compacted over the filter fabric.

h. Silt fences shall be removed when they have served their useful purpose but not before the upslope areas has been permanently stabilized.

3. Sequence of Installation –

Sediment barriers shall be installed prior to any soil disturbance of the contributing upslope drainage area.

4. Maintenance –

a. Silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water, the sediment barriers shall be replaced with a temporary stone check dam.

b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.

c. Sediment deposits must be removed when deposits reach approximately one-third (1/3) the height of the barrier.

d. Any sediment deposits remaining in place after the silt fence or other barrier is no longer required shall be removed. The area shall be prepared and seeded.

e. Additional stone may have to be added to the construction entrance, rock barrier and riprap lined swales, etc., periodically to maintain proper function of the erosion control structure.

E. PERMANENT SEEDING –

1. Bedding – stones larger than 1½", trash, roots, and other debris that will interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 5" to prepare a seedbed and mix fertilizer into the soil.

2. Fertilizer – lime and fertilizer should be applied evenly over the area prior to or at the time of seeding and incorporated into the soil. Kinds and amounts of lime and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:

    Agricultural Limestone @ 100 lbs. per 1,000 s.f.
    10–20–20 fertilizer @ 12 lbs. per 1,000 s.f.

3. Seed Mixture (See Landscape Drawings for additional information):

3.1. Lawn seed mix shall be a fresh, clean new seed crop. The Contractor shall furnish a dealer's guaranteed statement of the composition of the mixture and the percentage of purity and germination of each variety.

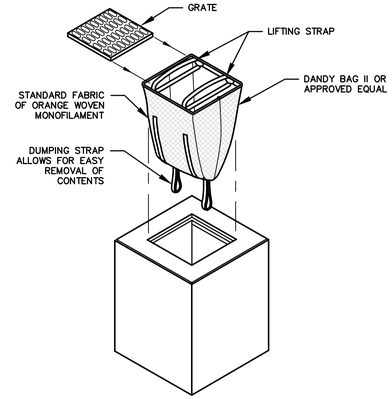
3.2. Seed mixture shall consist of
    a. 1/3 Kentucky blue,
    b. 1/3 perennial rye, and
    c. 1/3 fine fescue.

3.1. Turf type tall fescue is unacceptable.

4. Sodding – sodding is done where it is desirable to rapidly establish cover on a disturbed area. Sodding an area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing, and placement of sod shall be performed according to the S.C.S. Handbook. Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt), etc.

## WINTER CONSTRUCTION NOTES

1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and elsewhere seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting. The installation of erosion control blankets or mulch and netting shall not occur over accumulated snow or on frozen ground and shall be completed in advance of thaw or spring melt events;
2. All ditches or swales which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions; and
3. After October 15th, incomplete road or parking surfaces where work has stopped for the winter season shall be protected with a minimum of 3 inches of crushed gravel per NHDOT Item 304.3.




**INSTALLATION AND MAINTENANCE:**

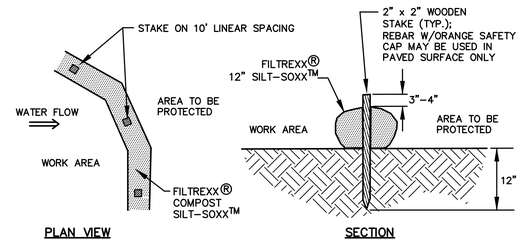
INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO CATCH BASIN INSERT SO THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF THE UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE CATCH BASIN INSERT. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY THE UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

**UNACCEPTABLE INLET PROTECTION METHOD:**

A SIMPLE SHEET OF GEOTEXTILE UNDER THE GRATE IS NOT ACCEPTABLE.

## STORM DRAIN INLET PROTECTION NOT TO SCALE




**NOTES:**
1. SILTSOXX OR APPROVED EQUAL MAY BY USED IN PLACE OF SILT FENCE OR OTHER SEDIMENT BARRIERS.
2. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
3. SILTSOXX COMPOST/SOIL/ROCK/SEED FILL MATERIAL SHALL BE ADJUSTED AS NECESSARY TO MEET THE REQUIREMENTS OF THE SPECIFIC APPLICATION.
4. ALL SEDIMENT TRAPPED BY SILTSOXX SHALL BE DISPOSED OF PROPERLY.

## TUBULAR SEDIMENT BARRIER NOT TO SCALE

P4801.3


ENGINEER:

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CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE
2/12/26

ISSUED FOR:
**SITE PLAN AMENDMENT**

ISSUE DATE:
**FEBRUARY 12, 2026**

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | CDB | 02/12/26 |

DRAWN BY: CDB
APPROVED BY: CDB
DRAWING FILE: 4801.3 DETAILS.DWG

SCALE:
**NOT TO SCALE**

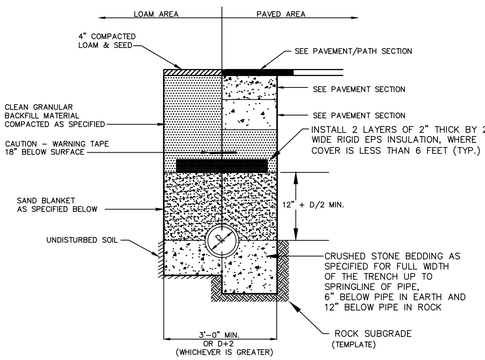
OWNER:
HOPE FOR TOMORROW FOUNDATION
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801
ASSESSOR'S PARCEL 266–5

APPLICANT:
*SAINT PATRICK ACADEMY*
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801

PROJECT:
SAINT PATRICK ACADEMY
LIBRARY EXPANSION
315 BANFIELD ROAD
PORTSMOUTH, N.H.
ASSESSOR'S PARCEL 266–5

TITLE:
EROSION CONTROL NOTES & DETAILS

SHEET NUMBER:
D-1




BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

SAND BLANKET

| SIEVE SIZE | % FINER BY WEIGHT |
|---|---|
| 1/2" | 90 – 100 |
| 200 | 0 – 15 |

CRUSHED STONE BEDDING *

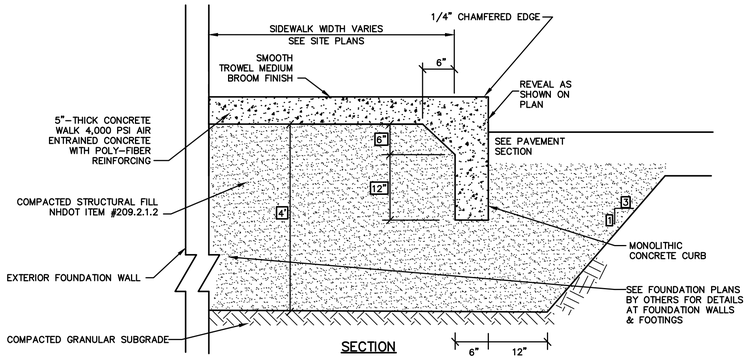
| SIEVE SIZE | % PASSING BY WEIGHT |
|---|---|
| 1" | 100 |
| 3/4" | 90 – 100 |
| 3/8" | 20 – 55 |
| # 4 | 0 – 10 |
| # 8 | 0 – 5 |

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

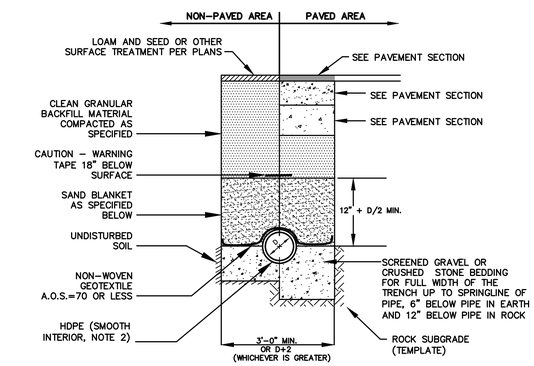
## SEWER TRENCH SECTION NOT TO SCALE

## STANDARD TRENCH NOTES:

1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN OF THE DRAWING.
2. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33, STONE SIZE NO. 67.
   100% PASSING 1 INCH SCREEN
   90 – 100% PASSING 3/4 INCH SCREEN
   20 – 55% PASSING 3/8 INCH SCREEN
   0–10% PASSING #4 SIEVE
   0–5% PASSING #8 SIEVE
   WHERE ORDERED BY THE ENGINEER TO STABILIZE THE 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, SO GRADED THAT 90 – 100% PASSES 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE. BLANKET MAY BE OMITTED FOR CAST–IRON, DUCTILE IRON, AND REINFORCED CONCRETE PIPE PROVIDED HOWEVER, THAT NO STONE LARGER THAN 2" IS IN CONTACT WITH THE PIPE.
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.
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. SHEETING, IF REQUIRED: WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID–DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION 1 FOOT ABOVE THE TOP OF PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAT 1 FOOT ABOVE THE TOP OF THE PIPE.
7. 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.
8. FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
9. 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.
10. 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.
11. 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.




## CONCRETE SLAB (SIDEWALK) DETAILS @ BLDG. ENTRANCES NOT TO SCALE




NOTES:
1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.
2. ALL PIPE SHALL BE HDPE WITH SMOOTH INTERIOR AND CORRUGATED EXTERIOR, ADS TYPE N–12 OR APPROVED EQUAL.

SAND BLANKET/BARRIER

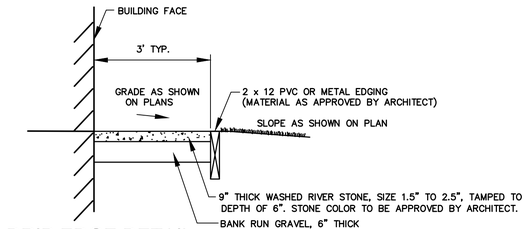
| SIEVE SIZE | % FINER BY WEIGHT |
|---|---|
| 1/2" | 90 – 100 |
| 200 | 0 – 15 |

SCREENED GRAVEL OR CRUSHED STONE BEDDING*

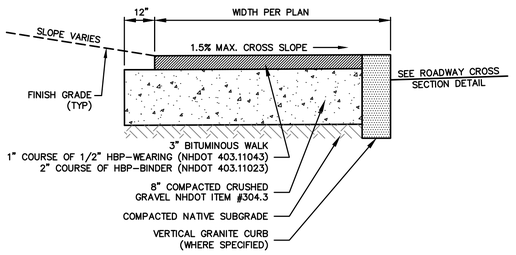
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| 3/4" | 90 – 100 |
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* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

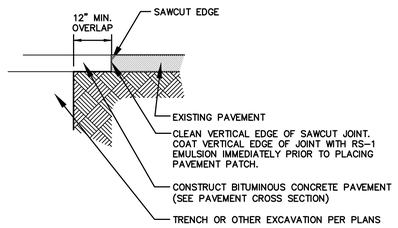
## STORM DRAIN TRENCH NOT TO SCALE



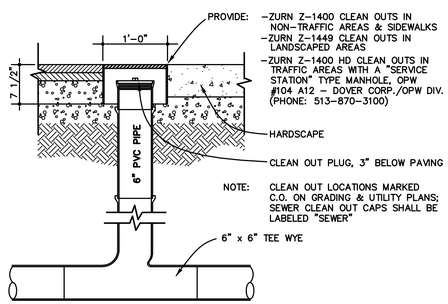

## DRIP EDGE DETAIL NOT TO SCALE




## BITUMINOUS SIDEWALK NOT TO SCALE




## TYPICAL PAVEMENT SAWCUT NOT TO SCALE




## CLEANOUT DETAIL NOT TO SCALE

P4801.3

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CORY D BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
2/12/26

ISSUED FOR:
SITE PLAN AMENDMENT

ISSUE DATE:
FEBRUARY 12, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | CDB | 02/12/26 |

DRAWN BY: CDB
APPROVED BY: CDB
DRAWING FILE: 4801.3 DETAILS.DWG

SCALE:
NOT TO SCALE

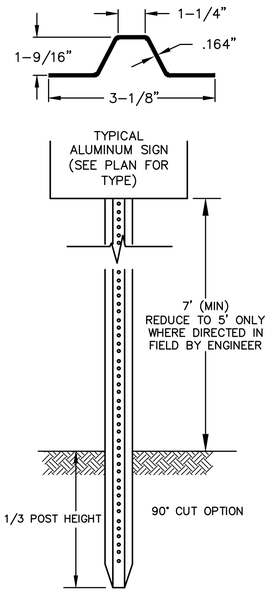
OWNER:
HOPE FOR TOMORROW FOUNDATION
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801
ASSESSOR'S PARCEL 266–5

APPLICANT:
*SAINT PATRICK ACADEMY*
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801

PROJECT:
SAINT PATRICK ACADEMY
LIBRARY EXPANSION
315 BANFIELD ROAD
PORTSMOUTH, N.H.
ASSESSOR'S PARCEL 266–5

TITLE:
DETAIL SHEET

SHEET NUMBER:
D-2




NOTES

1. ALL SIGNS SHALL MEET THE REQUIREMENTS OF AND BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

* IN LEDGE DRILL & GROUT TO A MIN OF 2'

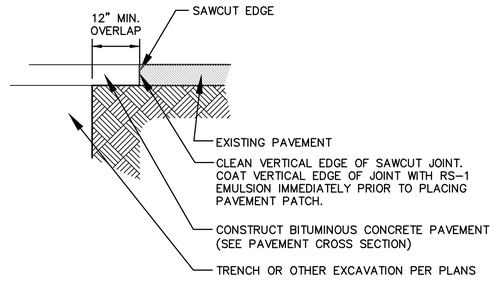
LENGTH: AS REQUIRED

WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)

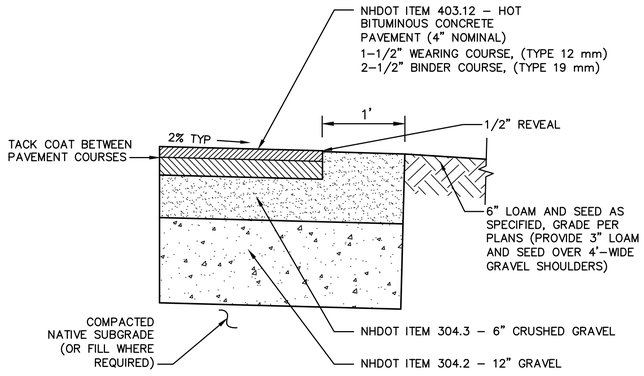
HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH

STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070 - 1080)

## SIGN DETAILS NOT TO SCALE




## TYPICAL PAVEMENT SAWCUT NOT TO SCALE




## PAVEMENT CROSS SECTION NOT TO SCALE

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CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE -
March 25, 2026

ISSUED FOR: SITE PLAN AMENDMENT

ISSUE DATE: MARCH 25, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | INITIAL SUBMISSION | CDB | 02/12/26 |
| 1 | TAC COMMENTS | CDB | 03/25/26 |

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APPROVED BY: CDB
DRAWING FILE: 4801.3 DETAILS.DWG

SCALE: NOT TO SCALE

OWNER:
HOPE FOR TOMORROW FOUNDATION
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801
ASSESSOR'S PARCEL 266-5

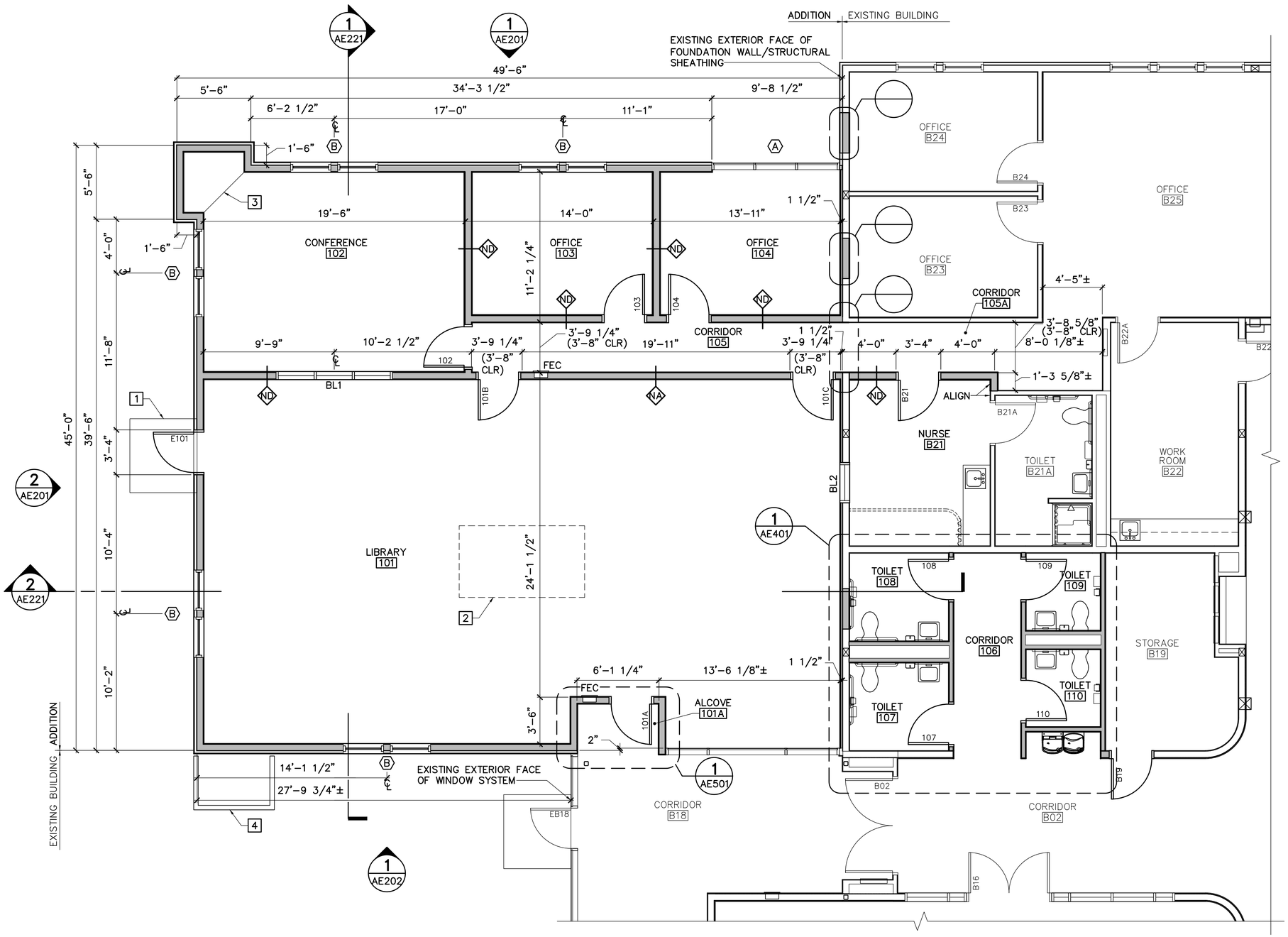
APPLICANT:
*SAINT PATRICK ACADEMY*
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801

PROJECT:
SAINT PATRICK ACADEMY
LIBRARY EXPANSION
315 BANFIELD ROAD
PORTSMOUTH, N.H.
ASSESSOR'S PARCEL 266-5

TITLE:
DETAIL SHEET

SHEET NUMBER:
D-3

P4801.3

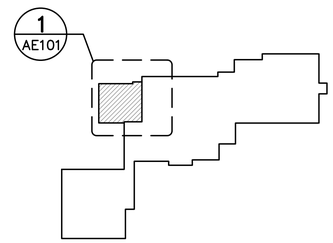



## GENERAL NOTES

1. SEE SHEET G-003 FOR GENERAL CONSTRUCTION NOTES.
2. SEE SHEET AE001 FOR WALL TYPES AND GENERAL WALL TYPE NOTES.
3. SEE SHEET AE601 FOR DOOR SCHEDULE.
4. SEE SHEET AE621 FOR WINDOW AND BORROWED LITE TYPES.
5. SEE SHEET AE641 FOR FINISH SCHEDULES.

## KEYNOTES (THIS SHEET ONLY)

1. REINFORCED CONCRETE EXTERIOR STOOP, SEE STRUCTURAL SHEETS.
2. SKYLIGHT ABOVE, SEE ROOF PLAN.
3. BUILT-IN STORAGE.
4. 6'-0" HIGH ARCHITECTURAL SCREENING, CARRY (14) LINEAR FEET AND (1) GATE WITH LATCH.




KEY PLAN
NOT TO SCALE

PLAN NORTH

1 AE101 PARTIAL FLOOR PLAN
SCALE: 1/4"=1'-0"

GRAPHIC SCALE
1/4"=1'-0"
4' 2' 0 4' 8'
CHECK GRAPHIC SCALE BEFORE USING

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | REVISIONS | |

04 Feb, 2026 - 2:28pm
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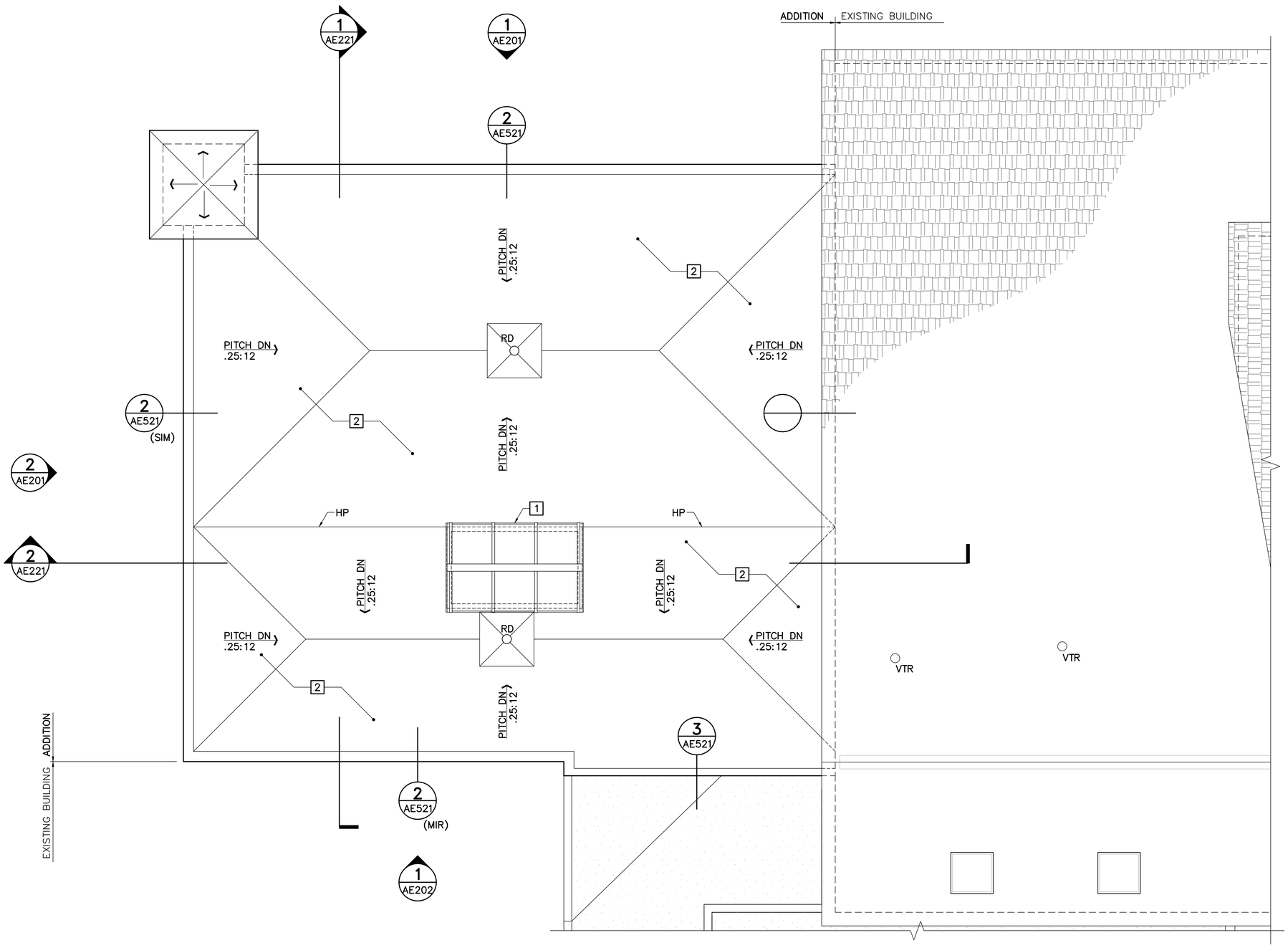
DESIGNED BY: BML
DRAWN BY: RMT
CHECKED BY: XXX
PROJECT: 22402.05

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PORTSMOUTH, N.H. 03801

SAINT PATRICK ACADEMY
LIBRARY EXPANSION
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801

FLOOR PLAN

SCALE: AS NOTED
DATE: 02-04-26
DWG.: AE101
SHEET: X OF XX




## GENERAL NOTES

1. SEE SHEET S–002 FOR COMPONENT AND CLADDING DESIGN PRESSURES.
2. SEE SHEET AE641 FOR EXTERIOR FINISH SCHEDULE.

## KEYNOTES (THIS SHEET ONLY)

1 CURB MOUNTED SKYLIGHT, SEE SHEET AE623.

2 EPDM ROOF SYSTEM, SEE DETAIL 1/AE521.

## ROOF LEGEND

- EXISTING ASPHALT SHINGLE ROOF SYSTEM
- EXISTING EPDM MEMBRANE ROOF SYSTEM
- ROOF PITCH
- RD — ROOF DRAIN SEE DETAIL 5/AE521
- HP — HIGH POINT
- VTR — VENT THROUGH ROOF SEE DETAIL 4/AE521

1 AE121 **PARTIAL ROOF PLAN**
SCALE: 1/4"=1'–0"

KEY PLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
1/4"=1'–0"
4' 2' 0 4' 8'
CHECK GRAPHIC SCALE BEFORE USING

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|---|---|---|---|
| | | REVISIONS | |

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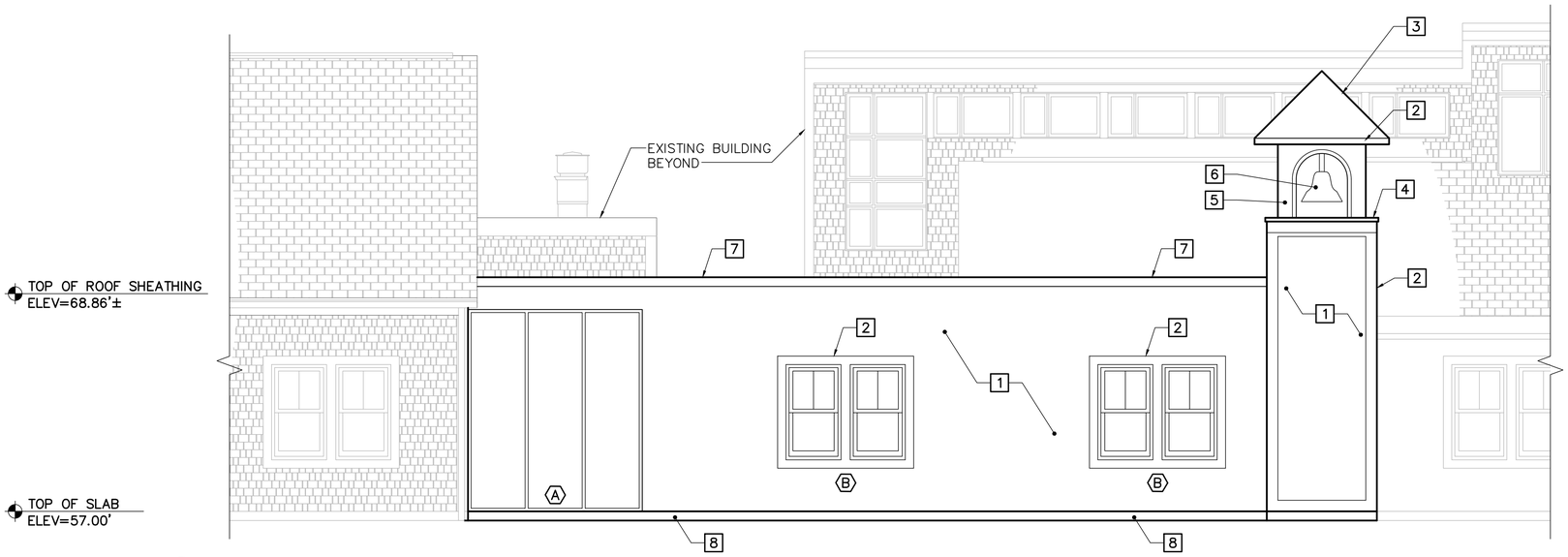
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DRAWN BY: SAS
CHECKED BY: XXX
PROJECT: 22402.05

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PORTSMOUTH, N.H. 03801

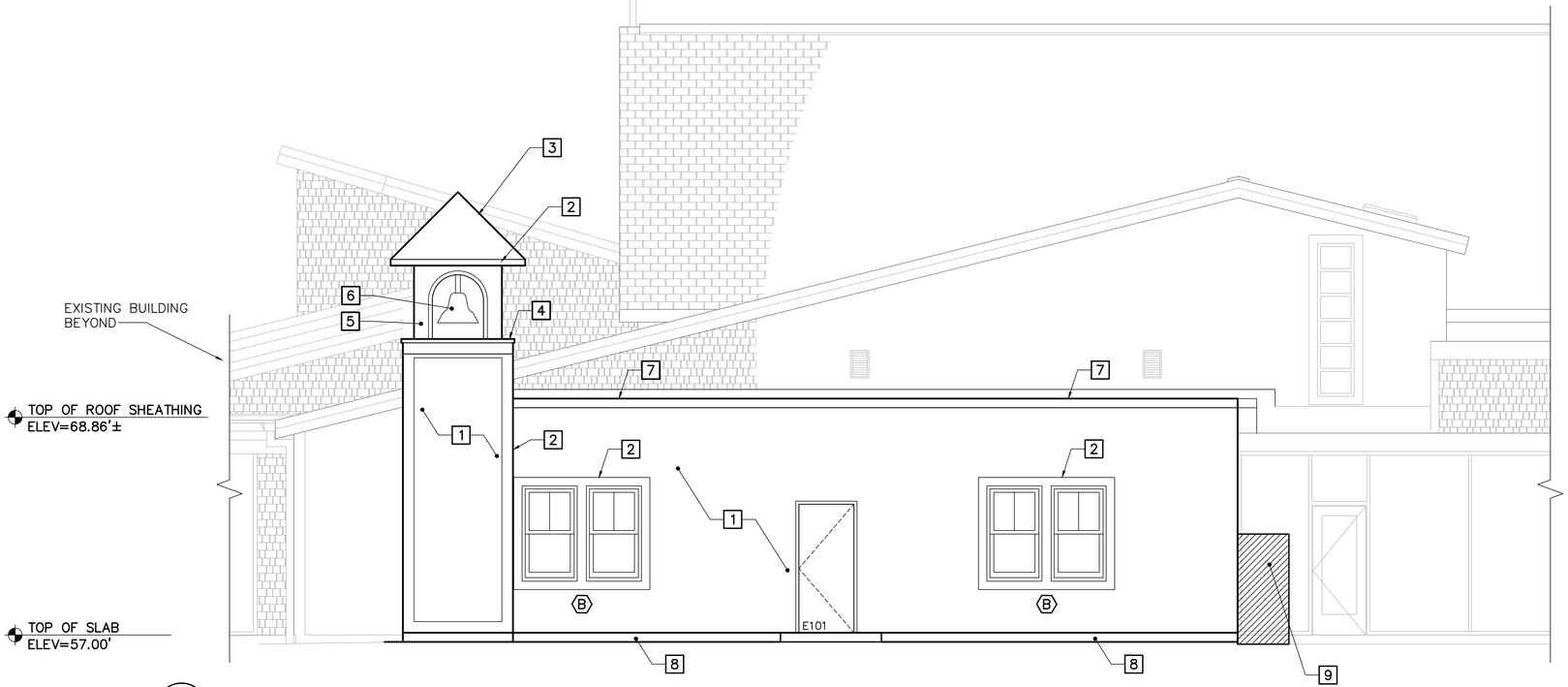
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ROOF PLAN

SCALE: AS NOTED
DATE: 02-04-26
DWG.: AE121
SHEET: X OF XX




1 NORTH EXTERIOR ELEVATION
AE101,AE121 AE201 SCALE: 1/4"=1'-0"



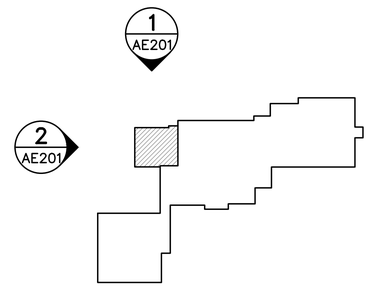

2 WEST EXTERIOR ELEVATION
AE101,AE121 AE201 SCALE: 1/4"=1'-0"

## GENERAL NOTES

1. SEE SHEET AE621 FOR WINDOW TYPES.
2. SEE SHEET AE641 FOR EXTERIOR FINISH SCHEDULE.

## KEYNOTES (SHEETS AE201 AND AE202)

1. VINYL SHINGLE SIDING, COLOR TO MATCH EXISTING SCHOOL.
2. 1x PVC TRIM.
3. ASPHALT SHINGLE ROOF SYSTEM.
4. PRECAST CONCRETE SILL
5. STEEL FRAMED BELL TOWER WITH PVC TRIM.
6. 2'-0" STATIONARY ALUMINUM BELL.
7. PREFINISHED METAL FASCIA WITH DRIP EDGE.
8. CEMENTITIOUS FINISH SYSTEM OVER FOUNDATION INSULATION.
9. 6'-0" HIGH ARCHITECTURAL SCREENING, CARRY (14) LINEAR FEET AND (1) GATE WITH LATCH.




KEY PLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
4' 2' 0 4' 8'
1/4"=1'-0"
CHECK GRAPHIC SCALE BEFORE USING

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | REVISIONS | |

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DESIGNED BY: BML
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CHECKED BY: XXX
PROJECT: 22402.05

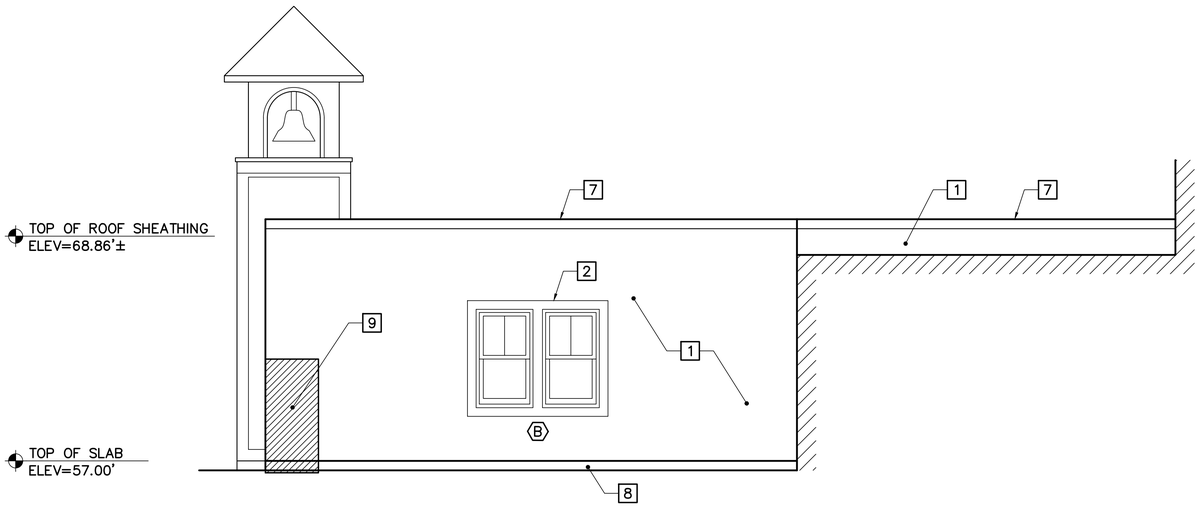
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PORTSMOUTH, N.H. 03801

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LIBRARY EXPANSION
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801

# NORTH AND WEST EXTERIOR ELEVATIONS

SCALE: AS NOTED
DATE: 02-04-26
DWG.: AE201
SHEET: X OF XX

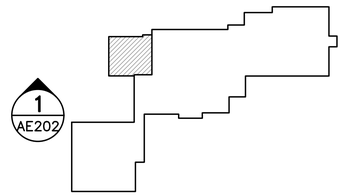
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1 SOUTH EXTERIOR ELEVATION
AE101,AE121 AE202 SCALE: 1/4"=1'-0"

## GENERAL NOTES

1. SEE SHEET AE201 FOR KEYNOTES.
2. SEE SHEET AE621 FOR WINDOW TYPES.
3. SEE SHEET AE641 FOR EXTERIOR FINISH SCHEDULE.




KEY PLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
4' 2' 0 4' 8'
1/4"=1'-0"
CHECK GRAPHIC SCALE BEFORE USING

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DRAWN BY: RMT
CHECKED BY: XXX
PROJECT: 22402.05

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315 BANFIELD ROAD
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SOUTH EXTERIOR ELEVATION

SCALE: AS NOTED
DATE: 02-04-26
DWG.: AE202
SHEET: X OF XX

# Circulation Improvements to Address Dismissal Traffic

Saint Patrick Academy recognizes the City's concern regarding vehicles queuing on the public roadway during dismissal periods. In response, the school has evaluated several operational and physical improvements to the site circulation pattern. The proposed concept focuses on improving the efficiency of traffic movement within the campus, increasing the site's capacity to accommodate vehicles internally during dismissal, and reducing the potential for vehicles to queue on the roadway.

Traffic conditions on Banfield Road during peak commuter periods can influence how quickly vehicles are able to exit the site, and the proposed circulation improvements are designed to allow vehicles to move through the campus and exit as efficiently as possible.

Saint Patrick Academy has long been part of the Portsmouth community, and the proposed library project represents an investment in the educational resources available to students rather than an expansion of the school's enrollment or traffic generation. The project consolidates two smaller existing libraries into one larger, more functional space that will better support student learning and student support services. Because the project replaces existing library functions already serving the school community, it does not increase the intensity of use of the campus.

The proposed circulation improvements include the following:

- Converting the existing driveway on the right side of the property (facing property from Banfield Road) to entrance only, with minor widening adjacent to the angled parking stalls to provide two inbound lanes. One lane would allow vehicle stacking, while the second lane would allow emergency access and will be striped "Fire Lane No Stopping".

- Establishing a one-way horseshoe circulation pattern toward the main building, where students are staged for pickup and staff coordinate loading to maintain efficient vehicle movement through the pickup area.

- Creating a new exit-only driveway on the left side of the property (facing property from Banfield Road) so that vehicles leaving the campus no longer conflict with vehicles entering the site.

- Directing early-arriving families to utilize park-and-walk parking rather than forming a queue in the pickup loop. This operational approach helps prevent early queue formation and reduces the potential for vehicles to accumulate at the entrance prior to dismissal.

- Proved a second loading lane through the horseshoe loop so that double the amount of cars can be stored and children loaded to significantly improve loading times.

Separating entrance and exit movements significantly improves the throughput of the pickup loop because vehicles entering the campus will no longer be delayed by vehicles attempting to exit. The one-way circulation pattern allows vehicles to move continuously through the site, reducing internal congestion and allowing the pickup area to clear more efficiently.

The additional parking and queue storage areas further increase the site's ability to accommodate vehicles within the property during dismissal periods. By increasing on-site vehicle stacking capacity, the likelihood that vehicles will queue onto the public roadway is reduced.

Taken together, these improvements represent a practical and proportionate response to the City's concerns. They improve internal circulation, increase the site's capacity to store vehicles, and reduce the potential for roadway queuing without requiring roadway widening or land acquisition.

ALTUS ENGINEERING

*Civil*
*Site Planning*
*Environmental*
*Engineering*

133 Court Street
Portsmouth, NH
03801-4413

# DRAINAGE MEMOMANDUM

**Saint Patrick Academy Library Expansion**
315 Banfield Road, Portsmouth, NH
Assessor's Parcel 266-5

March 25, 2026

## Table of Contents


- Project Description
- Drainage Analysis
  - Stormwater Modeling Summary
- Conclusion
- Attachments
  - A) HydroCAD Routing Diagram
  - B) BMP Worksheet for Raingarden #1
  - C) Stage Storage Table for Raingaden #1
  - D) Peak Flow Results at Point of Analysis #1
  - E) Revised Post-Development Watershed Plan


## *PROJECT DESCRIPTION*

In 2019, the Hope for Tomorrow Foundation (HFTF) and Saint Patrick Academy (Academy) developed a 200-student school at 315 Banfield Road, followed by construction of a gymnasium in 2020 on the 10.7-acre property. The Academy now plans to construct a new library addition totaling approximately 2,115 square feet. The City has also required additional improvements on to improve traffic flow that will require approximately 2,100 square feet of additional pavement widening. The proposed total lot impervious coverage will increase from 15.9% to 16.7% with the proposed addition and pavement increases. Stormwater from the proposed roof area will be managed through internal roof drains, directed to an existing catch basin, and routed through a previously installed raingarden for treatment. Altus has incorporated the new library addition and pavement additions into the drainage model to review the capacity of the raingarden. The raingarden still provides the required water quality volume storage required for the increase as a result of the building addition and pavement additions. In addition, the associated watershed areas have been revised for the increase in additional pavement and the stormwater management system for the full site still provides a decrease in the peak discharge rates for all storms analyzed compared to the 2020 Pre-Development site condition. All rainfall intensities also include the 15% increase for Seacoast communities.

## *Drainage Analysis*

In 2020, for the construction of the St. Patrick Academy gymnasium, a NHDES Alteration of Terrain permit was approved (AoT-1786, dated April 10, 2020) . A comprehensive drainage study was prepared for the permit that modeled the Pre-Development and Post Development site conditions.

As noted in the project description, Altus has updated the drainage model to include the new building and pavement additions. Utilizing the updated model, Altus has reviewed the existing Raingarden #1 for storage capacity and WQV treatment requirements. The BMP worksheet and storage table are included as an attachment. With the increased impervious areas, the required WQV increased slightly to 2,296 cubic feet of storage. The raingarden provides 2,519 cubic feet and therefore meets the WQV requirement. Therefore the capacity is also adequate to accommodate the proposed improvements. Lastly the peak flows were compared to the pre-development flows from the 2020 AoT permit application at the Point of Analysis #1. The results below show that the Peak flows for all storm events continue to provide a decrease compared to the pre-development conditions.

**Stormwater Modeling Summary**
**Peak Q (cfs) for Type III 24-Hour Storm Events**

| | 2-Yr Storm (3.71 inch) | 10-Yr Storm (5.64 inch) | 25-Yr Storm (7.14 inch) | 50-Yr Storm (8.57 inch) |
|---|---|---|---|---|
| **POA #1 – Banfield Road** | | | | |
| Pre (2020) | 6.15 | 12.60 | 16.66 | 25.51 |
| Post (2020) | 5.85 | 11.76 | 15.74 | 24.33 |
| Post (Library-2026) | 6.08 | 11.97 | 15.92 | 24.60 |
| **New Net Change** | **-0.07** | **-0.63** | **-0.74** | **-0.91** |

As the above table demonstrates, the proposed peak rates of runoff will be decreased from the existing conditions of the site at the analysis point for all analyzed storm events. All storms are analyses utilizing the 15% increase to rainfall intensities for Seacoast communities.

## *Conclusion*

This proposed 2,115 square foot library addition and associated site improvements at Saint Patrick Academy, located at 335 Banfield Road in Portsmouth, NH will not have an adverse effect on abutting properties and infrastructure as a result of stormwater runoff. Post-construction peak rates of runoff from the site will remain lower than the Pre-development conditions for all analyzed storm events, including the 15% increase to rainfall for seacoast communities. The construction of a comprehensive stormwater drainage system will provide the required treatment to stormwater runoff. Appropriate steps will be taken to properly mitigate erosion and sedimentation through the use of temporary and permanent Best Management Practices for sediment and erosion control.

## *Attachments*

The following attachments are included for reference:

A) HydroCAD Routing Diagram
B) BMP Worksheet for Raingarden #1
C) Stage Storage Table for Raingaden #1
D) Peak Flow Results at Point of Analysis #1
E) Revised Post-Development Watershed Plan

Prepared by:

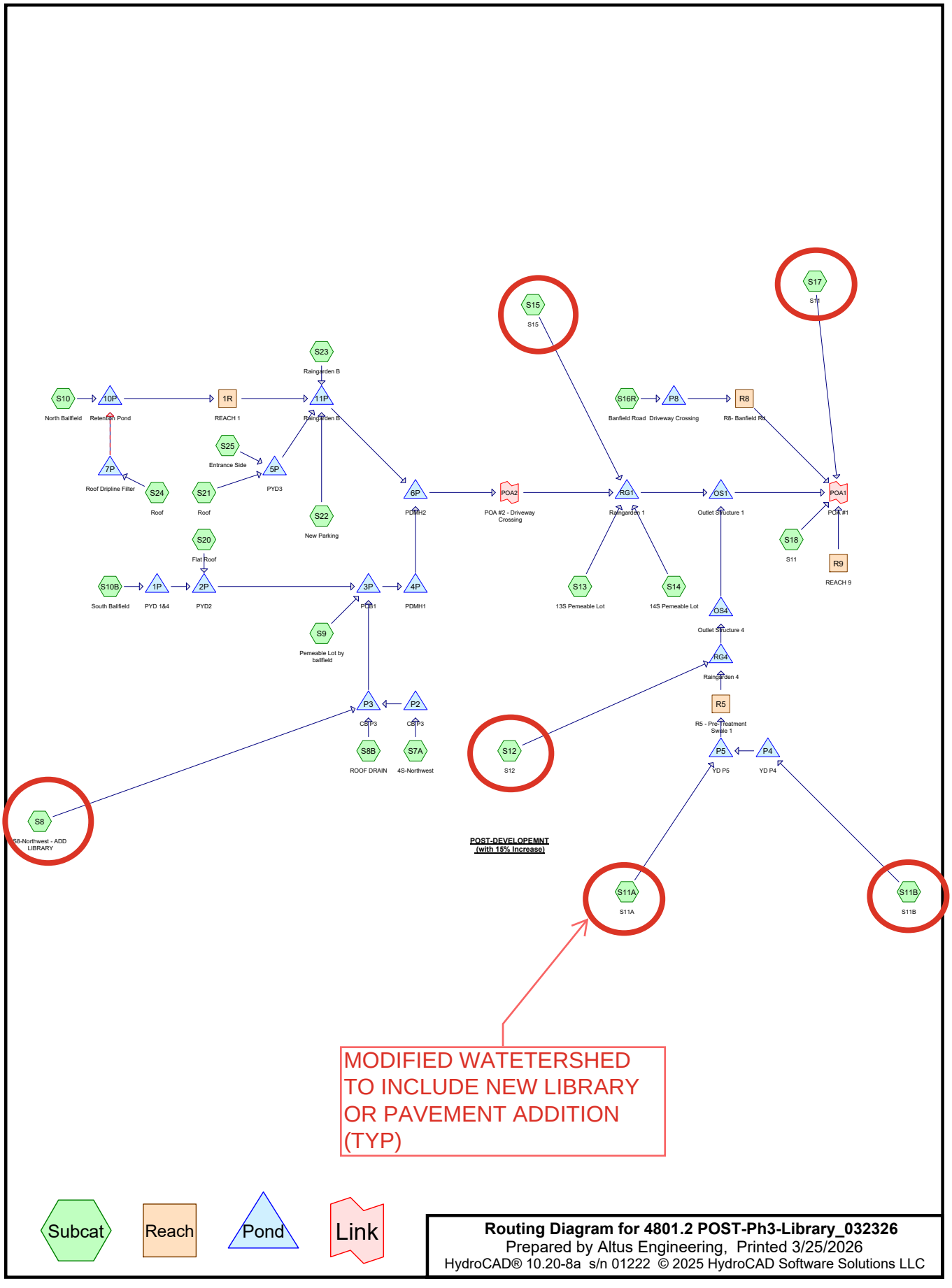
**ALTUS ENGINEERING, LLC**



Cory D. Belden, P.E.

3/25/26






**Routing Diagram for 4801.2 POST-Ph3-Library_032326**
Prepared by Altus Engineering, Printed 3/25/2026
HydroCAD® 10.20-8a s/n 01222 © 2025 HydroCAD Software Solutions LLC

# FILTRATION PRACTICE DESIGN CRITERIA (Env-Wq 1508.06)

**Type/Node Name:** **Raingarden #1 (HydroCAD Pond RG1) - Updated for 2026 Library**

Enter the type of filtration practice (e.g., bioretention system) and the node name in the drainage analysis, if applicable

| | | | |
|---|---|---|---|
| YES | | Have you reviewed the restrictions on unlined systems outlined in Env-Wq 1508.06(b)? | |
| 3.47 | ac | A = Area draining to the practice[1] | |
| 0.51 | ac | $A_I$ = Impervious area draining to the practice | |
| 0.15 | decimal | I = percent impervious area draining to the practice, in decimal form | |
| 0.18 | unitless | Rv = Runoff coefficient = 0.05 + (0.9 x I) | |
| 0.63 | ac-in | WQV= 1" x Rv x A | |
| 2,296 | cf | WQV conversion (ac-in x 43,560 sf/ac x 1ft/12") | |
| 574 | cf | 25% x WQV (check calc for sediment forebay volume) | |
| 1,722 | cf | 75% x WQV (check calc for surface sand filter volume) | |
| sumps | | Method of Pretreatment? (not required for clean or roof runoff) | |
| | cf | $V_{SED}$ = sediment forebay volume, if used for pretreatment | ← ≥ 25%WQV |
| 1,000 | sf | $A_{SA}$ = surface area of the practice | |
| 1.00 | iph | $I_{DESIGN}$ = design infiltration rate[2] | |
| | Yes/No | If $I_{DESIGN}$ is < 0.50 iph, has an underdrain been provided? | |
| 27.6 | hours | $T_{DRAIN}$ = drain time = V / ($A_{SA}$ * $I_{DESIGN}$) | ← ≤ 72-hrs |
| 39.25 | feet | $E_{FC}$ = elevation of the bottom of the filter course material | |
| 38.25 | feet | $E_{UD}$ = invert elevation of the underdrain (UD), if applicable | |
| 37.75 | feet | $E_{BTM}$ = elevation of the bottom of the practice (i.e., bottom of the stone reservoir). | |
| 37.00 | feet | $E_{SHWT}$ = elevation of SHWT (if none found, enter the lowest elevation of the test pit) | |
| 34.00 | feet | $E_{ROCK}$ = elevation of bedrock (if none found, enter the lowest elevation of the test pit) | |
| 1.00 | feet | $D_{FC\ to\ UD}$ = depth to UD from the bottom of the filter course[3] | ← ≥ 1' |
| 5.25 | feet | $D_{FC\ to\ ROCK}$ = depth to bedrock from the bottom of the filter course[3] | ← ≥ 1' |
| 2.25 | feet | $D_{FC\ to\ SHWT}$ = depth to SHWT from the bottom of the filter course[3] | ← ≥ 1' |
| 0.75 | feet | $D_{BTM\ to\ SHWT}$ = depth to SHWT from the bottom of the practice[3] | ← ≥ 2' |
| 42.24 | ft | Peak elevation of the 10-year storm event (infiltration can be used in analysis) | |
| 43.00 | ft | Elevation of the top of the practice | |
| YES | | 10 peak elevation ≤ Elevation of the top of the practice | ← yes |

**If a surface sand filter is proposed:**

| | | | |
|---|---|---|---|
| YES | ac | Drainage Area check. | ← < 10 ac |
| | cf | V = volume of storage[4, 5] (attach a stage-storage table) | ← ≥ 75%WQV |
| | inches | $D_{FC}$ = filter course thickness | ← 18" |
| Sheet | | Note what sheet in the plan set contains the filter course specification | |
| | Yes/No | Access grate provided? | ← yes |
| | | The filter shall not be covered in grass. What is covering the filter? | |

**If an underground sand filter is proposed:**

| | | | |
|---|---|---|---|
| YES | ac | Drainage Area check. | ← < 10 ac |
| | cf | V = volume of storage[4, 5] (attach a stage-storage table) | ← ≥ 75%WQV |
| | inches | $D_{FC}$ = filter course thickness | ← 24" |
| Sheet | | Note what sheet in the plan set contains the filter course specification | |
| | Yes/No | Access grate provided? | ← yes |

**If a bioretention area is proposed:**

| | | | |
|---|---|---|---|
| YES | ac | Drainage Area no larger than 5 ac? | ← **yes** |
| 2,448 | cf | V = volume of storage[4, 5] (attach a stage-storage table) | ← **≥ WQV** |
| 18.0 | inches | $D_{FC}$ = filter course thickness | ← **18"** |
| Sheet | D-5 | Note what sheet in the plan set contains the filter course specification | |
| 3.0 | :1 | Pond side slopes | ← **≥2:1** |
| Sheet | LS101 | Note what sheet in the plan set contains the planting plans and surface cover | |

**If porous pavement is proposed:**

| | | | |
|---|---|---|---|
| | | Type of pavement proposed (concrete? Asphalt? Pavers? Etc) | |
| | acres | $A_{SA}$ = surface area of the pervious pavement | |
| - | :1 | ratio of the contributing area to the pervious surface area | ← **5:1** |
| | inches | $D_{FC}$ = filter course thickness | ← **12"** |
| Sheet | | Note what sheet in the plan set contains the filter course spec. | ← **304.1 sand** |

1. If the practice is a tree box filter, the drainage area shall be < 0.1 acre

2. Rate of the limiting layer (either the filter course or the underlying soil). See Vol. 2 of the NH Stormwater Manual, Ch. 2-4, for guidance on determining the infiltration rate.

3. If not within a GPA or WSIPA: SHWT/Bedrock must be at least 1 foot below the filter course material (or an underdrain must drain the SHWT to at least one foot below the filter course material). If within a GPA or WSIPA: SHWT must be at least two feet below the bottom of the practice OR the filter course material must be at least twice as thick as required and the SHWT must be at least one foot below the filter course material.

4. Volume without depending on infiltration. The storage above the filter media shall not include the volume above the outlet structure, if any.

5. The volume includes the storage above the filter but below the invert of the outlet structure (if any), the filter media voids, and the pretreatment area.

Designer's Notes:

## Stage-Area-Storage for Pond RG1: Raingarden 1

| Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) |
|---|---|---|
| 37.50 | 1,000 | 0 |
| 37.60 | 1,000 | 33 |
| 37.70 | 1,000 | 66 |
| 37.80 | 1,000 | 99 |
| 37.90 | 1,000 | 132 |
| 38.00 | 1,000 | 165 |
| 38.10 | 1,000 | 198 |
| 38.20 | 1,000 | 231 |
| 38.30 | 1,000 | 264 |
| 38.40 | 1,000 | 297 |
| 38.50 | 1,000 | 330 |
| 38.60 | 1,000 | 363 |
| 38.70 | 1,000 | 396 |
| 38.80 | 1,000 | 429 |
| 38.90 | 1,000 | 462 |
| 39.00 | 1,000 | 495 |
| 39.10 | 1,000 | 528 |
| 39.20 | 1,000 | 561 |
| 39.30 | 1,000 | 594 |
| 39.40 | 1,000 | 627 |
| 39.50 | 1,000 | 660 |
| 39.60 | 1,000 | 693 |
| 39.70 | 1,000 | 726 |
| 39.80 | 1,000 | 759 |
| 39.90 | 1,000 | 792 |
| 40.00 | 1,000 | 825 |
| 40.10 | 1,000 | 858 |
| 40.20 | 1,000 | 891 |
| 40.30 | 1,000 | 924 |
| 40.40 | 1,000 | 957 |
| 40.50 | 1,000 | 990 |
| 40.60 | 1,000 | 1,000 |
| 40.70 | 1,000 | 1,010 |
| 40.80 | 1,000 | 1,031 |
| 40.90 | 1,000 | 1,064 |
| 41.00 | 1,000 | 1,098 |
| 41.10 | 1,080 | 1,278 |
| 41.20 | 1,160 | 1,458 |
| 41.30 | 1,240 | 1,637 |
| 41.40 | 1,320 | 1,817 |
| 41.50 | 1,400 | 1,998 |
| 41.60 | 1,480 | 2,178 |
| 41.70 | 1,560 | 2,358 |
| 41.80 | 1,640 | 2,537 |
| 41.90 | 1,720 | 2,717 |
| 42.00 | 1,800 | 2,898 |
| 42.10 | 1,880 | 3,078 |
| 42.20 | 1,960 | 3,258 |
| 42.30 | 2,040 | 3,437 |
| 42.40 | 2,120 | 3,617 |
| 42.50 | 2,200 | 3,798 |
| 42.60 | 2,280 | 3,978 |
| 42.70 | 2,360 | 4,158 |
| 42.80 | 2,440 | 4,337 |
| 42.90 | 2,520 | 4,517 |
| 43.00 | **2,600** | **4,698** |

41.79 outlet / WQV = 2519cf

## Summary for Link POA1: POA #1

Inflow Area = 5.529 ac, 32.77% Impervious, Inflow Depth > 1.47" for 2-Year event
Inflow = 6.08 cfs @ 12.16 hrs, Volume= 0.679 af
Primary = 6.08 cfs @ 12.16 hrs, Volume= 0.679 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs



## Summary for Link POA1: POA #1

Inflow Area = 5.529 ac, 32.77% Impervious, Inflow Depth > 3.00" for 10-Year event
Inflow = 11.97 cfs @ 12.14 hrs, Volume= 1.383 af
Primary = 11.97 cfs @ 12.14 hrs, Volume= 1.383 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs



## Summary for Link POA1: POA #1

Inflow Area = 5.529 ac, 32.77% Impervious, Inflow Depth > 4.27" for 25-Year event
Inflow = 15.92 cfs @ 12.14 hrs, Volume= 1.966 af
Primary = 15.92 cfs @ 12.14 hrs, Volume= 1.966 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs

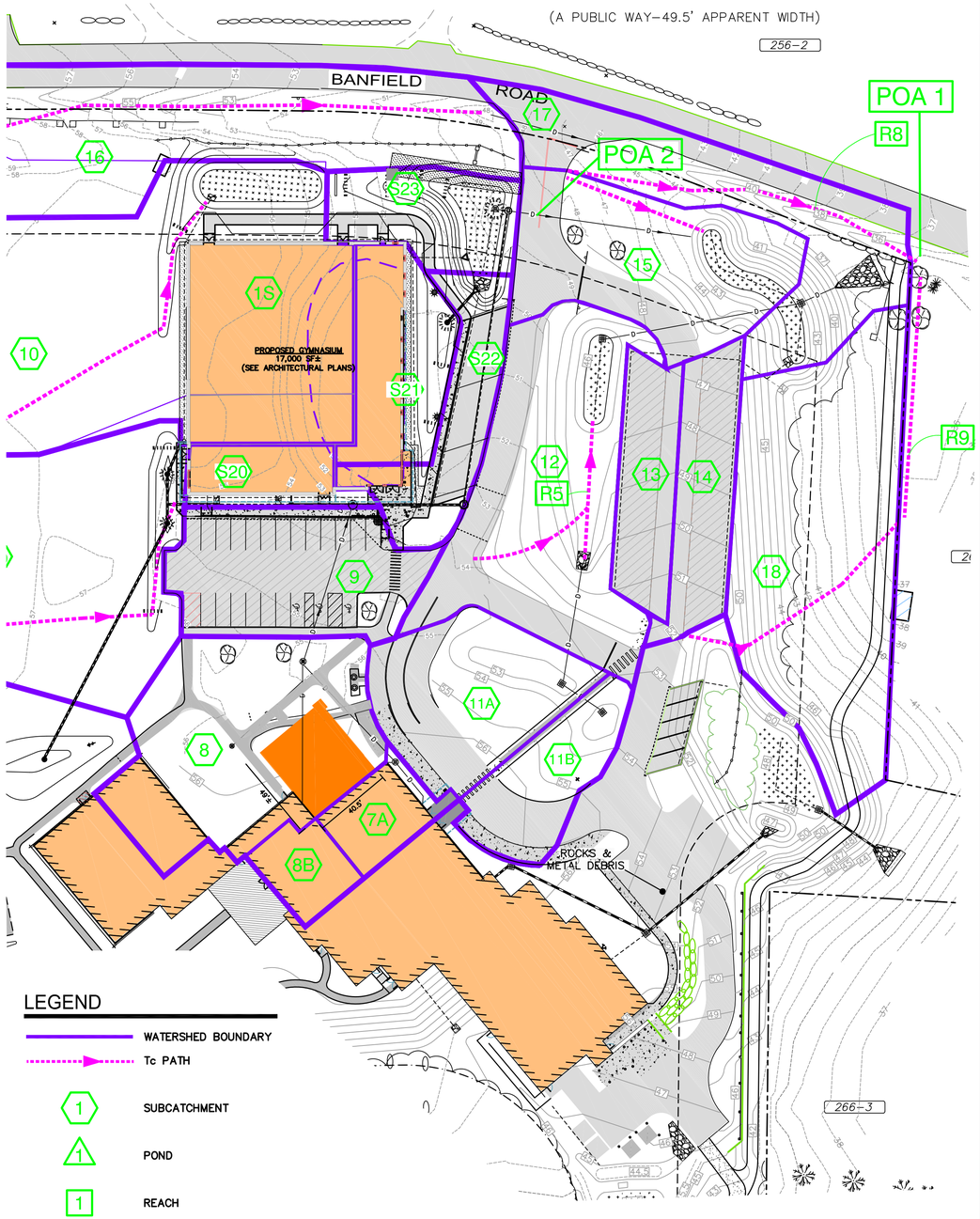


## Summary for Link POA1: POA #1

Inflow Area = 5.529 ac, 32.77% Impervious, Inflow Depth > 5.52" for 50-Year event
Inflow = 24.60 cfs @ 12.19 hrs, Volume= 2.543 af
Primary = 24.60 cfs @ 12.19 hrs, Volume= 2.543 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs

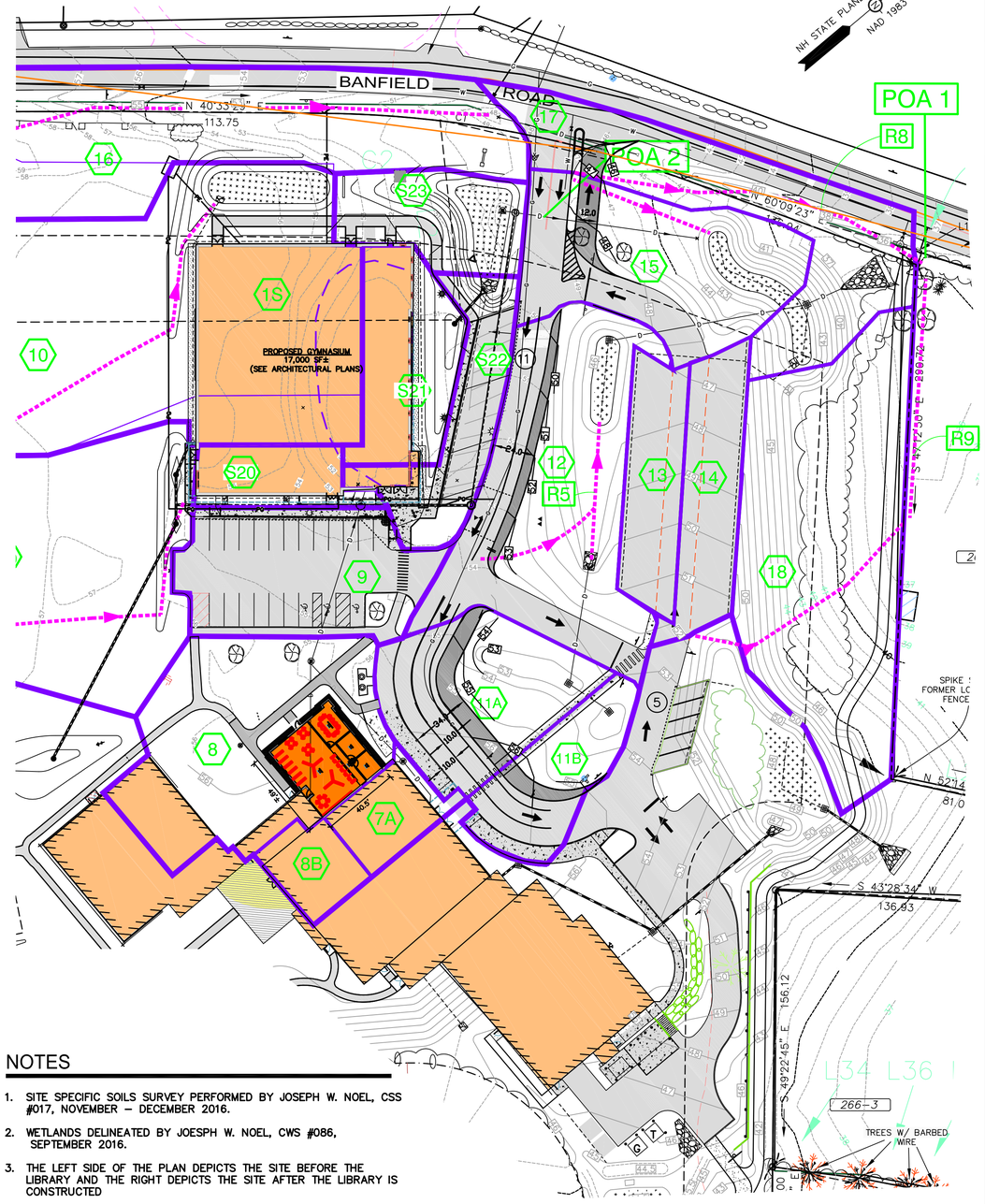
# PRE




## LEGEND

- WATERSHED BOUNDARY
- Tc PATH
- 1 — SUBCATCHMENT
- 1 — POND
- 1 — REACH
- SOILS – HSG B
- SOILS – HSG C
- SOILS – IMPERVIOUS PAVE/BLDG
- LIBRARY ADDITION

# POST




## NOTES

1. SITE SPECIFIC SOILS SURVEY PERFORMED BY JOSEPH W. NOEL, CSS #017, NOVEMBER – DECEMBER 2016.
2. WETLANDS DELINEATED BY JOESPH W. NOEL, CWS #086, SEPTEMBER 2016.
3. THE LEFT SIDE OF THE PLAN DEPICTS THE SITE BEFORE THE LIBRARY AND THE RIGHT DEPICTS THE SITE AFTER THE LIBRARY IS CONSTRUCTED

40 0 40 80 120 FEET

P4801


ENGINEER:

ALTUS ENGINEERING

133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com


ISSUED FOR: DRAINAGE MEMO

ISSUE DATE: MARCH 25, 2026

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | DRAINAGE MEMO | CDB | 02/12/26 |
| 1 | ADD PVMNT WIDENING | CDB | 03/25/26 |

DRAWN BY: CDB
APPROVED BY: CDB
DRAWING FILE: 4801EC.DWG

SCALE:
22" x 34" – 1" = 30'
11" x 17" – 1" = 60'

OWNER:
HOPE FOR TOMORROW FOUNDATION
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801

APPLICANT:
SAINT PATRICK ACADEMY
315 BANFIELD ROAD
PORTSMOUTH, N.H. 03801

PROJECT:
LIBRARY EXPANSION
BANFIELD ROAD
PORTSMOUTH, N.H.
ASSESSOR'S PARCELS
266–4, 266–5 & 266–6

TITLE:
REVISED POST-DEVELOPMENT WATERSHED PLAN

SHEET NUMBER:
WS-3

HALEY WARD

# APPLICATION FOR SITE PLAN REVIEW

**TO THE CITY OF PORTSMOUTH**
**FOR 94 LANGDON ST. & 98 CORNWALL ST.**
Map 139, Lots 1 & 8 | Portsmouth, NH

**APPLICANT:**
**Chinburg Development**
3 Penstock Way, Newmarket, NH 03857

March 23, 2026
JN: 5010220.004

---

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

March 23, 2026

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

**RE: Request for TAC Review**
**94 Langdon Street & 98 Cornwall Street**
**Proposed Multifamily Development**

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

On behalf of Chinburg Development, we are pleased to submit the attached **Site Plan Review Application** for the above-mentioned project and request that we be placed on the agenda for your **April 7, 2026**, TAC Meeting. The properties are shown on the City of Portsmouth Assessors Map 139 as Lot 1 & Lot 8.

## PROJECT OVERVIEW

The project consists of two adjoining parcels located at 94 Langdon Street and 98 Cornwall Street with a total area of 25,107 square feet. The site is currently developed with two commercial buildings and a surface parking lot. The current use is an electrical contractor building.

The project includes the merger of the two adjacent parcels, the removal of the existing structures and pavement on the parcels, and the construction of three single family dwellings with the associated and required site improvements. The site will remain as one parcel and the dwelling units will be in a condominium association.

The conversion of the site will comply with the applicable design, safety, and operational standards, including building code compliance. We believe that the transition to residential use will complement the surrounding neighborhood. The site's proximity to downtown Portsmouth further enhances this re-use. The existing Langdon Street curb cut will be relocated as the buildings will occupy the north, or railroad side of the site. Existing access to the Map 139 Lot 1 property will be discontinued; all access to the merged parcels will be from Langdon Street.

## SITE HISTORY

Regan Electric Company, Inc. has owned and operated the site since purchasing the property in the early 1990s. The site has remained relatively unchanged and has served as an office with parking for company vehicles and electrical related storage.



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

## SITE ZONING

The project is within the City of Portsmouth Mixed Residential Business (MRB) District which allows for residential development. The proposed project is consistent with the surrounding neighborhood which is predominantly single family residential. As proposed with the merged lots, the project meets all zoning requirements except for the minimum frontage which is a grandfathered non-conforming condition. A variance was sought for the non-conforming frontage and approved by the Board of Adjustment at their March 17, 2026 meeting.

## PARKING

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

## VEHICULAR AND PEDESTRIAN CIRCULATION

The proposed development will be accessed by a shared 20-foot-wide paved driveway with a turnaround. Pedestrian access will be provided by a block sidewalk with flush curbing that will run adjacent to the driveway and connect the existing city sidewalk system along Langdon Street.

## TRAFFIC

A trip generation letter has been prepared for the AM and PM peak hour trips based on the Institute of Transportation Engineer's (ITE) publication, Trip Generation, 12th Edition and is included in this submission. The analysis demonstrates a reduction in peak hour trip based on the conversion of the property from commercial use to residential.

## SCREENING AND LANDSCAPING

Detailed landscape plans were prepared by Terra Firma Landscape Architecture and are included in the submittal package. The landscape design provides a blend of street trees and shrubs to enhance the property while providing screening at the perimeter. Low level plantings are proposed between unit 2 and 3 to maintain a Cornwall Street view corridor.

## WATER AND SEWAGE SYSTEMS

The development will be served by municipal water and sewer located within Langdon Street. A new sewer line with manholes will be extended into the site from the existing 8" PVC sewer in Langdon Street to collect the laterals for each dwelling unit. All onsite sewers will be 6" PVC SDR 35 gasketed pipe. A 1" domestic water line will be extended into the property to serve each dwelling with ¾" services.

## STORMWATER MANAGEMENT

The impervious surfaces will be reduced by over 5,000 square feet onsite and an additional 1,000 square feet offsite, therefore creating a reduction in stormwater runoff. The proposed stormwater will maintain existing flow patterns and continue to discharge offsite to the north and to the municipal system within Langdon Street. Refer to the Stormwater Management and Erosion Control Plan includes as part of this submittal for additional details related to the stormwater design.

## SITE LIGHTING

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

## SITE UTILITIES

Natural gas, electric and communications services will be installed underground to serve the dwelling units. Included in the submission is a "will serve" letter for the project from Unitil. Coordination has begun with Eversource for the electrical connection and proposed transformer. Included in the submission is a copy of the Eversource work order.

## SOLID WASTE

Solid waste will be collected through Portsmouth curb side pickup.

## SUBMISSION

The submission includes the following materials

- Site Plan Application Checklist
- Site Review Application Fee Form
- Construction Cost Estimate
- Site Photos
- Tax Map
- Zoning Map
- Trip Generation Letter
- Eversource Coordination Email
- Until "Will Serve" Letter
- Green Building Statement
- Architectural Plans
- Drainage Narrative
- Inspection & Long-Term Maintenance Plan
- Site Plans

The following plans are included in our submission:

- C000 – Cover Sheet
- C001 – General Notes, Legend & Abbreviations
- V101 – Conditions Plan – This plan shows the existing conditions at the site.
- C101 – Demolition Plan – This plan shows site preparation and items to be demolished.
- C102 – Site Layout Plan – This plan shows the proposed site development.
- C103 – Grading & Drainage Plan – This plan shows the proposed stormwater improvements.
- C104 – Utility Plan – This plan shows the proposed water, sewer, electric, communication and gas locations
- C501 & C502 – Construction Details
- C701 & C702 – Pre- & Post-Development Hydrology Plans – These plans show the existing and proposed drainage areas and flow paths.
- L-1 & L-2 – Landscape Plans – These plans show the proposed landscaping

We look forward to the Technical Advisory Committee's review of this submission and to presenting the project in person at your upcoming meeting.

Sincerely,
Haley Ward, Inc.

Shawn Tobey, PE
Southern Maine & New Hampshire Land Development Manager

# City of Portsmouth, New Hampshire

## *Site Plan Application Checklist*

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

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

Name of Applicant: Chinburg Development Date Submitted: March 23, 2026

Application # (in City's online permitting): LU-25-175

Site Address: 94 Langdon Street & 98 Cornwall Street Map: 139 Lot: 1 & 8

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

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

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

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

| Site Plan Specifications – Required Exhibits and Data | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | **1. Existing Conditions: (2.5.4.3A)**<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. | **Existing Conditions Plan V101** | |
| ☒ | **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. | **Architectural Plans** | |
| ☒ | **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). | **Site Layout Plan C102** | |
| ☒ | **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). | **Site Layout Plan C102** | |
| ☒ | **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). | **Utility Plan C104** | |
| ☒ | **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. | **Utility Plan C104** | |

| | | | |
|---|---|---|---|
| ☒ | **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. | **Utility Plan C104** | |
| ☒ | **8. Solid Waste Facilities: (2.5.4.3H)** | **City Curbside Pickup** | |
| | • The size, type and location of solid waste facilities. | **Note on C102** | |
| ☒ | **9. Storm water Management: (2.5.4.3I)**<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. | **Grading & Drainage Plan C103** | |
| ☒ | **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. | **Wall Mounted Residential Lighting Only. Note On C102** | |
| ☒ | **11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)** | **Note On C102** | |
| ☒ | **12. Landscaping: (2.5.4.3K)**<br>• Identify all undisturbed area, existing vegetation and that which is to be retained;<br>• Location of any irrigation system and water source. | **Landscape Plans L-1 & L-2** | |
| ☒ | **13. Contours and Elevation: (2.5.4.3L)**<br>• Existing/Proposed contours (2 foot minimum) and finished grade elevations. | **Grading & Drainage Plan C103** | |
| ☒ | **14. Open Space: (2.5.4.3M)**<br>• Type, extent and location of all existing/proposed open space. | **Site Layout Plan C102** | |
| ☒ | **15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)** | **Existing Conditions Plan V101** | |
| ☐ | **16. Character/Civic District (All following information shall be included): (2.5.4.3P)**<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). | **N/A** | |
| ☐ | **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)** | **Trip Generation Letter** | |
| ☒ | Indicate where Low Impact Development Design practices have been incorporated. **(7.1)** | **Drainage Analysis** | |
| ☐ | Indicate whether the proposed development is located in a wellhead protection or aquifer protection area. Such determination shall be approved by the Director of the Dept. of Public Works. **(7.3.1)** | **N/A** | |
| ☒ | Stormwater Management and Erosion Control Plan. **(7.4)** | **Grading & Drainage Plan C103** | |
| ☒ | Inspection and Maintenance Plan **(7.6.5)** | **Drainage Analysis** | |

| Final Site Plan Approval Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | All local approvals, permits, easements and licenses required, including but not limited to:<br>• Waivers;<br>• Driveway permits;<br>• Special exceptions;<br>• Variances granted;<br>• Easements;<br>• Licenses.<br>**(2.5.3.2A)** | **Cover Sheet C000** | |
| ☒ | Exhibits, data, reports or studies that may have been required as part of the approval process, including but not limited to:<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)** | **Included In Online Submittal** | |
| ☒ | A document from each of the required private utility service providers indicating approval of the proposed site plan and indicating an ability to provide all required private utilities to the site.<br>**(2.5.3.2D)** | **Included In Online Submittal** | |

| Final Site Plan Approval Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☒ | A list of any required state and federal permit applications required for the project and the status of same. **(2.5.3.2E)** | **Cover Sheet C000** | |
| ☒ | A note shall be provided on the Site Plan stating: "All conditions on this Plan shall remain in effect in perpetuity pursuant to the requirements of the Site Plan Review Regulations." **(2.5.4.2E)** | **Site Layout Plan C102** | N/A |
| ☐ | For site plans that involve land designated as "Special Flood Hazard Areas" (SFHA) by the National Flood Insurance Program (NFIP) confirmation that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. **(2.5.4.2F)** | **N/A** | |
| ☐ | Plan sheets submitted for recording shall include the following notes:<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)** | **Site Layout Plan C102** | N/A |

**Applicant's Signature:** Steven Ibsley **Date:** March 23, 2026

Applicants Agent

City of Portsmouth Planning Department

# Site Plan Review Application Fee – FY25

**Project:** Multifamily Develoment - 94 Langdon St. **Map/Lot:** 139 / 1 & 8

**Applicant:** Chinburg Development

All development

| | | | |
|---|---|---|---|
| *Base fee $600* | | | $600.00 |
| *Plus $5.00 per $1,000 of site costs* | | | |
| Site costs | $470,470 | + | $2,352.35 |
| *Plus $10.00 per 1,000 S.F. of site development area* | | | |
| Site development area | 25,000 S.F. | + | $250.00 |
| | | **Fee** | **$3,202.35** |

Maximum fee: $20,000.00

Fee received by: _____ Date: _____

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

# Construction Cost Estimate

## Haley Ward, Inc

Date: March 20, 2026

Project: Proposed Multifamily Development Job No: 5010220.004

Location: 94 Langdon Street and 98 Cornwall Street Portsmouth, NH - **On Site**

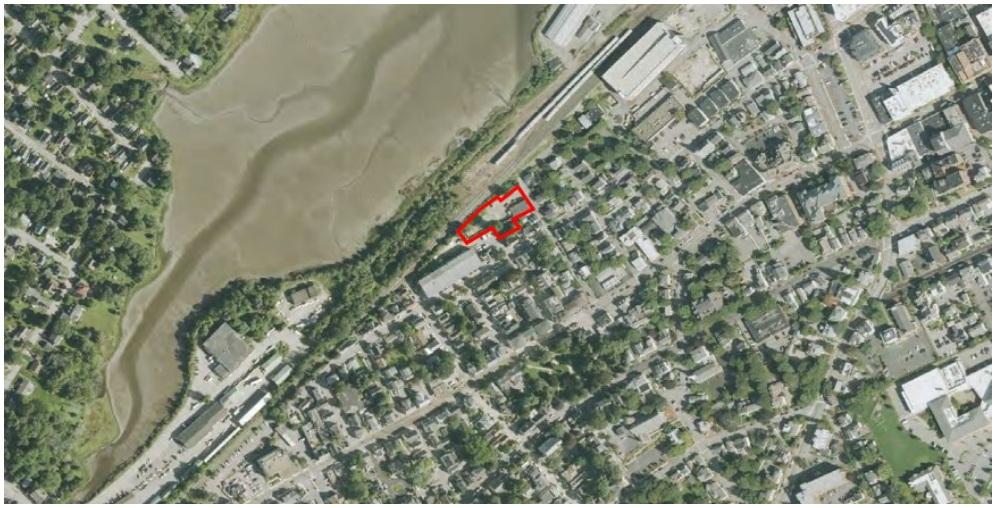
Scope: **Site Cost Estimate**

| ITEM NO | DESCRIPTION | UNIT | AMOUNT | UNIT COST | TOTAL |
|---|---|---|---|---|---|
| 1 | Construction Entrance | EA | 2 | $5,000.00 | $10,000.00 |
| 2 | Site Clearing & Demolition | LS | 1 | $ 36,400.00 | $36,400.00 |
| 3 | Saw Cutting Asphalt | LF | 160 | $ 13.50 | $2,160.00 |
| 4 | SiltSoxx | LF | 390 | $8.00 | $3,120.00 |
| 5 | Sub-Base Gravel (Type D) | CY | 180 | $52.00 | $9,360.00 |
| 6 | Base Gravel (Type A) | CY | 94 | $50.00 | $4,700.00 |
| 7 | Base Asphalt | TN | 100 | $85.00 | $8,500.00 |
| 8 | Surface Asphalt | TN | 50 | $110.00 | $5,500.00 |
| 9 | 6" SDR-35 | LF | 335 | $185.00 | $61,975.00 |
| 10 | Sewer Man Hole | VF | 16 | $900.00 | $14,400.00 |
| 11 | HDPE 12" Drain | LF | 303 | $85.00 | $25,755.00 |
| 12 | Drain Manhole | VF | 5 | $900.00 | $4,500.00 |
| 13 | Catch Basin | VF | 14.5 | $900.00 | $13,050.00 |
| 14 | Covers and Frames (SS & SD) | EA | 7 | $1,200.00 | $8,400.00 |
| 15 | Testing - Sewer | LS | 1 | $10,000.00 | $10,000.00 |
| 16 | HDPEP 3/4" Domestic & 2" Fire Water Service | LF | 630 | $145.00 | $91,350.00 |
| 17 | Testing - Water | LS | 1 | $15,000.00 | $15,000.00 |
| 18 | Underground Electric & Cable | LF | 1040 | $85.00 | $88,400.00 |
| 19 | Electrical Transformer | EA | 1 | $12,000.00 | $12,000.00 |
| 20 | Underground Gas Trench Prep & Backfill | LF | 330 | $50.00 | $16,500.00 |
| 21 | Loam & Seed Slopes | SY | 1400 | $21.00 | $29,400.00 |
| | **TOTAL** | | | | **$470,470** |

Note: This is an estimate of construction costs based upon various sources

CHINBURG
DEVELOP. BUILD. MANAGE.

## Photos of 94 Langdon St & 98 Cornwall St



Bird's eye view of area




Aerial view of 94 Langdon St & 98 Cornwall St



View of Property from Langdon St



Garage at 98 Cornwall



Northeast facing view.



View from Langdon St.



Current existing condition of the site.



Abutting home, (constructed by Chinburg).



More abutting homes (constructed by Chinburg).

# TAX MAP




MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Portsmouth, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 03/06/2026

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

# ZONING MAP




MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

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Geometry updated 03/06/2026

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## Map Theme Legends

### Zoning



March 23, 2026

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

**RE: Trip Generation Letter**
**94 Langdon Street & 98 Cornwall Street**
**Proposed Multifamily Development**

## INTRODUCTION

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

## TRIP GENERATION

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

## EXISTING TRAFFIC

Weekday AM Peak Hour of Generator = 1.98 Trips per 1,000 SF (LUC 180)
Existing Building = 3,000 SF (Assumed)
3,000/1,000 X 1.98 Trip Ends = **6 trips** (77% entering, 23% exiting)

Weekday PM Peak Hour of Generator = 2.18 Trips per 1,000 SF (LUC 180)
Existing Building = 3,000 SF (Assumed)
3,000/1,000 X 2.18 Trip Ends = **6 trips** (38% entering; 62% exiting)

## PROPOSED TRAFFIC

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

Weekday PM Peak Hour of Generator = 0.97 Trips per Dwelling Unit (LUC 210)
Dwelling Units = 3
3 X 0.75 Trip Ends = **3 trips** (63% entering; 37% exiting)

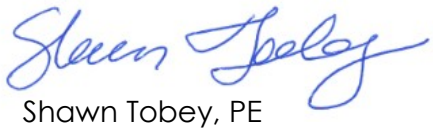


200 GRIFFIN RD. UNIT 14, PORTSMOUTH, NH 03802 603.430.9282 | HALEYWARD.COM

## CONCLUSION

As demonstrated above, the proposed project will result in a reduced number of trips in both the Weekday AM and PM Peak hours therefore providing a betterment to the surrounding neighborhood as related to traffic.

Sincerely,
Haley Ward, Inc.



Shawn Tobey, PE
Southern Maine & New Hampshire Land Development Manager

## Shawn Tobey

**From:** Eversource Do Not Reply <noreply@notifications.eversource.com>
**Sent:** Friday, March 13, 2026 9:48 AM
**To:** Shawn Tobey
**Subject:** Work Request Submission Confirmation #25249494

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

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

EVERSOURCE

Work Request Submission Confirmation

**Work Request Type:**
Install Permanent Service Underground- Small (<=400A)

**Work Request Number:**
25249494

**Job Location:**
94 LANGDON STREET

Dear Valued Customer,

We received your work request with the following information:

* Request Type: Install Permanent Service Underground- Small (<=400A)
* Request Number: 25249494
* Work Requested Date: 2026-03-13
* Job Location: 94 LANGDON STREET
* Contractor Name: Shawn Tobey
* Contractor Phone Number: 6033912118

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

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

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

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

March 13, 2026

Shawn Tobey
Haley Ward
200 Griffin Rd Unit 14
Portsmouth NH 03801

RE: Natural Gas Availability to 94 Langdon St Portsmouth NH

Dear Shawn,

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

Unitil hereby confirms natural gas service will be available to 94 Langdon St, Portsmouth NH to serve a three unit residential project.

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

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

Sincerely,

Janet Oliver
Senior Business Development Representative

CUSTOMER ENERGY SOLUTIONS
325 West Road
Portsmouth, NH 03801

T 888.486.4845 www.unitil.com

# "GREEN" BUILDING STATEMENT, 94 LANGDON ST, PORTSMOUTH, NH

## LOCATION AND TRANSPORTATION

**Walkable Destinations:** 94 Langdon Street abuts the railroad tracks in the vicinity of North Mill Pond. It is very walkable to downtown Portsmouth.

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

**Ride sharing:** Although this location is not serviced directly by public transportation, it enjoys easy access and is a quickly identifiable address for cabs or shared transportation services.

## SITE

**Stormwater:** The existing site has no stormwater infrastructure. Runoff currently sheet flows across the existing parking area and offsite to the north or into Langdon Street. The proposed development will include a significant reduction in impervious cover and the installation of four new deep sump catch basins to coney the stormwater into the city system in Langdon Street.

**Reuse**: The existing site is predominantly pavement with commercial buildings for an electrical contractor. The proposed project will redevelop the site into a new residential development that is cohesive with the surrounding residential developments.

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

**Zoning:** This project is in the MRB zone. A frontage variance was issued by the ZBA on 17MAR2026. This parcel has 88' of frontage whereas zoning requires 100'.

## UTILITIES AND FIRE PROTECTION

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

**Sewer:** Tying into to public sewer in Langdon St

**Electric:** Will need to relocate the utility pole. Electric within site will be UG (likely 1 pad mount transformer will suffice).

**Gas or heating oil:** Propane or natural gas, if available.

## ENERGY:

**Heating and Air Conditioning:**

System: Forced Hot Air with Central A/C.

Furnace: Gas fired, Rheem or similar.

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

**Insulation:** ENERGY STAR Certified

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

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

Basement: R-30 fiberglass in ceiling.

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

**Lighting:** LED lighting will be used throughout.

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

**Fenestration:** Very substantial windows and doors are state-of-the-art and shall have a U-value below .30, meeting or exceeding energy-star requirements. All Chinburg Builders windows exceed **Energy Star 7** window requirements for this region.

# Sherlock

## 387.124.v26 GL (2/3/2026) - R2

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603-431-9559







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**Alt Window/Garage Door/Railing Color Option**

2/3/2026

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**Alt Window/Garage Door/Railing Color Option**

2/3/2026

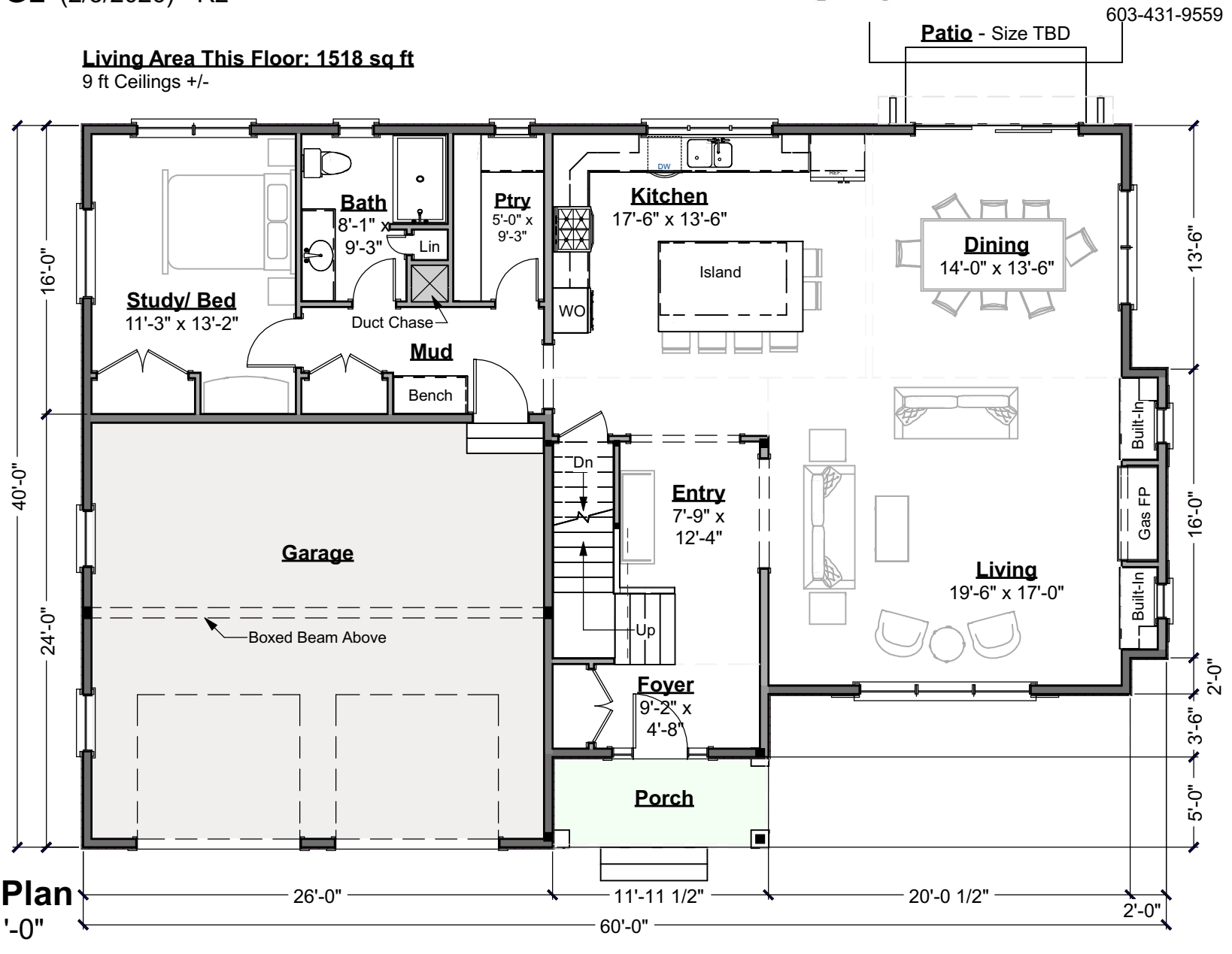
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**Living Area This Floor: 1518 sq ft**
9 ft Ceilings +/-




## First Floor Plan

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

2/3/2026

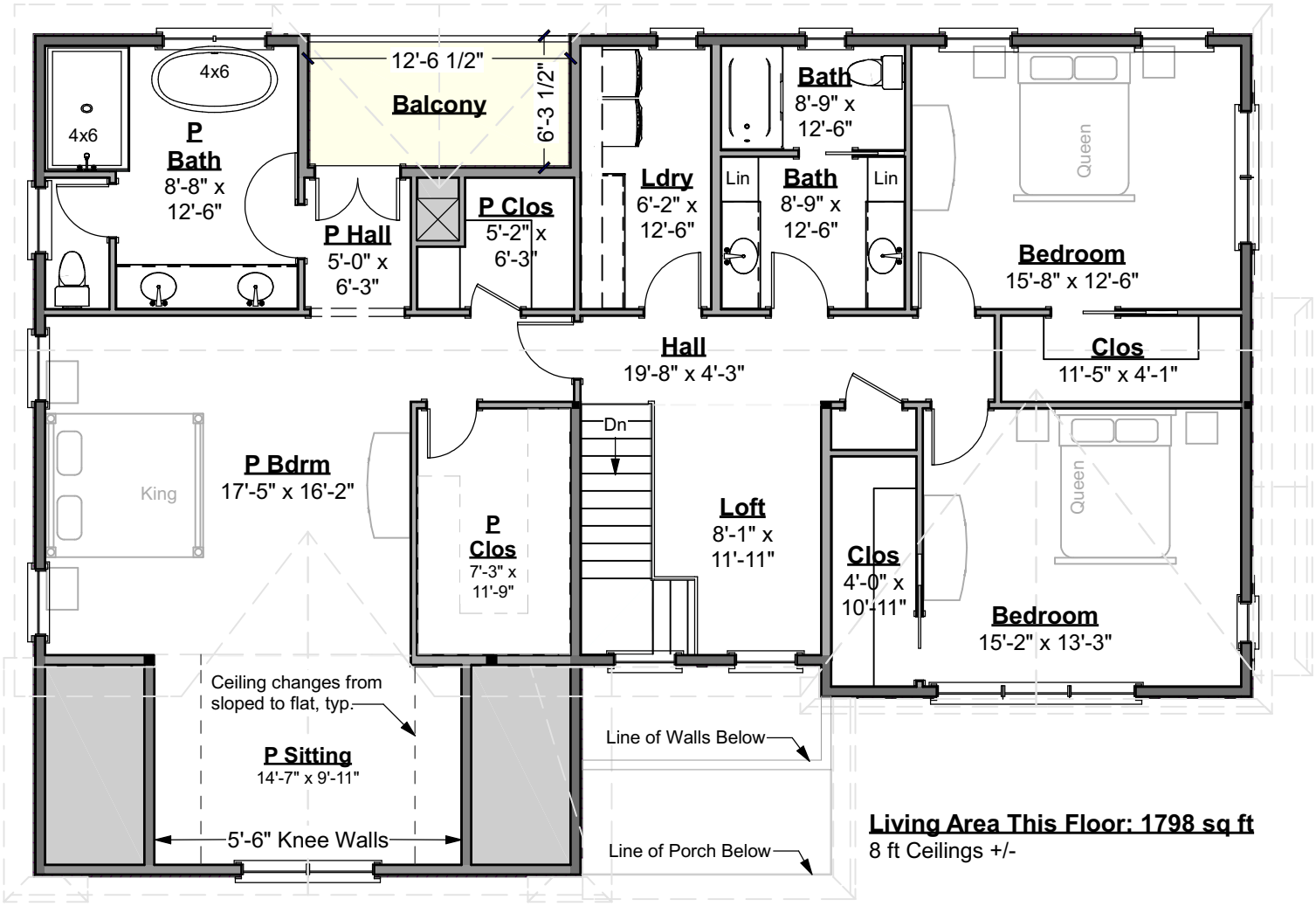
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**Living Area This Floor: 1798 sq ft**

8 ft Ceilings +/-

## Second Floor Plan

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

2/3/2026

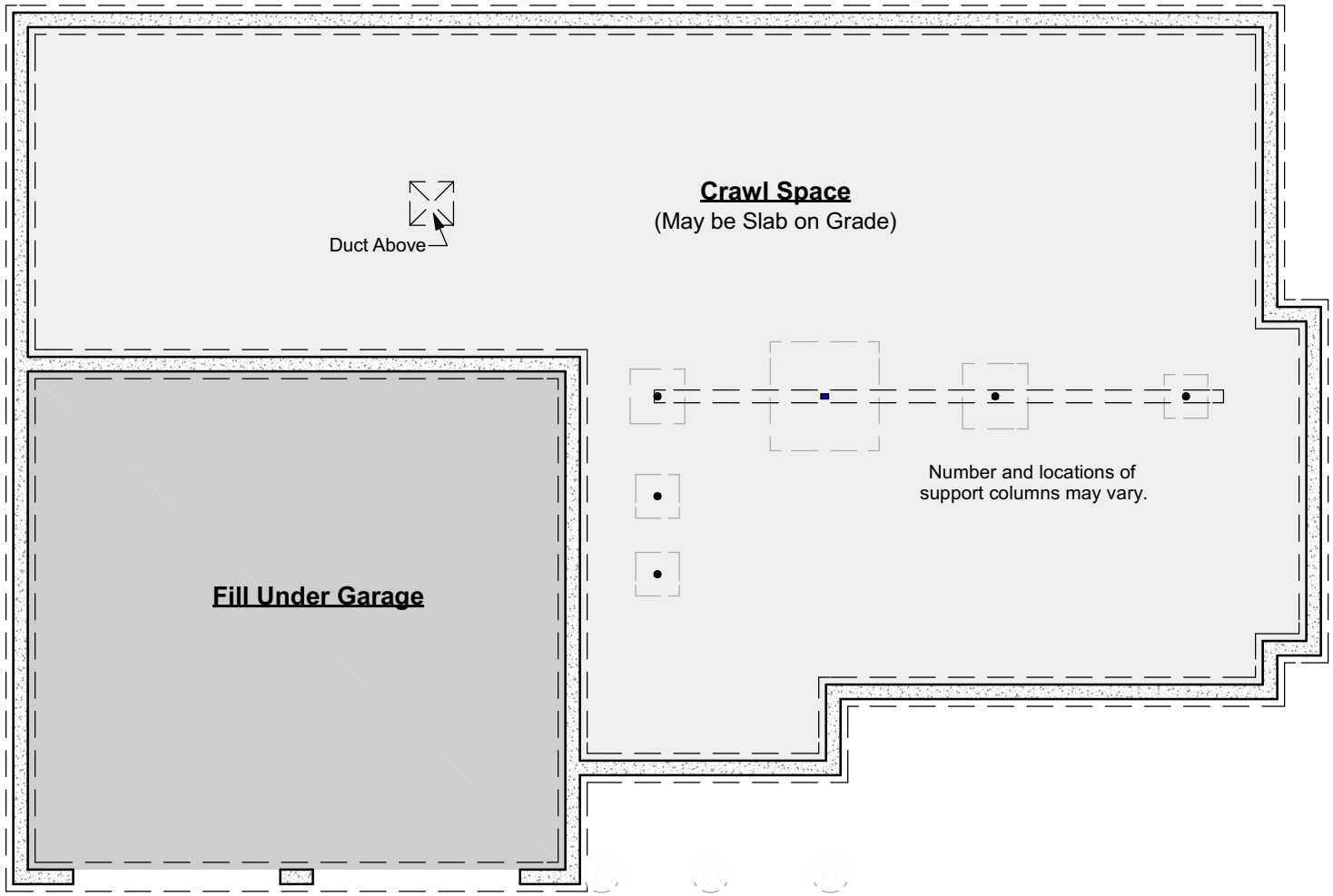
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## Foundation Plan

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

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## Front Elevation

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

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## Right Elevation

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

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## Rear Elevation

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

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## Left Elevation

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

2/4/2026

# Elsa

1221.124.v2 GL (2/4/2026) - R2

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2/4/2026

# Elsa

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**Alt Window/Garage Door/Railing Color Option**

2/4/2026

# Elsa

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**Alt Window/Garage Door/Railing Color Option**

2/4/2026

# Elsa

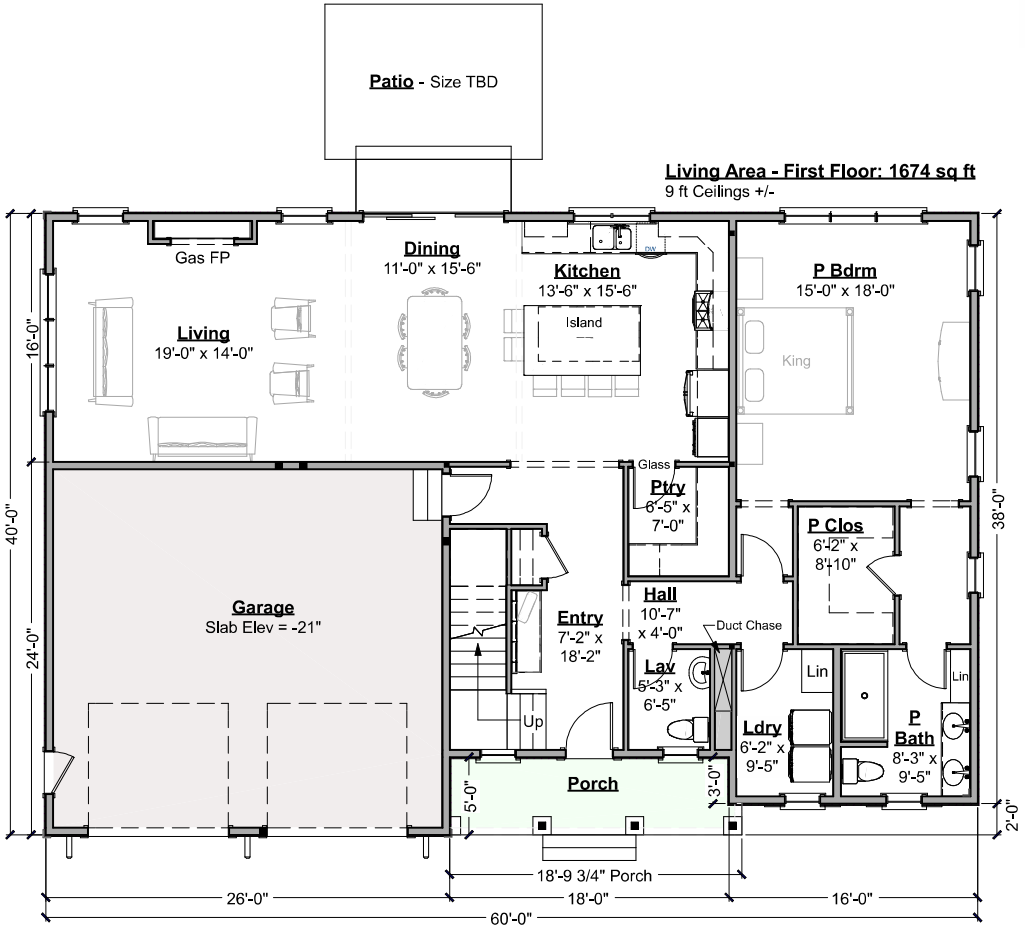
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## First Floor Plan

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

2/4/2026

# Elsa

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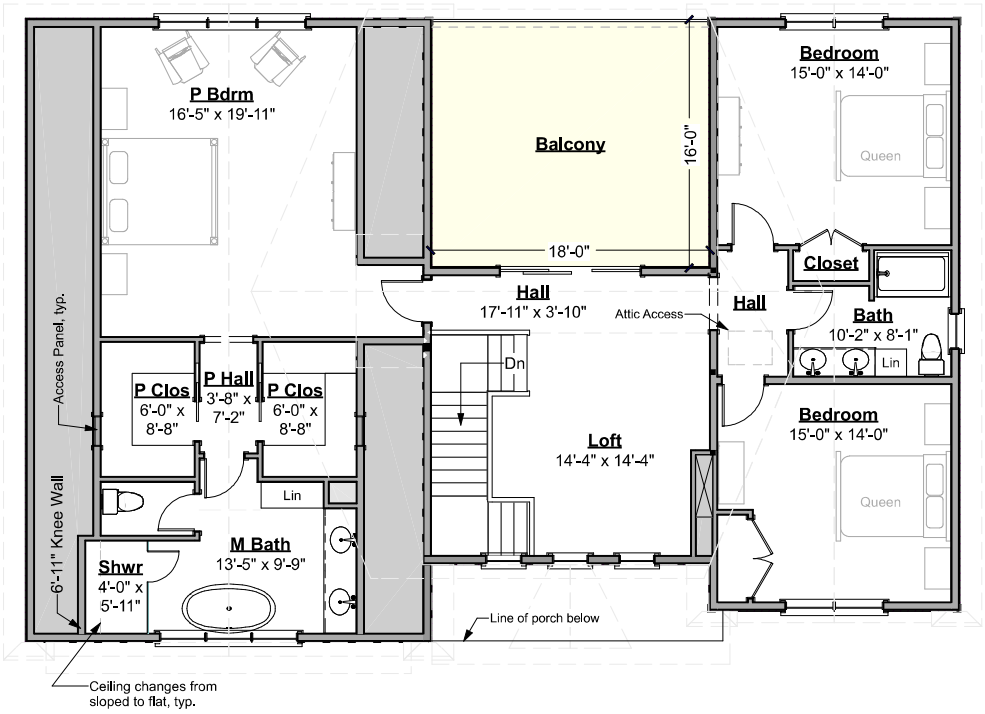
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**Living Area - Second Floor: 1684 sq ft**

8 ft Ceilings +/-




## Second Floor Plan

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

2/4/2026

# Elsa

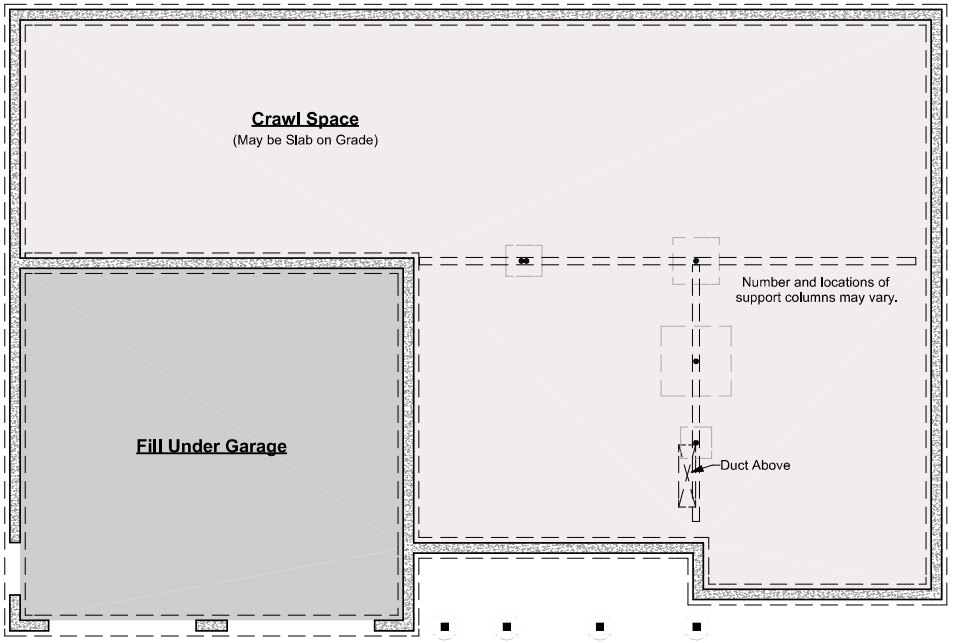
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## Foundation Plan

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2/4/2026

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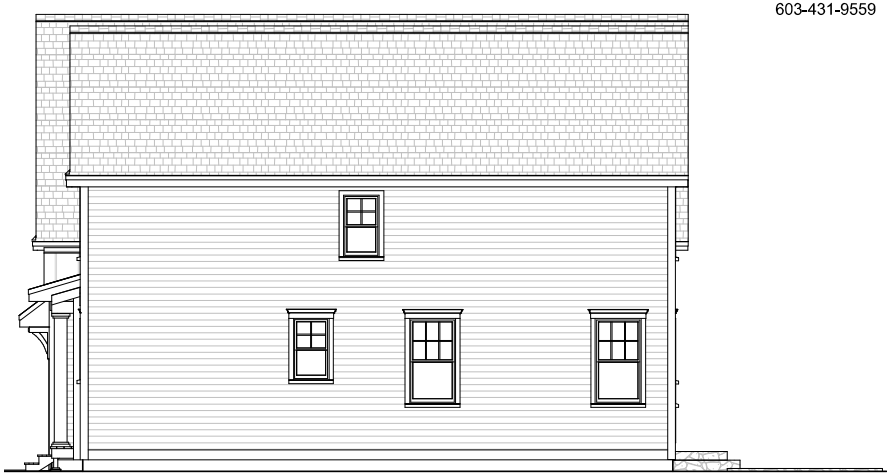
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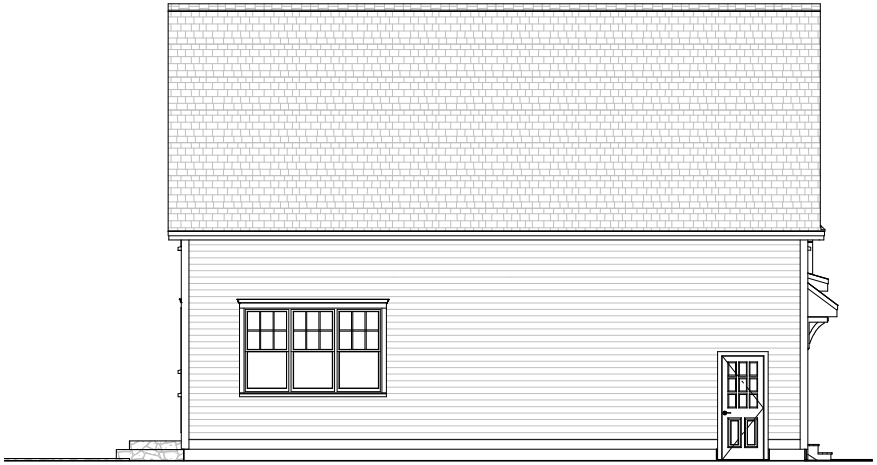

Front



Right



Rear



Left

## Elevations

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

2/10/2026

# Carter

## 1016.124.v2 GR (2/10/2026)

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2/10/2026

# Carter

1016.124.v2 GR (2/10/2026)

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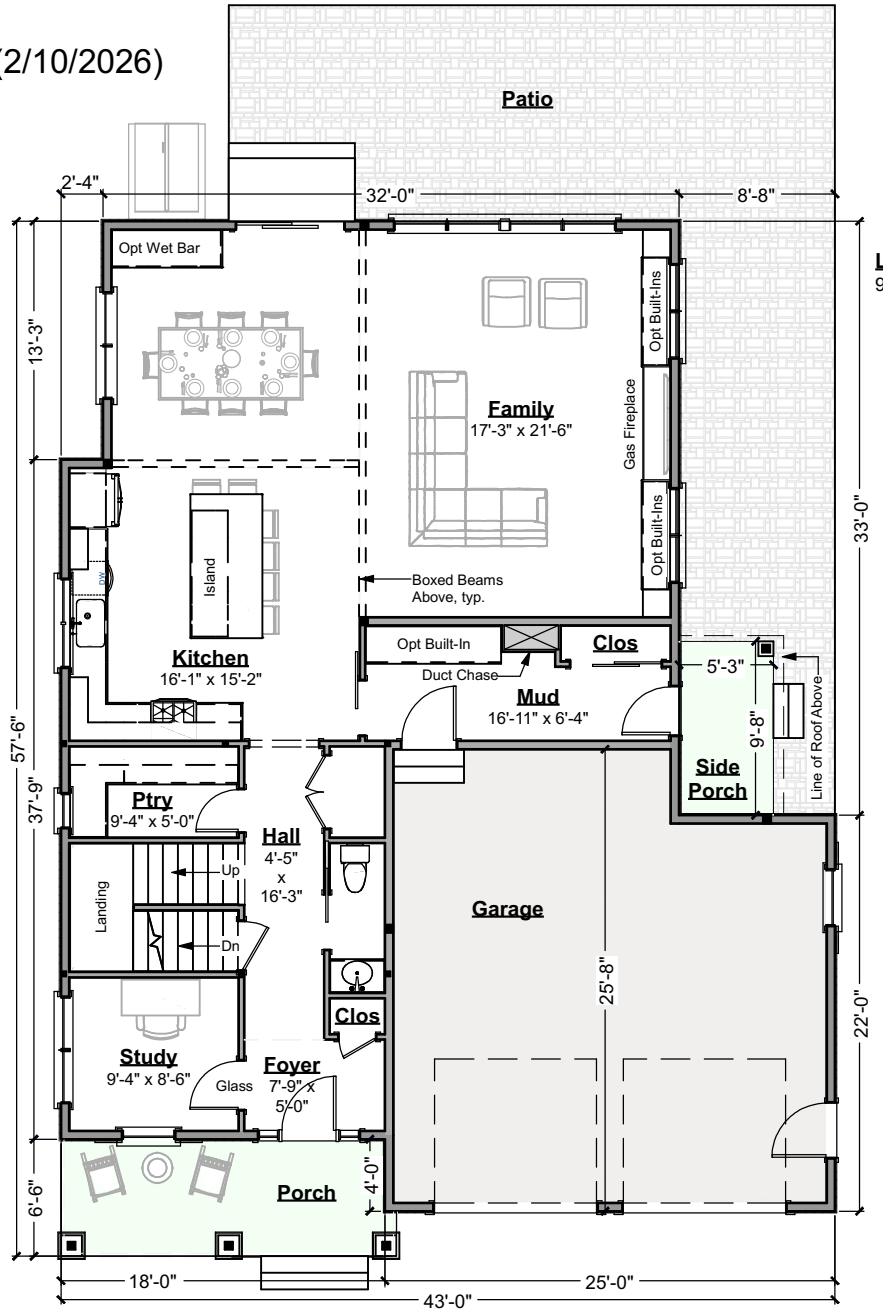
# Carter

1016.124.v2 GR (2/10/2026)

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**Living Area this Floor: 1376 sq ft**

9 ft Ceilings +/-, unless noted otherwise

## First Floor Plan

Scale: 3/32" = 1'-0"

2/10/2026

# Carter

1016.124.v2 GR (2/10/2026)

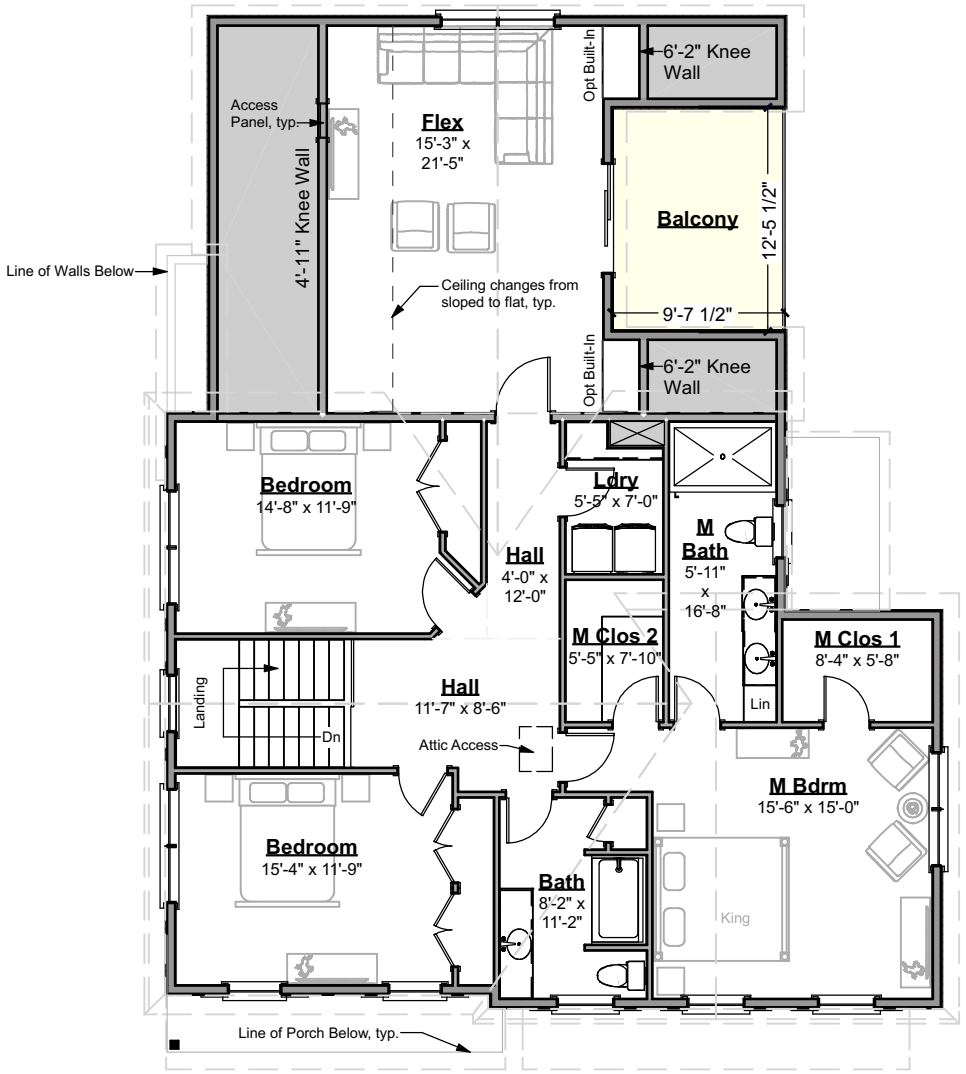
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**Living Area this Floor: 1688 sq ft**

8 ft Ceilings +/-




## Second Floor Plan

Scale: 3/32" = 1'-0"

2/10/2026

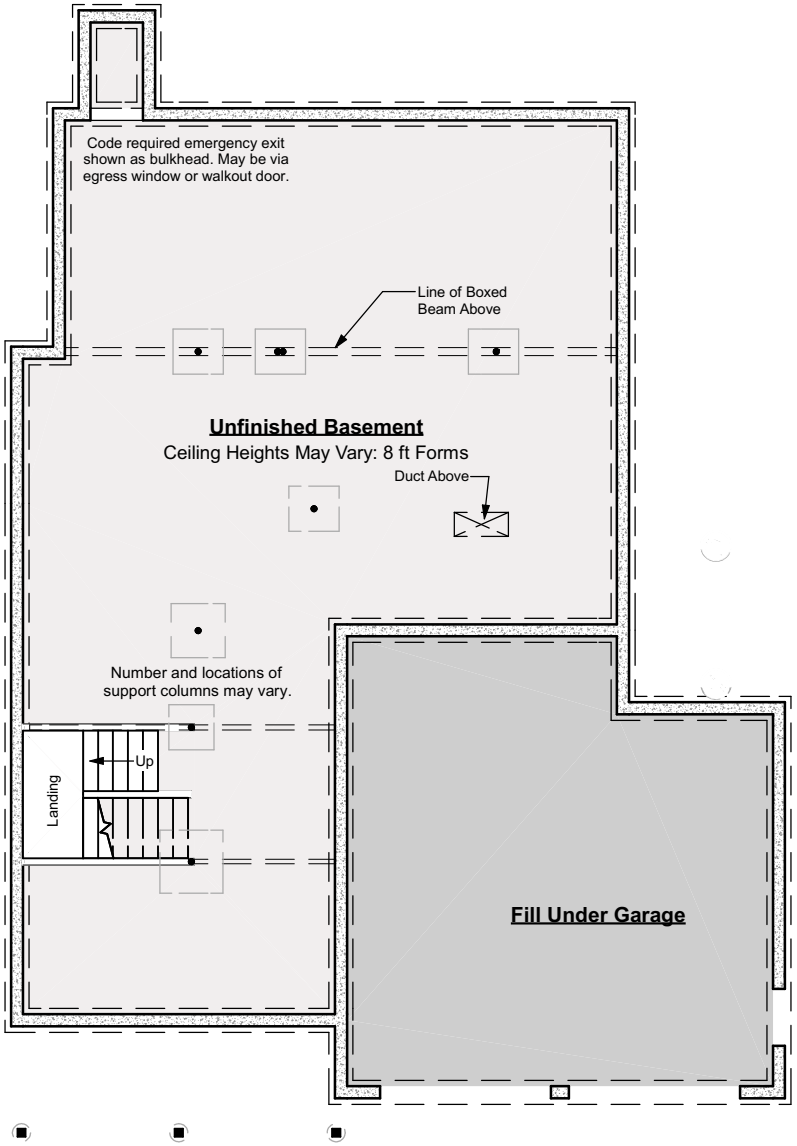
# Carter

1016.124.v2 GR (2/10/2026)

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## Foundation Plan

Scale: 3/32" = 1'-0"

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## Front Elevation

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

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## Right Elevation

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

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## Rear Elevation

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

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## Left Elevation

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

HALEY WARD

# STORMWATER MANAGEMENT AND EROSION CONTROL PLAN

**TO THE CITY OF PORTSMOUTH**
**FOR 94 LANGDON ST & 98 CORNWALL ST**
Map 139, Lots 1 & 8 | Portsmouth, NH

**APPLICANT:**
**Chinburg Development**
3 Penstock Way
Newmarket, NH 03847




March 23, 2026
JN: 5010220.004

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

## EXECUTIVE SUMMARY

This drainage analysis examines the pre-development (existing) and post-development (proposed) stormwater drainage patterns for the proposed residential redevelopment project at the intersection 94 Langdon Street and 98 Cornwall Street in Portsmouth, NH. The site is shown on the City of Portsmouth Assessor's Tax Map 139 as Lots 1 and 8. The total size of the existing lot is approximately 25,107 square feet.

The development will merge the two parcels, demolish the existing building, remove the existing parking, and construct three single-family homes in a condominium association, with associated landscaping, utilities, and driveways. The new buildings will be serviced by public water and sewer. The development has been designed to ensure that there will be no increase in peak runoff from the site as a result of this project.

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

## INTRODUCTION / PROJECT DESCRIPTION

This drainage report is designed to assist the owner, planning board, contractor, regulatory reviewer, and others in understanding the impact of the proposed development project on local surface water runoff.

The site is bound to the north by a railroad corridor, to the east by Langdon Street, to the south by residential development and to the west by commercial development. The site is predominantly developed with two commercial buildings and associated pavement. The site has no existing stormwater infrastructure. Runoff currently sheet flows across the existing parking area and offsite to the north or into Langdon Street. The proposed development will include a significant reduction in impervious cover and the installation of four new deep sump catch basins to coney the stormwater into the city system in Langdon Street.

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



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

## METHODOLOGY

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

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

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

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

## SITE SPECIFIC INFORMATION

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

| Soil Symbol | Soil Name and Slopes |
|---|---|
| **699** | Urban land |
| **799** | Urban land-Canton complex (3-15% slopes) |

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

The lot is relatively flat and generally slopes towards the railroad and Langdon Street. Elevations on the site range from 11 to 18 feet above mean sea level. The western portion of the site drains towards the railroad, and the eastern portion of the site drains west into the city stormwater system located in Langdon Street.

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

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

## PRE-DEVELOPMENT DRAINAGE

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

Subcatchment 1 represents the western half of the site and includes a mix of paved parking and grass area. This area drains northwest and onto the railroad property. (Summation Point 1.)

Subcatchment 2 represents the eastern half of the site and includes pavement and buildings. This area drains offsite to the east and into the city stormwater system located in Langdon Street. (Summation Point 2.)

## POST-DEVELOPMENT DRAINAGE

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

Subcatchment 1 continues to represent the reduced portion of the site draining to the railroad property.

Subcatchment 2 represents the proposed dwellings and driveway that drains into the Langdon Street stormwater system.

## RUNOFF COMPARISON

***Table 1: Pre-Development to Post-Development Comparison***

| | Q2 (CFS) | | Q10 (CFS) | | Q50 (CFS) | | |
|---|---|---|---|---|---|---|---|
| **Design Point** | **Pre** | **Post** | **Pre** | **Post** | **Pre** | **Post** | **Description** |
| **SP1** | 0.53 | 0.29 | 0.92 | 0.61 | 1.50 | 1.13 | Offsite Flow to the North |
| **SP2** | 1.49 | 1.34 | 2.27 | 2.19 | 3.45 | 3.45 | Offsite Flow to Langdon Street |

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

## EROSION AND SEDIMENT CONTROL PRACTICES

During construction, the potential for erosion exists due to stormwater runoff. The contractor will be required to inspect and maintain all necessary erosion control measures, as well as installing any additional measures as required. All erosion control practices shall conform to "The Stormwater Management and Erosion Control Handbook

for Urban and Developing Areas in New Hampshire." Some examples of erosion and sediment control measures to be utilized for this project during construction may include:

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

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

## CONCLUSION

The proposed development has been designed to match the pre-development drainage patterns to the greatest extent feasible. With the significant reduction in impervious cover, the post- development runoff rates are reduced below the pre-development runoff rates. The addition of deep sump catch basins will allow for sediment capture and pre-treatment of runoff providing an overall betterment of the site compared to the current developed conditions.

Erosion and sediment control practices will be implemented for both the temporary condition during construction and for final stabilization after construction. Therefore, there are no negative impacts to downstream receptors or adjacent properties anticipated as a result of this project.

## REFERENCES


1. Comprehensive Environmental Inc. and New Hampshire Department of Environmental Services. New Hampshire Stormwater Manual (Volumes 1, 2 and 3), December 2008 (Revision 1.0).
2. Minnick, E.L. and H.T. Marshall. Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire, prepared by Rockingham County Conservation District, prepared for New Hampshire Department of Environmental Services, in cooperation with USDA Soil Conservation Service, August 1992.
3. HydroCAD Software Solution, LLC. HydroCAD Stormwater Modeling System Version10.20 copyright 2013.

# Extreme Precipitation Tables

## Northeast Regional Climate Center

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

| Metadata for Point | |
|---|---|
| **Smoothing** | Yes |
| **State** | |
| **Location** | |
| **Latitude** | 43.075 degrees North |
| **Longitude** | 70.766 degrees West |
| **Elevation** | 0 feet |
| **Date/Time** | Tue Mar 17 2026 14:41:45 GMT-0400 (Eastern Daylight Time) |

## Extreme Precipitation Estimates

| | 5min | 10min | 15min | 30min | 60min | 120min | | 1hr | 2hr | 3hr | 6hr | 12hr | 24hr | 48hr | | 1day | 2day | 4day | 7day | 10day | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1yr** | 0.26 | 0.40 | 0.50 | 0.65 | 0.81 | 1.04 | **1yr** | 0.70 | 0.98 | 1.21 | 1.56 | 2.03 | 2.66 | 2.92 | **1yr** | 2.35 | 2.81 | 3.22 | 3.94 | 4.55 | **1yr** |
| **2yr** | 0.32 | 0.50 | 0.62 | 0.81 | 1.02 | 1.30 | **2yr** | 0.88 | 1.18 | 1.52 | 1.94 | 2.49 | 3.21 | 3.57 | **2yr** | 2.84 | 3.43 | 3.94 | 4.68 | 5.33 | **2yr** |
| **5yr** | 0.37 | 0.58 | 0.73 | 0.98 | 1.25 | 1.61 | **5yr** | 1.08 | 1.47 | 1.89 | 2.43 | 3.14 | 4.07 | 4.58 | **5yr** | 3.60 | 4.40 | 5.04 | 5.94 | 6.70 | **5yr** |
| **10yr** | 0.41 | 0.65 | 0.82 | 1.12 | 1.45 | 1.89 | **10yr** | 1.25 | 1.73 | 2.23 | 2.89 | 3.75 | 4.87 | 5.53 | **10yr** | 4.31 | 5.32 | 6.09 | 7.11 | 7.98 | **10yr** |
| **25yr** | 0.48 | 0.76 | 0.97 | 1.34 | 1.77 | 2.34 | **25yr** | 1.53 | 2.14 | 2.78 | 3.63 | 4.74 | 6.17 | 7.10 | **25yr** | 5.46 | 6.83 | 7.80 | 9.03 | 10.05 | **25yr** |
| **50yr** | 0.54 | 0.86 | 1.10 | 1.54 | 2.07 | 2.76 | **50yr** | 1.79 | 2.53 | 3.29 | 4.32 | 5.66 | 7.39 | 8.58 | **50yr** | 6.54 | 8.25 | 9.42 | 10.81 | 11.98 | **50yr** |
| **100yr** | 0.60 | 0.97 | 1.25 | 1.77 | 2.42 | 3.26 | **100yr** | 2.09 | 2.98 | 3.90 | 5.16 | 6.77 | 8.85 | 10.38 | **100yr** | 7.83 | 9.98 | 11.38 | 12.96 | 14.27 | **100yr** |
| **200yr** | 0.67 | 1.10 | 1.43 | 2.05 | 2.82 | 3.83 | **200yr** | 2.44 | 3.52 | 4.62 | 6.13 | 8.08 | 10.61 | 12.55 | **200yr** | 9.39 | 12.07 | 13.76 | 15.55 | 17.02 | **200yr** |
| **500yr** | 0.80 | 1.31 | 1.71 | 2.48 | 3.48 | 4.76 | **500yr** | 3.00 | 4.38 | 5.76 | 7.70 | 10.22 | 13.48 | 16.14 | **500yr** | 11.93 | 15.52 | 17.67 | 19.78 | 21.49 | **500yr** |

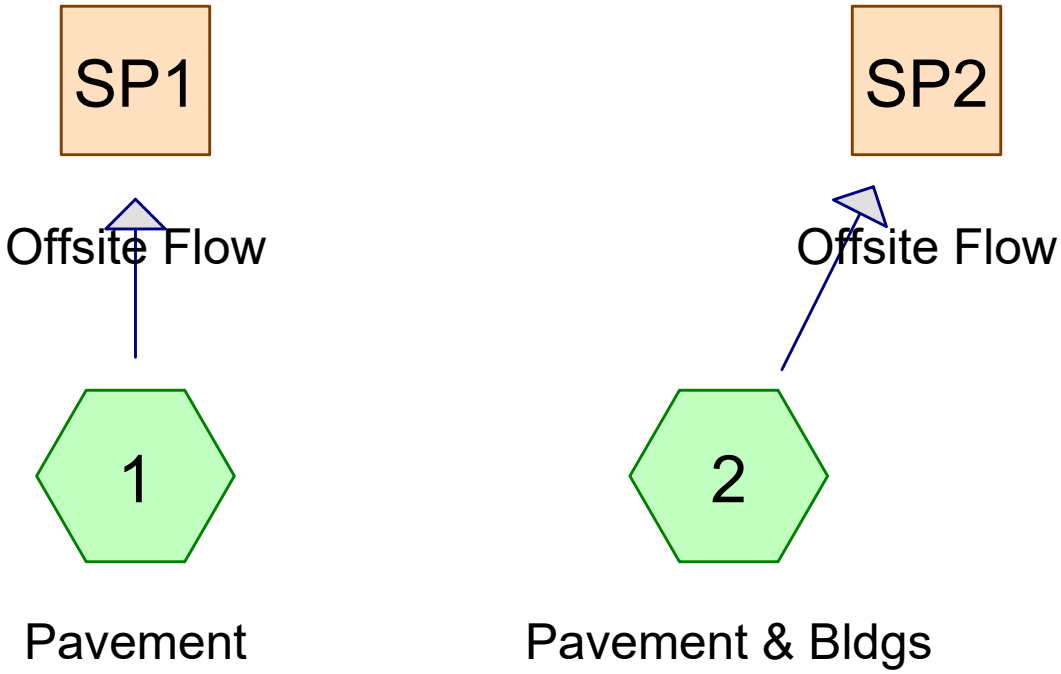
## Lower Confidence Limits

| | 5min | 10min | 15min | 30min | 60min | 120min | | 1hr | 2hr | 3hr | 6hr | 12hr | 24hr | 48hr | | 1day | 2day | 4day | 7day | 10day | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1yr** | 0.23 | 0.36 | 0.44 | 0.59 | 0.72 | 0.88 | **1yr** | 0.63 | 0.86 | 0.92 | 1.33 | 1.68 | 2.24 | 2.49 | **1yr** | 1.98 | 2.40 | 2.87 | 3.18 | 3.90 | **1yr** |
| **2yr** | 0.31 | 0.49 | 0.60 | 0.81 | 1.00 | 1.19 | **2yr** | 0.86 | 1.16 | 1.37 | 1.82 | 2.34 | 3.06 | 3.45 | **2yr** | 2.71 | 3.32 | 3.82 | 4.55 | 5.08 | **2yr** |
| **5yr** | 0.35 | 0.54 | 0.67 | 0.92 | 1.17 | 1.40 | **5yr** | 1.01 | 1.37 | 1.61 | 2.12 | 2.73 | 3.79 | 4.19 | **5yr** | 3.35 | 4.03 | 4.72 | 5.53 | 6.24 | **5yr** |
| **10yr** | 0.39 | 0.59 | 0.73 | 1.03 | 1.33 | 1.60 | **10yr** | 1.14 | 1.56 | 1.80 | 2.39 | 3.06 | 4.37 | 4.86 | **10yr** | 3.87 | 4.67 | 5.44 | 6.41 | 7.20 | **10yr** |
| **25yr** | 0.44 | 0.67 | 0.83 | 1.19 | 1.56 | 1.90 | **25yr** | 1.35 | 1.86 | 2.10 | 2.75 | 3.53 | 4.72 | 5.89 | **25yr** | 4.18 | 5.66 | 6.65 | 7.79 | 8.68 | **25yr** |
| **50yr** | 0.48 | 0.73 | 0.91 | 1.31 | 1.76 | 2.17 | **50yr** | 1.52 | 2.12 | 2.35 | 3.07 | 3.93 | 5.33 | 6.80 | **50yr** | 4.72 | 6.54 | 7.72 | 9.04 | 10.02 | **50yr** |
| **100yr** | 0.54 | 0.81 | 1.01 | 1.47 | 2.01 | 2.47 | **100yr** | 1.73 | 2.41 | 2.63 | 3.41 | 4.35 | 6.00 | 7.85 | **100yr** | 5.31 | 7.55 | 8.98 | 10.51 | 11.56 | **100yr** |
| **200yr** | 0.59 | 0.89 | 1.13 | 1.63 | 2.28 | 2.81 | **200yr** | 1.96 | 2.75 | 2.93 | 3.78 | 4.79 | 6.72 | 9.06 | **200yr** | 5.95 | 8.71 | 10.42 | 12.22 | 13.37 | **200yr** |
| **500yr** | 0.68 | 1.02 | 1.31 | 1.90 | 2.71 | 3.36 | **500yr** | 2.34 | 3.29 | 3.41 | 4.31 | 5.45 | 7.82 | 10.94 | **500yr** | 6.92 | 10.52 | 12.69 | 14.96 | 16.19 | **500yr** |

## Upper Confidence Limits

| | 5min | 10min | 15min | 30min | 60min | 120min | | 1hr | 2hr | 3hr | 6hr | 12hr | 24hr | 48hr | | 1day | 2day | 4day | 7day | 10day | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1yr** | 0.28 | 0.44 | 0.54 | 0.72 | 0.89 | 1.08 | **1yr** | 0.77 | 1.06 | 1.26 | 1.74 | 2.21 | 2.98 | 3.16 | **1yr** | 2.64 | 3.04 | 3.58 | 4.37 | 5.04 | **1yr** |
| **2yr** | 0.34 | 0.52 | 0.64 | 0.86 | 1.07 | 1.27 | **2yr** | 0.92 | 1.24 | 1.48 | 1.96 | 2.51 | 3.42 | 3.70 | **2yr** | 3.03 | 3.56 | 4.09 | 4.84 | 5.63 | **2yr** |
| **5yr** | 0.40 | 0.62 | 0.77 | 1.05 | 1.34 | 1.62 | **5yr** | 1.15 | 1.58 | 1.88 | 2.53 | 3.25 | 4.34 | 4.96 | **5yr** | 3.84 | 4.77 | 5.38 | 6.37 | 7.16 | **5yr** |
| **10yr** | 0.47 | 0.72 | 0.89 | 1.25 | 1.61 | 1.98 | **10yr** | 1.39 | 1.93 | 2.28 | 3.11 | 3.95 | 5.34 | 6.20 | **10yr** | 4.72 | 5.96 | 6.82 | 7.84 | 8.75 | **10yr** |
| **25yr** | 0.58 | 0.88 | 1.09 | 1.56 | 2.05 | 2.57 | **25yr** | 1.77 | 2.51 | 2.95 | 4.07 | 5.15 | 7.78 | 8.34 | **25yr** | 6.88 | 8.02 | 9.15 | 10.34 | 11.41 | **25yr** |
| **50yr** | 0.67 | 1.02 | 1.27 | 1.83 | 2.46 | 3.13 | **50yr** | 2.12 | 3.06 | 3.60 | 5.00 | 6.32 | 9.74 | 10.46 | **50yr** | 8.62 | 10.06 | 11.44 | 12.72 | 13.96 | **50yr** |
| **100yr** | 0.79 | 1.19 | 1.49 | 2.16 | 2.96 | 3.81 | **100yr** | 2.55 | 3.72 | 4.37 | 6.16 | 7.76 | 12.18 | 13.10 | **100yr** | 10.78 | 12.60 | 14.31 | 15.69 | 17.09 | **100yr** |
| **200yr** | 0.92 | 1.39 | 1.76 | 2.55 | 3.56 | 4.65 | **200yr** | 3.07 | 4.55 | 5.34 | 7.58 | 9.54 | 15.28 | 16.44 | **200yr** | 13.53 | 15.81 | 17.92 | 19.35 | 20.92 | **200yr** |
| **500yr** | 1.15 | 1.71 | 2.19 | 3.19 | 4.53 | 6.04 | **500yr** | 3.91 | 5.90 | 6.93 | 10.02 | 12.56 | 20.65 | 22.20 | **500yr** | 18.27 | 21.34 | 24.13 | 25.51 | 27.34 | **500yr** |

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Northeast Regional Climate Center




Subcat Reach Pond Link

**Routing Diagram for 5010220.004-Pre**
Prepared by Haley Ward, Printed 3/20/2026
HydroCAD® 10.20-7a s/n 00641 © 2025 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (sq-ft) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 4,135 | 74 | >75% Grass cover, Good, HSG C (1, 2) |
| 1,000 | 96 | Gravel surface, HSG C (2) |
| 21,125 | 98 | Paved parking, HSG C (1, 2) |

## Soil Listing (all nodes)

| Area (sq-ft) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 0 | HSG A | |
| 0 | HSG B | |
| 26,260 | HSG C | 1, 2 |
| 0 | HSG D | |
| 0 | Other | |

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

**Subcatchment1: Pavement** Runoff Area=8,390 sf 53.99% Impervious Runoff Depth>2.36"
Tc=5.0 min CN=87 Runoff=0.53 cfs 1,651 cf

**Subcatchment2: Pavement & Bldgs** Runoff Area=17,870 sf 92.87% Impervious Runoff Depth>3.46"
Tc=5.0 min CN=98 Runoff=1.49 cfs 5,159 cf

**Reach SP1: Offsite Flow** Inflow=0.53 cfs 1,651 cf
Outflow=0.53 cfs 1,651 cf

**Reach SP2: Offsite Flow** Inflow=1.49 cfs 5,159 cf
Outflow=1.49 cfs 5,159 cf

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

**Subcatchment1: Pavement** Runoff Area=8,390 sf 53.99% Impervious Runoff Depth>4.14"
Tc=5.0 min CN=87 Runoff=0.92 cfs 2,896 cf

**Subcatchment2: Pavement & Bldgs** Runoff Area=17,870 sf 92.87% Impervious Runoff Depth>5.37"
Tc=5.0 min CN=98 Runoff=2.27 cfs 7,997 cf

**Reach SP1: Offsite Flow** Inflow=0.92 cfs 2,896 cf
Outflow=0.92 cfs 2,896 cf

**Reach SP2: Offsite Flow** Inflow=2.27 cfs 7,997 cf
Outflow=2.27 cfs 7,997 cf

## Summary for Subcatchment 1: Pavement

Runoff = 0.92 cfs @ 12.07 hrs, Volume= 2,896 cf, Depth> 4.14"
Routed to Reach SP1 : Offsite Flow

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.61"

| Area (sf) | CN | Description |
|---|---|---|
| 4,530 | 98 | Paved parking, HSG C |
| 3,860 | 74 | >75% Grass cover, Good, HSG C |
| 8,390 | 87 | Weighted Average |
| 3,860 | | 46.01% Pervious Area |
| 4,530 | | 53.99% Impervious Area |

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

## Summary for Subcatchment 2: Pavement & Bldgs

Runoff = 2.27 cfs @ 12.07 hrs, Volume= 7,997 cf, Depth> 5.37"
Routed to Reach SP2 : Offsite Flow

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.61"

| Area (sf) | CN | Description |
|---|---|---|
| 275 | 74 | >75% Grass cover, Good, HSG C |
| 1,000 | 96 | Gravel surface, HSG C |
| 16,595 | 98 | Paved parking, HSG C |
| 17,870 | 98 | Weighted Average |
| 1,275 | | 7.13% Pervious Area |
| 16,595 | | 92.87% Impervious Area |

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

## Summary for Reach SP1: Offsite Flow

Inflow Area = 8,390 sf, 53.99% Impervious, Inflow Depth > 4.14" for 10-Yr event
Inflow = 0.92 cfs @ 12.07 hrs, Volume= 2,896 cf
Outflow = 0.92 cfs @ 12.07 hrs, Volume= 2,896 cf, Atten= 0%, Lag= 0.0 min

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

## Summary for Reach SP2: Offsite Flow

Inflow Area = 17,870 sf, 92.87% Impervious, Inflow Depth > 5.37" for 10-Yr event
Inflow = 2.27 cfs @ 12.07 hrs, Volume= 7,997 cf
Outflow = 2.27 cfs @ 12.07 hrs, Volume= 7,997 cf, Atten= 0%, Lag= 0.0 min

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

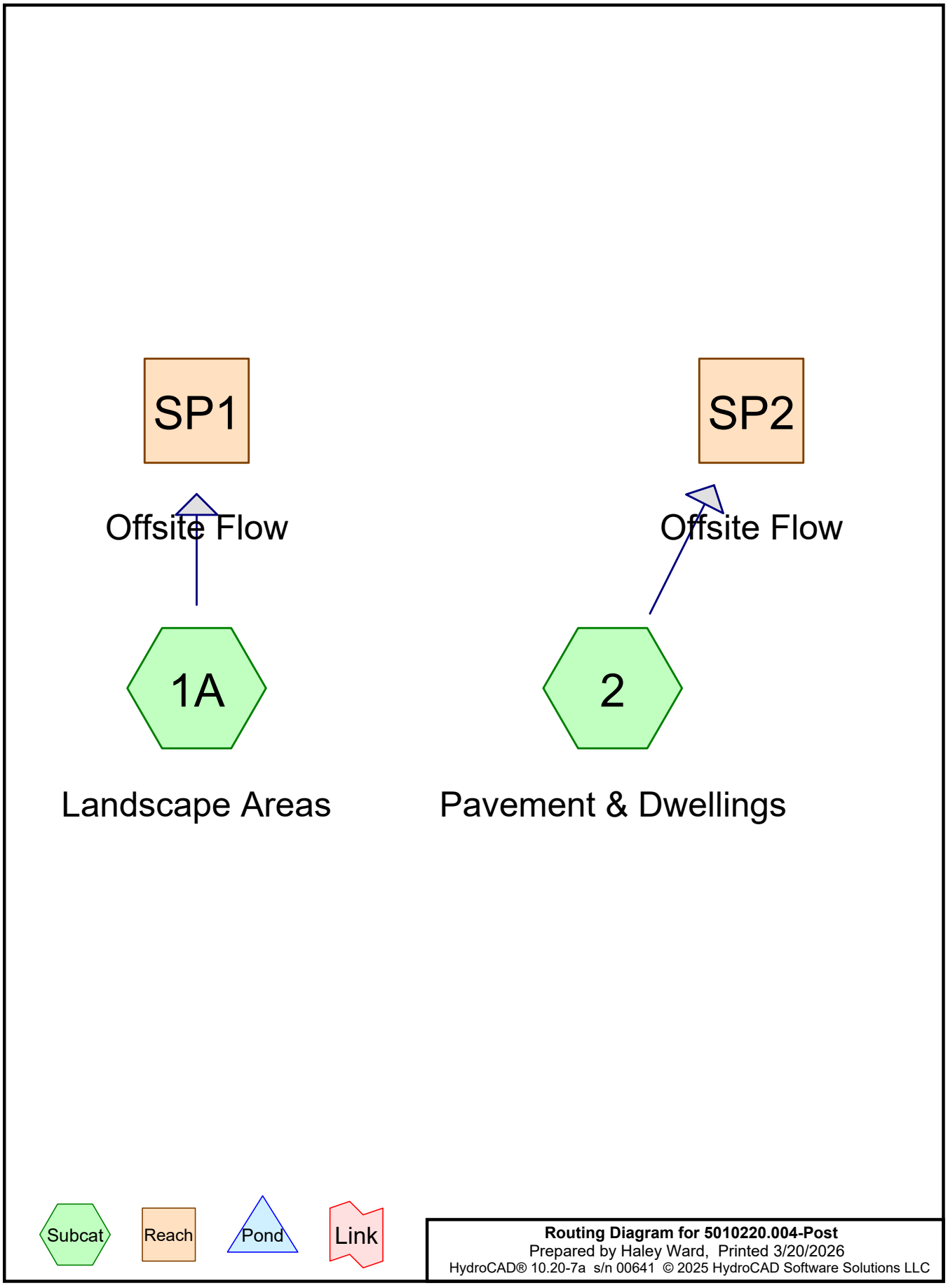
Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment1: Pavement** Runoff Area=8,390 sf 53.99% Impervious Runoff Depth>6.94"
Tc=5.0 min CN=87 Runoff=1.50 cfs 4,854 cf

**Subcatchment2: Pavement & Bldgs** Runoff Area=17,870 sf 92.87% Impervious Runoff Depth>8.27"
Tc=5.0 min CN=98 Runoff=3.45 cfs 12,310 cf

**Reach SP1: Offsite Flow** Inflow=1.50 cfs 4,854 cf
Outflow=1.50 cfs 4,854 cf

**Reach SP2: Offsite Flow** Inflow=3.45 cfs 12,310 cf
Outflow=3.45 cfs 12,310 cf




**Routing Diagram for 5010220.004-Post**
Prepared by Haley Ward, Printed 3/20/2026
HydroCAD® 10.20-7a s/n 00641 © 2025 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (sq-ft) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 12,725 | 74 | >75% Grass cover, Good, HSG C (1A, 2) |
| 13,535 | 98 | Paved parking, HSG C (1A, 2) |

## Soil Listing (all nodes)

| Area (sq-ft) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 0 | HSG A | |
| 0 | HSG B | |
| 26,260 | HSG C | 1A, 2 |
| 0 | HSG D | |
| 0 | Other | |

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

**Subcatchment1A: Landscape Areas** Runoff Area=7,660 sf 4.44% Impervious Runoff Depth>1.44"
Tc=5.0 min CN=75 Runoff=0.29 cfs 917 cf

**Subcatchment2: Pavement & Dwellings** Runoff Area=18,600 sf 70.94% Impervious Runoff Depth>2.72"
Tc=5.0 min CN=91 Runoff=1.34 cfs 4,216 cf

**Reach SP1: Offsite Flow** Inflow=0.29 cfs 917 cf
Outflow=0.29 cfs 917 cf

**Reach SP2: Offsite Flow** Inflow=1.34 cfs 4,216 cf
Outflow=1.34 cfs 4,216 cf

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

**Subcatchment1A: Landscape Areas** Runoff Area=7,660 sf 4.44% Impervious Runoff Depth>2.94"
Tc=5.0 min CN=75 Runoff=0.61 cfs 1,878 cf

**Subcatchment2: Pavement & Dwellings** Runoff Area=18,600 sf 70.94% Impervious Runoff Depth>4.56"
Tc=5.0 min CN=91 Runoff=2.19 cfs 7,074 cf

**Reach SP1: Offsite Flow** Inflow=0.61 cfs 1,878 cf
Outflow=0.61 cfs 1,878 cf

**Reach SP2: Offsite Flow** Inflow=2.19 cfs 7,074 cf
Outflow=2.19 cfs 7,074 cf

## Summary for Subcatchment 1A: Landscape Areas

Runoff = 0.61 cfs @ 12.08 hrs, Volume= 1,878 cf, Depth> 2.94"
Routed to Reach SP1 : Offsite Flow

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.60"

| Area (sf) | CN | Description |
|---|---|---|
| 7,320 | 74 | >75% Grass cover, Good, HSG C |
| 340 | 98 | Paved parking, HSG C |
| 7,660 | 75 | Weighted Average |
| 7,320 | | 95.56% Pervious Area |
| 340 | | 4.44% Impervious Area |

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

## Summary for Subcatchment 2: Pavement & Dwellings

Runoff = 2.19 cfs @ 12.07 hrs, Volume= 7,074 cf, Depth> 4.56"
Routed to Reach SP2 : Offsite Flow

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.60"

| Area (sf) | CN | Description |
|---|---|---|
| 5,405 | 74 | >75% Grass cover, Good, HSG C |
| 13,195 | 98 | Paved parking, HSG C |
| 18,600 | 91 | Weighted Average |
| 5,405 | | 29.06% Pervious Area |
| 13,195 | | 70.94% Impervious Area |

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

## Summary for Reach SP1: Offsite Flow

Inflow Area = 7,660 sf, 4.44% Impervious, Inflow Depth > 2.94" for 10-Yr event
Inflow = 0.61 cfs @ 12.08 hrs, Volume= 1,878 cf
Outflow = 0.61 cfs @ 12.08 hrs, Volume= 1,878 cf, Atten= 0%, Lag= 0.0 min

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

## Summary for Reach SP2: Offsite Flow

Inflow Area = 18,600 sf, 70.94% Impervious, Inflow Depth > 4.56" for 10-Yr event
Inflow = 2.19 cfs @ 12.07 hrs, Volume= 7,074 cf
Outflow = 2.19 cfs @ 12.07 hrs, Volume= 7,074 cf, Atten= 0%, Lag= 0.0 min

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

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

**Subcatchment1A: Landscape Areas** Runoff Area=7,660 sf 4.44% Impervious Runoff Depth>5.49"
Tc=5.0 min CN=75 Runoff=1.13 cfs 3,505 cf

**Subcatchment2: Pavement & Dwellings** Runoff Area=18,600 sf 70.94% Impervious Runoff Depth>7.41"
Tc=5.0 min CN=91 Runoff=3.45 cfs 11,493 cf

**Reach SP1: Offsite Flow** Inflow=1.13 cfs 3,505 cf
Outflow=1.13 cfs 3,505 cf

**Reach SP2: Offsite Flow** Inflow=3.45 cfs 11,493 cf
Outflow=3.45 cfs 11,493 cf

# Soil Map—Rockingham County, New Hampshire




Map Scale: 1:669 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 5 10 20 30

Feet
0 30 60 120 180

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

## MAP LEGEND

**Area of Interest (AOI)**

- Area of Interest (AOI)

**Soils**

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

**Special Point Features**

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

**Water Features**

- Streams and Canals

**Transportation**

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

**Background**

- Aerial Photography

## MAP INFORMATION

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

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

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

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

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

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

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

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

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

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

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

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 699 | Urban land | 0.5 | 68.6% |
| 799 | Urban land-Canton complex, 3 to 15 percent slopes | 0.2 | 31.4% |
| **Totals for Area of Interest** | | **0.7** | **100.0%** |

HALEY WARD

**INSPECTION & LONG-TERM MAINTENANCE PLAN FOR RESIDENTIAL DEVELOPMENT**

**94 Langdon Street/98 Cornwall Street**
**PORTSMOUTH, NH**

## Introduction

The intent of this plan is to provide Chinburg Development (herein referred to as the "Owner") with a list of procedures that document the inspection and maintenance requirements of the stormwater management system for proposed development at 94 Langdon Street and 98 Cornwall Street. Specifically, the proposed roof Drip Strip Filter System and the proposed stormwater Catch Basins (collectively referred to as the "Stormwater Management System"). The contact information for the owner shall be kept current, and if there is a change of ownership of the property this plan must be transferred to the new owner.

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

## Construction Inspections

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

## Annual Report

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

## Inspection & Maintenance Checklist/Log

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

## Stormwater Management System Components

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

### Non-Structural BMPs

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

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

### Structural BMPs

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

- Roof Drip Strip Filter System
- Closed Drainage System

## Inspection and Maintenance Requirements

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

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

## Pollution Prevention

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

### *Spill Procedures*

Any discharge of waste oil or other pollutant shall be reported immediately to the New Hampshire Department of Environmental Services (NHDES). The Contractor/Owner will be responsible for any incident of groundwater contamination resulting from the improper discharge of pollutants to the stormwater system, and may be required by NHDES to remediate incidents that may impact groundwater quality. If the property ownership is transferred, the new owner will be informed of the legal responsibilities associated with operation of the stormwater system, as indicated above.

### *Sanitary Facilities*

Sanitary facilities shall be provided during all phases of construction.

## Material Storage

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

stormwater structures will be protected as outlined in this document.

### Material Disposal

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

# CATCH BASIN BASKET CONSTRUCTION MAINTENANCE SHEET

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

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

# CLOSED DRAINAGE STRUCTURE LONG-TERM MAINTENANCE SHEET

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

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

# STABILIZED CONSTRUCTION ENTRANCE CONSTRUCTION MAINTENANCE SHEET

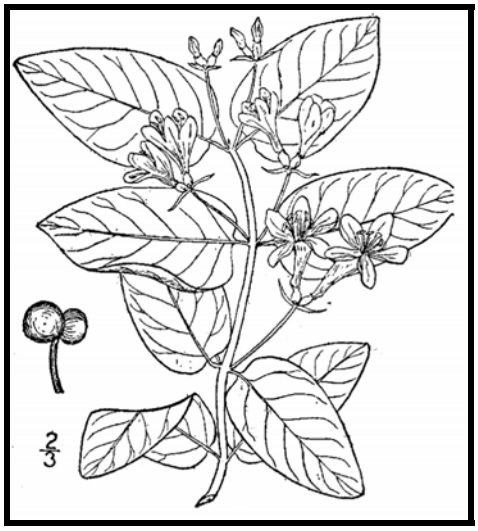
| INSPECTION REQUIREMENTS | | |
|---|---|---|
| **ACTION TAKEN** | **FREQUENCY** | **MAINTENANCE REQUIREMENTS** |
| ENTRANCE SURFACE<br>*-Check for sediment accumulation/clogging of stone*<br>*-Check Vegetative filter strips* | After heavy rains, as necessary | *-Top dress pad with new stone.*<br>*-Replace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

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

University of New Hampshire Cooperative Extension

# Methods for Disposing Non-Native Invasive Plants

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



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

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

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

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

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

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

**New Hampshire Regulations**

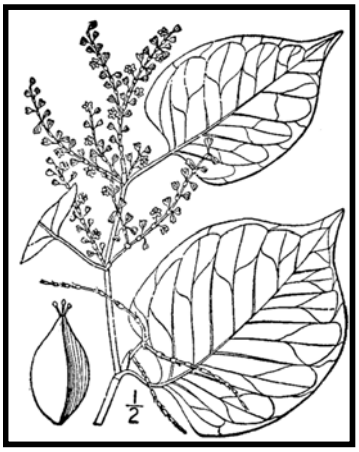
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

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

## How and When to Dispose of Invasives?

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

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



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

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

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

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

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

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

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

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

# Suggested Disposal Methods for Non-Native Invasive Plants

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

<table>
<tr><th>Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">Norway maple<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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# CHINBURG DEVELOPMENT
# PROPOSED MULTIFAMILY DEVELOPMENT

## 94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH

## PROJECT INFORMATION

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

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

**LANDSCAPE ARCHITECT**
TERRA FIRMA LANDSCAPE ARCHITECTURE
ATTN: TERRENCE PARKER
163.A COURT STREET
PORTSMOUTH, NH 03801
T: 603.531.9109

**OWNER**
REGAN ELECTRIC CO., INC.
94 LANGDON STREET
PORTSMOUTH, NH 03801

**APPLICANT**
CHINBURG DEVELOPMENT
3 PENSTOCK WAY
NEWMARKET, NH 03857

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

**UTILITY PROVIDERS**

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

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

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

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

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




**LOCATION MAP**

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| PERMITS & APPROVALS | PERMIT # | DATE |
|---|---|---|
| CITY OF PORTSMOUTH SITE PLAN REVIEW | LU-25-175 | PENDING |
| CITY OF PORTSMOUTH ZONING BOARD | LU-25-175 | 03/17/26 |
| NHDES SHORELAND PERMIT | TBD | PENDING |

## ISSUED FOR PERMITTING
## MARCH 23, 2026

HALEY WARD
www.haleyward.com

STATE OF NEW HAMPSHIRE
SHAWN M. TOBEY
No. 14121
LICENSED PROFESSIONAL ENGINEER
3/23/26

5010220.004

# CONSTRUCTION NOTES

## CONSTRUCTION SEQUENCE

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

## PROJECT DESCRIPTION

1. THE PROJECT CONSISTS OF MERGING TWO EXISTING LOTS AND DEMOLISHING THE EXISTING BUILDINGS TO CONSTRUCT THREE SINGLE FAMILY HOMES WITH A SHARED DRIVEWAY AND ASSOCIATED SITE IMPROVEMENTS.
2. THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 24,560 SQUARE FEET.
3. THE STORMWATER RUNOFF FROM THE SITE WILL FOLLOW EXISTING PATTERNS AND DISCHARGE OFFSITE TO THE ABUTTING PARCEL AND INTO THE CITY STORMWATER SYSTEM IN LANGDON STREET.

## GENERAL CONSTRUCTION NOTES

1. THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE". THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
2. DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED FOR MORE THAN 45 DAYS.
3. ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.
4. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
5. DUST CONTROL MEASURES SHALL INCLUDE BUT ARE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS. IF TEMPORARY STABILIZATION PRACTICES, SUCH AS TEMPORARY VEGETATION AND MULCHING, DO NOT ADEQUATELY REDUCE DUST GENERATION, APPLICATION OF WATER OR CALCIUM CHLORIDE SHALL BE APPLIED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.
6. SILTSOXX SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. ALL DAMAGED SILTSOXX SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED IN A SECURED LOCATION.
7. ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.
8. ALL NON-STRUCTURAL, SITE-FILL SHALL BE PLACED AND COMPACTED TO 90% MODIFIED PROCTOR DENSITY IN LAYERS NOT EXCEEDING 18 INCHES IN THICKNESS UNLESS OTHERWISE NOTED.
9. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIAL, TRASH, WOODY DEBRIS, LEAVES, BRUSH OR ANY DELETERIOUS MATTER SHALL NOT BE INCORPORATED INTO FILLS.
10. FILL MATERIAL SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.
11. DURING CONSTRUCTION AND UNTIL ALL DEVELOPED AREAS ARE FULLY STABILIZED, ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH ONE HALF INCH OF RAINFALL.
12. THE CONTRACTOR SHALL MODIFY OR ADD EROSION CONTROL MEASURES AS NECESSARY TO ACCOMMODATE PROJECT CONSTRUCTION.
13. ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
14. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    - BASE COURSE GRAVELS HAVE BEEN INSTALLED ON AREAS TO BE PAVED
    - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
    - A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED
    - EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.
    - IN AREAS TO BE PAVED, "STABLE" MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED.
15. STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA.
16. STABILIZATION MEASURES TO BE USED INCLUDE:
    - TEMPORARY SEEDING;
    - MULCHING.
17. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
18. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN THESE AREAS, SILTSOXX, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
19. DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILTSOXX, MULCH BERMS, HAY BALE BARRIERS, OR SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY OCTOBER 15.

## MAINTENANCE AND PROTECTION

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

## WINTER NOTES

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

## STOCKPILES

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

## CONCRETE WASHOUT AREA

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

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

## UTILITY NOTES

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

## ALLOWABLE NON-STORMWATER DISCHARGES

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

## WASTE DISPOSAL

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

## BLASTING NOTES

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

## ABBREVIATIONS

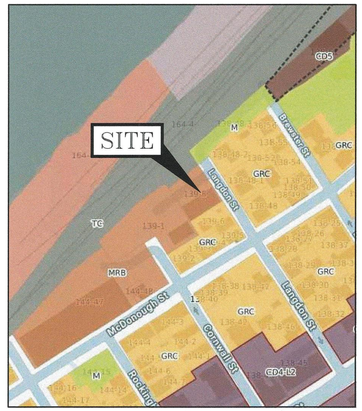
| | | | |
|---|---|---|---|
| @ | AT | MAX. | MAXIMUM |
| ANSI | AMERICAN NATIONAL STANDARDS INSTITUTE | MH | MANHOLE |
| APPROX.± | APPROXIMATELY | MIN | MINIMUM |
| BLDG | BUILDING | N | NORTHING |
| | | NE | NORTHEAST |
| CL | CENTERLINE | NHDOT | NH DEPT. OF TRANSPORTATION |
| CB | CATCH BASIN |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

## LEGEND:

**ITEMS SHOWN MAY NOT APPEAR ON PLANS**

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

## ZONING MAP




**Residential Districts**

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

**Mixed Residential Districts**

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

| REV. | DATE | DESCRIPTION | BY | CHK. |
|---|---|---|---|---|
| 1 | 03/23/26 | ISSUED FOR TAC | JHV | SMT |

DRAWING ISSUE STATUS

**ISSUED FOR PERMITTING**


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603.430.9282


PROJECT

**PROPOSED MULTIFAMILY DEVELOPMENT**
**94 LANGDON ST & 98 CORNWELL ST, PORTSMOUTH NH**

TITLE

**GENERAL NOTES, LEGEND & ABBREVIATIONS**

STATE OF NEW HAMPSHIRE — SHAWN M. TOBEY No. 14121 — PROFESSIONAL ENGINEER — 3/23/26

| DATE | SCALE |
|---|---|
| 2025.12.02 | NTS |

| DRAWN BY | DESIGNED BY | CHECKED BY |
|---|---|---|
| JCR | SJR | JRC |

PROJECT No. 5010220.004

DRAWING No. **C001** REV. **1**

FILE LOCATION: P:\NH\5010220-CHINBURG_BUILDERS\004-94 LANGDON ST., PORTSMOUTH\04-SMT\02-CAD_FILES\004-C\VIL\5010220.004-C-CV.DWG, 2026.03.20, 1:48 PM

## LEGEND:

| DESCRIPTION | EXISTING |
|---|---|
| RCRD | ROCKINGHAM COUNTY REGISTRY OF DEEDS |
| 1234/123 | DEED BOOK/PAGE |
| N/F | NOW OR FORMALLY |
| TYP. | TYPICAL |
| ELV. | ELEVATION |
| FF | FINISHED FLOOR |
| LSA | LANDSCAPE AREA |
| VGC | VERTICAL GRANITE CURB |
| MAP 21 LOT 8 | 21/8 |
| BENCHMARK | |
| IRON ROD/PIPE FOUND | |
| SEWER MANHOLE | S |
| DRAIN MANHOLE | D |
| UTILITY POLE | |
| CATCH BASIN | CB |
| HYDRANT | |
| GATE VALVE | GGV/WGV |
| GAS/WATER SHUTOFF | GAS/W |
| BOLLARD | |
| FLAGPOLE | |
| TREES | |
| GAS/ELECTRIC METER | E/G |
| AIR CONDITIONER | A |
| SIGN | |
| PROPERTY LINE | |
| APPROXIMATE EXTERIOR PROPERTY LINE | |
| EDGE OF PAVEMENT | |
| EDGE OF GRAVEL | |
| MINOR FOOT CONTOUR | 98 |
| MAJOR FOOT CONTOUR | 100 |
| GAS LINE | GAS |
| WATER LINE | W |
| STORM DRAIN LINE | SD |
| SANITARY SEWER LINE | SS |
| OVERHEAD UTILITY LINE | E |
| UNDERGROUND ELECTRIC LINE | UGE |

## PLAN REFERENCES:

1) LOT LINE REVISION PLAN FOR JOHN AHLGREN, PETER HAPPNY AND BOSTON AND MAINE CORPORATION, LANGDON STREET, MCDONOUGH STREET & BREWSTER STREET, PORTSMOUTH, NEW HAMPSHIRE. PREPARED BY DOUCET SURVEY INC., SCALE: 1"=20', DATED FEB. 13, 2002, R.C.R.D. D-31107.

2) SUBDIVISION PLAN TAX MAP 138 – LOT 48, FOR CHINBURG BUILDERS, INC. ON LAND OF JOHN L. AHLGREN & BESSIE PALMISCIANO, PREPARED BY AMBIT ENGINEERING, INC., SCALE: 1"=20', DATED: 5/7/13 (REV. 4), R.C.R.D. D-39552.

3) PLAN OF LAND COR. MCDONOUGH & CORNWALL STS. PORTSMOUTH, N.H. PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS, SCALE: 1"=10'. DATED: DEC. 1966. R.C.R.D. 1869/045.

4) PLAN OF THE ROCK FIELD IN THE TOWN OF PORTSMOUTH PREPARED BY BENJAMIN AKERMAN. DATED 1815. R.C.R.D. PLAN 00562.

5) STATION MAP–LANDS CONCORD AND PORTSMOUTH R.R. OPERATED BY THE BOSTON AND MAINE R.R., STATION 0+0 TO STATION 33+0, PREPARED BY: OFFICE OF THE VALUATION ENGINEER. BOSTON, MASS., DATED: JUNE 30, 1914, SCALE: 1–IN.=100–FT., NOT RECORDED.

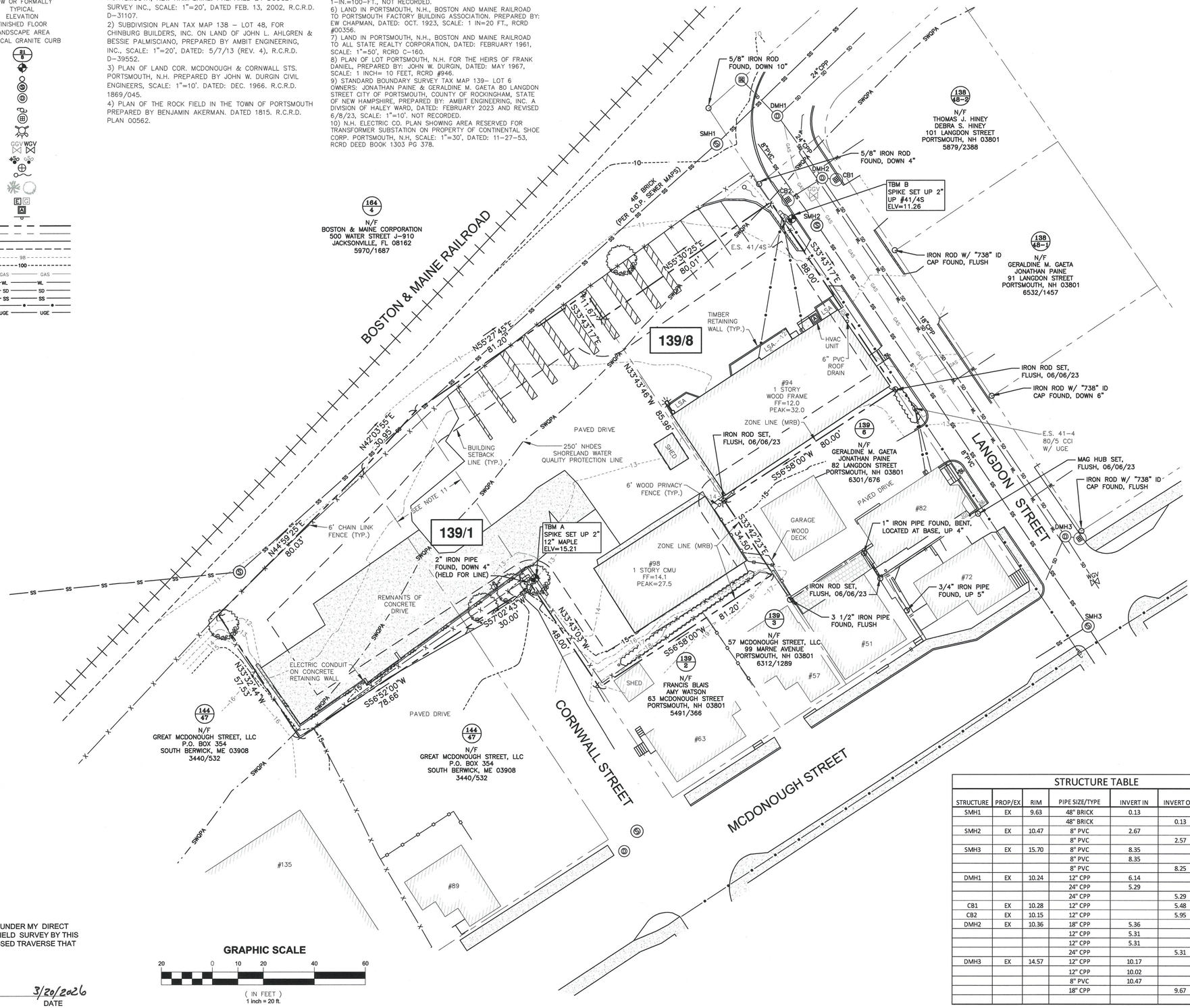
6) LAND IN PORTSMOUTH, N.H., BOSTON AND MAINE RAILROAD TO PORTSMOUTH FACTORY BUILDING ASSOCIATION. PREPARED BY: EW CHAPMAN, DATED: OCT. 1923, SCALE: 1 IN=20 FT., RCRD #00356.

7) LAND IN PORTSMOUTH, N.H., BOSTON AND MAINE RAILROAD TO ALL STATE REALTY CORPORATION, DATED: FEBRUARY 1961, SCALE: 1"=50', RCRD C–160.

8) PLAN OF LOT PORTSMOUTH, N.H. FOR THE HEIRS OF FRANK DANIEL. PREPARED BY: JOHN W. DURGIN, DATED: MAY 1967, SCALE: 1 INCH= 10 FEET, RCRD #946.

9) STANDARD BOUNDARY SURVEY TAX MAP 139– LOT 6 OWNERS: JONATHAN PAINE & GERALDINE M. GAETA 80 LANGDON STREET CITY OF PORTSMOUTH, COUNTY OF ROCKINGHAM, STATE OF NEW HAMPSHIRE, PREPARED BY: AMBIT ENGINEERING, INC. A DIVISION OF HALEY WARD, DATED: FEBRUARY 2023 AND REVISED 6/8/23, SCALE: 1"=10'. NOT RECORDED.

10) N.H. ELECTRIC CO. PLAN SHOWING AREA RESERVED FOR TRANSFORMER SUBSTATION ON PROPERTY OF CONTINENTAL SHOE CORP. PORTSMOUTH, N.H, SCALE: 1"=30', DATED: 11–27–53, RCRD DEED BOOK 1303 PG 378.




NORTH NAD83(2011)
GRID NHSPC




LOCATION MAP SCALE: 1" = 100'

## NOTES:

1) PARCELS ARE SHOWN ON THE PORTSMOUTH ASSESSOR'S MAP 139 AS LOTS 1 & 8.

2) OWNER OF RECORD:
REGAN ELECTRIC COMPANY, INC.
94 LANGDON STREET
PORTSMOUTH, NH 03801
2956/1527 & 2960/1376

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

4) EXISTING LOT AREAS:

| MAP 139 LOT 8 | MAP 139 LOT 1 | TOTAL |
|---|---|---|
| 6,958 S.F. | 18,149 S.F. | 25,107 S.F. |
| 0.1597 ACRES | 0.4166 ACRES | 0.5764 ACRES |

5) PARCEL IS LOCATED IN THE MIXED RESIDENTIAL BUSINESS (MRB) ZONING DISTRICT.

6) DIMENSIONAL REQUIREMENTS:

| | | |
|---|---|---|
| MIN. LOT AREA: | | 7,500 S.F. |
| FRONTAGE: | | 100 FEET |
| SETBACKS: | FRONT | 5 FEET |
| | SIDE | 10 FEET |
| | REAR | 15 FEET |
| LOT DEPTH: | | 80 FEET |
| MAXIMUM STRUCTURE HEIGHT: | | |
| | SLOPED ROOF | 40 FEET |
| | FLAT ROOF | 30 FEET |
| MAXIMUM BUILDING COVERAGE: | | 40% |
| MINIMUM OPEN SPACE: | | 25% |

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE RESULTS OF AN EXISTING CONDITIONS SURVEY OF ASSESSOR'S MAP 139 LOTS 1 & 8 IN THE CITY OF PORTSMOUTH.

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

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

10) ABUTTER BUILDING LOCATIONS SHOWN HEREON SHOULD BE CONSIDERED APPROXIMATE.

11) THE PAPER STREETS SHOWN WERE DEDICATED BY THE RECORDING OF A SUBDIVISION PLAN TITLED "PLAN OF THE ROCK FIELD IN THE TOWN OF PORTSMOUTH, DRAWN IN PART FROM ACTUAL SURVEY AND PARTLY FROM A PLAN OF OF MR.WILLIAM HART BY BENJAMIN AKERMAN DATED 1815" AND RECORDED AT THE ROCKINGHAM REGISTRY OF DEEDS BOOK 321, PAGE 100 ON NOVEMBER 10, 1845. PURSUANT TO NH RSA 231:51, THE CITY OF PORTSMOUTH WAS REQUIRED TO ACCEPT ITS RIGHTS IN THE PAPER STREETS BY CONSTRUCTING SAID STREETS WITH IN 20 YEARS OF THEIR DEDICATION OR ITS RIGHTS WOULD BE EXTINGUISHED. THE CITY OF PORTSMOUTH FAILED TO ACCEPT ITS RIGHTS IN SAID PORTION OF CORNWALL STREET AND ITS RIGHTS IN IT WERE EXTINGUISHED BY OPERATION OF LAW ON OR ABOUT NOVEMBER 1865. SEE POLIZZO VS. TOWN OF HAMPTON, 126 N.H. 398,399 (1985).

| REV. | DATE | DESCRIPTION | BY | CHK. |
|---|---|---|---|---|
| 2 | 3/18/26 | INVERTS | RJB | CSA |
| 1 | 2/18/26 | CITY COMMENTS | CSA | PAY |
| 0 | 12/15/25 | ISSUED FOR COMMENT | RJB | PAY |

DRAWING ISSUE STATUS

**SITE SURVEY**


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


PROJECT

**CHINBURG BUILDERS**
**94 LANGDON STREET & 98 CORNWALL STREET**
PORTSMOUTH, NH 03801

TITLE

**EXISTING CONDITIONS PLAN**

| DATE | SCALE |
|---|---|
| DECEMBER 2025 | 1"=20' |

| DRAWN BY | DESIGNED BY | CHECKED BY |
|---|---|---|
| RJB | --- | PAY |

| PROJECT No. | FIELD BOOK / PAGE |
|---|---|
| 5010220.04 | FB 443 PG 17 |

DRAWING No. **V101** REV. **2**

### STRUCTURE TABLE

| STRUCTURE | PROP/EX | RIM | PIPE SIZE/TYPE | INVERT IN | INVERT OUT | DIRECTION |
|---|---|---|---|---|---|---|
| SMH1 | EX | 9.63 | 48" BRICK | 0.13 | | SW |
| | | | 48" BRICK | | 0.13 | NE |
| SMH2 | EX | 10.47 | 8" PVC | 2.67 | | SE |
| | | | 8" PVC | | 2.57 | NW |
| SMH3 | EX | 15.70 | 8" PVC | 8.35 | | SW |
| | | | 8" PVC | 8.35 | | SE |
| | | | 8" PVC | | 8.25 | NW |
| DMH1 | EX | 10.24 | 12" CPP | 6.14 | | NW |
| | | | 24" CPP | 5.29 | | SE |
| | | | 24" CPP | | 5.29 | NE |
| CB1 | EX | 10.28 | 12" CPP | | 5.48 | W |
| CB2 | EX | 10.15 | 12" CPP | | 5.95 | NE |
| DMH2 | EX | 10.36 | 18" CPP | 5.36 | | SE |
| | | | 12" CPP | 5.31 | | SW |
| | | | 12" CPP | 5.31 | | E |
| | | | 24" CPP | | 5.31 | NW |
| DMH3 | EX | 14.57 | 12" CPP | 10.17 | | SE |
| | | | 12" CPP | 10.02 | | SW |
| | | | 8" PVC | 10.47 | | E |
| | | | 18" CPP | | 9.67 | NW |

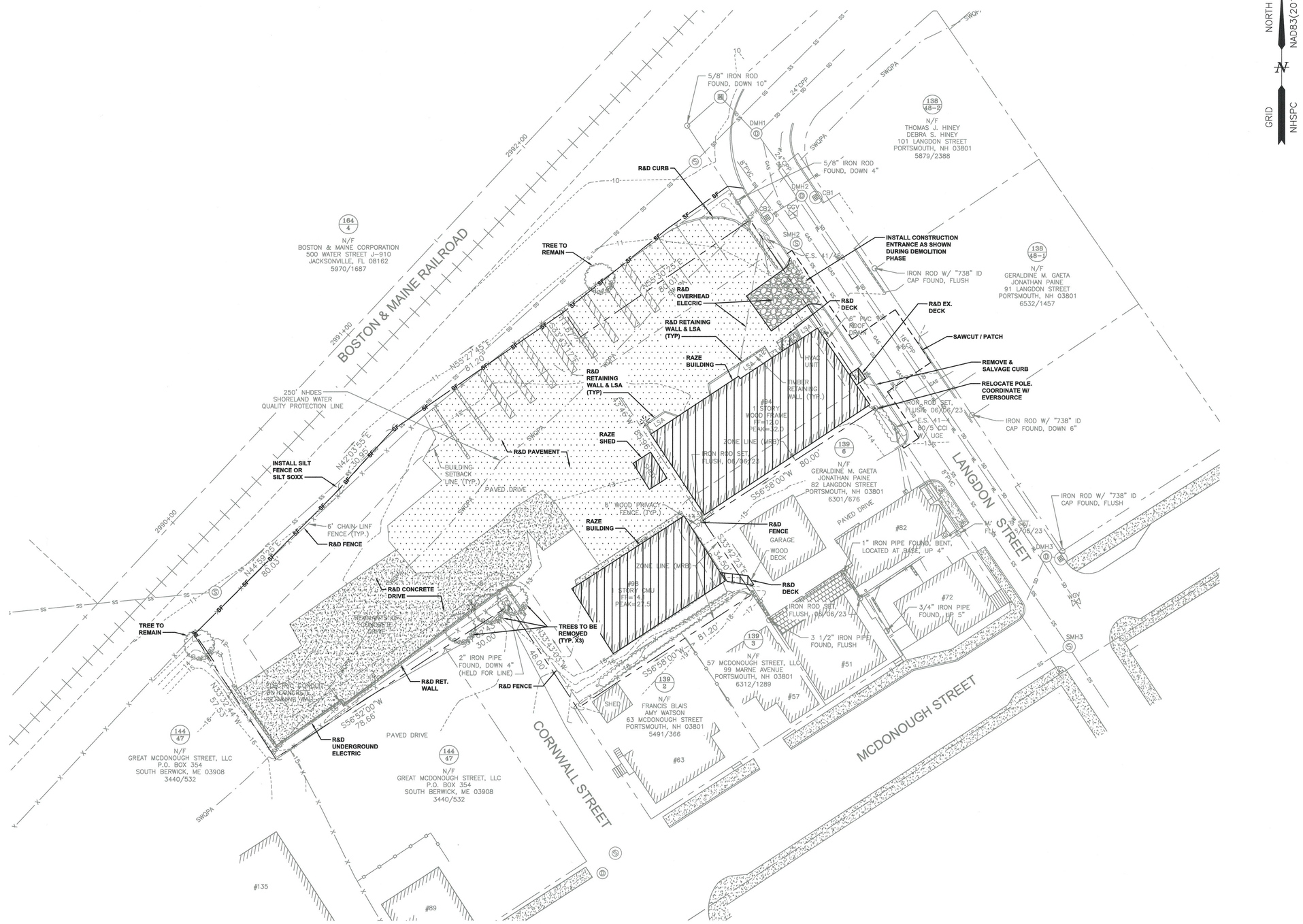


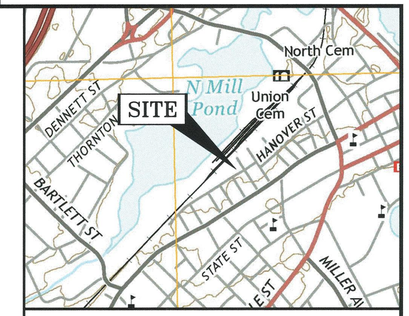

``I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000."

PHILLIP A. YETMAN, LLS 3/20/2026
PHILLIP A. YETMAN, LLS 1122 DATE

**GRAPHIC SCALE**

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




LOCATION MAP SCALE: 1" = 1,000'

## DEMOLITION NOTES:

1. REFER TO DWG C001 FOR NOTES, ABBREVIATIONS AND LEGEND.
2. REFER TO DWGS C501 & C502 FOR CONSTRUCTION DETAILS.
3. INSTALL ALL EROSION CONTROL MEASURES ON THIS SHEET PRIOR TO STARTING CONSTRUCTION.
4. THE CONTRACTOR SHALL OBTAIN ANY NECESSARY DEMOLITION PERMITS AND PAY ALL RELATED FEES.
5. THE CONTRACTOR SHALL REMOVE AND DISPOSE ALL ABANDONED ONSITE UTILITIES, MAINS AND SERVICES UNCOVERED DURING CUT OPERATIONS OR WITHIN 36" OF FINISHED GRADE. CUT AND CAP ABANDONED SERVICES AT THE RIGHT OF WAY.
6. THE CONTRACTOR SHALL COORDINATE WITH PORTSMOUTH WATER AND SEWER SERVICES NOT SHOWN OR NOT SHOWN ON THIS PLAN.
7. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL BUILDING FOUNDATIONS AND FOOTINGS.
8. THE CONTRACTOR SHALL CLEAR AND GRUB SITE AND REMOVE ALL DEMO DEBRIS PRIOR TO COMMENCING ANY GRADING ACTIVITIES.
9. ALL MATERIALS REMOVED DURING DEMOLITION, INCLUDING ASBESTOS CONCRETE PIPE, SHALL BE PROPERTY REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL GOVERNING AGENCIES / REGULATIONS.
10. ALL DEMOLITION WORK SHALL BE IN ACCORDANCE W/ THE PHASE 1 ENVIRONMENTAL SITE ASSESSMENT REPORT PREPARED BY EXETER ENVIRONMENTAL ASSOCIATES, LLC DATED NOVEMBER 17, 2025.

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

| REV. | DATE | DESCRIPTION | BY | CHK. |
|---|---|---|---|---|
| 1 | 03/23/2026 | ISSUED FOR TAC | JHV | SMT |

DRAWING ISSUE STATUS
**ISSUED FOR PERMITTING**

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

PROJECT
**PROPOSED MULTIFAMILY DEVELOPMENT**
**94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH**

TITLE
**DEMOLITION PLAN**

STATE OF NEW HAMPSHIRE SHAWN M. TOBEY No. 14121 LICENSED PROFESSIONAL ENGINEER 3/23/26

| DATE | SCALE |
|---|---|
| MARCH 2026 | 1" = 20' |

| DRAWN BY | DESIGNED BY | CHECKED BY |
|---|---|---|
| JHV | JHV | SMT |

PROJECT No. 5010220.004

DRAWING No. **C101** REV. **1**

FILE LOCATION: P:\NH\5010220-DANBURG_BUILDERS\004-94 LANGDON ST, PORTSMOUTH\SMT\2025-CAD_FILES\04-CIVIL\5010220_004-C-SIP.DWG, 2026.03.20, 2:41 PM

## TABLE OF DIMENSIONAL STANDARDS:

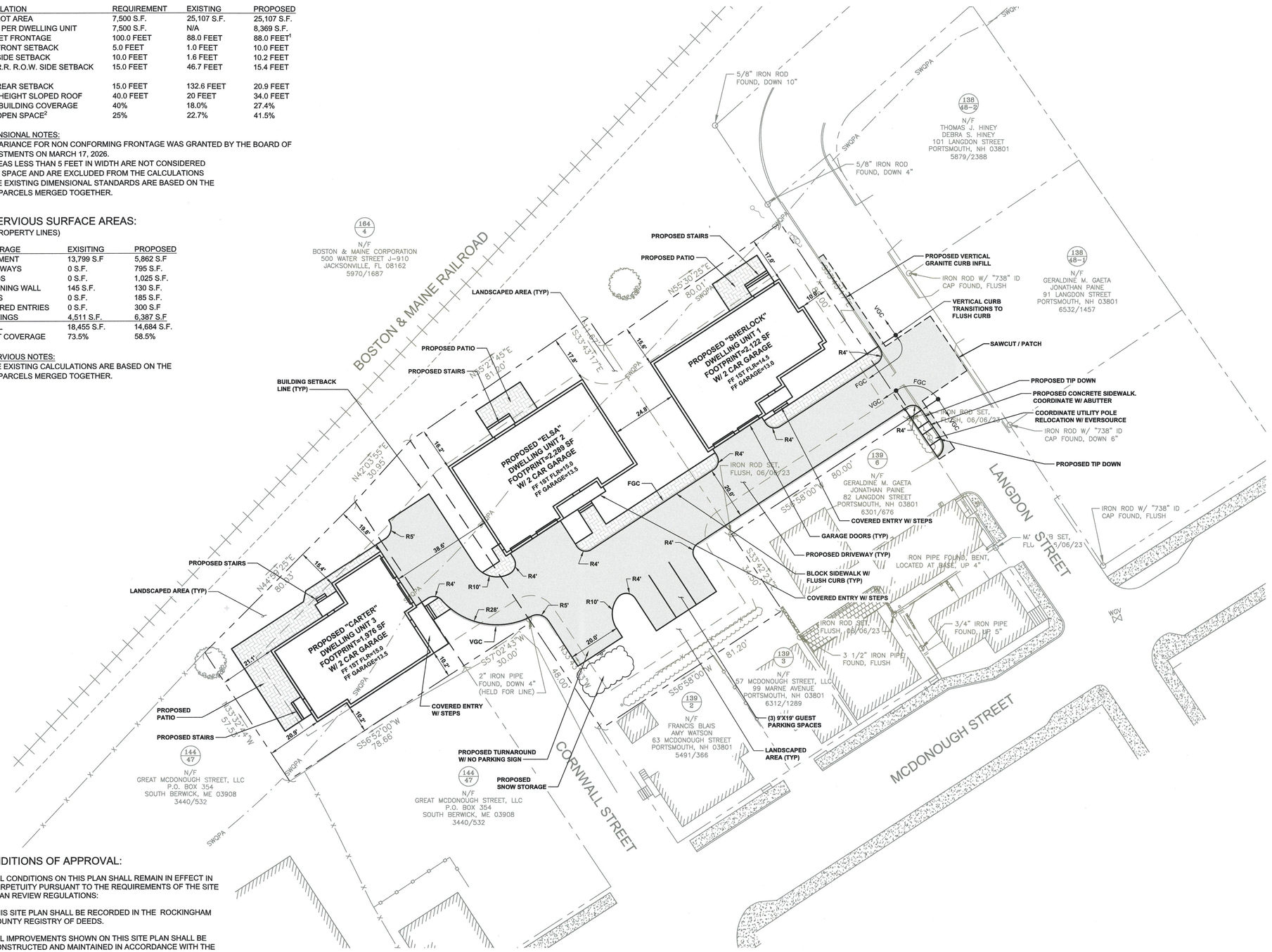
| REGULATION | REQUIREMENT | EXISTING | PROPOSED |
|---|---|---|---|
| MIN. LOT AREA | 7,500 S.F. | 25,107 S.F. | 25,107 S.F. |
| AREA PER DWELLING UNIT | 7,500 S.F. | N/A | 8,369 S.F. |
| STREET FRONTAGE | 100.0 FEET | 88.0 FEET | 88.0 FEET[1] |
| MIN. FRONT SETBACK | 5.0 FEET | 1.0 FEET | 10.0 FEET |
| MIN. SIDE SETBACK | 10.0 FEET | 1.6 FEET | 10.2 FEET |
| MIN. R.R. R.O.W. SIDE SETBACK | 15.0 FEET | 46.7 FEET | 15.4 FEET |
| MIN. REAR SETBACK | 15.0 FEET | 132.6 FEET | 20.9 FEET |
| MAX. HEIGHT SLOPED ROOF | 40.0 FEET | 20 FEET | 34.0 FEET |
| MAX. BUILDING COVERAGE | 40% | 18.0% | 27.4% |
| MIN. OPEN SPACE[2] | 25% | 22.7% | 41.5% |

DIMENSIONAL NOTES:
1) A VARIANCE FOR NON CONFORMING FRONTAGE WAS GRANTED BY THE BOARD OF ADJUSTMENTS ON MARCH 17, 2026.
2) AREAS LESS THAN 5 FEET IN WIDTH ARE NOT CONSIDERED OPEN SPACE AND ARE EXCLUDED FROM THE CALCULATIONS
3) THE EXISTING DIMENSIONAL STANDARDS ARE BASED ON THE TWO PARCELS MERGED TOGETHER.

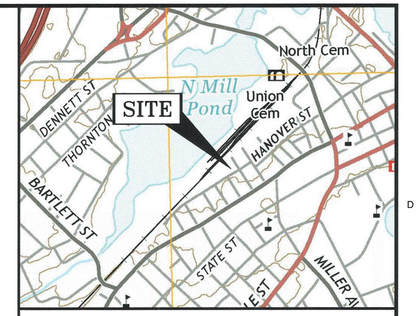
## IMPERVIOUS SURFACE AREAS:
(TO PROPERTY LINES)

| COVERAGE | EXISITING | PROPOSED |
|---|---|---|
| PAVEMENT | 13,799 S.F | 5,862 S.F |
| WALKWAYS | 0 S.F. | 795 S.F. |
| PATIOS | 0 S.F. | 1,025 S.F. |
| RETAINING WALL | 145 S.F. | 130 S.F. |
| STEPS | 0 S.F. | 185 S.F. |
| COVERED ENTRIES | 0 S.F. | 300 S.F |
| BUILDINGS | 4,511 S.F. | 6,387 S.F |
| TOTAL | 18,455 S.F. | 14,684 S.F. |
| % LOT COVERAGE | 73.5% | 58.5% |

IMPERVIOUS NOTES:
1) THE EXISTING CALCULATIONS ARE BASED ON THE TWO PARCELS MERGED TOGETHER.




NORTH NAD83(2011) — GRID NHSPC




LOCATION MAP SCALE: 1" = 1,000'

## NOTES:

1. PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S TAX MAP 139 AS LOTS 1 & 8.
2. OWNER OF RECORD (MAP 139, LOTS 1 & 8):
   REGAN ELECTRIC CO.,INC.
   94 LANGDON STREET
   PORTSMOUTH, NH 03801

   APPLICANT:
   CHINBURG DEVELOPMENT
   3 PENSTOCK WAY
   NEWMARKET, NH 03857
3. PARCELS ARE NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE JANUARY 29, 2021.
4. PARCELS ARE LOCATED IN THE MIXED RESIDENTIAL BUSINESS (MRB) DISTRICT.
5. EXISTING LOT AREA:
   LOT 1: 18,149 S.F.
   LOT 8: 6,958 S.F.
   MERGED LOT TOTAL = 25,107 S.F.
6. THE TWO EXISTING PARCELS ARE TO BE MERGED.
7. REFER TO THE EXISTING CONDITIONS PLAN (DWG NO. V101) FOR ADDITIONAL SITE INFORMATION.
8. THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED 3 UNIT RESIDENTIAL DEVELOPMENT ON ASSESSOR'S TAX MAP 139, LOTS 1 & 8.
9. ALL EXISTING SITE FEATURES, STRUCTURES AND BUILDINGS ON THE SUBJECT PARCELS ARE TO BE DEMOLISHED AND REMOVED AS PART OF THIS DEVELOPMENT. SEE DEMOLITION PLAN.
10. PARKING CALCULATION (RESIDENTIAL)
    REQUIRED: 1 SPACE PER UNIT = 3 TOTAL
    PROVIDED: 6 GARAGE + 3 GUEST = 9 TOTAL
11. TRASH DISPOSAL SHALL BE CITY OF PORTSMOUTH CURBSIDE PICKUP.
12. LIGHTING SHALL BE STANDARD RESIDENTIAL WALL MOUNTED ONLY AND SHALL BE DARK SKY COMPLIANT.

| REV. | DATE | DESCRIPTION | BY | CHK |
|---|---|---|---|---|
| 4 | 03/23/2026 | ISSUED FOR TAC | JHV | SMT |
| 3 | 02/18/2026 | ISSUED FOR ZBA | JHV | SMT |
| 2 | 01/07/2026 | ISSUED FOR PB CONCEPT REVIEW | SMT | JRC |
| 1 | 12/17/2025 | ISSUED FOR ZBA | SMT | JRC |

DRAWING ISSUE STATUS

**ISSUED FOR PERMITTING**


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


PROJECT

**PROPOSED MULTIFAMILY DEVELOPMENT**
**94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH**

TITLE

**SITE LAYOUT PLAN**

SHAWN M. TOBEY No. 14121 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE 3/25/26

| DATE | SCALE |
|---|---|
| DECEMBER 2025 | 1" = 20' |
| DRAWN BY: JHV | DESIGNED BY: JHV | CHECKED BY: SMT |
| PROJECT No. 5010220.004 | |
| DRAWING No. C102 | REV. 4 |

## CONDITIONS OF APPROVAL:

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

**APPROVED BY THE PORTSMOUTH PLANNING BOARD**

**CHAIRMAN** **DATE**

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

JOHN R. CHAGNON, LLS 3.23.26 DATE

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

**GRAPHIC SCALE**

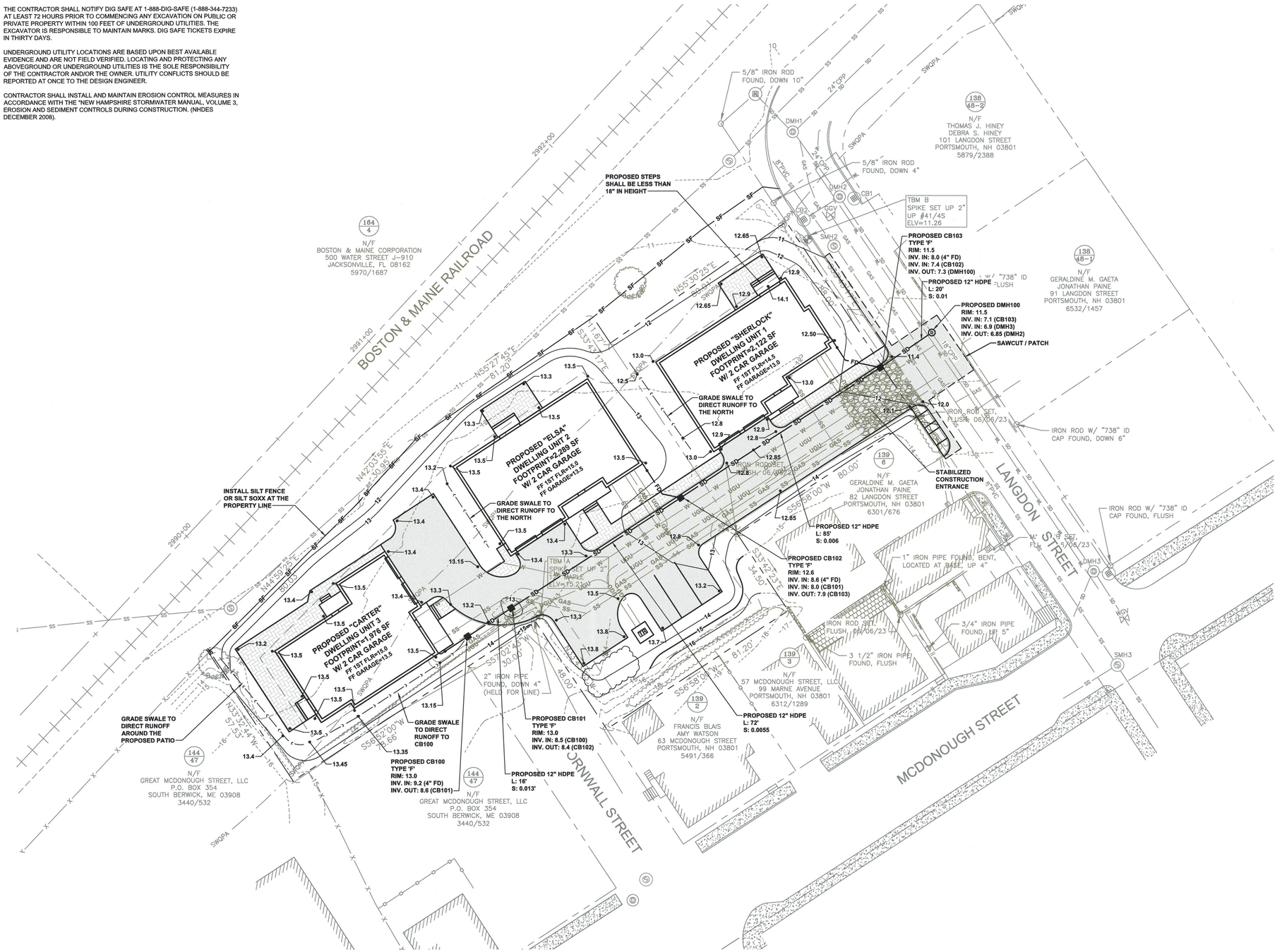
20 0 10 20 40 60

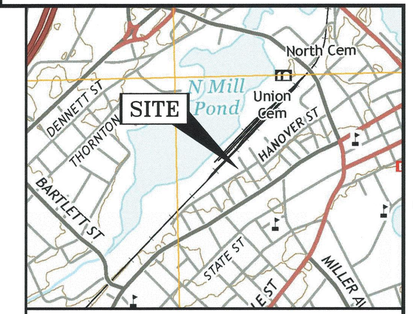
( IN FEET )
1 inch = 20 ft.

FILE LOCATION: P:\#01\01220-CHINBURG_BUILDER\05\04-94 LANGDON ST., PORTSMOUTH-SMT\200-CAD_FILES\04-DWG\01220_004-C-SP.DWG, 2026.03.20, 2:42 PM

## NOTES:

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




LOCATION MAP SCALE: 1" = 1,000'

NORTH NAD83(2011) N GRID NHSPC

## DRAINAGE NOTES:

1. REFER TO DWG C001 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. REFER TO DWGS C501 FOR ALL CONSTRUCTION DETAILS.
3. DWELLING UNITS WILL HAVE A CRAWL SPACE. NO BASEMENTS.
4. ALL ROOF RUNOFF SHALL BE COLLECTED WITH DRIP STRIPS OR A GUTTER COLLECTION SYSTEM AND CONNECTED TO THE STORMWATER SYSTEM.
5. ALL FOOTING DRAINS SHALL BE CONNECTED TO THE STORMWATER SYSTEM.
6. VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.
7. PORTSMOUTH STORMWATER CONNECTION PERMIT REQUIRED.

**GRAPHIC SCALE**

20 0 10 20 40 60

( IN FEET )
1 inch = 20 ft.

| REV. | DATE | DESCRIPTION | BY | CHK. |
|---|---|---|---|---|
| 1 | 03/23/2026 | ISSUED FOR TAC | JHV | SMT |

DRAWING ISSUE STATUS

**ISSUED FOR PERMITTING**


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


PROJECT

**PROPOSED MULTIFAMILY DEVELOPMENT**
**94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH**

TITLE

**GRADING & DRAINAGE PLAN**

STATE OF NEW HAMPSHIRE SHAWN M. TOBEY No. 14121 PROFESSIONAL ENGINEER 3/23/26

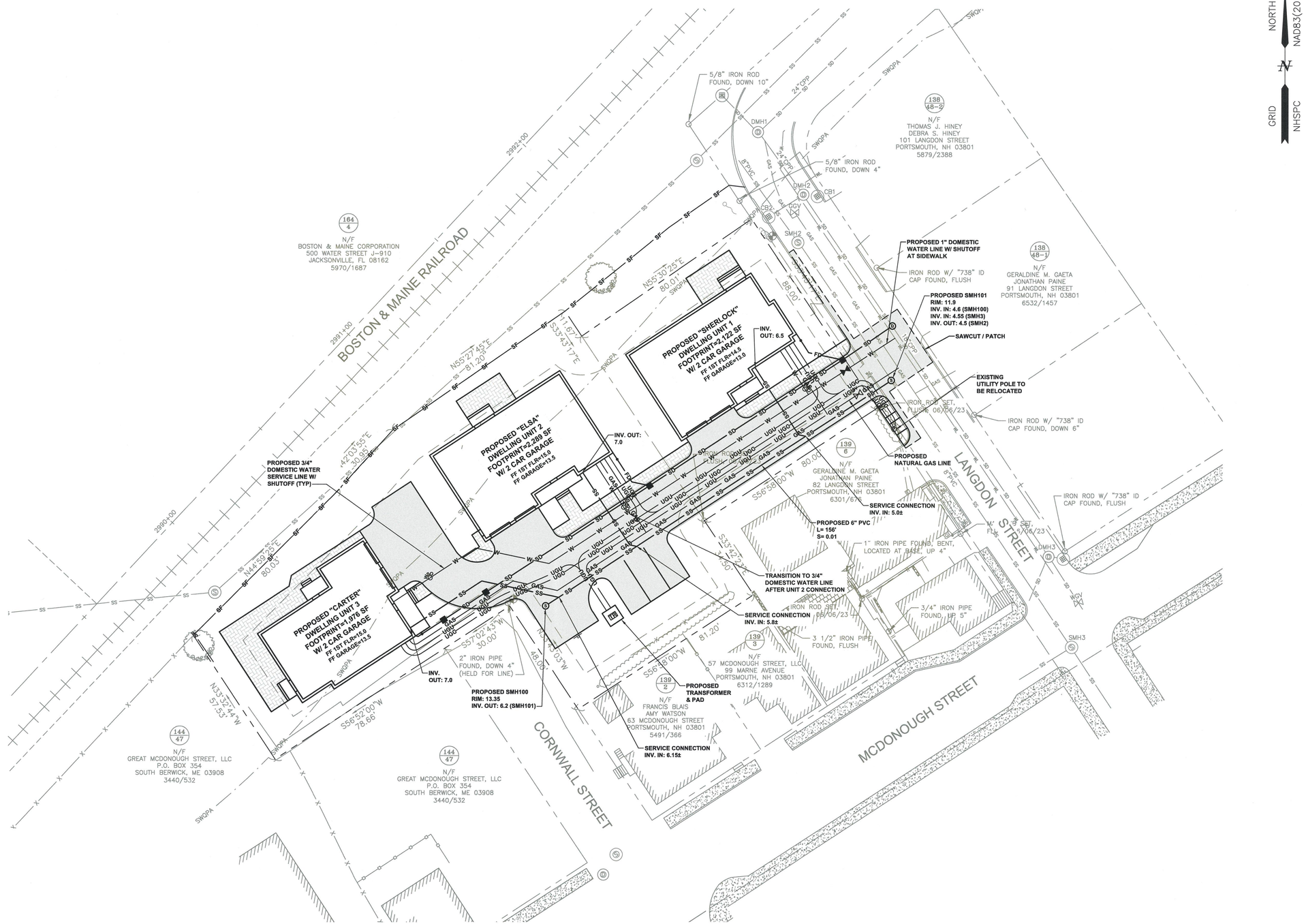
| DATE | SCALE |
|---|---|
| MARCH 2026 | 1" = 20' |

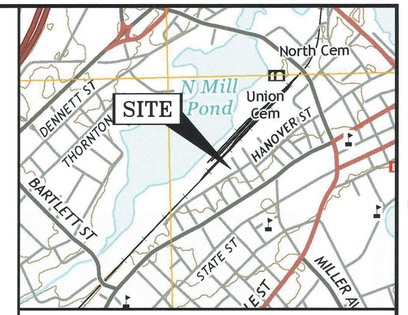
| DRAWN BY | DESIGNED BY | CHECKED BY |
|---|---|---|
| JHV | JHV | SMT |

PROJECT No. 5010220.004

DRAWING No. **C103** REV. **1**

FILE LOCATION: P:\HH5010220\CHINBURG_BUILDERS\004-94 LANGDON ST., PORTSMOUTH\DWG\SMT2023-CAD_FILES\04-CIVIL\5010220.004-C-SP.DWG, 2026.03.20, 2:43 PM




LOCATION MAP SCALE: 1" = 1,000'

NORTH NAD83(2011)

GRID NHSPC

## NOTES:

1. REFER TO DWG C001 FOR GENERAL NOTES, LEGEND, & ABBREVIATIONS.
2. REFER TO DWGS C501 FOR ALL CONSTRUCTION DETAILS.
3. ALL PROPOSED SEWER LINES TO BE 6" PVC SDR 35 GASKETED.
4. THE SPACING BETWEEN ELECTRICAL AND COMMUNICATION LINES ON THIS PLAN IS EXAGGERATED FOR CLARITY AND INTENDED TO SHOW THE GENERAL LOCATION OF PROPOSED UTILITIES. THE FINAL LOCATIONS AND SPACING MAY BE ADJUSTED TO RUN WITHIN THE SAME TRENCH PER THE CONSTRUCTION DETAILS.

**GRAPHIC SCALE**

20 0 10 20 40 60

( IN FEET )
1 inch = 20 ft.

| REV. | DATE | DESCRIPTION | BY | CHK. |
|---|---|---|---|---|
| 1 | 03/23/2026 | ISSUED FOR TAC | JHV | SMT |

DRAWING ISSUE STATUS

**ISSUED FOR PERMITTING**

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

PROJECT

**PROPOSED MULTIFAMILY DEVELOPMENT**
**94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH**

TITLE

**UTILITY PLAN**

STATE OF NEW HAMPSHIRE SHAWN M. TOBEY No. 14121 LICENSED PROFESSIONAL ENGINEER
3/23/26

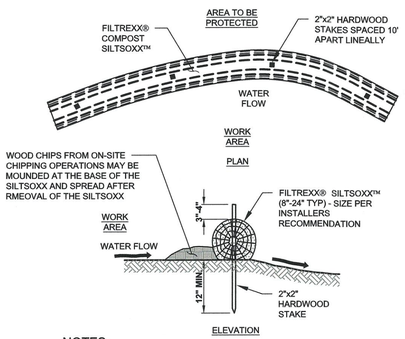
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| MARCH 2026 | 1" = 20' |

| DRAWN BY | DESIGNED BY | CHECKED BY |
|---|---|---|
| JHV | JHV | SMT |

PROJECT No. 5010220.004

DRAWING No. **C104** REV. **1**

FILE LOCATION: P:\NH\5010220-CHINBURG_BUILDERS\004-94 LANGDON ST., PORTSMOUTH-SMT\2020-CAD_FILES\04-CIVIL\5010220.004-C-SP.DWG, 2026.03.20, 2:44 PM

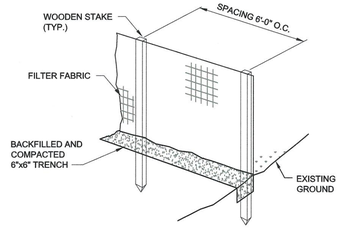



NOTES:

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

## FILTREXX SILTSOXX DETAIL

**N.T.S.**

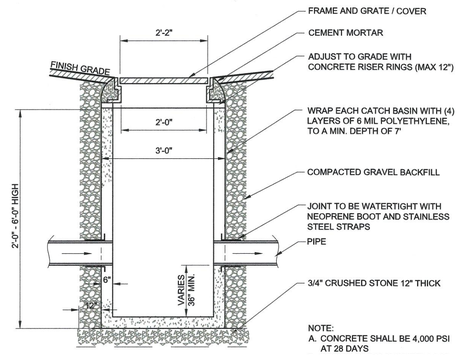



NOTES:

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

## SILT FENCE DETAIL

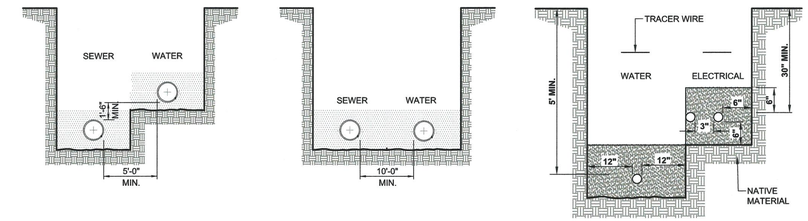
**N.T.S.**




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

## TYPICAL CATCH BASIN DETAIL

**N.T.S.**




PARALLEL INSTALLATION OF WATER MAINS AND GRAVITY SEWER MAINS:

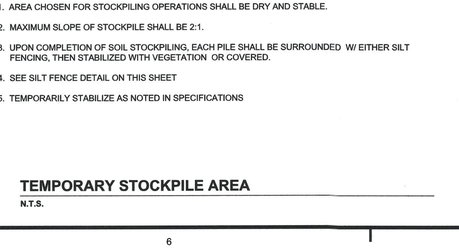
1. NORMAL CONDITIONS – WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY SANITARY SEWER, OR SEWER MANHOLE, WHENEVER POSSIBLE; THE DISTANCE SHALL BE MEASURED EDGE-TO-EDGE (PIPE WALL TO PIPE WALL).
2. UNUSUAL CONDITIONS – WHEN LOCAL CONDITIONS (SUCH AS LEDGE, BRIDGES, UTILITY CONGESTION,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

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

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

## TYPICAL UTILITY SEPARATION DETAILS

**N.T.S.**




**PLAN VIEW**

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




**SECTION**

## STABILIZED CONSTRUCTION ENTRANCE DETAIL

**N.T.S.**




NOTES:

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

## SEDIMENT SACK INLET PROTECTION DETAIL

**N.T.S.**




## STORM DRAIN CLEANOUT DETAIL

**N.T.S.**




NOTE:

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

## TYPICAL WATER MAIN TRENCH DETAIL

**N.T.S.**




NOTES:

1. GATE VALVE TO BE LOCATED WITHIN ROADWAY PAVEMENT WHERE POSSIBLE.
2. PROPER SIZE VALVE BOX SHALL BE INSTALLED WHERE GATE VALVES ARE SHOWN ON PLANS.
3. SPRINKLER SERVICE TO BE PAINTED RED. DOMESTIC TO BE PAINTED BLUE.

## TYPICAL VALVE AND BOX DETAIL

**N.T.S.**




INSTALLATION NOTES:

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

## TEMPORARY STOCKPILE AREA

**N.T.S.**




## TYPICAL MANHOLE DETAIL

**N.T.S.**




NOTE:

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

## TYPICAL SEWER TRENCH DETAIL

**N.T.S.**




NOTE:

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

## TYPICAL STORM DRAIN TRENCH DETAIL

**N.T.S.**

| REV. | DATE | DESCRIPTION | BY | CHK. |
|---|---|---|---|---|
| 1 | 03/23/2026 | ISSUED FOR TAC | JHV | SMT |

DRAWING ISSUE STATUS

**ISSUED FOR PERMITTING**

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

PROJECT

**PROPOSED MULTIFAMILY DEVELOPMENT**
**94 LANGDON ST & 98 CORNWELL ST, PORTSMOUTH NH**

TITLE

**SITE DETAILS**

SHAWN M. TOBEY No. 14121 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
3/23/26

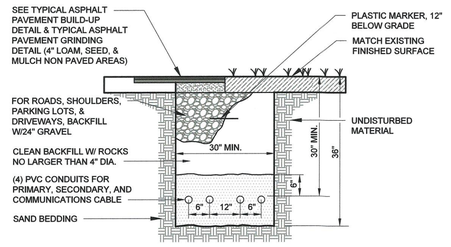
| DATE | SCALE |
|---|---|
| MARCH 2026 | NTS |

| DRAWN BY | DESIGNED BY | CHECKED BY |
|---|---|---|
| JHV | JHV | SMT |

PROJECT No. 5010220.004

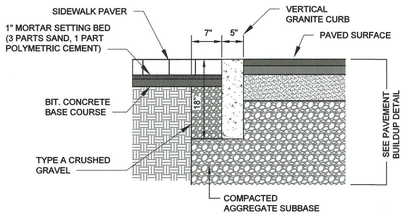
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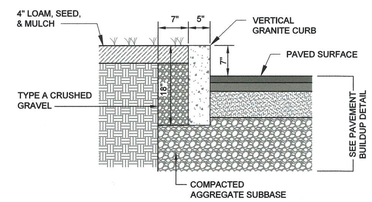



NOTES:
1. SIZE, NUMBER, MATERIAL, AND ARRANGEMENT OF CONDUIT SHALL BE COORDINATED WITH INDIVIDUAL UTILITIES.
2. ALL ELECTRICAL CONDUIT AND STRUCTURES SHALL BE WATER TIGHT.

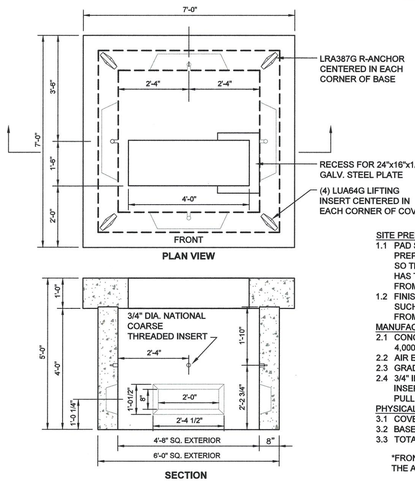
## TYPICAL UNDERGROUND UTILITY TRENCH DETAIL
N.T.S.




## TYPICAL FLUSH GRANITE CURB DETAIL (WHERE SHOWN)
N.T.S.




## TYPICAL VERTICAL GRANITE CURB DETAIL (WHERE SHOWN)
N.T.S.



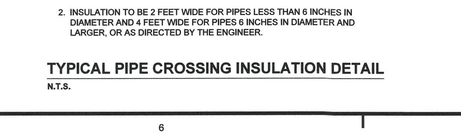

SITE PREPARATION NOTES:
1.1 PAD SHALL BE SET ON A PROPERLY PREPARED GRAVEL BASE AND ORIENTED SO THE FRONT OF THE TRANSFORMER HAS TRUCK ACCESS AND IS PROTECTED FROM TRAFFIC.
1.2 FINISHED GRADE SHALL BE PREPARED IN SUCH A WAY AS TO SHED WATER AWAY FROM THE PAD.

MANUFACTURING NOTES:
2.1 CONCRETE COMPRESSIVE STRENGTH: 4,000 PSI @ 28 DAYS.
2.2 AIR ENTRAINMENT: 4%-6%
2.3 GRADE 60 REINFORCEMENT
2.4 3/4" IDA. NATIONAL COURSE THREADED INSERTS CAST-IN AS SHOWN FOR PULLING EYES

PHYSICAL SPECIFICATIONS
3.1 COVER WEIGHT: 6,290 LBS
3.2 BASE WEIGHT: 8,080 LBS
3.3 TOTAL WEIGHT: 14,370 LBS

*FRONT DENOTES THE SIDE ON WHICH THE ACCESS DOORS ARE LOCATED

## SINGLE PHASE TRANSFORMER PAD DETAIL
N.T.S.




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

## TYPICAL UNDERGROUND UTILITY TRENCH DETAIL
N.T.S.




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

## TYPICAL GAS TRENCH DETAIL
N.T.S.




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

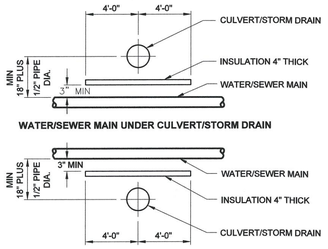
## TYPICAL SANITARY SEWER SERVICE DETAIL
N.T.S.




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

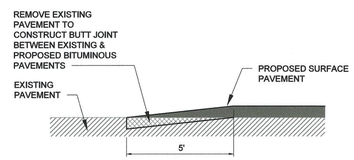
## TYPICAL WATER SERVICE DETAIL
N.T.S.

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

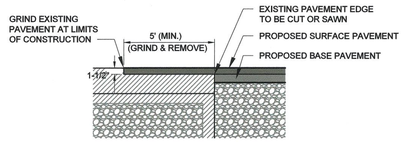



NOTES:
1. 2" RIGID INSULATION SHALL BE BLUEBOARD S.M. EXTRUDED POLYSTYRENE, R-10 RATING BY DOW CO. OR APPROVED EQUAL.
2. INSULATION TO BE 2 FEET WIDE FOR PIPES LESS THAN 6 INCHES IN DIAMETER AND 4 FEET WIDE FOR PIPES 6 INCHES IN DIAMETER AND LARGER, OR AS DIRECTED BY THE ENGINEER.

## TYPICAL PIPE CROSSING INSULATION DETAIL
N.T.S.

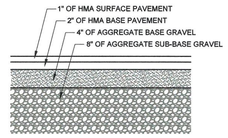



## TYPICAL ASPHALT PAVEMENT BUTT JOINT DETAIL
N.T.S.

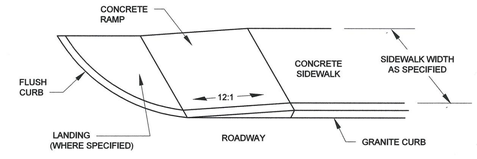



NOTES:
1. EXTEND NEW SURFACE PAVEMENT ACROSS BUTT JOINT BASE COURSE.
2. PROVIDE TACK COAT ON ALL SURFACES OF EXISTING PAVEMENT TO BE COVERED.

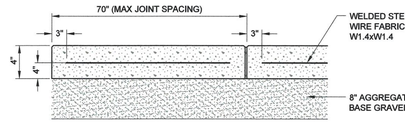
## TYPICAL ASPHALT PACEMENT GRINDING DETAIL
N.T.S.




## TYPICAL DRIVEWAY PAVING DETAIL
N.T.S.




## TYPICAL SIDEWALK TIP DOWNS
N.T.S. (NON INTERSECTION)




## TYPICAL CONCRETE SIDEWALK DETAIL
N.T.S.

| REV. | DATE | DESCRIPTION | BY | CHK |
|---|---|---|---|---|
| 1 | 03/26/2026 | ISSUED FOR TAC | JHV | SMT |

DRAWING ISSUE STATUS

**ISSUED FOR PERMITTING**


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


PROJECT

**PROPOSED MULTIFAMILY DEVELOPMENT**
**94 LANGDON ST & 98 CORNWELL ST, PORTSMOUTH NH**

TITLE

**SITE DETAILS**

STATE OF NEW HAMPSHIRE — SHAWN M. TOBEY No. 14121 — PROFESSIONAL ENGINEER — 3/23/26

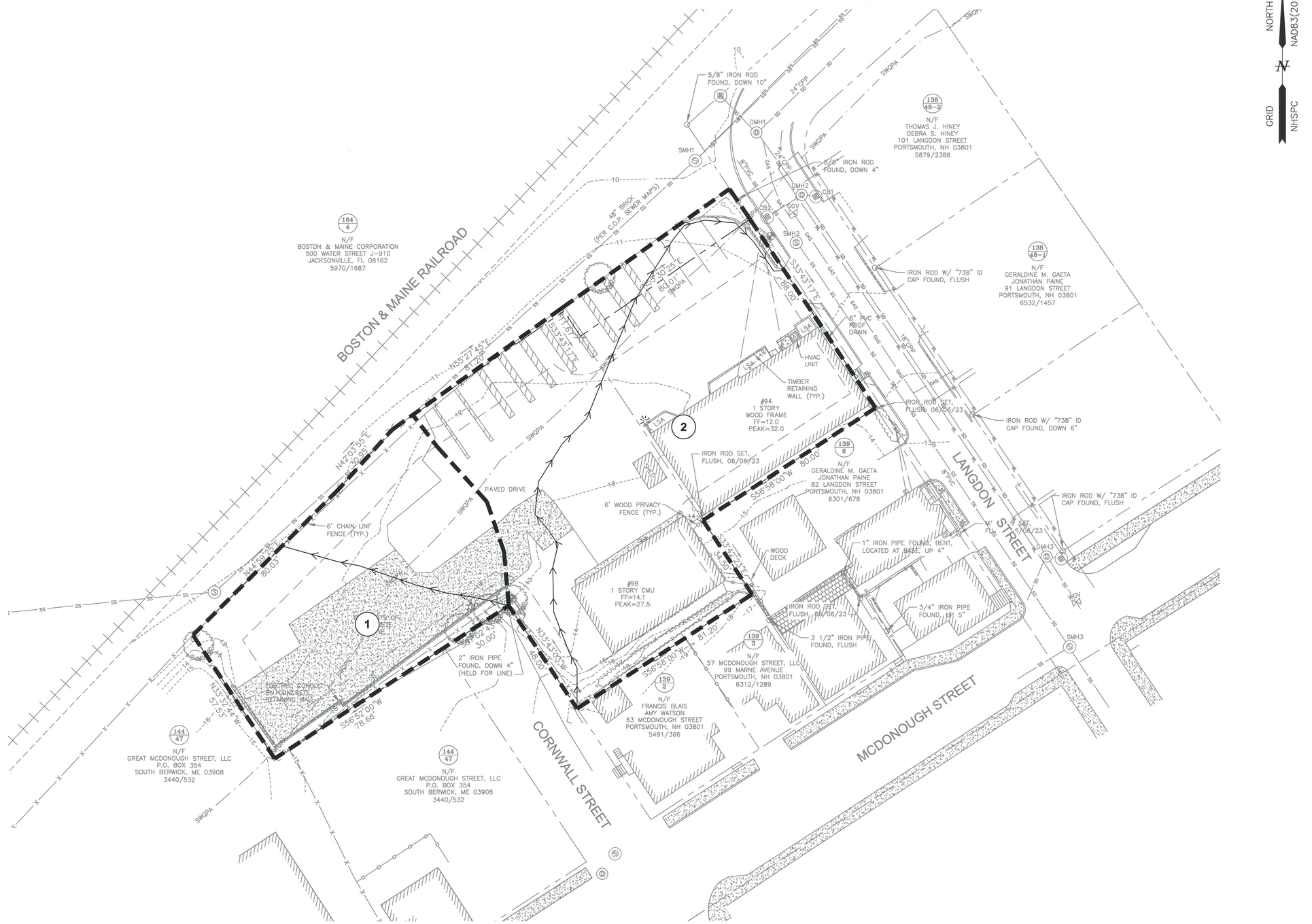
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|---|---|
| MARCH 2026 | NTS |

| DRAWN BY | DESIGNED BY | CHECKED BY |
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| JHV | JHV | SMT |

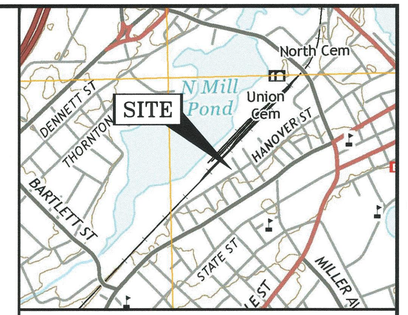
PROJECT No. 5010220.004

DRAWING No. **C502** REV. **1**

FILE LOCATION: P:\HW\5010220-DUNBURG_BVA_DELIVERABLES\04-44 LANGDON ST., PORTSMOUTH-SMT\202-CAD_FILES\04-CIVIL\5010220-004-C-DT.DWG, 2026.03.22, 2:13 PM




NORTH
NAD83(2011)
GRID
NHSPC




LOCATION MAP SCALE: 1" = 1,000'

**PRE LEGEND:**

- PROPERTY LINE
- WATERSHED BOUNDARY LINE
- (1) WATERSHED DESIGNATION
- TIME OF CONCENTRATION FLOW PATH

**GRAPHIC SCALE**

20 0 10 20 40 60

( IN FEET )
1 inch = 20 ft.

| REV. | DATE | DESCRIPTION | BY | CHK. |
|---|---|---|---|---|
| 1 | 03/23/2026 | ISSUED FOR TAC | JHV | SMT |

DRAWING ISSUE STATUS

**ISSUED FOR PERMITTING**

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

PROJECT

**PROPOSED MULTIFAMILY DEVELOPMENT**
**94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH**

TITLE

**PRE-DEVELOPMENT HYDROLOGY PLAN**

STATE OF NEW HAMPSHIRE
SHAWN M. TOBEY No. 14121
PROFESSIONAL ENGINEER
3/23/26

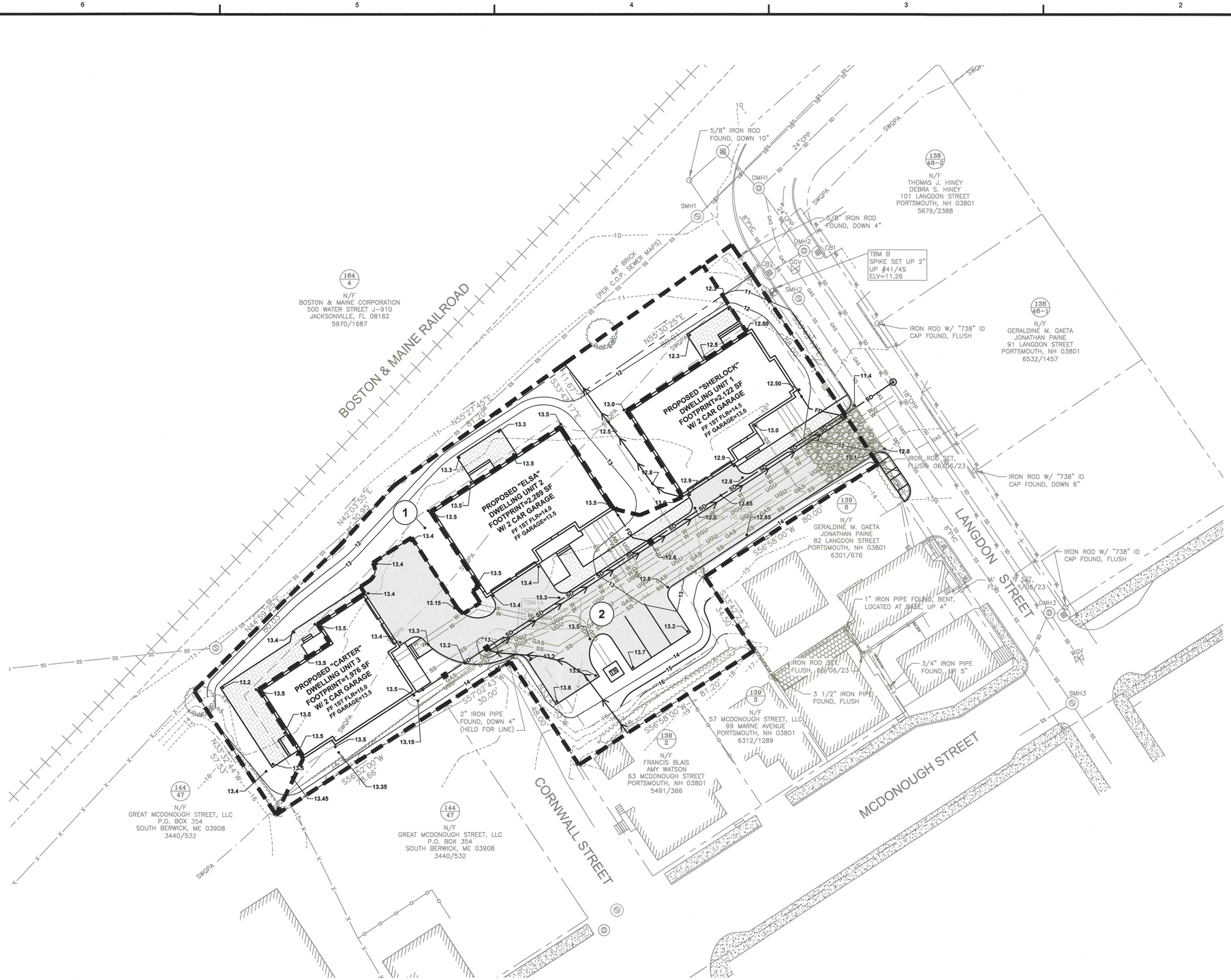
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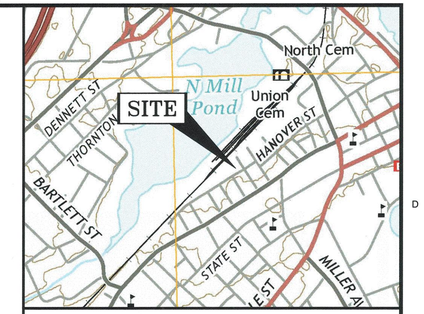
| DRAWN BY | DESIGNED BY | CHECKED BY |
|---|---|---|
| JHV | JHV | SMT |

PROJECT No. 5010220.004

DRAWING No. **C701** REV. **1**

FILE LOCATION: P:\#16501020-CHINBURG_BUILDERS\5004-94 LANGDON ST., PORTSMOUTH-SMT\202-CAD_FILES\04-CIVIL\501020-004-C-HY.DWG, 2026.03.20, 1:48 PM




LOCATION MAP SCALE: 1" = 1,000'

**POST LEGEND:**

- PROPERTY LINE
- WATERSHED BOUNDARY LINE
- (1) WATERSHED DESIGNATION
- TIME OF CONCENTRATION FLOW PATH

| REV. | DATE | DESCRIPTION | BY | CHK |
|---|---|---|---|---|
| 1 | 03/23/2026 | ISSUED FOR TAC | JHV | SMT |

DRAWING ISSUE STATUS

**ISSUED FOR PERMITTING**

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

PROJECT

**PROPOSED MULTIFAMILY DEVELOPMENT**
**94 LANGDON STREET & 98 CORNWALL STREET, PORTSMOUTH NH**

TITLE

**POST-DEVELOPMENT HYDROLOGY PLAN**

SHAWN M. TOBEY No. 14121 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
3/23/26

| DATE | SCALE |
|---|---|
| MARCH 2026 | 1" = 20' |

| DRAWN BY | DESIGNED BY | CHECKED BY |
|---|---|---|
| JHV | JHV | SMT |

PROJECT No. 5010220.004

DRAWING No. **C702** REV. **1**

FILE LOCATION: P:\94\501\0220-CHNB\RG_BUILDERS\004-94 LANGDON ST - PORTSMOUTH\TH-SMT\202-CAD_FILES\04-CIVIL\5010220-004-C-HY DWG, 2026.03.20, 1:48 PM

## Plant List - Trees and Shrubs

| ID | Qty | Botanical Name | Common Name | Scheduled Size | Mature Height | Mature Width | Growth Habit | Tolerances | Requirements |
|---|---|---|---|---|---|---|---|---|---|
| ARB | 4 | Acer rubrum 'Bowhall' | Bowhall Maple | 3 1/2" Cal. | 40-60' | 10-15' | Upright, Broadly Columnar | Urban, Wet Soil | Full, partial sun. Moist, well-drained soil |
| CFF | 5 | Carpinus betulus 'Frans Fontaine' | Frans Fontaine Hornbeam | 2 1/2" Cal. | 30-40' | 20-30' | Oval | Disease, Drought, Urban | Full, partial sun. Well-drained soil |
| COGN | 6 | Chamaecyparis obtusa 'Nana Gracilis' | Hinoki Cypress | 2 1/2' Ht. | 6-8' | 4-5' | Pyramidal | Disease, Drought, Deer | Full, partial sun. Moist, well-drained soil |
| HAL | 1 | Halesia carolina 'Jersey Belle' | Jersey Belle Carolina Silverbelle | 1 1/2" Cal. | 20-30' | 20' | Rounded | Urban, Disease, Moist Soil | Full, partial sun. Moist, well-drained soil. |
| HYP | 12 | Hypericum x 'Hidcote' | Hidcote St. John's Wort | 2 Gal. | 2-3' | 3-4' | Mounded | Salt, Deer, Urban | Full, partial sun. Moist, well-drained soil. |
| ICH | 7 | Ilex crenata 'Hetzi' | Hetzi Japanese Holly | 3 Gal. | 3-6' | 3-6' | Rounded | Urban, Clay soil, Drought | Full, partial sun. Moist, well-drained soil. |
| LT | 4 | Liriodendron tulipifera | Tulip Tree | 2 1/2" Cal. | 60-90' | 30-40' | Rounded | Deer, Moist Soil, Urban | Full, partial sun. Moist, well-drained soil |
| RGL | 69 | Rhus aromatica 'Grow Low' | Grow Low Sumac | 18-24" | 18-24" | 18-24" | Spreading | Drought, Urban, Salt | Full, partial sun. Dry to average, well-drained soil |
| SA | 5 | Sassafras albidum | Sassafras | 2" Cal. | 30-40' | 20-30' | Pyramidal | Drought, Deer, Clay Soil, Urban | Full, partial sun. Moist, well-drained soil |
| TOS | 12 | Thuja occidentalis 'Smaragd' | American Arborvitae | 7-8' | 15-20' | 5-6' | Upright, Pyramidal | Urban, Moist Soil | Full, partial sun. Average, well-drained soil |
| TOT | 3 | Thuja occidentalis 'Techny' | Techny Arborvitae | 8-10' | 10-15' | 6-8' | Pyramidal | Urban, Moist Soil | Full sun. Average, well-drained soil |
| TPA | 3 | Thuja plicata 'Atrovirens' | Atrovirens Western Red Cedar | 8-10' | 30-40' | 15-20' | Pyramidal | Moist Soil, Urban | Full, partial sun. Average, well-drained soil |
| VBM | 5 | Viburnum dentatum 'Blue Muffin®' | Blue Muffin® Viburnum | 3-4' | 6-8' | 4-5' | Compact | Deer, Moist Soil, Drought, Salt, Urban | Full, partial sun. Average, well-drained soil |
| VCC | 13 | Viburnum carlesi 'Compacta' | Dwarf Mayflower Viburnum | 3-4' | 4-5' | 4-5' | Compact | Disease, Deer, Wind, Urban | Full, partial sun. Average, well-drained soil |
| VIN | 15 | Viburnum p.p. 'Newport' | Dwarf Japanese Snowball Viburnum | 3-4' | 5-6' | 5-6' | Rounded | Deer, Moist Soil | Full, partial sun. Average, well-drained soil |
| VSS | 3 | Viburnum p. t. 'Summer Snowflake' | Summer Snowflake Viburnum | 5-6' | 8-10' | 6-8' | Upright | Deer, Moist Soil, Drought, Urban | Full, partial sun. Average, well-drained soil |


ERNST SEEDS

**Ernst Conservation Seeds**
8884 Mercer Pike
Meadville, PA 16335
(800) 873-3321 Fax (814) 336-5191
www.ernstseed.com


**Date: March 13, 2026**

**5311 Conservation Mix - ERNMX-114**

| | Botanical Name | Common Name |
|---|---|---|
| 30.00 % | *Festuca rubra* | Creeping Red Fescue |
| 25.00 % | *Poa pratensis, 'Navy'* | Kentucky Bluegrass, 'Navy' |
| 25.00 % | *Poa pratensis, 'Volt'* | Kentucky Bluegrass, 'Volt' |
| 10.00 % | *Lolium multiflorum* | Annual Ryegrass |
| 10.00 % | *Lolium perenne, 'Black Sparrow'* | Perennial Ryegrass, 'Black Sparrow' (turf type) |

**100.00 %**

**Seeding Rate:** 100-200 lb per acre, or 3-5 lb per 1,000 sq ft

Grasses & Grass-like Species - Herbaceous Perennial; Lawn & Turfgrass Sites

Our best and most popular mix designed for full sun. While this mix tolerates partial shade, it will need at least 3 hours of sunlight a day. The bluegrasses go dormant during a drought. Mowing too close can cause browning. The ryegrasses and red fescue blend well with the bluegrasses to create a full lawn. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

Note: Japanese Knotweed is a pernicious invasive plant that exists in large quantities on this site. It can't be eradicated via excavation. Eradication of established stands of Japanese Knotweed takes repeated sprayings with a glyphosate-based herbicide by a certified professional company. All Japanese Knotweed on the site shall be eradicated as soon as possible and before new plants are planted in the area.

## Plant List - Perennials

| ID | Qty | Botanical Name | Common Name | Scheduled Size | Mature Height | Mature Width | Growth Habit | Tolerances | Requirements |
|---|---|---|---|---|---|---|---|---|---|
| GMB | 34 | Geranium macrorrhizum 'Bevan's Variety' | Bevan's Variety Geranium | 1 Gal. | 1 ft. | 12-18" | Mounded, Spreading | Rabbit, Deer, Drought, Erosion | Full/Partial Sun, Dry to Medium Soils |
| HGU | 8 | Hosta 'Guacamole' | Guacamole Hosta | 1 Gal. | 1-1.5' | 3-4' | Mounded | Shade | Full/Partial Shade, Average Soils |
| PX | 21 | Polystichum acrostichoides | Christmas Fern | 2 QT | 1-2' | 1-2' | Upright | Rabbit, Deer, Drought | Full/Partial Shade, Dry to Average Soils |
| SAT | 18 | Sedum 'Angelina's Teacup' | Angelina's Teacup Stonecrop | 2 QT | 3-5" | 12-18" | Slowly spreading | Drought, Rabbit, Disease, Salt | Full/Partial Shade, Dry to Average Soils |
| SEDS | 15 | Sedum sexangulare | Stonecrop | 2 QT | 3-5" | 1-2' | Slowly spreading | Drought, Rabbit, Disease, Salt | Full/Partial Shade, Dry to Average Soils |
| SEDW | 18 | Sedum 'Weihenstephaner Gold' | Weihenstephaner Gold Stonecrop | 2 QT | 3-5" | .25-2' | Slowly spreading | Drought, Rabbit, Disease, Salt | Full/Partial Shade, Dry to Average Soils |
| SSD | 18 | Sedum Sunsparkler 'Dazzleberry' | Dazzleberry Stonecrop | 2 QT | 5-9" | 12-18" | Slowly spreading | Drought, Rabbit, Disease, Salt | Full/Partial Shade, Dry to Average Soils |

PLEASE NOTE: SHEET SIZE IS SCALED FOR ASME D . DO NOT REDUCE OR ENLARGE.

NOTE: ALL LANDSCAPE AREAS DISTURBED BY CONSTRUCTION TO BE REPLACED WITH 6" OF SUITABLE TOP SOIL TO MEET SPECIFICATIONS OF THE CITY OF PORTSMOUTH DPW.


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Project Title
**PROPOSED MULTIFAMILY DEVELOPMENT**
94 LANGDON STREET & 98 CORNWALL STREET
PORTSMOUTH, NH

TERRENCE PARKER 00254 LICENSED LANDSCAPE ARCHITECT STATE OF NEW HAMPSHIRE

Landscape Architect

Scale
1:120

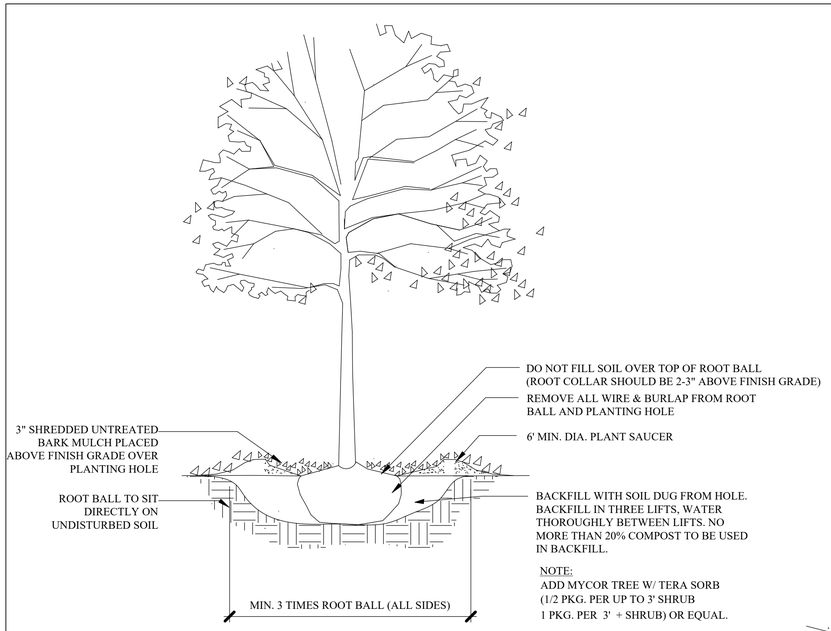
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| NO. | DATE | ISSUE NOTE |
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Project Manager | Drawn By
Date 3/23/2026 | Reviewed By
Project ID PROPOSED MULTIFAMILY DEVELOPMENT

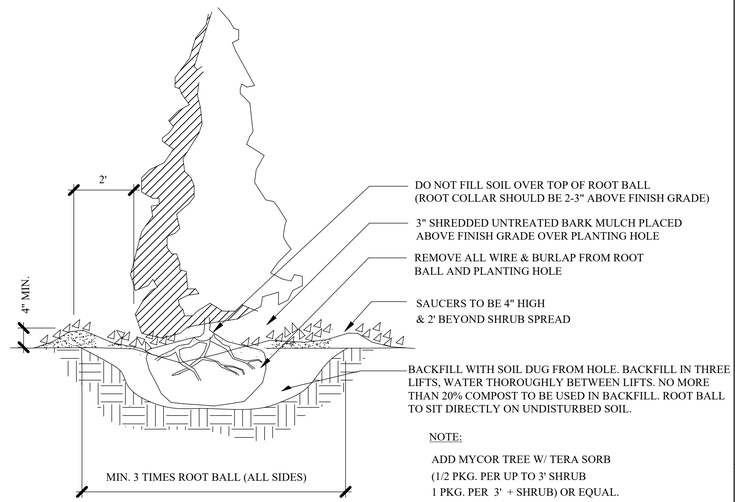
Sheet Title
LANDSCAPE PLAN

Sheet No.
L-1



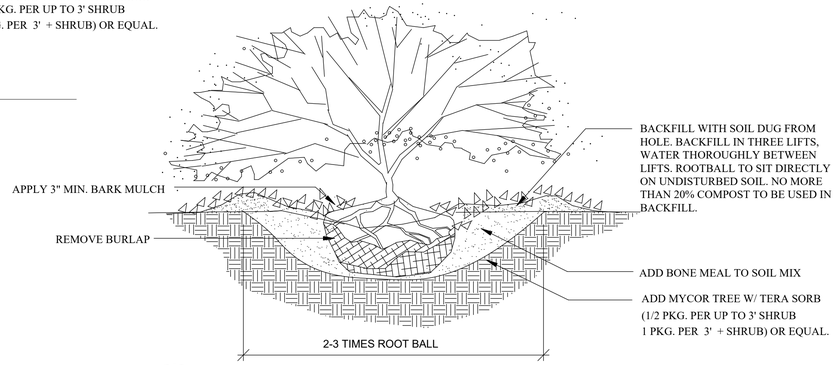

1 L-3

## TREE PLANTING - 2"+ CAL.
SCALE: NTS



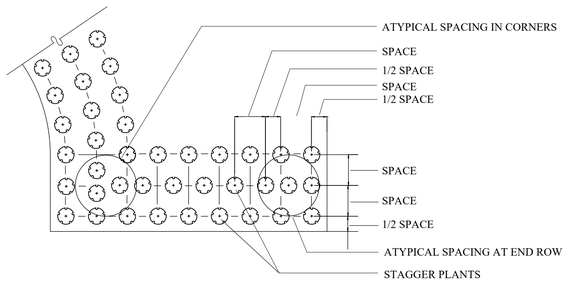

2 L-3

## PYRAMIDAL EVERGREEN TREE PLANTING
SCALE: NTS




3 L-3

## B&B SHRUB PLANTING
SCALE: NTS

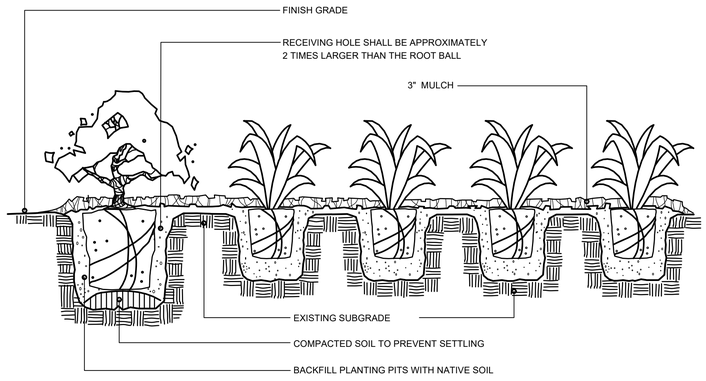



NOTES:

1. PLACE PLANTS IN BED AS SHOWN, SPACING AS SPECIFIED IN PLANT SCHEDULE.
2. GROUNDCOVER SHALL BE TRIANGULAR SPACED IN ROWS PARALLEL TO STRAIGHT EDGES AND SHALL BE EVENLY SPACED IN ROWS PARALLEL TO CURVE EDGES.

4 L-3

## GROUND COVER SPACING DETAIL
SCALE: NTS




NOTE: SHRUBS SHALL BE PLANTED A MINIMUM OF 1" & NO MORE THAN 2" ABOVE FINISH GRADE, DEPENDING UPON SITE CONDITIONS.

5 L-3

## SHRUB/GROUND COVER PLANTING DETAIL
SCALE: NTS

LANDSCAPE NOTES:

1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THE DRAWINGS.
3. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. ALL PLANT SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
5. ALL PLANT MATERIALS SHALL BE EXACTLY AS SPECIFIED BY THE LANDSCAPE ARCHITECT. IF PLANT SPECIES CULTIVARS ARE FOUND TO VARY FROM THAT SPECIFIED AT ANY TIME DURING THE GUARANTEE PERIOD, THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO HAVE THE CONTRACTOR REPLACE THAT PLANT MATERIAL. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT DELIVERED TO THE SITE FOR AESTHETIC REASONS BEFORE PLANTING. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE QUALITY FOR ALL THE PLANTS.
6. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, UPON DELIVERY OR AT THE JOB SITE WHILE WORK IS ON-GOING TO CONFORMITY TO SPECIFIED QUALITY, SIZE AND VARIETY.
7. PLANTS FURNISHED IN CONTAINERS SHALL HAVE THE ROOTS WELL ESTABLISHED IN THE SOIL MASS AND SHALL HAVE AT LEAST ONE (1) GROWING SEASON. ROOT-BOUND PLANTS OR INADEQUATELY SIZED CONTAINERS TO SUPPORT THE PLANT MAY BE DEEMED UNACCEPTABLE.
8. NO PLANT SHALL BE PUT IN THE GROUND BEFORE GRADING HAS BEEN FINISHED AND APPROVED BY THE LANDSCAPE ARCHITECT.
9. ALL PLANTS SHALL BE INSTALLED AND DETAILED PER PROJECT SPECIFICATIONS.
10. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN IF NECESSARY, DURING THE FIRST GROWING SEASON.
11. ALL PLANTS SHALL BE GUARANTEED BY THE CONTRACTOR FOR NOT LESS THAN ONE FULL YEAR FROM THE TIME OF PROVISIONAL ACCEPTANCE. DURING THIS TIME, THE OWNER SHALL MAINTAIN ALL PLANT MATERIALS IN THE ABOVE MANNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE PLANTS TO ENSURE PROPER CARE. IF THE CONTRACTOR IS DISSATISFIED WITH THE CARE GIVEN, HE SHALL IMMEDIATELY, AND IN SUFFICIENT TIME TO PERMIT THE CONDITION TO BE RECTIFIED, NOTIFY THE LANDSCAPE ARCHITECT IN WRITING OR OTHERWISE FORFEIT HIS CLAIM. LANDSCAPE CONTRACTOR SHALL PRUNE PLANTINGS OF DEAD LIMBS OR TWIGS DURING THE FIRST YEAR OF GROWTH.
12. FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT WILL BE MADE UPON THE CONTRACTOR'S REQUEST AFTER ALL CORRECTIVE WORK HAS BEEN COMPLETED.
13. LANDSCAPE CONTRACTOR SHOULD REPLACE DEAD PLANTINGS IMMEDIATELY UPON OWNER DIRECTION WITHIN THE WARRANTY PERIOD AND AGAIN AT THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL HAVE REPLACED ANY PLANT MATERIAL THAT IS MISSING, NOT TRUE TO SIZE AS SPECIFIED, THAT HAVE DIED, THAT HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESSIVE PRUNING OR INADEQUATE OR IMPROPER CARE, OR THAT ARE, IN THE OPINION OF THE LANDSCAPE ARCHITECT, IN UNHEALTHY OR UNSIGHTLY CONDITION.
14. ALL LANDSCAPE AREAS TO BE GRASS COMMON TO REGION EXCEPT FOR INTERIOR LANDSCAPED ISLANDS OR WHERE OTHER PLANT MATERIAL IS CALLED FOR.
15. ALL TREES AND SHRUBS TO BE PLANTED IN MULCH BEDS WITH DEFINED AND CUT EDGES TO SEPARATE TURF GRASS AREAS.
16. FOR ANY LANDSCAPE AREA SO DESIGNATED TO REMAIN, WHETHER ON OR OFF-SITE, REMOVE WEEDS, ROCKS, CONSTRUCTION ITEMS, ETC., THEN APPLY GRASS SEED OR PINE BARK MULCH AS DEPICTED ON PLANS.
17. LANDSCAPE CONTRACTOR SHALL FEED AND PRUNE EX. TREES, ON OR JUST OFF SITE, THAT HAVE EXPERIENCED ROOT BASE INTRUSION OR DAMAGE DURING CONSTRUCTION IMMEDIATELY AND FOR THE DURATION OF THE WARRANTY PERIOD AT THE DIRECTION OF THE LANDSCAPE ARCHITECT.
18. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY SNOW FENCING AT THE EDGE OF THE EX. TREE CANOPY THE CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS WITHIN THE LANDSCAPED AREAS. ANY DAMAGE TO EXISTING TREES, SHRUBS OR LAWN SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
19. ALL MULCH AREAS SHALL RECEIVE A 2-3" LAYER OF SHREDDED PINE BARK MULCH.
20. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
21. ALL PLANTING HOLES TO BE HAND-DUG, EXCEPT IN NEW CONSTRUCTION WITH NEW PLANTING PITS, PLANTING NEAR CURBS, OR AREAS WHERE SILVA CELLS WILL BE USED. IF HOLES ARE MACHINE-DUG, BOTTOM OF HOLES NEED TO BE THE APPROPRIATE HEIGHT, AND FIRMED BY THE MACHINE TO CREATE STABILITY FOR THE PLANT MATERIAL.

PLEASE NOTE: SHEET SIZE IS SCALED FOR ASME D . DO NOT REDUCE OR ENLARGE.

terra *firma*
landscape architecture



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Project Title
**PROPOSED MULTIFAMILY DEVELOPMENT**
94 LANGDON STREET & 98 CORNWALL STREET
PORTSMOUTH, NH




Landscape Architect

Scale
SEE DETAILS

| REV. | DATE | DESCRIPTION |
|---|---|---|

| NO. | DATE | ISSUE NOTE |
|---|---|---|

Project Manager
Drawn By
Date 3/23/2026
Reviewed By
Project ID PROPOSED MULTIFAMILY DEVELOPMENT

Sheet Title
LANDSCAPE DETAILS

Sheet No.
L-2

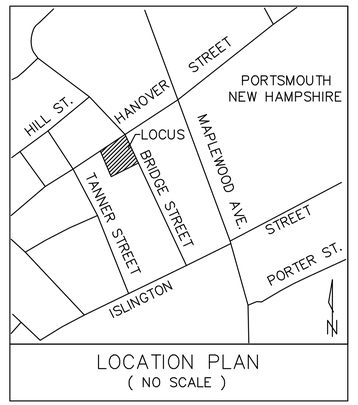
# SITE PLAN
## FOR
# BRIDGE STREET DEVELOPMENT

TAX MAP 126, LOT 55

**64 BRIDGE STREET**

**PORTSMOUTH, NH 03801**

**FEBRUARY, 2026**



LOCATION PLAN
( NO SCALE )

OWNER/APPLICANT

STEPHEN MATEUX &
CHRISTINE MAYEUX
64 BRIDGE STREET
PORTSMOUTH, NH 03801

SITE CIVIL ENGINEER

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

LAND SURVEYOR

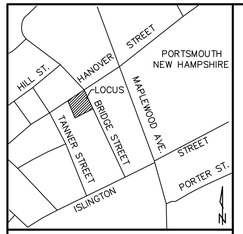
MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND
P.O. BOX 681
24 CHESTNUT STREET
DOVER, NH 03820
(603) 742-0911

ARCHITECT

TW DESIGNS
254 DRAKE HILL ROAD
STRAFFORD, NH
(603) 664-2181

| CIVIL SHEET INDEX | SHEET |
|---|---|
| COVER SHEET | 1 |
| EXISTING CONDITIONS PLAN (BY MCENEANEY SURVEY) | 2 |
| SITE & UTILITY PLAN | 3 |
| GRADING, DRAINAGE & EROSION CONTROL PLAN | 4 |
| EROSION CONTROL NOTES | 5 |
| DETAILS | 7-10 |

| ARCHITECTURAL SHEET INDEX | |
|---|---|
| PLANS | - |




LOCATION PLAN
( NO SCALE )

## REFERENCE PLANS:

1.) PLAN OF AN ESTATE BELONGING TO ALEXANDER LADD CONTAINING 46589 SQUARE FEET, BY: WM A. WILLIAMS DATED: 1805, SCALE: 1" = 20'; RECORDED R.C.R.D. 0059.

2.) CONDOMINIUM SITE PLAN 40 BRIDGE STREET, A CONDOMINIUM TAX MAP 126. LOT 52, OWNER / DECLARANT: TANNER BRIDGE DEVELOPMENT, LLC PROPERTY LOCATED AT 40 BRIDGE STREET CITY OF PORTSMOUTH COUNTY OF ROCKINGHAM STATE OF NEW HAMPSHIRE, BY: AMBIT ENGINEERING, INC. DATED: JANUARY, 2018; SCALE: 1" = 10'; RECORDED R.C.R.D. D-40718




126 / 59
CITY OF PORTSMOUTH
P.O. BOX 628
PORTSMOUTH, NH 03802
2166/388

125 / 2
THIRTY MAPLEWOOD LLC
36 MAPLEWOOD AVENUE
PORTSMOUTH, NH 03802
6469/244

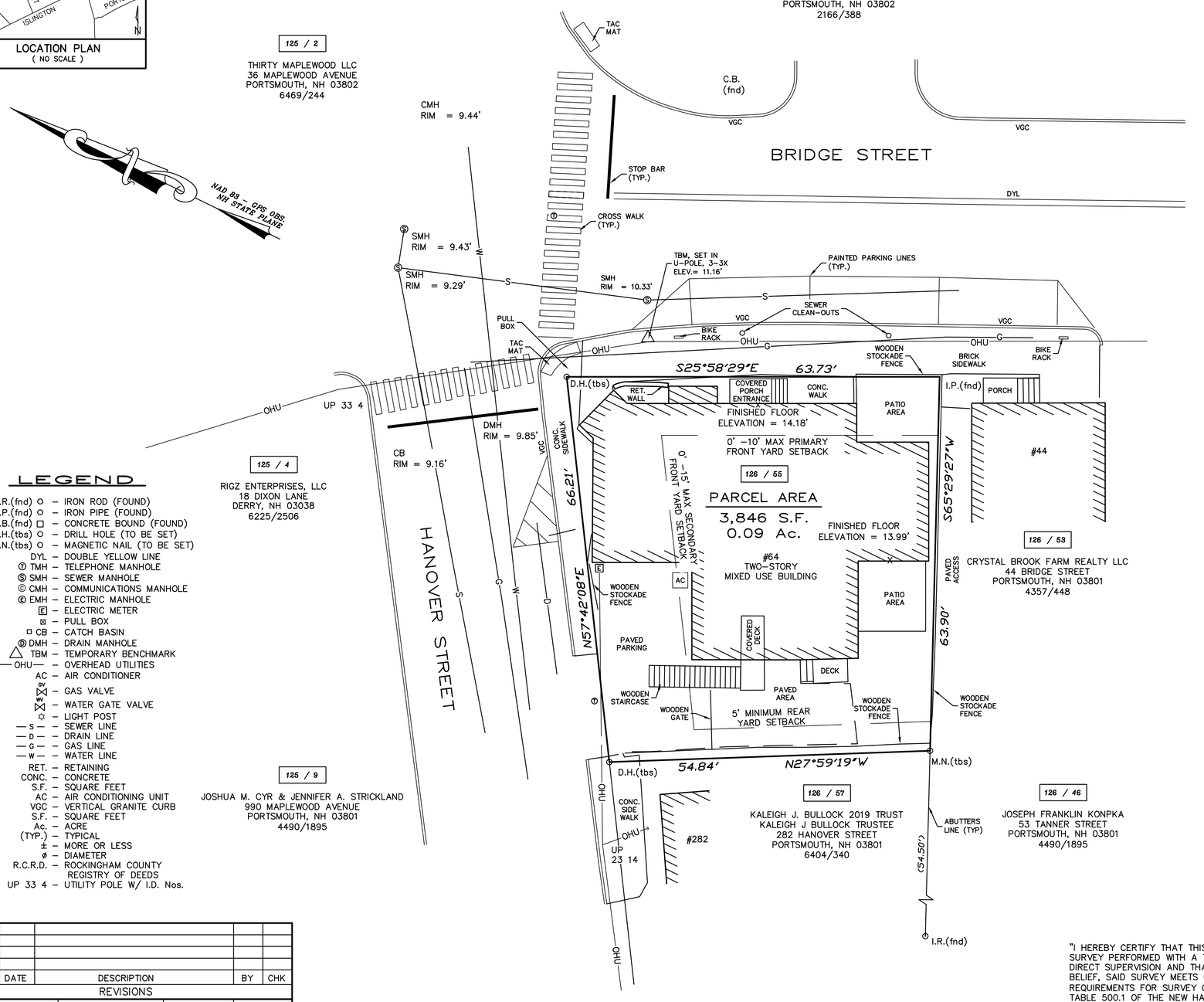
125 / 4
RIGZ ENTERPRISES, LLC
18 DIXON LANE
DERRY, NH 03038
6225/2506

125 / 9
JOSHUA M. CYR & JENNIFER A. STRICKLAND
990 MAPLEWOOD AVENUE
PORTSMOUTH, NH 03801
4490/1895

126 / 53
CRYSTAL BROOK FARM REALTY LLC
44 BRIDGE STREET
PORTSMOUTH, NH 03801
4357/448

126 / 57
KALEIGH J. BULLOCK 2019 TRUST
KALEIGH J BULLOCK TRUSTEE
282 HANOVER STREET
PORTSMOUTH, NH 03801
6404/340

126 / 46
JOSEPH FRANKLIN KONPKA
53 TANNER STREET
PORTSMOUTH, NH 03801
4490/1895




## LEGEND

I.R.(fnd) ○ – IRON ROD (FOUND)
I.P.(fnd) ○ – IRON PIPE (FOUND)
C.B.(fnd) □ – CONCRETE BOUND (FOUND)
D.H.(tbs) ○ – DRILL HOLE (TO BE SET)
M.N.(tbs) ○ – MAGNETIC NAIL (TO BE SET)
DYL – DOUBLE YELLOW LINE
Ⓣ TMH – TELEPHONE MANHOLE
Ⓢ SMH – SEWER MANHOLE
© CMH – COMMUNICATIONS MANHOLE
Ⓔ EMH – ELECTRIC MANHOLE
[E] – ELECTRIC METER
⊠ – PULL BOX
□ CB – CATCH BASIN
Ⓓ DMH – DRAIN MANHOLE
△ TBM – TEMPORARY BENCHMARK
OHU – OVERHEAD UTILITIES
AC – AIR CONDITIONER
GV ⋈ – GAS VALVE
WV ⋈ – WATER GATE VALVE
☼ – LIGHT POST
S – SEWER LINE
D – DRAIN LINE
G – GAS LINE
W – WATER LINE
RET. – RETAINING
CONC. – CONCRETE
S.F. – SQUARE FEET
AC – AIR CONDITIONING UNIT
VGC – VERTICAL GRANITE CURB
S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
± – MORE OR LESS
ø – DIAMETER
R.C.R.D. – ROCKINGHAM COUNTY REGISTRY OF DEEDS
UP 33 4 – UTILITY POLE W/ I.D. Nos.

## NOTES:

1.) OWNER OF RECORD:
STEPHEN MAYEUX & CHRISTINE MAYEUX
64 BRIDGE STREET
PORTSMOUTH, NEW HAMPSHIRE
R.C.R.D. VOLUME 2869, PAGE 647

2.) 126 / 55 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) PARCEL AREA = 3,846 S.F. / 0.09 Ac.

4.) THE INTENT OF THIS PLAN IS TO DEPICT THE PARCEL BOUNDARY AND EXISTING SITE CONDITIONS AS OF JUNE 12, 2025.

5.) ZONING DISTRICT: CHARACTER DISTRICT 4, DOWNTOWN OVERLAY

DISTRICT (CD4)
DEVELOPMENT STANDARDS:

| | |
|---|---|
| BUILDING PLACEMENT – PRINCIPAL BUILDING | |
| MAXIMUM PRINCIPAL FRONT YARD | = 10 FEET |
| MAXIMUM SECONDARY FRONT YARD | = 15 FEET |
| SIDE YARD | = NR |
| MINIMUM REAR YARD | = GREATER OF 5 FT. FROM REAR LOT LINE OR 10 FT. FROM CENTERLINE OF ALLEY |
| FRONT LOT LINE BUILDOUT | = 50 PERCENT MINIMUM |
| MAXIMUM BUILDING HEIGHT | |
| BUILDING AND LOT OCCUPATION | |
| MAXIMUM BUILDING BLOCK LENGTH | = 200 FEET |
| MAXIMUM FACADE MODULATION LENGTH | = 80 FEET (SEE SECTION 10.5A43.20) |
| MAXIMUM ENTRANCE SPACING | = 50 FEET |
| MAXIMUM BUILDING COVERAGE | = 90 PERCENT |
| MAXIMUM BUILDING FOOTPRINT | = 15,000 S.F. (OR AS ALLOWED BY SECTION 10.5A43.40) |
| MINIMUM LOT AREA | = NR |
| MINIMUM LOT AREA PER DWELLING UNIT | = NR |
| MINIMUM OPENSPACE | = 10 PERCENT |
| MAXIMUM GROUND FLOOR GFA PER USE | = 15,000 S.F. |
| BUILDING FORM – PRINCIPAL BUILDING | |
| BUILDING HEIGHT | = 2-3 STORIES, 3 STORIES & 40' FEET MAXIMUM |
| MAXIMUM FINISHED FLOOR SURFACE OF GROUND FLOOR ABOVE SIDEWALK GRADE | = 36 INCHES |
| MINIMUM GROUND STORY HEIGHT | = 12 FEET |
| MINIMUM SECOND STORY HEIGHT | = 10 FEET |

6.) THE SUBJECT PARCEL IS OUTSIDE OF THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 33015C0259F; EFFECTIVE DATE JANUARY 29, 2021.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) BASED ON GPS OBSERVATION DATED JUNE 12, 2025. VERTICAL DATUM IS NAVD88 BASED ON GPS OBSERVATION DATED JUNE 12, 2025.

8.) THIS PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON THE DATE OF THE SURVEY. THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. FROM THIS PLAN, BUT IN EXISTENCE, IS NOT INTENDED OR IMPLIED.

| NO. | DATE | DESCRIPTION | BY | CHK |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

REVISIONS

| | | | |
|---|---|---|---|
| 25066 | SUBDIVISION | 25-06 | 10-13 |
| PROJECT NO | TYPE | FIELDBOOK & PAGES | |

"I HEREBY CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL GROUND SURVEY PERFORMED WITH A TOTAL STATION, BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, SAID SURVEY MEETS OR EXCEEDS THE MINIMUM PRECISION REQUIREMENTS FOR SURVEY CLASSIFICATION "U" AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS."

# EXISTING CONDITIONS PLAN
PREPARED FOR
SCOTT RAFFERTY
TAX MAP 126, LOT No. 55
64 BRIDGE STREET
CITY of PORTSMOUTH
COUNTY of ROCKINGHAM
STATE of NEW HAMPSHIRE

| | |
|---|---|
| DRAWN BY: JJH | FILE: P\25066\DWG\25066 |
| SCALE: 1" = 10' | DATE: AUGUST 27, 2025 |

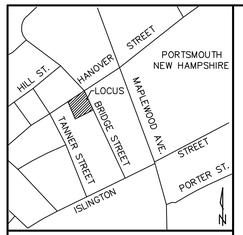
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STATE OF NEW HAMPSHIRE
No. 661
KEVIN M. McENEANEY
LICENSED LAND SURVEYOR
SIGNATURE

McEneaney Survey Associates
of NEW ENGLAND
P.O. Box 1166 – 181 WATSON ROAD
DOVER, NH 03820 (603) 742-0911

SURVEYING – PLANNING – CONSULTING

9/3/2025 15:22:00 File: P\25066 - 64 Bridge Street Portsmouth, NH - Scott Rafferty\Survey\Drawings\25066 ec with setbacks.dwg Layout: MS42024 - CHE-22x34




LOCATION PLAN
( NO SCALE )

SEWER SCHEDULE:
(I.D. NAMES FROM G.I.S.)

SMH 2303 HANOVER ST.
RIM = 11.20'
INV. IN 8" PVC = 6.15' TANNER ST. SE)
INV. IN 15" PVC = 5.75' (SW)
INV. OUT 15" PVC = 5.64' SMH 2301
SUMP = 5.64'

SMH 2301 BRIDGE / HANOVER INTX.
RIM = 9.29'
(INVERTS DERIVED FROM G.I.S., DID NOT OPEN)
INV. IN 15" PVC DROP = 4.4' SMH 2303
INV. IN 12" PVC = 2.1' SMH 5928
INV. IN 15" PVC = 2.1' SMH 1489
INV. OUT 24" PVC = 2.0' BRIDGE ST. (NW)

SMH 6093 BRIDGE ST.
RIM = 21.29'
INV. IN 12" PVC DROP = 16.57' (NE)
INV. IN 12" PVC = 13.37' (NE)
INV. OUT 12" PVC = 13.24' SMH 5928
SHELF = 14.27'
TRENCH = 13.24'

SMH 5928 BRIDGE ST.
RIM = 10.30'
INV. IN 12" PVC = 4.05' SMH 6093
INV. OUT 12" PVC = 3.84' SMH 2301
SHELF = 5.04'
TRENCH = 4.09'

INVERT OUT OF SUBJECT BUILDING = 8.50'

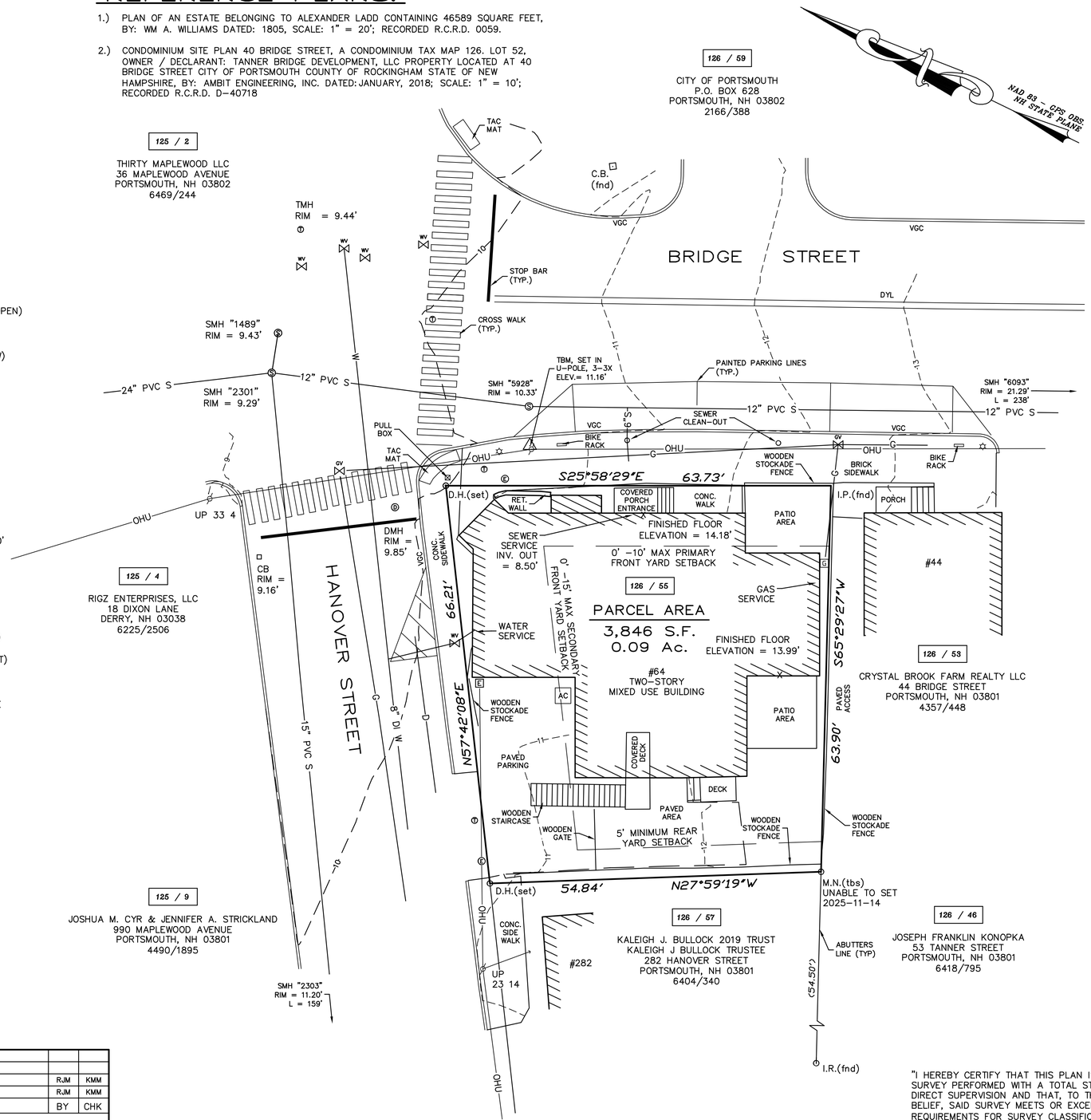
## LEGEND

I.R.(fnd) ○ – IRON ROD (FOUND)
I.P.(fnd) ○ – IRON PIPE (FOUND)
C.B.(fnd) – CONCRETE BOUND (FOUND)
D.H.(tbs) ○ – DRILL HOLE (TO BE SET)
M.N.(tbs) ○ – MAGNETIC NAIL (TO BE SET)
DYL – DOUBLE YELLOW LINE
Ⓣ TMH – TELEPHONE MANHOLE
Ⓢ SMH – SEWER MANHOLE
Ⓒ CMH – COMMUNICATIONS MANHOLE
Ⓔ EMH – ELECTRIC MANHOLE
[E] – ELECTRIC METER
⊠ – PULL BOX
□ CB – CATCH BASIN
Ⓓ DMH – DRAIN MANHOLE
△ TBM – TEMPORARY BENCHMARK
—OHU— – OVERHEAD UTILITIES
AC – AIR CONDITIONER
GV ⋈ – GAS VALVE
WV ⋈ – WATER GATE VALVE
☼ – LIGHT POST
—S— – SEWER LINE
—D— – DRAIN LINE
—G— – GAS LINE
—W— – WATER LINE
RET. – RETAINING
CONC. – CONCRETE
S.F. – SQUARE FEET
AC – AIR CONDITIONING UNIT
VGC – VERTICAL GRANITE CURB
S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
± – MORE OR LESS
ø – DIAMETER
R.C.R.D. – ROCKINGHAM COUNTY REGISTRY OF DEEDS
UP 33 4 – UTILITY POLE W/ I.D. Nos.
[G] – GAS METER

## REFERENCE PLANS:

1.) PLAN OF AN ESTATE BELONGING TO ALEXANDER LADD CONTAINING 46589 SQUARE FEET, BY: WM A. WILLIAMS DATED: 1805, SCALE: 1" = 20'; RECORDED R.C.R.D. 0059.

2.) CONDOMINIUM SITE PLAN 40 BRIDGE STREET, A CONDOMINIUM TAX MAP 126. LOT 52, OWNER / DECLARANT: TANNER BRIDGE DEVELOPMENT, LLC PROPERTY LOCATED AT 40 BRIDGE STREET CITY OF PORTSMOUTH COUNTY OF ROCKINGHAM STATE OF NEW HAMPSHIRE, BY: AMBIT ENGINEERING, INC. DATED: JANUARY, 2018; SCALE: 1" = 10'; RECORDED R.C.R.D. D–40718




## NOTES:

1.) OWNER OF RECORD:
RAFFERTY INVESTMENT GROUP LLC
369 ISLINGTON STREET, SUITE A,
PORTSMOUTH, NEW HAMPSHIRE 03801
R.C.R.D. VOLUME 6641, PAGE 2274

2.) [126 / 55] – DENOTES TAX MAP AND PARCEL NUMBER.

3.) PARCEL AREA = 3,846 S.F. / 0.09 Ac.

4.) THE INTENT OF THIS PLAN IS TO DEPICT THE PARCEL BOUNDARY AND EXISTING SITE CONDITIONS AS OF JUNE 12, 2025, WITH UPDATES THROUGH FEBRUARY 10, 2026.

5.) ZONING DISTRICT: CHARACTER DISTRICT 4, DOWNTOWN OVERLAY

DISTRICT (CD4)
DEVELOPMENT STANDARDS:

BUILDING PLACEMENT – PRINCIPAL BUILDING
MAXIMUM PRINCIPAL FRONT YARD = 10 FEET
MAXIMUM SECONDARY FRONT YARD = 15 FEET
SIDE YARD = NR
MINIMUM REAR YARD = GREATER OF 5 FT. FROM REAR LOT LINE OR 10 FT. FROM CENTERLINE OF ALLEY
FRONT LOT LINE BUILDOUT = 50 PERCENT MINIMUM
MAXIMUM BUILDING HEIGHT
BUILDING AND LOT OCCUPATION
MAXIMUM BUILDING BLOCK LENGTH = 200 FEET
MAXIMUM FACADE MODULATION LENGTH = 80 FEET (SEE SECTION 10.5A43.20)
MAXIMUM ENTRANCE SPACING = 50 FEET
MAXIMUM BUILDING COVERAGE = 90 PERCENT
MAXIMUM BUILDING FOOTPRINT = 15,000 S.F. (OR AS ALLOWED BY SECTION 10.5A43.40)
MINIMUM LOT AREA = NR
MINIMUM LOT AREA PER DWELLING UNIT = NR
MINIMUM OPENSPACE = 10 PERCENT
MAXIMUM GROUND FLOOR GFA PER USE = 15,000 S.F.

BUILDING FORM – PRINCIPAL BUILDING
BUILDING HEIGHT = 2–3 STORIES, 3 STORIES & 40' FEET MAXIMUM
MAXIMUM FINISHED FLOOR SURFACE OF GROUND FLOOR ABOVE SIDEWALK GRADE = 36 INCHES
MINIMUM GROUND STORY HEIGHT = 12 FEET
MINIMUM SECOND STORY HEIGHT = 10 FEET

6.) THE SUBJECT PARCEL IS OUTSIDE OF THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 33015C0259F; EFFECTIVE DATE JANUARY 29, 2021.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) BASED ON GPS OBSERVATION DATED JUNE 12, 2025.
VERTICAL DATUM IS NAVD88 BASED ON GPS OBSERVATION DATED JUNE 12, 2025.

8.) THIS PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON THE DATE OF THE SURVEY. THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. FROM THIS PLAN, BUT IN EXISTENCE, IS NOT INTENDED OR IMPLIED.

| NO. | DATE | DESCRIPTION | BY | CHK |
|---|---|---|---|---|
| | | REVISIONS | | |
| 2 | 2/11/26 | UPDATE OWNER, ADD SEWER DATA | RJM | KMM |
| 1 | 11-18-25 | UPDATE FOR MONUMENTS SET | RJM | KMM |

| 25066 | SUBDIVISION | 25-06 | 10-13 |
|---|---|---|---|
| PROJECT NO | TYPE | FIELDBOOK & PAGES | |

"I HEREBY CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL GROUND SURVEY PERFORMED WITH A TOTAL STATION, BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, SAID SURVEY MEETS OR EXCEEDS THE MINIMUM PRECISION REQUIREMENTS FOR SURVEY CLASSIFICATION "U" AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS."

# EXISTING CONDITIONS PLAN
PREPARED FOR
RAFFERTY INVESTMENT GROUP LLC
TAX MAP 126, LOT No. 55
64 BRIDGE STREET
CITY of PORTSMOUTH
COUNTY of ROCKINGHAM
STATE of NEW HAMPSHIRE

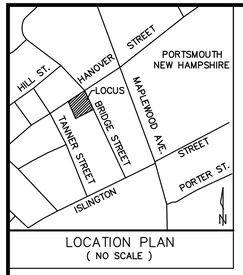
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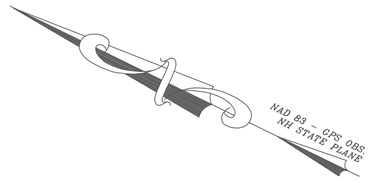
STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR
No. 661
KEVIN M. McENEANEY
SIGNATURE

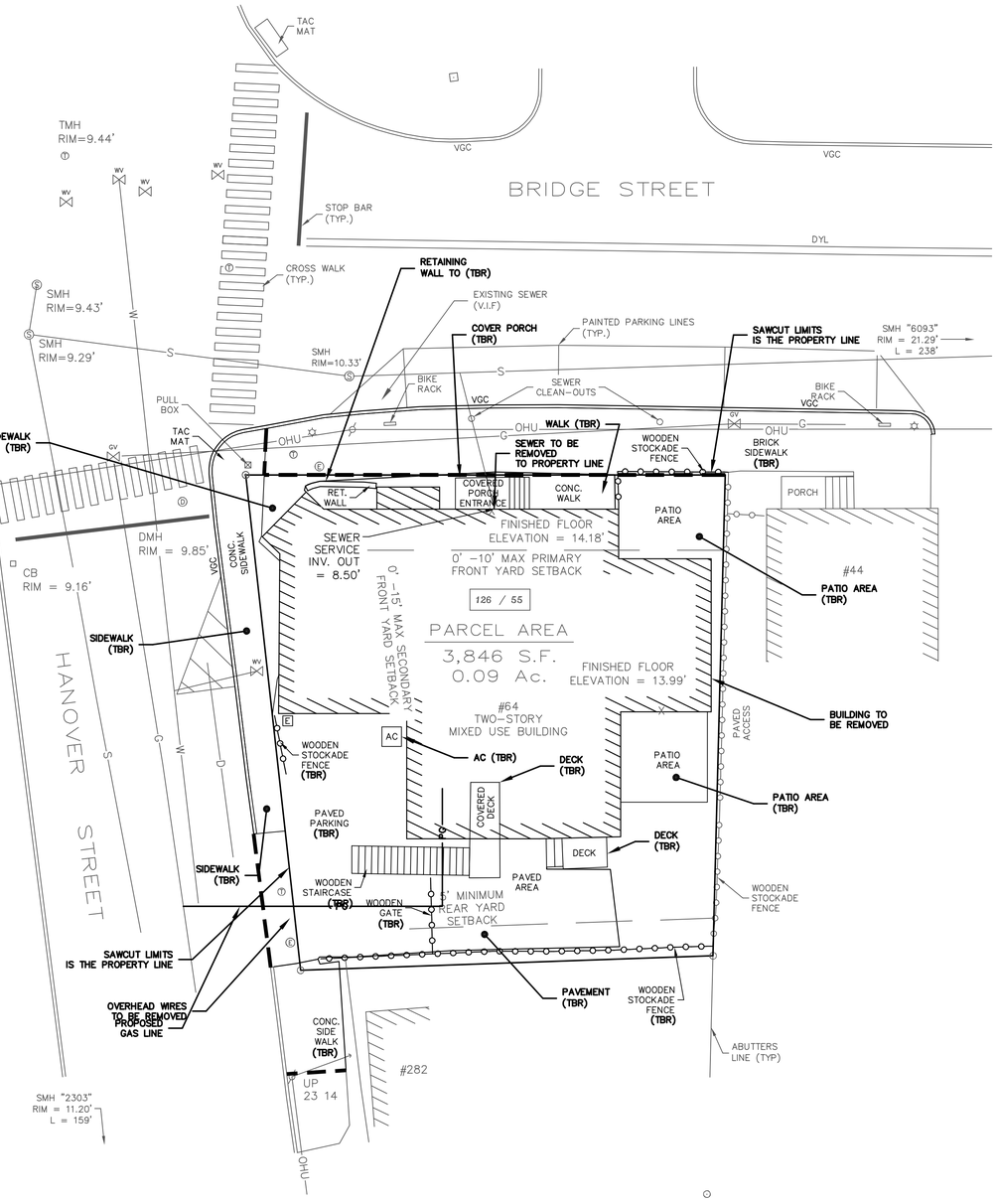
McEneaney Survey Associates
of NEW ENGLAND
P.O. Box 1166 – 181 WATSON ROAD
DOVER, NH 03820 (603) 742-0911

SURVEYING – PLANNING – CONSULTING




LOCATION PLAN
( NO SCALE )




SEWER SCHEDULE:
(I.D. NAMES FROM G.I.S.)

SMH 2303 HANOVER ST.
RIM = 11.20'
INV. IN 8" PVC = 6.15' TANNER ST. SE)
INV. IN 15" PVC = 5.75' (SW)
INV. OUT 15" PVC = 5.64' SMH 2301
SUMP = 5.64'

SMH 2301 BRIDGE / HANOVER INTX.
RIM = 9.29'
(INVERTS DERIVED FROM G.I.S., DID NOT OPEN)
INV. IN 15" PVC DROP = 4.4' SMH 2303
INV. IN 12" PVC = 2.1' SMH 5928
INV. IN 15" PVC = 2.1' SMH 1489
INV. OUT 24" PVC = 2.0' BRIDGE ST. (NW)

SMH 6093 BRIDGE ST.
RIM = 21.29'
INV. IN 12" PVC DROP = 16.57' (NE)
INV. IN 12" PVC = 13.37' (NE)
INV. OUT 12" PVC = 13.24' SMH 5928
SHELF = 14.27'
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SHELF = 5.04'
TRENCH = 4.09'

INVERT OUT OF SUBJECT BUILDING = 8.50'

DIG-SAFE
1-888-344-7233

CALL BEFORE YOU DIG !

NOTE:
CONTRACTOR IS REQUIRED TO CALL DIGSAFE AND COORDINATE LOCATIONS OF EXISTING UTILITY SERVICES A MINIMUM OF 72 HOURS PRIOR TO STARTING ANY WORK ON SITE.

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)

## DEMOLITION NOTES:

1. COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
2. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY DEMOLITION/ CONSTRUCTION ACTIVITIES. (1-888-DIG-SAFE)
4. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
5. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS NOT ALREADY OBTAINED BY THE OWNER AND ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
7. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL CODES.
8. EXISTING UTILITIES SHALL BE LOCATED PRIOR TO DEMOLITION. THE PROJECT PROPONENT, IN COORDINATION WITH THE UTILITY COMPANY, SHALL DETERMINE IF THE WATER AND SEWER SERVICE CAN BE REUSED. UTILITIES THAT REQUIRE DEMOLITION SHALL BE REMOVED IN ACCORDANCE WITH THE CORRESPONDING UTILITY COMPANY REQUIREMENTS.

LEGEND

- DYL – DOUBLE YELLOW LINE
- Ⓣ TMH – TELEPHONE MANHOLE
- Ⓢ SMH – SEWER MANHOLE
- Ⓒ CMH – COMMUNICATIONS MANHOLE
- Ⓔ EMH – ELECTRIC MANHOLE
- [E] – ELECTRIC METER
- ⊠ – PULL BOX
- □ CB – CATCH BASIN
- Ⓓ DMH – DRAIN MANHOLE
- OHU – OVERHEAD UTILITIES
- AC – AIR CONDITIONER
- GV – GAS VALVE
- WV – WATER GATE VALVE
- ☼ – LIGHT POST
- S – SEWER LINE
- D – DRAIN LINE
- G – GAS LINE
- W – WATER LINE
- RET. – RETAINING
- CONC. – CONCRETE
- S.F. – SQUARE FEET
- AC – AIR CONDITIONING UNIT
- PG – VGC – VERTICAL GRANITE CURB
- S.F. – SQUARE FEET
- Ac. – ACRE
- (TYP.) – TYPICAL
- UP 33 4 – UTILITY POLE W/ I.D. Nos.

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE
CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

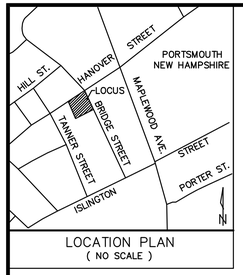
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DATE: XXX
SCALE: 1"=10'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO: 25066
FILE: SITE.DWG

DEMOLITION PLAN

STEPHEN MATEUX & CHRISTINE MAYEUX
64 BRIDGE STREET
PORTSMOUTH, NH

DEVELOPMENT
64 BRIDGE STREET
PORTSMOUTH, NH




LOCATION PLAN
( NO SCALE )

SEWER SCHEDULE:
(I.D. NAMES FROM G.I.S.)

SMH 2303 HANOVER ST.
RIM = 11.20'
INV. IN 8" PVC = 6.15' TANNER ST. SE)
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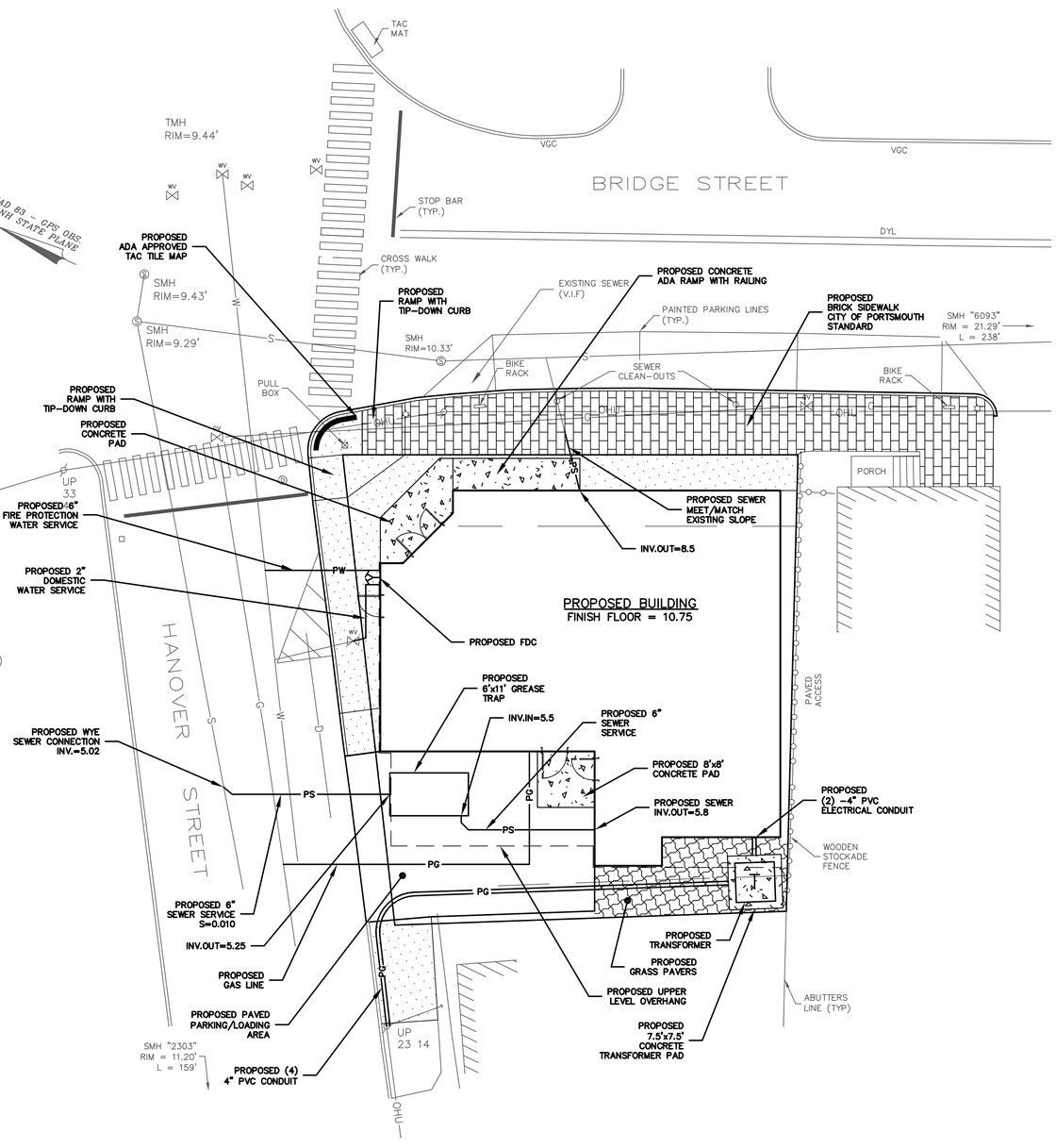
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INVERT OUT OF SUBJECT BUILDING = 8.50'

DIG-SAFE
1-888-344-7233

CALL BEFORE YOU DIG !

NOTE:
CONTRACTOR IS REQUIRED TO CALL DIGSAFE AND COORDINATE LOCATIONS OF EXISTING UTILITY SERVICES A MINIMUM OF 72 HOURS PRIOR TO STARTING ANY WORK ON SITE.




GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)

**GENERAL NOTES:**

1. OWNER OF RECORD:
   STEPHEN MAYEUX & CHRISTINE MAYEUX
   64 BRIDGE STREET
   PORTSMOUTH, NEW HAMPSHIRE
   R.C.R.D. VOLUME 2869, PAGE 647
2. 126 / 55 – DENOTES TAX MAP AND PARCEL NUMBER.
3. PARCEL AREA = 3,846 S.F. / 0.09 Ac.
4. ZONING DISTRICT: CHARACTER DISTRICT 4, DOWNTOWN OVERLAY DISTRICT (CD4)
   DEVELOPMENT STANDARDS:

| | |
|---|---|
| BUILDING PLACEMENT – PRINCIPAL BUILDING | |
| MAXIMUM PRINCIPAL FRONT YARD | = 10 FEET |
| MAXIMUM SECONDARY FRONT YARD | = 15 FEET |
| SIDE YARD | = NR |
| MINIMUM REAR YARD | = GREATER OF 5 FT. FROM REAR LOT LINE OR 10 FT. FROM CENTERLINE OF ALLEY |
| FRONT LOT LINE BUILDOUT | = 50 PERCENT MINIMUM |
| MAXIMUM BUILDING HEIGHT | |
| BUILDING AND LOT OCCUPATION | |
| MAXIMUM BUILDING BLOCK LENGTH | = 200 FEET |
| MAXIMUM FACADE MODULATION LENGTH | = 80 FEET (SEE SECTION 10.5A43.20) |
| MAXIMUM ENTRANCE SPACING | = 50 FEET |
| MAXIMUM BUILDING COVERAGE | = 90 PERCENT |
| MAXIMUM BUILDING FOOTPRINT | = 15,000 S.F. (OR AS ALLOWED BY SECTION 10.5A43.40) |
| MINIMUM LOT AREA | = NR |
| MINIMUM LOT AREA PER DWELLING UNIT | = NR |
| MINIMUM OPENSPACE | = 10 PERCENT |
| MAXIMUM GROUND FLOOR GFA PER USE | = 15,000 S.F. |
| BUILDING FORM – PRINCIPAL BUILDING | |
| BUILDING HEIGHT | = 2–3 STORIES, 3 STORIES & 40' FEET MAXIMUM |
| MAXIMUM FINISHED FLOOR SURFACE OF GROUND FLOOR ABOVE SIDEWALK GRADE | = 36 INCHES |
| MINIMUM GROUND STORY HEIGHT | = 12 FEET |
| MINIMUM SECOND STORY HEIGHT | = 10 FEET |

**SITE NOTES:**

1. THE INTENT OF THIS PLAN IS TO DEPICT THE PARCEL BOUNDARY AND EXISTING SITE CONDITIONS AS OF JUNE 12, 2025.
2. THE SITE LIGHTING WILL CONSIST OF PROPOSED NIGHT SKY COMPLIANT LED SITE LIGHTING AND ACCESS LIGHTS FOR THE PROPOSED BUILDING.
3. ON-SITE SNOW STORAGE SHALL OCCUR ALONG THE EDGES OF PROPOSED PAVEMENT AREAS.
4. DUST WILL LIKELY BE CREATED DURING CONSTRUCTION BUT WILL BE MINIMAL ONCE THE SITE HAS BEEN REGRADED AND STABILIZED.
5. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITIES AND THEIR COMPONENTS DURING DEMOLITION AND CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE OWNERS REPRESENTATIVE. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE-DOWNS. SUCH MATERIALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AT THE COMPLETION OF THE PROJECT.
6. METHODS OF DEMOLITION, CONSTRUCTION AND ERECTION ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE AND MUNICIPAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS SHALL INCLUDE BUT SHALL NOT BE LIMITED TO DUST CONTROL AND SILT BARRIERS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO STRUCTURES OR UTILITIES OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION PHASE CAUSED BY HIMSELF, HIS EMPLOYEES, HIS SUBCONTRACTORS OR EMPLOYEES OF SAME. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TEMPORARY FACILITIES FOR THE PROTECTION OF THE WORK, WORKERS AND PUBLIC SAFETY.
8. ALL LAYOUT SHALL BE PERFORMED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR UNDER CONTRACT WITH THE CONTRACTOR.
9. ALL CONDITIONS ON THE PLAN SHALL REMAIN IN EFFECT IN PERPETUITY.
10. NO HAZARDOUS MATERIALS SHALL BE STORED ON-SITE WITHOUT PROPERLY IMPLEMENTED BEST MANAGEMENT PRACTICES.
11. OUTDOOR STORAGE OF MATERIALS SHALL BE CONFINED TO FENCED AREAS.
12. MAINTENANCE OF STORMWATER MANAGEMENT SYSTEM IS THE RESPONSIBILITY OF THE SITE OWNER.
13. SITE IS SERVED BY MUNICIPAL WATER AND SEWER.
14. THE SUBJECT PARCEL IS OUTSIDE OF THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 33015C0259F; EFFECTIVE DATE JANUARY 29, 2021.
15. BASIS OF BEARING IS NH STATE PLANE (NAD83) BASED ON GPS OBSERVATION DATED JUNE 12, 2025. VERTICAL DATUM IS NAVD88 BASED ON GPS OBSERVATION DATED JUNE 12, 2025.
16. THIS PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON THE DATE OF THE SURVEY.

**UTILITY NOTES**

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
2. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
3. THE INSTALLATION OF ELECTRIC POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED.
4. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
5. THE SUBJECT PARCEL IS SERVED BY MUNICIPAL WATER AND SEWER.
6. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
7. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, DOUBLE CEMENT LINED DUCTILE IRON PIPE OR TYPE "K" COPPER, OR TOWN APPROVED MATERIAL.
8. ALL WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION PRIOR TO ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE CHLORINATION AND TESTING WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT.
9. ALL GRAVITY SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE NOTED AND CONFORM TO THE REQUIREMENTS OF THE CITY OF PORTSMOUTH SEWER DISTRICT STANDARDS.
10. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
11. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE UTILITY COMPANIES.
12. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
13. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF THIS PROJECT.
14. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
15. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES. COORDINATE WITH GAS COMPANY.
16. THE CONTRACTOR SHALL CONTACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL TIMES.
17. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
18. GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF PORTSMOUTH.
19. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF PORTSMOUTH SEWER DISTRICT.
20. CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
21. CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION, PARTICULARLY WATER MAIN AND GAS MAIN CONSTRUCTION AS TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
22. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PREPARED BY THE PROJECT ELECTRICAL ENGINEER.
23. APPROVED BACKFLOW PREVENTORS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
24. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE TOWN AND STATE CODES.
25. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY. PROPOSED INSTALLATION OF UNDERGROUND CONDUITS FOR TELEPHONE, AND ELECTRIC SERVICE SHALL BE COORDINATED WITH THE RESPECTIVE CONTACTS ARE AS FOLLOWS:

| | |
|---|---|
| ELECTRIC: | EVERSOURCE 1.800.362.7764 |
| CABLE: | COMCAST 603.334.3615 |
| GAS: | UNITIL: 888.301.7700 |
| PORTSMOUTH NH WATER: | 603.427.1530 |
| PORTSMOUTH SEWER DISTRICT: | 603.828-5273 |

LEGEND

| | |
|---|---|
| DYL | – DOUBLE YELLOW LINE |
| Ⓣ TMH | – TELEPHONE MANHOLE |
| Ⓢ SMH | – SEWER MANHOLE |
| Ⓒ CMH | – COMMUNICATIONS MANHOLE |
| Ⓔ EMH | – ELECTRIC MANHOLE |
| [E] | – ELECTRIC METER |
| ⊠ | – PULL BOX |
| □ CB | – CATCH BASIN |
| Ⓓ DMH | – DRAIN MANHOLE |
| OHU | – OVERHEAD UTILITIES |
| AC | – AIR CONDITIONER |
| GV ⋈ | – GAS VALVE |
| WV ⋈ | – WATER GATE VALVE |
| ☼ | – LIGHT POST |
| —S— | – SEWER LINE |
| —D— | – DRAIN LINE |
| —G— | – GAS LINE |
| —W— | – WATER LINE |
| VGC | – VERTICAL GRANITE CURB |
| S.F. | – SQUARE FEET |
| (TYP.) | – TYPICAL |
| ± | – MORE OR LESS |
| UP 33 4 | – UTILITY POLE W/ I.D. Nos. |
| PW | – PROPOSED WATER LINE |
| PG | – PROPOSED GAS LINE |
| PE | – PROPOSED ELECTRIC LINES |
| PS | – PROPOSED SEWER LINE |

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181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

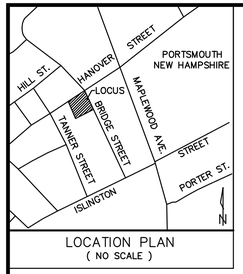

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DATE: XXX
SCALE: 1"=10'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO: 25066
FILE: SITE.DWG

SITE & UTILITY PLAN

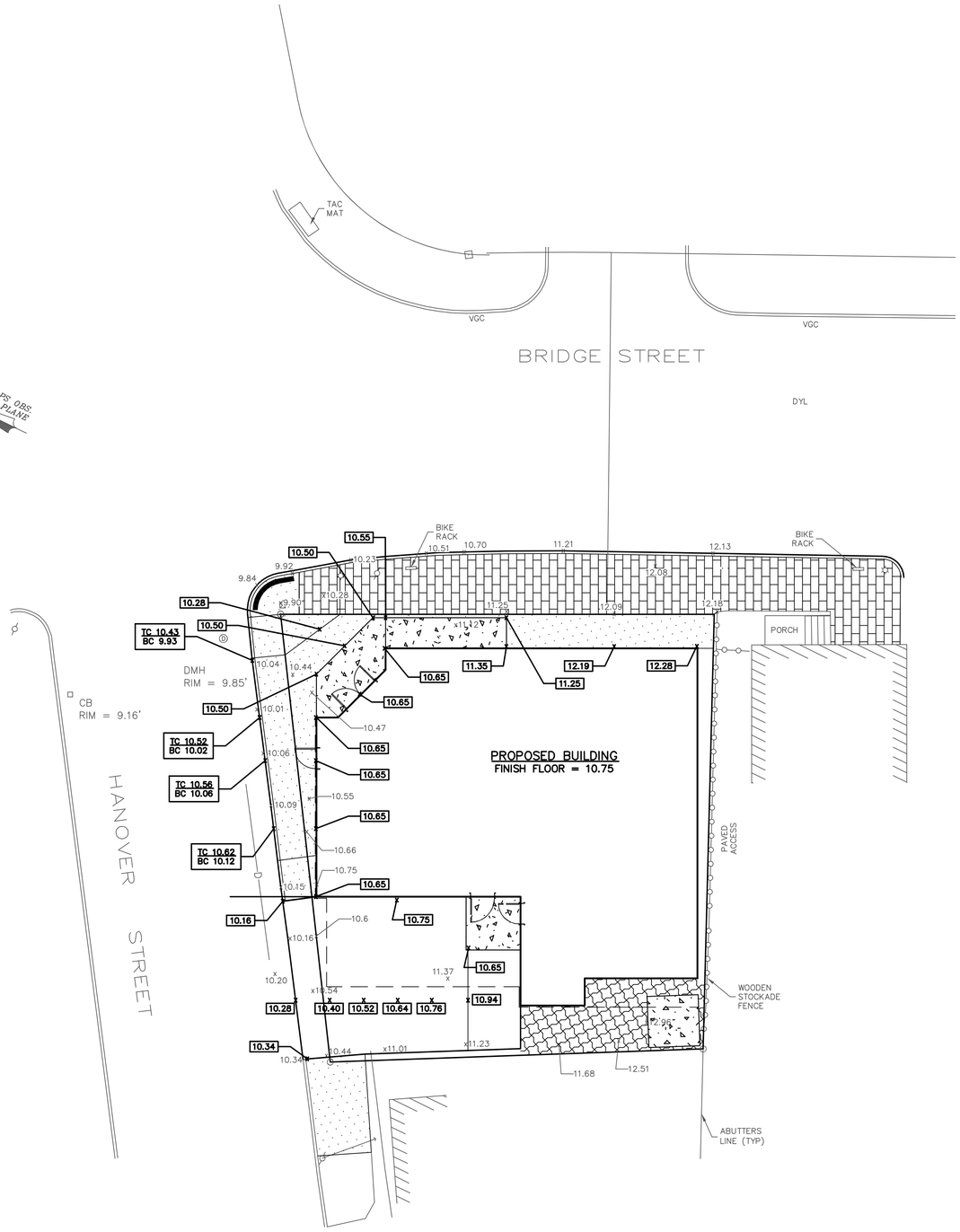
STEPHEN MATEUX & CHRISTINE MAYEUX
64 BRIDGE STREET
PORTSMOUTH, NH

DEVELOPMENT
64 BRIDGE STREET
PORTSMOUTH, NH




LOCATION PLAN
( NO SCALE )

NAD 83 - GPS OBS.
NH STATE PLANE




GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)

DIG-SAFE
1-888-344-7233

CALL BEFORE YOU DIG !

NOTE:
CONTRACTOR IS REQUIRED TO CALL DIGSAFE AND COORDINATE LOCATIONS OF EXISTING UTILITY SERVICES A MINIMUM OF 72 HOURS PRIOR TO STARTING ANY WORK ON SITE.

## GRADING NOTES:

1. ALL ROAD DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR CONSTRUCTION OF THE TOWN OF NEWINGTON N.H. AND "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION", LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL APPLY.
2. CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEERING CONSULTANT APPROVED BY THE OWNER, TO CONDUCT COMPACTION TESTING AND FILL GRADATION MONITORING PER THE ABOVE REFERENCED "STANDARD SPECIFICATIONS".
3. SEE EROSION CONTROL NOTES & DETAIL SHEET FOR TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
4. ALL DRAINAGE PIPES SHALL BE HDPE OR APPROVED EQUAL UNLESS OTHERWISE NOTED.
5. ALL DISTURBED AREAS NOT OTHERWISE CALLED FOR SURFACE TREATMENT SHALL RECEIVE 6" OF HIGH QUALITY LOAM AND SHALL BE SEEDED WITH GRASS.
6. ALL SITEWORK CONSTRUCTION SHALL BE ADVANCED USING "BEST MANAGEMENT PRACTICES" SANCTIONED BY THE USDA SCS AND NHDES.
7. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED, UTILIZED AND MAINTAINED UNTIL BASE MATERIALS ARE CONSTRUCTED.
8. CONTRACTOR SHALL PROVIDE A FINISH GRADED SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE AND UNDER RAISED STRUCTURES.
9. DENSITY REQUIREMENTS:

| LOCATION | MINIMUM DENSITY |
|---|---|
| BELOW PAVED OR CONCRETE AREAS | 95% |
| TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL | 95% |
| BELOW LOAM AND SEED AREA | 90% |

*ALL PERCENTAGES SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH AASHTO STANDARD 180, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH AASHTO STANDARD T-191, T-204, OR T-238 AND T-239.

10. SEE GENERAL EROSION CONTROL NOTES ON DETAIL SHEET.
11. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND AS SHOWN ON PLAN. MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED AND UPSTREAM AREAS HAVE BEEN STABILIZED.
12. INSPECT SILT BARRIERS AFTER EACH RAIN STORM OF 1/4 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
13. LIMIT TREE CLEARING TO ONLY THE EXTENT NECESSARY FOR CONSTRUCTION.
14. ALL IMPERVIOUS RUNOFF FROM THE PROPOSED SITE MUST BE DIRECTED TO BIORETENTION POND 1.

LEGEND

| | |
|---|---|
| I.R.(fnd) O | – IRON ROD (FOUND) |
| I.P.(fnd) O | – IRON PIPE (FOUND) |
| C.B.(fnd) | – CONCRETE BOUND (FOUND) |
| D.H.(tbs) O | – DRILL HOLE (TO BE SET) |
| M.N.(tbs) O | – MAGNETIC NAIL (TO BE SET) |
| DYL | – DOUBLE YELLOW LINE |
| Ⓣ TMH | – TELEPHONE MANHOLE |
| Ⓢ SMH | – SEWER MANHOLE |
| Ⓒ CMH | – COMMUNICATIONS MANHOLE |
| Ⓔ EMH | – ELECTRIC MANHOLE |
| [E] | – ELECTRIC METER |
| ⊠ | – PULL BOX |
| □ CB | – CATCH BASIN |
| Ⓓ DMH | – DRAIN MANHOLE |
| △ TBM | – TEMPORARY BENCHMARK |
| OHU | – OVERHEAD UTILITIES |
| AC | – AIR CONDITIONER |
| GV | – GAS VALVE |
| WV | – WATER GATE VALVE |
| ☼ | – LIGHT POST |
| S | – SEWER LINE |
| D | – DRAIN LINE |
| G | – GAS LINE |
| W | – WATER LINE |
| RET. | – RETAINING |
| CONC. | – CONCRETE |
| S.F. | – SQUARE FEET |
| AC | – AIR CONDITIONING UNIT |
| VGC | – VERTICAL GRANITE CURB |
| S.F. | – SQUARE FEET |
| Ac. | – ACRE |
| (TYP.) | – TYPICAL |
| ± | – MORE OR LESS |
| ø | – DIAMETER |
| R.C.R.D. | – ROCKINGHAM COUNTY REGISTRY OF DEEDS |
| UP 33 4 | – UTILITY POLE W/ I.D. Nos. |
| 10.16 | – PROPOSED SPOT GRADE |

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CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

| NO. | REVISION | APP'D | DATE |
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DATE: XXX
SCALE: 1"=10'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO: 25066
FILE: SITE.DWG

GRADING PLAN

STEPHEN MATEUX & CHRISTINE MAYEUX
64 BRIDGE STREET
PORTSMOUTH, NH

DEVELOPMENT
64 BRIDGE STREET
PORTSMOUTH, NH

5

**DESCRIPTION**

1. THE INTENT OF THIS PLAN IS TO SHOW SITE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF A 3,000 S.F. BUILDING AND GRAVEL LAY DOWN YARD AS WELL AS DRAINAGE, UTILITY, AND SITE ACCESS IMPROVEMENTS.

**PROJECT NAME AND LOCATION**

XXX
BRIDGE STREET — *LATITUDE N43° 06' 19"*
PORTSMOUTH, NH 03801 — *LONGITUDE W70° 48' 42"*

DISTURBED AREA
± S.F.

NOTES:
1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 1 ACRE AT ANY TIME BEFORE DISTURBED AREAS ARE STABILIZED.
2. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

**SEQUENCE OF MAJOR ACTIVITIES**

1. PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S PRIOR TO EARTH MOVING ACTIVITIES.
2. ALL EROSION CONTROL AND PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO COMMENCING EARTH MOVING OPERATIONS.
3. SELECTIVE DEMOLITION.
4. REGRADE SITE TO SUBGRADE.
5. TEMPORARY WATER DIVERSION (SWALES, BASINS) MUST BE USED AS NECCESSARY UNTIL AREAS ARE STABILIZED.
6. SWALES AND PONDS (AS APPLICABLE) SHALL BE CONSTRUCTED EARLY ON IN THE CONSTRUCTION SEQUENCE AND BEFORE ROUGH GRADING OF THE SITE AND ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
7. INSTALL DRAINAGE STRUCTURES AND CONTROLS.
8. INSTALL FOUNDATION FOOTINGS AND WALLS.
9. INSTALL UTILITIES.
10. PLACE GRAVELS AND FINE GRADE.
11. STABILIZE ROADWAYS AND PARKING AREAS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
12. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED (AS APPLICABLE) WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
13. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
14. IN ALL CASES THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION AND IN NO CASE SHALL EXCEED 1 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

**DEFINITIONS**

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED.
1. BASE COURSE GRAVELS 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 RIP-RAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED

**INSTALLATION, MAINTENANCE, AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS**

**A. SILT BARRIER**
1. INSTALLATION
   a. USE SILT BARRIER AS PERIMETER CONTROLS, PARTICULARLY AT THE LOWER OR DOWN SLOPE EDGE OF A DISTURBED AREA.
   b. LEAVE SPACE FOR MAINTENANCE BETWEEN TOE AND SLOPE OF SILT BARRIER.
   c. TRENCH IN THE SILT BARRIER ON THE UPHILL SIDE (6 INCHES DEEP BY 6 INCHES WIDE).
   d. INSTALL STAKES ON THE DOWNHILL SIDE OF THE SILT BARRIER.
   e. CURVE THE END OF THE SILT BARRIER UP-GRADIENT TO HELP IT CONTAIN RUNOFF.
2. SEQUENCE OF INSTALLATION
   a. SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
3. MAINTENANCE
   a. SILT BARRIERS SHOULD BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
   b. SILT BARRIERS HAVE A USEFUL LIFE OF ONE SEASON. ON LONGER CONSTRUCTION PROJECTS, SILT BARRIERS SHOULD BE REPLACED PERIODICALLY TO MAINTAIN EFFECTIVENESS.
   c. REMOVE SEDIMENT WHEN IT REACHES ONE-THIRD (1/3) THE HEIGHT OF THE SILT BARRIER.
   d. REPLACE THE SILT BARRIERS WHERE THEY ARE TORN, WORN, OR OTHERWISED DAMAGED AND MONITOR PERFORMANCE TO ENSURE EFFECTIVE PERFORMANCE.
   e. RETRENCH OR REPLACE ANY SILT BARRIER THAT IS NOT PROPERLY ANCHORED TO THE GROUND.
   f. IF THERE IS EVIDENCE OF END FLOW ON PROPERLY INSTALLED BARRIERS, EXTEND BARRIERS UPHILL OR CONSIDER REPLACING THEM WITH OTHER MEASURES, SUCH AS TEMPORARY DIVERSIONS AND SEDIMENT TRAPS.
   g. SILT BARRIERS SHOULD BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SILT BARRIERS SHOULD BE REPLACED WITH A TEMPORARY CHECK DAM.

**B. MULCHING**
1. TIMING
   a. APPLY MULCH PRIOR TO ANY STORM EVENT. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.
   b. IN OTHER AREAS, THE TIME PERIOD CAN RANGE FROM 14 TO 30 DAYS OF INACTIVITY ON A AREA. THE LENGTH OF TIME VARYING WITH SITE CONDITIONS. PROFESSIONAL JUDGEMENT 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 OHOOSE AN APPROPRIATE TIME RESTRICTION.
   c. WITHIN 100 FEET OF RIVERS, STREAMS, WETLANDS, AND IN LAKE AND POND WATERSHEDS, THE TIME PERIOD OF WHICH MULCHING SHOULD TAKE OCCUR SHOULD BE NO GREATER THAN SEVEN (7) DAYS. THIS SEVEN DAY LIMIT SHOULD BE REDUCED FURTHER DURING WET WEATHER PERIODS.
2. APPLICATION RATE
   a. MULCH SHALL BE APPLIED AT A RATE OF BETWEEN 1.5 TO 2 TONS PER ACRE, OR 70 TO 90 POUNDS PER 1000 SQUARE FEET.
   b. 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 150-200 POUNDS OF HAY OR STRAW PER ACRE WITH ABOUT 4 INCHES IN DEPTH. A TACKIFIER MAY BE ADDED TO THE MULCH.
3. MAINTENANCE
   a. ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS. CHECK FOR SIGNS OF EROSION OR DISPLACEMENT OF THE MULCH. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.
   b. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE AND SHOULD BE REPAIRED AS NECCESSARY.
   c. INSPECTIONS SHOULD TAKE PLACE UNTIL THE SITE IS ESTABLISHED.
   d. EROSION CONTROL MIX MULCH USED FOR TEMPORARY STABILIZATION SHOULD BE LEFT IN PLACE. VEGETATION ADDS STABILITY AND SHOULD BE PROMOTED.

**C. TEMPORARY SEEDING**
1. SEEDBED PREPARATION
   a. STONES AND TRASH SHOULD BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
   b. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
   c. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS.
      i) APPLY FERTILIZER AT A RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER OR EQUIVALENT.
      ii) APPLY LIMESTONE AT A RATE OF 3 TONS PER ACRE OR 138 POUNDS PER 1,000 SQUARE FEET.
2. SEEDING
   a. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SUMMARY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   b. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
   c. TEMPORARY SEEDING BETWEEN MAY 15TH AND AUGUST 15TH SHOULD BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE.
   d. VEGETATED GROWTH COVERING 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH.
3. MAINTENANCE
   a. TEMPORARY SEEDING SHALL BE INSPECTED PERIODICALLY. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER FABRICS, CHECK DAMS, ETC.).

**D. PERMANENT SEEDING**
1. BEDDING -- STONES LARGER THAN 2 INCHES, TRASH, ROOTS, AND OTHER DEBRIS INTERFERRING WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA SHOULD BE REMOVED. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF 4" TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL.
2. FERTILIZER
   a. LIME AND FERTILIZER SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 4 INCHES USING A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT PRIOR TO OR AT THE SAME TIME OF SEEDING.
   b. FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITORGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER.
   c. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
      AGRICULTURAL LIMESTONE @ 138 LBS. PER 1,000 S.F.
      LOW PHOSPHATE (N-P205-K20) FERTILIZER @ 13.8 LBS. PER 1,000 S.F.
3. SEED MIXTURE (RECOMMENDED)
   RATE:

| TYPE | LBS. PER ACRE | LBS. PER 1,000 S.F. |
|---|---|---|
| TALL FESCUE | 20 | 0.45 |
| CREEPING RED FESCUE | 20 | 0.45 |
| BIRDSFOOT TREFOIL | 8 | 0.20 |
| TOTAL | 48 | 1.10 |

4. SEEDING
   a. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES. PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST.
   b. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   c. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT TEMPORARY STABILIZATION MEASURES FOR OVERWINTER PROTECTION.
5. HYDROSEEDING
   a. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF STRAW MULCH ON CRITICAL AREAS IS PREFERRED SINCE IT GRANTS BETTER SLOPE PROTECTION BY USING ADHESIVE MATERIALS.
   b. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO 1 FOOT VERTICALLY).
   c. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
6. MAINTENANCE
   a. PERMANENT SEEDED AREAS SHOULD BE INSPECTED AT LEAST MONTHLY DURING THE COURSE OF CONSTRUCTION. INSPECTIONS, MAINTENANCE, AND CORRECTIVE ACTIONS SHOULD CONTINUE UNTIL THE OWNER ASSUMES PERMANENT OPERATION OF THE SITE.
   b. SEEDED AREAS SHOULD BE MOWED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION, WITH MOWING HEIGHT AND FREQUENCY DEPENDENT ON TYPE OF GRASS COVER.
   c. BASED ON INSPECTION, AREAS SHOULD BE RESEEDED TO ACHIEVE FULL STABALIZATION OF EXPOSED SOILS.
   d. IF EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS RESEEDED. WITH OTHER TEMPORARY MEASURES USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.
   e. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.

**E. STORM DRAIN INLET PROTECTION**
1. SPECIFICATIONS
   a. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE BARRIER SHOULD BE LESS THAN ONE ACRE.
   b. ANY RESULTANT PONDING OF STORMWATER MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.
2. INSTALLATION
   a. INSTALL INLET PROTECTION AS SOON AS STORM DRAIN INLETS ARE INSTALLED AND BEFORE LAND-DISTURBANCE ACTIVITIES BEGIN IN AREAS WITH EXISTING STORM DRAIN SYSTEMS.
   b. PROTECT ALL INLETS THAT COULD RECEIVE STORMWATER FROM YOUR CONSTRUCTION PROJECT.
   c. USE IN CONJUNCTION WITH OTHER EROSION PREVENTION AND SEDIMENT CONTROL BMPS.
   d. DESIGN YOUR INLET PROTECTION TO HANDLE THE VOLUME OF WATER FROM THE AREA BEING DRAINED. ENSURE THAT THE DESIGN IS SIZED APPROPRIATELY.
3. MAINTENANCE
   a. INSPECT INLETS BARRIERS FREQUENTLY, BEFORE AND AFTER EACH RAINFALL EVENT AND REPAIR WHEN NECESSARY.
   b. SEDIMENT SHOULD BE REMOVED AND THE STORM DRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE BARRIER.
   c. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   d. SWEEP STREETS, SIDEWALKS, AND OTHER PAVED AREAS REGULARLY.
   e. ALL CATCH BASINS AND STORM DRAIN INLETS MUST BE CLEANED AT THE END OF CONSTRUCTION AND AFTER THE SITE HAS BEEN FULLY STABILIZED

**TIMING OF CONTROLS/MEASURES**

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES THE 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 FENCES AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.

**WASTE DISPOSAL**

a. 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 PERSONEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
b. 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.
c. 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.

**MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES**

THE PROJECT PROPONENT IS RESPONSIBLE FOR THE MAINTENANCE OF ALL STORMWATER FACILITIES DURING CONSTRUCTION AND THE PROPERTY OWNER IS RESPONSIBLE AFTER CONSTRUCTION IS COMPLETE.

**CATCH BASINS & STORMWATER TREATMENT STRUCTURES**

1. CATCH BASINS & STORMWATER TREATMENT STRUCTURES SHOULD BE INSPECTED ON A MONTHLY BASIS AND/OR AFTER A MAJOR RAINFALL EVENT TO ASSURE THAT DEBRIS OR SEDIMENTS DO NOT REDUCE THE EFFECTIVENESS OF THE SYSTEM.

**SPIL PREVENTION**

**A. MATERIAL MANAGEMENT PRACTICES**

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RICK OF SPILLS OR OTHER ACCIDENTAL SANITARY EXPOSURE OF MATERIALS AND SUBSTANCE DURING CONSTRUCTION TO STORMWATER RUNOFF:
GOOD HOUSEKEEPING:
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES THAT WILL BE FOLLOWED ON SITE DURING
1. 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.
2. HAZARDOUS PRODUCTS:
   a. THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
   b. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
   c. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
   d. SURPLUS PRODUCT THAT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

**B. PRODUCT SPECIFICATION PRACTICES**

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:
1. PETROLEUM PRODUCTS:
   a. ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE 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.
2. FERTILIZERS:
   a. 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 FERTILZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
3. PAINTS:
   a. 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 THE MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
4. CONCRETE TRUCKS:
   a. CONCRETE TRUCKS WILL DISCHARGE AND WASH OUT SURPLUS CONCRETE OR DRUM WASH WATER IN A CONTAINED AREA ON SITE.

**C. 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 OF 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 OCCURS. 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.

THE PROJECT PROPONENT IS REQUIRED TO MANAGE CONSTRUCTION TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO CONTROLLING INVASIVE SPECIES AND CONTROLLING FUGITIVE DUST IN ACCORDANCE WITH ENV-A 1002.

**AGR 3800 PROHIBITED INVASIVE PLANT SPECIES RULES**

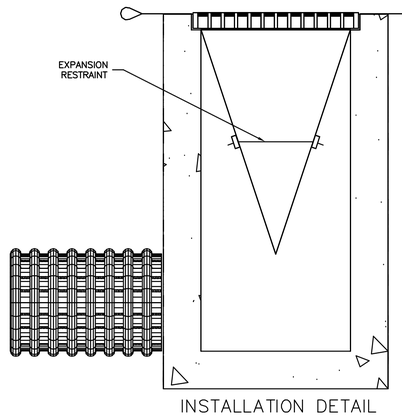
THE RULE, AGR 3800, STATES: NO PERSON SHALL COLLECT, TRANSPORT, IMPORT, EXPORT, MOVE, BUY SELL, DISTRIBUTE, PROPAGATE OR TRANSPLANT ANY LIVING AND VIABLE PORTION OF ANY PLANT SPECIES, WHICH INCLUDED ALL OF THEIR CULTIVARS AND VARIETIES, LISTED IN TABLE 3800.1, NEW HAMPSHIRE PROHIBITED INVASIVE SPECIES LIST'. A COMPLETE COPY OF THE RULES CAN BE ACCESSED ON THE INTERNET AT
HTTP://AGRICULTURE.NH.GOV/TOPICS/PLANTS_INSECTS.HTM.

**ENV-A 1002 FUGITIVE DUST: PRECAUTIONS TO PREVENT, ABATE, AND CONTROL FUGITIVE DUST**

a. ANY PERSON ENGAGED IN ANY ACTIVITY WITHIN THE STATE EMITS FUGITIVE DUST, OTHER THAT THOSE LISTED IN ENV-A 1002.02 (a), SHALL TAKE PRECAUTIONS THROUGHOUT THE DURATION OF THE ACTIVITY IN ORDER TO PREVENT, ABATE, AND CONTROL THE EMISSION OF FUGITIVE DUST.
b. PRECUAIONS REQUIRED BY (a) ABOVE, SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
   i) THE USE OF WATER OR HYDROPHILIC MATERIAL ON OPERATIONS OR SURFACES, OR BOTH;
   ii) THE APPLICATION OF ASPHALT, WATER, OR HYDROPHILIC MATERIAL, OR TARPS OR OTHER SUCH COVERS TO MATERIAL STOCKPILES;
   iii) THE USE OF HOODS, FANS, FABRIC FILTERS, OR OTHER DEVICES TO ENCLOSE AND VENT AREAS WHERE MATERIALS PRONE TO PRODUCING FUGITIVE DUST ARE HANDLED;
   iv) THE USE OF CONTAINMENT METHODS FOR SANDBLASTING OR SIMILAR OPERATIONS; AND
   v) THE USE OF VACUUMS OR OTHER SUCTION DEVICES TO COLLECT AIRBORNE PARTICULATE MATTER.

**WINTER CONSTRUCTION NOTES**

1. ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND 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.
2. ALL DITCHES & 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.
3. AFTER OCTOBER 15TH, INCOMPLETE ROAD AND PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.




INSTALLATION DETAIL

## SILTSACK®
SPECIFICATIONS

NOTE: THE SILTSACK® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS. AS SUPPLIED BY AH HARRIS OF PORTSMOUTH OR APPROVED EQUAL

### REGULAR FLOW SILTSACK®
(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

| PROPERTIES | TEST METHOD | UNITS |
|---|---|---|
| GRAB TENSILE STRENGTH | ASTM D-4632 | 300 LBS |
| GRAB TENSILE ELONGATION | ASTM D-4632 | 20% |
| PUNCTURE | ASTM D-4833 | 120 LBS |
| MULLEN BURST | ASTM D-3786 | 800 PSI |
| TRAPEZOID TEAR | ASTM D-4533 | 120 LBS |
| UV RESISTANCE | ASTM D-4355 | 80% |
| APPARENT OPENING SIZE | ASTM D-4751 | 40 US SIEVE |
| FLOW RATE | ASTM D-4491 | 40 GAL/MIN/SQ FT |
| PERMITTIVITY | ASTM D-4491 | 0.55 SEC -1 |

### HI-FLOW SILTSACK®
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

| PROPERTIES | TEST METHOD | UNITS |
|---|---|---|
| GRAB TENSILE STRENGTH | ASTM D-4632 | 265 LBS |
| GRAB TENSILE ELONGATION | ASTM D-4632 | 20% |
| PUNCTURE | ASTM D-4833 | 135 LBS |
| MULLEN BURST | ASTM D-3786 | 420 PSI |
| TRAPEZOID TEAR | ASTM D-4533 | 45 LBS |
| UV RESISTANCE | ASTM D-4355 | 90 % |
| APPARENT OPENING SIZE | ASTM D-4751 | 20 US SIEVE |
| FLOW RATE | ASTM D-4491 | 200 GAL/MIN/SQ FT |
| PERMITTIVITY | ASTM D-4491 | 1.5 SEC -1 |

### OIL-ABSORBANT SILTSACK®
(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)
DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK® CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL-ABSORBANT PILLOW INSERT OR, MADE COMPLETELY FROM AN OIL-ABSORBANT SILTSACK®, WITH A WOVEN PILLOW INSERT.

DETAIL OF INLET SEDIMENT CONTROL DEVICE
N.T.S.

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE
CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

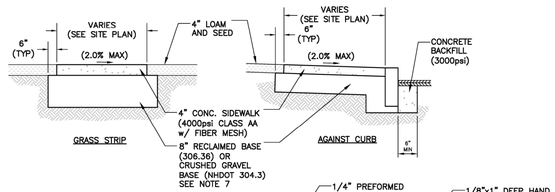
| NO. | REVISION | APP'D | DATE |
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DATE: XXX
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DRAWN BY: XX
DESIGN BY: XX
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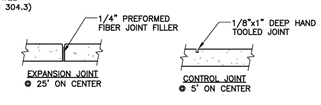
*EROSION CONTROL NOTES*

*STEPHEN MATEUX & CHRISTINE MAYEUX*
*64 BRIDGE STREET*
*PORTSMOUTH, NH*

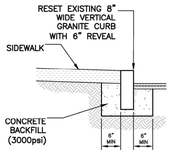
*64 BRIDGE STREET*
*PORTSMOUTH, NH*




NOTES:
1. MEDIUM BROOM FINISH.
2. 6x6-W2.9xW2.9 W.W.F. TO BE USED AT ALL ACCESSIBLE RAMPS.
3. JOINTS SHALL BE HAND TOOLED w/ 1/8" RADII.
4. EXPANSION JOINT FIBER FILLER SHALL BE TRIMMED TO 1/4" BELOW SIDEWALK SURFACE FOR SEALANT.
5. THERE SHALL BE NO CHANGE IN ELEVATION (LIP) OR GAPS IN THE SIDEWALK GREATER THAN 1/4".
6. SIDEWALK CONCRETE SHALL BE TREATED WITH SILOXANE SEALER.
7. RECLAIMED BASE MATERIAL SHALL BE USED UNLESS DIRECTED BY THE ENGINEER, OR IF QUANTITIES HAVE BEEN DEPLETED.



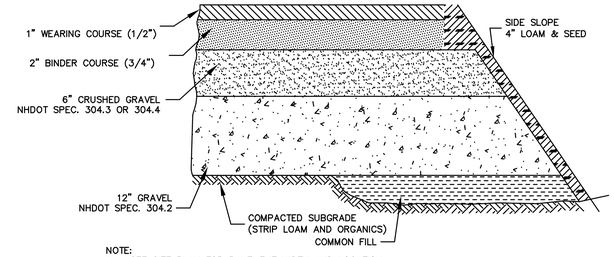

CONCRETE SIDEWALK
SCALE: N.T.S




| RADIUS | MAX. LENGTH USE CURVED CURB |
|---|---|
| <20' | |
| 21'-25' | 3' |
| 26'-30' | 4' |
| 31'-35' | 5' |
| 36'-40' | 6' |
| 41'-50' | 7' |
| 51'-56' | 8' |
| 56'-60' | 9' |
| OVER 60' | 10' |

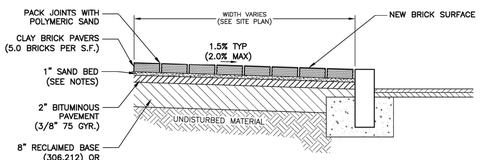
NOTES:
1. CURB TO BE SET TO LINE AND GRADE SPECIFIED.
2. ALL RADII 20 FEET AND SMALLER SHALL USE CURVED SECTIONS.
3. CURB AT FLUSH SECTION OF SIDEWALK SHALL BE SET TO 1.5% (2.0% MAX.) SLOPE. CURB AT RAMPS SHALL BE SET TO 8.0% (8.3% MAX.). IT IS THE CURB CONTRACTORS RESPONSIBILITY TO VERIFY SLOPES WITH A SMART LEVEL.
4. VERTICAL GRANITE JOINTS SHALL BE MORTARED.
5. SEE CHART FOR MAX / MIN STONE LENGTHS.
6. RESET EXISTING CURB, ANY MISSING OR DAMAGED CURB SHALL BE REPLACED WITH MATCHING CURB SIZE.
7. NO CURB LESS THAN 3' IN LENGTH WILL BE ALLOWED.
8. CURB MATERIAL SHALL BE FROM THE SAME LOT OF GRANITE. VARIANCES IN COLOR AND TYPE WILL NOT BE ACCEPTED.

VERTICAL GRANITE CURB
SCALE: N.T.S



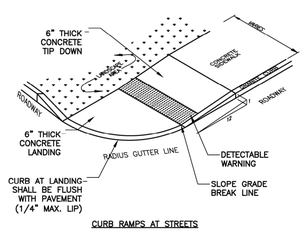

NOTE:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
3. GEOTEXTILE FABRIC MAYBE REQUIRED UNDER THE ROADWAY AND /OR THE PARKING AREAS AS REQUIRED BY THE ENGINEER BASED UPON SITE CONDITIONS.

TYPICAL PAVEMENT SECTION
N.T.S.

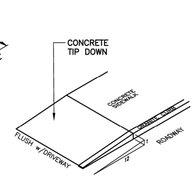



NOTES:
1. PINEHALL PAVERS ARE REQUIRED. CONTRACTOR SHALL SUBMIT SAMPLE OF BRICKS FOR APPROVAL BY THE CITY OF PORTSMOUTH.
2. IN AREAS WHERE BRICK DOES NOT ABUT CURBING, EDGING SHALL BE INSTALLED TO HOLD BRICKS IN PLACE.
3. SAND BEDDING: 3 PARTS SAND MIX AND 1 PART PORTLAND CEMENT.
4. BRICKS SHALL BE CLASS SX, TYPE 1, APPLICATION PX. BRICKS SHALL BE NO.1, WIRE CUT FOR PAVING w/COMPRESSIVE STRENGTH OF 6,000psi (MIN.). BRICKS SHALL NOT BE CORED OR HAVE FROGS AND SHALL BE STANDARD SIZE (2.25"x3.625"x7.625").
5. BASE MATERIAL SHALL BE REHANDLED RECLAIMED BASE MATERIAL. IN THE EVENT THE RECLAIMED MATERIAL IS UNSUITABLE, OR QUANTITIES HAVE BEEN DEPLETED, 304.3 CRUSHED GRAVEL BASE SHALL BE USED.

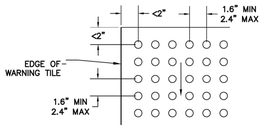
BRICK SIDEWALK
SCALE: N.T.S



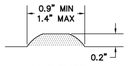

CURB RAMPS AT STREETS




RAMPS AT DRIVEWAYS

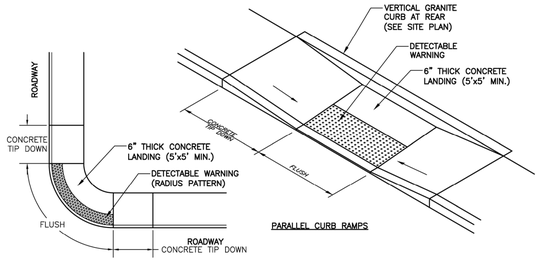



DETECTABLE WARNING TILE




DOME SECTION

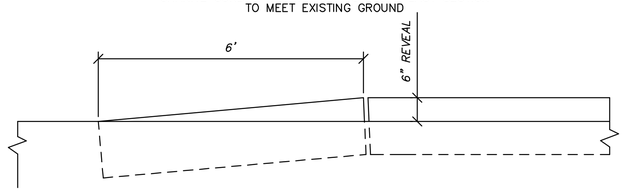
NOTES:
1. ALL CURB RAMPS AND SIDEWALKS SHALL COMPLY WITH ADA (AMERICANS WITH DISABILITIES ACT).
2. TIP DOWNS SHALL HAVE A RUNNING SLOPE OF 7.5% (8.3% MAX.) AND CROSS SLOPE OF 1.5% (2.0% MAX.).
3. THERE SHALL BE NO CHANGE IN ELEVATION (LIP) OR GAPS IN THE SIDEWALK RAMPS GREATER THAN 1/4".
4. LANDINGS AND AREAS OF CHANGE IN DIRECTION SHALL HAVE A SLOPE OF 1.5% (2.0%) IN ALL DIRECTIONS.
5. DETECTABLE WARNINGS SHALL INSTALLED SO THAT PATTERN IS IN LINE WITH DIRECTION OF TRAVEL TO THE EXTENT POSSIBLE.
6. DETECTABLE WARNING TILES SHALL BE PLACED SO THAT THE EDGE CLOSEST TO THE CURB IS BETWEEN 6"-8" FROM CURB LINE.
7. DETECTABLE WARNING TILE SHALL SPAN THE FULL WIDTH OF THE RAMP AND A MINIMUM OF 24" DEEP.
8. DETECTABLE WARNING TILE SHALL BE CAST IRON, NEENAH FOUNDRY OR APPROVED EQUAL. RADIUS ADA CURB RAMPS SHALL HAVE DETECTABLE WARNING TILES IN A RADIUS PATTERN USING TUFTILE OR APPROVED EQUAL.
9. CONCRETE AT DETECTABLE WARNING RAMPS SHALL BE FIBER REINFORCED WITH A MEDIUM BROOM FINISH.
10. BASE MATERIAL FOR CONCRETE SECTIONS SHALL BE EITHER 8" THK RECLAIM BASE (306.36), OR 8" THK CRUSHED GRAVEL BASE (NHDOT 304.3).




RADII CURB RAMPS

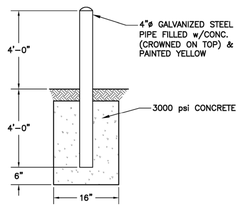
CURB RAMP DETAILS
SCALE: N.T.S

GRANITE CURB & MORTAR JOINTS SLOPE LAST SECTION
TO MEET EXISTING GROUND




SIMILAR TREATMENT BOTH SIDES OF OPENING

"TIP-DOWN" CURB DETAIL
N.T.S.

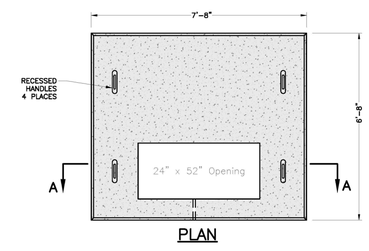



BOLLARD
SCALE: N.T.S

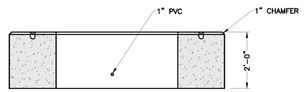
NOTES:
1. SEE SITE PLAN FOR LOCATIONS.
2. DISTURBED AREA AROUND BOLLARD SHALL BE RESTORED TO MATCH EXISTING.

SHEA CONCRETE PRODUCTS — New England's Premier Precaster
800-696-7432 (SHEA) www.sheaconcrete.com
MAILING ADDRESS: 87 HAVERHILL RD AMESBURY, MA 01913

EVERSOURCE-NH 53-111 3-PHASE
TRANSFORMER PAD 75-500 KVA




PLAN

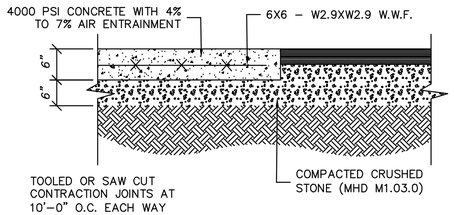



SECTION A-A

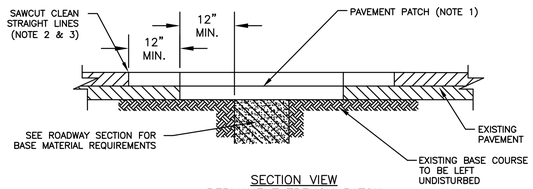
NOTES:
1. CONCRETE: 4,000 PSI MIN. AFTER 28 DAYS
2. REINFORCEMENT STEEL CONFORMS TO ASTM A615 GRADE 60 #6 REBAR.
3. PAD MEETS OR EXCEEDS EVERSOURCE SPECIFICATIONS

| | | | | | |
|---|---|---|---|---|---|
| SHEA PRODUCT ID: | 53-111 | FILE NAME: | ES-NH TP 53-111 | | |
| WEIGHT (LBS): | 12,600# | DRAWN BY: | NMB | DATE: 03/21/2018 | PAGE: III.C.3 |

773 Salem Street-Wilmington, MA | 153 Cranberry Hwy-Rochester, MA | 87 Haverhill Road-Amesbury, MA | 160 Old Turnpike Rd-Nottingham, NH
Specifications subject to change without notice




CONCRETE PAD DETAIL
N.T.S.




SECTION VIEW
PERMANENT TRENCH PATCH
N.T.S.

NOTES (PERMANENT):
1. PERMANENT PAVEMENT PATCH SHALL BE 3/4" BINDER FOR THE FULL THICKNESS. THICKNESS SHALL BE 4" OR MATCH EXISTING (WHICHEVER IS GREATER), PLACED AND COMPACTED IN TWO LIFTS. THICKNESS MUST BE APPROVED BY THE ENGINEER.
2. PERMANENT PAVEMENT PATCH SHALL BE MILLED 1.5" AFTER SUFFICIENT TIME FOR ANY SETTLEMENT. MILL AREA SHALL EXTEND 12" BEYOND THE BINDER EDGE.
3. PERMANENT PAVEMENT PATCH REQUIRES RUBBER JOINT SEALANT ON ALL JOINTS AFTER WEARING COURSE HAS BEEN PLACED.
4. EXTENT OF PAVING MAY EXTEND BEYOND DIMENSIONS SHOWN IN THE DETAIL AS DIRECTED BY THE ENGINEER.

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GNE CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

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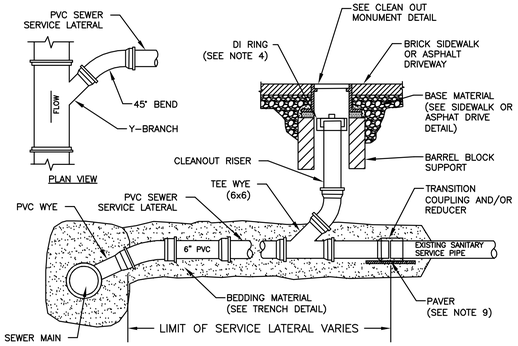
DATE: XXX
SCALE: XX
DRAWN BY: XX
DESIGN BY: XX
APPROVED BY:XX
PROJECT NO: 25066
FILE: XXX

DETAILS

STEPHEN MATEUX & CHRISTINE MAYEUX
64 BRIDGE STREET
PORTSMOUTH, NH

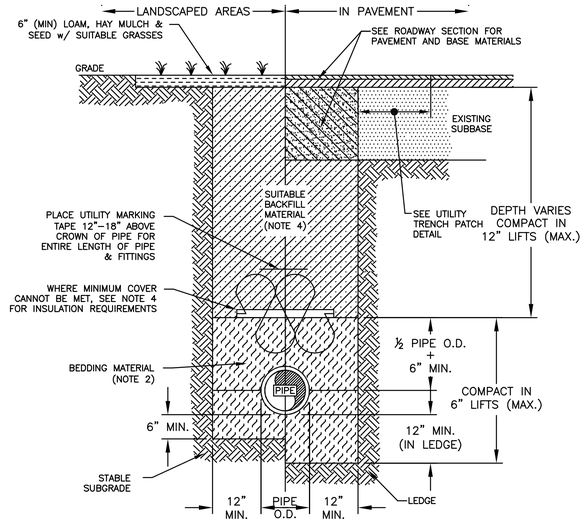
64 BRIDGE STREET
PORTSMOUTH, NH

7



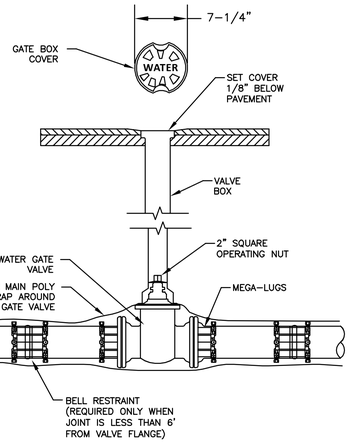

SEWER SERVICE CONNECTION
N.T.S

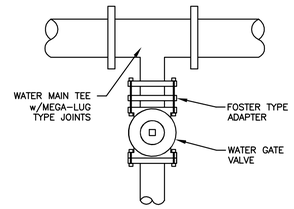
NOTES:
1. SEWER SERVICE LATERAL SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT.
2. WARNING TAPE SHALL BE PLACED 12" ABOVE SERVICE LATERAL.
3. 10" DIA. CAST IRON MONUMENT BOX SHALL BE INSTALLED WHEN CLEANOUT IS AT PAVED (ASPHALT, CONCRETE OR BRICK) SURFACE.
4. WHEN CLEANOUT IS PLACED IN LAWN AREA, IT SHALL BE CAPPED 6" BELOW GRADE. A 6" LENGTH OF 8" DIA. DI PIPE SHALL BE PLACED AROUND CLEANOUT WHEN CLEANOUT IS BURIED AND NO DI COVER USED.
5. COVER / BARREL BLOCK TRANSITION SHALL BE PARGED AND SEALED WITH MORTAR.
6. CLEANOUT TO BE USED TO PLUG & TEST ALL NEW LATERALS.
7. EXISTING SEWER LATERALS AT AREAS WHERE NO NEW SEWER MAIN IS TO BE INSTALLED THAT IS DAMAGED DUE TO OTHER PIPE INSTALLATION SHALL BE REPAIRED AT NO ADDITIONAL COST.
8. PVC TO PVC REPAIRS SHALL BE DONE WITH PVC GASKETED REPAIR COUPLINGS. COUPLINGS TO TRANSITION FROM ANY OTHER TYPE OF PIPE MATERIAL TO PVC MUST BE A MAXADAPTOR (BY GRIPPER GASKET, OR APPROVED EQUAL)
9. RUBBER BOOT CONNECTIONS (FERNCO) ONLY ALLOWED WHEN APPROVED BY CITY DPW. RUBBER BOOT CONNECTIONS REQUIRE A 16x8x2 SOLID PAVER BLOCK PLACED UNDER THE BOOT, CENTERED ON THE JOINT.




GENERAL UTILITY TRENCH
N.T.S

NOTES:
1. PIPE AND FITTING MATERIALS (UNLESS OTHERWISE INDICATED ON THE PLANS):
   WATER – CLASS 52 DUCTILE IRON
   SEWER – PVC SDR35
   DRAIN – HIGH DENSITY POLYETHYLENE (HDPE)
2. BEDDING MATERIAL (FULL WIDTH OF TRENCH):
   WATER – SAND (NHDOT 304.1)
   SEWER – 3/4" WASHED CRUSHED STONE
   DRAIN – 3/4" WASHED CRUSHED STONE
3. SAND SHALL NOT BE DIRECTLY PLACED ON CRUSHED STONE. IN THE EVENT FINELY GRADED BACKFILL OR SAND IS USED ABOVE STONE, GEOTEXTILE FABRIC SHALL BE PLACED TO SEPARATE.
4. SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT OR CLAY, EXCAVATED LEDGE MATERIAL, AND ANY OTHER ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIALS DEEMED TO BE UNACCEPTABLE BY THE ENGINEER.
5. DEPTH OF COVER SHALL BE:
   WATER – 5' MIN. & 7' MAX. (<5' REQ. RIGID INS.)
   SEWER – AS INDICATED ON PLANS (<6' REQ. RIGID INS.)
   DRAIN – AS INDICATED ON PLANS
   2" RIGID FOAM INSULATION SHALL BE PLACED ON TOP OF BEDDING MATERIAL. BEDDING MATERIAL SHALL BE MADE SMOOTH TO ALLOW FOAM BOARD TO SIT WITHOUT VOIDS BENEATH. FOAM SHALL BE INSTALLED THE FULL WIDTH OF THE TRENCH, NOT TO EXCEED 4' WIDE.
6. DUCTILE IRON WATER MAIN SHALL BE POLY WRAPPED AND HAVE THREE BRASS WEDGES (FOR CONTINUITY AND TRACING) AT ALL NON MECHANICAL CONNECTIONS.
7. ALL PIPES GREATER THAN 12" DIA. WITH STONE BEDDING, BEDDING SHALL BE WRAPPED IN GEOTEXTILE FABRIC. GEOTEXTILE FABRIC SHALL BE MIRAFI 140N OR APPROVED EQUAL. FABRIC SHALL BE WRAPPED COMPLETELY AROUND STONE w/12" (MIN) OVERLAP AT SEAMS.

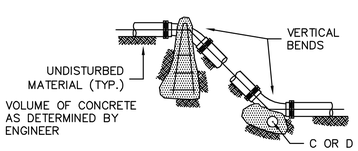



GATE VALVE AT TEE

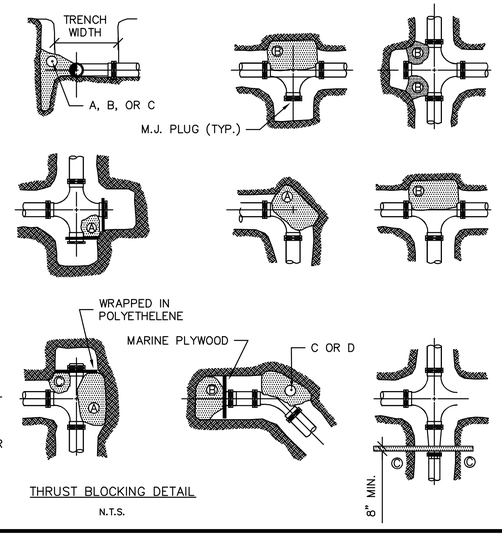
NOTES:
1. WATER GATE VALVES SHALL OPEN RIGHT (CITY OF PORTSMOUTH) AND OPEN LEFT (PEASE TRADEPORT).
2. VALVE BOXES SHALL BE HEAVY PATTERN CAST IRON, TWO PIECE, SLIP TYPE, 5-INCH DIAMETER SHAFT WITH EXTENSIONS PIECES TO ALLOW FOR SUFFICIENT COVER.
3. THE UPPER SECTION OF THE BOX SHALL BE TOP-FLANGE TYPE TO PREVENT SETTLEMENT.
4. THE LOWER SECTION OF THE BOX SHALL BE BELLED-TYPE TO ENCLOSE THE OPERATING NUT OF THE VALVE.
5. THE COVER SHALL BE CAST IRON WITH THE WORD "WATER" PLAINLY CAST.
6. WHEN A PROJECT REQUIRES GATE BOX TOP TO TEMPORARILY BE SET TO BINDER DEPTH, THEN RAISED TO FINAL GRADE, RISER RINGS ARE NOT PERMITTED. CONTRACTOR SHALL RAISE THE ENTIRE TOP SECTION OF THE VALVE BOX TO FINAL GRADE. ASPHALT MATCHING THE THICKNESS OF THE BINDER SHALL BE PLACED AND COMPACTED BENEATH THE GATE BOX TOP FLANGE.
7. WHEN RISER RINGS ARE THE ONLY OPTION, ONLY FLANGED RISERS WILL BE PERMITTED.
8. WHEN FOSTER ADAPTOR CONNECTION IS NOT POSSIBLE, VALVES SHALL BE ANCHORED BACK TO MECHANICAL JOINTS WITH THREADED RODS.

WATER GATE VALVE
N.T.S

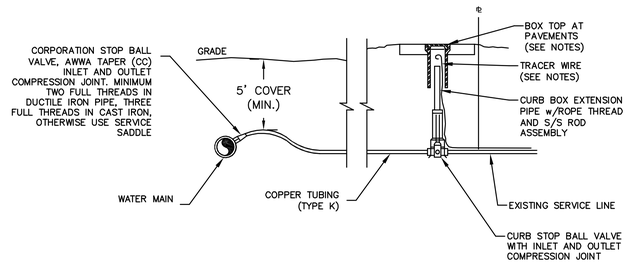



| TEST PRESSURE = 200psi | SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL | | | | | |
|---|---|---|---|---|---|---|
| | REACTION TYPE | PIPE SIZE | | | | |
| | | 4" | 6" | 8" | 10" | 12" |
| | A 90° | 0.89 | 2.19 | 3.82 | 11.14 | 17.24 |
| | B 180° | 0.65 | 1.55 | 2.78 | 8.38 | 12.00 |
| | C 45° | 0.48 | 1.19 | 2.12 | 6.02 | 9.32 |
| | D 22-1/2° | 0.25 | 0.60 | 1.06 | 3.08 | 4.74 |
| | E 11-1/4° | 0.13 | 0.30 | 0.54 | 1.54 | 2.38 |

NOTES:
1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
4. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS.




THRUST BLOCKING DETAIL
N.T.S.




NOTES:
1. SERVICE SIZE SHALL BE EQUAL TO EXISTING, OR 1"ø MINIMUM, WHICHEVER IS LARGER.
2. PROVIDE NEW LINE USING CONTINUOUS LENGTHS OF COPPER. NO COUPLING ALLOWED IN ROADWAY WITHOUT APPROVAL OF ENGINEER.
3. TAP ORIENTATION TO BE MADE AT APPROXIMATELY 2:00 AND 10:00.
4. PROVIDE FOR SERVICE LINE CONTRACTION AND EXPANSION BY INSTALLING "S" IN SERVICE LINE NEAR MAIN.
5. 2" RIGID FOAM INSULATION REQUIRED OVER SECTIONS OF SERVICE PIPES WITH LESS THAN 4' OF COVER.
6. REMOVE EXISTING CURB STOP AND REPLACE.
7. CONNECT CURB STOP TO EXISTING SERVICE LINE AT PROPERTY LINE, BACK SIDE OF SIDEWALK, OR AT LOCATION APPROVED BY THE ENGINEER AFTER PRESSURE TESTING AND DISINFECTION.
8. SERVICE CONNECTIONS OF 1-1/4" AND LARGER SHALL USE A SERVICES SADDLE.
9. CONTRACTOR SHALL COORDINATE SERVICE INSTALLATIONS WITH HOMEOWNERS TO ALLOW ADEQUATE ADVANCED NOTICE OF WATER SERVICE INTERUPTIONS.
10. CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS IMMEDIATELY IN THE EVENT GALVANIZED STEEL PIPE IS ENCOUNTERED. CONTRACTOR SHALL TAKE PHOTOS OF THE CURB STOP CLEARLY IDENTIFYING THE PIPES THAT ARE GALVANIZED STEEL.
11. CURB BOX TOPS INSTALLATION SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
    IN GRASS – STANDARD HAYES TOP.
    IN SIDEWALK AND DRIVEWAYS – OPERATING PIPE SHALL EXTEND TO APPROXIMATELY 2"-3" BELOW FINISHED GRADE AND COVERED WITH A PLASTIC CAP. A BUFFALO BOX TOP (24" DEPTH) SHALL BE PLACED OVER THE OPERATING PIPE AND BROUGHT TO FINISHED SIDEWALK GRADE.
    IN ROADWAY – OPERATING PIPE SHALL EXTEND TO APPROXIMATELY 2"-3" BELOW FINISHED GRADE AND COVERED WITH A PLASTIC CAP. A GATE BOX TOP (24" DEPTH) SHALL BE PLACED OVER THE OPERATING PIPE AND BROUGHT TO FINISHED ROADWAY GRADE.
12. TRACER WIRE ON PRIVATE PROPERTY SIDE SHALL BE BROUGHT TO GRADE AND LEFT IN BOX WHEN PRIVATE SIDE IS PLASTIC. TRACER WIRE SHALL NOT PLACED IN THE OPERATING ROD PIPE.
13. ROD ASSEMBLY: OPERATING ROD AND COTTER PINS SHALL BE STAINLESS STEEL.

WATER SERVICE CONNECTION
N.T.S

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY


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CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
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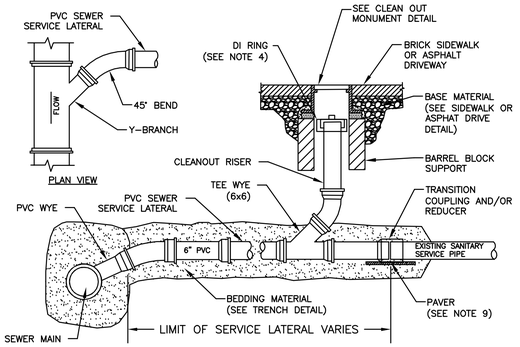

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DATE: XXX
SCALE: XX
DRAWN BY: XX
DESIGN BY: XX
APPROVED BY:XX
PROJECT NO: 25066
FILE: XXX

CONCEPT-002

STEPHEN MATEUX & CHRISTINE MAYEUX
64 BRIDGE STREET
PORTSMOUTH, NH

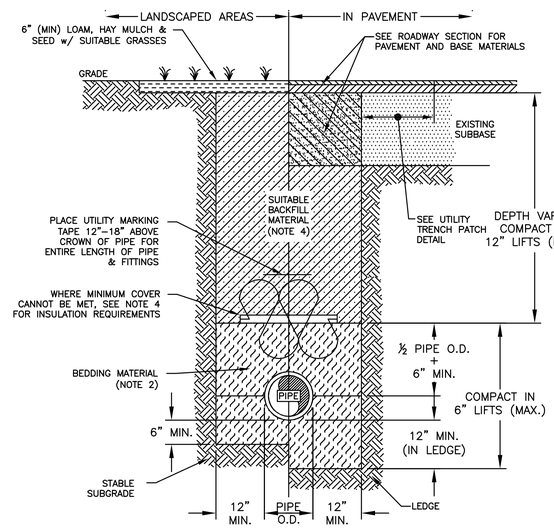
64 BRIDGE STREET
PORTSMOUTH, NH




SEWER SERVICE CONNECTION

SCALE: N.T.S

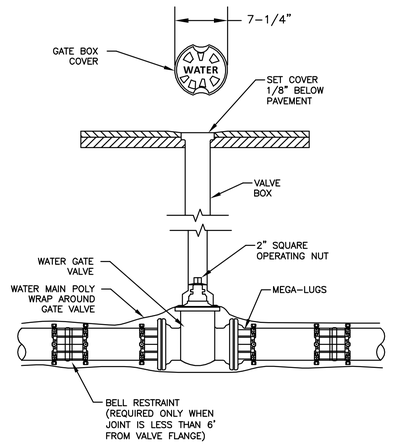
NOTES:
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GENERAL UTILITY TRENCH

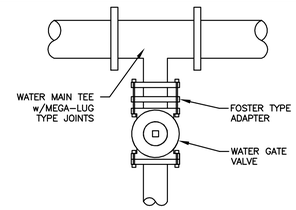
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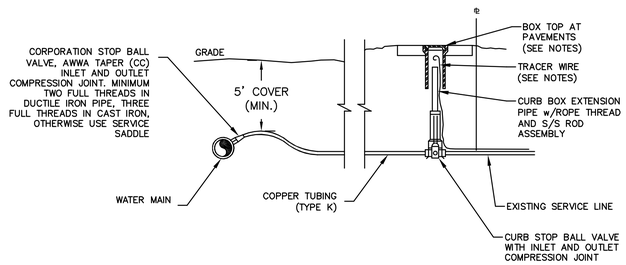

WATER GATE VALVE

SCALE: N.T.S




GATE VALVE AT TEE

NOTES:
1. WATER GATE VALVES SHALL OPEN RIGHT (CITY OF PORTSMOUTH) AND OPEN LEFT (PEASE TRADEPORT).
2. VALVE BOXES SHALL BE HEAVY PATTERN CAST IRON, TWO PIECE, SLIP TYPE, 5–INCH DIAMETER SHAFT WITH EXTENSIONS PIECES TO ALLOW FOR SUFFICIENT COVER.
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8. WHEN FOSTER ADAPTOR CONNECTION IS NOT POSSIBLE, VALVES SHALL BE ANCHORED BACK TO MECHANICAL JOINTS WITH THREADED RODS.




NOTES:
1. SERVICE SIZE SHALL BE EQUAL TO EXISTING, OR 1"ø MINIMUM, WHICHEVER IS LARGER.
2. PROVIDE NEW LINE USING CONTINUOUS LENGTHS OF COPPER. NO COUPLING ALLOWED IN ROADWAY WITHOUT APPROVAL OF ENGINEER.
3. TAP ORIENTATION TO BE MADE AT APPROXIMATELY 2:00 AND 10:00.
4. PROVIDE FOR SERVICE LINE CONTRACTION AND EXPANSION BY INSTALLING "S" IN SERVICE LINE NEAR MAIN.
5. 2" RIGID FOAM INSULATION REQUIRED OVER SECTIONS OF SERVICE PIPES WITH LESS THAN 4' OF COVER.
6. REMOVE EXISTING CURB STOP AND REPLACE.
7. CONNECT CURB STOP TO EXISTING SERVICE LINE AT PROPERTY LINE, BACK SIDE OF SIDEWALK, OR AT LOCATION APPROVED BY THE ENGINEER AFTER PRESSURE TESTING AND DISINFECTION.
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13. ROD ASSEMBLY: OPERATING ROD AND COTTER PINS SHALL BE STAINLESS STEEL.

WATER SERVICE CONNECTION

SCALE: N.T.S

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY


GNE CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443


| NO. | REVISION | APP'D | DATE |
|---|---|---|---|
| | | | |

DATE: XXX
SCALE: XX
DRAWN BY: XX
DESIGN BY: XX
APPROVED BY:XX
PROJECT NO: 25066
FILE: XXX

CONCEPT–002

STEPHEN MATEUX & CHRISTINE MAYEUX
64 BRIDGE STREET
PORTSMOUTH, NH

64 BRIDGE STREET
PORTSMOUTH, NH

# Bridge St. Inn

## 64 BRIDGE ST. PORTSMOUTH, NH

## SCHEMATIC DESIGN
## NFC - 092925

LOCUS MAP: (N.T.S.)





T | W DESIGNS
254 Drake Hill Rd. Strafford, NH
TW-Designs.com | 603.664.2181


### Project Info:

Bridge St. Inn
64 BRIDGE ST. PORTSMOUTH, NH
SCHEMATIC DESIGN

### Architect of Record:

T | W Designs, LLC
254 Drake Hill Rd.
Strafford, NH 03884
603-664-2181

### Civil Engineer:

XXX

### Structural Engineer:

XXX

### Electrical Engineer:

XXX

### Mechanical Engineer:

XXX

### Plumbing Engineer:

XXX

### Fire Protection Eng.:

XXX

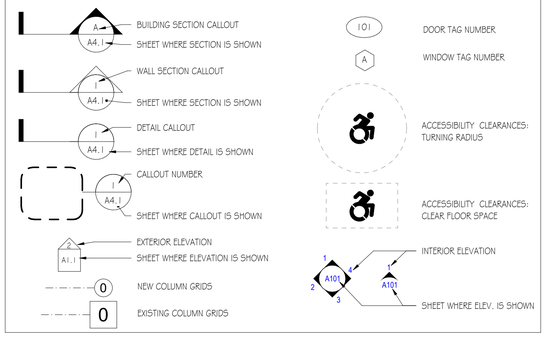
### Contractor of Record:

XXX

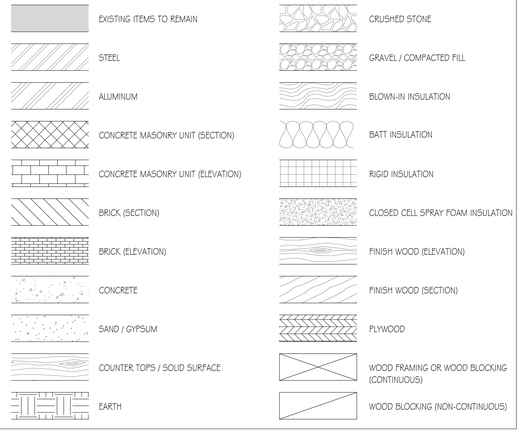
### MASTER ABBREVIATION KEY:

| | |
|---|---|
| AB | ANCHOR BOLT |
| AC | AIR CONDITIONER |
| ACI | AMERICAN CONCRETE INSTITUTE |
| ACOUST | ACOUSTIC |
| AFF | ABOVE FINISH FLOOR |
| ALT | ALTERNATE |
| ALUM | ALUMINUM |
| ANCH | ANCHOR |
| ANOD | ANODIZED |
| ASTM | AMERICAN SOCIETY FOR TESTING MATERIALS |
| BD | BOARD |
| BIT | BITUMINOUS |
| BL | BUILDING LINE |
| BLDG | BUILDING |
| BLK | BLOCK |
| BLKG | BLOCKING |
| BM | BEAM |
| BOC | BOTTOM OF CURB |
| BOF | BOTTOM OF FOOTING ELEVATION |
| BOT | BOTTOM |
| BRG | BEARING |
| BRK | BRICK |
| BSMT | BASEMENT |
| BTW | BETWEEN |
| BUR | BUILT-UP ROOF |
| CAB | CABINET |
| CB | CATCH BASIN |
| CER | CERAMIC |
| CF | CUBIC FOOT |
| CI | CAST IRON |
| CJ | CONTROL JOINT |
| CL | CLOSET |
| CLCB | CURBLESS CATCH BASIN |
| CLG | CEILING |
| CM | CONTRACT MANAGER |
| CMU | CONCRETE MASONRY UNIT |
| CO | CLEAN OUT |
| COL | COLUMN |
| COMP | COMPACTED (COMPOSITION) |
| CONC | CONCRETE |
| CONST | CONSTRUCTION |
| CONT | CONTINUOUS |
| CONTR | CONTRACTOR |
| CORR | CORRUGATED |
| CP | CONTROL PANEL |
| CSG | CASING |
| CSMT | CASEMENT |
| CT | CERAMIC TILE |
| CTR | CENTER |
| CY | CUBIC YARD |
| DF | DRINKING FOUNTAIN |
| DIA | DIAMETER |
| DIAG | DIAGONAL |
| DIM | DIMENSION |
| DL | DEAD LOAD |
| DN | DOWN |
| DR | DOOR |
| DS | DOWNSPOUT |
| DS/C | DRIVE SIDE OF CURB |
| DTL | DETAIL |
| DWG | DRAWING |
| E | EAST |
| EJ | EXPANSION JOINT |
| EJC | EXPANSION JOINT COVER |
| EL | ELEVATION |
| ELEC | ELECTRICAL |
| ELEV | ELEVATOR |
| EQ | EQUAL |
| EQUIP | EQUIPMENT |
| ER | EMERGENCY ROOM |
| EST | ESTIMATE |
| EWC | ELECTRICAL WATER COOLER |
| EXH | EXHAUST |
| EXIST | EXISTING |
| EXP | EXPANSION |
| EXPD | EXPANDED |
| EXT | EXTERIOR |
| F/F | FACE OF FOUNDATION WALL |
| FA | FRESH AIR |
| FAP | FIRE ALARM PANEL |
| FD | FLOOR DRAIN |
| FE | FIRE EXTINGUISHER |
| FEC | FIRE EXTINGUISHER CABINET |
| FIN | FINISH |
| FL | FLOW LINE |
| FLR | FLOOR |
| FND | FOUNDATION |
| FOF | FACE OF FINISH |
| FOM | FACE OF MASONRY |
| FOS | FACE OF STUD |
| FR | FIRE RATED |
| FS | FULL SIZE |
| FT | FOOT |
| FTG | FOOTING |
| FUR | FURRED (FURRING) |
| FVC | FIRE VALVE CABINET |
| GA | GAUGE |
| GALV | GALVANIZED |
| GC | GENERAL CONTRACTOR |
| GEN | GENERAL |
| GL | GLASS |
| GLZ | GLAZING |
| GRD | GRADE |
| GYP | GYPSUM |
| H#V | HEATING & VENTILATING |
| HC | HANDICAP |
| HDWD | HARDWOOD |
| HGT | HEIGHT |
| HM | HOLLOW METAL |
| HP | HIGH POINT |
| HVAC | HEATING, VENTILATION, AIR CONDITIONING |
| HWH | HOT WATER HEATER |
| ID | INSIDE DIAMETER |
| IN | INCH |
| INSUL | INSULATION |
| INT | INTERIOR |
| INV | INVERT |
| JC | JANITOR'S CLOSET |
| JST | JOIST |
| JT | JOINT |
| LAM | LAMINATE |
| LAV | LAVATORY |
| MAS | MASONRY |
| MAT | MATERIAL |
| MAX | MAXIMUM |
| MECH | MECHANICAL |
| MEM | MEMBRANE |
| MEP | MECHANICAL, ELECTRICAL, PLUMBING |
| METTP | METAL TOILET PARTITION |
| MFR | MANUFACTURER |
| MH | MANHOLE |
| MIN | MINIMUM |
| MISC | MISCELLANEOUS |
| MO | MASONRY OPENING |
| MTL | METAL |
| MULL | MULLION |
| N | NORTH |
| NAT | NATURAL |
| NEC | NECESSARY |
| NIC | NOT IN CONTRACT |
| NOM | NOMINAL |
| NRC | NOISE REDUCTION COEFFICIENT |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| OD | OUTSIDE DIAMETER |
| OF/C | OUTSIDE FACE OF CONCRETE |
| OH | OVERHEAD |
| OPG | OPENING |
| OPP | OPPOSITE |
| OR | OPERATING ROOM |
| PBD | PARTICLE BOARD |
| PCF | POUNDS PER CUBIC FOOT |
| PL | PROPERTY LINE |
| PLAM | PLASTIC LAMINATE |
| PLAS | PLASTER |
| PLYWD | PLYWOOD |
| PNL | PANEL |
| PSF | POUNDS PER SQUARE FOOT |
| PSI | POUNDS PER SQUARE INCH |
| PT | PAINT |
| PTD | PAINTED |
| PTN | PARTITION |
| PVC | POLYVINYL CHLORIDE |
| QT | QUARRY TILE |
| R | RADIUS |
| R/A | RETURN AIR |
| RC | REINFORCED CONCRETE |
| RD | ROOF DRAIN |
| REF | REFERENCE |
| REFR | REFRIGERATOR |
| REINF | REINFORCE |
| REQD | REQUIRED |
| RGH | ROUGH |
| RL | RAIN LEADER |
| RM | ROOM |
| RO | ROUGH OPENING |
| ROW | RIGHT OF WAY |
| RQMT | REQUIREMENT |
| S | SOUTH |
| S-TRAP | SEDIMENT TRAP |
| SC | SOLID CORE |
| SCED | SCHEDULE |
| SD | STORM DRAIN |
| SF | SQUARE FOOT |
| SH | SHOWER |
| SHT | SHEET |
| SIM | SIMILAR |
| SL | SLIDING |
| SMR | SINGLE PLY MEMBRANE ROOF |
| SP/PT/FIN | SPECIAL PAINT FINISH |
| SPEC | SPECIFICATION |
| SPKR | SPEAKER |
| SQ | SQUARE |
| SS | STAINLESS STEEL |
| STA | STATION |
| STD | STANDARD |
| STL | STEEL |
| STOR | STORAGE |
| STRG | STRINGER |
| STRUCT | STRUCTURAL |
| SU | SITE UTILITY |
| SUSP | SUSPEND (SUSPENDED) |
| SYMM | SYMMETRICAL |
| SYS | SYSTEM |
| T | TREAD |
| T&G | TONGUE & GROOVED |
| T/FRM | TOP OF FRAME |
| T/SLB | TOP OF SLAB |
| TB | TACKBOARD |
| TEL | TELEPHONE |
| TEMP | TEMPORARY |
| TERR | TERRAZZO |
| THK | THICK |
| THLD | THRESHOLD |
| TOC | TOP OF CURB |
| TOF | TOP OF FOUNDATION |
| TOS | TOP OF SLAB |
| TOW | TOP OF WALL ELEVATION |
| TR | TO REMAIN |
| TYP | TYPICAL |
| UH | UNIT HEATER |
| UL | UNDERWRITERS LABORATORIES, INC. |
| UOD | UNDERSIDE OF DECK |
| UON | UNLESS OTHERWISE NOTED |
| UR | URINAL |
| UV | UNIT VENTILATOR |
| VAR | VARIES OR VARIABLE |
| VB | VINYL BASE |
| VCT | VINYL COMPOSITION TILE |
| VERT | VERTICAL |
| VEST | VESTIBULE |
| VIF | VERIFY IN FIELD |
| VNR | VENEER |
| VOL | VOLUME |
| W | WEST |
| W/ | WITH |
| WC | WATER CLOSET |
| WD | WOOD |
| WDW | WINDOW |
| WGL | WIRE GLASS |
| WP | WEATHERPROOF (WATERPROOFING) |
| WWF | WELDED WIRE FABRIC |

### GRAPHIC SYMBOLS LEGEND




### MATERIAL LEGEND




### DRAWING SHEET INDEX:

| Sheet | Sheet Name | Issued | Revision | Revision Date |
|---|---|---|---|---|
| *PCS* | *PROJECT COVER SHEET* | *NFC 10/15/25* | | |
| *A1.1* | *FIRST FLOOR PLAN* | *NFC 10/15/25* | | |
| *A1.2* | *SECOND FLOOR PLAN* | *NFC 10/15/25* | | |
| *A1.3* | *THIRD FLOOR PLAN* | *NFC 10/15/25* | | |
| *A1.4* | *BASEMENT PLAN* | *NFC 10/15/25* | | |
| *A1.5* | *ROOF DECK* | *NFC 10/15/25* | | |
| *A9.1* | *Intersection View* | *NFC 10/15/25* | | |
| *A9.2* | *Exterior Views* | *NFC 10/15/25* | | |
| *A9.3* | *Misc. Views* | *NFC 10/15/25* | | |

### GENERAL NOTES:

1. DO NOT SCALE DRAWING OR DIMENSIONS. FOR MISSING DIMENSIONS OR DIMENSIONS IN CONFLICT, CONTACT THE CONTRACTOR IMMEDIATELY BEFORE CONTINUING WITH WORK.
2. ANY DISCREPANCIES IN THESE PLANS WILL BE BROUGHT TO THE CONTRACTOR'S ATTENTION IN WRITING IMMEDIATELY
3. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DESIGN-BUILD PLANS AND SPECIFICATION FOR LOCATIONS OF ALL BLOCK OUTS, INSERTS, OPENINGS, CURBS, BASES, & PADS THAT ARE NOT DIMENSIONED OR SHOWN ON CONTRACTOR'S DWG'S. OR STRUCTURAL DWG'S.
4. STRUCTURAL STEEL, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION PLANS AND SPECIFICATION SHALL BE PROVIDED AND ARE THE RESPONSIBILITY OF THERE RESPECTIVE SUBCONTRACTORS IF NOT CARRIED IN ARCHITECTURAL SERVICES
5. ALL CONSTRUCTION SHALL CONFORM TO AND BE IN ACCORDANCE WITH THE REGULATOR REQUIREMENTS MANDATED BY ALL FEDERAL, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION IN ACCORDANCE TO THE STATE IN WHICH THE WORK IS PERFORMED (STATE BUILDING CODE, STATE LIFE SAFETY & FIRE CODE ETC.)
6. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS AND VERIFY ALL DIMENSIONS AND FIELD CONDITIONS, AND SHALL CONFIRM WORK IS BUILDABLE AS SHOWN. ANY CONFLICTS OR OMISSIONS, ETC. SHALL BE IMMEDIATELY REPORTED IN WRITING TO THE ARCHITECT FOR CLARIFICATION
7. DIMENSIONS ARE FROM EXTERIOR FACE OF FOUNDATION, VENEER, OR WALL STUD AND TO CENTER OF ALL INTERIOR STUD WALLS OR FACE OF INTERIOR MASONRY. UNLESS NOTED OTHERWISE.
8. CLEAR DIMENSIONS ARE FROM FACE TO FACE OF WALL FINISH. UNLESS NOTED OTHERWISE
9. REFER TO MECHANICAL DRAWINGS / SPEC. FOR ALL SIZES AND LOCATIONS OF MECHANICAL DUCT WORK.
10. UNLESS OBVIOUSLY SHOWN OTHERWISE, DOOR LOCATIONS NOT DESIGNATED BY WRITTEN DIMENSION SHALL BE CENTERED IN THE WALL OR SHALL BE LOCATED FOUR (4) INCHES FROM FINISH WALL TO EDGE OF DOOR JAMB. PER PLAN.
11. PROVIDE METAL CORNER BEAD AT ALL OUTSIDE CORNERS OF PLASTERED OR DRYWALL SURFACES, UNLESS NOTED OTHERWISE.
12. PENETRATIONS OF ALL FIRE RATED ASSEMBLIES SHALL BE PROTECTED BY LIKE RATED CONSTRUCTION DAMPERS, SEALANTS, COLLARS, ETC., TYPICAL.
13. CONTRACTOR SHALL FURNISH, LOCATE AND INSTALL ALL ACCESS PANELS AS REQUIRED AFTER INSTALLATION OF MECHANICAL DUCTS, PLUMBING AND ELECTRICAL WORK, FIRE RATED AS REQUIRED.
14. FURNISH AND INSTALL SOLID BLOCKING BEHIND ALL WALL HUNG MILLWORK ITEMS, RAILS, FIXTURES,GRAB BARS, ETC. WHERE INDICATED OR REQUIRED.
15. CONTRACTOR SHALL LAYOUT OR MARK, ALL EQUIPMENT, SYSTEMS AND MILLWORK ON THE FLOOR FOR ARCHITECT OR OWNER'S APPROVAL PRIOR TO BEGINNING CEILING / OVER HEAD WORK.
16. ALL SPRINKLER HEAD LOCATIONS, MAINS, BRANCHES AND RISER PIPE LOCATIONS MUST BE COORDINATED WITH THE DESIGN / BUILD CONTRACTOR PRIOR TO WORK.
17. FURNISH AND INSTALL FIRE EXTINGUISHERS IN TYPE, QUANTITY, AND LOCATION PER LOCAL FIRE DEPARTMENT. TYPICAL
18. CONTRACTOR SHALL VERIFY, COORDINATE LOCATION WITH THE ARCHITECT ANY SMOKE, CARBON MONOXIDE DETECTOR OR FIRE ALARM DEVICE AS REQUIRED BY THE LOCAL FIRE DEPARTMENT.
19. FURNISH & INSTALL FIRE DAMPERS WITH FUSIBLE LOUVER WHEREVER DUCT WORK PENETRATES ONE OR TWO HOUR CEILINGS OR WALLS. TYPICAL UNLESS NOTED OTHERWISE.
20. PROVIDE PLASTER AND GYPSUM WALL BOARD CONTROL JOINTS AT 30'-0" ON CENTER FROM FLOOR TO CEILING, OR AS NOTED ON THE CONSTRUCTION DOCUMENTS. VERIFY IN FEILD WITH ARCHITECT PRIOR TO WORK.

**Revision Schedule**

| No. | Description | Date |
|---|---|---|

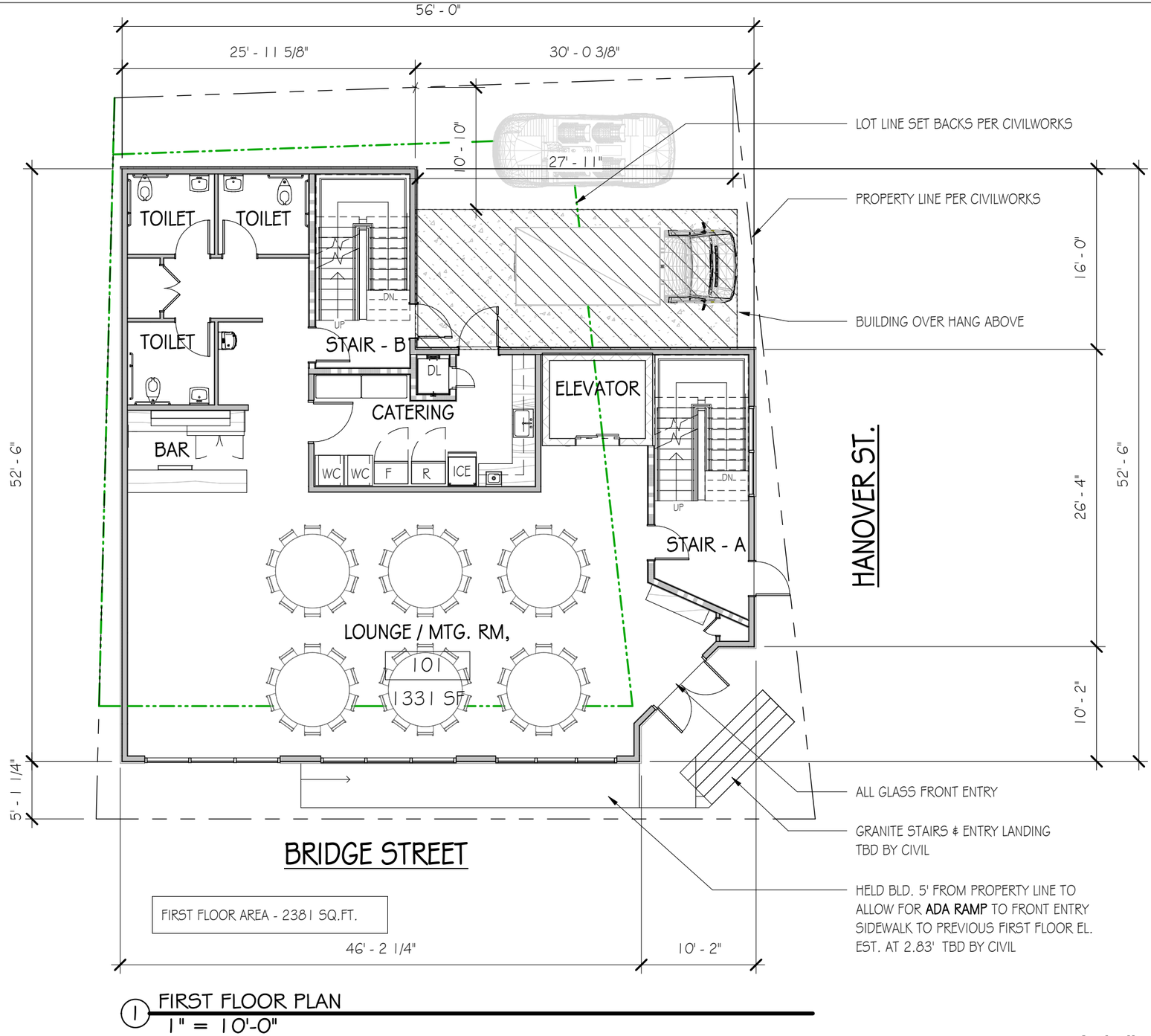
PROJECT COVER SHEET

SHEET NUMBER

PCS



2 INTERIOR BAR VIEW
1/4" = 1'-0"




1 FIRST FLOOR PLAN
1" = 10'-0"

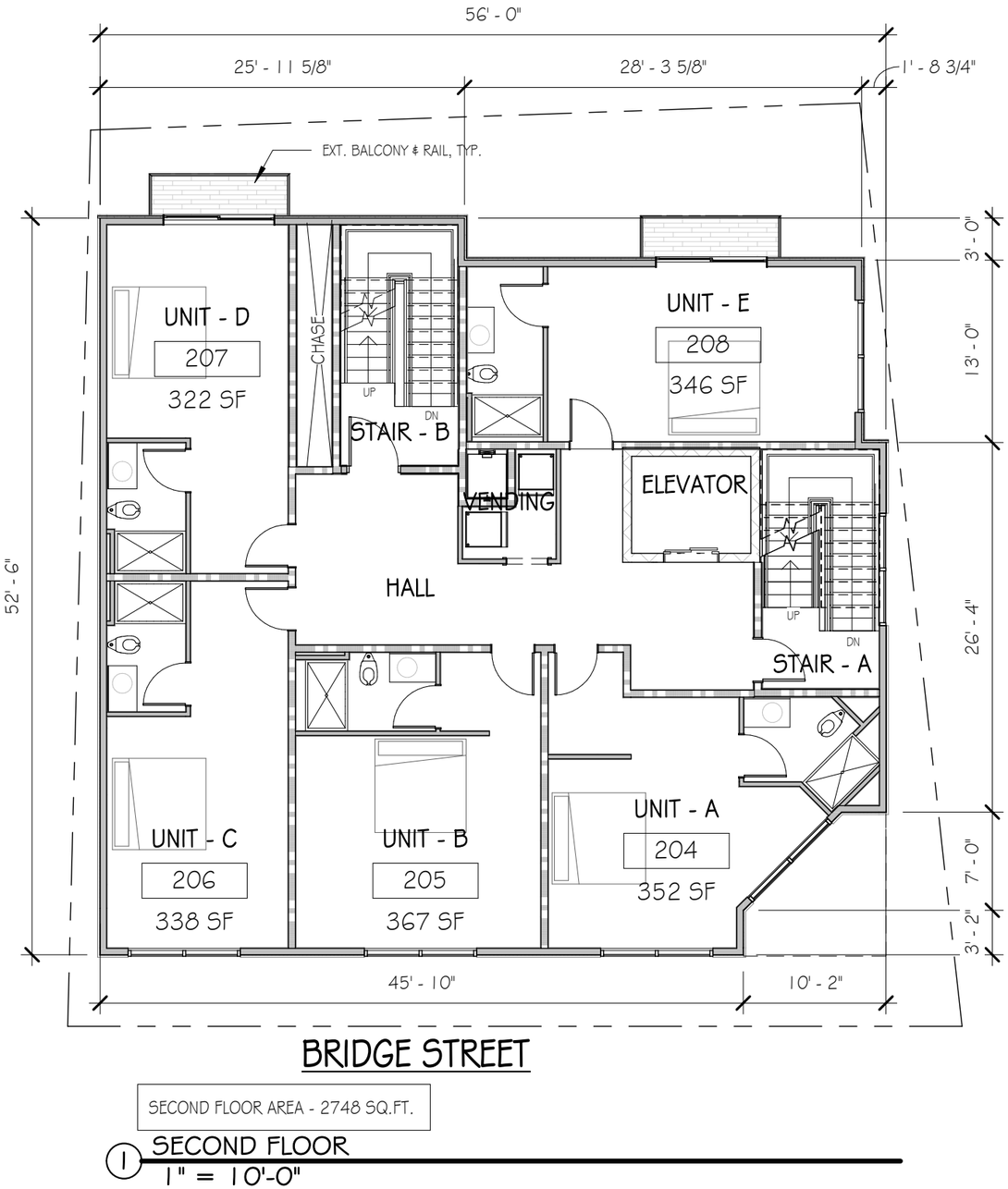
# FIRST FLOOR PLAN

## Bridge St. Inn

TW DESIGNS

As indicated
NFC - 092925
SCHEMATIC DESIGN

A1.1




SECOND FLOOR AREA - 2748 SQ.FT.

1 SECOND FLOOR
1" = 10'-0"

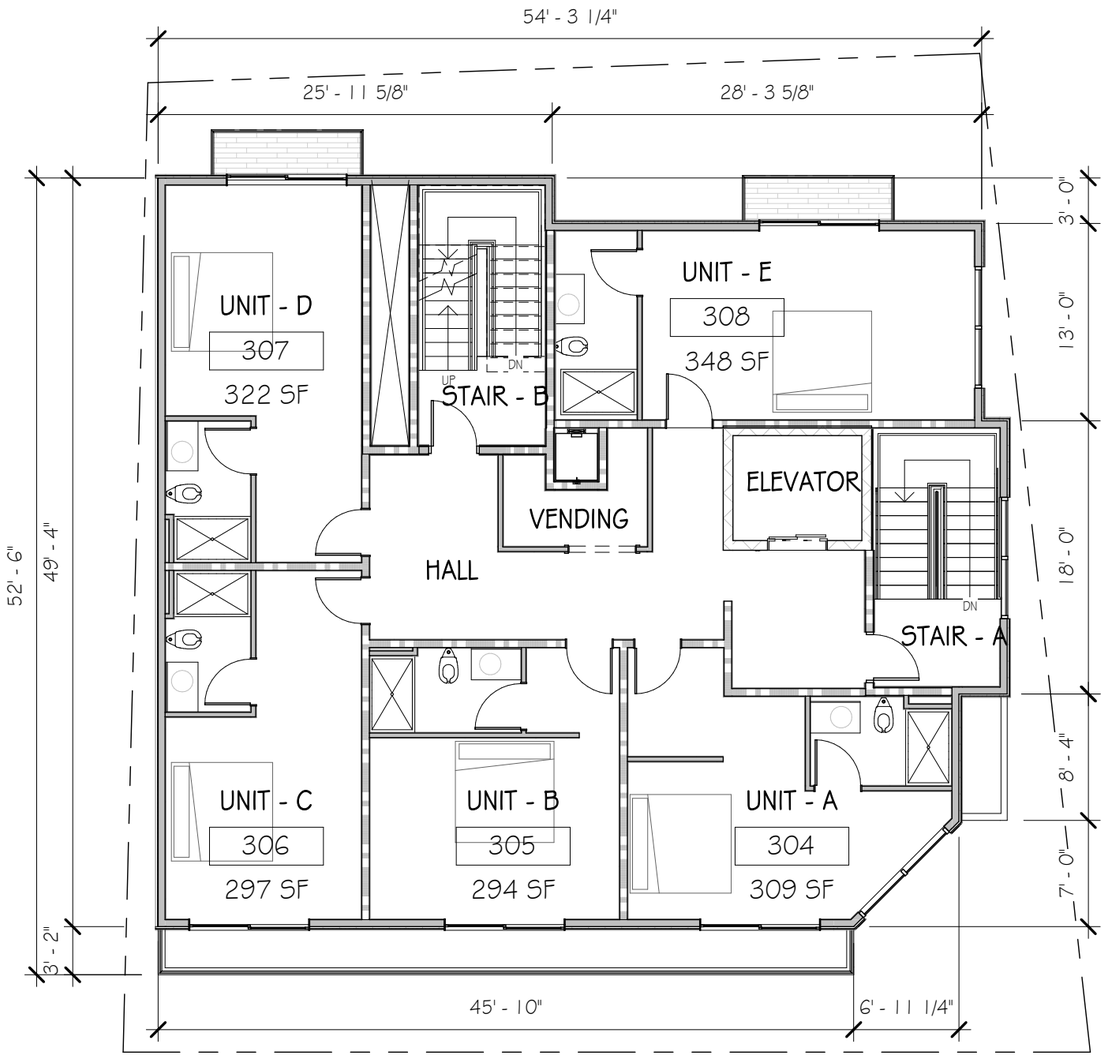
T|W DESIGNS

# SECOND FLOOR PLAN

## Bridge St. Inn

1" = 10'-0"
NFC - 092925
SCHEMATIC DESIGN

A1.2




THIRD FLOOR AREA - 2748 SQ.FT.

1 THIRD FLOOR
1" = 10'-0"

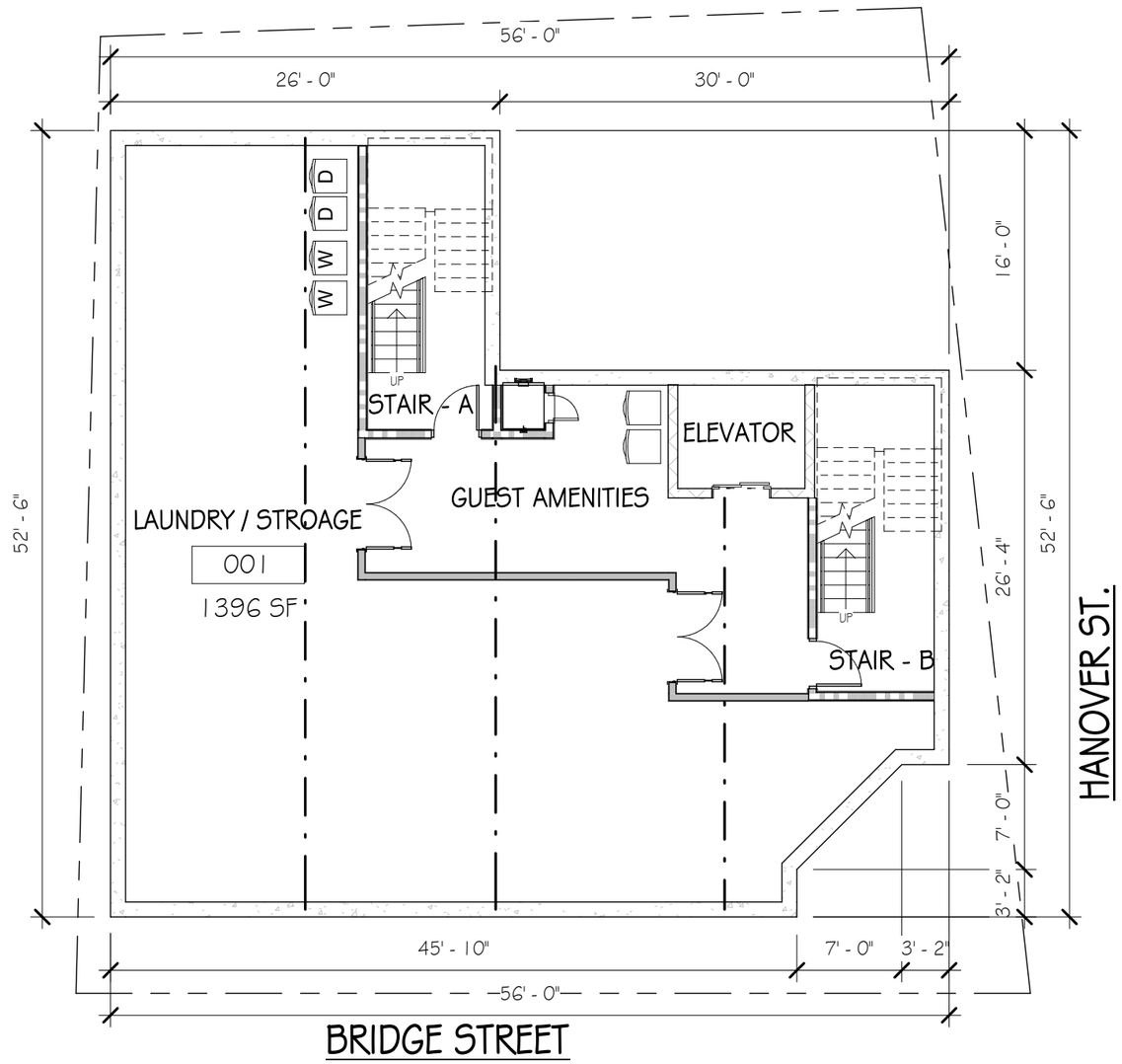
T|W DESIGNS

# THIRD FLOOR PLAN

## Bridge St. Inn

1" = 10'-0"
NFC - 092925
SCHEMATIC DESIGN

A1.3




BASEMENT AREA - 2381 SQ.FT.

1 BASEMENT LEVEL PLAN
1" = 10'-0"

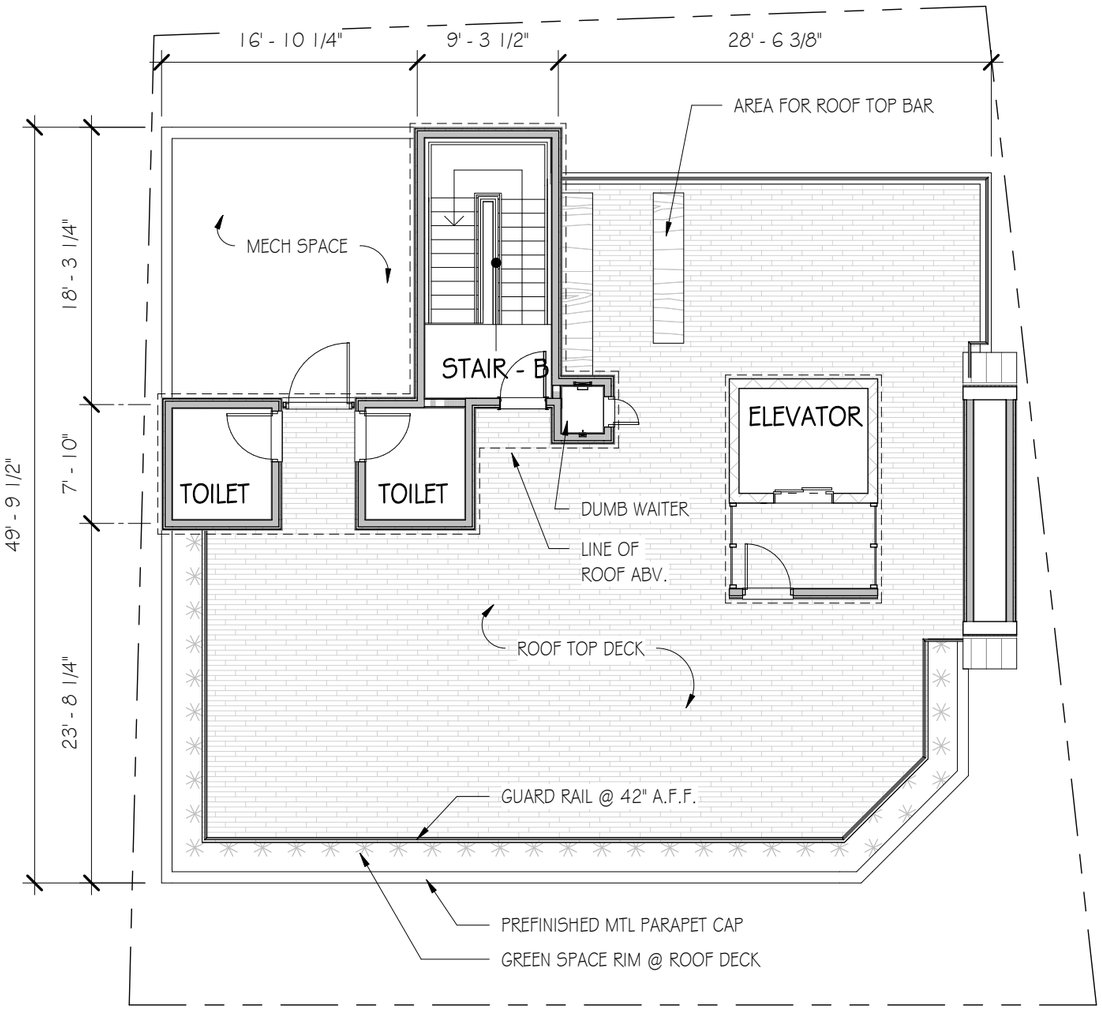
TW DESIGNS

# BASEMENT PLAN

## Bridge St. Inn

1" = 10'-0"
NFC - 092925
SCHEMATIC DESIGN

A1.4




ROOF DECK AREA - 1645 SQ.FT.

1 ROOF DECK
1" = 10'-0"

TW DESIGNS

# ROOF DECK

## Bridge St. Inn

1" = 10'-0"
NFC - 092925
SCHEMATIC DESIGN

A1.5

ROOF DECK & RAILING

ROUGHLY 39'-0" BUILDING HGT.
FROM SIDEWALK GRADE.
CIVILWORKS NEEDS TO CONFIRM

3RD FL. @ 10'-4" F/F
ALLOWS FOR 9' CLG @ 2ND FL.

2ND FL @ 12'-4" F/F
ALLOWS FOR 11' CLG. @ 1ST FL.




TW DESIGNS

# STREET VIEW - MASSING

## Bridge St. Inn

NFC - 092925
SCHEMATIC DESIGN

A3.1




TW DESIGNS

# Intersection View
# Bridge St. Inn

A9.1

NFC 10/15/25










TW DESIGNS

# Exterior Views
# Bridge St. Inn

A9.2

NFC 10/15/25









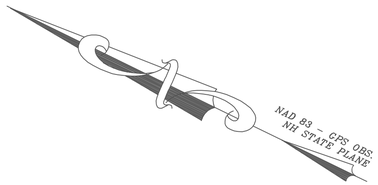
TW DESIGNS

# Misc. Views
# Bridge St. Inn

A9.3

NFC 10/15/25

LOCATION PLAN
( NO SCALE )






## Pad Mounted Oil Insulated Equipment Location and Mechanical Protection

### GENERAL

Pad-mounted oil insulated equipment (such as transformers, transclosures, switches, etc) should be installed so as to be accessible, not constitute an environmental hazard or a fire hazard, and be protected from damage. In underground areas, transformers installed at residential front lot lines are not subject to this requirement.

### LOCATION

The pad-mounted equipment should be installed at a location where permanent access will be assured for future operation and maintenance as well as to permit installation, replacement and removal of the equipment by means of a winch truck with the boom up. Where noise may be a problem, careful consideration should be given when selecting a location. Areas subject to flooding should be avoided, as should other environmentally sensitive areas. Refer to **Environmental Considerations**. The building owner's and/or tenant's fire insurance carrier may restrict the proximity of the equipment to doors, windows or combustible materials and such requirements are the responsibility of the customer subject to the requirements of the Company. In the absence of other requirements, the equipment shall be located with the following minimum clearances from various building facilities. The distances mentioned in this section shall not supersede any local ordinance or code which requires greater clearances.

| ITEM | MINIMUM DISTANCE | | |
|---|---|---|---|
| | IN FRONT OF IN FEET | TO SIDE OF IN FEET | BELOW IN FEET |
| Door | 20 | 10 | – |
| Air Intake | 10 | 10 | 25 |
| Window | 10 | 3 | 5 |
| Fire Escape | 20 | 20 | – |
| Combustible Wall | 6 | 6 | – |
| Noncombustible wall | 5 | 3 | – |
| Fuel tanks (above and below grade) | 10 | 10 | – |
| Natural Gas or Propane Connections (NH) | 15 | 15 | – |
| Gasoline Dispensing Unit | 20 | 20 | – |

### OIL SUMP

If the surrounding grade pitches toward critical areas, it is recommended that an oil sump be provided. This should consist of ¾" trap rock fill under and around the equipment pad adequate to contain the quantity of oil in the equipment to be installed at the given location.

### ADDITIONAL FIRE PROTECTION

If the building owner's and/or tenant's combustible facilities adjacent to the equipment require fire protection beyond that provided by oil sump, it shall be their responsibility to provide such protection in the form of space separation, fire resistant barriers, automatic spray systems, other oil containment facilities, or other means approved by their fire insurance company.

### EQUIPMENT PROTECTION

Where pad-mounted equipment would be exposed to possible damage by vehicular traffic, protective bumpers are to be installed on exposed sides. Galvanized steel pipes 4" minimum diameter filled with concrete, I-beams 5" minimum, or other suitable means of protection may be used as bumpers. Such pipes or I-beams shall extend 42" minimum both above and below grade (bumpers shall be set in cylindrical concrete foundations a minimum of 42" below grade). Heavier bumpers set deeper should be considered where exposed to heavy trucks. Bumpers should be 10' minimum from the operating side of concrete pad and on the other sides 36" minimum from equipment or pad, whichever projects farther. The maximum spacing between bumpers on exposed sides should be 60".

### EQUIPMENT LOCKS

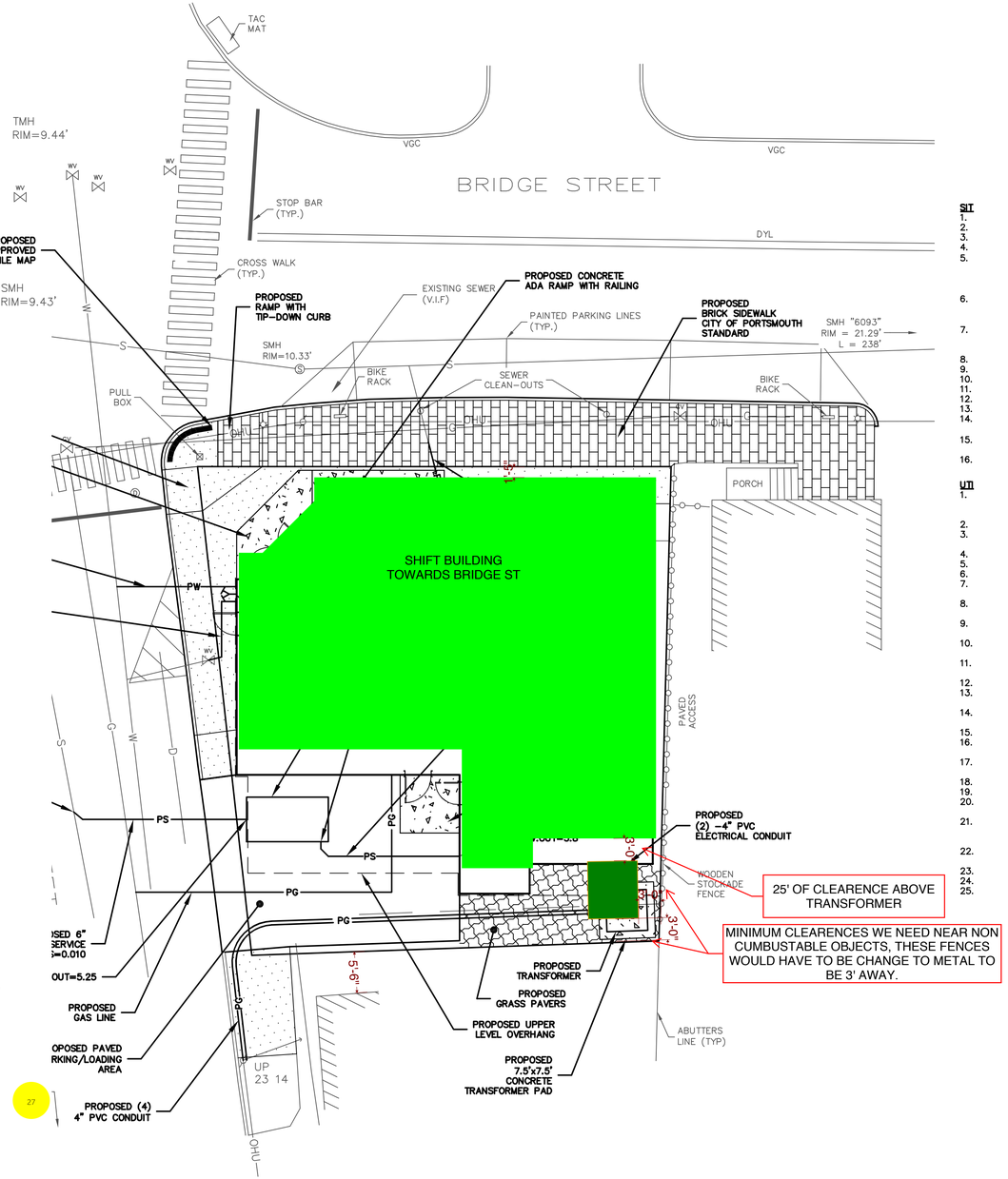
Any equipment, with provisions for locking, that is left on site and is accessible to the general public, shall be padlocked. This includes installations that are not complete and not energized.








NOTE:
CONTRACTOR IS REQUIRED TO CALL DIGSAFE AND COORDINATE LOCATIONS OF EXISTING UTILITY SERVICES A MINIMUM OF 72 HOURS PRIOR TO STARTING ANY WORK ON SITE.



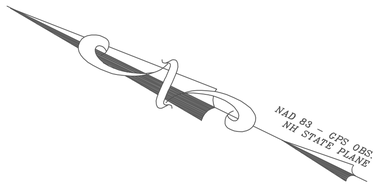

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)

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LOCATION PLAN
( NO SCALE )






## Pad Mounted Oil Insulated Equipment Location and Mechanical Protection

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### EQUIPMENT PROTECTION

Where pad-mounted equipment would be exposed to possible damage by vehicular traffic, protective bumpers are to be installed on exposed sides. Galvanized steel pipes 4" minimum diameter filled with concrete, I-beams 5" minimum, or other suitable means of protection may be used as bumpers. Such pipes or I-beams shall extend 42" minimum both above and below grade (bumpers shall be set in cylindrical concrete foundations a minimum of 42" below grade). Heavier bumpers set deeper should be considered where exposed to heavy trucks. Bumpers should be 10' minimum from the operating side of concrete pad and on the other sides 36" minimum from equipment or pad, whichever projects farther. The maximum spacing between bumpers on exposed sides should be 60".

### EQUIPMENT LOCKS

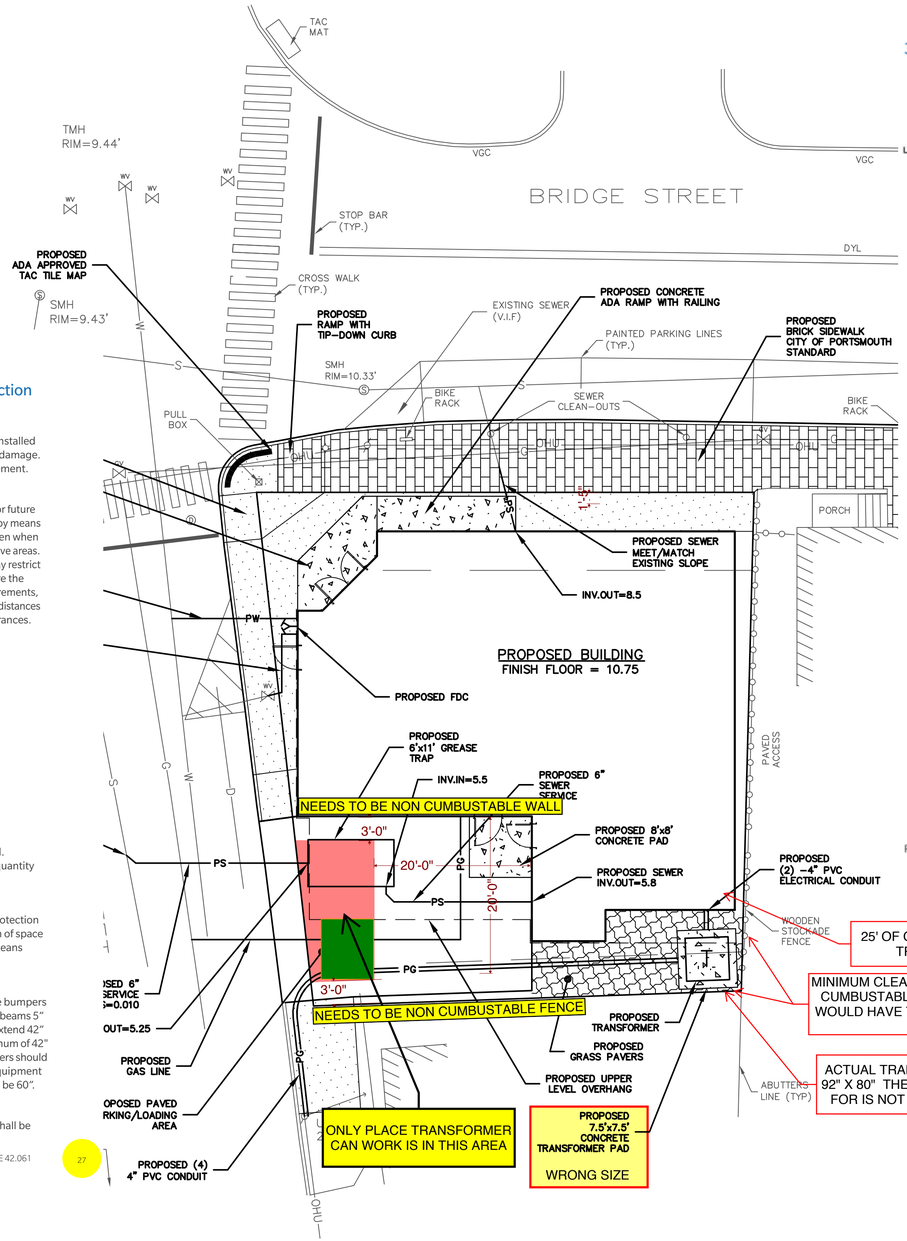
Any equipment, with provisions for locking, that is left on site and is accessible to the general public, shall be padlocked. This includes installations that are not complete and not energized.

EVERSOURCE INTERNAL REFERENCE 42.061

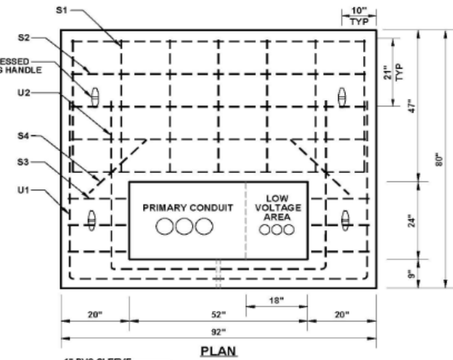


CALL BEFORE YOU DIG !

NOTE:
CONTRACTOR IS REQUIRED TO CALL DIGSAFE AND COORDINATE LOCATIONS OF EXISTING UTILITY SERVICES A MINIMUM OF 72 HOURS PRIOR TO STARTING ANY WORK ON SITE.




## 3 Phase Padmounted Transformer Slab 75-500 KVA Dead Front 15 KV and Below







| REINFORCING SCHEDULE (#6 BAR) | | | |
|---|---|---|---|
| Type | Qty | Length | Diagram |
| S1 | 14 | 41" | Straight |
| S2 | 10 | 86" | Straight |
| S3 | 12 | 14" | Straight |
| S4 | 4 | 24" | Straight |
| U1 | 2 | 194" | S4 #6 S4 |
| U2 | 2 | 170" | S4 #2 S4 |

Total Foundation Weight, 12,600 lbs.

EVERSOURCE INTERNAL REFERENCE 53.111

Refer to **Installation Requirements for Padmounted Transformer and Sector Cabinets** for additional details.



22.
23.
24.
25.

25' OF CLEARENCE ABOVE TRANSFORMER

MINIMUM CLEARENCES WE NEED NEAR NON CUMBUSTABLE OBJECTS, THESE FENCES WOULD HAVE TO BE CHANGE TO METAL TO BE 3' AWAY.

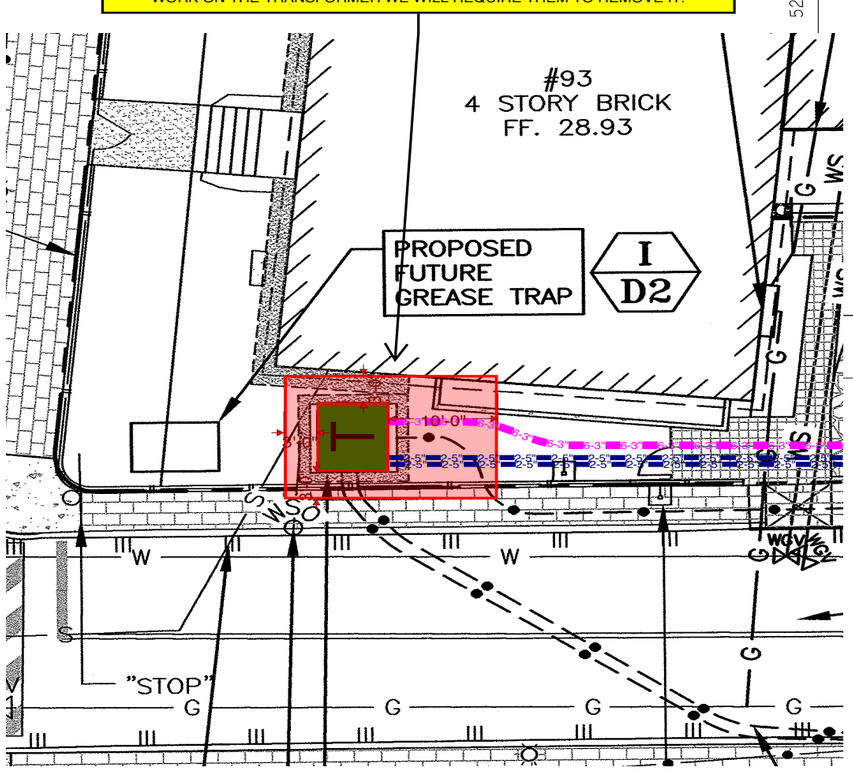
ACTUAL TRANSFORMER PAD SIZE IS 92" X 80" THE ONE YOU CALCULATED FOR IS NOT EVEN THE RIGHT ONE.

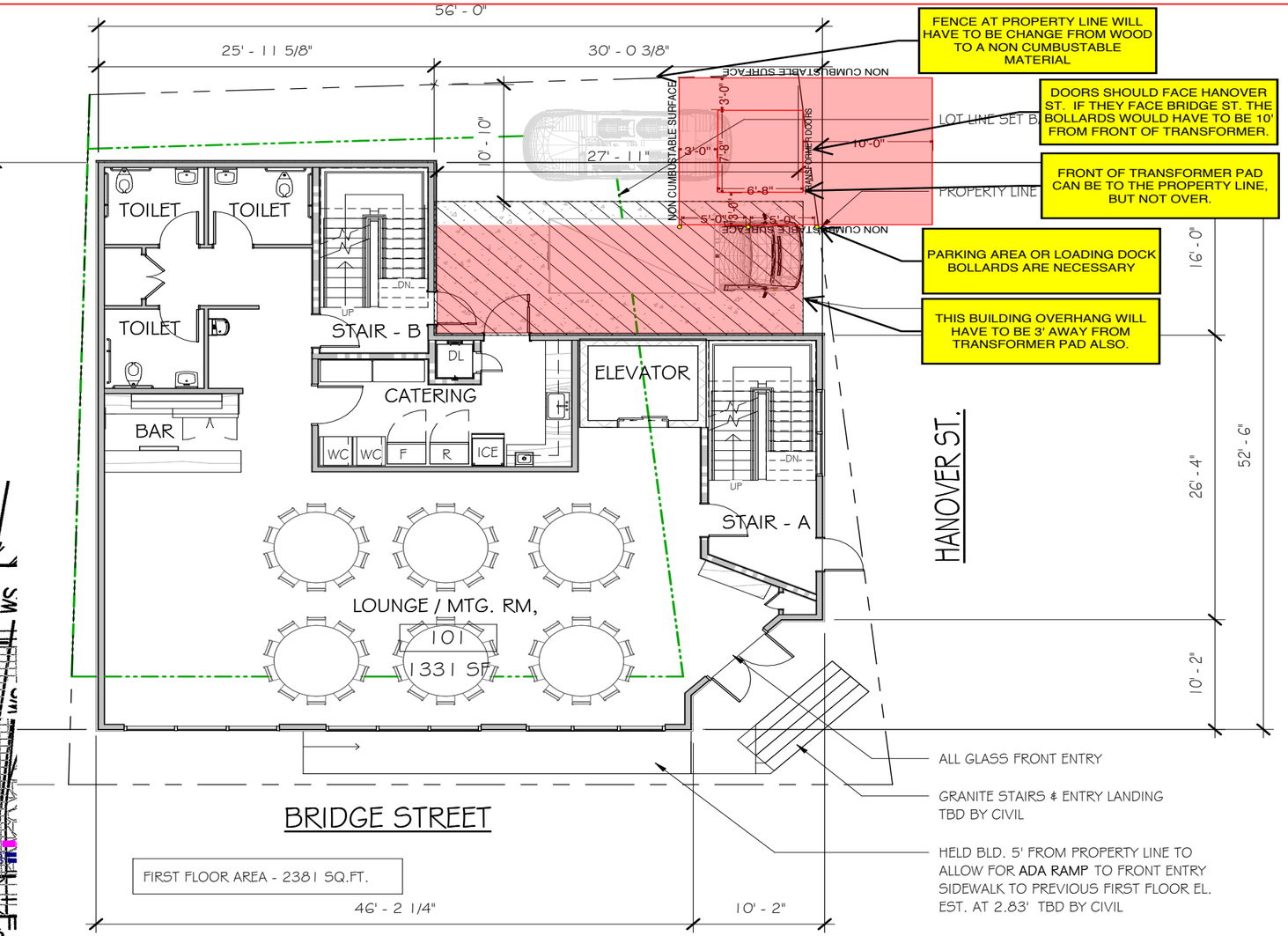
GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)

HERE IS THE DESIGN THAT 93 PLEASANT STREET RECIEVED. THE TRANSFORMER AND PAD FALL INTO THE PROPERSAFETY WINDOW WE REQUIRED. AS STATED BEFORE THEY FENCE WAS NEVER MENTIONED TO US, AND WHEN WE NEED TO WORK ON THE TRANSFORMER WE WILL REQUIRE THEM TO REMOVE IT.




FENCE AT PROPERTY LINE WILL HAVE TO BE CHANGE FROM WOOD TO A NON CUMBUSTABLE MATERIAL

DOORS SHOULD FACE HANOVER ST. IF THEY FACE BRIDGE ST. THE BOLLARDS WOULD HAVE TO BE 10' FROM FRONT OF TRANSFORMER.

FRONT OF TRANSFORMER PAD CAN BE TO THE PROPERTY LINE, BUT NOT OVER.

PARKING AREA OR LOADING DOCK BOLLARDS ARE NECESSARY

THIS BUILDING OVERHANG WILL HAVE TO BE 3' AWAY FROM TRANSFORMER PAD ALSO.

1 FIRST FLOOR PLAN
1" = 10'-0"

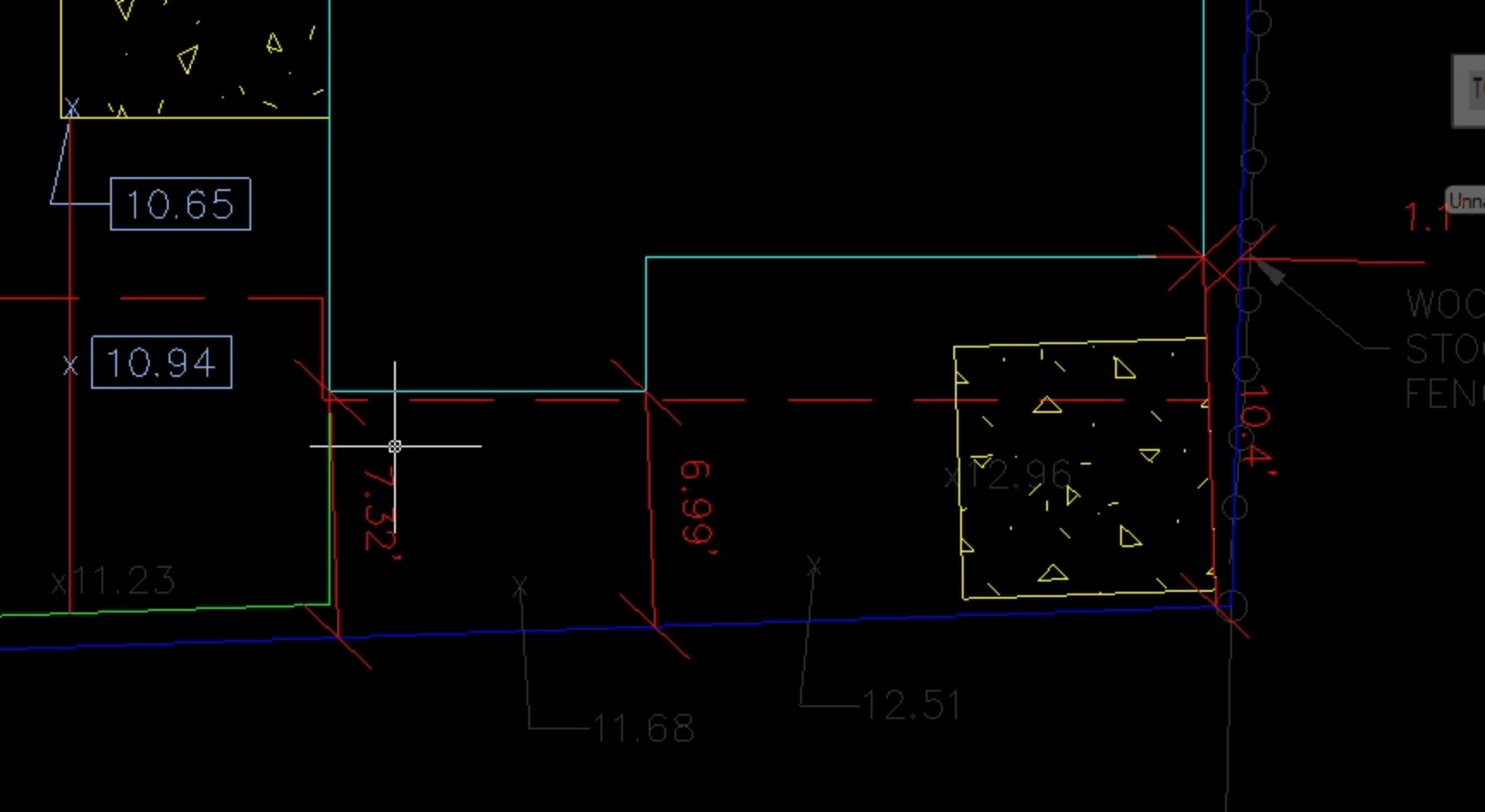
# FIRST FLOOR PLAN

## Bridge St. Inn

As indicated
NFC - 092925
SCHEMATIC DESIGN

A1.1

| | | | | | | |
|---|---|---|---|---|---|---|
| EVERSOURCE | | Description: 64 BRIDGE ST TRANSFORMER LOCATION IDEAS | Service Address: 64 BRIDGE ST | Circuit: | Primary Voltage: 12.47kV | N |
| WO: | Distribution Engineering | Primary Contact/Phone: | City/Town: PORTSMOUTH, NH 03801 | Designer/Date: S. COUTURE / 03/06/2026 | | |
| FWO: | Project: | Eversource Contact/Phone: | AWC: Portsmouth | Page: 1 of 1 | Rev #: 3 | Sketch not to Scale |


10.65
10.94
7.32'
6.99'
10.4'
12.96
11.23
11.68
12.51
WOO
STO
FEN


YOUR TRANSFORMER HERE WITH CITY PERMISSION
ONLY
© 2024 Google

**Contact Information for Utilities**

Eversource:
Scott Coulture
603 332-7542
scott.couture@eversource.com

Unitli:
Josh Wilk
603.227.4628
wilkj@unitil.com

Public Works:
Dave Desfosses
603 766-1411
djdesfosses@portsmouthnh.gov

dotloop signature verification: dtlp.us/MWhz-wNSv-5wML

# 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: Scott Rafferty Date Submitted: 03/23/2026

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

Site Address: 64 Bridge St, Portsmouth NH 03801 Map: 0126 Lot: 0055

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

| Site Plan Review Application Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☑ | Statement that lists and describes "green" building components and systems. **(2.5.3.1B)** | Civil Plans | |
| ☑ | 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)** | Civil / TW Plans | N/A |
| ☑ | Tax map and lot number, and current zoning of all parcels under Site Plan Review. **(2.5.3.1D)** | TW Plans and Application | N/A |

dotloop signature verification: dtlp.us/MWhz-wNSv-5wML

| 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)** | Application | 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)** | Civil Plans | N/A |
| ☑ | Names, addresses and telephone numbers of all professionals involved in the site plan design. **(2.5.3.1G)** | Application | N/A |
| ☑ | List of reference plans. **(2.5.3.1H)** | | N/A |
| ☑ | List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)** | Pg 26 | 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)** | Application / Plans | N/A |
| ☑ | Plans shall be drawn to scale and stamped by a NH licensed civil engineer. **(2.5.4.1D)** | Required on all plan sheets | N/A |
| ☑ | Wetlands shall be delineated by a NH certified wetlands scientist and so stamped. **(2.5.4.1E)** | No Wetlands | N/A |
| ☑ | Title (name of development project), north point, scale, legend. **(2.5.4.2A)** | TW Plans | N/A |
| ☑ | Date plans first submitted, date and explanation of revisions. **(2.5.4.2B)** | 03/23/2026 | N/A |
| ☑ | Individual plan sheet title that clearly describes the information that is displayed. **(2.5.4.2C)** | Required on all plan sheets | N/A |
| ☑ | Source and date of data displayed on the plan. **(2.5.4.2D)** | | N/A |

dotloop signature verification: dtlp.us/MWhz-wNSv-5wML

| 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. | Civil Plans | |
| ☑ | **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. | TW Plans | |
| ☑ | **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). | Civil Plans | |
| ☑ | **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). | Civil / TW Plans | |
| ☑ | **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). | Civil Plans | |
| ☑ | **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. | Civil Plans | |

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| | | | |
|---|---|---|---|
| ☐ | **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. | Civil Plans : Transformer site needs to be addressed | |
| ☑ | **8. Solid Waste Facilities: (2.5.4.3H)** | Civil Plans | |
| | • The size, type and location of solid waste facilities. | | |
| ☑ | **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. | Civil Plans | |
| ☑ | **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. | TBD - waiting for site plan approval | |
| ☑ | **11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)** | TBD - waiting for site plan approval | |
| ☑ | **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. | No exiting vegetation landscaping TBD waiting for site plan approval | |
| ☑ | **13. Contours and Elevation: (2.5.4.3L)**<br>• Existing/Proposed contours (2 foot minimum) and finished grade elevations. | Civil Plans | |
| ☑ | **14. Open Space: (2.5.4.3M)**<br>• Type, extent and location of all existing/proposed open space. | Civil / TW Plans | |
| ☑ | **15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)** | Civil Plans | |
| ☑ | **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). | Application TW Plans | |
| ☑ | **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. | Civil Plans | |

dotloop signature verification: dtlp.us/MWhz-wNSv-5wML

| 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)** | | Not required |
| ☑ | Indicate where Low Impact Development Design practices have been incorporated. **(7.1)** | TW Plans | |
| ☑ | 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)** | Civil Plans | |
| ☑ | Stormwater Management and Erosion Control Plan. **(7.4)** | Civil Plans Page - 7 | |
| ☑ | Inspection and Maintenance Plan **(7.6.5)** | TBD - waiting for site plan approval | |

| 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)** | | NA |
| ☑ | 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)** | | Per TAC workshop stormwater management plan would not be needed City requested us to tie into existing |
| ☑ | 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)** | Civil Approved Pending Eversource and unitil | |

dotloop signature verification: dtlp.us/MWhz-wNSv-5wML

| 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)** | NA | |
| ☑ | 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)** | | Not in flood zone |
| ☑ | 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:** Scott Rafferty dotloop verified 03/23/26 1:57 PM EDT TWAN-C9YY-LB0W-ZYNA **Date:** 03/23/2026

P-0766-0009
March 23, 2026

Mr. Peter Britz, Director of Planning & Sustainability
City of Portsmouth Planning Department
1 Junkins Avenue
Portsmouth, New Hampshire 03801

Re: **Site Review Permit Application**
**New Franklin School, 1 Franklin Drive Portsmouth, NH 03801**

Dear Peter:

On behalf of the City of Portsmouth, New Franklin School, we are pleased to submit the following information to support a request for courtesy Site Plan Review for the above referenced project:

- One (1) 22x34 and one (1) 11X17 copy of plans, dated March 23, 2026;
- Owners Authorization, dated March 23, 2026
- One (1) copy of the Drainage Memo, dated March 23, 2026;
- Site Plan Review Checklist, dated March 23, 2026
- Green Building Statement, dated March 20, 2026
- Lighting Fixtures & Dark Sky Friendly Lighting Measures Data

The proposed project is located at 1 Franklin Ave which is identified as Map 220 Lot 2 on the City of Portsmouth Tax Maps. The proposed project consists of the construction of three (3) additions to the existing New Franklin Elementary School. The first addition, approximately 500 square feet, will function as a vestibule entrance to serve student drop-off activities. The second addition, approximately 2,350 square feet, will provide an additional kindergarten classroom and a loading zone. The third addition, approximately 6,000 square feet, will accommodate new third- and fourth-grade classrooms.

The project also includes associated site, grading, drainage, and utilities improvements. These improvements consist of the installation of an accessible path of egress around the third building addition, as well as the creation of an accessible pathway at the main entrance located southwest of the existing building. The relocation of water, sewer, and electrical utilities will be required to allow for the proposed building expansion.

We respectfully request to be placed on the Technical Advisory Committee (TAC) meeting agenda for April 7, 2026. If you have any questions or need any additional information, please contact Eric Doremus by phone at (603) 294-9208 or by email at edoremus@tighebond.com.

Sincerely,

**TIGHE & BOND, INC.**

Eric Doremus

Eric G. Doremus, PE
Project Manager

Patrick M. Crimmins, PE
Vice President

Copy:

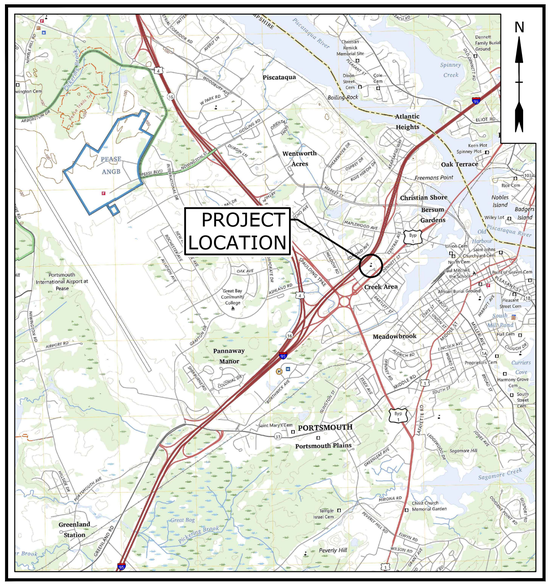
# CITY OF PORTSMOUTH, NH

# NEW FRANKLIN SCHOOL

## P-0766-009

## MARCH 23, 2026

| LIST OF DRAWINGS | |
|---|---|
| DRAWING NO. | DRAWING TITLE |
| G-001 | COVER SHEET |
| CIVIL | |
| C-100 | EXISTING CONDITIONS PLAN |
| C-200 | DEMOLITION PLAN |
| C-300 | SITE PLAN |
| C-400 | GRADING, DRAINAGE, AND EROSION CONTROL PLAN |
| C-500 | UTILITIES PLAN |
| C-600 | EROSION CONTROL NOTES & DETAILS SHEET |
| C-601 | DETAILS SHEET |
| C-602 | DETAILS SHEET |
| C-603 | DETAILS SHEET |
| C-700 | FIRE TRUCK TURNING PLANS |
| C-800 | PRE-DEVELOPMENT WATERSHED PLAN |
| C-801 | POST DEVELOPMENT WATERSHED PLAN |
| ARCHITECTURAL | |
| TAC100 | FLOOR PLAN DATA |
| TAC200 | ELEVATION DATA |
| ELECTRICAL | |
| PH | PHOTOMETRIC PLAN FOR BUILDING ADDITIONS |




**SITE LOCATION MAP**
SCALE: 1"=1000'


PREPARED BY:

Tighe & Bond

177 Corporate Drive
Portsmouth, NH 03801
T 603.433.8818


ERIC D. DOREMUS No. 16308 LICENSED PROFESSIONAL ENGINEER
Eric Doremus
3/23/2026

PATRICK CRIMMINS No. 12378 LICENSED PROFESSIONAL ENGINEER
3/23/2026

OWNER:
PORTSMOUTH SCHOOL DEPARTMENT, SAU52
1 JUNKINS AVE, SUITE 402
PORTSMOUTH, NH 03801
T: (603) 436-0910

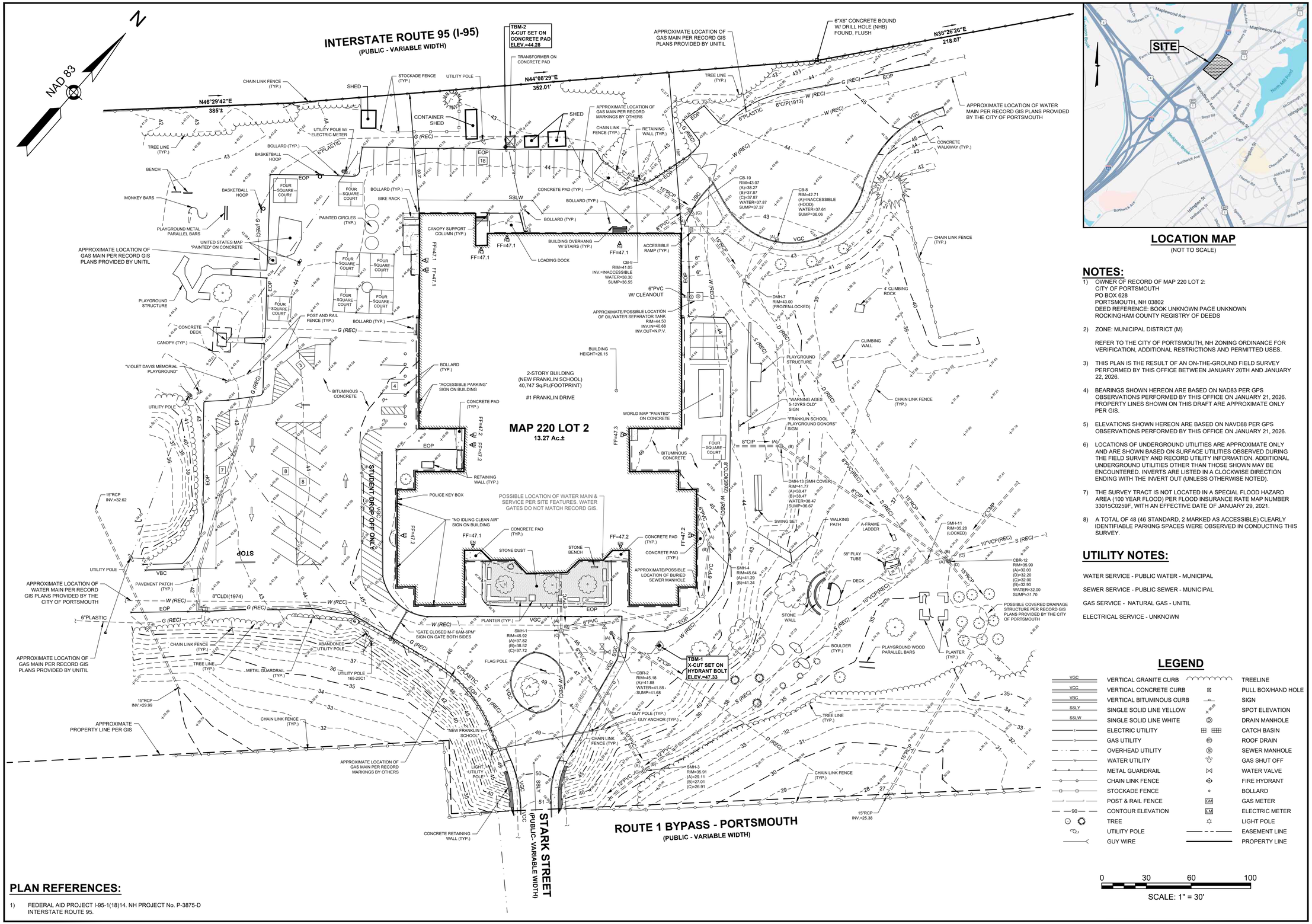
SURVEYOR
GREENMAN PEDERSEN, INC,
44 STILES ROAD, SUITE ONE
SALEM, NH, 03079
T: (603) 893-0720

ARCHITECT:
BANWELL ARCHITECTS
6 SOUTH PARK STREET
LEBANON, NH 03766
T: (603) 448-3778

ELECTRICAL:
SEACOAST CONSULTING ENGINEERS, LLC
261 JENNIE LANE
ELLIOT, MAINE 03903
T: (207) 475-7054

**TAC SUBMISSION**
**COMPLETE SET 16 SHEETS**


Last Saved: 3/23/2026
Plotted On: Mar 23, 2026 6:29am By: MFillion
Tighe & Bond: \\tighebond.com\data\Data\Projects\P\P0766 Portsmouth, NH General Proposals\~0009 New Franklin School Upgrades\Drawings\AutoCAD\Sheet\P0766-0009- COVER-TAC.dwg







## LOCATION MAP
(NOT TO SCALE)

## NOTES:

1) OWNER OF RECORD OF MAP 220 LOT 2:
CITY OF PORTSMOUTH
PO BOX 628
PORTSMOUTH, NH 03802
DEED REFERENCE: BOOK UNKNOWN PAGE UNKNOWN
ROCKINGHAM COUNTY REGISTRY OF DEEDS

2) ZONE: MUNICIPAL DISTRICT (M)

REFER TO THE CITY OF PORTSMOUTH, NH ZONING ORDINANCE FOR VERIFICATION, ADDITIONAL RESTRICTIONS AND PERMITTED USES.

3) THIS PLAN IS THE RESULT OF AN ON-THE-GROUND FIELD SURVEY PERFORMED BY THIS OFFICE BETWEEN JANUARY 20TH AND JANUARY 22, 2026.

4) BEARINGS SHOWN HEREON ARE BASED ON NAD83 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON JANUARY 21, 2026. PROPERTY LINES SHOWN ON THIS DRAFT ARE APPROXIMATE ONLY PER GIS.

5) ELEVATIONS SHOWN HEREON ARE BASED ON NAVD88 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON JANUARY 21, 2026.

6) LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY AND ARE SHOWN BASED ON SURFACE UTILITIES OBSERVED DURING THE FIELD SURVEY AND RECORD UTILITY INFORMATION. ADDITIONAL UNDERGROUND UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED. INVERTS ARE LISTED IN A CLOCKWISE DIRECTION ENDING WITH THE INVERT OUT (UNLESS OTHERWISE NOTED).

7) THE SURVEY TRACT IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOOD) PER FLOOD INSURANCE RATE MAP NUMBER 33015C0259F, WITH AN EFFECTIVE DATE OF JANUARY 29, 2021.

8) A TOTAL OF 48 (46 STANDARD, 2 MARKED AS ACCESSIBLE) CLEARLY IDENTIFIABLE PARKING SPACES WERE OBSERVED IN CONDUCTING THIS SURVEY.

## UTILITY NOTES:

WATER SERVICE - PUBLIC WATER - MUNICIPAL

SEWER SERVICE - PUBLIC SEWER - MUNICIPAL

GAS SERVICE - NATURAL GAS - UNITIL

ELECTRICAL SERVICE - UNKNOWN

## PLAN REFERENCES:

1) FEDERAL AID PROJECT I-95-1(18)14. NH PROJECT No. P-3875-D
INTERSTATE ROUTE 95.

GPI
Engineering
Design
Planning
Construction Inspection
603.893.0720 GPINET.COM
Greenman-Pedersen, Inc.
44 Stiles Road, Suite One
Salem, NH 03079

PREPARED FOR
TIGHE & BOND
177 CORPORATE DRIVE
PORTSMOUTH, NH

# ASSESSOR MAP 220 LOT 2
# 1 FRANKLIN DRIVE
# PORTSMOUTH, NH

STATE OF NEW HAMPSHIRE
NO. 1019
SCOTT M. L'ITALIEN
LICENSED LAND SURVEYOR

2/27/2026

| NO. | REVISION | DATE |
|---|---|---|
| | REVISIONS | |

FEBRUARY 27, 2026

| DRAWN/DESIGN BY | CHECKED BY |
|---|---|
| JMS/CSS | DPD/AKC |

PARTIAL EXISTING CONDITIONS PLAN

SCALE: 1"=30'

NEX-2200150.65

C-100

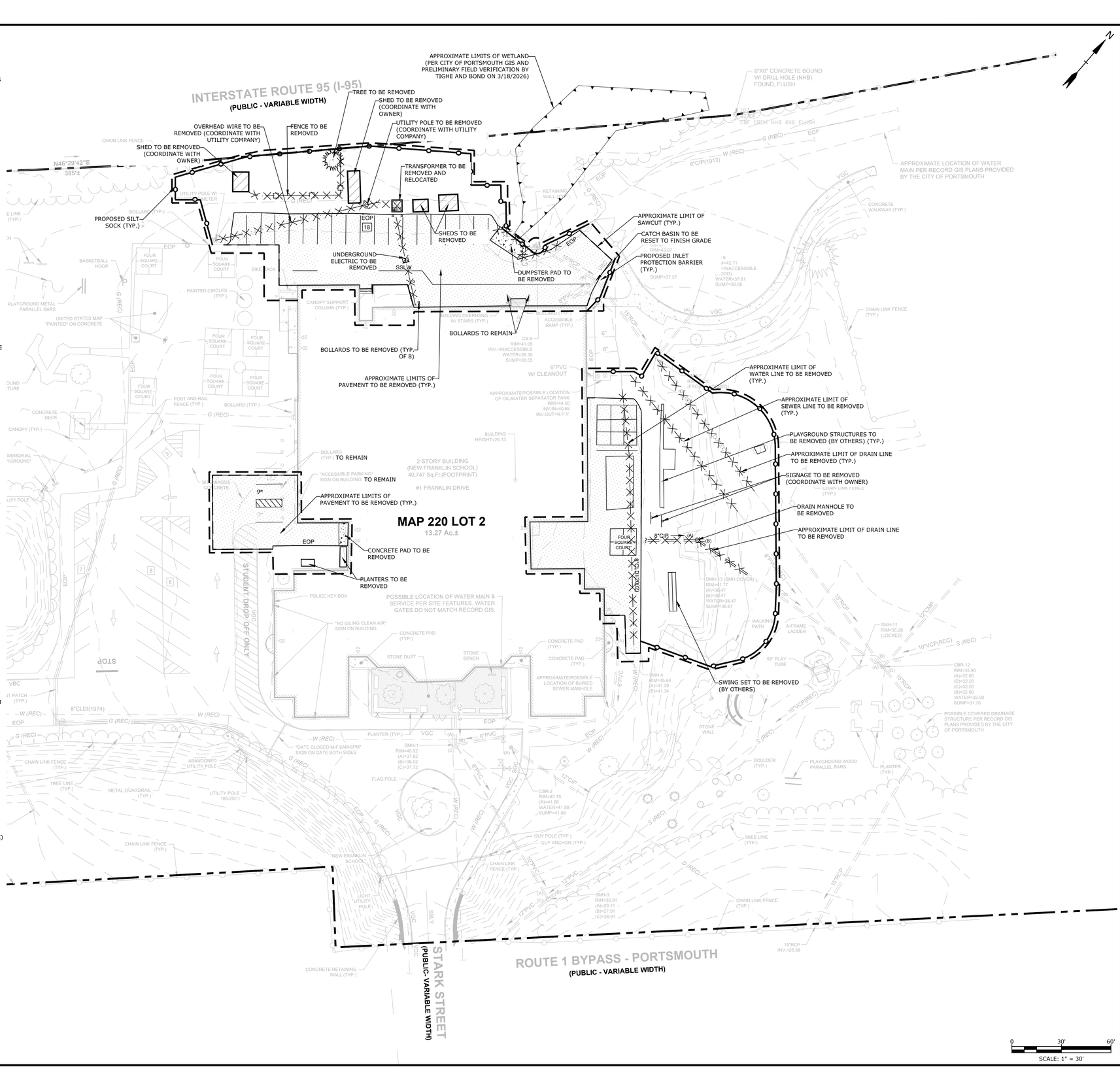
F:\Projects\NEX-2200150 - Tighe & Bond MSA\65 - Portsmouth, NH - New Franklin\CAD Files\2200150.65_SV.dwg ECP 2/27/26 12:49pm ddriscoll

## DEMOLITION NOTES:

1. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
3. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
4. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES. CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.
5. THE ACCURACY AND COMPLETENESS OF SUBSURFACE INFORMATION (E.G., EXISTING UTILITIES) SHOWN ON THESE DRAWINGS IS NOT GUARANTEED AND SOME SUBSURFACE INFORMATION MAY NOT BE SHOWN. DETERMINE THE LOCATIONS AND ELEVATIONS OF ALL SUBSURFACE FEATURES WHICH MAY AFFECT CONSTRUCTION OPERATIONS BY TEST PIT OR OTHER METHODS, AS NECESSARY TO PREVENT DAMAGE TO UTILITIES AND OTHER SUBSURFACE FEATURES, AND/OR INTERRUPTIONS IN UTILITY SERVICE. PROVIDE DATA COLLECTED THROUGH THESE INVESTIGATIONS TO THE ENGINEER PRIOR TO CONSTRUCTING THE PROPOSED IMPROVEMENTS.
6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITIES IDENTIFIED DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE DRAWINGS OR THAT DIFFER IN SIZE OR MATERIAL.
7. THE CONTRACTOR IS RESPONSIBLE FOR SUPPORT OF EXISTING UTILITIES AND REPAIR OR REPLACEMENT COSTS OF UTILITIES DAMAGED DURING CONSTRUCTION, WHETHER ABOVE OR BELOW GRADE. REPLACE DAMAGED UTILITIES IMMEDIATELY AT NO ADDITIONAL COST TO THE OWNER AND AT NO COST TO THE PROPERTY OWNER.
8. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/ DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
9. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY; COORDINATION WITH THE OWNER, ALL SUBCONTRACTORS, AND WITH OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF WORK, THE MEANS AND METHODS OF CONSTRUCTING THE PROPOSED WORK.
10. THE CONTRACTOR SHALL VERIFY ORIGIN OF ALL DRAINS AND UTILITIES PRIOR TO REMOVAL/TERMINATION TO DETERMINE IF DRAINS OR UTILITY ARE ACTIVE, AND SERVICES ANY ON OR OFF-SITE STRUCTURE TO REMAIN. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY SUCH UTILITY FOUND AND SHALL MAINTAIN THESE UTILITIES UNTIL PERMANENT SOLUTION IS IN PLACE.
11. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES.
12. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE PADS, UTILITIES AND PAVEMENT WITHIN THE WORK LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ITEMS TO BE REMOVED INCLUDE BUT ARE NOT LIMITED TO: CONCRETE, PAVEMENT, CURBS, LIGHTING, MANHOLES, CATCH BASINS, UNDER GROUND PIPING, POLES, STAIRS, SIGNS, FENCES, RAMPS, WALLS, BOLLARDS, BUILDING SLABS, FOUNDATION, TREES AND LANDSCAPING.
13. REMOVE TREES AND BRUSH AS REQUIRED FOR COMPLETION OF WORK. CONTRACTOR SHALL GRUB AND REMOVE ALL STUMPS WITHIN LIMITS OF WORK AND DISPOSE OF OFF-SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
15. THE CONTRACTOR SHALL COORDINATE; REMOVAL, RELOCATION, DISPOSAL, ABANDONMENT, OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
16. UTILITIES SHALL BE TERMINATED AT THE MAIN LINE PER UTILITY COMPANY STANDARDS. THE CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES LOCATED WITHIN THE LIMITS OF WORK, UNLESS SPECIFICALLY IDENTIFIED OTHERWISE.
17. SAW CUT AND REMOVE PAVEMENT ONE (1) FOOT OFF PROPOSED EDGE OF PAVEMENT OR EXISTING CURB LINE IN ALL AREAS WHERE PAVEMENT TO BE REMOVED ABUTS EXISTING PAVEMENT OR CONCRETE TO REMAIN.
18. PAVEMENT REMOVAL LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE. ADDITIONAL PAVEMENT REMOVAL MAY BE REQUIRED DEPENDING ON THE CONTRACTOR'S OPERATION. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT REMOVAL PRIOR TO BID.
19. SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL UTILITIES TO BE REMOVED AND PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
20. THE CONTRACTOR SHALL REMOVE AND SALVAGE EXISTING GRANITE CURB FOR REUSE.
21. THE CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY TRAFFIC CONTROL/SAFETY DEVICES TO ENSURE SAFE VEHICULAR AND PEDESTRIAN ACCESS THROUGH THE WORK AREA, OR FOR SAFELY IMPLEMENTING DETOURS AROUND THE WORK AREA. PERFORM TRAFFIC CONTROL IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED TRAFFIC CONTROL PLAN.
22. WHEN WORKING IN THE RIGHT OF WAY, THE CONTRACTOR SHALL PROVIDE THE OWNER AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES A DETAILED PLAN OF APPROACH INDICATING METHODS OF PROPOSED TRAFFIC ROUTING ON A DAILY BASIS, AND COORDINATION TO ENSURE COMMUNICATION AND COORDINATION BETWEEN THE OWNER, THE CONTRACTOR AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES THROUGHOUT THE CONSTRUCTION PERIOD.
23. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL PROPERTIES WITHIN THE PROJECT AREA AT ALL TIMES DURING CONSTRUCTION.
24. THE CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO EXISTING BUSINESSES AND HOMES THROUGHOUT THE CONSTRUCTION PERIOD. EXISTING BUSINESS AND HOME SERVICES INCLUDE, BUT ARE NOT LIMITED TO ELECTRICAL, COMMUNICATION, FIRE PROTECTION, DOMESTIC WATER AND SEWER SERVICES. TEMPORARY SERVICES, IF REQUIRED, SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. CONTRACTOR SHALL PROVIDE DETAILED CONSTRUCTION SCHEDULE TO OWNER PRIOR TO ANY DEMOLITION/CONSTRUCTION ACTIVITIES AND SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
25. THE CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY THE CONTRACTOR, THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED SURVEYOR TO REPLACE DISTURBED MONUMENTS.
26. THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY AND SAFETY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.
27. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ADDITIONAL PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
28. THE CONTRACTOR SHALL COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAY WITH THE CITY OF PORTSMOUTH.
29. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION
30. BEFORE ANY DEWATERING IS PERFORMED A TEMPORARY DISCHARGE PERMIT FROM THE NHDES IS REQUIRED.
31. NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICT, ERROR, AMBIGUITY, OR DISCREPANCY WITH THE PLANS OR BETWEEN THE PLANS AND ANY APPLICABLE LAW, REGULATION, CODE, STANDARD SPECIFICATION, OR MANUFACTURER'S INSTRUCTIONS.
32. TIGHE & BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES, LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM TIGHE & BOND.

LEGEND

- PROPERTY LINE
- LIMIT OF WORK (APPROX)
- LIMIT OF SAWCUT (APPROX)
- LIMIT OF EROSION CONTROL (APPROX)
- INLET PROTECTION
- PAVEMENT / CONCRETE SECTION TO BE REMOVED (APPROX)
- LIMIT OF CLEARING & GRUBBING (APPROX)
- LIMIT OF BUILDING(S) / STRUCTURE(S) TO BE REMOVED (APPROX)
- LIMIT OF UTILITY / SITE FEATURE TO BE REMOVED (APPROX)





Tighe & Bond
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T 603.433.8818


STATE OF NEW HAMPSHIRE — ERIC G. DOREMUS — No. 16308 — Eric Doremus — 3/23/2026

STATE OF NEW HAMPSHIRE — PATRICK CRIMMINS — No. 12378 — LICENSED PROFESSIONAL ENGINEER — 3/23/2026

# New Franklin School

City of Portsmouth

Portsmouth, New Hampshire

| MARK | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| PROJECT NO: | P0766-0009 |
| DATE: | 03/23/2026 |
| FILE: | P0766-0009- DSGN.dwg |
| DRAWN BY: | MKF |
| DESIGNED BY: | EGD |
| CHECKED BY: | EGD |
| APPROVED BY: | |

DEMOLITION PLAN

SCALE: AS SHOWN

C-200


Last Saved: 3/23/2026
Plotted: Mar 23, 2026-9:38am By: MFillion
Tighe & Bond:\\tighebond.com\data\Data\Projects\P\P0766 Portsmouth, NH General Proposals\0009 New Franklin School Upgrades\DrawingsAutoCAD\Sheet\P0766-0009- DSGN.dwg

## SITE NOTES:

1. PAVEMENT MARKINGS, INCLUDING BUT NOT LIMITED TO; PARKING SPACES, STOP BARS, ADA SYMBOLS, PAINTED ISLANDS, CROSS WALKS, ARROWS, LEGENDS, AND CENTERLINES, SHALL BE CONSTRUCTED AS SHOWN ON THE DRAWINGS AND DETAILS, AND SHALL MEET THE FOLLOWING REQUIREMENTS:
   - ALL ON-SITE PAVEMENT MARKINGS EXCEPT CENTERLINES, MEDIAN ISLANDS, FOG/SHOULDER LINES, AND LANE LINES SHALL BE CONSTRUCTED USING WHITE TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248 TYPE "F".
   - ALL PAVEMENT MARKINGS WITHIN PUBLIC RIGHT OF WAY SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, AND APPLICABLE DEPARTMENT OF TRANSPORTATION (DOT), STANDARD SPECIFICATIONS.
2. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" CURRENT EDITION, "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" CURRENT EDITION, AND THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA), THE ARCHITECTURAL BARRIERS ACT (ABA), AS APPLICABLE.
3. THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED LAND SURVEYOR TO DETERMINE ALL LINES AND GRADES.
4. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAW CUT LINE WITH RS-1 EMULSION IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
5. THE CONTRACTOR TO PROVIDE BACKFILL AND COMPACTION AT CURB LINE AFTER CONCRETE FORMS FOR SIDEWALKS AND PADS HAVE BEEN STRIPPED.
6. COORDINATE ALL WORK ADJACENT TO BUILDINGS WITH BUILDING DRAWINGS/CONTRACTOR.
7. SEE BUILDING DRAWINGS FOR ALL CONCRETE PADS & SIDEWALKS ADJACENT TO BUILDING.
8. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
9. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE, AND LOCAL CODES & SPECIFICATIONS.
10. THE CONTRACTOR SHALL COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAY WITH THE CITY OF PORTSMOUTH.
11. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.
12. THE CONTRACTOR SHALL SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES) TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR AND SHALL INCLUDE A FULL TOPOGRAPHY SURVEY WITHIN THE LIMITS OF WORK INCLUDING BUT NOT LIMITED TO SITE TOPOGRAPHY, SITE FEATURES, (BUILDINGS, ROADS, CURBS, SIDEWALK, ETC.), STORM DRAINAGE, AND SURFACE & SUBSURFACE UTILITIES.
13. PROPERTY MANAGER WILL BE RESPONSIBLE FOR TIMELY SNOW REMOVAL FROM ALL PUBLIC WALKS, DRIVES, AND PARKING AREAS ON-SITE. SNOW SHALL BE HAULED OFF-SITE AND LEGALLY DISPOSED OF, WHEN NECESSARY, WHEN SNOW STORAGE AREAS HAVE REACHED CAPACITY.
14. NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICT, ERROR, AMBIGUITY, OR DISCREPANCY WITH THE PLANS OR BETWEEN THE PLANS AND ANY APPLICABLE LAW, REGULATION, CODE, STANDARD SPECIFICATION, OR MANUFACTURER'S INSTRUCTIONS.
15. TIGHE & BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES, LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM TIGHE & BOND.

## LEGEND

| | |
|---|---|
| | EDGE OF PAVEMENT |
| | PROPOSED VERTICAL GRANITE CURB |
| | PAVEMENT SECTION |
| | PROPOSED BITUMINOUS SIDEWALK |
| | PROPOSED CONCRETE SECTION |
| | PROPOSED BUILDING ADDITION |
| VGC | VERTICAL GRANITE CURB |
| 5'R | PROPOSED CURB RADIUS |

## SITE DATA:

LOCATION: 1 FRANKLIN AVE
PORTSMOUTH, NH 03801
TAX MAP 15 LOT 91

OWNER: PORTSMOUTH SCHOOL DEPARTMENT, SAU52
1 JUNKINS AVE, SUITE 402
PORTSMOUTH, NH 03801

ZONING DISTRICT: MUNICIPAL (M)

PROPOSED USE: PUBLIC ELEMENTARY SCHOOL
EXISTING LOT SIZE: 13.27 ACRES

DEVELOPMENT STANDARDS

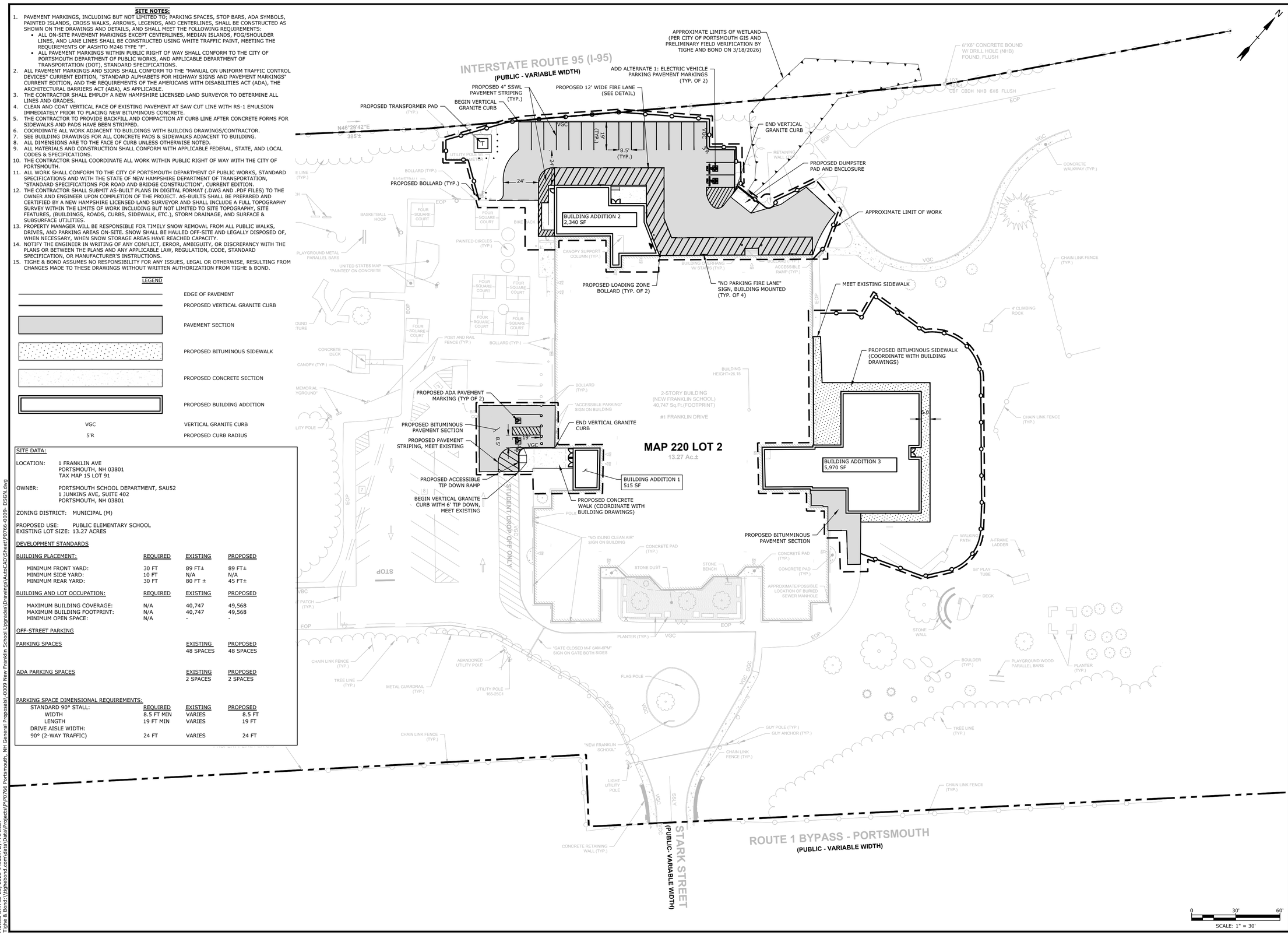
| BUILDING PLACEMENT: | REQUIRED | EXISTING | PROPOSED |
|---|---|---|---|
| MINIMUM FRONT YARD: | 30 FT | 89 FT± | 89 FT± |
| MINIMUM SIDE YARD: | 10 FT | N/A | N/A |
| MINIMUM REAR YARD: | 30 FT | 80 FT ± | 45 FT± |
| **BUILDING AND LOT OCCUPATION:** | **REQUIRED** | **EXISTING** | **PROPOSED** |
| MAXIMUM BUILDING COVERAGE: | N/A | 40,747 | 49,568 |
| MAXIMUM BUILDING FOOTPRINT: | N/A | 40,747 | 49,568 |
| MINIMUM OPEN SPACE: | N/A | - | - |

OFF-STREET PARKING

| PARKING SPACES | EXISTING | PROPOSED |
|---|---|---|
| | 48 SPACES | 48 SPACES |

| ADA PARKING SPACES | EXISTING | PROPOSED |
|---|---|---|
| | 2 SPACES | 2 SPACES |

| PARKING SPACE DIMENSIONAL REQUIREMENTS: | REQUIRED | EXISTING | PROPOSED |
|---|---|---|---|
| STANDARD 90° STALL: WIDTH | 8.5 FT MIN | VARIES | 8.5 FT |
| LENGTH | 19 FT MIN | VARIES | 19 FT |
| DRIVE AISLE WIDTH: 90° (2-WAY TRAFFIC) | 24 FT | VARIES | 24 FT |





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ERIC G. DOREMUS No. 16308 STATE OF NEW HAMPSHIRE
Eric Doremus
3/23/2026

PATRICK CRIMMINS No. 12378 STATE OF NEW HAMPSHIRE LICENSED PROFESSIONAL ENGINEER
3/23/2026

# New Franklin School

City of Portsmouth

Portsmouth, New Hampshire

| MARK | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| PROJECT NO: | P0766-0009 |
| DATE: | 03/23/2026 |
| FILE: | P0766-0009- DSGN.dwg |
| DRAWN BY: | MKF |
| DESIGNED BY: | EGD |
| CHECKED BY: | EGD |
| APPROVED BY: | |

SITE PLAN

SCALE: AS SHOWN

C-300


Last Saved: 3/23/2026
Printed: Mar 23, 2026 - 9:50am By: MFillion
Tighe & Bond: \\tighebond.com\data\Data\Projects\P\P0766 Portsmouth, NH General Proposals\-0009 New Franklin School Upgrades\Drawings\AutoCAD\Sheet\P0766-0009- DSGN.dwg

## GRADING AND DRAINAGE NOTES:

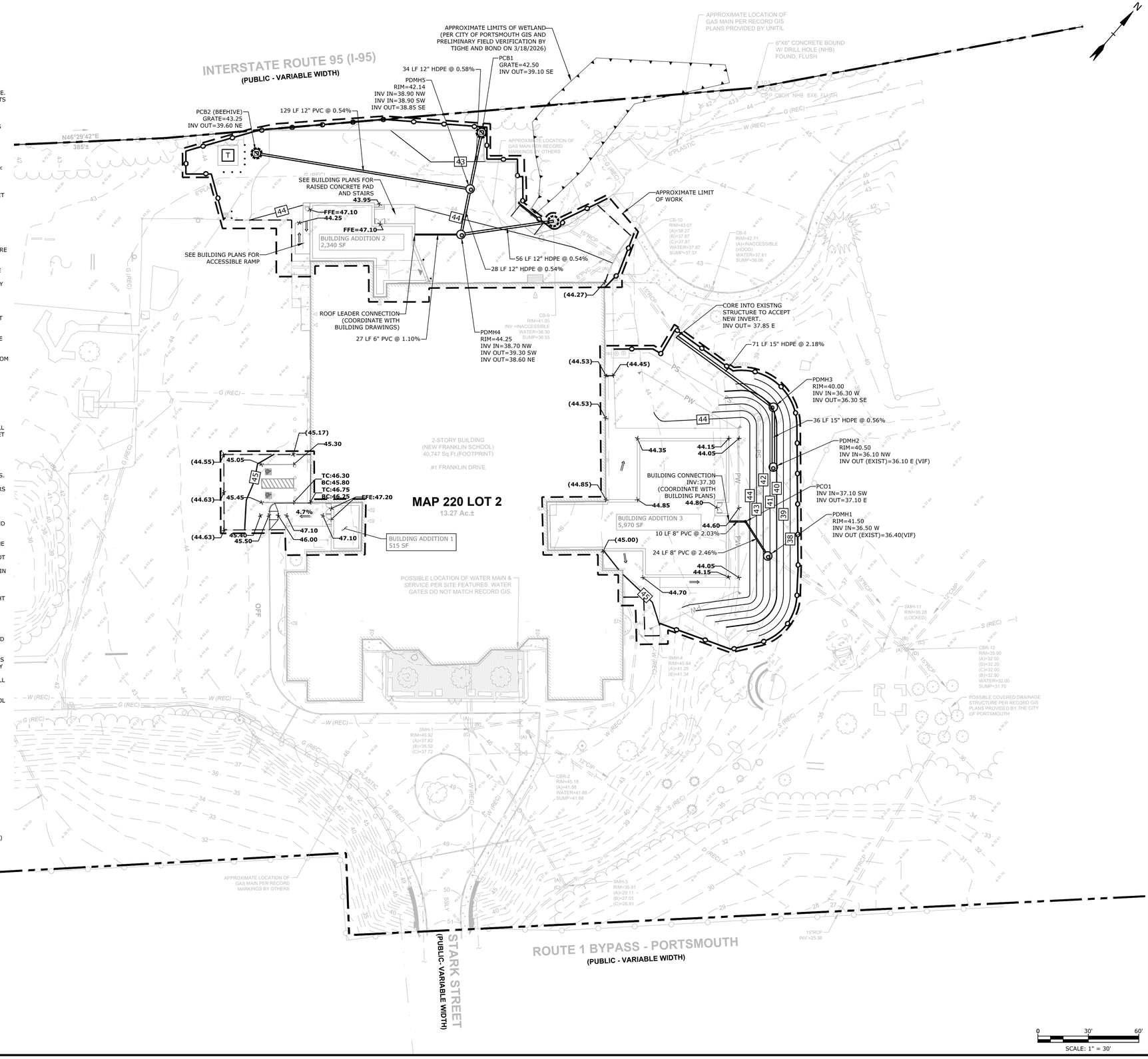
1. GENERAL COMPACTION REQUIREMENTS:
   - BELOW PAVED OR CONCRETE AREAS: 95%
   - TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL: 95%
   - BELOW LOAM AND SEED AREAS: 90%
   - * ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM-2922.
2. ALL STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HANCOR HI-Q, ADS N-12 OR EQUAL) OR RCP CLASS IV, UNLESS OTHERWISE SPECIFIED.
3. SEE UTILITY PLAN FOR ALL SITE UTILITY INFORMATION.
4. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
5. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE AND LAWN AREAS FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCES, EXITS, RAMPS AND LOADING DOCK AREAS ADJACENT TO THE BUILDING.
6. PROVIDE SITE GRADING AT ACCESSIBLE SIDEWALK RAMPS, SIDEWALKS, AND BUILDING ENTRANCES THAT IS CONSISTENT WITH THE RELEVANT ACCESS REQUIREMENTS OF THE ARCHITECTURAL BARRIERS ACT (ABA), THE AMERICANS WITH DISABILITIES ACT (ADA), AND MA ARCHITECTURAL ACCESS BOARD REQUIREMENTS (AAB). SMALL CHANGES IN GRADE OVER RELATIVELY SHORT DISTANCES (E.G. AT PARKING SPACES, ACCESSIBLE ROUTES, AND RAMPS) MIGHT NOT BE CLEARLY DEPICTED WITHIN THE CONTOUR INTERVAL SHOWN. COMPLY WITH THE CRITERIA IN THESE STANDARDS. SELECT MAXIMUM SLOPE CRITERIA ARE REPRODUCED BELOW:
   - ACCESSIBLE PARKING STALLS AND PASSENGER LOADING ZONES (IN ANY DIRECTION) SHALL BE < 2.0%
   - LONGITUDINAL SLOPE ALONG ACCESSIBLE ROUTES SHALL BE < 5.0%
   - CROSS SLOPE ALONG ACCESSIBLE ROUTES SHALL BE < 2.0%
7. THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL CATCH BASINS AND DRAIN LINES, WITHIN THE LIMIT OF WORK, OF SEDIMENT IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
8. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES.
9. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED FERTILLIZER AND MULCH.
10. ALL PROPOSED CATCH BASINS SHALL BE EQUIPPED WITH OIL/GAS SEPARATOR HOODS AND 4' SUMPS.
11. ALL WORK AND STORM DRAIN CONSTRUCTION SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.
12. THE CONTRACTOR SHALL SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES) TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR AND SHALL INCLUDE A FULL TOPOGRAPHY SURVEY WITHIN THE LIMITS OF WORK INCLUDING BUT NOT LIMITED TO SITE TOPOGRAPHY, SITE FEATURES, (BUILDINGS, ROADS, CURBS, SIDEWALK, ETC.), STORM DRAINAGE, AND SURFACE & SUBSURFACE UTILITIES.
13. SEE EXISTING CONDITIONS PLAN(S) FOR BENCH MARK INFORMATION.
14. THE CONTRACTOR SHALL VERIFY INVERTS OF EXISTING DRAIN AND SEWER LINES AND STRUCTURES AT PROPOSED DRAINAGE CONNECTION LOCATIONS AS FIRST ORDER OF WORK AND IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES.
15. NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICT, ERROR, AMBIGUITY, OR DISCREPANCY WITH THE PLANS OR BETWEEN THE PLANS AND ANY APPLICABLE LAW, REGULATION, CODE, STANDARD SPECIFICATION, OR MANUFACTURER'S INSTRUCTIONS.
16. TIGHE & BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES, LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM TIGHE & BOND.

## GENERAL EROSION CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION", PREPARED BY NHDES.
2. SEE SHEET C-501 AND C-502 FOR ADDITIONAL EROSION CONTROL REQUIREMENTS AND DETAILS.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL EROSION AND SEDIMENT CONTROL MEASURES FOR APPROVAL.
4. AS THE FIRST ORDER OF WORK, PRIOR TO ANY EARTH DISTURBANCE, THE CONTRACTOR SHALL INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BUT NOT LIMITED TO; INLET PROTECTION BARRIERS, SILT SOCKS, SILT FENCES, MULCH BERMS, AND STABILIZED CONSTRUCTION EXITS AS SHOWN ON THE DRAWINGS, AND AS REQUIRED BY ALL STATE AND LOCAL PERMITS AND APPROVALS.
5. INLET PROTECTION BARRIERS SHALL BE INSTALLED AT ALL EXISTING AND PROPOSED CATCH BASINS/CURB INLETS AND YARD DRAINS WITHIN THE LIMITS OF WORK AS WELL AS ANY CATCH BASINS/CURB INLETS AND YARD DRAINS THAT RECEIVE RUNOFF FROM ANY CONSTRUCTION ACTIVITIES. THESE MEASURES SHALL BE FULLY MAINTAINED FOR THE DURATION OF THE PROJECT.
6. PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL ALL NON-PAVED AREAS HAVE BEEN STABILIZED.
7. THE CONTRACTOR SHALL INSTALL EROSION CONTROL BLANKETS ON ALL STEEP SLOPE AREA (3:1 OR GREATER).
8. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST AND WIND EROSION THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES INCLUDE, BUT NOT LIMITED TO; MOISTEN EXPOSED SOIL SURFACES PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST, MECHANICAL SWEEPERS ON PAVED SURFACES, AND COVERING SURFACES WITH CRUSHED STONE OR COARSE GRAVEL.
9. THE CONTRACTOR SHALL HAVE ALL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, INLET PROTECTION BARRIERS, PERIMETER SEDIMENT CONTROLS, AND STEEP SLOPE EROSION CONTROL BLANKETS INSPECTED BY A QUALIFIED PERSON AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.25 INCHES OR GREATER. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED, REPAIRED, MODIFIED, OR ADDITIONAL MEASURES INSTALLED AS NECESSARY TO ADDRESS EVOLVING CONDITIONS DURING CONSTRUCTION.
10. SEDIMENT CONTROL FILTER MEASURES SHALL BE REPLACED WHEN SEDIMENT REACHES 1/3 THE HEIGHT OF THE FILTER.
11. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
12. ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND FERTILIZER.
13. ALL CATCH BASIN SUMPS AND PIPING SHALL BE THOROUGHLY CLEANED TO REMOVE ALL SEDIMENT AND DEBRIS AFTER THE PROJECT HAS BEEN FULLY STABILIZED.
14. TEMPORARY SOIL STOCKPILE SHALL BE SURROUNDED WITH SEDIMENT CONTROLS AND SHALL BE STABILIZED BY TEMPORARY EROSION CONTROL SEEDING. STOCKPILE AREAS TO BE LOCATED AS FAR AS POSSIBLE FROM THE DELINEATED EDGE OF WETLANDS. STOCKPILES OVER 10 FEET SHALL HAVE SAFETY FENCING PROVIDED AROUND THE STOCKPILES.
15. IF NECESSARY CONCRETE TRUCKS WILL BE REQUIRED TO WASHOUT THE SHOOTS. THIS ACTIVITY SHALL ONLY BE DONE WITHIN A DESIGNATED CONCRETE WASHOUT FACILITY ON-SITE.
16. IF NECESSARY TEMPORARY SEDIMENT TRAPS SHALL BE PROVIDED FOR GENERAL EXCAVATION DEWATERING PRACTICES PRIOR TO DIRECTING FLOW TO ANY OTHER EROSION AND SEDIMENT CONTROL MEASURES.
17. THE CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

LEGEND

- STORM DRAIN
- STORM DRAIN MANHOLE
- STORM DRAIN INLETS
- INTERMEDIATE CONTOURS (4)
- INDEX CONTOURS (5) 44.45
- LIMIT OF EROSION CONTROL (APPROX) 2%
- INLET PROTECTION





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T 603.433.8818


ERIC G. DOREMUS No. 16308 STATE OF NEW HAMPSHIRE
Eric Doremus
3/23/2026

PATRICK CRIMMINS No. 12378 STATE OF NEW HAMPSHIRE PROFESSIONAL ENGINEER LICENSED
3/23/2026

# New Franklin School

City of Portsmouth

Portsmouth, New Hampshire

| MARK | DATE | DESCRIPTION |
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|---|---|
| PROJECT NO: | P0766-0009 |
| DATE: | 03/23/2026 |
| FILE: | P0766-0009- DSGN.dwg |
| DRAWN BY: | MKF |
| DESIGNED BY: | EGD |
| CHECKED BY: | EGD |
| APPROVED BY: | |

GRADING, DRAINAGE AND EROSION CONTROL PLAN

SCALE: AS SHOWN

C-400

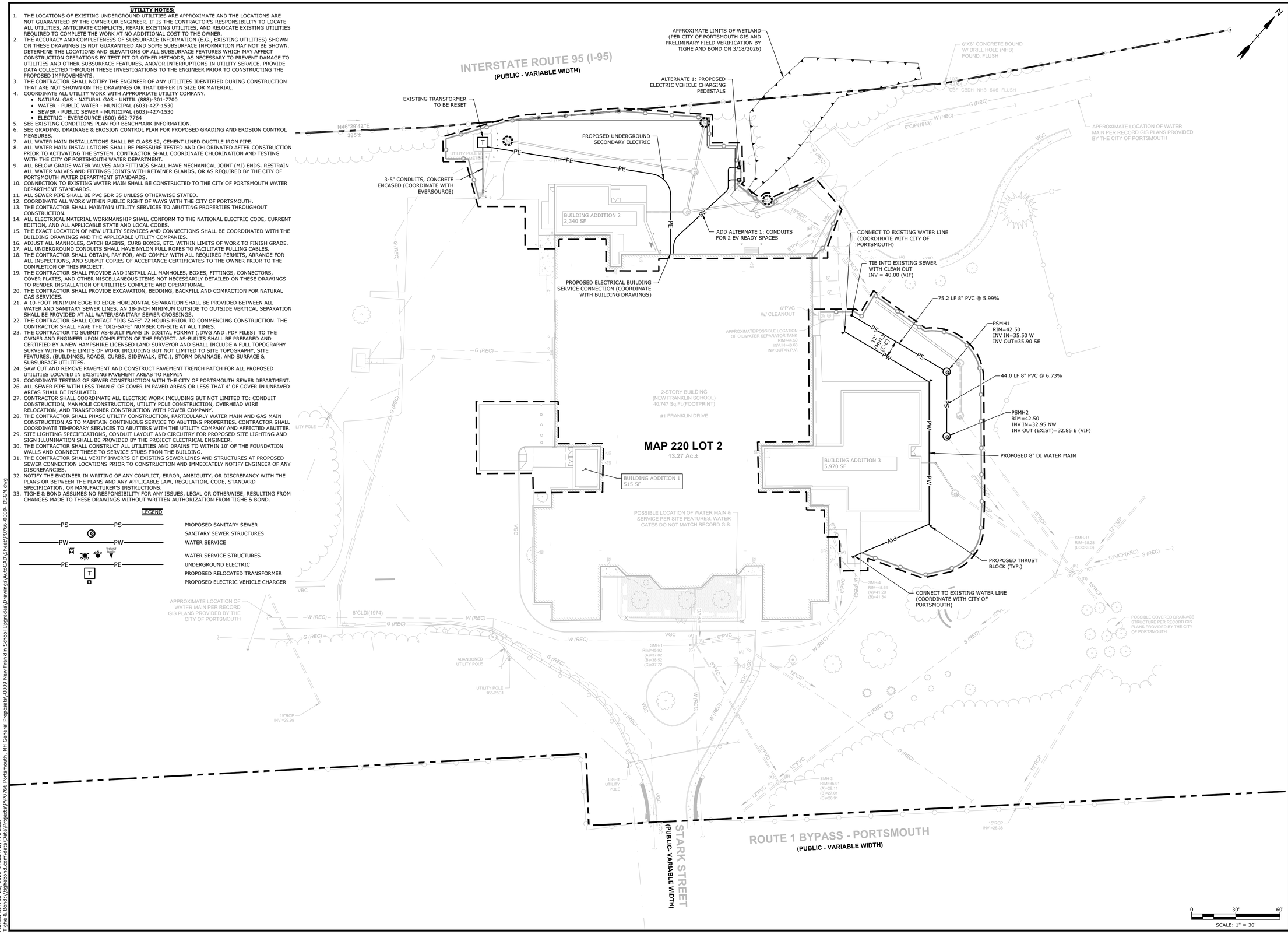

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## UTILITY NOTES:

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
2. THE ACCURACY AND COMPLETENESS OF SUBSURFACE INFORMATION (E.G., EXISTING UTILITIES) SHOWN ON THESE DRAWINGS IS NOT GUARANTEED AND SOME SUBSURFACE INFORMATION MAY NOT BE SHOWN. DETERMINE THE LOCATIONS AND ELEVATIONS OF ALL SUBSURFACE FEATURES WHICH MAY AFFECT CONSTRUCTION OPERATIONS BY TEST PIT OR OTHER METHODS, AS NECESSARY TO PREVENT DAMAGE TO UTILITIES AND OTHER SUBSURFACE FEATURES, AND/OR INTERRUPTIONS IN UTILITY SERVICE. PROVIDE DATA COLLECTED THROUGH THESE INVESTIGATIONS TO THE ENGINEER PRIOR TO CONSTRUCTING THE PROPOSED IMPROVEMENTS.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITIES IDENTIFIED DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE DRAWINGS OR THAT DIFFER IN SIZE OR MATERIAL.
4. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
   - NATURAL GAS - NATURAL GAS - UNITIL (888)-301-7700
   - WATER - PUBLIC WATER - MUNICIPAL (603)-427-1530
   - SEWER - PUBLIC SEWER - MUNICIPAL (603)-427-1530
   - ELECTRIC – EVERSOURCE (800) 662-7764
5. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
6. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
7. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE.
8. ALL WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION PRIOR TO ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE CHLORINATION AND TESTING WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT.
9. ALL BELOW GRADE WATER VALVES AND FITTINGS SHALL HAVE MECHANICAL JOINT (MJ) ENDS. RESTRAIN ALL WATER VALVES AND FITTINGS JOINTS WITH RETAINER GLANDS, OR AS REQUIRED BY THE CITY OF PORTSMOUTH WATER DEPARTMENT STANDARDS.
10. CONNECTION TO EXISTING WATER MAIN SHALL BE CONSTRUCTED TO THE CITY OF PORTSMOUTH WATER DEPARTMENT STANDARDS.
11. ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.
12. COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH.
13. THE CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT CONSTRUCTION.
14. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, CURRENT EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
15. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES.
16. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
17. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
18. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF THIS PROJECT.
19. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
20. THE CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES.
21. A 10-FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS.
22. THE CONTRACTOR SHALL CONTACT "DIG SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON-SITE AT ALL TIMES.
23. THE CONTRACTOR TO SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES) TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR AND SHALL INCLUDE A FULL TOPOGRAPHY SURVEY WITHIN THE LIMITS OF WORK INCLUDING BUT NOT LIMITED TO SITE TOPOGRAPHY, SITE FEATURES, (BUILDINGS, ROADS, CURBS, SIDEWALK, ETC.), STORM DRAINAGE, AND SURFACE & SUBSURFACE UTILITIES.
24. SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN
25. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF PORTSMOUTH SEWER DEPARTMENT.
26. ALL SEWER PIPE WITH LESS THAN 6' OF COVER IN PAVED AREAS OR LESS THAT 4' OF COVER IN UNPAVED AREAS SHALL BE INSULATED.
27. CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
28. THE CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION, PARTICULARLY WATER MAIN AND GAS MAIN CONSTRUCTION AS TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
29. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PROVIDED BY THE PROJECT ELECTRICAL ENGINEER.
30. THE CONTRACTOR SHALL CONSTRUCT ALL UTILITIES AND DRAINS TO WITHIN 10' OF THE FOUNDATION WALLS AND CONNECT THESE TO SERVICE STUBS FROM THE BUILDING.
31. THE CONTRACTOR SHALL VERIFY INVERTS OF EXISTING SEWER LINES AND STRUCTURES AT PROPOSED SEWER CONNECTION LOCATIONS PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES.
32. NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICT, ERROR, AMBIGUITY, OR DISCREPANCY WITH THE PLANS OR BETWEEN THE PLANS AND ANY APPLICABLE LAW, REGULATION, CODE, STANDARD SPECIFICATION, OR MANUFACTURER'S INSTRUCTIONS.
33. TIGHE & BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES, LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM TIGHE & BOND.

LEGEND

- PS — PROPOSED SANITARY SEWER
- SANITARY SEWER STRUCTURES
- PW — WATER SERVICE
- WATER SERVICE STRUCTURES
- PE — UNDERGROUND ELECTRIC
- T — PROPOSED RELOCATED TRANSFORMER
- PROPOSED ELECTRIC VEHICLE CHARGER





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STATE OF NEW HAMPSHIRE — ERIC G. DOREMUS No. 16308 — LICENSED PROFESSIONAL ENGINEER — 3/23/2026

STATE OF NEW HAMPSHIRE — PATRICK CRIMMINS No. 12378 — LICENSED PROFESSIONAL ENGINEER — 3/23/2026

# New Franklin School

City of Portsmouth

Portsmouth, New Hampshire

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| APPROVED BY: | |

UTILITIES PLAN

SCALE: AS SHOWN

C-500


Last Saved: 3/23/2026
Printed: Mar 23, 2026-9:56am By: MFillion
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**GENERAL PROJECT INFORMATION**

PROJECT OWNER: CITY OF PORTSMOUTH NEW FRANKLIN SCHOOL
(S) PO BOX 628
PORTSMOUTH, NH 03801
PROJECT NAME: NEW FRANKLIN SCHOOL UPGRADES
PROJECT ADDRESS: 1 FRANKLIN DRIVE
PORTSMOUTH, NH 03801
PROJECT MAP / LOT: MAP 220 / LOT 02
PROJECT LATITUDE: 43°-4'-37.848"N
PROJECT LONGITUDE: 70°-46'-35.724"W

**PROJECT DESCRIPTION**

THE PROJECT CONSISTS OF THE CONSTRUCTION OF 3 BUILDING ADDITIONS TO EXPAND THE FOOTPRINT OF THE EXISTING NEW FRANKLIN SCHOOL. THE WORK IS ANTICIPATED TO START IN MONTH APRIL 2026, AND BE COMPLETED BY OCTOBER 2026.

**DISTURBED AREA**

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 0.94 ACRES.

**SOIL CHARACTERISTICS**

BASED ON THE NRCS WEB SOIL SURVEY FOR ROCKINGHAM COUNTY - NEW HAMPSHIRE, THE SOILS ON SITE CONSIST OF URBAN LAND SOILS WHICH ARE WELL DRAINED SOILS WITH HYDROLOGIC SOIL GROUP RATING(S) OF A.

**NAME OF RECEIVING WATERS**

THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA OVERLAND FLOW TO A CLOSED DRAINAGE NETWORK, AND OFF SITE.

**CONSTRUCTION SEQUENCE PLAN OF MAJOR ACTIVITIES:**

1. CONSTRUCT TEMPORARY AND PERMANENT PERIMETER EROSION CONTROLS, SEDIMENT CONTROLS AND DETENTION MEASURES, PRIOR TO ANY EARTH MOVING OPERATIONS THAT MAY AFFECT STORMWATER RUNOFF SUCH AS:
   - DISPOSAL OF SEDIMENT SPOIL, STUMPS, DEMOLITION DEBRIS, AND OTHER SOLID WASTE
   - CONTROL OF DUST
   - CONSTRUCTION OF DRIVES, PARKING AREAS, AND OTHER IMPERVIOUS SURFACES
   - INSTALLATION OF UTILITIES, BUILDINGS, AND PLAYGROUND EQUIPMENT
   - CONSTRUCTION DURING LATE WINTER AND EARLY SPRING
1. DEMOLISH ALL SITE FEATURES AS DIRECTED ON THE DRAWINGS. CLEAR AND DISPOSE OF DEBRIS IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS.
2. CUT AND CLEAR TREES ACROSS SITE. (GRUBBING SHALL NOT OCCUR UNTIL AFTER THE INSTALLATION OF PERIMETER CONTROLS.)
3. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE ENTIRETY OF CONSTRUCTION. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS NEEDED.
4. NOTE THAT ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS SHALL BE STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMPS PRIOR TO DIRECTING RUNOFF TO THEM.
5. CONSTRUCT TEMPORARY CULVERTS, DIVERSION CHANNELS, AND/OR BASINS AS REQUIRED. SEDIMENT TRAPS AND/OR BASINS SHALL BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.
6. COMPLETE MASS GRADING AND EARTHWORK IN ORDER TO ESTABLISH SITE SUBGRADE ELEVATIONS, AS WELL AS EXCAVATION NECESSARY TO CONSTRUCT FOUNDATIONS FOR PROPOSED STRUCTURES.
7. CONSTRUCT UNDERGROUND DRAINAGE, UTILITY AND LIGHTING INFRASTRUCTURE NECESSARY TO SUPPORT TEMPORARY AND PERMANENT CONDITIONS. ALL TRENCHES TO BE BACKFILLED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
8. ALL AREAS OF UNSTABILIZED SOIL SHALL BE TEMPORARILY STABILIZED AS SOON AS PRACTICABLE, BUT IN ALL CASES WITHIN 45 DAYS OF INITIAL DISTURBANCE, UNLESS A SHORTER TIME IS SPECIFIED BY LOCAL AUTHORITIES, THE CONSTRUCTION SEQUENCE APPROVED AS PART OF THE ISSUED PERMIT, OR AN INDEPENDENT MONITOR. ALL AREAS OF TEMPORARILY STABILIZED SOIL SHALL PERMANENTLY STABILIZED AS SOON AS PRACTICABLE BUT IN ALL CASES WITHIN 3 DAYS OF FINAL GRADING.
9. CONSTRUCT BASE COURSE GRAVELS FOR ALL DRIVES AND PARKING AREAS. ALL DRIVES AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
10. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES THAT HAVE NOT BEEN OTHERWISE STABILIZED BY GRAVELS SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
11. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER EROSION CONTROL MEASURES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
12. FINISH PAVING ALL DRIVES, AND PARKING AREAS. CONSTRUCT ALL HARDSCAPE, FIELD SURFACES AND SITE AMENITIES/FEATURES.
13. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
14. REMOVE TRAPPED SEDIMENTS FROM ALL EROSION CONTROL MEASURES AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

**EROSION CONTROL NOTES:**

1. ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL , LATEST EDITION.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL EROSION AND SEDIMENT CONTROL MEASURES FOR APPROVAL.
3. AS THE FIRST ORDER OF WORK, PRIOR TO ANY EARTH DISTURBANCE, THE CONTRACTOR SHALL INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BUT NOT LIMITED TO; INLET PROTECTION BARRIERS, SILT SOCKS, SILT FENCES, MULCH BERMS, AND STABILIZED CONSTRUCTION EXITS AS SHOWN ON THE DRAWINGS, AND AS REQUIRED BY ALL STATE AND LOCAL PERMITS AND APPROVALS.
4. INLET PROTECTION BARRIERS SHALL BE INSTALLED AT ALL EXISTING AND PROPOSED CATCH BASINS/CURB INLETS AND YARD DRAINS WITHIN THE LIMITS OF WORK AS WELL AS ANY CATCH BASINS/CURB INLETS AND YARD DRAINS THAT RECEIVE RUNOFF FROM ANY CONSTRUCTION ACTIVITIES. THESE MEASURES SHALL BE FULLY MAINTAINED FOR THE DURATION OF THE PROJECT
5. PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL ALL NON-PAVED AREAS HAVE BEEN STABILIZED.
6. CONTRACTOR SHALL INSTALL EROSION CONTROL BLANKETS ON ALL STEEP SLOPE AREA (3:1 OR GREATER).
7. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST AND WIND EROSION THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES INCLUDE, BUT NOT LIMITED TO; MOISTEN EXPOSED SOIL SURFACES PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST, MECHANICAL SWEEPERS ON PAVED SURFACES, AND COVERING SURFACES WITH CRUSHED STONE OR COARSE GRAVEL.
8. THE CONTRACTOR SHALL HAVE ALL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, INLET PROTECTION BARRIERS, PERIMETER CONTROLS, AND STEEP SLOPE EROSION CONTROL BLANKETS INSPECTED BY A QUALIFIED PERSON AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.25 INCHES OR GREATER. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED, REPAIRED, MODIFIED, OR ADDITIONAL MEASURES INSTALLED AS NECESSARY TO ADDRESS EVOLVING CONDITIONS DURING CONSTRUCTION.
9. SEDIMENT CONTROL FILTER MEASURES SHALL BE REPLACED WHEN SEDIMENT REACHES 1/3 THE HEIGHT OF THE FILTER.
10. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
11. ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND FERTILIZER.

**EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES**

1. THIS PROJECT DOES NOT EXCEED ONE (1) ACRE OF DISTURBANCE AND THUS DOES NOT REQUIRE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

**STABILIZATION:**

1. AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
   A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
      a. IN AREAS TO BE PAVED, "STABLE" MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, ITEM 304.2 HAVE BEEN INSTALLED.
   B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
   D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
2. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
3. ALL ROADS, DRIVES AND PARKING AREA SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
4. WINTER STABILIZATION PRACTICES:
   A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS;
   B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS;
   C. AFTER OCTOBER 15, INCOMPLETE ROAD, DRIVES, OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT;
   D. FOR OVER-WINTER PROTECTION, A DOUBLE ROW OF SEDIMENT BARRIERS (SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX, ETC.) SHALL BE PLACED WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE AREA.
3. STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:
   A. TEMPORARY SEEDING;
   B. MULCHING.
4. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
5. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN THESE AREAS, SILT FENCES, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
6. DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT FENCES, MULCH BERMS, HAY BALE BARRIERS, OR SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY OCTOBER 15.

**DUST CONTROL:**

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.
2. DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING.
3. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

**STOCKPILES:**

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

**OFF SITE VEHICLE TRACKING:**

1. THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION EXIT(S) PRIOR TO ANY EXCAVATION ACTIVITIES.

**VEGETATION:**

1. TEMPORARY GRASS COVER:
   A. SEEDBED PREPARATION:
      a. APPLY FERTILIZER AT THE RATE OF 600 POUNDS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3) TONS PER ACRE;
   B. SEEDING:
      a. UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE;
      b. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED;
      c. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER), HYDROSEEDINGS, WHICH INCLUDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING;
   C. MAINTENANCE:
      a. TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMS, ETC.).
2. PERMANENT MEASURES AND PLANTINGS:
   A. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5;
   B. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 800 POUNDS PER ACRE OF 10-20-20 FERTILIZER;
   C. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4-1/2 POUNDS AND 5-1/2 POUNDS PER INCH OF WIDTH;
   D. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH;
   E. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE;
   F. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED;
   G. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED;
   H. A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE INDICATED RATE:

| SEED MIX | APPLICATION RATE |
|---|---|
| CREEPING RED FESCUE | 20 LBS/ACRE |
| TALL FESCUE | 20 LBS/ACRE |
| REDTOP | 2 LBS/ACRE |

   IN NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW.
3. DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL):
   A. FOLLOW PERMANENT MEASURES SLOPE, LIME, FERTILIZER AND GRADING REQUIREMENTS. APPLY SEED MIXTURE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

**CONCRETE WASHOUT AREA:**

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

**ALLOWABLE NON-STORMWATER DISCHARGES:**

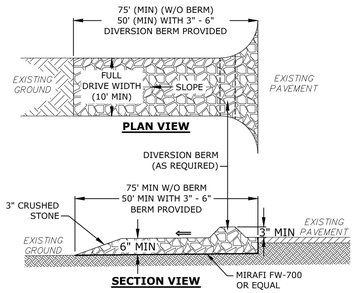
1. THE FOLLOWING ARE THE ONLY STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE:
   A. FIRE-FIGHTING ACTIVITIES;
   B. FIRE HYDRANT FLUSHING;
   C. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
   D. WATER USED TO CONTROL DUST;
   E. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING;
   F. ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED;
   G. PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED;
   H. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION;
   I. UNCONTAMINATED GROUND WATER OR SPRING WATER;
   J. FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED;
   K. UNCONTAMINATED EXCAVATION DEWATERING;
   L. LANDSCAPE IRRIGATION.

**WASTE DISPOSAL:**

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

**SPILL PREVENTION:**

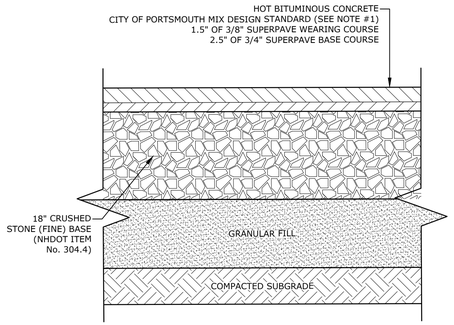
1. CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY ALL LOCAL, STATE AND FEDERAL REGULATIONS. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW.
2. THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
   A. GOOD HOUSEKEEPING - THE FOLLOWING GOOD HOUSEKEEPING PRACTICE SHALL BE FOLLOWED ON SITE DURING CONSTRUCTION:
      a. ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE;
      b. ALL REGULATED MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE, ON AN IMPERVIOUS SURFACE;
      c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED;
      d. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS;
      e. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER;
      f. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
      g. THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.
   B. HAZARDOUS PRODUCTS - THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
      a. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE;
      b. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION;
      c. SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.
   C. PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:
      a. PETROLEUM PRODUCTS:
         - ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE;
         - PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
         - SECURE FUEL STORAGE AREAS AGAINST UNAUTHORIZED ENTRY;
         - INSPECT FUEL STORAGE AREAS WEEKLY;
         - WHEREVER POSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET FROM PUBLIC WELLS;
         - COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
         - SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINERS CONTAINING REGULATED SUBSTANCES STORED OUTSIDE, EXCEPT FOR ON PREMISE USE HEATING FUEL TANKS, OR ABOVEGROUND OR UNDERGROUND STORAGE TANKS OTHERWISE REGULATED.
         - THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE:
           (1) EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED;
           (2) PLACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS;
           (3) HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL WORK AREAS;
           (4) USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES;
           (5) PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS SURFACE.
         - FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT SHALL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES THESE REQUIREMENTS ARE SUMMARIZED IN WD-DWGB-22-6 BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT, OR ITS SUCCESSOR DOCUMENT.
         https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/dwgb-22-6.pdf
      b. FERTILIZERS:
         - FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS;
         - ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER;
         - STORAGE SHALL BE IN A COVERED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
         - PAINTS:
         - ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE;
         - EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM;
         - EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
   D. SPILL CONTROL PRACTICES - IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
      a. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES;
      b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, BAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE;
      c. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY;
      d. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE;
      e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED;
      f. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
   E. VEHICLE FUELING AND MAINTENANCE PRACTICE:
      a. CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY;
      b. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY;
      c. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED;
      d. CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA;
      e. CONTRACTOR SHALL REGULARLY INSPECT VEHICLES FOR LEAKS AND DAMAGE;
      f. CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.




**PLAN VIEW**

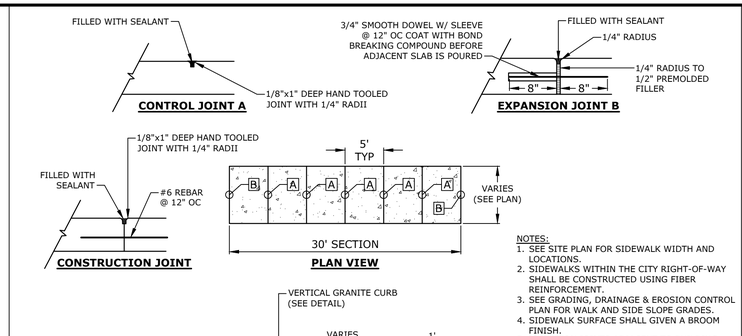
**SECTION VIEW**

NOTES
1. THE EXIT SHOULD BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF WAY.
2. WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHOULD BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL, RE-GRADED ON SITE, AND STABILIZED PRIOR TO RECONSTRUCTING THE EXIT.
3. THE CONTRACTOR SHOULD SWEEP THE PAVEMENT AT EXITS WHENEVER SOIL MATERIALS ARE TRACKED ONTO THE ADJACENT PAVEMENT OR TRAVELED WAY.
4. WHEN WHEEL WASHING IS REQUIRED, IT SHOULD BE CONDUCTED ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT-TRAPPING DEVICE.
5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS TO THE GREATEST EXTENT PRACTICAL.
6. NATURAL DRAINAGE THAT CROSSES THE LOCATION OF THE STONE PAD SHOULD BE INTERCEPTED AND PIPED BENEATH THE PAD, AS NECESSARY, WITH SUITABL



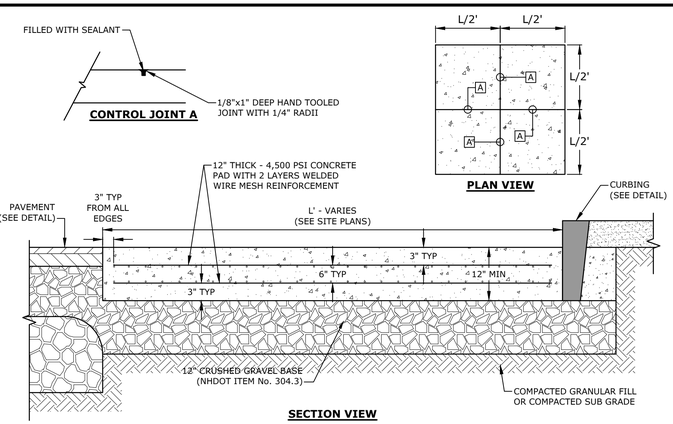

NOTES:
1. PAVEMENT MIX DESIGN WITHIN THE CITY RIGHT-OF-WAY SHALL COMPLY WITH THE CITY OF PORTSMOUTH MIX DESIGN STANDARD WITH A MAXIMUM OF 10% RAP. CONTRACTOR SHALL SUPPLY MIX DESIGNS TO DPW FOR APPROVAL PRIOR TO INSTALLATION.
2. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
3. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
4. A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE PAVEMENT PRIOR TO PLACING WEARING COURSE.

## TYPICAL STANDARD DUTY PAVEMENT SECTION
NO SCALE



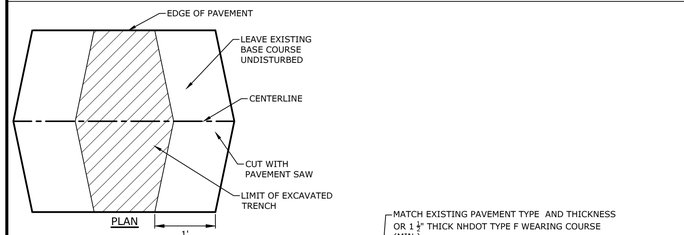

NOTES:
1. SEE SITE PLAN FOR SIDEWALK WIDTH AND LOCATIONS.
2. SIDEWALKS WITHIN THE CITY RIGHT-OF-WAY SHALL BE CONSTRUCTED USING FIBER REINFORCEMENT.
3. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR WALK AND SIDE SLOPE GRADES.
4. SIDEWALK SURFACE SHALL GIVEN A BROOM FINISH.
5. ISOLATION JOINTS ADJACENT TO BUILDING SHALL BE COORDINATED WITH BUILDING DRAWINGS.
6. CONTRACTOR SHALL SUBMIT THE PROPOSED CONCRETE MIX DESIGN FOR APPROVAL PRIOR TO CONSTRUCTION.
7. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.

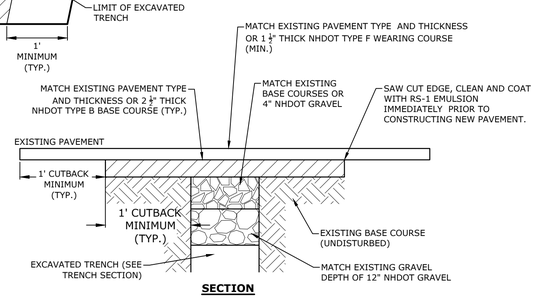
## CONCRETE SIDEWALK
NO SCALE



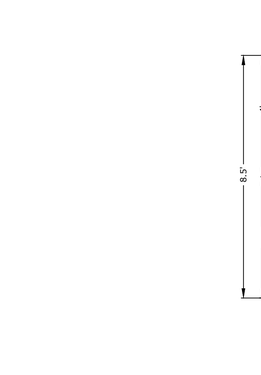

NOTES
1. SEE SITE PLAN FOR DUMPSTER PAD DIMENSIONS AND LOCATIONS.
2. DUMPSTER PAD SURFACE SHALL GIVEN A BROOM FINISH.
3. CONTRACTOR SHALL SUBMIT THE PROPOSED CONCRETE MIX DESIGN AND WELDED WIRE MESH REINFORCEMENT FOR APPROVAL PRIOR TO CONSTRUCTION.

## TYPICAL DUMPSTER PAD
NO SCALE

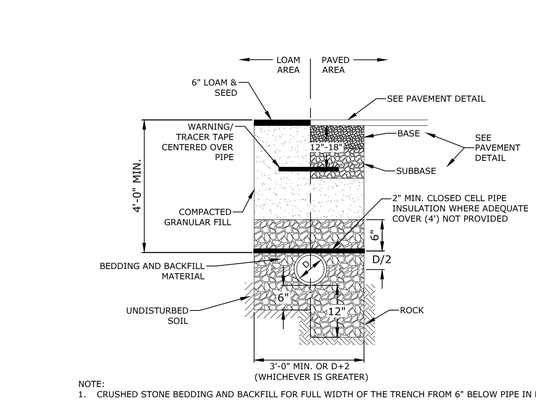



## DIAMOND ROADWAY TRENCH PATCH
NO SCALE

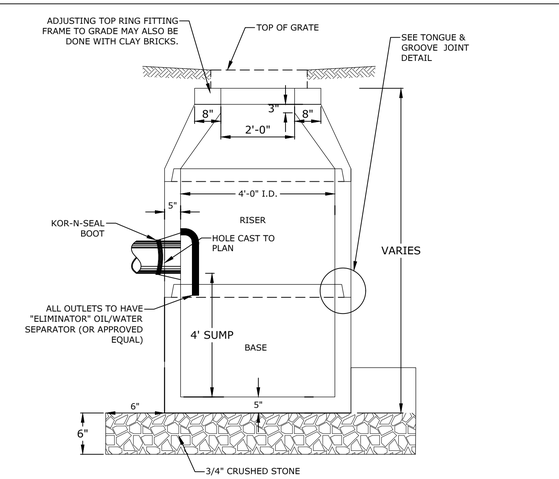


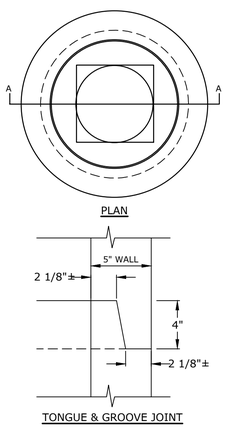

## STEEL BOLLARD
NO SCALE




NOTE:
1. CRUSHED STONE BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 6" ABOVE TOP OF PIPE.
2. ALL UTILITIES SHALL BE INSTALLED PER THE INDIVIDUAL UTILITY COMPANY STANDARDS. COORDINATE ALL INSTALLATIONS WITH INDIVIDUAL UTILITY COMPANIES AND THE CITY OF PORTSMOUTH.
3. DRAIN LINE SHALL BE INSULATED WHERE THERE IS LESS THAN 6' OF COVER IN PAVED AREAS AND LESS THAN 4' OF COVER IN NON-PAVED AREAS.

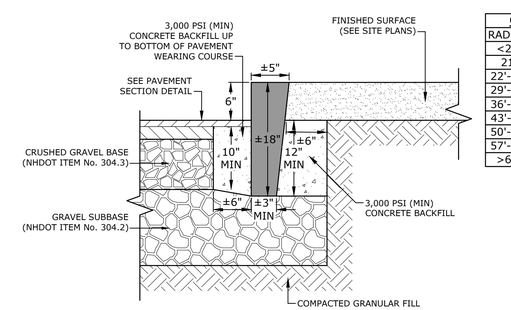
## STORM DRAIN TRENCH
NO SCALE




NOTES:
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF WALL.
3. THE TONGUE AND GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. RISERS OF 1', 2', 3', & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. THE STRUCTURES SHALL BE DESIGN FOR H2O LOADING.
6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.

## 4' DIAMETER CATCH BASIN
NO SCALE




| 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' |

NOTES
1. SEE SITE PLANS FOR LIMITS OF VERTICAL GRANITE CURB (VGC).
2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 3'
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 10'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES (SEE TABLE).
6. ALL RADII 20 FEET AND SMALLER SHALL BE CONSTRUCTED USING CURVED SECTIONS.
7. JOINTS BETWEEN STONES SHALL HAVE A MAXIMUM SPACING OF 1/2" AND SHALL BE MORTARED.

## VERTICAL GRANITE CURB
NO SCALE

Tighe & Bond
177 Corporate Drive
Portsmouth, NH 03801
T 603.433.8818

STATE OF NEW HAMPSHIRE – ERIC G. DORSMUS No. 16308 – LICENSED PROFESSIONAL ENGINEER
Eric Dorsmus
3/23/2026

STATE OF NEW HAMPSHIRE – PATRICK CRIMMINS No. 12378 – LICENSED PROFESSIONAL ENGINEER
3/23/2026

# New Franklin School

City of Portsmouth

Portsmouth, New Hampshire

| MARK | DATE | DESCRIPTION |
|---|---|---|

| | |
|---|---|
| PROJECT NO: | P0766-0009 |
| DATE: | 03/05/2026 |
| FILE: | P0766-0009- DTLS.dwg |
| DRAWN BY: | MKF |
| DESIGNED BY: | EGD |
| CHECKED BY: | EGD |
| APPROVED BY: | |

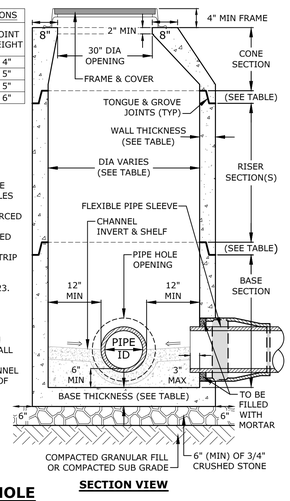
DETAILS SHEET

SCALE: AS SHOWN

C-601

Last Saved: 3/23/2026
Plotted: 03/23/2026 1:18pm By: MFillion
Tighe & Bond:\\tighebond.com\data\Projects\P\P0766 Portsmouth, NH General Proposals\0009 New Franklin School Upgrades\Drawings\AutoCAD\Sheet\P0766-0009- DTLS.dwg

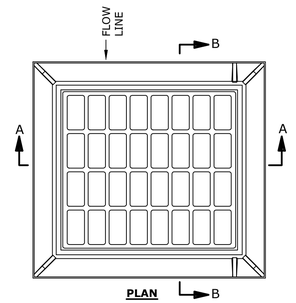
| MANHOLE DIMENSIONS | | | |
|---|---|---|---|
| DIA | WALL & BASE THICKNESS | | JOINT HEIGHT |
| | WALL | BASE | |
| 4' | 5" | 6" | 4" |
| 5' | 6" | 8" | 5" |
| 6' | 7" | 8" | 5" |
| 8' | 9" | 10" | 6" |



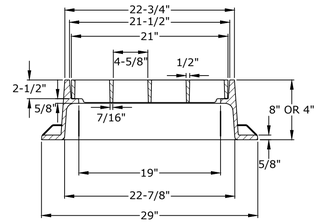

**SECTION VIEW**

NOTES
1. ALL PRECAST SECTIONS SHALL BE 4,000 PSI (MIN) CONCRETE DESIGNED FOR AASHTO H-20 LOADING CONFORMING TO ASTM C-478 AND AASHTO M-199.
2. STEEL REINFORCEMENT SHALL BE 0.12-IN²/LF AND 0.12-IN² (BOTH WAYS) BASE BOTTOM CONFORMING TO ASTM A-615 AND ASTM A-185.
3. FRAMES AND COVERS SHALL BE AS FOLLOWS:
   - PER THE CITY OF PORTSMOUTH, DEPARTMENT OF PUBLIC WORKS STANDARDS, FOR ALL MANHOLES WITHIN PUBLIC RIGHT OF WAYS OR EASEMENTS.
   - CAST IRON, DESIGNED FOR AASHTO H-20 LOADING, HAVING A 30" CLEAR OPENING, WITH THE WORD "DRAIN" IN A 3" LETTERING CAST INTO THE CENTER OF EACH COVER, FOR ALL MANHOLES WITHIN THE PROJECT SITE.
4. ADJUSTING FRAMES AND COVERS TO FINISHED GRADE SHALL BE DONE USING PRECAST REINFORCED CONCRETE GRADE RINGS OR CLAY BRICKS.
5. CONE SECTIONS MAY BE EITHER CONCENTRIC OR ECCENTRIC (TYP). FLAT SLAB TOPS MAY BE USED WHERE PIPE WOULD OTHERWISE ENTER INTO THE CONE SECTION OF THE STRUCTURE.
6. HORIZONTAL SECTION JOINTS SHALL BE TONGUE AND GROOVE JOINTS SEALED WITH ONE (1) STRIP OF FLEXIBLE BUTYL RUBBER JOINT SEALANT CONFORMING TO ASTM C-990.
   - JOINT SEALANT SHALL BE CONSEAL CS-102 (OR EQUAL).
5. PIPE TO MANHOLE CONNECTION JOINTS SHALL BE FLEXIBLE SLEEVE CONFORMING TO ASTM C-923.
   - FLEXIBLE SLEEVES SHALL BE KOR-N-SEAL (OR EQUAL).
6. PIPE HOLE OPENING(S) WITHIN PRECAST SECTIONS VARIES DEPENDING ON PIPE SIZE. PIPE OPENING SIZES SHALL BE COORDINATED WITH PRECASTER AND FLEXIBLE PIPE SLEEVE MANUFACTURERS.
7. MANHOLES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF HORIZONTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES WITHIN 3" OF HORIZONTAL SECTION JOINTS.
8. CHANNEL INVERT SHALL BE A SMOOTH CONTINUATION OF THE DRAIN LINE INVERT(S). ALL CHANNEL INVERTS AND SHELVES SHALL BE CONSTRUCTED PER THE CITY OF PORTSMOUTH, DEPARTMENT OF PUBLIC WORKS STANDARDS.

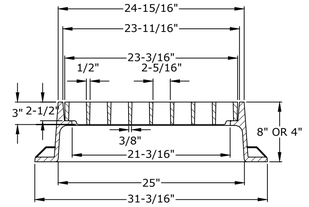
## TYPICAL DRAIN MANHOLE
NO SCALE




**PLAN**



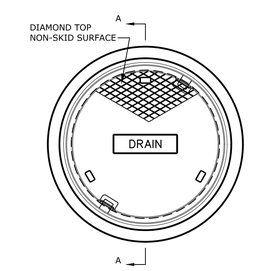

**SECTION B-B**



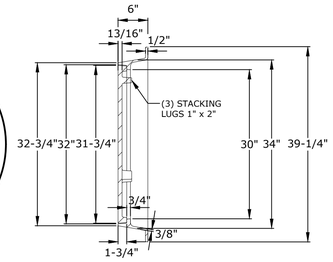

**SECTION A-A**

NOTES:
1. ALL DIMENSIONS ARE NOMINAL
2. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
   2.a. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING.
   2.b. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.
   2.c. ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
3. FRAME AVAILABLE IN 4" OR 8" HEIGHTS
4. FREE OPEN AREA = 2.55 SQ. FT.
5. USE 3-FLANGE FRAME IF INSTALLED ADJACENT TO GRANITE CURB.

## CATCH BASIN FRAME AND GRATE (NHDOT TYPE "B")
NO SCALE



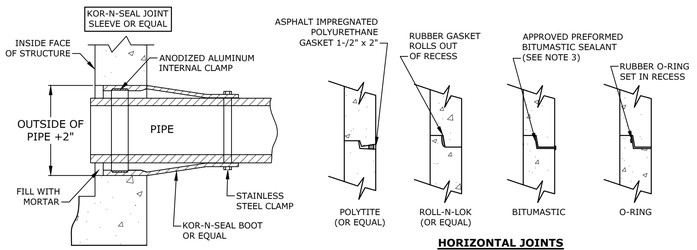

**PLAN**




**SECTION A-A**

NOTES:
1. ALL DIMENSIONS ARE NOMINAL.
2. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
   A. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING.
   B. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.
   C. ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
3. LABEL TYPE OF MANHOLE WITH 3" HIGH LETTERS IN THE CENTER OF THE COVER.

## DRAIN MANHOLE FRAME AND COVER
NO SCALE




**PIPE JOINTS**



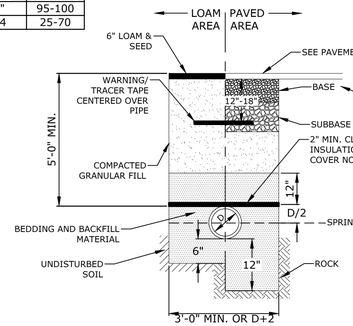

**HORIZONTAL JOINTS**

NOTES
1. HORIZONTAL JOINTS BETWEEN THE SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE PER CITY OF PORTSMOUTH DPW STANDARD AND SHALL BE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW ELASTOMERIC OR MASTIC-LIKE GASKET.
2. PIPE TO MANHOLE JOINTS SHALL BE PER CITY OF PORTSMOUTH STANDARD.
3. FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.
4. ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.

## STRUCTURE JOINTS
NO SCALE

| GRANULAR FILL (GRAVEL) | |
|---|---|
| SIEVE SIZE | % PASSING |
| 3" | 95-100 |
| #4 | 25-70 |

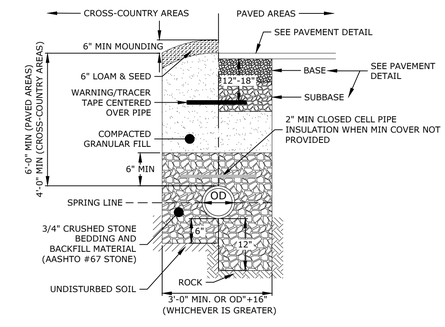
| SAND BLANKET | |
|---|---|
| SIEVE SIZE | % PASSING |
| 1/2" | 100 |
| #200 | 15 MAX |




| AASHTO #67 STONE (#4 to 3/4") | |
|---|---|
| SIEVE SIZE | % PASSING |
| 1" | 100 |
| 3/4" | 90-100 |
| 3/8" | 20-55 |
| #4 | 0-10 |
| #8 | 0-5 |

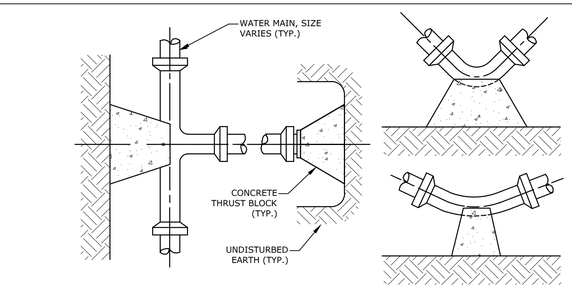
NOTE:
1. SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE.
2. ALL UTILITIES SHALL BE INSTALLED PER THE INDIVIDUAL UTILITY COMPANY STANDARDS. COORDINATE ALL INSTALLATIONS WITH INDIVIDUAL UTILITY COMPANIES AND THE CITY OF PORTSMOUTH.

## WATER TRENCH
NO SCALE




NOTES:
1. 3/4" CRUSHED STONE BEDDING AND BACKFILL MATERIAL FOR FULL WIDTH OF THE TRENCH FROM MINIMUM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO MINIMUM OF 6" OVER THE TOP OF THE PIPE.
2. SANITARY SEWER SHALL BE INSTALLED PER THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS STANDARDS. COORDINATE ALL INSTALLATIONS WITH THE CITY OF PORTSMOUTH.

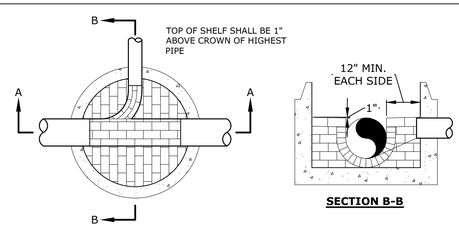
## SEWER TRENCH
NO SCALE



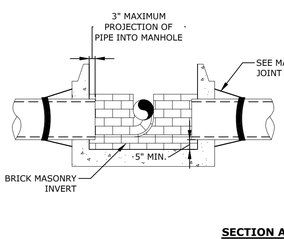

NOTES:
1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
4. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS.
5. INSTALLATION AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE WITH CITY OF PORTSMOUTH WATER DEPARTMENT STANDARDS.

| TEST PRESSURE = 200psi | SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL | | | | |
|---|---|---|---|---|---|
| REACTION TYPE | PIPE SIZE | | | | |
| | 4" | 6" | 8" | 10" | 12" |
| A 90° | 0.89 | 2.19 | 3.82 | 11.14 | 17.24 |
| B 180° | 0.65 | 1.55 | 2.78 | 8.38 | 12.00 |
| C 45° | 0.48 | 1.19 | 2.12 | 6.02 | 9.32 |
| D 22-1/2° | 0.25 | 0.60 | 1.06 | 3.08 | 4.74 |
| E 11-1/4° | 0.13 | 0.30 | 0.54 | 1.54 | 2.38 |

## THRUST BLOCKING DETAIL
NO SCALE



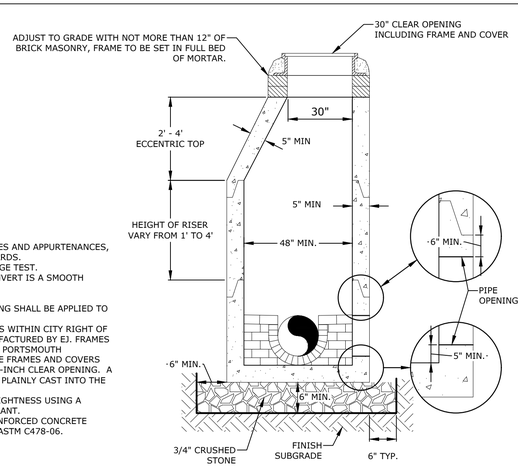

**PLAN** **SECTION B-B**




**SECTION A-A**

NOTES:
1. ALL SEWER MANHOLES, AS WELL AS ASSOCIATED PIPES AND APPURTENANCES, SHALL BE CONSTRUCTED TO CITY AND STATE STANDARDS.
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. TWO (2) COATS OF BITUMINOUS WATERPROOF COATING SHALL BE APPLIED TO ENTIRE EXTERIOR OF MANHOLE.
6. FRAMES AND COVERS: MANHOLE FRAMES AND COVERS WITHIN CITY RIGHT OF WAY SHALL BE CITY STANDARD HINGE COVERS MANUFACTURED BY EJ. FRAMES AND COVERS WILL BE PURCHASED FROM THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS. ALL OTHER MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
7. HORIZONTAL JOINTS SHALL BE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT.
8. BARREL AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE DESIGNED FOR H20 LOADING, AND CONFORMING TO ASTM C478-06.

## SEWER MANHOLE
NO SCALE




**TYPICAL SECTION**


Tighe & Bond
177 Corporate Drive
Portsmouth, NH 03801
T 603.433.8818


STATE OF NEW HAMPSHIRE — ERIC G. DORSEMUS No. 16308 — LICENSED PROFESSIONAL ENGINEER — Eric Dorsemus — 3/23/2026

STATE OF NEW HAMPSHIRE — PATRICK CRIMMINS No. 12378 — LICENSED PROFESSIONAL ENGINEER — 3/23/2026

# New Franklin School

City of Portsmouth

Portsmouth, New Hampshire

| MARK | DATE | DESCRIPTION |
|---|---|---|
| | | |

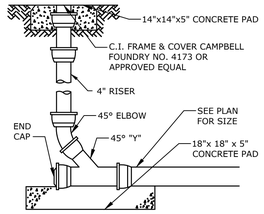
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| DATE: | 03/05/2026 |
| FILE: | P0766-0009- DTLS.dwg |
| DRAWN BY: | MKF |
| DESIGNED BY: | EGD |
| CHECKED BY: | EGD |
| APPROVED BY: | |

DETAILS SHEET

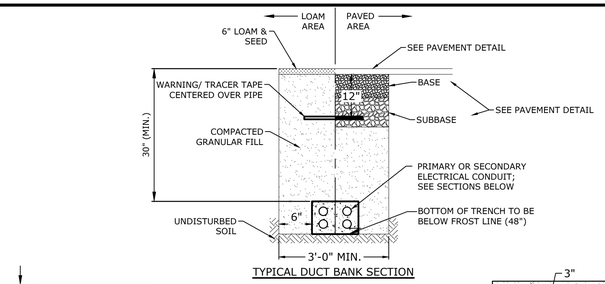
SCALE: AS SHOWN

C-602

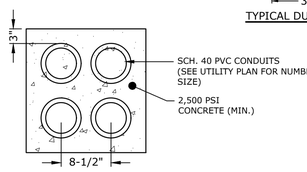

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Plotted: Mar 23, 2026-1:19pm By: MFillion
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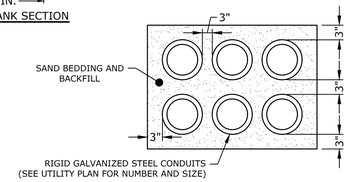

## CLEAN OUT DETAIL
NO SCALE




TYPICAL DUCT BANK SECTION



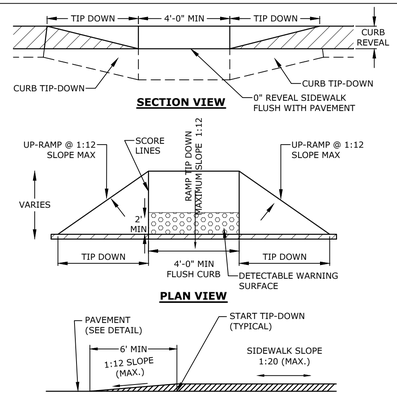

PRIMARY DUCTBANK




SECONDARY DUCTBANK

NOTES:
1. NO CONDUIT RUN SHALL EXCEED 360 DEGREES IN TOTAL BENDS.
2. A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL, SHALL BE INSTALLED IN THE CONDUIT PRIOR TO INSTALLING CONDUIT. THE STRING SHALL BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT.
3. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE.
4. SEE UTILITY PLAN FOR LIMITS.
5. ALL ELECTRICAL CONDUIT PENETRATING VAULTS AND FOUNDATION WALLS OR TRANSITIONING OUT OF A CONCRETE DUCT BANK SHALL BE RIGID GALVANIZED WITH TWO COATS OF CARBOLINE BITUMASTIC 300M COAL TAR EPOXY FOR PROTECTION.
6. PRIMARY ELECTRICAL CONDUITS SHALL BE SCH. 40 PVC IN A CONCRETE DUCT BANK. SECONDARY ELECTRICAL SHALL BE SCH. 40 PVC WITH SAND BEDDING AND BACKFILL.
7. PROVIDE 3" MIN. CONCRETE COVER OVER PRIMARY CONDUITS. SIDES OF CONCRETE DUCTBANKS SHALL BE FORMED VERTICAL. TOPS OF DUCTBANKS SHALL BE BULL-FLOATED.

## ELECTRICAL TRENCH DETAIL
NO SCALE




**SECTION VIEW**



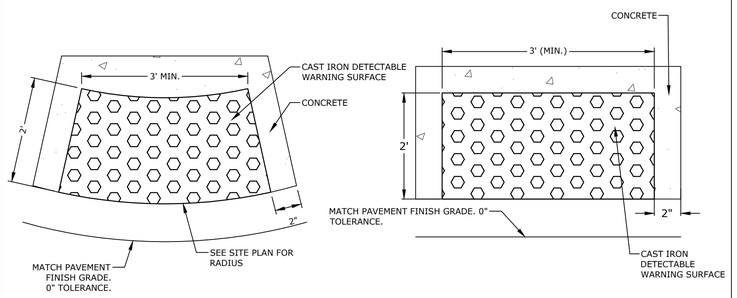

**PLAN VIEW**




**SECTION**

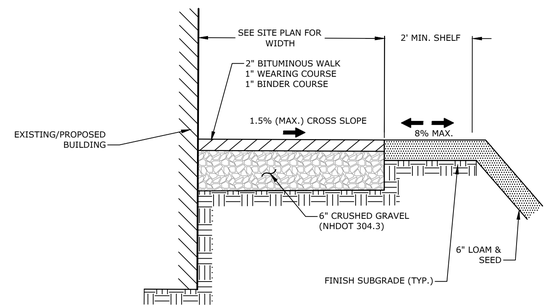
NOTES:
1. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS.
2. A 9" COMPACTED CRUSHED GRAVEL BASE (NHDOT ITEM No. 304.3) SHALL BE PROVIDED BENEATH RAMPS.
3. DETECTABLE WARNING PANEL SHALL BE CAST IRON WITH BLACK COATING

## CONCRETE SIDEWALK TIP-DOWN RAMPS WITH DETECTIBLE WARNING SURFACE
NO SCALE




NOTES:
1. DETECTABLE WARNING SURFACE SHALL BE CAST IRON PANEL SET IN CONCRETE.
2. CONCRETE THAT PLATES ARE SET IN SHALL BE NO LESS THAN 6" THICK, NHDOT TYPE AA (4000 PSI) WITH FIBER.
3. THE WARNING SURFACE SHALL EXTEND FULLY ACROSS AND WITHIN 2" OF THE EDGES OF THE SIDEWALK.
4. DETECTABLE WARNING SURFACES SHALL BE INSTALLED AT ALL MAJOR DRIVEWAYS AND STREET CROSSINGS.
5. DETECTABLE WARNING SURFACE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

## CAST IRON DETECTIBLE WARNING SURFACE
NO SCALE




NOTES:
1. SEE SITE PLAN FOR SIDEWALK WIDTH, AND LOCATIONS.
2. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR WALK AND SIDESLOPE GRADES.

## BITUMINOUS CONCRETE SIDEWALK
NO SCALE

Tighe & Bond
177 Corporate Drive
Portsmouth, NH 03801
T 603.433.8818

ERIC G. DOREMUS No. 16308 STATE OF NEW HAMPSHIRE
Eric Doremus
3/23/2026

PATRICK CRIMMINS No. 12378 STATE OF NEW HAMPSHIRE LICENSED PROFESSIONAL ENGINEER
3/23/2026

# New Franklin School

City of Portsmouth

Portsmouth, New Hampshire

| MARK | DATE | DESCRIPTION |
|---|---|---|
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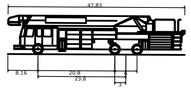
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| DESIGNED BY: | EGD |
| CHECKED BY: | EGD |
| APPROVED BY: | |

DETAILS SHEET

SCALE: AS SHOWN

C-603

Last Saved: 3/23/2026
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Portsmouth Fire Truck

| | |
|---|---|
| Overall Length | 47.830ft |
| Overall Width | 8.500ft |
| Overall Body Height | 10.432ft |
| Min Body Ground Clearance | 0.862ft |
| Track Width | 8.000ft |
| Lock-to-lock time | 6.00s |
| Max Steering Angle (Virtual) | 38.00° |

INTERSTATE ROUTE 95 (I-95)
(PUBLIC - VARIABLE WIDTH)

APPROXIMATE LIMITS OF WETLAND (PER CITY OF PORTSMOUTH GIS AND PRELIMINARY FIELD VERIFICATION BY TIGHE AND BOND ON 3/18/2026)

6"X6" CONCRETE BOUND W/ DRILL HOLE (NHB) FOUND, FLUSH

CBF CBDH NHB 6X6 FLUSH

N46°29'42"E
389'±

BUILDING ADDITION 2
2,340 SF

BUILDING ADDITION 1
515 SF

BUILDING ADDITION 3
5,970 SF

2-STORY BUILDING
(NEW FRANKLIN SCHOOL)
40,747 Sq.Ft.(FOOTPRINT)

#1 FRANKLIN DRIVE

MAP 220 LOT 2
13.27 Ac.±

"ACCESSIBLE PARKING" SIGN ON BUILDING

"VIOLET DAVIS MEMORIAL PLAYGROUND"

POLICE KEY BOX

"NO IDLING CLEAN AIR" SIGN ON BUILDING

"NEW FRANKLIN SCHOOL"

Pedestrian Path Typ.

EOP
VGC
VBC
SSLY
SSCC
CCC
OFF

STARK STREET
(PUBLIC- VARIABLE WIDTH)

ROUTE 1 BYPASS - PORTSMOUTH
(PUBLIC - VARIABLE WIDTH)

0 30' 60'
SCALE: 1" = 30'

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Tighe & Bond
177 Corporate Drive
Portsmouth, NH 03801
T 603.433.8818

STATE OF NEW HAMPSHIRE
ERIC G. DOREMUS
No. 16308
LICENSED LAND SURVEYOR
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3/23/2026

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City of Portsmouth

Portsmouth, New Hampshire

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| DRAWN BY: | MKF |
| DESIGNED BY: | EGD |
| CHECKED BY: | EGD |
| APPROVED BY: | |

FIRE TRUCK TURNING PLAN

SCALE: AS SHOWN

C-700

## PRE-DEVELOPMENT WATERSHED LEGEND

PRE-DEVELOPMENT WATERSHED BOUNDARY

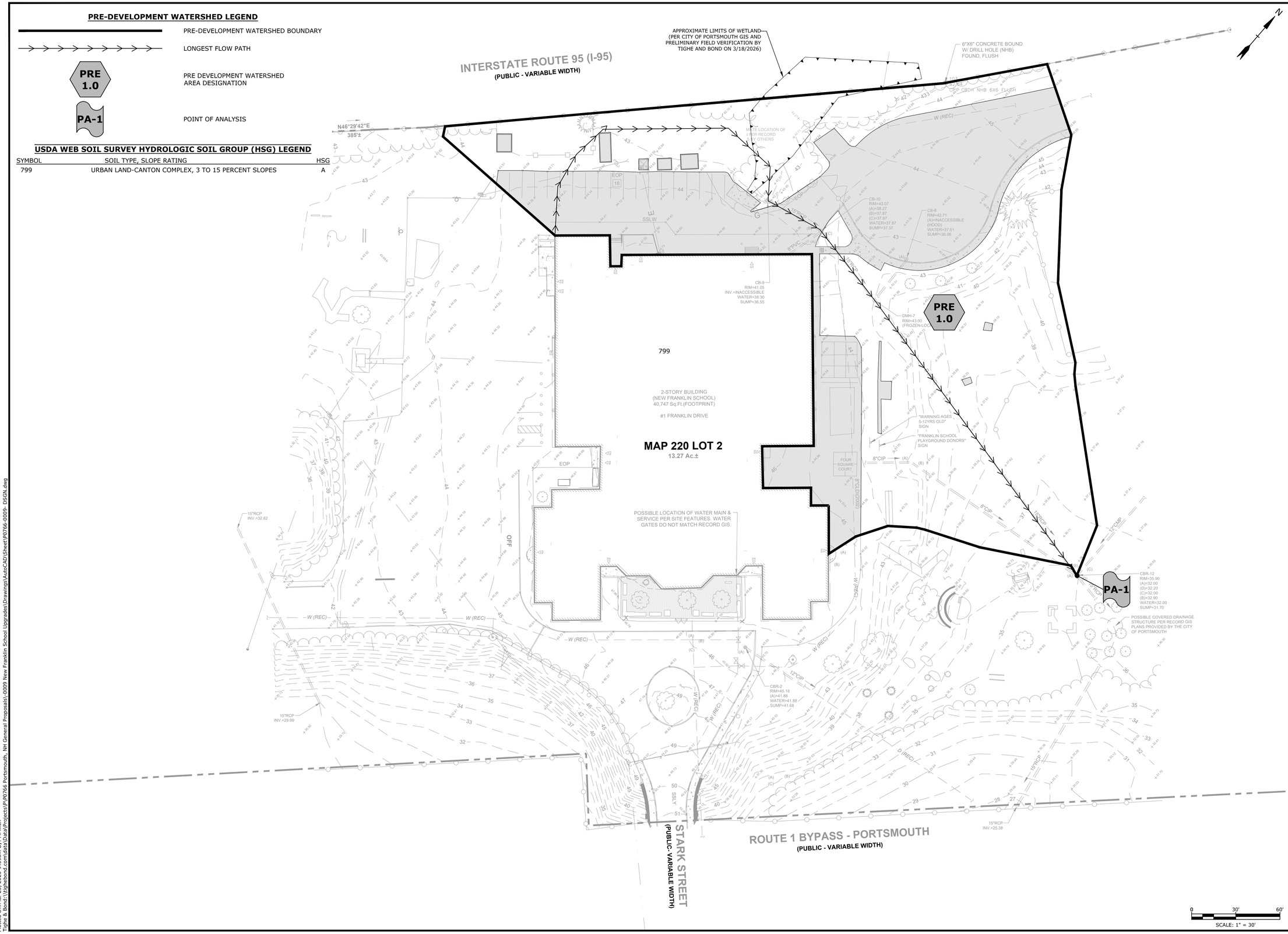
LONGEST FLOW PATH

PRE 1.0 — PRE DEVELOPMENT WATERSHED AREA DESIGNATION

PA-1 — POINT OF ANALYSIS

## USDA WEB SOIL SURVEY HYDROLOGIC SOIL GROUP (HSG) LEGEND

| SYMBOL | SOIL TYPE, SLOPE RATING | HSG |
|---|---|---|
| 799 | URBAN LAND-CANTON COMPLEX, 3 TO 15 PERCENT SLOPES | A |




0 30' 60'

SCALE: 1" = 30'


Tighe & Bond
177 Corporate Drive
Portsmouth, NH 03801
T 603.433.8818


STATE OF NEW HAMPSHIRE — ERIC G. DOREMUS No. 16308 — LICENSED LAND SURVEYOR — 3/23/2026

STATE OF NEW HAMPSHIRE — PATRICK CRIMMINS No. 12378 — LICENSED PROFESSIONAL ENGINEER — 3/23/2026

# New Franklin School

City of Portsmouth

Portsmouth, New Hampshire

| MARK | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| PROJECT NO: | P0766-0009 |
| DATE: | 03/23/2026 |
| FILE: | P0766-0009- DSGN.dwg |
| DRAWN BY: | MKF |
| DESIGNED BY: | EGD |
| CHECKED BY: | EGD |
| APPROVED BY: | |

PRE-DEVELOPMENT WATERSHED PLAN

SCALE: AS SHOWN

C-800


Last Saved: 3/23/2026
Printed: 3/23/2026 8:9:59am By: MFillion
Tighe & Bond:\\tighebond.com\data\Data\Projects\P\P0766 Portsmouth, NH General Proposals\~0009 New Franklin School Upgrades\Drawings\AutoCAD\Sheet\P0766-0009- DSGN.dwg

## POST-DEVELOPMENT WATERSHED LEGEND

POST-DEVELOPMENT WATERSHED BOUNDARY

LONGEST FLOW PATH

POST 1.0 — POST DEVELOPMENT WATERSHED AREA DESIGNATION

PA-1 — POINT OF ANALYSIS

## USDA WEB SOIL SURVEY HYDROLOGIC SOIL GROUP (HSG) LEGEND

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|---|---|---|
| 799 | URBAN LAND-CANTON COMPLEX, 3 TO 15 PERCENT SLOPES | A |

INTERSTATE ROUTE 95 (I-95)
(PUBLIC - VARIABLE WIDTH)

APPROXIMATE LIMITS OF WETLAND (PER CITY OF PORTSMOUTH GIS AND PRELIMINARY FIELD VERIFICATION BY TIGHE AND BOND ON 3/18/2026)

APPROXIMATE LOCATION OF GAS MAIN PER RECORD GIS PLANS PROVIDED BY UNITIL

6"X6" CONCRETE BOUND W/ DRILL HOLE (NHB) FOUND, FLUSH

APPROXIMATE LOCATION OF GAS MAIN PER RECORD MARKINGS BY OTHERS

N46°29'42"E 389'±

BUILDING ADDITION 2
2,340 SF

799

POST 1.0

2-STORY BUILDING
(NEW FRANKLIN SCHOOL)
40,747 Sq.Ft.(FOOTPRINT)

#1 FRANKLIN DRIVE

MAP 220 LOT 2
13.27 Ac.±

4.7%

BUILDING ADDITION 1
515 SF

BUILDING ADDITION 3
5,970 SF

POSSIBLE LOCATION OF WATER MAIN & SERVICE PER SITE FEATURES. WATER GATES DO NOT MATCH RECORD GIS.

PA-1

POSSIBLE COVERED DRAINAGE STRUCTURE PER RECORD GIS PLANS PROVIDED BY THE CITY OF PORTSMOUTH

APPROXIMATE LOCATION OF GAS MAIN PER RECORD GIS PLANS PROVIDED BY UNITIL

APPROXIMATE LOCATION OF GAS MAIN PER RECORD MARKINGS BY OTHERS

STARK STREET
(PUBLIC- VARIABLE WIDTH)

ROUTE 1 BYPASS - PORTSMOUTH
(PUBLIC - VARIABLE WIDTH)

SCALE: 1" = 30'


Tighe & Bond
177 Corporate Drive
Portsmouth, NH 03801
T 603.433.8818


STATE OF NEW HAMPSHIRE — ERIC G. DORSEMUS No. 16308 — LICENSED LAND SURVEYOR — 3/23/2026

STATE OF NEW HAMPSHIRE — PATRICK CRIMMINS No. 12378 — LICENSED PROFESSIONAL ENGINEER — 3/23/2026

# New Franklin School

City of Portsmouth

Portsmouth, New Hampshire

| MARK | DATE | DESCRIPTION |
|---|---|---|

| | |
|---|---|
| PROJECT NO: | P0766-0009 |
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| DRAWN BY: | MKF |
| DESIGNED BY: | EGD |
| CHECKED BY: | EGD |
| APPROVED BY: | |

POST-DEVELOPMENT WATERSHED PLAN

SCALE: AS SHOWN

C-801

Last Saved: 3/23/2026
Printed: Mar 23, 2026 - 10:02am By: MFillion
Tighe & Bond:\\tighebond.com\data\Data\Projects\P\P0766 Portsmouth, NH General Proposals\~0009 New Franklin School Upgrades\Drawings\AutoCAD\Sheet\P0766-0009- DSGN.dwg




**1** BUILDING PLAN - FOR TAC REVIEW
Scale: NTS

## TAC INFORMATION:

GROSS AREA (BUILDING ONLY)
(NEW) PHASE 1: 3,281 SF
(NEW) PHASE 2: 6,063 SF
TOTAL: 9,344 SF

(EXISTING) PHASE 3: 40,506 SF

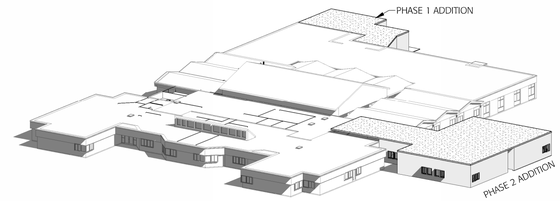
GRAND TOTAL (NEW + EXISTING): 49,850 SF

STATEMENT OF USES:
BUILDING IS A SINGLE STORY ELEMENTARY SCHOOL (EDUCATIONAL OCCUPANCY) W/ BUSINESS (OFFICES), ASSEMBLY (GYM, CAFETERIA), STORAGE, AND MECHANICAL SUPPORT SPACES.

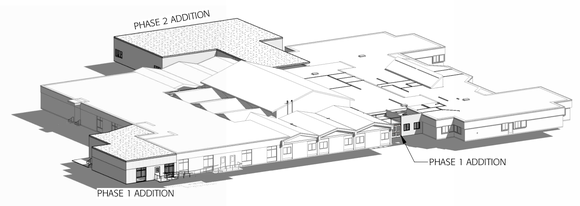
OVERHANGS:
PROPOSED OVERHANGS NOT SHOWN. SOFFIT PROJECTIONS = 4"
EXISTING OVERHANGS NOT SHOWN. SOFFIT PROJECTIONS RANGE FROM 2" TO 20".

FIRST FLOOR ELEVATION:
SEE CIVIL PLAN / SURVEY FOR FIRST FLOOR ELEVATION AND GRADE PLANE.

## MASSING:




**2** MASSING FOR TAC 1
Scale:




**3** MASSING FOR TAC 2
Scale:

banwell ARCHITECTS
THE CARRIAGE HOUSE
6 SOUTH PARK STREET
LEBANON, NH 03766
T: (603) 448 3778

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CONSULTANTS / DESIGN TEAM:

**OWNER:**
PORTSMOUTH SCHOOL DEPARTMENT, SAU 52
1 JUNKINS AVENUE, SUITE 402
PORTSMOUTH, NH 03801
T: (603) 436-0910

**CONSTRUCTION MANAGER:**
ENERGY EFFICIENT INVESTMENTS, INC.
19D STAR DRIVE
MERRIMACK, NH 03054
T: (603) 423-6001

**ARCHITECT:**
BANWELL ARCHITECTS
6 SOUTH PARK STREET
LEBANON, NH 03766
T: (603) 448-3778

**CIVIL:**
TIGHE & BOND
177 CORPORATE DRIVE
PORTSMOUTH, NH 3801
T: (603) 294-9208

**STRUCTURAL:**
SIG ENGINEERING, LLC
6 GOLDEN GATE DRIVE
HOOKSETT, NH 03106
T: (207) 752-5274

**ELECTRICAL:**
SEACOAST CONSULTING ENGINEERS, LLC
261 JENNIE LANE
ELLIOT, MAINE 03903
T: (207) 475-7054

**MECHANICAL/PLUMBING:**
ENERGY EFFICIENT INVESTMENTS, INC.
296 AVENUE D
WILLISTON, VT 05495
T: (603) 423-6000

**FIRE PROTECTION:**
DEFERRED SUBMITTAL

VITAL INFORMATION REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE WORK IS CONTAINED IN THE PROJECT MANUAL PREPARED FOR THIS PROJECT.

| REVISION | DATE | COMMENTS |
|---|---|---|

KEY PLAN & NORTH ARROW:

PROJECT:
NEW FRANKLIN ELEMENTARY SCHOOL - PHASE 1
1 FRANKLIN DRIVE
PORTSMOUTH, NH 03801

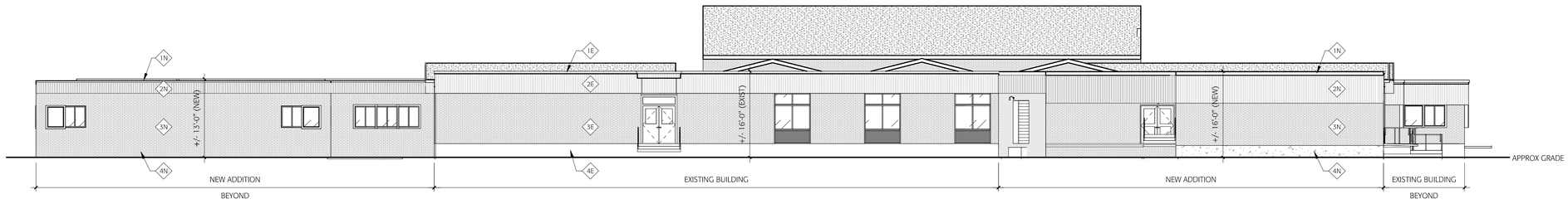
ISSUED:
TAC REVIEW

DRAWING
FLOOR PLAN DATA

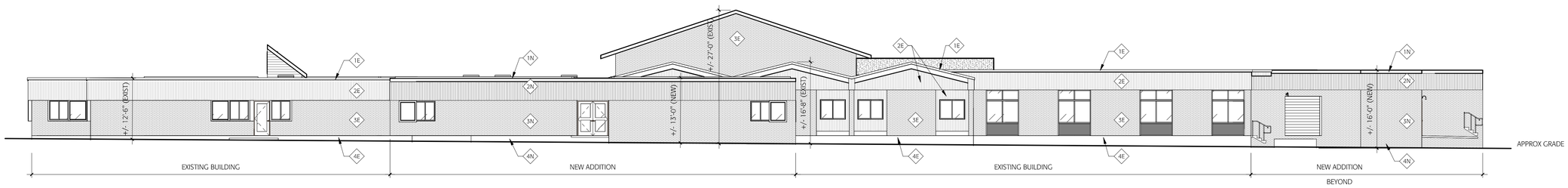
PROJECT NO: 19-602 DATE: 3/23/2026

SHEET NUMBER:
# TAC 100

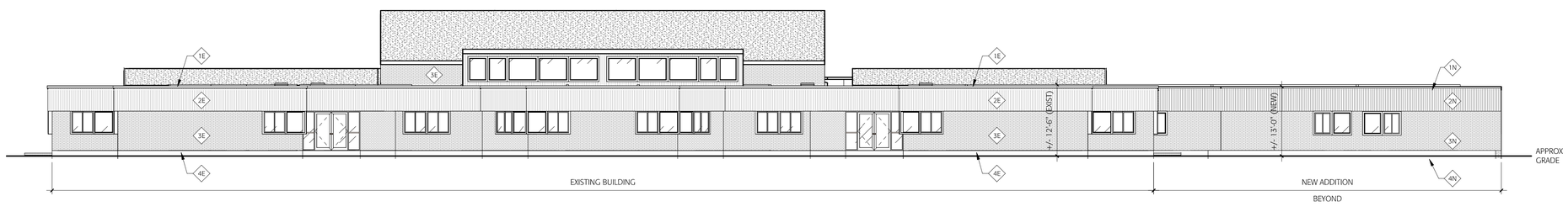
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3/20/2026 5:15:20 PM



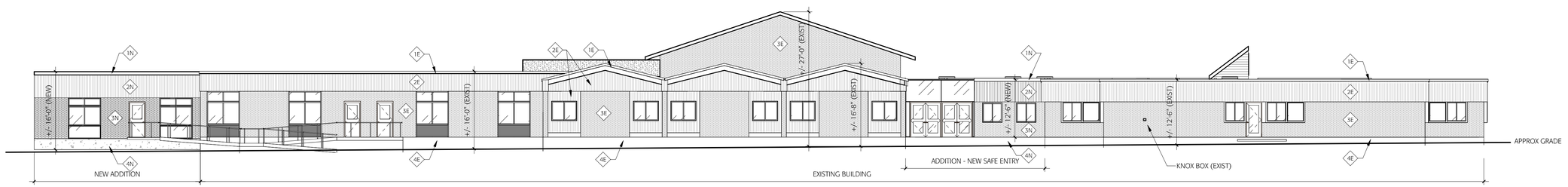

**1** ELEVATION - NORTH (P)
NTS




**2** ELEVATION - EAST (P)
NTS




**3** ELEVATION - SOUTH (P)
NTS




**4** ELEVATION - WEST (P)
NTS

## MATERIALS LEGEND KEY:

| | |
|---|---|
| 1E | METAL DRIP EDGE (EXISTING) |
| 1N | METAL DRIP EDGE (NEW) |
| 2E | VERTICAL VINYL SIDING (EXISTING) |
| 2N | VERTICAL VINYL SIDING (NEW) |
| 3E | BRICK VENEER (EXISTING) |
| 3N | BRICK VENEER (NEW) |
| 4E | CONCRETE FOUNDATION (EXISTING) |
| 4N | CONCRETE FOUNDATION (NEW) |


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| REVISION | DATE | COMMENTS |
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PROJECT:
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1 FRANKLIN DRIVE
PORTSMOUTH, NH 03801

ISSUED:
TAC REVIEW

DRAWING TITLE:
ELEVATION DATA

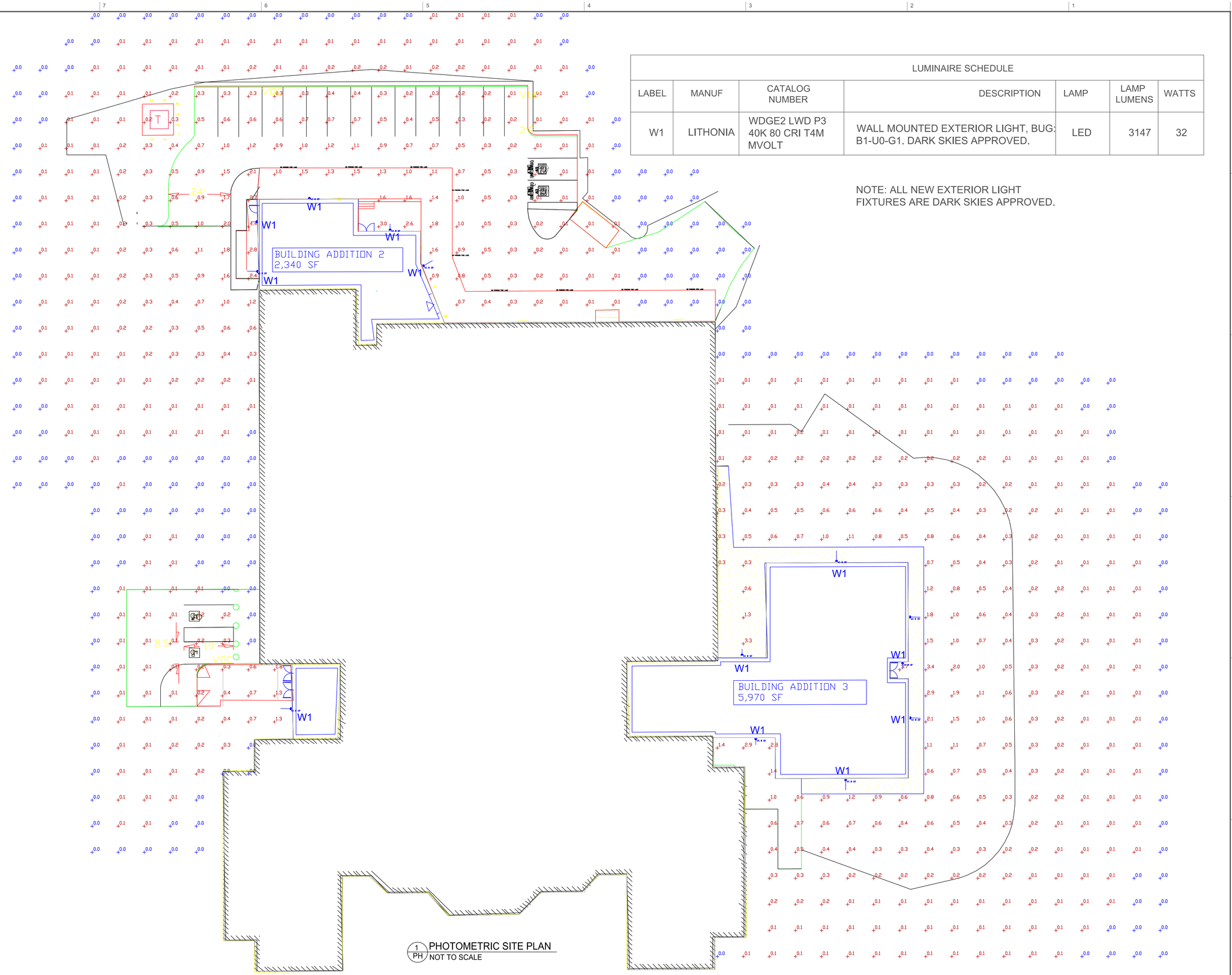
PROJECT NO: 19-602 DATE: 3/23/2026

SHEET NUMBER:
**TAC200**

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3/20/2026 5:35:14 PM

| LUMINAIRE SCHEDULE | | | | | | |
|---|---|---|---|---|---|---|
| LABEL | MANUF | CATALOG NUMBER | DESCRIPTION | LAMP | LAMP LUMENS | WATTS |
| W1 | LITHONIA | WDGE2 LWD P3 40K 80 CRI T4M MVOLT | WALL MOUNTED EXTERIOR LIGHT, BUG: B1-U0-G1. DARK SKIES APPROVED. | LED | 3147 | 32 |

NOTE: ALL NEW EXTERIOR LIGHT FIXTURES ARE DARK SKIES APPROVED.


W1
BUILDING ADDITION 2
2,340 SF
W1
W1
W1
W1
W1
W1
W1
W1
W1
W1
BUILDING ADDITION 3
5,970 SF
W1
W1
W1
W1
W1
W1
W1
W1
W1
W1

# Owner Letter of Authorization

This letter is to authorize Tighe & Bond, Inc. (Civil Engineer), to represent and submit on behalf of Portsmouth School Department/SAU 52 (Owner/Applicant), applications and materials in all site design and permitting matters for the proposed *New Franklin School Addition Project* located at 1 Frankin Drive in Portsmouth, New Hampshire on parcel of land identified as Map 220 Lot 2. This project includes the construction of three separate additions to the existing school and associated on-site improvements. This authorization shall relate to those activities that are required for local, state and federal permitting for the above project and include any required signatures for those applications.

| Signature | Zachary J. McLaughlin<br>Print Name | 3/19/26<br>Date |
|---|---|---|

Tighe & Bond

Partnership with purpose

New Franklin School
1 Franklin Ave
Portsmouth, NH 03801

# Drainage Analysis

Prepared For:

**City of Portsmouth**
1 Junkins Ave
Portsmouth, NH 03801

March 23, 2026

TECHNICAL MEMORANDUM

# Drainage Analysis

**TO:** City of Portsmouth Technical Advisory Committee (TAC)

**FROM:** Eric Doremus, PE
Patrick M. Crimmins, PE

**COPY:** New Franklin School

**DATE:** March 23, 2026

## 1.0 Project Description

The project site is located at 1 Franklin Avenue and is identified as Map 220, Lot 2 on the City of Portsmouth Tax Maps.

The proposed project consists of the construction of three (3) additions to the existing New Franklin Elementary School. The first addition, approximately 500 square feet, will function as a vestibule entrance to serve student drop-off activities. The second addition, approximately 2,350 square feet, will provide an additional kindergarten classroom and a loading zone. The third addition, approximately 6,000 square feet, will accommodate new third- and fourth-grade classrooms.

The project also includes associated site, grading, drainage, and utilities improvements. These improvements consist of the installation of an accessible path of egress around the third building addition, as well as the creation of an accessible pathway at the main entrance located southwest of the existing building. The relocation of water, sewer, and electrical utilities will be required to allow for the proposed building expansion.

## 2.0 Drainage Analysis

The proposed project will create approximately 8,300 square feet of additional impervious surface compared to existing conditions. Currently, stormwater runoff from the existing Northwest parking area flows northwest toward an adjacent wetland, where it is collected by an existing catch basin and conveyed through a closed drainage system before discharging off-site.

To improve upon these existing conditions, runoff from the proposed parking area and building will be intercepted by new curbing and redirected to an offline deep sump catch basin equipped with an oil-water separator hood. The additional proposed roof runoff will be discharged directly to a closed drainage system. This system will provide an additional level of pre-treatment prior to discharge into the existing closed drainage network and subsequent off-site conveyance.

Due to project budget constraints, full stormwater quality treatment and detention for the proposed impervious surfaces is not being proposed at this time. However, the selected design approach represents a practical and cost-effective improvement over existing conditions by reducing the direct discharge of untreated runoff to the wetland.

Overall, the proposed improvements will limit the amount of untreated impervious surface runoff reaching the wetland while enhancing stormwater management relative to the current site conditions.

## 2.1 Pre- and Post-Development Comparison

The pre-development and post-development watershed areas have been evaluated using a single point of analysis, designated as PA-1. This point is located at the connection between the proposed drainage system and the existing catch basin, prior to discharge off-site.

The location of PA-1 remains unchanged between pre- and post-development conditions. Additionally, the overall contributing sub-catchment areas to this point will remain consistent under both scenarios.

The post-development watershed will largely reflect existing site conditions, with the primary changes consisting of proposed building additions and a reconfigured parking area. These modifications will result in an increase of approximately ±8,300 square feet of impervious surface within the watershed.

## 2.2 Peak Rate Comparison

The peak discharge rates at these points of analysis were determined by analyzing Type III, 24-hour storm events. The rainfall data for these storm events were obtained from the data published by the Northeast Regional Climate Center at Cornell University.

The following table summarizes and compares the pre- and post-development peak runoff rates for the 2-year, 10-year, 25-year and 50-year storm events at the point of analysis.

**Table 2.2 – Comparison of Pre- and Post- Development Flows**

| Point of Analysis | Pre/**Post** 2-Year Storm (cfs) | Pre/**Post** 10-Year Storm (cfs) | Pre/**Post** 25-Year Storm (cfs) | Pre/**Post** 50-Year Storm (cfs) |
|---|---|---|---|---|
| PA1 | 2.11/**3.06** | 5.43/**6.89** | 8.39/**10.18** | 11.23/**13.37** |

## PRE-DEVELOPMENT WATERSHED LEGEND

PRE-DEVELOPMENT WATERSHED BOUNDARY

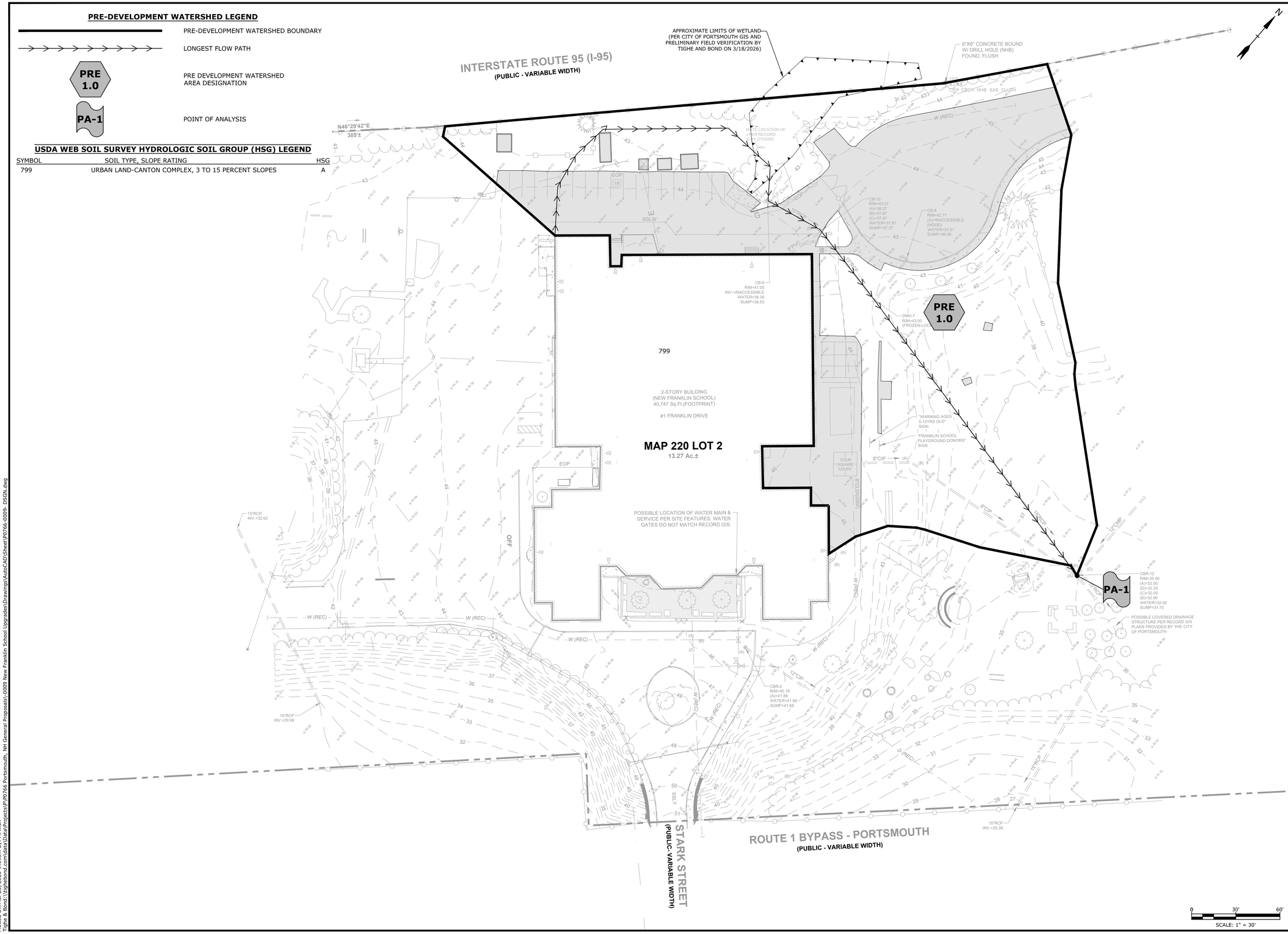
LONGEST FLOW PATH

PRE 1.0 — PRE DEVELOPMENT WATERSHED AREA DESIGNATION

PA-1 — POINT OF ANALYSIS

## USDA WEB SOIL SURVEY HYDROLOGIC SOIL GROUP (HSG) LEGEND

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STATE OF NEW HAMPSHIRE — PATRICK CRIMMINS No. 12378 — LICENSED PROFESSIONAL ENGINEER — 3/23/2026

# New Franklin School

City of Portsmouth

Portsmouth, New Hampshire

| MARK | DATE | DESCRIPTION |
|---|---|---|
| | | |

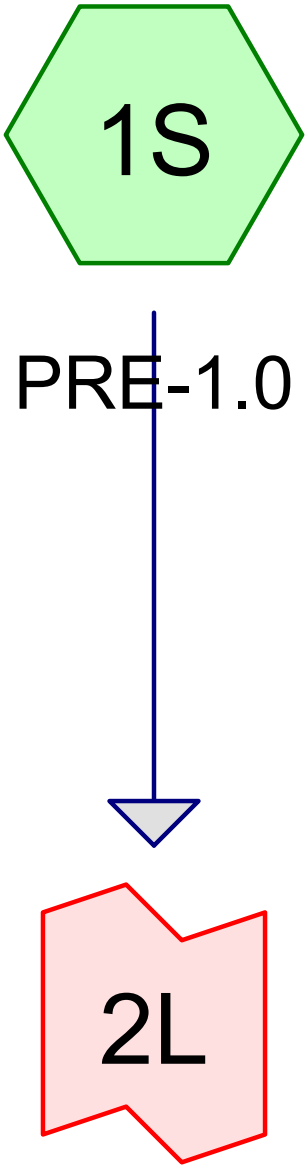
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| CHECKED BY: | EGD |
| APPROVED BY: | |

PRE-DEVELOPMENT WATERSHED PLAN

SCALE: AS SHOWN

C-800


Last Saved: 3/23/2026
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Tighe & Bond:\\tighebond.com\data\Data\Projects\P\P0766 Portsmouth, NH General Proposals\~0009 New Franklin School Upgrades\Drawings\AutoCAD\Sheet\P0766-0009- DSGN.dwg




Subcat Reach Pond Link

**Routing Diagram for Pre-Development Model**
Prepared by Tighe & Bond, Printed 3/20/2026
HydroCAD® 10.20-4c s/n 01453 © 2024 HydroCAD Software Solutions LLC

## Rainfall Events Listing (selected events)

| Event# | Event Name | Storm Type | Curve | Mode | Duration (hours) | B/B | Depth (inches) | AMC |
|---|---|---|---|---|---|---|---|---|
| 1 | 2-yr | Type II 24-hr | | Default | 24.00 | 1 | 3.20 | 2 |
| 2 | 10-yr | Type II 24-hr | | Default | 24.00 | 1 | 4.86 | 2 |
| 3 | 25-yr | Type II 24-hr | | Default | 24.00 | 1 | 6.16 | 2 |
| 4 | 50-yr | Type II 24-hr | | Default | 24.00 | 1 | 7.38 | 2 |

## Area Listing (selected nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 1.087 | 49 | 50-75% Grass cover, Fair, HSG A (1S) |
| 0.673 | 98 | Paved parking, HSG A (1S) |
| **1.761** | **68** | **TOTAL AREA** |

## Soil Listing (selected nodes)

| Area (acres) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 1.761 | HSG A | 1S |
| 0.000 | HSG B | |
| 0.000 | HSG C | |
| 0.000 | HSG D | |
| 0.000 | Other | |
| **1.761** | | **TOTAL AREA** |

## Ground Covers (selected nodes)

| HSG-A (acres) | HSG-B (acres) | HSG-C (acres) | HSG-D (acres) | Other (acres) | Total (acres) | Ground Cover | Subcatchment Numbers |
|---|---|---|---|---|---|---|---|
| 1.087 | 0.000 | 0.000 | 0.000 | 0.000 | 1.087 | 50-75% Grass cover, Fair | 1S |
| 0.673 | 0.000 | 0.000 | 0.000 | 0.000 | 0.673 | Paved parking | 1S |
| **1.761** | **0.000** | **0.000** | **0.000** | **0.000** | **1.761** | **TOTAL AREA** | |

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment1S: PRE-1.0** Runoff Area=76,696 sf 38.25% Impervious Runoff Depth>0.65"
Flow Length=568' Tc=6.1 min CN=68 Runoff=2.11 cfs 0.095 af

**Link 2L: PA-1** Inflow=2.11 cfs 0.095 af
Primary=2.11 cfs 0.095 af

**Total Runoff Area = 1.761 ac Runoff Volume = 0.095 af Average Runoff Depth = 0.65"**
**61.75% Pervious = 1.087 ac 38.25% Impervious = 0.673 ac**

## Summary for Subcatchment 1S: PRE-1.0

Runoff = 2.11 cfs @ 11.99 hrs, Volume= 0.095 af, Depth> 0.65"
Routed to Link 2L : PA-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=3.20"

| Area (sf) | CN | Description |
|---|---|---|
| 29,335 | 98 | Paved parking, HSG A |
| 47,361 | 49 | 50-75% Grass cover, Fair, HSG A |
| 76,696 | 68 | Weighted Average |
| 47,361 | | 61.75% Pervious Area |
| 29,335 | | 38.25% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.7 | 44 | 0.0180 | 1.12 | | **Sheet Flow, Parking Area** Smooth surfaces n= 0.011 P2= 3.20" |
| 4.6 | 192 | 0.0100 | 0.70 | | **Shallow Concentrated Flow, Woods Area Against Parking** Short Grass Pasture Kv= 7.0 fps |
| 0.8 | 332 | 0.0170 | 6.86 | 8.42 | **Pipe Channel, Pipe Network** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Cast iron, coated |
| 6.1 | 568 | Total | | | |

## Summary for Link 2L: PA-1

Inflow Area = 1.761 ac, 38.25% Impervious, Inflow Depth > 0.65" for 2-yr event
Inflow = 2.11 cfs @ 11.99 hrs, Volume= 0.095 af
Primary = 2.11 cfs @ 11.99 hrs, Volume= 0.095 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment1S: PRE-1.0** Runoff Area=76,696 sf 38.25% Impervious Runoff Depth>1.62"
Flow Length=568' Tc=6.1 min CN=68 Runoff=5.43 cfs 0.237 af

**Link 2L: PA-1** Inflow=5.43 cfs 0.237 af
Primary=5.43 cfs 0.237 af

**Total Runoff Area = 1.761 ac Runoff Volume = 0.237 af Average Runoff Depth = 1.62"**
**61.75% Pervious = 1.087 ac 38.25% Impervious = 0.673 ac**

## Summary for Subcatchment 1S: PRE-1.0

Runoff = 5.43 cfs @ 11.98 hrs, Volume= 0.237 af, Depth> 1.62"
Routed to Link 2L : PA-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=4.86"

| Area (sf) | CN | Description |
|---|---|---|
| 29,335 | 98 | Paved parking, HSG A |
| 47,361 | 49 | 50-75% Grass cover, Fair, HSG A |
| 76,696 | 68 | Weighted Average |
| 47,361 | | 61.75% Pervious Area |
| 29,335 | | 38.25% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.7 | 44 | 0.0180 | 1.12 | | **Sheet Flow, Parking Area** Smooth surfaces n= 0.011 P2= 3.20" |
| 4.6 | 192 | 0.0100 | 0.70 | | **Shallow Concentrated Flow, Woods Area Against Parking** Short Grass Pasture Kv= 7.0 fps |
| 0.8 | 332 | 0.0170 | 6.86 | 8.42 | **Pipe Channel, Pipe Network** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Cast iron, coated |
| 6.1 | 568 | Total | | | |

## Summary for Link 2L: PA-1

Inflow Area = 1.761 ac, 38.25% Impervious, Inflow Depth > 1.62" for 10-yr event
Inflow = 5.43 cfs @ 11.98 hrs, Volume= 0.237 af
Primary = 5.43 cfs @ 11.98 hrs, Volume= 0.237 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment1S: PRE-1.0** Runoff Area=76,696 sf 38.25% Impervious Runoff Depth>2.51"
Flow Length=568' Tc=6.1 min CN=68 Runoff=8.39 cfs 0.369 af

**Link 2L: PA-1** Inflow=8.39 cfs 0.369 af
Primary=8.39 cfs 0.369 af

**Total Runoff Area = 1.761 ac Runoff Volume = 0.369 af Average Runoff Depth = 2.51"**
**61.75% Pervious = 1.087 ac 38.25% Impervious = 0.673 ac**

## Summary for Subcatchment 1S: PRE-1.0

Runoff = 8.39 cfs @ 11.98 hrs, Volume= 0.369 af, Depth> 2.51"
Routed to Link 2L : PA-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=6.16"

| Area (sf) | CN | Description |
|---|---|---|
| 29,335 | 98 | Paved parking, HSG A |
| 47,361 | 49 | 50-75% Grass cover, Fair, HSG A |
| 76,696 | 68 | Weighted Average |
| 47,361 | | 61.75% Pervious Area |
| 29,335 | | 38.25% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.7 | 44 | 0.0180 | 1.12 | | **Sheet Flow, Parking Area** Smooth surfaces n= 0.011 P2= 3.20" |
| 4.6 | 192 | 0.0100 | 0.70 | | **Shallow Concentrated Flow, Woods Area Against Parking** Short Grass Pasture Kv= 7.0 fps |
| 0.8 | 332 | 0.0170 | 6.86 | 8.42 | **Pipe Channel, Pipe Network** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Cast iron, coated |
| 6.1 | 568 | Total | | | |

## Summary for Link 2L: PA-1

Inflow Area = 1.761 ac, 38.25% Impervious, Inflow Depth > 2.51" for 25-yr event
Inflow = 8.39 cfs @ 11.98 hrs, Volume= 0.369 af
Primary = 8.39 cfs @ 11.98 hrs, Volume= 0.369 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment1S: PRE-1.0** Runoff Area=76,696 sf 38.25% Impervious Runoff Depth>3.43"
Flow Length=568' Tc=6.1 min CN=68 Runoff=11.23 cfs 0.503 af

**Link 2L: PA-1** Inflow=11.23 cfs 0.503 af
Primary=11.23 cfs 0.503 af

**Total Runoff Area = 1.761 ac Runoff Volume = 0.503 af Average Runoff Depth = 3.43"**
**61.75% Pervious = 1.087 ac 38.25% Impervious = 0.673 ac**

## Summary for Subcatchment 1S: PRE-1.0

[47] Hint: Peak is 133% of capacity of segment #3

Runoff = 11.23 cfs @ 11.97 hrs, Volume= 0.503 af, Depth> 3.43"
Routed to Link 2L : PA-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 50-yr Rainfall=7.38"

| Area (sf) | CN | Description |
|---|---|---|
| 29,335 | 98 | Paved parking, HSG A |
| 47,361 | 49 | 50-75% Grass cover, Fair, HSG A |
| 76,696 | 68 | Weighted Average |
| 47,361 | | 61.75% Pervious Area |
| 29,335 | | 38.25% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.7 | 44 | 0.0180 | 1.12 | | **Sheet Flow, Parking Area** Smooth surfaces n= 0.011 P2= 3.20" |
| 4.6 | 192 | 0.0100 | 0.70 | | **Shallow Concentrated Flow, Woods Area Against Parking** Short Grass Pasture Kv= 7.0 fps |
| 0.8 | 332 | 0.0170 | 6.86 | 8.42 | **Pipe Channel, Pipe Network** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Cast iron, coated |
| 6.1 | 568 | Total | | | |

## Summary for Link 2L: PA-1

Inflow Area = 1.761 ac, 38.25% Impervious, Inflow Depth > 3.43" for 50-yr event
Inflow = 11.23 cfs @ 11.97 hrs, Volume= 0.503 af
Primary = 11.23 cfs @ 11.97 hrs, Volume= 0.503 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

## POST-DEVELOPMENT WATERSHED LEGEND

POST-DEVELOPMENT WATERSHED BOUNDARY

LONGEST FLOW PATH

POST 1.0 — POST DEVELOPMENT WATERSHED AREA DESIGNATION

PA-1 — POINT OF ANALYSIS

## USDA WEB SOIL SURVEY HYDROLOGIC SOIL GROUP (HSG) LEGEND

| SYMBOL | SOIL TYPE, SLOPE RATING | HSG |
|---|---|---|
| 799 | URBAN LAND-CANTON COMPLEX, 3 TO 15 PERCENT SLOPES | A |

INTERSTATE ROUTE 95 (I-95)
(PUBLIC - VARIABLE WIDTH)

APPROXIMATE LIMITS OF WETLAND (PER CITY OF PORTSMOUTH GIS AND PRELIMINARY FIELD VERIFICATION BY TIGHE AND BOND ON 3/18/2026)

APPROXIMATE LOCATION OF GAS MAIN PER RECORD GIS PLANS PROVIDED BY UNITIL

6"X6" CONCRETE BOUND W/ DRILL HOLE (NHB) FOUND, FLUSH

APPROXIMATE LOCATION OF GAS MAIN PER RECORD MARKINGS BY OTHERS

N46°29'42"E 389'±

BUILDING ADDITION 2
2,340 SF

799

POST 1.0

2-STORY BUILDING
(NEW FRANKLIN SCHOOL)
40,747 Sq.Ft.(FOOTPRINT)

#1 FRANKLIN DRIVE

MAP 220 LOT 2
13.27 Ac.±

4.7%

BUILDING ADDITION 1
515 SF

BUILDING ADDITION 3
5,970 SF

POSSIBLE LOCATION OF WATER MAIN & SERVICE PER SITE FEATURES. WATER GATES DO NOT MATCH RECORD GIS.

PA-1

POSSIBLE COVERED DRAINAGE STRUCTURE PER RECORD GIS PLANS PROVIDED BY THE CITY OF PORTSMOUTH

APPROXIMATE LOCATION OF GAS MAIN PER RECORD GIS PLANS PROVIDED BY UNITIL

APPROXIMATE LOCATION OF GAS MAIN PER RECORD MARKINGS BY OTHERS

STARK STREET
(PUBLIC- VARIABLE WIDTH)

ROUTE 1 BYPASS - PORTSMOUTH
(PUBLIC - VARIABLE WIDTH)

SCALE: 1" = 30'


Tighe & Bond
177 Corporate Drive
Portsmouth, NH 03801
T 603.433.8818


STATE OF NEW HAMPSHIRE — ERIC G. DORSEMUS No. 16308 — LICENSED LAND SURVEYOR — 3/23/2026

STATE OF NEW HAMPSHIRE — PATRICK CRIMMINS No. 12378 — LICENSED PROFESSIONAL ENGINEER — 3/23/2026

# New Franklin School

City of Portsmouth

Portsmouth, New Hampshire

| MARK | DATE | DESCRIPTION |
|---|---|---|

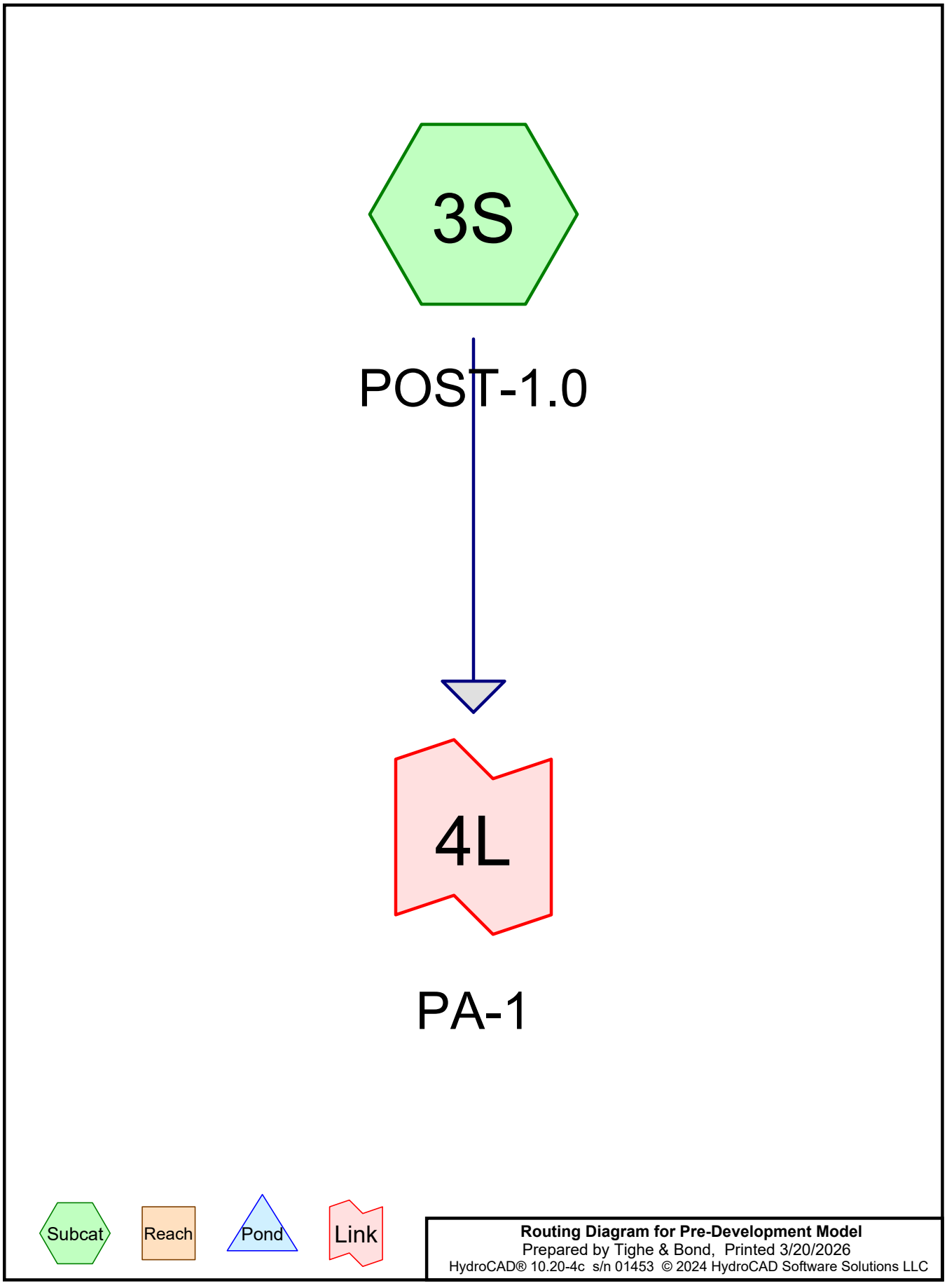
| | |
|---|---|
| PROJECT NO: | P0766-0009 |
| DATE: | 03/23/2026 |
| FILE: | P0766-0009- DSGN.dwg |
| DRAWN BY: | MKF |
| DESIGNED BY: | EGD |
| CHECKED BY: | EGD |
| APPROVED BY: | |

POST-DEVELOPMENT WATERSHED PLAN

SCALE: AS SHOWN

C-801

Last Saved: 3/23/2026
Printed: Mar 23, 2026 - 10:02am By: MFillion
Tighe & Bond:\\tighebond.com\data\Data\Projects\P\P0766 Portsmouth, NH General Proposals\~0009 New Franklin School Upgrades\Drawings\AutoCAD\Sheet\P0766-0009- DSGN.dwg




**Routing Diagram for Pre-Development Model**
Prepared by Tighe & Bond, Printed 3/20/2026
HydroCAD® 10.20-4c s/n 01453 © 2024 HydroCAD Software Solutions LLC

## Rainfall Events Listing (selected events)

| Event# | Event Name | Storm Type | Curve | Mode | Duration (hours) | B/B | Depth (inches) | AMC |
|---|---|---|---|---|---|---|---|---|
| 1 | 2-yr | Type II 24-hr | | Default | 24.00 | 1 | 3.20 | 2 |
| 2 | 10-yr | Type II 24-hr | | Default | 24.00 | 1 | 4.86 | 2 |
| 3 | 25-yr | Type II 24-hr | | Default | 24.00 | 1 | 6.16 | 2 |
| 4 | 50-yr | Type II 24-hr | | Default | 24.00 | 1 | 7.38 | 2 |

## Area Listing (selected nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 0.900 | 49 | 50-75% Grass cover, Fair, HSG A (3S) |
| 0.861 | 98 | Paved parking, HSG A (3S) |
| **1.761** | **73** | **TOTAL AREA** |

## Soil Listing (selected nodes)

| Area (acres) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 1.761 | HSG A | 3S |
| 0.000 | HSG B | |
| 0.000 | HSG C | |
| 0.000 | HSG D | |
| 0.000 | Other | |
| **1.761** | | **TOTAL AREA** |

## Ground Covers (selected nodes)

| HSG-A (acres) | HSG-B (acres) | HSG-C (acres) | HSG-D (acres) | Other (acres) | Total (acres) | Ground Cover | Subcatchment Numbers |
|---|---|---|---|---|---|---|---|
| 0.900 | 0.000 | 0.000 | 0.000 | 0.000 | 0.900 | 50-75% Grass cover, Fair | 3S |
| 0.861 | 0.000 | 0.000 | 0.000 | 0.000 | 0.861 | Paved parking | 3S |
| **1.761** | **0.000** | **0.000** | **0.000** | **0.000** | **1.761** | **TOTAL AREA** | |

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment3S: POST-1.0** Runoff Area=76,696 sf 48.90% Impervious Runoff Depth>0.88"
Flow Length=614' Tc=5.0 min CN=73 Runoff=3.06 cfs 0.130 af

**Link 4L: PA-1** Inflow=3.06 cfs 0.130 af
Primary=3.06 cfs 0.130 af

**Total Runoff Area = 1.761 ac Runoff Volume = 0.130 af Average Runoff Depth = 0.88"**
**51.10% Pervious = 0.900 ac 48.90% Impervious = 0.861 ac**

## Summary for Subcatchment 3S: POST-1.0

[49] Hint: Tc<2dt may require smaller dt

Runoff = 3.06 cfs @ 11.97 hrs, Volume= 0.130 af, Depth> 0.88"
Routed to Link 4L : PA-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=3.20"

| Area (sf) | CN | Description |
|---|---|---|
| 37,508 | 98 | Paved parking, HSG A |
| 39,188 | 49 | 50-75% Grass cover, Fair, HSG A |
| 76,696 | 73 | Weighted Average |
| 39,188 | | 51.10% Pervious Area |
| 37,508 | | 48.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.0 | 39 | 0.0050 | 0.65 | | **Sheet Flow, Roof**<br>Smooth surfaces n= 0.011 P2= 3.20" |
| 0.6 | 124 | 0.0270 | 3.34 | | **Shallow Concentrated Flow, Parking Area**<br>Paved Kv= 20.3 fps |
| 0.4 | 107 | 0.0100 | 4.54 | 3.56 | **Pipe Channel, Pipe Network**<br>12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'<br>n= 0.013 Cast iron, coated |
| 0.9 | 344 | 0.0150 | 6.45 | 7.91 | **Pipe Channel, Pipe Network**<br>15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'<br>n= 0.013 Corrugated PE, smooth interior |
| 2.9 | 614 | Total, Increased to minimum Tc = 5.0 min | | | |

## Summary for Link 4L: PA-1

Inflow Area = 1.761 ac, 48.90% Impervious, Inflow Depth > 0.88" for 2-yr event
Inflow = 3.06 cfs @ 11.97 hrs, Volume= 0.130 af
Primary = 3.06 cfs @ 11.97 hrs, Volume= 0.130 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment3S: POST-1.0** Runoff Area=76,696 sf 48.90% Impervious Runoff Depth>1.99"
Flow Length=614' Tc=5.0 min CN=73 Runoff=6.89 cfs 0.292 af

**Link 4L: PA-1** Inflow=6.89 cfs 0.292 af
Primary=6.89 cfs 0.292 af

**Total Runoff Area = 1.761 ac Runoff Volume = 0.292 af Average Runoff Depth = 1.99"**
**51.10% Pervious = 0.900 ac 48.90% Impervious = 0.861 ac**

## Summary for Subcatchment 3S: POST-1.0

[49] Hint: Tc<2dt may require smaller dt
[47] Hint: Peak is 193% of capacity of segment #3

Runoff = 6.89 cfs @ 11.96 hrs, Volume= 0.292 af, Depth> 1.99"
Routed to Link 4L : PA-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=4.86"

| Area (sf) | CN | Description |
|---|---|---|
| 37,508 | 98 | Paved parking, HSG A |
| 39,188 | 49 | 50-75% Grass cover, Fair, HSG A |
| 76,696 | 73 | Weighted Average |
| 39,188 | | 51.10% Pervious Area |
| 37,508 | | 48.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.0 | 39 | 0.0050 | 0.65 | | **Sheet Flow, Roof**<br>Smooth surfaces n= 0.011 P2= 3.20" |
| 0.6 | 124 | 0.0270 | 3.34 | | **Shallow Concentrated Flow, Parking Area**<br>Paved Kv= 20.3 fps |
| 0.4 | 107 | 0.0100 | 4.54 | 3.56 | **Pipe Channel, Pipe Network**<br>12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'<br>n= 0.013 Cast iron, coated |
| 0.9 | 344 | 0.0150 | 6.45 | 7.91 | **Pipe Channel, Pipe Network**<br>15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'<br>n= 0.013 Corrugated PE, smooth interior |
| 2.9 | 614 | Total, Increased to minimum Tc = 5.0 min | | | |

## Summary for Link 4L: PA-1

Inflow Area = 1.761 ac, 48.90% Impervious, Inflow Depth > 1.99" for 10-yr event
Inflow = 6.89 cfs @ 11.96 hrs, Volume= 0.292 af
Primary = 6.89 cfs @ 11.96 hrs, Volume= 0.292 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment3S: POST-1.0** Runoff Area=76,696 sf 48.90% Impervious Runoff Depth>2.97"
Flow Length=614' Tc=5.0 min CN=73 Runoff=10.18 cfs 0.436 af

**Link 4L: PA-1** Inflow=10.18 cfs 0.436 af
Primary=10.18 cfs 0.436 af

**Total Runoff Area = 1.761 ac Runoff Volume = 0.436 af Average Runoff Depth = 2.97"**
**51.10% Pervious = 0.900 ac 48.90% Impervious = 0.861 ac**

## Summary for Subcatchment 3S: POST-1.0

[49] Hint: Tc<2dt may require smaller dt
[47] Hint: Peak is 286% of capacity of segment #3
[47] Hint: Peak is 129% of capacity of segment #4

Runoff = 10.18 cfs @ 11.96 hrs, Volume= 0.436 af, Depth> 2.97"
Routed to Link 4L : PA-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=6.16"

| Area (sf) | CN | Description |
|---|---|---|
| 37,508 | 98 | Paved parking, HSG A |
| 39,188 | 49 | 50-75% Grass cover, Fair, HSG A |
| 76,696 | 73 | Weighted Average |
| 39,188 | | 51.10% Pervious Area |
| 37,508 | | 48.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.0 | 39 | 0.0050 | 0.65 | | **Sheet Flow, Roof**<br>Smooth surfaces n= 0.011 P2= 3.20" |
| 0.6 | 124 | 0.0270 | 3.34 | | **Shallow Concentrated Flow, Parking Area**<br>Paved Kv= 20.3 fps |
| 0.4 | 107 | 0.0100 | 4.54 | 3.56 | **Pipe Channel, Pipe Network**<br>12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'<br>n= 0.013 Cast iron, coated |
| 0.9 | 344 | 0.0150 | 6.45 | 7.91 | **Pipe Channel, Pipe Network**<br>15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'<br>n= 0.013 Corrugated PE, smooth interior |
| 2.9 | 614 | Total, Increased to minimum Tc = 5.0 min | | | |

## Summary for Link 4L: PA-1

Inflow Area = 1.761 ac, 48.90% Impervious, Inflow Depth > 2.97" for 25-yr event
Inflow = 10.18 cfs @ 11.96 hrs, Volume= 0.436 af
Primary = 10.18 cfs @ 11.96 hrs, Volume= 0.436 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment3S: POST-1.0** Runoff Area=76,696 sf 48.90% Impervious Runoff Depth>3.95"
Flow Length=614' Tc=5.0 min CN=73 Runoff=13.37 cfs 0.580 af

**Link 4L: PA-1** Inflow=13.37 cfs 0.580 af
Primary=13.37 cfs 0.580 af

**Total Runoff Area = 1.761 ac Runoff Volume = 0.580 af Average Runoff Depth = 3.95"**
**51.10% Pervious = 0.900 ac 48.90% Impervious = 0.861 ac**

## Summary for Subcatchment 3S: POST-1.0

[49] Hint: Tc<2dt may require smaller dt
[47] Hint: Peak is 375% of capacity of segment #3
[47] Hint: Peak is 169% of capacity of segment #4

Runoff = 13.37 cfs @ 11.96 hrs, Volume= 0.580 af, Depth> 3.95"
Routed to Link 4L : PA-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 50-yr Rainfall=7.38"

| Area (sf) | CN | Description |
|---|---|---|
| 37,508 | 98 | Paved parking, HSG A |
| 39,188 | 49 | 50-75% Grass cover, Fair, HSG A |
| 76,696 | 73 | Weighted Average |
| 39,188 | | 51.10% Pervious Area |
| 37,508 | | 48.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.0 | 39 | 0.0050 | 0.65 | | **Sheet Flow, Roof**<br>Smooth surfaces n= 0.011 P2= 3.20" |
| 0.6 | 124 | 0.0270 | 3.34 | | **Shallow Concentrated Flow, Parking Area**<br>Paved Kv= 20.3 fps |
| 0.4 | 107 | 0.0100 | 4.54 | 3.56 | **Pipe Channel, Pipe Network**<br>12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'<br>n= 0.013 Cast iron, coated |
| 0.9 | 344 | 0.0150 | 6.45 | 7.91 | **Pipe Channel, Pipe Network**<br>15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'<br>n= 0.013 Corrugated PE, smooth interior |
| 2.9 | 614 | Total, Increased to minimum Tc = 5.0 min | | | |

## Summary for Link 4L: PA-1

Inflow Area = 1.761 ac, 48.90% Impervious, Inflow Depth > 3.95" for 50-yr event
Inflow = 13.37 cfs @ 11.96 hrs, Volume= 0.580 af
Primary = 13.37 cfs @ 11.96 hrs, Volume= 0.580 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

# Appendix A – Web Soil Survey

Soil Map—Rockingham County, New Hampshire
(New Franklin School - Web Soil Survey Map)




Map Scale: 1:2,780 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

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

## MAP LEGEND

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

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

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

**Water Features**
- Streams and Canals

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

**Background**
- Aerial Photography

## MAP INFORMATION

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

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

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

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

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

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

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

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

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

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

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

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 799 | Urban land-Canton complex, 3 to 15 percent slopes | 15.0 | 100.0% |
| **Totals for Area of Interest** | | **15.0** | **100.0%** |

# Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Some minor components, however, have properties and behavior characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

# Rockingham County, New Hampshire

## 799—Urban land-Canton complex, 3 to 15 percent slopes

**Map Unit Setting**

*National map unit symbol:* 9cq0
*Elevation:* 0 to 1,000 feet
*Mean annual precipitation:* 42 to 46 inches
*Mean annual air temperature:* 45 to 48 degrees F
*Frost-free period:* 120 to 160 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Urban land:* 55 percent
*Canton and similar soils:* 20 percent
*Minor components:* 25 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Canton**

**Setting**

*Parent material:* Till

**Typical profile**

*H1 - 0 to 5 inches:* gravelly fine sandy loam
*H2 - 5 to 21 inches:* gravelly fine sandy loam
*H3 - 21 to 60 inches:* loamy sand

**Properties and qualities**

*Slope:* 3 to 8 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Low
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Low (about 5.3 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 2e
*Hydrologic Soil Group:* A
*Ecological site:* F144AY034CT - Well Drained Till Uplands
*Hydric soil rating:* No

**Minor Components**

**Udorthents**

*Percent of map unit:* 5 percent
*Hydric soil rating:* No

**Squamscott and scitico**

*Percent of map unit:* 4 percent
*Landform:* Marine terraces
*Hydric soil rating:* Yes

**Boxford and eldridge**

*Percent of map unit:* 4 percent
*Hydric soil rating:* No

**Walpole**

*Percent of map unit:* 4 percent

*Landform:* Depressions
*Hydric soil rating:* Yes

**Scituate and newfields**
*Percent of map unit:* 4 percent
*Hydric soil rating:* No

**Chatfield**
*Percent of map unit:* 4 percent
*Hydric soil rating:* No

## Data Source Information

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

# Appendix B – Rainfall Data

# Extreme Precipitation Tables

## Northeast Regional Climate Center

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

**Metadata for Point**

| | |
|---|---|
| **Smoothing** | Yes |
| **State** | New Hampshire |
| **Location** | New Hampshire, United States |
| **Latitude** | 43.077 degrees North |
| **Longitude** | 70.777 degrees West |
| **Elevation** | 10 feet |
| **Date/Time** | Thu Mar 19 2026 16:53:08 GMT-0400 (Eastern Daylight Time) |

### Extreme Precipitation Estimates

| | 5min | 10min | 15min | 30min | 60min | 120min | | 1hr | 2hr | 3hr | 6hr | 12hr | 24hr | 48hr | | 1day | 2day | 4day | 7day | 10day | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1yr** | 0.26 | 0.40 | 0.50 | 0.65 | 0.81 | 1.04 | **1yr** | 0.70 | 0.98 | 1.21 | 1.56 | 2.03 | 2.66 | 2.92 | **1yr** | 2.35 | 2.80 | 3.21 | 3.93 | 4.54 | **1yr** |
| **2yr** | 0.32 | 0.50 | 0.62 | 0.81 | 1.02 | 1.30 | **2yr** | 0.88 | 1.18 | 1.51 | 1.94 | 2.48 | 3.20 | 3.56 | **2yr** | 2.84 | 3.43 | 3.93 | 4.67 | 5.32 | **2yr** |
| **5yr** | 0.37 | 0.58 | 0.73 | 0.97 | 1.24 | 1.60 | **5yr** | 1.07 | 1.46 | 1.88 | 2.42 | 3.13 | 4.06 | 4.57 | **5yr** | 3.59 | 4.39 | 5.03 | 5.92 | 6.69 | **5yr** |
| **10yr** | 0.41 | 0.65 | 0.82 | 1.11 | 1.45 | 1.88 | **10yr** | 1.25 | 1.72 | 2.22 | 2.88 | 3.74 | 4.86 | 5.52 | **10yr** | 4.30 | 5.31 | 6.07 | 7.09 | 7.96 | **10yr** |
| **25yr** | 0.48 | 0.76 | 0.96 | 1.33 | 1.77 | 2.33 | **25yr** | 1.52 | 2.13 | 2.76 | 3.62 | 4.73 | 6.16 | 7.09 | **25yr** | 5.45 | 6.81 | 7.78 | 9.00 | 10.03 | **25yr** |
| **50yr** | 0.53 | 0.85 | 1.09 | 1.53 | 2.06 | 2.74 | **50yr** | 1.78 | 2.52 | 3.27 | 4.31 | 5.64 | 7.38 | 8.57 | **50yr** | 6.53 | 8.24 | 9.39 | 10.78 | 11.96 | **50yr** |
| **100yr** | 0.59 | 0.96 | 1.24 | 1.76 | 2.40 | 3.24 | **100yr** | 2.07 | 2.96 | 3.88 | 5.13 | 6.75 | 8.84 | 10.36 | **100yr** | 7.82 | 9.96 | 11.34 | 12.93 | 14.25 | **100yr** |
| **200yr** | 0.67 | 1.09 | 1.41 | 2.03 | 2.80 | 3.81 | **200yr** | 2.42 | 3.50 | 4.59 | 6.10 | 8.05 | 10.59 | 12.52 | **200yr** | 9.37 | 12.04 | 13.70 | 15.50 | 16.99 | **200yr** |
| **500yr** | 0.79 | 1.30 | 1.70 | 2.46 | 3.45 | 4.73 | **500yr** | 2.97 | 4.35 | 5.72 | 7.66 | 10.18 | 13.46 | 16.11 | **500yr** | 11.91 | 15.49 | 17.59 | 19.72 | 21.46 | **500yr** |

### Lower Confidence Limits

| | 5min | 10min | 15min | 30min | 60min | 120min | | 1hr | 2hr | 3hr | 6hr | 12hr | 24hr | 48hr | | 1day | 2day | 4day | 7day | 10day | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1yr | 0.23 | 0.36 | 0.44 | 0.59 | 0.73 | 0.88 | 1yr | 0.63 | 0.87 | 0.92 | 1.32 | 1.67 | 2.22 | 2.49 | 1yr | 1.96 | 2.40 | 2.85 | 3.16 | 3.87 | 1yr |
| 2yr | 0.31 | 0.49 | 0.60 | 0.81 | 1.00 | 1.19 | 2yr | 0.86 | 1.16 | 1.37 | 1.82 | 2.34 | 3.05 | 3.45 | 2yr | 2.70 | 3.32 | 3.82 | 4.54 | 5.07 | 2yr |
| 5yr | 0.35 | 0.54 | 0.67 | 0.92 | 1.17 | 1.40 | 5yr | 1.01 | 1.37 | 1.61 | 2.12 | 2.74 | 3.78 | 4.19 | 5yr | 3.35 | 4.03 | 4.71 | 5.52 | 6.23 | 5yr |
| 10yr | 0.38 | 0.59 | 0.73 | 1.02 | 1.32 | 1.60 | 10yr | 1.14 | 1.56 | 1.81 | 2.39 | 3.07 | 4.37 | 4.86 | 10yr | 3.86 | 4.67 | 5.43 | 6.40 | 7.19 | 10yr |
| 25yr | 0.44 | 0.67 | 0.83 | 1.18 | 1.56 | 1.90 | 25yr | 1.34 | 1.86 | 2.10 | 2.77 | 3.55 | 4.68 | 5.89 | 25yr | 4.14 | 5.66 | 6.64 | 7.78 | 8.67 | 25yr |
| 50yr | 0.48 | 0.73 | 0.91 | 1.31 | 1.76 | 2.17 | 50yr | 1.52 | 2.12 | 2.35 | 3.09 | 3.95 | 5.28 | 6.80 | 50yr | 4.67 | 6.54 | 7.71 | 9.03 | 10.01 | 50yr |
| 100yr | 0.54 | 0.81 | 1.01 | 1.46 | 2.01 | 2.47 | 100yr | 1.73 | 2.41 | 2.62 | 3.43 | 4.37 | 5.92 | 7.85 | 100yr | 5.24 | 7.55 | 8.97 | 10.49 | 11.54 | 100yr |
| 200yr | 0.59 | 0.89 | 1.13 | 1.63 | 2.28 | 2.82 | 200yr | 1.96 | 2.75 | 2.93 | 3.81 | 4.82 | 6.63 | 9.07 | 200yr | 5.86 | 8.72 | 10.41 | 12.20 | 13.34 | 200yr |
| 500yr | 0.68 | 1.02 | 1.31 | 1.90 | 2.71 | 3.37 | 500yr | 2.34 | 3.29 | 3.41 | 4.35 | 5.50 | 7.69 | 10.96 | 500yr | 6.81 | 10.54 | 12.69 | 14.92 | 16.15 | 500yr |

### Upper Confidence Limits

| | 5min | 10min | 15min | 30min | 60min | 120min | | 1hr | 2hr | 3hr | 6hr | 12hr | 24hr | 48hr | | 1day | 2day | 4day | 7day | 10day | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1yr | 0.28 | 0.44 | 0.54 | 0.72 | 0.89 | 1.08 | 1yr | 0.77 | 1.06 | 1.26 | 1.74 | 2.21 | 2.99 | 3.15 | 1yr | 2.64 | 3.03 | 3.58 | 4.37 | 5.04 | 1yr |
| 2yr | 0.33 | 0.52 | 0.64 | 0.86 | 1.06 | 1.27 | 2yr | 0.92 | 1.24 | 1.48 | 1.96 | 2.51 | 3.42 | 3.69 | 2yr | 3.03 | 3.55 | 4.08 | 4.83 | 5.63 | 2yr |
| 5yr | 0.40 | 0.61 | 0.76 | 1.05 | 1.33 | 1.62 | 5yr | 1.15 | 1.58 | 1.88 | 2.53 | 3.24 | 4.33 | 4.95 | 5yr | 3.83 | 4.76 | 5.36 | 6.36 | 7.14 | 5yr |
| 10yr | 0.47 | 0.72 | 0.89 | 1.24 | 1.60 | 1.97 | 10yr | 1.38 | 1.92 | 2.28 | 3.10 | 3.94 | 5.33 | 6.18 | 10yr | 4.72 | 5.94 | 6.79 | 7.81 | 8.73 | 10yr |
| 25yr | 0.57 | 0.87 | 1.08 | 1.55 | 2.04 | 2.56 | 25yr | 1.76 | 2.50 | 2.94 | 4.06 | 5.13 | 7.81 | 8.31 | 25yr | 6.91 | 7.99 | 9.10 | 10.30 | 11.38 | 25yr |
| 50yr | 0.67 | 1.01 | 1.26 | 1.82 | 2.44 | 3.11 | 50yr | 2.11 | 3.04 | 3.58 | 4.98 | 6.28 | 9.78 | 10.41 | 50yr | 8.66 | 10.01 | 11.37 | 12.68 | 13.92 | 50yr |
| 100yr | 0.78 | 1.18 | 1.48 | 2.14 | 2.94 | 3.78 | 100yr | 2.53 | 3.70 | 4.36 | 6.13 | 7.71 | 12.25 | 13.04 | 100yr | 10.84 | 12.54 | 14.20 | 15.63 | 17.04 | 100yr |
| 200yr | 0.92 | 1.38 | 1.74 | 2.53 | 3.52 | 4.62 | 200yr | 3.04 | 4.51 | 5.31 | 7.55 | 9.46 | 15.38 | 16.36 | 200yr | 13.62 | 15.73 | 17.77 | 19.27 | 20.86 | 200yr |
| 500yr | 1.13 | 1.69 | 2.17 | 3.15 | 4.49 | 5.99 | 500yr | 3.87 | 5.85 | 6.89 | 9.96 | 12.43 | 20.81 | 22.08 | 500yr | 18.42 | 21.23 | 23.91 | 25.40 | 27.27 | 500yr |



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# City of Portsmouth, New Hampshire

## *Site Plan Application Checklist*

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

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

Name of Applicant: City of Portsmouth Date Submitted: 03/23/2026

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

Site Address: 1 Franklin Drive Portsmouth, NH 03801 Map: 220 Lot: 02

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

| Site Plan Review Application Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☐ | Statement that lists and describes "green" building components and systems. **(2.5.3.1B)** | Enclosed | |
| ☐ | 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)** | Enclosed | N/A |
| ☐ | Tax map and lot number, and current zoning of all parcels under Site Plan Review. **(2.5.3.1D)** | Enclosed | N/A |

| Site Plan Review Application Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☐ | Owner's name, address, telephone number, and signature. Name, address, and telephone number of applicant if different from owner. **(2.5.3.1E)** | Cover Sheet, Owner Authorization | 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 Enclosed | N/A |
| ☐ | Names, addresses and telephone numbers of all professionals involved in the site plan design. **(2.5.3.1G)** | Cover Sheet | N/A |
| ☐ | List of reference plans. **(2.5.3.1H)** | Sheet C-100 | N/A |
| ☐ | List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)** | Sheet C-500, Note 4 | 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)** | Included | 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)** | Formal wetland delineation prior to construction | N/A |
| ☐ | Title (name of development project), north point, scale, legend. **(2.5.4.2A)** | all sheets | N/A |
| ☐ | Date plans first submitted, date and explanation of revisions. **(2.5.4.2B)** | all sheets | N/A |
| ☐ | Individual plan sheet title that clearly describes the information that is displayed. **(2.5.4.2C)** | Required on all plan sheets | N/A |
| ☐ | Source and date of data displayed on the plan. **(2.5.4.2D)** | C-100, Notes | 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. | C-100, Additional Information Provided on C-300 | |
| ☐ | **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. | Architectural Drawings, TAC 100 and TAC 200 | |
| ☐ | **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-300 Site Plan and C-700 Fire Truck Turning Plan | |
| ☐ | **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-300 Site Plan | |
| ☐ | **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-500 Utilities Plan | |
| ☐ | **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-500 Utilities Plan | |

| | | | |
|---|---|---|---|
| ☐ | **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-500 Utilities Plan | |
| ☐ | **8. Solid Waste Facilities: (2.5.4.3H)** | C-300 Site Plan (dumpster location identified) | |
| | • The size, type and location of solid waste facilities. | | |
| ☐ | **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-400 Grading, Drainage and Erosion Control Plan | |
| ☐ | **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. | Electrical Drawings - PM | |
| ☐ | **11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)** | Enclosed | |
| ☐ | **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. | No irrigation is propsoed as a part of this project, see Erosion Control Note #11 on Sheet C-600 | |
| ☐ | **13. Contours and Elevation: (2.5.4.3L)**<br>• Existing/Proposed contours (2 foot minimum) and finished grade elevations. | C-300 Grading Drainage and Erosion Control Sheet | |
| ☐ | **14. Open Space: (2.5.4.3M)**<br>• Type, extent and location of all existing/proposed open space. | C-300 Site Plan | |
| ☐ | **15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)** | | |
| ☐ | **16. Character/Civic District (All following information shall be included): (2.5.4.3P)**<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). | N/A | |
| ☐ | **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)** | | |
| ☐ | Indicate where Low Impact Development Design practices have been incorporated. **(7.1)** | | |
| ☐ | Indicate whether the proposed development is located in a wellhead protection or aquifer protection area. Such determination shall be approved by the Director of the Dept. of Public Works. **(7.3.1)** | N/A | |
| ☐ | Stormwater Management and Erosion Control Plan. **(7.4)** | Sheet C-400 | |
| ☐ | Inspection and Maintenance Plan **(7.6.5)** | | |

| 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)** | N/A | |
| ☐ | 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)** | Drainage Report Enclosed | |
| ☐ | A document from each of the required private utility service providers indicating approval of the proposed site plan and indicating an ability to provide all required private utilities to the site.<br>**(2.5.3.2D)** | N/A | |

| Final Site Plan Approval Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☐ | A list of any required state and federal permit applications required for the project and the status of same. **(2.5.3.2E)** | N/A | |
| ☐ | A note shall be provided on the Site Plan stating: "All conditions on this Plan shall remain in effect in perpetuity pursuant to the requirements of the Site Plan Review Regulations." **(2.5.4.2E)** | | N/A |
| ☐ | For site plans that involve land designated as "Special Flood Hazard Areas" (SFHA) by the National Flood Insurance Program (NFIP) confirmation that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. **(2.5.4.2F)** | N/A | |
| ☐ | Plan sheets submitted for recording shall include the following notes:<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."<br>**(2.13.3)** | | N/A |

**Applicant's Signature: _____ Date: _____**

March 20, 2026

City of Portsmouth
Attn: Site Plan Review Technical Advisory Committee
City Hall
1 Junkins Ave, 3rd Floor
Portsmouth, NH

RE: NEW FRANKLIN ELEMENTARY SCHOOL

To whom it may concern:

In response to the "City of Portsmouth, NH - Site Plan Application Checklist", item 2.5.3.1B, the following outlines "green" building components and systems.

Roof:
Roof is flat and is designed with extra structural capacity to support installation of future photovoltaics. Roof is black which takes advantage of solar heat gains during the colder seasons which benefits buildings in the Northern Climate.

Site:
Conduits are being installed from the electrical panel to (2) parking spaces to support future EV charging.

Thermal envelope:
In lieu of energy code minimum, the wall and roof systems will be designed with continuous insulation exceed energy code R-value minimums.

Windows/Doors:
Aluminum, thermally broken frames with glazing that meets or exceeds the U-factor, SHGC, and air sealing energy code minimums.

Building materials:
Masonry is specified for exterior walls which has a longer life span than other traditional building materials.
Aluminum windows and doors are specified in order to better withstand salt degradation, as a result of being located close to the ocean.

Lighting:
LED light fixtures will be installed.

HVAC:
Air handling units and ventilation systems incorporate heat and energy recovery on exhaust and makeup air. All motors incorporate variable frequency drives or ECM motors for speed modulation and electrical savings. Classrooms have demand control ventilation based on CO2 monitoring. Air handler will reduce airflow to unoccupied spaces or those with lower outside air requirements. New control integration provides energy savings through system night setbacks and scheduling for occupied and unoccupied hours. Ventilation control system incorporates free cooling by monitoring outside and inside temperatures.

Sincerely,

Ingrid Moulton Nichols, AIA
Principal
LEED™ Accredited Professional



# WDGE2 LED

## Architectural Wall Sconce
## Precision Refractive Optic

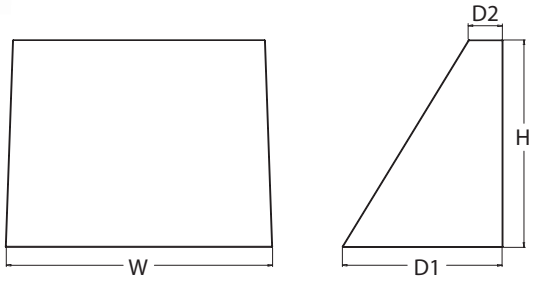
Catalog No. WFGE2 LED P3 80 CRI T4M

| | |
|---|---|
| Catalog Number | New Franklin School |
| Notes | Portsmouth, NH<br>Fixture W1<br>Dark Skies Approved |
| Type | DLC Premium Rated |

*Hit the Tab key or mouse over the page to see all interactive elements.*

## Specifications

**Depth (D1):** 7"
**Depth (D2):** 1.5"
**Height:** 9"
**Width:** 11.5"
**Weight:** (without options) 13.5 lbs




## Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 with industry leading precision refractive optics provides great uniform distribution and optical control. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

## WDGE LED Family Overview

| Luminaire | Optics | Standard EM, 0°C | Cold EM, -20°C | Sensor | Approximate Lumens (4000K, 80CRI) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | P0 | P1 | P2 | P3 | P4 | P5 | P6 |
| WDGE1 LED | Visual Comfort | 4W | | -- | 750 | 1,200 | 2,000 | -- | -- | -- | -- |
| WDGE2 LED | Visual Comfort | 10W | 18W | Standalone / nLight | -- | 1,200 | 2,000 | 3,000 | 4,500 | 6,000 | -- |
| WDGE2 LED | Precision Refractive | 10W | 18W | Standalone / nLight | 700 | 1,200 | 2,000 | 3,200 | 4,200 | -- | -- |
| WDGE3 LED | Precision Refractive | 15W | 18W | Standalone / nLight | -- | 7,500 | 8,500 | 10,000 | 12,000 | -- | -- |
| WDGE4 LED | Precision Refractive | | | Standalone / nLight | -- | 12,000 | 16,000 | 18,000 | 20,000 | 22,000 | 25,000 |

## Ordering Information

**EXAMPLE:** WDGE2 LED P3 40K 80CRI T3M MVOLT SRM DDBXD

| Series | Package | Color Temperature | | CRI | Distribution | Voltage | Mounting | |
|---|---|---|---|---|---|---|---|---|
| WDGE2 LED | P0[1] | 27K 2700K | 40K 4000K | 70CRI[4] | T1S Type I Short | MVOLT | **Shipped included** | **Shipped separately** |
| | P1[2] | 30K 3000K | 50K 5000K | 80CRI | T2M Type II Medium | 347[5] | SRM Surface mounting bracket | AWS 3/8inch Architectural wall spacer[7] |
| | P2[2] | 35K 3500K | AMB[3] Amber | LW[3] Limited Wavelength | T3M Type III Medium | 480[5] | ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only)[6] | PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available[7] |
| | P3[2] | | | | T4M Type IV Medium | | | |
| | P4[2] | | | | TFTM Forward Throw Medium | | | |

### Options

| | |
|---|---|
| E10WH | Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C min) |
| E20WC | Emergency battery backup, Certified in CA Title 20 MAEDBS (18W, -20°C min) |
| PE | Photocell, Button Type[8] |
| DMG | 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)[9] |
| BCE | Bottom conduit entry for back box (PBBW). Total of 4 entry points. |
| CCE | Coastal Construction[7] |

**Standalone Sensors/Controls**

| | |
|---|---|
| PIR | Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching. |
| PIRH | Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching |
| PIR1FC3V | Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation. |
| PIRH1FC3V | Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation. |

**Networked Sensors/Controls**

| | |
|---|---|
| NLTAIR2 PIR | Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 8-15' mounting heights. |
| NLTAIR2 PIRH | Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 15-30' mounting heights. |
| NLTAIREM2 PIR | Embedded wireless controls by nLight with UL924 listed emegency operation, Passive Infrared Occ sensor and on/off photocell for 8-15' mounting heights |
| NLTAIREM2 PIRH | Embedded wireless controls by nLight with UL924 listed emegency operation, Passive Infrared Occ sensor and on/off photocell for 15-30' mounting heights. |

See page 4 for out of box functionality

### Finish

| | |
|---|---|
| DDBXD | Dark bronze |
| DBLXD | Black |
| DNAXD | Natural aluminum |
| DWHXD | White |
| DSSXD | Sandstone |
| DDBTXD | Textured dark bronze |
| DBLBXD | Textured black |
| DNATXD | Textured natural aluminum |
| DWHGXD | Textured white |
| DSSTXD | Textured sandstone |


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## Accessories

*Ordered and shipped separately.*

| | |
|---|---|
| WDGEAWS DDBXD U | WDGE 3/8inch Architectural Wall Spacer (specify finish) |
| WDGE2PBBW DDBXD U | WDGE2 surface-mounted back box (specify finish) |

**NOTES**

1 P0 option not available with sensors/controls.
2 P1-P4 not available with AMB and LW.
3 AMB and LW always go together.
4 70CRI only available with T3M and T4M.
5 347V and 480V not available with E10WH or E20WC.
6 Not qualified for DLC. Not available with emergency battery backup or sensors/controls.
7 For PBBW and AWS with CCE option, require an RFA.
8 PE not available in 480V or with sensors/controls.
9 DMG option not available with sensors/controls.

# Performance Data

## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

| Performance Package | System Watts | Dist. Type | 27K (2700K, 80 CRI) | | | | | 30K (3000K, 80 CRI) | | | | | 40K (4000K, 80 CRI) | | | | | 50K (5000K, 80 CRI) | | | | | Amber (Limited Wavelength) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G |
| P0 | 7W | T1S | 636 | 92 | 0 | 0 | 0 | 666 | 97 | 0 | 0 | 0 | 699 | 101 | 0 | 0 | 1 | 691 | 100 | 0 | 0 | 1 | 712 | 47 | 0 | 0 | 1 |
| | | T2M | 662 | 96 | 0 | 0 | 0 | 693 | 101 | 0 | 0 | 0 | 728 | 106 | 0 | 0 | 0 | 719 | 104 | 0 | 0 | 0 | 741 | 48 | 0 | 0 | 0 |
| | | T3M | 662 | 96 | 0 | 0 | 0 | 693 | 101 | 0 | 0 | 0 | 728 | 106 | 0 | 0 | 0 | 719 | 104 | 0 | 0 | 0 | 741 | 48 | 0 | 0 | 0 |
| | | T4M | 648 | 94 | 0 | 0 | 0 | 679 | 98 | 0 | 0 | 0 | 712 | 103 | 0 | 0 | 0 | 704 | 102 | 0 | 0 | 0 | 726 | 47 | 0 | 0 | 0 |
| | | TFTM | 652 | 95 | 0 | 0 | 0 | 683 | 99 | 0 | 0 | 0 | 717 | 104 | 0 | 0 | 0 | 708 | 103 | 0 | 0 | 0 | 730 | 48 | 0 | 0 | 1 |
| P1 | 11W | T1S | 1,105 | 99 | 0 | 0 | 1 | 1,157 | 104 | 0 | 0 | 1 | 1,215 | 109 | 0 | 0 | 1 | 1,200 | 107 | 0 | 0 | 1 | | | | | |
| | | T2M | 1,150 | 103 | 0 | 0 | 1 | 1,204 | 108 | 0 | 0 | 1 | 1,264 | 113 | 0 | 0 | 1 | 1,249 | 112 | 0 | 0 | 1 | | | | | |
| | | T3M | 1,150 | 103 | 0 | 0 | 1 | 1,205 | 108 | 0 | 0 | 1 | 1,265 | 113 | 0 | 0 | 1 | 1,250 | 112 | 0 | 0 | 1 | | | | | |
| | | T4M | 1,126 | 101 | 0 | 0 | 1 | 1,179 | 106 | 0 | 0 | 1 | 1,238 | 111 | 0 | 0 | 1 | 1,223 | 110 | 0 | 0 | 1 | | | | | |
| | | TFTM | 1,133 | 101 | 0 | 0 | 1 | 1,186 | 106 | 0 | 0 | 1 | 1,245 | 112 | 0 | 0 | 1 | 1,230 | 110 | 0 | 0 | 1 | | | | | |
| P2 | 19W | T1S | 1,801 | 95 | 1 | 0 | 1 | 1,886 | 99 | 1 | 0 | 1 | 1,981 | 104 | 1 | 0 | 1 | 1,957 | 103 | 1 | 0 | 1 | | | | | |
| | | T2M | 1,875 | 99 | 1 | 0 | 1 | 1,963 | 103 | 1 | 0 | 1 | 2,061 | 109 | 1 | 0 | 1 | 2,037 | 107 | 1 | 0 | 1 | | | | | |
| | | T3M | 1,876 | 99 | 1 | 0 | 1 | 1,964 | 103 | 1 | 0 | 1 | 2,062 | 109 | 1 | 0 | 1 | 2,038 | 107 | 1 | 0 | 1 | | | | | |
| | | T4M | 1,836 | 97 | 1 | 0 | 1 | 1,922 | 101 | 1 | 0 | 1 | 2,018 | 106 | 1 | 0 | 1 | 1,994 | 105 | 1 | 0 | 1 | | | | | |
| | | TFTM | 1,847 | 97 | 1 | 0 | 1 | 1,934 | 102 | 1 | 0 | 1 | 2,030 | 107 | 1 | 0 | 1 | 2,006 | 106 | 1 | 0 | 1 | | | | | |
| P3 | 32W | T1S | 2,809 | 87 | 1 | 0 | 1 | 2,942 | 92 | 1 | 0 | 1 | 3,089 | 96 | 1 | 0 | 1 | 3,052 | 95 | 1 | 0 | 1 | | | | | |
| | | T2M | 2,924 | 91 | 1 | 0 | 1 | 3,062 | 95 | 1 | 0 | 1 | 3,215 | 100 | 1 | 0 | 1 | 3,176 | 99 | 1 | 0 | 1 | | | | | |
| | | T3M | 2,925 | 91 | 1 | 0 | 1 | 3,063 | 95 | 1 | 0 | 1 | 3,216 | 100 | 1 | 0 | 1 | 3,177 | 99 | 1 | 0 | 1 | | | | | |
| | | T4M | 2,862 | 89 | 1 | 0 | 1 | 2,997 | 93 | 1 | 0 | 1 | 3,147 | 98 | 1 | 0 | 1 | 3,110 | 97 | 1 | 0 | 1 | | | | | |
| | | TFTM | 2,880 | 90 | 1 | 0 | 1 | 3,015 | 94 | 1 | 0 | 1 | 3,166 | 99 | 1 | 0 | 1 | 3,128 | 97 | 1 | 0 | 1 | | | | | |
| P4 | 47W | T1S | 3,729 | 80 | 1 | 0 | 1 | 3,904 | 84 | 1 | 0 | 1 | 4,099 | 88 | 1 | 0 | 1 | 4,051 | 87 | 1 | 0 | 1 | | | | | |
| | | T2M | 3,881 | 83 | 1 | 0 | 1 | 4,063 | 87 | 1 | 0 | 1 | 4,267 | 91 | 1 | 0 | 1 | 4,216 | 90 | 1 | 0 | 1 | | | | | |
| | | T3M | 3,882 | 83 | 1 | 0 | 1 | 4,065 | 87 | 1 | 0 | 1 | 4,268 | 91 | 1 | 0 | 1 | 4,217 | 90 | 1 | 0 | 1 | | | | | |
| | | T4M | 3,799 | 81 | 1 | 0 | 1 | 3,978 | 85 | 1 | 0 | 1 | 4,177 | 90 | 1 | 0 | 1 | 4,127 | 88 | 1 | 0 | 1 | | | | | |
| | | TFTM | 3,822 | 82 | 1 | 0 | 1 | 4,002 | 86 | 1 | 0 | 1 | 4,202 | 90 | 1 | 0 | 1 | 4,152 | 89 | 1 | 0 | 1 | | | | | |

| Performance Package | System Watts | Dist. Type | 27K (2700K, 70 CRI) | | | | | 30K (3000K, 70 CRI) | | | | | 40K (4000K, 70 CRI) | | | | | 50K (5000K, 70 CRI) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G |
| P0 | 7W | T3M | 737 | 107 | 0 | 0 | 0 | 763 | 111 | 0 | 0 | 0 | 822 | 119 | 0 | 0 | 0 | 832 | 121 | 0 | 0 | 1 |
| | | T4M | 721 | 105 | 0 | 0 | 0 | 746 | 108 | 0 | 0 | 0 | 804 | 117 | 0 | 0 | 1 | 814 | 118 | 0 | 0 | 1 |
| P1 | 11W | T3M | 1,280 | 115 | 0 | 0 | 1 | 1,325 | 119 | 0 | 0 | 1 | 1,427 | 128 | 1 | 0 | 1 | 1,445 | 129 | 1 | 0 | 1 |
| | | T4M | 1,253 | 112 | 0 | 0 | 1 | 1,297 | 116 | 0 | 0 | 1 | 1,397 | 125 | 0 | 0 | 1 | 1,415 | 127 | 0 | 0 | 1 |
| P2 | 19W | T3M | 2,087 | 110 | 1 | 0 | 1 | 2,160 | 114 | 1 | 0 | 1 | 2,327 | 123 | 1 | 0 | 1 | 2,357 | 124 | 1 | 0 | 1 |
| | | T4M | 2,042 | 108 | 1 | 0 | 1 | 2,114 | 111 | 1 | 0 | 1 | 2,278 | 120 | 1 | 0 | 1 | 2,306 | 121 | 1 | 0 | 1 |
| P3 | 32W | T3M | 3,254 | 101 | 1 | 0 | 1 | 3,369 | 105 | 1 | 0 | 1 | 3,629 | 113 | 1 | 0 | 1 | 3,675 | 114 | 1 | 0 | 1 |
| | | T4M | 3,185 | 99 | 1 | 0 | 1 | 3,297 | 103 | 1 | 0 | 1 | 3,552 | 111 | 1 | 0 | 1 | 3,597 | 112 | 1 | 0 | 1 |
| P4 | 47W | T3M | 4,319 | 93 | 1 | 0 | 1 | 4,471 | 96 | 1 | 0 | 1 | 4,817 | 103 | 1 | 0 | 2 | 4,878 | 105 | 1 | 0 | 2 |
| | | T4M | 4,227 | 91 | 1 | 0 | 1 | 4,376 | 94 | 1 | 0 | 2 | 4,714 | 101 | 1 | 0 | 2 | 4,774 | 102 | 1 | 0 | 2 |


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## Electrical Load

| Performance Package | System Watts | Current (A) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 120Vac | 208Vac | 240Vac | 277Vac | 347Vac | 480Vac |
| P0 | 7.0 | 0.061 | 0.042 | 0.04 | 0.039 | -- | -- |
| | 9.0 | -- | -- | -- | -- | 0.031 | 0.021 |
| P1 | 11.0 | 0.100 | 0.064 | 0.059 | 0.054 | -- | -- |
| | 14.1 | -- | -- | -- | -- | 0.046 | 0.031 |
| P2 | 19.0 | 0.168 | 0.106 | 0.095 | 0.083 | -- | -- |
| | 22.8 | -- | -- | -- | -- | 0.067 | 0.050 |
| P3 | 32.0 | 0.284 | 0.163 | 0.144 | 0.131 | -- | -- |
| | 37.1 | -- | -- | -- | -- | 0.107 | 0.079 |
| P4 | 47.0 | 0.412 | 0.234 | 0.207 | 0.185 | -- | -- |
| | 53.5 | -- | -- | -- | -- | 0.153 | 0.112 |

## Lumen Output in Emergency Mode (4000K, 80 CRI, T3M)

| Option | Lumens |
|---|---|
| E10WH | 1,358 |
| E20WC | 2,230 |

## Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

| Ambient | | Lumen Multiplier |
|---|---|---|
| 0°C | 32°F | 1.03 |
| 10°C | 50°F | 1.02 |
| 20°C | 68°F | 1.01 |
| 25°C | 77°F | 1.00 |
| 30°C | 86°F | 0.99 |
| 40°C | 104°F | 0.97 |

## Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Operating Hours | 0 | 25,000 | 50,000 | 100,000 |
|---|---|---|---|---|
| Lumen Maintenance Factor | 1.0 | >0.96 | >0.93 | >0.87 |

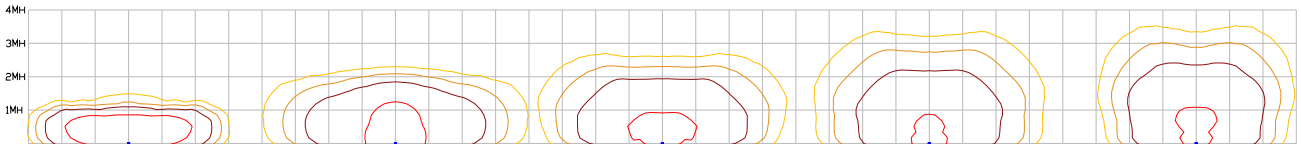
## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND

0.25 fc
0.5 fc
1.0 fc
3.0 fc

MH = 10ft
Grid = 10ft x 10ft




"P3 40K 80CRI T1S" "P3 40K 80CRI T2M" "P3 40K 80CRI T3M" "P3 40K 80CRI T4M" "P3 40K 80CRI TFTM"

## Emergency Egress Options

### Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9


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## Control / Sensor Options

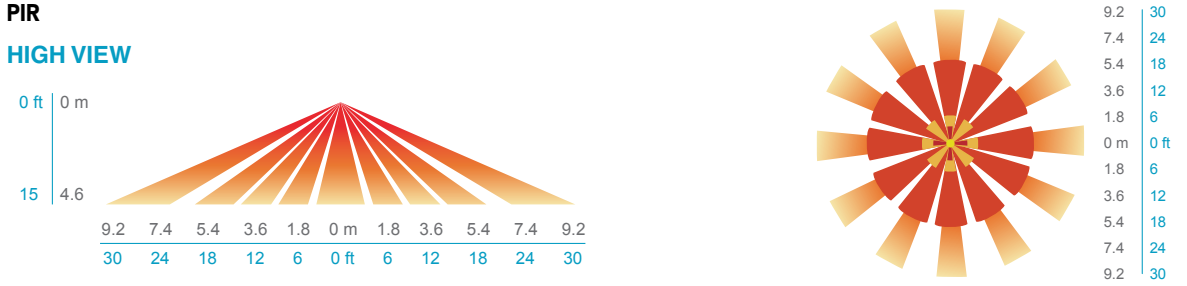
### Motion/Ambient Sensor (PIR_, PIRH_)

Motion/Ambeint sensor (Sensor Switch MSOD) is integrated into the the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIRH option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between 8-15ft, while PIRH is optimized for 15-40ft mounting height.

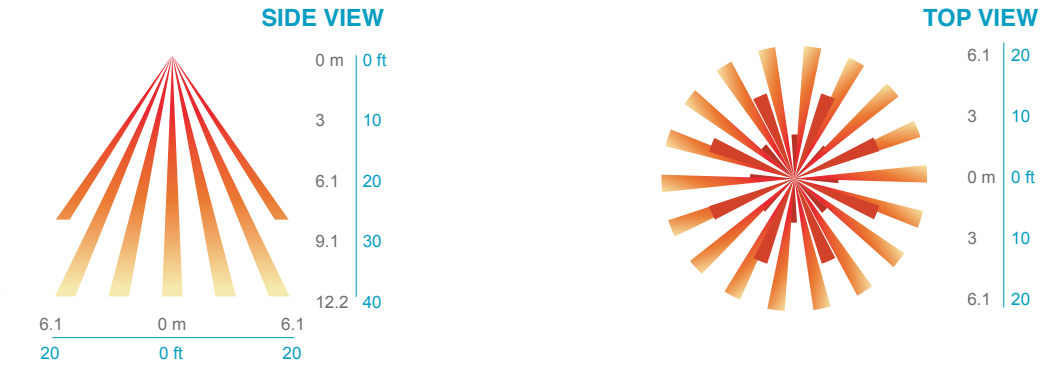
### Networked Control (NLTAIR2)

nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture,  900 MHz wireless communication and app (CLAIRITY™ Pro) based configurability combined together make nLight® AIR a secure, reliable and easy to use platform.

**PIR**




**PIRH**




| Option | Dim Level | High Level (when triggered | Photocell Operation | Motion Time Delay | Ramp-down Time | Ramp-up Time |
|---|---|---|---|---|---|---|
| PIR or PIRH | Motion - 3V (37% of full output)<br>Photocell - 0V (turned off) | 10V (100% output) | Enabled @ 5fc | 5 min | 5 min | Motion - 3 sec<br>Photocell - 45 sec |
| PIR1FC3V, PIRH1FC3V | Motion - 3V (37% of full output)<br>Photocell - 0V (turned off) | 10V (100% output) | Enabled @ 1fc | 5 min | 5 min | Motion - 3 sec<br>Photocell - 45 sec |
| NLTAIR2 PIR, NLTAIR2 PIRH, NLTAIREM2 PIR, NLTAIREM2 PIRH (out of box) | Motion - 3V (37% of full output)<br>Photocell - 0V (turned off) | 10V (100% output) | Enabled @ 5fc | 7.5 min | 5 min | Motion - 3 sec<br>Photocell - 45 sec |

### UL 924 Response – nLight AIR Devices with EM Option

- NLTAIREM2 devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY+ mobile app, NLTAIREM2 devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- The non-emergency devices, NLTAIR2 PIR and NLTAIR2 PIRH, with version 3.4 or later firmware can be used for normal power sensing.


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## Mounting, Options & Accessories



**Motion/Ambient Sensor**

D = 7"

H = 9" (Standalone controls)
11" (nLight AIR controls, 2" antenna will be pointing down behind the sensor)

W = 11.5"



**PBBW – Surface-Mounted Back Box**
**Use when there is no junction box available.**

D = 1.75"

H = 9"

W = 11.5"



**AWS – 3/8inch Architectural Wall Spacer**

D = 0.38"

H = 4.4"

W = 7.5"

## FEATURES & SPECIFICATIONS

**INTENDED USE**
Common architectural look, with clean rectilinear shape, of the WDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

**CONSTRUCTION**
The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

**FINISH**
Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

**OPTICS**
Individually formed acrylic lenses are engineered for superior application efficiency which maximizes the light in the areas where it is most needed. The WDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

**ELECTRICAL**
Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2). Fixture ships standard with 0-10v dimmable driver.

**INSTALLATION**
A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

**LISTINGS**
CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

**GOVERNMENT PROCUREMENT**
BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

**WARRANTY**
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.


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# City of Portsmouth, New Hampshire

## *Site Plan Application Checklist*

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

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

Name of Applicant: City of Portsmouth Date Submitted: 03/23/2026

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

Site Address: 1 Franklin Drive Portsmouth, NH 03801 Map: 220 Lot: 02

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

| Site Plan Review Application Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☐ | Statement that lists and describes "green" building components and systems. **(2.5.3.1B)** | Enclosed | |
| ☐ | 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)** | Enclosed | N/A |
| ☐ | Tax map and lot number, and current zoning of all parcels under Site Plan Review. **(2.5.3.1D)** | Enclosed | N/A |

| Site Plan Review Application Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☐ | Owner's name, address, telephone number, and signature. Name, address, and telephone number of applicant if different from owner. **(2.5.3.1E)** | Cover Sheet, Owner Authorization | N/A |
| ☐ | Names and addresses (including Tax Map and Lot number and zoning districts) of all direct abutting property owners (including properties located across abutting streets) and holders of existing conservation, preservation or agricultural preservation restrictions affecting the subject property. **(2.5.3.1F)** | | N/A |
| ☐ | Names, addresses and telephone numbers of all professionals involved in the site plan design. **(2.5.3.1G)** | Cover Sheet | N/A |
| ☐ | List of reference plans. **(2.5.3.1H)** | Sheet C-100 | N/A |
| ☐ | List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)** | Sheet C-500, Note 4 | 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)** | Included | 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)** | Formal wetland delineation prior to construction | N/A |
| ☐ | Title (name of development project), north point, scale, legend. **(2.5.4.2A)** | all sheets | N/A |
| ☐ | Date plans first submitted, date and explanation of revisions. **(2.5.4.2B)** | all sheets | N/A |
| ☐ | Individual plan sheet title that clearly describes the information that is displayed. **(2.5.4.2C)** | Required on all plan sheets | N/A |
| ☐ | Source and date of data displayed on the plan. **(2.5.4.2D)** | C-100, Notes | 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. | C-100, Additional Information Provided on C-300 | |
| ☐ | **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. | Architectural Drawings, TAC 100 and TAC 200 | |
| ☐ | **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-300 Site Plan and C-700 Fire Truck Turning Plan | |
| ☐ | **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-300 Site Plan | |
| ☐ | **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-500 Utilities Plan | |
| ☐ | **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-500 Utilities Plan | |

| | | | |
|---|---|---|---|
| ☐ | **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-500 Utilities Plan | |
| ☐ | **8. Solid Waste Facilities: (2.5.4.3H)** | C-300 Site Plan (dumpster location identified) | |
| | • The size, type and location of solid waste facilities. | | |
| ☐ | **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-400 Grading, Drainage and Erosion Control Plan | |
| ☐ | **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. | Electrical Drawings - PM | |
| ☐ | **11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)** | Enclosed | |
| ☐ | **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. | No irrigation is propsoed as a part of this project, see Erosion Control Note #11 on Sheet C-600 | |
| ☐ | **13. Contours and Elevation: (2.5.4.3L)**<br>• Existing/Proposed contours (2 foot minimum) and finished grade elevations. | C-300 Grading Drainage and Erosion Control Sheet | |
| ☐ | **14. Open Space: (2.5.4.3M)**<br>• Type, extent and location of all existing/proposed open space. | C-300 Site Plan | |
| ☐ | **15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)** | | |
| ☐ | **16. Character/Civic District (All following information shall be included): (2.5.4.3P)**<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). | N/A | |
| ☐ | **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)** | | |
| ☐ | Indicate where Low Impact Development Design practices have been incorporated. **(7.1)** | | |
| ☐ | Indicate whether the proposed development is located in a wellhead protection or aquifer protection area. Such determination shall be approved by the Director of the Dept. of Public Works. **(7.3.1)** | N/A | |
| ☐ | Stormwater Management and Erosion Control Plan. **(7.4)** | Sheet C-400 | |
| ☐ | Inspection and Maintenance Plan **(7.6.5)** | | |

| 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)** | N/A | |
| ☐ | 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)** | Drainage Report Enclosed | |
| ☐ | A document from each of the required private utility service providers indicating approval of the proposed site plan and indicating an ability to provide all required private utilities to the site.<br>**(2.5.3.2D)** | N/A | |

| Final Site Plan Approval Required Information | | | |
|---|---|---|---|
| ☑ | **Required Items for Submittal** | **Item Location (e.g. Page/line or Plan Sheet/Note #)** | **Waiver Requested** |
| ☐ | A list of any required state and federal permit applications required for the project and the status of same. **(2.5.3.2E)** | N/A | |
| ☐ | A note shall be provided on the Site Plan stating: "All conditions on this Plan shall remain in effect in perpetuity pursuant to the requirements of the Site Plan Review Regulations." **(2.5.4.2E)** | | N/A |
| ☐ | For site plans that involve land designated as "Special Flood Hazard Areas" (SFHA) by the National Flood Insurance Program (NFIP) confirmation that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. **(2.5.4.2F)** | N/A | |
| ☐ | Plan sheets submitted for recording shall include the following notes:<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."<br>**(2.13.3)** | | N/A |

**Applicant's Signature: _____ Date: _____**