PLANNING BOARD PORTSMOUTH, NEW HAMPSHIRE

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

7:00 PM Public Hearings

January 27, 2022

AGENDA

Please note the original meeting date for this agenda was scheduled for January 20, 2022 and was rescheduled to be conducted on January 27, 2022

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

7:00 PM PUBLIC HEARING

I. ELECTION OF OFFICERS

II. APPROVAL OF MINUTES

A. Approval of the Planning Board minutes from the December 16, 2021 and the December 30, 2021 meeting.

III. DETERMINATIONS OF COMPLETENESS

SUBDIVISION REVIEW

A. The request of Austin Repair & Renovation LLC, (Owner), for the property located at 27 Shaw Road requesting Preliminary and Final Subdivision approval.

SITE PLAN REVIEW

- A. The request of Monarch Village, LLC (Applicant), on behalf of Neveesha Hospitality, LLC (Owner), for property located at 3548 Lafayette Road requesting Site Plan Review Approval.
- B. The request of **Sagamore Corner LLC**, (Owner and Applicant), for the property located at **960 Sagamore Avenue** requesting Site Plan Approval.

IV. PUBLIC HEARINGS -- OLD BUSINESS

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

- A. REQUEST TO POSTPONE Request of Ricci Construction Company Inc., (Owner) and Green & Company Building & Development Corp., (Applicant) for property located at 3400 Lafayette Rd requesting a wetland Conditional Use Permit under section 10.1017 to construct 50 town homes on an undeveloped lot. The (Applicant) is proposing five areas of wetland impact for a total of 21,350 square feet of permanent impact and three areas of temporary impact for a total of 2,350 square feet. Said property is shown on Assessor Map 297 Lot 11 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District and the Natural Resource Protection (NRP) District. REQUEST TO POSTPONE (LU-21-98)
- B. REQUEST TO POSTPONE Request of Ricci Construction Company Inc., (Owner) and Green & Company Building & Development Corp., (Applicant) for property located at 3400 Lafayette Rd requesting Conditional Use Permit for a Development Site in accordance with Section 10.5B40 of the Zoning Ordinance and Site Plan Review approval for construction of a 50-unit multi-family residential development that includes community space and related landscaping, drainage, paving, utilities and other site improvements. Said property is shown on Assessor Map 297 Lot 11 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District and the Natural Resource Protection (NRP) District. REQUEST TO POSTPONE (LU-21-98)
- C. The request of Gregory J. Morneault and Amanda B. Morneault (Owners) and Darrell Moreau, (Applicant) for property located at 137 Northwest Street requesting a Wetland Conditional Use Permit under Section 10. 1017 of the Zoning Ordinance to impact 5,062 square feet of wetland buffer and 45 square feet of tidal wetland. The proposed new home and existing turnaround is partially within the 100' tidal buffer zone of the North Mill Pond. In addition to the new home the applicant is proposing to remove an existing gravel turnaround and install a new paved parking apron for City vehicles to turn around. This new turnaround and the City pump station are all within a new easement. In addition, there is a plan to upgrade the stormwater outfall to protect against erosion. Said property is shown on Assessor Map 122 Lot 2 and lies within the General Residence A (GRA) District and Historic District. (LU-20-222)
- **D. REQUEST TO POSTPONE INDEFINITELY** The request of **ADL 325 Little Harbor** road Trust (Owner), for the property located at **325 Little Harbor Road** requesting a Wetland Conditional Use Permit under section 10.1017. The applicant is proposing 81,865 square feet of disturbance in the tidal wetland buffer the disturbance includes replacement of an existing home with a new home with a footprint of 3,382 square feet,

construction of a new garage 1,300 square feet, renovation of an existing guest cottage 1,217 square feet, construction of a pool cabana 368 square feet and replacement of an existing shed 384 square feet along with other impacts/improvements including utility connections, playground, drainage improvement and extensive landscape improvements. Said property is shown on Assessor Map 205 Lot 2 and is located in the Rural (R) and Single Residence A (SRA) Districts. **REQUEST TO POSTPONE INDEFINITELY** (LU-21-189)

V. PUBLIC HEARINGS – NEW BUSINESS

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

- **A.** The request of **Austin Repair & Renovation LLC**, **(Owner)**, for the property located at **27 Shaw Road** requesting Preliminary and Final Subdivision approval to subdivide one existing lot with 57,354 square feet of lot area and 230 feet of street frontage on Shaw Road and 127 feet of street frontage on Walker Bungalow Road into 2 lots as follows: Proposed Lot 1 with 34,205 square feet of lot area and 230 feet of street frontage on Shaw Road; Proposed Lot 2 with 23,149 square feet of lot area and 127 feet of street frontage on Walker Bungalow Road. Said property is shown on Assessor Map 223 Lot 18 and is located in the Single Residence B (SRB) District. (LU-21-203)
- **B.** The request of **Monarch Village**, **LLC** (**Applicant**), on behalf of **Neveesha Hospitality**, **LLC** (**Owner**), for property located at **3548 Lafayette Road** requesting Site Plan Review and a Conditional Use Permit as permitted under 10.5B41.10 of the Zoning Ordinance to allow for the demolition of 6 structures; the redevelopment of 6 existing structures to create 6 units in building 8, 15 units in building 2, 5 units in building 4, 2 units in building 5, 9 units in building 7; the construction of 4 new structures to create 12 units in building 3 with a 4,303 square foot footprint, 24 units in building 6 with a 7,048 square foot footprint, a 250 square foot storage structure and an 825 square foot storage structure; creating a total of seventy-five (75) residential units with 123 parking spaces where 113 spaces are required. Said property is shown on Assessor Map 297 Lot 6 and lies within the Gateway Corridor (G1) District. (LU-21-90)
- C. The request of Sagamore Corner LLC, (Owner and Applicant), for the property located at 960 Sagamore Avenue requesting Site Plan Approval to demolish the existing mixed use structure and construct a 6-unit residential structure totaling 21,066 square feet of gross floor area, 21 parking spaces as well as associated utilities, lighting, landscaping, and site improvements. Said property is shown on Assessor Map 201 Lot 2 and is located in the Mixed Residential Business (MRB) District. (LU-21-204)
- **D.** The request of **Sagamore LLC (Owner and Applicant)**, for the property located at **960 Sagamore Avenue** requesting a Wetland Conditional Use Permit approval according to section 10.1017.5 of the Zoning ordinance to impact 1,100 square feet of wetland buffer for grading and to remove 750 square feet of impervious surface in the wetland buffer

- and construct a new 100 square foot porous paver patio. Said property is shown on Assessor Map 201 Lot 2 and is located in the Mixed Residential Business (MRB) District (LU-21-204)
- **E.** Application of **ADL 325 Little Harbor Road Trust (Owner)**, for property located at **325 Little Harbor Road**, for Conditional Use Permit approval in accordance with Section 10.814 of the Zoning Ordinance for the conversion of an existing accessory structure (formerly caretaker's home) into a Detached Accessory Dwelling Unit with a gross floor area of 1,300 square feet of gross floor area. Said property is shown on Assessor Map 205 Lot 2 and lies within the Rural (R) and Single Residence A (SRA) districts. (lu-21-220)

VI. PRELIMINARY CONCEPTUAL CONSULTATION

- A. The request of **Bailey J. Frederick III (Owner)**, for the property located at **212**, **214** & **216 Woodbury Avenue** requesting Preliminary Conceptual Consultation for a Lot Line Revision, demolition of one existing structure, and the construction of one eight-unit structure, two two-unit structures, and one three-unit structure. Said property is shown on Assessor Map 175 Lot 1; Map 175 Lot 2; Map 175 Lot 3 and lies in the General Residence A (GRA) District. (LUPD-22-3)
- B. The request of **635 Sagamore Development LLC (Owner)**, for the properties located at **635 and 695 Sagamore Avenue** requesting Preliminary Conceptual Consultation for the demolition of the existing commercial structure on Lot 19, the construction of five single-unit structures on Lot 19, and the construction of one single-unit structure on Lot 18. Said property is located on Assessor Map 222 Lot 18 and Map 222 Lot 19 and lie within the Single residence A (SRA) District. (LUPD-22-2)

VII. DESIGN REVIEW APPLICATION ACCEPTANCE

A. The request of **Port Harbor Land LLC**, **(Owner)** for the property located at **2 Russell Street and along Russell Street and Deer Street** requesting Design Review for a mixed use project consisting of office, retail/commercial, and residential uses in one 4-story and two 5-story buildings. The site is located between, Russell Street, Deer Street, Maplewood Avenue and the Railroad Corridor. Said properties are located on Assessor Map 124 Lot 12, Assessor Map 118 Lot 28, Assessor Map 119 Lot 4, and Assessor Map 125 Lot 21 and lie within the Character District 5 (CD-5). (LUPD-22-1)

VIII. PUBLIC HEARING - CITY COUNCIL REFERRALS

A. Application of **Randi Collins (Owner)**, for the restoration of involuntarily merged lots at 77 Meredith Way to their pre-merger status pursuant to NH RSA 674:39-aa. Said

property is shown on Assessor Map 162 Lot 16 and lies within the General Residence A (GRA) district. (RIML-21-5)

IX. OTHER BUSINESS

- A. Request of London Bridge South Inc. (Owner) for property located at 0 Falkland Way (address now known as 114 Saratoga Way) for a 1-year extension of the Site Plan review approval for the demolition of an existing garage and shed and the construction of a new 4-unit residential building on merged lots with associated parking, stormwater management, lighting, utilities and landscaping as granted on January 21, 2020. (LU-20-164)
- B. Woodbury Avenue Cooperative, Inc. (Owner), for the property located at 1338 Woodbury Avenue for a 1-year extension of the Site Plan review approval for the demolition of two existing structures and replacement and reconfiguration of existing mobile home units with associated grading, pavement, lighting, utilities, landscaping and other site improvements as granted on March 18, 2021. (LU-20-198)
- C. The rehearing request of **Duncan McCallum (Rehearing Applicant)**, for property located at **31 Raynes Avenue**, **203 Maplewood Avenue**, **and 1 Raynes Avenue** for a Conditional Use Permit as permitted by Section 10.1112.62 of the Zoning Ordinance and according to the requirements of Section 10.1112.14 to allow 113 off-street parking spaces including 18 reserved spaces to be provided on-site and 25 spaces to be provided on a separate lot where a total of 138 are required and Site Plan Review approval for the demolition of three existing buildings and construction of the following: 1) a 5-story mixed use building with 66,676 gross floor area and 16,629 sq. ft. building footprint including 7,720 sq. ft. of commercial use on the ground story and 32 residential units on the upper stories; 2) a 5-story 124-room hotel with 65,980 gross floor area and 14,622 sq. ft. of building footprint; 3) 34,427 sq. ft. of community space as well as associated paving, lighting, utilities, landscaping and other site improvements. Said properties are shown on Assessor Map 123 Lot 14, Map 123 Lot 13, Map 123 Lot 12, Map 123 Lot 10 and lie within the Character District 4 (CD4) District, Downtown Overlay District (DOD), Historic District, and the North End Incentive Overlay District. (LU-21-54)
- D. The rehearing request of **Duncan McCallum (Rehearing Applicant)**, for property located at **31 Raynes Avenue**, **203 Maplewood Avenue**, **and 1 Raynes Avenue** requesting a Wetland Conditional Use Permit under section 10.1017 to construct two buildings 1) a 5 story mixed use commercial and residential building and 2) a five story hotel building with 124 rooms. The project has removed all of the impervious surface from the 25' tidal buffer, proposes 67 square feet of impervious surface in the 25-50' tidal buffer and 21,190 square feet of impervious in the 50-100' tidal buffer. Overall the project is able to demonstrate a reduction of 7,070 square feet of impervious surface in the tidal wetland buffer from the existing condition or a reduction of 10,107 square feet if the reserve parking is not constructed. Said properties are shown on Assessor Map 123 Lot 14, Map 123 Lot 13, Map 123 Lot 12, Map 123 Lot 10 and lie within the Character District 4 (CD4) District, Downtown Overlay District (DOD), Historic District, and the North End Incentive Overlay District. (LU-21-54)

E.

The rehearing request of **Katy Sherman (Rehearing Applicant)**, for property located at **99 Bow Street**, requesting to allow the expansion of the existing deck to include expanded seating for the business as well as public access to the Piscataqua River. Said property is shown on Assessor Map 106 as Lot 54 and lies within the Character District 5 (CD5), Downtown Overlay, and Historic Districts. (LU-21-181)

X. ADJOURNMENT

*Members of the public also have the option to join the 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 100QKZg2RSCf1G7968p1YA

REGULAR MEETING PLANNING BOARD PORTSMOUTH, NEW HAMPSHIRE

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

7:00 PM December 16, 2021

MINUTES

MEMBERS PRESENT: Dexter Legg, Chair; Elizabeth Moreau, Vice Chair; Karen Conard,

City Manager; Peter Whelan, City Councilor; Ray Pezzullo, Assistant City Engineer; Colby Gamester; Corey Clark; Peter

Harris; Rick Chellman; Polly Henkel, Alternate;

ALSO PRESENT: Peter Britz, Interim Planning Director; Stefanie Casella, Planner 1

MEMBERS ABSENT:

I. PRESENTATIONS (Time: 6:00 pm)

A. FY 2023-2028 Capital Improvement Plan

City Manager Conard commented that this presentation will be on the City's web site as a resource going forward. The CIP helps inform the budget. It's a planning document but it does not appropriate money. It is made up of projects proposed from staff and public input about what is appropriate for the 6-year horizon. The planning process begins in September. Money will be appropriated for fiscal year 2023 when the budget is adopted by the City Council in March. The document is organized by sections for different projects. It includes citizen requested projects, studies involved in evaluated projects, historical documents, projects by wards. 1,300 historical documents have been identified for preservation and an additional 1,000 that still need to be evaluated. There are currently 98 projects in the document and 14 of them are new. The CIP will not be more than 2% of the previous budget. This is 1.49%, so it is well below the 2% line. The FY 21 and 22 reduction was a direct result of the pandemic restraint. The CIP bonding has target of no more than 10% net debt service. It is 8.91% for this proposal.

Fire Chief Todd Germain spoke to the projects proposed by the Fire Department some of which included: vehicle replacements, medical equipment, protective clothing replacement, breathing apparatus equipment, cardiac monitor replacement.

Public Works Director Peter Rice spoke to the projects proposed by Public Works some of which included: a new brine machine.

Police Chief Mark Newport spoke to the projects proposed by the Police Department some of which included: a new facility land acquisition, new police department facility, upgrades to current facility.

School Business Administrator Nathan Lunney spoke to the projects proposed by the schools some of which included: improvements across the district, turf field replacement, tennis court replacement, high school facility upgrades, elementary school facility upgrades, and Sherburne School upgrade.

Abby Mills from the Finance Department spoke to proposed projects from that department some of which included: a city document storage facility and document restoration, preservation, and scanning.

Interim Planning Director Peter Britz spoke to proposed projects from the Planning Department some of which included: conservation land acquisition, historic district guidelines, trail development projects, McIntyre Building redevelopment, climate action plan, groundwater study.

Recreation Director Todd Henley spoke to proposed projects from the Recreation Department some of which included: additional field, phased build out of the Greenland Rd. recreation facility, playground improvements, Leary Field bleacher upgrade, pool upgrades, community campus upgrades.

Public Works Director Peter Rice spoke to the projects proposed by Public Works some of which included: the Pierce Island Master Plan, park and monument improvements, tree and greenery program, Prescott Park Master Plan and capital improvements, city fuel station replacement, Bow St. overlook maintenance, City Hall HVAC repairs, transfer station upgrades, cemetery improvements, retaining wall maintenance, sound barriers along I-95 corridor, citywide facility improvements, undergrounding downtown aerial utilities.

Deputy City Manager Suzanne Woodland spoke to the projects proposed by the IT Department some of which included: technical service upgrades, server upgrades, licensing, citywide switch to Microsoft Office 365, financial software upgrade, record retention software.

Police Chief Mark Newport spoke to the projects proposed by the Police Department some of which included: public safety record management and dispatch system upgrade.

Public Works Director Peter Rice spoke to the projects proposed by Public Works some of which included: parking lot paving, parking meter maintenance.

Interim Planning Director Peter Britz spoke to proposed projects from the Planning Department some of which included: the Hampton Branch Rail Trail, bike/ped master plan, Middle Street bike lane connection to downtown, wayfinding system, Greenland Rd. bike/pedestrian improvements, Market St. side path, US Route 1 new side path, US Route 1 crosswalk and signals, Maplewood Ave. downtown complete streets program, Elwyn park traffic calming and pedestrian improvements, Borthwick Ave. bike path.

Public Works Director Peter Rice spoke to the projects proposed by Public Works some of which included: Market Square upgrades, Sagamore Ave. upgrades, sidewalk reconstruction program, traffic signal upgrade program, citywide intersection improvements, Russell/Market intersection upgrade, citywide bridge improvement program, Cate St. bridge replacement, Coakley-Borthwick connector roadway, traffic calming on Middle Rd, Aldrich Rd. and South St., street paving for the City and Pease, Junkins Ave. improvements, Pinehurst Rd. drain improvements, Madison St. road improvements.

Deputy Director of Public Works Brian Goetz spoke to the proposed water projects some of which included: annual water line replacement, well stations improvements, reservoir management, new groundwater source, water storage tank painting, water storage tank improvements, Madbury water treatment plan facility repairs and improvements.

City Engineer Terry Desmarais spoke to the proposed sewer projects some of which included: annual sewer line replacement, Pease wastewater treatment facility upgrades, wastewater reuse at Pease, long term control plan related projects, wastewater pumping station improvements, Woodbury Ave. sewer separation, sewer mains and service funding for Sagamore Ave. sewer extension, Mechanic St. pumping station upgrade.

Public Works Director Peter Rice, spoke to the proposed combined projects some of which included: Bartlett St. corridor, Fleet St. utilities upgrade and streetscape, Edmond Avenue upgrades, citywide storm drain improvements, Chapel St. upgrades, DPW complex improvements, The Creek neighborhood reconstruction.

Mr. Clark requested detail on if any projects would help address anything with new the MS4 permit. Mr. Goetz responded that they were currently doing a Master Plan for the storm water permit, which will require site specific projects. They are going through the exercise of locating projects and cost. Then they will start implementing projects in the out years. Public Works Director Rice added that the brine machine was a direct response to the permit.

Mr. Clark questioned if land acquisition outside the Bellamy Reserve was still ongoing. Mr. Goetz confirmed that they were working on pursuing another property. They will utilize reserve Enterprise Funds and receive a 50% match from the State. This will continue to help optimize it. There are conservation easements as well.

Mr. Clark noted that the additional recreation fields project looks like it was pushed out to 2028, but the transfer station is for 2026. Those projects were supposed to go hand in

hand. Mr. Clark questioned if there would be any conflict separating them. Public Works Director Rice did not think so. There was a citizen request to extend the bike/ped access through the building to that area. That request has been identified. There should not be any conflict.

PUBLIC HEARING

Ben Doyle of 4 October Dr. Greenland, NH is a student of Portsmouth High School. Mr. Doyle commented on the proposed climate action plan project. Mr. Doyle is the liaison between Eco-Club and the Mayor's Blue Ribbon Committee on sustainability. Portsmouth has been an eco-friendly municipality for more than a decade and is striving to be as sustainable as possible. The Blue Ribbon Committee is looking for tangible options and is keen on investing in concrete practices to maintain environmental practices. The climate action plan is the central jumping off point. Mr. Doyle urged the Planning Board to include that project. As a young person in Portsmouth, it would be especially meaningful to achieve this and help further the progress.

Effy Malley of 428 Pleasant St. commented that she was on the Sustainability Committee and spoke in favor of the climate action plan. A climate action plan would support actionable steps and technical points to identify targeted emissions. This supports other goals in the Master Plan as well.

Larry Lariviere was a member of the Blue Ribbon Committee and commented in support of the climate action plan. Mr. Lariviere supported the request for additional staff to work with the Planning Board and Sustainability Coordinator to begin the process to create a climate action plan. The City needs to do more to claim that they are an ecomunicipality. They need to back it up with action. This will benefit all of us.

Ellen Legg of 4 Moebus Terrace spoke to recognize some members of the Planning Board who were not reappointed by the current Mayor. They have put in a lot of work. The City has a problem of beating up Board members and then sending them out without much thanks. Dexter Legg has lived here for 40 years. He has shown dedication to the City by raising his family here and serving on several boards over the years, including this one. He has been maligned by some City Council members and some future members of the Planning Board. They can be kinder than that. Ms. Legg also thanked Colby Gamester as well. He is the one of the most hard working and honest people she knew. He has worked hard to stay in Portsmouth and serve on the Planning Board without any agendas. It is important to say that because things have gotten out of hand with City politics. Ms. Legg thanked Chairman Legg and Mr. Gamester for their service.

Matt Glenn of 34 Harrison Ave. served on the board of SABR and voiced strong support for the bike/ped project opportunities in the CIP. In 2014 a lot of effort went into the bike/ped plan but only a few projects have been completed. This is an exciting opportunity to connect the fragments and make a network. The newest athletic field and plans on community campus will have a dirt road put in for emergency access only. The multi-use path won't be available until 2028. Walking access should be allowed now.

Mr. Glenn also expressed for the skate park plan to move forward with the Middle Rd. improvements. The Route 1 side path should include the section from Elwyn Rd. to the high school. Safety improvements are needed. These projects are relatively inexpensive.

Christina Dubin or 336 Miller Ave. also expressed support for the CIP to include funds for the climate action plan. They set a good policy. They need consistent data collection and goals across the City and to create plans to address the changing environment.

Lenora Wise Bronson of 828 Woodbury Ave. commented that they requested traffic calming on Woodbury Ave. and the adjacent streets. Ms. Wise Bronson questioned what the status of that project was. The residential area of Woodbury Ave. is very dangerous. Traffic calming has been requested for a long time. There have been a lot of accidents. There needs to be strategic stop sign locations and speed tables. Cars speed and tailgate. It's a dangerous situation. Chairman Legg commented that he would ask for City staff to comment on that query at the end of the hearing.

Page Trace of 27 Hancock St. spoke as a resident and agreed with Ms. Wise Bronson's comments. This request went to the Parking, Traffic, and Safety Committee and now it is somewhere out there in the middle of nowhere. The City needs to take Woodbury Ave. seriously. Someone needs to take action on this.

Chairman Legg asked if anyone else was present from the public wishing to speak to, for, or against the petition. Seeing no one else rise, the Chair closed the public hearing.

DISCUSSION AND DECISION

Chairman Legg requested for City staff to comment on the status of the Woodbury Ave. traffic calming request. Public Works Director Rice responded that the request did go to PTS and it is being reviewed. Data is being collected. The request is not being ignored. It is just not in the queue for this year. Traffic calming identification is an ongoing effort. It's not that this request is not important. It's just that other projects have been identified prior to this one. They are moving forward. They are not ignoring the situation. If City Council wants to push this project forward, then that's their prerogative.

Mr. Gamester moved to adopt the Capital Improvement Plan as presented and pass to the City Council for consideration, seconded by Mr. Clark.

Mr. Gamester commented that this was the 8th CIP process that he has sat on, and it is one of the best parts of the year. The City Manager and staff did a good job putting this together.

Vice Chairman Morea commented that she sat on the subcommittee, and they did talk about the Woodbury Ave. traffic calming. Monies are allocated toward traffic calming every year.

Mr. Chellman thanked the staff and noted a lot of work went into this.

Chairman Legg commented that this was his 6th year involved with the CIP process. If someone wants to look at one document to understand the City, this is it. The document will show them what's happened and what's planned for the City. Chairman Legg thanked the City staff again.

The motion passed unanimously.

II. APPROVAL OF MINUTES (*Time: 7:00pm*)

A. Approval of the Planning Board minutes from the November 18, 2021 meeting.

Vice Chairman Moreau recused herself because she was not present at the November meeting.

Mr. Gamester moved to approve the Planning Board minutes from the November 18, 2021 meeting, seconded by City Council Representative Whelan. The motion passed unanimously.

Mr. Chellman commented that after the last Planning Board meeting it came to his attention that they were in a situation with Planning Board members that doesn't comport with the state statute. This was reviewed with the NH Municipal Association, and they agreed. The minutes need to reflect that there is concern that there is an ex officio member on the Board. That could have a detrimental effect on any action the Board takes.

Chairman Legg commented that this was discussed with the City Attorney Bob Sullivan. Attorney Sullivan noted that this Board is not the place to resolve this issue. The Planning Board is not responsible for appointing members to the Board. That authority is invested in the City Council. The Council has voted two current ex officio members to this Board unanimously. They will serve in that role until the City Council makes a different decision. Mr. Chellman should bring his concerns to the City Council because they have the authority.

Mr. Chellman clarified that there were three ex officio members, City Manager Conard, Mr. Pezzullo, and City Council Representative Whelan. Mr. Chellman confirmed he would address this with the City Council. However, this Board does have the authority to remove a member from action. Chairman Legg responded that it did not. They have the authority to make a recommendation to City Council. This is not the place to debate this.

III. DETERMINATIONS OF COMPLETENESS

SITE PLAN REVIEW

A. The request of North Mill Pond Holdings LLC (Applicant), and One Raynes Ave LLC, 31 Raynes Ave LLC, and 203 Maplewood Ave LLC (Owners) for property located at 31 Raynes Avenue, 203 Maplewood Avenue, and 1 Raynes Avenue requesting Site Plan Review approval.

Mr. Gamester moved to determine that the application is **complete** according to the Site Plan Review Regulations, and to accept the application for consideration, seconded by Vice Chairman Moreau. The motion passed by an 8-1 vote. City Council Representative Whelan opposed.

B. The request of Martingale, LLC (Owner), for property located at 99 Bow Street, requesting Site Plan Review approval.

Mr. Gamester moved to determine that the application is **complete** according to the Site Plan Review Regulations, and to accept the application for consideration, seconded by Vice Chairman Moreau. The motion passed by an 8-1 vote. City Council Representative Whelan opposed.

C. The request of **Dagny Taggart**, **LLC** (**Owner**), for property located at **93 Pleasant Street** requesting Site Plan Review approval.

Mr. Gamester moved to determine that the application is **complete** according to the Site Plan Review Regulations, and to accept the application for consideration, seconded by Vice Chairman Moreau. The motion passed by an 8-1 vote. City Council Representative Whelan opposed.

D. The request of Torrington Properties Inc. (Applicant), on behalf of 2422 Lafayette Road Associates, LLC (Owner), for property located at 2454 Lafayette Road requesting Site Plan Review approval.

Mr. Gamester moved to determine that the application is **complete** according to the Site Plan Review Regulations, and to accept the application for consideration, seconded by Vice Chairman Moreau. The motion passed by an 8-1 vote. City Council Representative Whelan opposed.

IV. PUBLIC HEARINGS – OLD BUSINESS

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

A. REQUEST TO POSTPONE Request of Ricci Construction Company Inc., (Owner) and Green & Company Building & Development Corp., (Applicant) for property located at 3400 Lafayette Rd requesting a wetland Conditional Use Permit under section 10.1017 to construct 50 town homes on an undeveloped lot. The (Applicant) is proposing five areas of wetland impact for a total of 21,350 square feet of permanent impact and three areas of temporary impact for a total of 2,350 square feet. Said property is shown on

Assessor Map 297 Lot 11 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District and the Natural Resource Protection (NRP) District. **REQUEST TO POSTPONE** (LU-21-98)

DISCUSSION AND DECISION OF THE BOARD

Mr. Gamester moved to postpone this application to the January 20, 2022, Planning Board Meeting, seconded by Mr. Clark. The motion passed unanimously.

B. REQUEST TO POSTPONE Request of Ricci Construction Company Inc., (Owner) and Green & Company Building & Development Corp., (Applicant) for property located at 3400 Lafayette Rd requesting Conditional Use Permit for a Development Site in accordance with Section 10.5B40 of the Zoning Ordinance and Site Plan Review approval for construction of a 50-unit multi-family residential development that includes community space and related landscaping, drainage, paving, utilities and other site improvements. Said property is shown on Assessor Map 297 Lot 11 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District and the Natural Resource Protection (NRP) District. REQUEST TO POSTPONE (LU-21-98)

DISCUSSION AND DECISION OF THE BOARD

Mr. Gamester moved to postpone this application to the January 20, 2022, Planning Board Meeting, seconded by Mr. Clark. The motion passed unanimously.

C. REQUEST TO POSTPONE The request of Gregory J. Morneault and Amanda B. Morneault (Owners) and Darrell Moreau, (Applicant) for property located at 137 Northwest Street requesting a Wetland Conditional Use Permit under Section 10. 1017 of the Zoning Ordinance to impact 5,062 square feet of wetland buffer and 45 square feet of tidal wetland. The proposed new home and existing turnaround is partially within the 100' tidal buffer zone of the North Mill Pond. In addition to the new home the applicant is proposing to remove an existing gravel turnaround and install a new paved parking apron for City vehicles to turn around. This new turnaround and the City pump station are all within a new easement. In addition, there is a plan to upgrade the stormwater outfall to protect against erosion. Said property is shown on Assessor Map 122 Lot 2 and lies within the General Residence A (GRA) District and Historic District. REQUEST TO POSTPONE (LU-20-222)

DISCUSSION AND DECISION OF THE BOARD

Mr. Gamester moved to postpone this application to the January 20, 2022, Planning Board Meeting, seconded by Vice Chairman Moreau. The motion passed unanimously.

V. PUBLIC HEARINGS – NEW BUSINESS

A. The request of North Mill Pond Holdings LLC (Applicant), and One Raynes Ave LLC, 31 Raynes Ave LLC, and 203 Maplewood Ave LLC (Owners) for property located at 31 Raynes Avenue, 203 Maplewood Avenue, and 1 Raynes Avenue requesting a Conditional Use Permit as permitted by Section 10.1112.62 of the Zoning Ordinance and according to the requirements of Section 10.1112.14 to allow 113 offstreet parking spaces including 18 reserved spaces to be provided on-site and 25 spaces to be provided on a separate lot where a total of 138 are required and Site Plan Review approval for the demolition of three existing buildings and construction of the following: 1) a 5-story mixed use building with 66,676 gross floor area and 16,629 sq. ft. building footprint including 7,720 sq. ft. of commercial use on the ground story and 32 residential units on the upper stories; 2) a 5-story 124-room hotel with 65,980 gross floor area and 14,622 sq. ft. of building footprint; 3) 34,427 sq. ft. of community space as well as associated paving, lighting, utilities, landscaping and other site improvements. Said properties are shown on Assessor Map 123 Lot 14, Map 123 Lot 13, Map 123 Lot 12, Map 123 Lot 10 and lie within the Character District 4 (CD4) District, Downtown Overlay District (DOD), Historic District, and the North End Incentive Overlay District. (LU-21-54)

Mr. Gamester moved to review Public Hearings – New Business Items A and B together and vote on them separately, seconded by Vice Chairman Moreau. The motion passed unanimously.

SPEAKING TO THE APPLICATION

Evan Tormey spoke to the application. This project was first here in December 2020 and was back again in March. Input from this and other Boards has made this plan better. The project meets a number of the City's Master Plan goals. The plan was developed in partnership with the City for the North Mill Pond greenway and community park. The proposed greenway site area is located on private property with the exception of the proposed public park. This project will contribute to the ongoing redevelopment of the North End. The proposed development improvements to the streetscape include wide sidewalks, landscaped areas, and hardscaped areas. There is one mixed use building and one hotel proposed for this site. The project will provide over half an acre of greenway trail. The total community space will be 31% of the site. The plan will significantly improve storm water runoff from the site and the neighborhood. The plan will remove impervious surface and provide the City with an easement to access the storm water drain. Since the project was last here, they have made some significant changes in response to feedback. The density has been reduced. The residential units were reduced from 60 units to 32 units. The hotel rooms have been reduced from 128 to 124 rooms. The surface parking has been significantly reduced by including a puzzle lift system. There is no parking or building in the 50foot setback. The amount of parking and building in the 100-foot buffer has been reduced. More landscaping and a berm were added in the buffer. The space between the 2 buildings has

been increased to make it more pedestrian friendly. There is a net reduction of over 7,000 sf of impervious surface. If the reserve parking is never built, then the net reduction is over 10,000 sf. Wayfinding signage and entrance markers were added to the greenway. This project team worked closely to coordinate with the landscaping and design of the City's abutting property. It will have an enormous beneficial effect on the shoreline and pond.

Patrick Crimmins from Tighe and Bond spoke to the site plan. The applicants have incorporated feedback from City Boards, staff, and the public. This is also being reviewed by the HDC. The property includes 425 linear feet of tidal wetland and buffer. These urban lots were historically filled in the past. It is a highly disturbed site that had industrial use on it in the past. The site currently has buildings and parking lots. The northern portion of the site includes an old boat ramp, piers, culvert, headwall, and outlet. The site is previously disturbed with buildings, maintained lawn, and parking lots. The existing vegetation on the site are invasive species. The existing conditions degrades the water quality in the pond. Runoff directly discharges into the pond today with no treatment. The existing culvert does not have an easement. There are no drainage systems on site. Many stated goals in the Master Plan involve this greenway. The City has the abutting parcel and are proposing a greenway and park for that site. Projects are not connected but this project plays a critical role in connecting the trail to this park. The project complies with the zoning ordinance. The first new building will be a mixed-use residential building with office retail. The upper floors step back. The second building is a 5-story hotel building. There will be one single drive off Raynes Ave. The plan meets site plan regulations to only provide one driveway. There is emergency access along the whole site. They can access all sides of the buildings. During the TAC review, staff requested that Raynes Ave. be converted to a one-way street. That is shown on the plan. They provided a traffic study for the project that contemplated a 2 way road but were asked to show one way street. The findings were that there was no significant impact in the area. This was peer reviewed by TEC and they agreed. The study was done based on the higher density. The total parking required is 138 spaces. On the first iteration of this plan they had 111 surface parking spaces. Now that the density has been reduced and creative parking solutions were implemented there are 59 surface spaces. 18 of those spaces are highlighted for future reserve. Only 41 will be built at this time. The screened lift systems will have 54 spaces and will be covered with the mixed-use building. The CUP is for shared parking off site. The proposal is to share 25 spaces with 145 Maplewood Ave. It is an office use so they will have off setting peaks and the parking will work well together. The plan is dark sky compliant. There will be lighting shields along the pond side, so light won't spill onto the water. The streetscape improvements will include city standard lighting. There will be a connection to the trail off Maplewood Ave. There will be pedestrian connections to the trail throughout the site. The sidewalk connects out to the site. There will also be a community space plaza, which will provide another connection to the park. The North Mill Pond trail is 10 feet wide and completely out of the 25 foot buffer except for where it will connect to the pier and kayak launch. The proposal is to rehab the pier and kayak launch and make that a public amenity. The intent would be to replace them in kind. The landscaping design works with the City's design. The storm water treatment improvements will be a significant upgrade. Utilities will connect off Raynes Ave. running down the middle of the driveway. They will also be upgrading the water main in Raynes Ave. The proposed treatment will include storm water treatment units and incorporate an underground detention system to mitigate temperature and peak runoff. The path will have porous asphalt, but it will be lined because they are not allowed

to infiltrate on the site. The storm water design will replace the existing culvert that discharges the neighborhood runoff. They will grant the City an easement to the culvert. In addition to the culvert reconstruction and easement they will also incorporate a storm water quality unit for neighborhood runoff. There is no treatment today. The plan will provide 34,427 sf of community space, including 27,352 sf along the North Mill Pond. Providing this space will help the City realize a goal of their Master Plan. The community space makes up 32.1% of the parcel. The proposed project will provide an overall improvement by reducing impervious surface in the 100-foot buffer. All impervious will be removed from the 0-25 foot, and there will be 67 sf of existing sidewalk in the 25-50 foot. The amount of impervious surface will be reduced by 3,283 sf in the 50-100 foot. Overall, the net reduction is 7,070 sf. If the reserve parking is never built, then the net reduction would be 10,100 sf. Reduction. The trail is a critical component, and the site will have significant landscaping.

Bob Ulig form Halverson Design with Tighe and Bond spoke to the landscaping plan. The building footprint and setback along Raynes Ave. allows for an active street edge and will tie the whole North End District together. It allows for the spill out of active programs for ground floor uses. The area between buildings has seating areas for the residents and public. The trail has been coordinated with the City to make sure is seamlessly integrates. The landscaping will enhance the relationship with the pond and encourage public use. The buffer plantings are intended to enhance the ecology and separate people from the water's edge while letting them appreciate the pond. Keeping the people from approaching the shoreline will help to prevent degradation. The streetscape will include brick edging strips to highlight furnishing zones. They will have the same tree grates as across the street. There will be a tabletop drive between the buildings to indicate it is a pedestrian space. The spill out areas at the corner of Raynes Ave. and Maplewood Ave. would provide a restaurant terrace and additional plantings. The planting strip will include evergreens and deciduous trees that will create seasonal interest. The dumpster enclosure in the back area will be screened. The area between 3S Art Space and the hotel will be creatively paved and connect to the trail. It will be a multi-use area for community activities. The entryways to the greenway will be identified with similar gateway material, plantings, and wayfinding signage. There will also be a series different seating areas along the greenway. The kayak launch and storage will be located along there as well. The proposed landscaping matches what is proposed for the City project. The unification will help the ecology and enhance the aesthetic. The fescue mix proposed is low maintenance. The edge of the parking areas will have a mix of hardy evergreens and deciduous trees. The operations and maintenance plans have been updated to address watering, monitoring, and mowing. There will be limited mowing in certain areas. This was designed and constructed through public and private partnerships to create a continuous multi use path experience from Maplewood Ave. to Market St.

Mr. Crimmins addressed the permits they were seeking. The project was first here in December 2020 and again in March. The applicants have been responsive to feedback for the site plan review permit, wetland CUP, and shared parking CUP. The application includes a response sheet that addresses the stipulations from TAC. The staff report recommends approval. The shared parking on the CUP is for the parking on a separate lot. The hotel requires 93 spaces, the residential building requires 42 spaces, and 7 visitor spaces. The overlay allows for a 4 space reduction. Overall, 138 spaces are required. This proposal provides that by providing 41 onsite surface spaces, 25 shared spaces, 54 puzzle lift spaces, and 18 reserves spaces. The applicant

intends to enter a parking agreement for the shared spaces. If the Planning Board grants the CUP, then a parking agreement be secured and recorded. The puzzle lift system will be screened from view along Maplewood Ave. The lift system is a more viable alternative than putting parking underground. The high ground water table and topography of the site would make underground parking costly and prohibitive. It would require a similar amount or more impervious surface because they would need to provide ramps and fire access. The reserve parking would not be constructed at this time. It will give the applicant opportunity to observe the parking and build it if needed. The applicant has committed to 100% valet for the mixed use and hotel to optimize the use of parking. The applicant has been responsive to comments from the Boards and public for the buffer impact and the wetland CUP. They met with the Conservation Commission 5 times. They have reduced the impervious surface in the buffer by 7,070 sf. If the reserve parking is never built, then it would be over 10,000 sf. The original proposal in December had a net impact of adding 4,000 sf. Now it is a 3,800-sf net reduction. The Conservation Commission voted 3-3 in June, but since that meeting, they have further improved the plans. The staff memo has recommended approval at that time before the further reduction. Mr. Crimmins addressed the six criteria for granting a wetland CUP. 1. The land is reasonably suited to the use, activity or alteration. This is a previously disturbed site that has been used for industrial use in the past. Currently there are buildings and parking on the site. The site is suitable for this project. The proposed project is consistent with the uses in this zoning. The waterfront is highly disturbed, and the existing vegetation provides little value to the pond. There is no public access. 2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration. The placement of the building and parking were done in a way to reduce impervious area in the buffer. The plan replaces maintained lawn with native grass and shrubs. 3. There will be no adverse impact on the wetland functional values of the site or surrounding properties. There is no wetland function on the site today. This plan will improve the tidal buffer and add value by providing public space. 4. The alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals. There is no alteration to woodlands or the wetland area. Any temporary disturbance of the buffer will be restored with vegetation to provide habitat. 5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Section. This project will result in a net improvement. 6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible. The project area in the vegetated buffer is limited to removing impervious construction, the greenway, and constructing the storm water outlet. Within the buffer strip the landscape plan will replace lawn with appropriate vegetation to help the wetland and prevent invasive species. It will be a low mow area with native trees and shrubs. The applicants believe that the plan addresses the criteria for all three permits. The project meets requirements, provides buffer enhancement, the greenway, and community space. The latest plan will reduce impervious surface, enhance the buffer, and provide open space. This Board has approved other projects that are similar in nature and scale.

Mr. Clark requested more detail on the soil contamination on the site and how this project may be helping that. Mr. Tormey responded that the site previously had a cleaners and gas station with a number of underground storage tanks. There is a ground water management permit out there and the site is under observation. This development will remove a lot of the remaining contaminated soils. A lot has already been removed over the years. They have found that the

soil is predominantly urban fill which is common throughout Portsmouth. The soil management plan will manage on site work appropriately to minimize exposure risk. The construction here is an engineered cap, so it will cap what is out there now. Mr. Clark questioned if it was their intent to continue monitoring. Mr. Tormey confirmed that was correct. The ground water management has been monitored for 9 years of the 20 years. The excavation and removal should attain closure on the site. There are levels of contamination above what is allowed in state regulations. Right now, there is a degraded parking lot and a lot of surface runoff. The proposal will capture all runoff and rain will not infiltrate. That's why AOT does not allow for pervious pavement because they don't want contaminants to move around. Mr. Clark questioned what the original use of this site was. Mr. Tormey responded that there was evidence of ship building and piers. The site has evolved over the years, but it has predominantly been an industrial site. Mr. Clark questioned if there were higher concentrations of coal ash toward the pond. Mr. Tormey responded that it was more concentrated where the proposed building is.

Mr. Clark requested more detail on the storm water treatment plan and the jellyfish filters. Mr. Crimmins responded that the filter systems will meet AOT regulations. The jellyfish filters will filter out contaminants and TSS to allow clean water to discharge to the pond. The operations and maintenance plan includes plans for the filters and tanks. Mr. Clark questioned what treatment would be provided for the storm water cap on Raynes Ave. Mr. Crimmins responded that they have proposed a water quality unit to treat runoff from the neighborhood. It is a little less maintenance intensive, but it will provide treatment. Mr. Clark commented that there are a lot of DES permits for this site and questioned what the status of those were. Mr. Crimmins responded that they have a number of preapplication meetings for the wetlands permit, AOT, and sewer connection. They haven't submitted the wetland permit application because the plan has changed so much. Once have this approval is granted, then they will submit the wetland application. Mr. Clark questioned if they thought of trying to do a granite head wall. Mr. Crimmins responded that they would have to defer to DPW because they would have an easement for maintenance of that. Mr. Clark commented that he didn't see anything regarding NOFA or organic land management. Mr. Crimmins responded that they have committed to that and will add it to the plan if it is not already in there.

Vice Chairman Moreau questioned how the emergency access road will not be used by regular cars. Mr. Crimmins responded that it will have a mountable curb, so it won't look like an entrance. Vice Chairman Moreau questioned how they will handle snow. Mr. Crimmins responded that it would be hauled off site. Vice Chairman Moreau requested more information on how the shared parking will work. Mr. Crimmins responded that the peaks for the hotel and residential building are at night. The peak for office parking is in the day. There is no one there at night. The valets will evaluate how to best manage the parking. Vice Chairman Moreau questioned if the valet would handle all the parking. Mr. Crimmins confirmed that was correct. Vice Chairman Moreau questioned who would be responsible for all the maintenance long term. Mr. Crimmins responded that the applicant would be. The community space easements would spell out those agreements.

Mr. Harris commented that this plan was a vast improvement from the original plan. Mr. Harris questioned what the status was with their HDC application. Mr. Tormey responded that they have been through 3 work sessions and are going back in January for another one. Mr. Harris

commented that there were still some outstanding items with the HDC relating to size and the location of the building. Mr. Tormey responded that they worked very hard to keep the building out of the buffer. There have been vision plans showing it in the buffer. The focus was to keep it out of the buffer. The design tonight is what they anticipate it will be and they are not flexible on the footprint. Mr. Harris questioned if they should be seeing this application before they were approved by the HDC. Chairman Legg commented that some developers run parallel paths. It is not required for them to get HDC approval before coming to the Planning Board. Mr. Britz confirmed they were not required to get HDC approval before coming to the Planning Board. Mr. Britz had a conversation with Nick Cracknell, and he noted that they have done a lot of work on the site. They are still working on the architectural design of the building, but he felt the site location was nailed down.

City Council Representative Whelan commented that it was his understanding that the HDC had not even started talking about the hotel yet. They have only discussed the mixed-use building. That's a significant open question. The applicant has done a tremendous about of work on this to get it out of the buffer. They need to be careful when the start to excavate because there has been a lot of industrial action on that site. There needs to be a mitigation plan to keep the soils where they should be. Mr. Tormey responded that it doesn't make sense to make a mitigation plan until get site plan approval. However, it is something they are very familiar with, and they are skilled with site management plans. The development team has a lot of expertise in this. City Council Representative Whelan questioned if they would get a deed or letter of intent about the shared parking agreement. Mr. Tormey responded that per the zoning ordinance they would need to record the agreement with the Registry of Deeds.

Vice Chairman Moreau commented that if anything in the HDC approval significantly changed the site plan, then they would have to come back for an amendment.

Mr. Chellman commented that it was good to hear the developers had experience with creating a contamination mitigation plan from brown field sites. It would have been good to review the mitigation. The memo in the package shows there is potential for serious stuff. The application feels a little premature. They haven't submitted for DES permits because they feel they need the site plan approval first. The Conservation Commission did not approve this. The HDC approval has not come through. The mixed-use building does go into the 100 foot buffer. Mr. Tormey responded that the part nearest Maplewood Ave. is a little sliver in the 100-foot buffer to the wetland across the street. The zoning requires a max setback from the street, so that why that is there. Mr. Chellman questioned if the puzzle lifts would be covered like car ports or fully enclosed. Mr. Crimmins responded that they would be fully covered by the building, and they were working on screening with the HDC. Mr. Chellman questioned if they would be accessed from the water side. Mr. Crimmins confirmed they would be accessed through the parking lot. They were still working on what the entrance screening would look like. Mr. Chellman questioned if they had talked with DES to understand if there were any red flags. Mr. Crimmins responded that they were comfortable submitting what they had designed. It coordinates with the City park application that has been submitted. Mr. Chellman questioned if there was any bonding requirement in their past brown field project to ensure mitigation was done in accordance with the plans. Mr. Tormey responded that they did not, but there was collaboration with the EPA and the City. There are a lot of regulations in place to ensure it is done properly.

Mr. Chellman questioned if there was a contingency fund in case there was a severe environmental condition. Mr. Chellman was comfortable with the end result but recognized there was risk during construction. Mr. Tormey responded that the memo notes there would be a storm water pollution prevention plan in place for the site. They will not be exposing contaminated soils. Those soils will need to be hauled off site and/or covered. There will be significant sediment controls. Mr. Chellman questioned if they would be wetting soils. Mr. Tormey confirmed they would for dust control. There are many sites around the City that have contaminated soils that have been handled appropriately. It is highly regulated. Mr. Chellman questioned when they would be wetting soils vs. covering them. It would be good to see those details. Mr. Tormey responded that they were talking about wetting them while they were working with them. They are not going to leave them exposed and wet for days. They keep it wet to prevent dust. The soils will be covered if they are staying exposed. Typically, those soils are going off site immediately. Mr. Chellman questioned if that would be in the plan that has not been developed. Mr. Tormey confirmed that was correct, but it's a plan created at the appropriate time for the appropriate parties.

Mr. Gamester questioned if the owner would be responsible for determining if the reserve parking was needed or if there was another trigger event. Mr. Gamester questioned if all of the spots had to be created if only some of the reserve was needed. Mr. Crimmins responded that the owner would determine if the reserve was needed. That is how it is written in the ordinance. The intent of the reserve spaces is to reduce surface parking as much as possible. The applicant would have to assess the parking management and asses if reserve parking was needed. They may not need to add all 18 at once. They can determine how many spaces are needed. Mr. Gamester questioned if they would just default to go into the reserve spaces or look at innovative options. Mr. Crimmins responded that they would look at innovative options. Cars are evolving so it is hard to predict what parking needs will be like in the future. If they needed to provide a parking demand analysis, then they could do that. Mr. Gamester questioned if they would be open to a discussion with the City before adding it. Mr. Crimmins agreed and noted that they provide a monitoring plan. Mr. Gamester questioned if the shared parking would be in perpetuity. Mr. Crimmins confirmed that was correct. Chairman Legg commented that it was a nicer plan if they kept the reserve parking undeveloped. Chairman Legg questioned if 25 spaces was the maximum amount that they could get across the street. Mr. Tormey responded that 25 was the max at 145 Maplewood Ave. 3S Art Space doesn't have parking and the AC Hotel is not a complementary use. They are optimistic that they won't need the reserve spaces. Chairman Legg questioned if there was any opportunity to put in another puzzle lift on site in the future. That could be a creative solution. Mr. Tormey agreed that it may be a creative solution. It may or may not meet the ordinance. They have to show a future reserve that they are able to build on the plan. They would entertain that as an opportunity before building the surface spaces. Mr. Gamester commented that ultimately what they are getting at that is that there's something more than just the owner going in and building those spaces without some sort of exchange. Chairman Legg commented that they could add a condition saying that the applicant has to provide a document that demonstrates the fact that they need spaces and will have a discussion with City staff on a creative solution before they build the surface reserve spaces. Mr. Tormey confirmed that they were amenable to that condition.

Mr. Chellman questioned if those 18 paces would be paved. Mr. Tormey confirmed that they would. Mr. Chellman commented that is looked like there was a lot of fill in the area between the buildings. Mr. Tormey responded that it was a pretty flat site out there. They were filling a berm to screen the parking from the trail and pond. Mr. Chellman confirmed that was what he was looking at. Mr. Tormey commented that the parking is on grade or slightly below the finished floor. Mr. Chellman questioned if the berm was in the 100-foot buffer. Mr. Tormey confirmed that it was.

Chairman Legg commented that some of the exhibits show that the dock and kayak launch are optional. Mr. Tormey responded that was because they were looking for Board feedback on that. This was discussed with TAC and the Conservation Commission about whether those should or should not be in there. To date all of them have recommended that they are included. Chairman Legg questioned if maintenance would be subject to an agreement with the City. Mr. Tormey confirmed that was correct. Chairman Legg questioned if the landowner would be accountable for the maintenance. Mr. Tormey confirmed that was correct.

Mr. Gamester questioned why the Conservation Commission was a tie vote. Mr. Tormey responded that one member was opposed to the density of the project. Which was not necessarily their per view because it was out of the buffer. There were questions about the soils. One member thought they were going to go back in front of them and was not clear to them it was the final vote.

PUBLIC HEARING

Abigail Gindele of 229 Clinton St. commented that it was important to maintain a functioning if not thriving eco system. It is good to balance a healthy community. The flora and fauna relationship is important and symbiotic. This proposal and a lot of the greenway treats the buffer zone like a park with native plants. The design invites people into the buffer zone and that is the opposite of what should be happening. This much human activity will decimate the whole North Mill Pond eco system. A park is not a buffer zone. The solution is to build a smaller project and pull the park out of the buffer. The greenway should be out of the buffer zone. The applicant's argument is that they are repairing the situation. However, if they make a change, then they should bring it up to current standards. That should include a viable 100-foot buffer. The applicants can still make a profit with a smaller project.

Bill Downey of 67 Bow St. commented that there has been a tremendous amount of work done on this project. It's an exciting project and a major gateway that will speak volumes as to how people perceive the community. At the last HDC meeting there were a lot of concerns with the location and lack of attention on the waterfront. There is a long way to go with the HDC. It is premature to bring this to the Planning Board. This should be postponed until that is resolved.

Mark Brightman of South Mill St. commented that they have an illegal board member on the Planning Board, and they have been warned.

Andrew Maynard of 61 Cabot St. spoke in support of the site review and development. The Portsmouth zoning ordinances provides incentives to build larger buildings in exchange for the greenway. This project complies with zoning and achieves Master Plan goals. Zoning requires 20% community space, and they are providing over 30%. The project features environmental improvements, storm water treatment, removing invasive species, and a landscaped buffer. It will provide a major portion of the long-awaited North Mill Pond greenway. This will be connecting Maplewood Ave. to City owned land. It completes a key piece of the greenway. It achieves the goals of reinvesting in underutilized buildings and land promoting open space and adding residential units. This will increase tax revenue. The wide sidewalks will compliment surrounding development. There is no reason why this site review should not be approved.

Rick Becksted of 1395 Islington St. spoke as a resident. Mr. Becksted commented that he understood the Master Plan and what the City has devised but there are still outstanding questions. This was meant to be a 2.5 story building. Incentives are not always a good thing. This Board should not approve this yet because the HDC has not finished their review. Some stipulations may change if the density changes. They have not taken the surrounding historic homes in consideration. This needs to be tabled.

Page Trace of 27 Hancock St. spoke as a resident. Ms. Trace applauded the gentleman for being so interested in the remediation of the brown fields. The property is featured in a painting and its location is described as Portsmouth, NH the corner of Raynes Ave and Maplewood. Remediation of a brown field is tremendously important, but history is equally important and deserves equal respect. The Board should think about this when the pass judgement. Ms. Trace sat on the HDC and at the last meeting they discussed massing and only looked at the mixed use building.

Second time speakers:

Elizabeth Bratter of 159 McDonough St. commented that the developers were attempting to do a lot of double dipping. The maximum height along the North Mill Pond is 35 feet or two stories stepping upward to 40 feet. They are presenting 5 stories up to 72 feet. They are choosing to use the North End Overlay incentive with the wide sidewalks. The ordinance says that any lots in 100 feet of the North Mill Pond must provide a specific amount of community space. They must provide a minimum of 20% and it must include the greenway trail connections to abutting streets with easements to the City. Using the overlay, they are double dipping on the massing. These buildings are more than that. The changes they have made make it only slightly smaller. They are requesting a 54% reduction of what is allowed for parking. The first summer this hotel is opened they will need 124 spaces without selling any condos. The reserve parking is shown in the buffer. The berm was supposed to be put in all along there per TAC. Please do not approve the parking CUP because they already received a reduction by using the Downtown Overlay District. They have not submitted a parking analysis. There is no extra parking in the area. DES will not allow pervious pavement in the 100-foot buffer or underground parking. It is unclear how they will allow pilings. It is known that the North Mill Pond has toxins in the sediment. That should be tested prior to putting anything into it. This was denied by the Conservation Commission for many good reasons. One of them was because of the mass of the buildings. There will be almost 300 people there every day. That will greatly impact conservation. Do not

override a group of people who know the Commission and regulations well. The site plan review should be postponed until all the double dipping has stopped and the HDC and Conservation Commission give approval.

Page Trace 27 Hancock St. spoke as resident. Ms. Trace applauded all of the work that has been done on the project. However, more work needs to be done. One of the reasons it looks so beautiful is because of stair step of buildings in the vision plan. Another project that will snake off the Sheraton Hotel. That is an entirely different project going into an odd piece of land with a stair step. This 5-story building on the North Mill Pond will not create a stair step. It will just be a long wall along the pond. The Board should look at the parking more.

Esther Kennedy of 41 Pickering Ave. commented that the biggest issue was building in the buffer zone. The Master Plans says to not to build in the buffer zone. Please do not allow building in the buffer zone. The height is questionable.

Duncan McCallum of 536 State St. spoke against the proposal. This proposal is a couple of monstrosities. It is inconsistent with the character of the North End and Historic District. The Wetland CUP is required in order to grant site plan approval for the project. They just went through this with 105 Bartlett St. In this case the development plan clearly violates the wetland ordinance. The development plan is not the alternate location with the least adverse impact. There is an alternate location that is both reasonable and feasible to build on. This plan violates the criteria. The development has to comply with all 6 and if they fail to comply, then the Wetland CUP may not be issued. They clearly do not comply with two of them. They can build out of the buffer. They can place buildings outside the wetlands buffer. They can place the parking lot and paved road out of the buffer. It may not be as big, but they are not entitled to build whatever they want. They don't always get to do what they want. The paved road cuts right through the middle of the buffer. The parking and paved road is 25,000 sf of impervious surface in the buffer. The plan does not meet those two requirements for granting a permit. They need a Wetlands CUP to get site plan approval. The applicants in this case like many don't want to comply with the zoning ordinance because they don't want to. They can't make as much money if they have to comply. If that is all the applicant has to offer, then they should not approve. The wetlands protection ordinance and buffer are not a joke. Developers don't take the buffer seriously enough. The Conservation Commission did not recommend this project.

Third time speakers:

Duncan McCallum of 536 State St. commented that it was clear that it would be premature to grant approval. The HDC has not considered the hotel yet. It is unclear who will enforce and pay for the valet in perpetuity. The developers are trying to focus on the reduction in overall impervious surface. But that misses the point. The construction itself will cause damage to the buffer and the pond overall. It is not just a matter of reducing the overall impervious surface. They will need to do construction to remove it. The greenway is great, but they don't need to construct a 5-story building to build that. They could just donate the land. They are offering nothing by giving that land to the City because they can't build on it anyway. In a public private partnership, it is almost always obvious why it's a good deal for the private side. It is harder to identify the public benefit. In this case it is hard to see why it is a good proposal for the public.

In view of the mass of the buildings they are a bad idea. At the minimum they should postpone and wait until hear they from the HDC. They should wait until some of the other issues raised are resolved. If the Board chooses to vote on it tonight, then they should deny it.

Chairman Legg asked if anyone else was present from the public wishing to speak to, for, or against the petition. Seeing no one else rise, the Chair closed the public hearing.

DISCUSSION AND DECISION OF THE BOARD

Chairman Legg commented that before they entertain a motion for this applicant request, they should make a motion to consider the balance of the agenda on December 30, 2021. Then if that motion is approved the people and public here for other applications can leave now.

Mr. Gamester moved to postpone the applications after the Raynes Ave. application to the December 30, 2021, Planning Board Meeting, seconded by City Council Representative Whelan. The motion passed unanimously.

Vice Chairman Moreau moved to grant the wetland conditional use permit as presented, seconded by Mr. Gamester.

Vice Chairman Moreau commented that this was a tough one. This project is making this site so much better in so many ways. There are a lot of things on both sides of the argument. People don't want anything there, but nothing will be taken care of. People want the greenway. They have pulled the buildings way out of the buffer, which is good. Vice Chairman Moreau was less worried about the piece in the back end of the buffer because it's across the street and Maplewood Ave. is doing more damage than the building would. The drainage and jellyfish filters are an improvement. Hauling the snow is an improvement. They will pay to maintain the landscaping and greenway. Those are all positives. They are putting in pavement and large buildings, but they are building the greenway. Vice Chairman Moreau disagreed with those who feel they have to meet every criteria exactly. It is more a negotiation of controls. Vice Chairman Moreau has been a board member for nine years and they have always treated it as a mitigation negotiation. It is not as black and white.

Mr. Gamester commented that he had a problem hearing comments that humans should not be using the buffer because that is contrary for what the buffer is there for. It is not just for the body of water, but what can be done in the buffer as it applies to the body of water. If the building was all in the buffer, then they would all agree to deny. It's not all in the buffer. They are restoring the buffer lands. People should be able to enjoy this area. It's the same as a beach or Prescott Park. It doesn't make sense that it does not comply because people will degrade the buffer. Mr. Gamester did not agree with the idea that they cannot build in the buffer. They have had this conversation countless times. The buffer is there for mitigation. It is not there as a strictly no build zone. All but a sliver of this building is not in the buffer. It doesn't make sense with the ordinance or statute that they have to keep it pristine and untouched. The 6 criteria are there to show how to prove they comply with what can be done in the buffer. Building can be done in it. In this instance parking is in the buffer. The buildings are going to create a cap. This site meets the criteria as it applies to the buffer, water, and ground contamination. It's not

perfect but not everything that comes before it has to be perfect. It is not the easiest yes but looking at the site, the proposal, and what's changed Mr. Gamester noted that he would support it

Mr. Clark commented that the North Mill Pond is on the 303 D list. It's an impaired water body. At some point they have to start looking at what to do to get those water bodies off that list. It is part of the City's MS4 permit. Regardless of what happens on the site people will be using the North Mill Pond for recreation. It's been looked at time and time again. This shoreline was created with urban fill. It wasn't designed by nature. As the shorefront degrades the contaminants within the soil will continue to leach out. They can say that they are never going to do anything in the buffer. However, it will continue to erode and break up and contaminate. If this was a pristine site that would be one thing. It's not. It is completely manmade, and this project is trying to turn it back into something natural. Right now, there is very little vegetation and no trees. Overall, the proposal will help the site and help the health of the North Mill Pond. There will be more human impact, but the site proposal is a benefit overall.

Mr. Chellman disagreed with a few comments. The proposal does include significant environmental improvements to the site. They could still improve and comply with the criteria to not put the building in the wetland buffer. They could clip the corner off the building and get a variance. Mr. Chellman had a problem with the criteria wording in the ordinance. It has nothing to do with people using the buffer or the size of the building. The criteria is very specific and says the application shall comply with all 6 criteria. That's not a discretionary list. If there was another point saying unless the Planning Board found there was an overall benefit that exceeded the prior 6 criteria, then there would be flexibility. It doesn't say that. It's more than a sliver in the buffer. They could still build a large project and do what they want to do by shifting things out of buffer. Criteria 2 and 5 are tough standards and the Board is supposed to follow the ordinance. It's a good project, but this is a threshold problem.

City Council Representative Whelan was not in favor of the project. The Board should table it and let it come back in January. They should give the HDC time for further clarification. City Council Representative Whelan agreed with Mr. Chellman's comments. They have to meet the 6 criteria and they are not meeting 2 of those. That's why have they have a zoning ordinance and they should not deviate from that. They went in front of the Conservation Commission 5 times, and they still did not approve. The Commission had serious concerns. It's a good project but there is a reason that they have a 100-foot buffer. New Hampshire has18 miles of coastline and people want to develop all of it. The Board should not be cavalier about the buffer. They should come back with a smaller project out of the buffer. There are problems with contamination on the site. There is a risk of putting more pollutants in the water when they excavate and do construction. Mr. Clark is right, it is an impaired waterway and that needs to change. However, this is an intensive project. The Board should be following the rules and regulations. They can come back with a smaller project outside of the buffer.

Mr. Harris agreed with Mr. Chellman and City Council Representative Whelan. There is a lot of benefit to the project. There are a lot of steps to improve the environment there. People accessing the buffer area will cause further disruption. The HDC had issues relating to the size and mass of the buildings. They are hoping to get it down to 3 stories. There are unresolved

issues. They need to listen to other Boards. It is prudent to wait until the HDC approves or vets it further.

Mr. Gamester commented that this CUP is coming before us regardless of the HDC. If they make a significant change, then they will come back before the Planning Board. There will be disturbance here regardless. The alternate location that is feasible and reasonable was achieved through the many iterations of the project. Most of the activity is outside of the buffer save a sliver of the building. The pavement is necessary because underground parking is not feasible. There is no alternate location. This is the least adverse impact especially with all the improvements for this manmade shoreline.

Chairman Legg agreed with Mr. Gamester and Vice Chairman Moreau. They don't need to see the final HDC product before acting. They have done that in the past, so it is not a new process. If the project changes significantly, then they would come back. There is no risk of approving something tonight and having something else developed in its place. Just like the law, the ordinance is open to interpretation. That's why they have attorneys to help interpret the law. If it was all clean cut and easy, then they would not need that. That's the reality with the zoning ordinance. If the City Council wanted to prohibit development in the buffer, then they would have said so. If it were pristine undisturbed wetland buffer, then no one would be saying this was a good project. The reality is that this is urban fill. This will improve the water that is currently shedding into the North Mill Pond. This is similar to the Bartlett St. project when the Piscataqua Waterkeeper spoke and said that the project would improve the water quality because of its current conditions. This project will improve quality of water for the North Mill Pond. The project meets the criteria for the wetland use permit. Chairman Legg commented that he would support the CUP.

Mr. Chellman commented that putting building in the wetlands buffer is a bad idea. It does not meet the criteria.

Chairman Legg commented that this Board has approved building in the wetland buffer in the past. Mr. Chellman commented that should not justify this decision.

Vice Chairman Moreau commented that they look at each project and its unique site. They have denied people in the past. The Board has never allowed someone to build an entirely new building in the buffer.

The motion passed by a 6-3 vote. City Council Representative Whelan, Mr. Chellman and Mr. Harris opposed.

Vice Chairman Moreau applauded the applicants for the unique parking ideas they came up with. The puzzle lift is creative. They considered the constraints of the site and kept it out of the buffer as much as possible. The valet and shared parking are good ideas. The. City gets to enforce that with this approval. They can make a stipulation for the developer to report back to the City with a parking monitoring report. It could be a stipulation for the parking CUP or the site plan. Chairman Legg noted that it should go with the parking CUP because it's parking related.

Mr. Harris questioned if the 18 additional spaces were required. Mr. Britz commented that with the offsite parking and allowance to do reserve parking they meet the parking requirement. They need the CUP to allow for the offsite. Chairman Legg commented that when they add up all the parking requirements it comes to 138 spaces, but they can't provide them all on site. They are creating a shared parking agreement for 25 spaces across the street. The applicant is also saying that the ordinance says they need 138 spaces, but they are not sure they do. That's why they are putting in 18 reserve spaces and not build them until it is confirmed that they are needed. That's why asking they are asking for the CUP for 25 spaces off site. Mr. Harris commented that there would be an overlap between hotel parking and office parking and questioned how that would be addressed. Chairman Legg commented that operationally the valets would manage that.

Mr. Chellman commented that hotels don't run at 100% occupancy. Unless they are in downtown Boston, they tend to run at 60-70%. The criteria says they are supposed to provide an arrangement and analysis. Mr. Chellman questioned if the wetlands CUP approved paving for the reserve spaces if needed. Vice Chairman Moreau confirmed that was correct. Mr. Chellman commented that if they have secured 25 spaces and can show a covenant, then they satisfy the ordinance.

Chairman Legg agreed. The applicant will monitor the parking capacity and provide information to the City before building any reserve spots. They will also work with the City to see if there is an innovative way to add more spaces in a different way. The Board should give the City and property owners some direction and guidance. Mr. Gamester applauded the applicant for not building those out right away because ultimately, they probably won't need it. If they are needed, then the applicant can look at innovative solutions. The applicant will keep a parking demand analysis, but they don't necessarily need to submit it unless they need to use any or all reserve spaces. Then they can meet with the City to see if there are innovative solutions.

Vice Chairman Moreau commented that they should include it as a stipulation. It should say something like parking will be subject to an annual usage report that is submitted to the City and they should work with the City to determine an appropriate plan. Mr. Gamester commented that they should not need to submit it to the City if they have no intention of building the reserve.

Mr. Chellman commented that there has been concern with other projects about parking spilling over into adjacent neighborhoods and questioned how that would be handled if the valets began to do that. City Council Representative Whelan responded that the valet license is approved or declined by City Council annually. Mr. Chellman clarified that if they violated their agreement, then they would lose their license. City Council Representative Whelan confirmed that was correct.

Vice Chairman Moreau commented that the City may need more clarification about working with the applicants on innovative solutions. Mr. Gamester commented that they would have to show that they looked at more options than just building out the reserve parking in the plan. Mr. Chellman commented that they could come back to the Planning Board for this too. Vice Chairman Moreau commented that the City can refer it to the Planning Board if needed. Chairman Legg commented that they would have to demonstrate to the City that the demand is

there and that they have exhausted other reasonable alternatives. The City would provide approval.

Vice Chairman Moreau moved to find the number of off-street parking spaces provided will be adequate and appropriate for the proposed use of the property and to grant the conditional use permit, seconded by Mr. Gamester with the following stipulation:

3.1 Construction of reserve parking will be subject to usage reports submitted to the City demonstrating additional parking is needed only after alternative options to construction of reserve spaces have been considered and reviewed by the City. If City staff determines further review is needed applicant will be referred to Planning board for further review.

The motion passed unanimously.

Mr. Gamester noted that City Council Representative Whelan and Mr. Chellman brought up concerns about monitoring the site. They should specifically call out an oversight engineer for monitoring.

Chairman Legg commented that the property owners should maintain the dock and kayak launch. Mr. Britz agreed that it there would be an easement over the community space for the City. Vice Chairman Moreau added that they could add the responsible parties for all maintenance in the stipulations.

Mr. Clark questioned if they should stipulate that they use NOFA practices. Mr. Britz responded that NOFA standards were above and beyond the City's requirements, but the Conservation Commission did ask for that.

Mr. Clark commented on the North End Vision plan that came up a lot tonight. The drawings in the Master Plan shows 8 buildings within the same parcel and one is over the water on Maplewood Ave. A lot of them are shorter than what is proposed but one is directly on the water and the rest are in the buffer. Ultimately these plans have less impact. They are complying with what is proposed in those two documents.

Vice Chairman Moreau commented that overall, the project is a lot better than it was, it is good that they pulled the bulk of the buildings out of the buffer. There are some creative solutions in this plan, and they will maintain the site long term at no expense to the City.

Vice Chairman Moreau moved to grant Site Plan approval, seconded by Mr. Gamester with the following stipulations:

Conditions Precedent

- 1 The site plan and any easement plans and deeds shall be recorded at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.
- 2 The applicant shall record a notice of voluntary lot merger.
- Any easement plans and deeds for which the City is a grantor or grantee shall be reviewed and approved by the Planning and Legal Departments prior to acceptance by City Council.

- 4 The applicant shall prepare a Construction Management and Mitigation Plan (CMMP) for review and approval by the City's Legal and Planning Departments.
- 5 The applicant shall agree to pay for the services of an oversight engineer, to be selected by the City, to monitor the demolition and construction of improvements within the public rights-of-way and on site.
- 6 Owner shall provide an access easement to the City for water valve access and leak detection. The easement shall be reviewed and approved by the Planning and Legal Departments prior to acceptance by the City Council.
- 7 The Applicant or its engineer shall submit a copy of a completed Land Use Development Tracking Form using the Pollutant Tracking and Accounting Program (PTAP) online portal currently managed by the UNH Stormwater Center or similar form approved by the City.
- 8 Grease traps will be designed to meet code requirements.
- 9 Sewer connection permit will be obtained from DES.
- 10 Applicant and City will enter into a Community Space Agreement which will specify the owner as the responsible party to maintain all the greenway/community space.
- 11 Fertilizing within the buffer zone will follow City guidance and Northeast Organic Farming Association (NOFA) standards.
- 12 Exposed parking shall be screened from view.

Conditions Subsequent:

- 13 The Engineer of Record shall submit a written report (with photographs and engineer stamp) certifying that the stormwater infrastructure was constructed to the approved plans and specifications and will meet the design performance.
- 14 A stormwater inspection and maintenance report shall be completed annually and copies shall be submitted to the City's Planning and Public Works Departments.

The motion passed unanimously.

B. The request of North Mill Pond Holdings LLC (Applicant), and One Raynes Ave LLC, 31 Raynes Ave LLC, and 203 Maplewood Ave LLC (Owners) for property located at 31 Raynes Avenue, 203 Maplewood Avenue, and 1 Raynes Avenue requesting a Wetland Conditional Use Permit under section 10.1017 to construct two buildings 1) a 5 story mixed use commercial and residential building and 2) a five story hotel building with 124 rooms. The project has removed all of the impervious surface from the 25' tidal buffer, proposes 67 square feet of impervious surface in the 25-50' tidal buffer and 21,190 square feet of impervious in the 50-100' tidal buffer. Overall the project is able to demonstrate a reduction of 7,070 square feet of impervious surface in the tidal wetland buffer from the existing condition or a reduction of 10,107 square feet if the reserve parking is not constructed. Said properties are shown on Assessor Map 123 Lot 14, Map 123 Lot 13, Map 123 Lot 12, Map 123 Lot 10 and lie within the Character District 4 (CD4) District, Downtown Overlay District (DOD), Historic District, and the North End Incentive Overlay District. (LU-21-54)

DISCUSSION AND DECISION OF THE BOARD

The motion and vote for this CUP is documented under Agenda Item A above.

C. The request of Martingale, LLC (Owner), for property located at 99 Bow Street, requesting Site Plan Review Approval to allow the expansion of the existing deck to include expanded seating for the business as well as public access to the Piscataqua River. Said property is shown on Assessor Map 106 as Lot 54 and lies within the Character District 5 (CD5), Downtown Overlay, and Historic Districts. (LU-21-181)

DISCUSSION AND DECISION OF THE BOARD

The Board voted to postpone to a special meeting scheduled for Thursday, December 30, 2021.

D. The request of **Dagny Taggart, LLC (Owner),** for property located at **93 Pleasant Street** requesting Site Plan Review approval for the redevelopment of the existing 4 story structure and the construction of a new structure totaling 34,266 square feet of commercial space and 18 parking spaces. Said property is shown on Assessor Map 107 Lot 74 and lies within the Historic, Downtown Overlay, and CD4 Districts. (LU-21-183)

DISCUSSION AND DECISION OF THE BOARD

The Board voted to postpone to a special meeting scheduled for Thursday, December 30, 2021.

E. The request of Torrington Properties Inc. (applicant), on behalf of 2422 Lafayette Road Associates, LLC (Owner), for property located at 2454 Lafayette Road requesting to amend a previously granted Conditional Use Permit to provide less than required parking in accordance with Section 10.1112.14 of the Zoning Ordinance and Conditional Use Permits for increased housing density and for increased building height as allowed by Section 10.5B72.10 and Section 105B72.20 of the Zoning Ordinance, and development within the Gateway Neighborhood Mixed Use District in accordance with Section 10.5B40 of the Zoning Ordinance; and for Site Plan Review to demolish the existing structure and construct a five (5) story structure with 95 condominium units with 20% designated as workforce housing units and provide 21,896 square feet of community space. Said property is shown on Assessor Map 273 Lot 3 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District. (LU-21-192)

DISCUSSION AND DECISION OF THE BOARD

The Board voted to postpone to a special meeting scheduled for Thursday, December 30, 2021.

F. The request of **35 Pines LLC**, **(Owner)**, for the property located at **295 Maplewood**, Unit **1** requesting a Conditional Use Permit Approval in Accordance with Section 10.1112.14 of the Zoning Ordinance, for the provision of no on-site parking spaces where three (3) spaces are required. Said property is shown on Assessor Map 141 Lot 35 and is located in the Character District 4-L2 (CD4-L2) and Historic District. (LU-21-211)

DISCUSSION AND DECISION OF THE BOARD

The Board voted to postpone to a special meeting scheduled for Thursday, December 30, 2021.

G. The request of Public Service CO of NH (Owner), for the property located at 300 Gosling Road requesting a Wetland Conditional Use approval according to section 10.1017 is requested for the replacement of 8 utility poles adjacent to Gosling Road. The project proposed temporary impact of 98,984 square feet in the wetland area and of 25,224 square feet in the wetland buffer. The proposal is to replace existing wooden structures with equivalent steel structures. Said property is shown on Assessor Map 214 Lot 3 and is located in the Office Research (OR) and Waterfront Industrial (WI) Districts. (LU-21-205)

DISCUSSION AND DECISION OF THE BOARD

The Board voted to postpone to a special meeting scheduled for Thursday, December 30, 2021.

H. REQUEST TO POSTPONE The request of ADL 325 Little Harbor road Trust (Owner), for the property located at 325 Little Harbor Road requesting a Wetland Conditional Use Permit under section 10.1017. The applicant is proposing 81,865 square feet of disturbance in the tidal wetland buffer the disturbance includes replacement of an existing home with a new home with a footprint of 3,382 square feet, construction of a new garage 1,300 square feet, renovation of an existing guest cottage 1,217 square feet, construction of a pool cabana 368 square feet and replacement of an existing shed 384 square feet along with other impacts/improvements including utility connections, playground, drainage improvement and extensive landscape improvements. Said property is shown on Assessor Map 205 Lot 2 and is located in the Rural (R) and Single Residence A (SRA) Districts. REQUEST TO POSTPONE (LU-21-189)

DISCUSSION AND DECISION OF THE BOARD

The Board voted to postpone to a special meeting scheduled for Thursday, December 30, 2021.

I. The request of **The City of Portsmouth (Owner)**, for property located at **0 Vaughan Street** requesting a Wetland Conditional Use Permit under section 10.1017 to restore a piece of property along the North Mill Pond into a City Park, Greenway and Living Shoreline project. The project as proposed includes restoration of 57,520 square feet of restoration work in the Wetland and Buffer with project impacts of 262 square feet in the wetland and 5,490 square feet of impact in the 100' wetland buffer. The project includes the removal of invasive plants, planting of native species to restore the vegetation on the site. The restoration work is proposed in the subtidal, intertidal, and tidal buffer portions

of the site. Said property is shown on the Assessor Map 123 Lot 15 and lies within the Character District 4 (CD-4). (LU-21-187)

DISCUSSION AND DECISION OF THE BOARD

The Board voted to postpone to a special meeting scheduled for Thursday, December 30, 2021.

VIII. PRELIMINARY CONCEPTUAL CONSULTATION

A. The request of **Port Harbor Land LLC**, for the property located at **2 Russell Street** requesting Preliminary Conceptual Site Consultation for a mixed use project consisting of office, retail/commercial, and residential uses in one 4-story and two 5-story buildings. The site is located between, Russell Street, Deer Street, Maplewood Avenue and the Railroad Corridor. Said property is located on Assessor Map 124-12 and lies within the Character District 5 (CD-5). (LUPD-21-10)

The Board voted to postpone to a special meeting scheduled for Thursday, December 30, 2021.

X. OTHER BUSINESS

XI. ADJOURNMENT

City Council Representative Whelan moved to adjourn the meeting at 10:46 p.m., seconded by Mr. Gamester. The motion passed unanimously.

Respectfully submitted,

Becky Frey, Secretary for the Planning Board

REGULAR MEETING PLANNING BOARD PORTSMOUTH, NEW HAMPSHIRE

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

7:00 PM December 30, 2021

MINUTES

MEMBERS PRESENT: Peter Britz, Interim Planning Director; Dexter Legg, Chair;

Elizabeth Moreau, Vice Chair; Karen Conard, City Manager; Peter Whelan, City Councilor; Ray Pezzullo, Assistant City Engineer; Colby Gamester; Corey Clark; Peter Harris; Rick Chellman; Polly

Henkel, Alternate; Stefanie Casella, Planner 1

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MEMBERS ABSENT	[`:
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I. PRESENTATIONS (Time: 6:00 pm)

A. FY 2023-2028 Capital Improvement Plan

- H. APPROVAL OF MINUTES (Time: 7:00pm)
 - A. Approval of the Planning Board minutes from the November 18, 2021 meeting.
- HI. DETERMINATIONS OF COMPLETENESS

SITE PLAN REVIEW

- A. The request of North Mill Pond Holdings LLC (Applicant), and One Raynes Ave LLC, 31 Raynes Ave LLC, and 203 Maplewood Ave LLC (Owners) for property located at 31 Raynes Avenue, 203 Maplewood Avenue, and 1 Raynes Avenue requesting Site Plan Review approval.
- B. The request of Martingale, LLC (Owner), for property located at 99 Bow Street, requesting Site Plan Review approval.

- C. The request of Dagny Taggart, LLC (Owner), for property located at 93 Pleasant Street requesting Site Plan Review approval.
- D. The request of Torrington Properties Inc. (Applicant), on behalf of 2422 Lafayette Road Associates, LLC (Owner), for property located at 2454 Lafayette Road requesting Site Plan Review approval.

IV. PUBLIC HEARINGS – OLD BUSINESS

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

- A. REQUEST TO POSTPONE Request of Ricci Construction Company Inc., (Owner) and Green & Company Building & Development Corp., (Applicant) for property located at 3400 Lafayette Rd requesting a wetland Conditional Use Permit under section 10.1017 to construct 50 town homes on an undeveloped lot. The (Applicant) is proposing five areas of wetland impact for a total of 21,350 square feet of permanent impact and three areas of temporary impact for a total of 2,350 square feet. Said property is shown on Assessor Map 297 Lot 11 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District and the Natural Resource Protection (NRP) District. REQUEST TO POSTPONE (LU-21-98)
- B. REQUEST TO POSTPONE Request of Ricci Construction Company Inc., (Owner) and Green & Company Building & Development Corp., (Applicant) for property located at 3400 Lafayette Rd requesting Conditional Use Permit for a Development Site in accordance with Section 10.5B40 of the Zoning Ordinance and Site Plan Review approval for construction of a 50-unit multi-family residential development that includes community space and related landscaping, drainage, paving, utilities and other site improvements. Said property is shown on Assessor Map 297 Lot 11 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District and the Natural Resource Protection (NRP) District. REQUEST TO POSTPONE (LU-21-98)
- C. REQUEST TO POSTPONE The request of Gregory J. Morneault and Amanda B. Morneault (Owners) and Darrell Moreau, (Applicant) for property located at 137
 Northwest Street requesting a Wetland Conditional Use Permit under Section 10. 1017
 of the Zoning Ordinance to impact 5,062 square feet of wetland buffer and 45 square feet of tidal wetland. The proposed new home and existing turnaround is partially within the 100' tidal buffer zone of the North Mill Pond. In addition to the new home the applicant is proposing to remove an existing gravel turnaround and install a new paved parking apron for City vehicles to turn around. This new turnaround and the City pump station are

all within a new easement. In addition, there is a plan to upgrade the stormwater outfall to protect against erosion. Said property is shown on Assessor Map 122 Lot 2 and lies within the General Residence A (GRA) District and Historic District. REQUEST TO POSTPONE (LU-20-222)

V. PUBLIC HEARINGS – NEW BUSINESS

- A. The request of North Mill Pond Holdings LLC (Applicant), and One Raynes Ave LLC, 31 Raynes Ave LLC, and 203 Maplewood Ave LLC (Owners) for property located at 31 Raynes Avenue, 203 Maplewood Avenue, and 1 Raynes Avenue requesting a Conditional Use Permit as permitted by Section 10.1112.62 of the Zoning Ordinance and according to the requirements of Section 10.1112.14 to allow 113 offstreet parking spaces including 18 reserved spaces to be provided on-site and 25 spaces to be provided on a separate lot where a total of 138 are required and Site Plan Review approval for the demolition of three existing buildings and construction of the following: 1) a 5-story mixed use building with 66,676 gross floor area and 16,629 sq. ft. building footprint including 7,720 sq. ft. of commercial use on the ground story and 32 residential units on the upper stories; 2) a 5-story 124-room hotel with 65,980 gross floor area and 14,622 sq. ft. of building footprint; 3) 34,427 sq. ft. of community space as well as associated paving, lighting, utilities, landscaping and other site improvements. Said properties are shown on Assessor Map 123 Lot 14, Map 123 Lot 13, Map 123 Lot 12, Map 123 Lot 10 and lie within the Character District 4 (CD4) District, Downtown Overlay District (DOD), Historic District, and the North End Incentive Overlay District. (LU-21-54)
- B. The request of North Mill Pond Holdings LLC (Applicant), and One Raynes Ave LLC, 31 Raynes Ave LLC, and 203 Maplewood Ave LLC (Owners) for property located at 31 Raynes Avenue, 203 Maplewood Avenue, and 1 Raynes Avenue requesting a Wetland Conditional Use Permit under section 10.1017 to construct two buildings 1) a 5 story mixed use commercial and residential building and 2) a five story hotel building with 124 rooms. The project has removed all of the impervious surface from the 25' tidal buffer, proposes 67 square feet of impervious surface in the 25-50' tidal buffer and 21,190 square feet of impervious in the 50-100' tidal buffer. Overall the project is able to demonstrate a reduction of 7,070 square feet of impervious surface in the tidal wetland buffer from the existing condition or a reduction of 10,107 square feet if the reserve parking is not constructed. Said properties are shown on Assessor Map 123 Lot 14, Map 123 Lot 13, Map 123 Lot 12, Map 123 Lot 10 and lie within the Character District 4 (CD4) District, Downtown Overlay District (DOD), Historic District, and the North End Incentive Overlay District. (LU-21-54)

C. The request of Martingale, LLC (Owner), for property located at 99 Bow Street, requesting Site Plan Review Approval to allow the expansion of the existing deck to include expanded seating for the business as well as public access to the Piscataqua River. Said property is shown on Assessor Map 106 as Lot 54 and lies within the Character District 5 (CD5), Downtown Overlay, and Historic Districts. (LU-21-181)

Chairman Legg commented that the Board received a letter from Duncan McCallum suggesting Mr. Pezzullo has been inappropriately elected to the Board and the letter asked the Board to dismiss him. There was a response letter from City Attorney Bob Sullivan stating that it was his opinion that Mr. Pezzullo remain active. The Board has no authority to take action on it. This is informational only.

SPEAKING TO THE APPLICATION

John Chagnon from Ambit Engineering spoke to the application via Zoom. The project consists of 2 separate decks that will be attached to the east and west ends of the existing deck. The western deck expansion will provide general and ADA public access to the riverfront and inner harbor of the Piscataqua River. The eastern deck expansion will be for expanding the outdoor dining space of the Martingale Wharf Restaurant. The public wharf deck will display an educational sculpture. The plan set cover sheet shows the US Army Corps Engineers navigation channel. That channel is located 120 feet from the Martingale Wharf building. There have been some edits to the plans based on abutters' comments. Ultimately, it reduces impact because the eastern deck has been reduced. They had a preapplication mitigation meeting with NHDES that was attended by Fish and Game. This project is adjacent to a critical habitat for Atlantic sturgeon. Fish and Game had no concern regarding impact to the species as long as the construction was completed between November and March. That has been specified in the plan. The deck on the east end has been reduced, so it is no longer located within 20 feet of the abutting property. The revised plans went to the Conservation Commission and there were comments that the structure should be reduced. The deck was reduced by 540 sf on the east. The float expansion has been eliminated completely. There will be a handicap accessible public zone and private provide outdoor dining area. The expansion will provide a specific use which is in accordance with DES regulations. The deck will be a pile supported structure. The project will not have an impact on the functions and values of the adjacent tidal wetland. The structure will not contribute to additional storm water and will not have an impact on species in the area. It will not impede on tidal flow or hydrology. It will not impede migratory fish movement. These structures are common in that area. It will not impact the character of the neighborhood or the abutters. The site was granted an urban exemption by DES. The entire property is now exempted from the Shoreline Protection Act. There was some objection raised at the HDC that they were not transparent, but they disagree. Martingale Wharf appeared before the HDC in many meetings to review and there were public hearings. If there is a required change with the HDC approval, then the team will go back to get approval.

Richard Desjardins and Mark Gianniny from McHenry Architects spoke to the application. Mr. Desjardins commented that the eastern deck would be 890 sf and would extend the restaurant use. The western end of the deck would be extended by 344 sf. The owner is gifting an ADA

compliant public access deck. The deck has squared off edges to align with the existing dock. That was at the request of the HDC. In addition to the expansions the project will include 2 custom designed murals. Those will be going through the HDC and will be included when approved. There will be planter boxes and green screening to soften the space. It will help reduce the long vistas down the deck.

Mr. Chagnon commented that the applicant had no issues with the stipulations that were listed. The second stipulation in the memo is not needed, but the rest are agreeable.

Mr. Chellman requested that the applicant speak to the easement and how the public access would be outlined in the easement. Mr. Chagnon commented that the public access would be through the public entrance to Martingale Wharf and use the elevator. There is also a direct stairway off Bow St. to the left of the building that goes directly to the deck. The developer will be granting the City access in an easement to that area so citizens can use the deck. It will not be available 24/7. There will be periods of time when it is not available. That is consistent with other public easements that have been granted throughout the City.

Vice Chairman Moreau questioned if there would be signage at the street directing the public to the deck. Mr. Chagnon responded that they have not developed a sign package but that would be something the Board can stipulate.

Chairman Legg questioned how the public would access the deck if they did not want to go through the restaurant. Mr. Chagnon responded that they could use the stairs off Bow St. outside the building. Chairman Legg questioned if that was a public right of way now. Mr. Chagnon confirmed that was correct. Chairman Legg commented that it would be more inviting to have the public walk from the sidewalk in the open air to the deck rather than going through the restaurant. Mr. Desjardins commented that the ADA access was through the restaurant, but otherwise they could use the open stairway. Chairman Legg commented that he encouraged safe passage and clear signage that was approved by City Staff.

Mr. Chellman commented that there was concern raised about conventional pilings and questioned if there was an alternative to screwing in the pilings. Mr. Chagnon responded that at this point in time the team is recommending this style of pile. The method is used a lot up and down river, so it's suitable. Mr. Chellman questioned if there had been borings done to know if there was ledge. Mr. Chagnon responded that he was not sure. They were working with a marine engineer contractor and this is what they are recommending.

Vice Chairman Moreau questioned what the status of the DES application was. Mr. Chagnon responded that they requested more information and the applicants responded to that on 12/23/21. DES has 60 days to either issue a decision or request more information.

Mr. Clark commented that the Conservation Commission reviewed this application for a wetland permit review and questioned what that meant. Mr. Britz responded that the City's jurisdiction of the wetland permit is everywhere but the river. The river does not require a City CUP. There is a state wetland permit for tidal wetland and fresh water prime wetlands. This requires a state wetland permit. The Conservation Commission is an advisory committee to the state

application. They make a recommendation to the state. Mr. Clark clarified that their recommendation was going to the state, not the Planning Board. Mr. Britz confirmed that was correct.

Mr. Gamester requested more information on the trash situation that was noted in Attorney Sherman's letter. Mr. Chagnon responded that the trash is routinely collected, and the storage area is on the southeast corner of the property. It is screened from Bow St. It is emptied as many times as necessary. There may be a time when it's overwhelmed, but they are working hard to ensure the bins are not overflowing. The expansion of the seating area is not necessarily an expansion of customers. More people want to eat outside, and this expansion will allow for that. It should not be a large number of additional diners.

Owner John Ricci commented that the trash was not really part of the per view of the dock. They have an enclosure and manage the trash. They have never had the Board of Health complaint. They would be glad to address it if there are issues.

Mr. Chellman commented that the easement for the public access should not include the area to the right, to prevent it from becoming a hang out area before people get to the deck. Mr. Chagnon agreed. That's the hostess station area, so that makes sense. Mr. Desjardins commented that there will be a gate before the hostess station, so that will reenforce that it is a private area. Chairman Legg commented that the public deck should not become an overflow space for customers waiting for a table. Mr. Ricci responded that there will be a landscape barrier between the restaurant and public space. There will be a clear definition between public and private. However, if the deck is open to the public, then who would defines who the public is. They will try to manage it, but people may want to enjoy the view.

Vice Chairman Moreau commented that there needed to be an access easement to use the elevator.

PUBLIC HEARING

Elizabeth Bratter of 159 McDonough St. commented that when the deck was expanded to its current size it was supposed to include a 400-sf public space, and that did not happen. Today they are proposing the same amount of public space. They are asking to expand the deck again. This public access come with a lot of strings. Ms. Bratter questioned if there would be an easement to allow the public access or if it would be just a massive super deck. This application does not show the actual dimensions of the current site. It is unclear on how big the deck is compared to what's there today. There is a large public access area off of Ceres St. The ADA access is not unique because people can go down on the Ceres St. side. The latest application is missing information. They should deny this application until all of the information is provided. If this is approved, then Portsmouth will just end up with a city of restaurants.

Attorney John Sherman of 111 Bow St. Unit 2 commented that there were a lot of unanswered questions in this submission. There were a lot of questions this Board asked that the applicants did not know the answer to. They are proposing to build an unprecedented sized deck over the

Piscataqua. One big open question is how DES will handle this. The Conservation Commission rejected this proposal twice. The applicants were told they could not wharf out into the Piscataqua because it would be in the federal navigable setback. The channel is separate than the navigation setback. In 2015 they were in front of the Conservation Commission and were denied. Now they are saying they will go back to the Conservation Commission again. Mr. Sherman was not aware of that. Their answer will not be different.

Katie Sherman of 111 Bow St. unit 2 commented that the application was not complete. They were asked if there was ledge, and they didn't know. The land use regulations specify the criteria that should be considered. The existing use causes abutters significant problems and expanding that will only make it worse. The expansion will not compliment or enhance 111 Bow St. It will cause the property to decline and one reason for that will be because of the unsightly outdoor storage. The trash is pushed up against the historic building. It is causing a rat problem. The grease trap is there too. There is light spillover from the existing deck, and it is year-round because they have fire pits. There is no space to access the water between the buildings if there is an emergency. The restaurant employees smoke in front of 111 Bow St. All of the units in 111 Bow St. do not agree with this expansion. At the HDC meetings it was noted that the public area now is a space for people waiting for their tables. The public can get to the water through Ceres St. At minimum the Board should do a site visit. This deck is not ADA accessible because the restaurant can open and close access at their discretion. There are several other public decks on Ceres St. already.

Second time speakers

Attorney John Sherman of 111 Bow St. the City just approved an expenditure to fix and upgrade the deck that overlooks the Piscataqua on 113 Bow St. it is double the size of this deck and will allow for public access and viewing opportunities. Patrons will be using the public area while waiting for their tables. That is not speculation. Jeremiah Johnson said that at the HDC meeting. They are presently required to have a public portion on the deck, and patrons use it as overflow waiting space. The applicants should know if there is ledge or not on the shorefront. 111 Bow St. is one of the oldest buildings. The Board should not allow them to drive piles into the shore without knowing what's there. That is unacceptable. The current screens for the trash are out of character with the Historic District. The Board should not allow more screens to be installed. It will take away views. The proposed screens are unsightly and out of character. The art on the screens will only be available to the people on the deck. The other side is blank metal. They are trying to mitigate that problem with plantings, but that is only a seasonal mitigation. The Planning Board needs to be considering the residences in the area. They need to ensure that the value of the abutting residences do not decrease. They have been talking about public ADA access since 2012 and if they were truly motivated to provide that, then they would have 10 years ago.

Katie Sherman of 111 Bow St. Unit 2 reiterated that the trash was a problem. John Ricci noted that the picture was taken on an overflow day but that's the standard. The trash issue has been ongoing. They have only just now separated it from the building by 2 inches.

Attorney John Sherman of 11 Bow St. Unit 2 commented that the trash pictures were from 2015 and were submitted to the Planning Board last time they went through this process.

John Chagnon from Ambit Engineering commented on the issues that were brought up. To say there are a lot of unanswered questions is not entirely true. The Planning Board gets to ask questions that can be answered throughout the process. The applicants come before the Planning Board before they have completed all the construction drawings to build a building. It does not make sense to make final plans before the site approval it acquired. Issues were raised about wharfing out in the previous application. There was an exhibit presented in the last round of applications that showed a wharf perpendicular to the shore wharfing out. That was used as an exhibit in the application to justify the expanded facility. It was stated in the application if they were to wharf perpendicular to the shore, then they would approach the channel and it would not be safe. The Harbor Master has reviewed this application and does not feel that there will be any impact to the navigation channel. This application will not be going back to the Conservation Commission. The project may go back for HDC approval because the deck has gotten smaller. The signage issue was raised and that will be addressed by the applicant. The final design for the pilings comes after the Planning Board approval. It will be part of the application for the building permit. There is public access already and that is not going to change. There are steps in the public access on Ceres St., so it is not ADA compliant. The screen that was proposed on the abutter's side was a mitigation measure and has since been taken out. The deck has been cut back so significant proton of the restaurant building will pick up noise and light before it spills to the abutter. The other side has a screen to separate between the two decks. It will offer privacy to the public portion.

John Ricci owner of Martingale Wharf commented that the elevator access was important because the grades on Ceres St. don't meet ADA requirements. The elevator is the only ADA access to the waterfront. They rebuilt the deck using vibratory piles. The abutting building was not impacted. If this is approved, they will get a marine engineer and investigate what type of piles should be installed. When deck that is there now was installed, they didn't have any complaints or issues from abutters.

Rick Becksted of 1395 Islington St. spoke as resident. Mr. Becksted expressed gratitude to the Chair and the other Planning Board members who will not be serving anymore. Their service has been greatly appreciated. Secondly, Mr. Chagnon claimed that questions can be answered after. Unanswered questions should not get an approval. Unanswered questions means that it's not complete. The Board should consider everyone's views. A direct abutter is opposed. If the Board approves this, then this will be a one and done approval.

Duncan MacCallum of 536 State St. was opposed to the project and agreed with the Shermans' and Ms. Bratter's comments. Mayor Becksted is correct. There are too many unanswered questions. Those should be answered before approval is granted.

Chairman Legg asked if anyone else was present from the public wishing to speak to, for, or against the petition. Seeing no one else rise, the Chair closed the public hearing.

DISCUSSION AND DECISION OF THE BOARD

Vice Chairman Moreau questioned how they ensure that what they approve is built in its entirety and fully finished. Mr. Britz responded that there's a bond in place to ensure all the site work is completed. Vice Chairman Moreau commented that there was a lot of talk about how the pilings can be driven in. Vice Chairman Moreau questioned if the pilings were part of the Planning Board's per view or DES. Mr. Britz responded that DES approves the water work. However, they still will have a building permit phase and that would include the piling construction.

Mr. Harris commented that there were still a lot of unknowns and unanswered questions about the base of the pilings and depth that they have to go down. It is deep water there. This should be evaluated beforehand. They should not approve this if there are unanswered questions.

Mr. Chellman commented that the easement needs to be defined from Bow St. down the stairs to the public deck. Chairman Legg commented that they can include that as a condition.

Mr. Gamester added they should clarify the ADA access would be through the elevator.

City Council Representative Whelan commented that DES has not provided approval yet, and the Conservation Commission did not recommend approval. They need DES approval to be able do this project. The Planning Board should not approve this, until they have answers. This is a large deck that will be further out into one of the fastest tidal rivers in the U.S. There is a reason why these rules are in place. There are a lot of unanswered questions.

Mr. Clark commented that if NHDES doesn't feel comfortable, then they will either have stipulations or deny it. The permit application to NHDES goes to the Army Corps for environmental review. They will approve what they are comfortable with for the pilings. The contractor has to evaluate the level of risk. Other projects have found ledge and worked with the City to overcome that. Mr. Clark commented that the trash was still an issue. Some may say it is not part of the site plan review because the Board is just reviewing the wharf. However, this expansion will increase occupancy and trash, so the trash management is part of this. There appears to be some onsite issues already and it may be exacerbated by this expansion.

Mr. Chellman commented that he was generally in favor of the application but was not opposed to going out there to have a look and assess the trash and abutters. It felt a little rushed.

Mr. Gamester commented that this did not feel rushed because questions have been asked but some of those decisions are not in the Planning Board's per view. Those questions will be answered through the preconstruction process, NHDES, and federal review. There are other Boards they have to go through. They aren't taking a risk because if something changes, they will have to come back with an amended site plan.

Mr. Harris commented that the trash was still a question. The Board of Health may need to review that. Not taking that step to look at it now can become more of a violation. They should review it and make it part of the approval process.

Vice Chairman Moreau commented that trash may not be their per view because they have already approved where it is and how it functions. If it's not functioning how it is supposed to be, then they are out of compliance. That would be handled by the City.

Mr. Harris commented that it was in the Board's per view because they were being asked to approve an expansion. Chairman Legg commented that they have been told trash has been a problem for a decade and for whatever reason it has not been resolved. If this expansion would exacerbate the problem, then it would be in their per view.

Mr. Britz commented that he had not hear a complaint on this one specifically, but there are a lot of complaints about trash in that part of the City because there are a lot of restaurants in that area. The project was approved through site review. All projects in that area have a construction mitigation management plan that looks at how trash is dealt with and how the site is accessed. The City has not heard that they are out of compliance, but they have not investigated that specifically.

City Manager Karen Conard commented that if this was a concern from the abutter, then the City would take action on it. It would be the City's administration that would ensure the applicant is adhering to the Board of Health standards.

Mr. Gamester commented he appreciated that applicant has argued that the number of diners may not increase. The expansion would just allow more people to sit outside. However, the reality is that it does increase the ability to have more patrons. Mr. Gamester questioned if the trash situation could be improved. If they are in compliance, then it is tough to deal with. Formal complaints should be made if they are out of compliance. It may not make sense to include this as a condition, but the City and owners should collaborate to improve the trash situation.

Mr. Chellman commented that it could be a simple condition saying there should be an administrative view by the Board of Health. Chairman Legg agreed it was appropriate to add as a condition to highlight the concern and ensure the property owner works with the City to address the issue.

Chairman Legg commented that he did not feel this was rushed. It is unusual to have multiple hearings for a site plan review. DES will fulfill its responsibilities as it relates to the pilings etc. DES has the expertise and regulations to review that. The approval of the site plan will not influence DES's decision. They will evaluate based on their criteria. If they deny it, then the project will be denied. If the project is changed significantly, then they will be back for another review. Approving this tonight is not a risk. The only issue was the trash, but the condition covers that.

Mr. Pezzullo commented that the responsible party for the ongoing maintenance of the deck under the City's easement should be included as a stipulation. Chairman Legg agreed and clarified that it should be the owner's responsibility.

Vice Chairman Moreau moved to grant Site plan approval, seconded by Mr. Gamester with the following stipulations:

- 1. The site plan and any easement plans and deeds shall be recorded at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.
- 1. a) Easements on the plan and instrument recorded at the registry shall depict the easement to run from Bow street to and through the stairwell to be inclusive of the area depicted as the public deck in the McHenry plan A9 to include ADA access to run with the land
- 2. Any easement plans and deeds for which the City is a grantor or grantee shall be reviewed and approved by the Planning and Legal Departments prior to acceptance by the City Council.
- 3. Proper signage shall be posted for public space to be consistent with the Board's request from the Street to the public space.
- 4. Deck to be built in its entirety including public space for this project to be considered complete.
- 5. Applicant is to do pre-site inspection and vibratory monitoring throughout the project to identify any impacts to abutting properties.
- 6. Property owner is to work with city staff to resolve trash issues through the Construction Management and Mitigation Plan (CMMP) process.
- 7. Property owner is to be responsible for maintenance of the deck forever.

The motion passed by an 8-1 vote. City Council Representative Whelan opposed.

D. The request of **Dagny Taggart, LLC (Owner),** for property located at **93 Pleasant Street** requesting Site Plan Review approval for the redevelopment of the existing 4 story structure and the construction of a new structure totaling 34,266 square feet of commercial space and 18 parking spaces. Said property is shown on Assessor Map 107
Lot 74 and lies within the Historic, Downtown Overlay, and CD4 Districts. (LU-21-183)

SPEAKING TO THE APPLICATION

Mr. Chellman recused himself from the application.

John Chagnon from Ambit Engineering spoke to the application. The proposal is for a 2 story and short third addition to the back of the existing building. Currently there is a surface lot. They will create underground parking. The site plan shows the site layout and addition to the rear office. The building is on the corner of Pleasant St. and Court St. Access to the lower parking will be a ramp on Court St. The project originally proposed micro units, however, due to abutter opposition that was eliminated. Now the proposed use will be office only. The HDC has approved the project. TAC recommended approval with conditions, and they are happy to address them all. The parking level plan shows the ramp and 18 parking spaces. The utility plan shows the service transformer location and connections on the east end. The site is currently mostly impervious surface, so that is not really changing. They will provide storm water treatment with an inline filtration system for the roof runoff and a series of R tanks. Runoff will be directed to the City drainage.

Landscape Architect Terrence Parker from Terra Firma commented that the existing historic fence will be renovated and extended along the perimeter of the building as a security fence. It will be the same design as what is there now. The building's main address will be on Pleasant St. The sidewalks will be granite and with new granite pavers. The embankment will be planted with plants that are historically correct for the Treadwell mansion. There will be service berry trees on the corners. The transformer will be screened by arborvitaes. Bike racks and the flagpole on Court St. The garage entrance preserves the historic granite wall. There will be a row of understory trees that allows more vegetated screening along the back of the building. There will be steppingstones in the lawn. They will grow vines up the broad face of the temple side of the building.

Tracy Kozak commented that they went to several sessions with the HDC and received approval. The primary design element was to keep the historic granite wall intact as much as possible. The handicap entrance to the building will be next to the garage entrance. The primary entrance is off Pleasant St. The upper floors are all office use. The addition massing and design will be subservient to the mansion. The plan got variances to allow that. The addition is 2 brick houses connected with recessed areas in between. The existing mansion will be restored. The addition will be brick and the recessed buildings will be composite clapboard.

Rebecca Brown from GPI commented on the traffic. They put together a traffic impact assessment for TAC which included evaluation of trip generations and parking demand. They also assessed the safety of the drive access. Based on ITE data the peak hours will generate 30 vehicle trips. The parking underground will be for the employees of the owner-occupied office. The remaining parking would occur in off-site public parking and garages. That means half of the trips will go to the site and the other half will go to other parking areas. They were not required to do any additional impact assessment. They did a safety analysis and looked at the crashes at Pleasant St. and Court St. and Washington St. and Court St. intersections. All study areas had 2 crashes or less over the study period. Ms. Brown reviewed the sightlines at the site driveway. Cars can see through to the intersection of Pleasant St. and Court St. on the west side. When the vehicle is stopped before the sidewalk people will be able to see 53 feet to the east side. That would allow people to see pedestrians approaching on the sidewalk. Once they and see it is clear they can move forward to be at the edge of the sidewalk to see further down the road. Then they can see 80 feet down the road. That is adequate for vehicles going 15 mph. The sightlines are adequate. The proposal also includes installing a convex mirror on the utility pole across the drive and implementing a pedestrian alert system. There will be a black post mounted in the ground near the drive that would illuminate when a car was exiting the driveway. It would light up with the words "car coming" and the yellow bars will start flashing. It will be posted at the top of the ramp to alert cars and pedestrians of that a car is exiting the garage. There will also be a black post at the bottom of the ramp to alert exiting cars that a new car is entering.

Attorney FX Bruton commented that he was present to answer any questions. They have gone through quite a bit of work to get here and received approval form all prior boards. The project meets site plan regulations and requirements.

Vice Chairman Moreau questioned what would trigger the black posts. Ms. Brown responded that the garage door will open and close when vehicles come and go. When the garage door opens the car coming post will activate. There are supplemental sensors on the ramp to activate the bottom post. Vice Chairman Moreau questioned how trash would be handled. Ms. Kozak responded that there would be a trash room in the garage, and it would be removed via the ramp and hauled away.

Mr. Clark questioned where the solar panels would go on the building. Ms. Kozak responded that there was a note on the roof plan that says the location of the future solar panels would be in the middle section behind the gable roof. There is a flat area there.

PUBLIC HEARING

Elizabet Bratter of 159 McDonough St. commented on a general problem that she hoped the City would address. This building is in the CD-4 district and across the street is the CD-4 L-1. Right now, the buildings abutting State St. look at a parking lot, so they have a view. If this is approved, then their view will be a building. There is not intermittent zoning. It is very big buildings with limited green space.

Second time:

John Chagnon from Ambit Engineering commented that they agreed with the proposed conditions, however, number 2 was not relevant to this case. There has been some discussion on whether or not number 6 applied. Chairman Legg noted that the conditions 8 and 9 had been revised. Chagnon commented that he had not seen that update but would review.

Chairman Legg asked if anyone else was present from the public wishing to speak to, for, or against the petition. Seeing no one else rise, the Chair closed the public hearing.

DISCUSSION AND DECISION OF THE BOARD

Mr. Gamester moved to grant Site Plan approval, seconded by Vice Chairman Moreau with the following stipulations:

Conditions Precedent:

- 1. The Site Plan and any easement plans and deeds shall be recorded at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.
- 2. Any easements plans and deeds for which the City is grantor or grantee shall be reviewed and approved by the Planning and Legal Departments prior to acceptance by the City Council.
- 3. The Applicant shall prepare a Construction Management and Mitigation Plan (CMMP) for review and approval by the City's Legal and Planning Departments.
- 4. The Applicant shall agree to pay for the services of an oversight engineer, to be selected by the City, to monitor the construction of improvements within the public right of way and on site.
- 5. The Applicant or engineer shall submit a copy of a completed Land Use Development Tracking using the Pollutant Tracking and Accounting Program (PTAP) online portal currently managed by the UNH Stormwater Center of Similar form approved by the City.

- 6. R-Tank shop drawings are to be submitted and approved by DPW before the building permit is issued.
- 7. A potential underground grease trap location is to be displayed on plans. *Conditions Subsequent:*
- 8. The Engineer of Record shall submit a written report (with photographs and engineer stamp) certifying that the stormwater infrastructure was constructed to the approved plans and specifications and will meet the design performance.
- 9. A stormwater inspection and maintenance report shall be completed annually and copies shall be submitted to the City's Planning and Public Works Department.
- 10. Applicant to obtain a license for the electrical conduits that are to be installed in the public right of way.
- Mr. Gamester commented that this was a good project. The construction and design are appropriate for the area. It is good that they are keeping the wall intact by moving the underground parking entrance.

Mr. Pezzullo commented that they would need access for the utilities for the conduits on the transformer pad shown going to Court St. They will need a license from the City to install the electrical conduits in the City right of way.

Mr. Clark commented that the project works and meets the rules and regulations. It is unfortunate that the residence plan could not work. It was a good concept going in.

Chairman Legg agreed the City needs more apartments of different sizes. The original proposal met a need. It is understandable that it was challenging to the neighborhood and developer. It is a better looking project, but it's unclear that if the program is as good as the housing would have been. The design works and the landscaping is great.

The motion passed unanimously.

E. The request of Torrington Properties Inc. (applicant), on behalf of 2422 Lafayette Road Associates, LLC (Owner), for property located at 2454 Lafayette Road requesting to amend a previously granted Conditional Use Permit to provide less than required parking in accordance with Section 10.1112.14 of the Zoning Ordinance and Conditional Use Permits for increased housing density and for increased building height as allowed by Section 10.5B72.10 and Section 105B72.20 of the Zoning Ordinance, and development within the Gateway Neighborhood Mixed Use District in accordance with Section 10.5B40 of the Zoning Ordinance; and for Site Plan Review to demolish the existing structure and construct a five (5) story structure with 95 condominium units with 20% designated as workforce housing units and provide 21,896 square feet of community space. Said property is shown on Assessor Map 273 Lot 3 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District. (LU-21-192)

Attorney John Bosen, Jay Bisognano, Gregg Mikolaities from August Consulting, Patrick Crimmins from Tighe and Bond, and Rob DiSalvio from Embark Architecture spoke to the application. Mr. Bosen commented that they have worked hard to make sure that this is a successfully well-designed gateway project. It has been vetted through TAC and they received their approval. The project involves demolishing the existing movie theater building a 5-story structure that will include 20% workforce housing and a lot of community space. They will need an amendment to the previously granted Parking CUP. This is a well thought out project that meets City, public realm, and workforce housing requirements. It achieves the Master Plan goals of creating a walkable mixed-use development.

Patrick Crimmins commented that they submitted a comprehensive package. They have been here previously here for Conceptual Consultation and Design Review. This is in the Gateway District, and they are seeking a CUP for site development standards and are seeking a density bonus. The project is required to provide 10% community space and the proposal will provide 14.6%. Also 20% of the units will be workforce housing. The 5-story building will have 95 units total. The first floor will have covered parking with amenity and lobby space. The floors above will be residential units. There will be an attractive drop off roundabout at the entrance of the building. The residential portion of the site will have 177 designated parking spaces. The first floor will cover 83 of those spaces. The community space includes the plaza, pickle ball courts for public use, an additional park, and a dog park area. The site has already been improved with advanced storm water treatment. There will be infiltration throughout the site. They have received appropriate approvals from DES. All of the existing utility connections can be reused. A hydrant will be added in front of the budling. The landscaping will include street trees and landscaped seating and patio areas. The plaza will have decorative pavers. There will be landscaped screening between the restaurant and community space. They are required to provide public realm improvements as part of this project. They are proposing to build 700 linear feet of new multi-use path along Constitution Ave. The project team also designed a multi-use path for the remainder of the road. It will be primarily in the existing paved area of the right of way. The path will include drainage improvements and catch basins. The design was coordinated with DPW. Through meeting with various City Boards, they have responded to feedback and addressed stipulations. In 2016 the Veridian was approved with slightly different parking ordinance. The ordinance was changed in 2018 and the shopping center use was eliminated. Now they have to calculate each use in the parcel or perform a parking demand analysis. When Pinz went in, they got a CUP for parking. This is an amendment to that approval and it is a less intensive parking use. Veridian has designated parking. This new residence will now have 177 designated spaces. That leaves 470 spaces for the retail and restaurants. It is more than what is there now for the businesses. They are seeking a CUP for site develop standards as well. The project is consistent with the Master Plan goals. It is promoting walkable areas and improving access to recreational spaces. The site compliments its surroundings because there is already one residential building. It complements the mixed-use space. The project will add 95 units to the housing stock and 19 of them will be workforce housing to accommodate different levels of income. The project has negligible or reduced impact on traffic. The storm water treatment has been designed. There will not be any added demand on municipal systems. The project will maintain the existing character of the neighborhood. It meets the standards outlined with is meeting multiple Master Plan goals. All of the units will be for sale and the workforce housing will be an average or minimum of 1,000

sf. The workforce housing has been identified on the floor plans. They met the criteria to build off site for the public realm improvements because the frontage has already been built out. This plan will be adding to it. The multi-use path will be constructed as part of the project. They are seeking a modification of standards. The site was previously developed. The site by right allows for 16 units per acre. The proposal is for 95 units. Splitting this into smaller buildings would be too challenging.

Rob DiSalvo commented that they tried to cover as much parking as possible on the ground floor. The lobby, fitness space and bike storage are built out in front of the covered parking to screen it from view. The second floor will have an outdoor plaza. There will be private outdoor deck space for the second-floor units and a common area lounge. Floors 3 and 4 will be standard residential units. The top floor sets in from the lower floors. Every unit has some degree of outdoor space. The building should fit into the complex. The drop off area will manage traffic and have greenery.

Mr. Clark questioned how the residents would access the path on Constitution Ave. Mr. Crimmins responded that they can utilize Water Country access road but there is connection out from the Veridian as well via the sidewalks. Mr. Clark questioned how bike traffic would access it. Mr. Crimmins responded that they would have to ride out to it via the access road or walk their bike on the sidewalks. Mr. Clark questioned if they looked at creating a bike lane. Mr. Crimmins responded that it wasn't possible because the space was too tight and there is an existing easement. Mr. Clark questioned what the hours on the pickle ball courts would be. Mr. Crimmins responded that it was community space, and the hours would be coordinated with the City. Lights have been included on the courts. The operations and maintenance will be outlined in the community space agreement as well as the hours.

Mr. Chellman requested more details on their calculations of the building size and units per building. Mr. Crimmins responded that the Board was allowed to modify the standards outlined by the ordinance. Mr. Chellman commented that one point in the ordinance calls out the units per building. Mr. Chellman did not object to more units for the site but was curious how they calculated that in the ordinance. Mr. Britz commented that the ordinance states that the Planning Board can modify the standards in the density bonus thresholds, and that applies to the whole section.

Vice Chairman Moreau requested more detail regarding the workforce housing and questioned if they can agree to 20% at 80% median income and include some larger units. Mr. Bosen responded that they were proud to offer 20% workforce housing units. They are providing 19 units for sale. That is the first of this size in the City. They have determined what qualifies as workforce housing by state law. The area median income is determined by HUD. Workforce housing is based on an income that is no more than 100% of median income for family of 4. This plan is following the statute requirements. The City commissioned a housing study in 2016 and that study recognized that they needed more housing to attract talented people. The study calls up a missing middle and the applicants believe these condos will address that. They will be moderately priced. They will not be able to build a unit at 80% AMI without losing money. They are in favor of workforce housing, but if the Board makes it so difficult, then it can have the counter effect. A private developer should meet the statute and that's what this plan is doing.

Anything beyond that puts this project at risk. Mr. Bisognano agreed with Mr. Bosen. They are proud to deliver 20% workforce housing at 100% AMI. This project is not receiving any subsidy and is privately funded. Mr. Bisognano has created workforce housing in many towns and cities, and was not sure if they had been able to meet the statute the same way they have here. If the consensus is to go to 80% AMI, then they would have to produce less housing units. It will cost \$420,000 to build a unit. Mr. Bisognano did not mind breaking even on the workforce housing, but they could stand to lose a fair amount of money on each unit at 80% AMI. 20% of the units at 100% AMI is a huge win. Less than that will result in a smaller number of units. Mr. Bosen added that they were exceeding the public realm requirements. They could offer a longer covenant instead of a lower AMI. Chairman Legg commented that he felt pretty strongly about the 19 units but wondered if half of the workforce units could be 80% AMI and the other half at 100% AMI. Mr. Bisognano responded that was a good suggestion. However, they are not delivering until late 2023 and that is a risky suggestion because the market could change. Mr. Bisognano was willing to commit to 100% AMI for 19 units. Anything else is a big consideration.

Vice Chairman Moreau questioned if they could stay at 100% AMI and do a 50-year covenant give with an additional 3 bed unit as part of the workforce housing mix. Mr. Bisognano responded that the proposed workforce housing is evenly spread through the building. People want different types of units, and the workforce housing would always be equal opportunity. Chairman Legg commented that there were 11 three-bedroom units and there is only one in the workforce housing mix. There should be 2. Mr. Bisognano confirmed that they could commit to equal distribution throughout the building.

Vice Chairman Moreau questioned if parking would be assigned for residents and if so where would the visitor parking be. Mr. Crimmins confirmed that was correct. The visitors could park in the remainder of the plaza outside of the shaded area on the plan. There are crosswalks and connectivity from the other parking area too.

Mr. Gamester requested clarification about whether or not they were sticking with the 100% AMI because the 80% AMI is too low. Mr. Bisognano confirmed that they can produce 19 units at 100% AMI. Deviation from that would be difficult to answer or commit to on the fly. Any lower AMI would prevent for them from providing 20% workforce units at this time. They can commit to 50 years and equally distributed units.

Mr. Chellman commented that he was in favor of workforce housing, and the proposal exactly conforms with the ordinance. Chairman Legg commented that the ordinance has flexibility to go as low as 80% AMI. Mr. Chellman commented that was understood but they met the ordinance, and it was a good proposal. Chairman Legg agreed that it was better than nothing, but it was good to ensure they could not do better.

PUBLIC HEARING

Rick Becksted 1395 Islington St. spoke as resident. The Board should hold them to the 80% AMI. Otherwise, they should not approve this. This Board granted the Veridian with 7

stipulations and special exceptions. The Board needs to stick to their guns on the 80% AMI. The median income will change in 2023. The Board and Council needs to make bold moves. Portsmouth has only so much land left. They need to consider what this will do to the City's infrastructure. The current residents must cover those costs. McKinnons is overcrowded. There are a lot of concerns about traffic flow. There are issues now without this building.

Second time speakers

Gregg Mikolaities commented that this project was spending close to \$300K off site on the multi-use path and designing the rest of the path as well as engineering and permitting. The cost of workforce housing is the cost of doing business. There is one pot of money, and they can only build so much. This project includes a lot of public realm improvements.

Rick Becksted of 1395 Islington St. commented that it was understood the public realm improvements were icing on the cake. Portsmouth has not defined how many units they need to solve the housing crisis. 80% AMI is not that big of an ask. The price and median will go up by the time this is built. They are pricing themselves out of this town. Two bed condos sell for \$450K. That impacts the price of single-family homes. The Board needs to hold their ground at 80%.

Attorney John Bosen reiterated that they were meeting all of the requirements of the ordinance and are giving more than what is required. They are meeting the definition of workforce housing in the ordinance and statute. This project is addressing the missing middle. The high cost of the market is not a problem they created. It is a problem all over the country. People come here for a reason. It's because it's desirable place to live.

Chairman Legg asked if anyone else was present from the public wishing to speak to, for, or against the petition. Seeing no one else rise, the Chair closed the public hearing.

DISCUSSION AND DECISION OF THE BOARD

Vice Chairman Moreau moved to find that the number of off-street parking spaces provided will be adequate and appropriate for the proposed use of the property and to grant a conditional use permit as presented, seconded by Mr. Gamester.

Vice Chairman Moreau commented that there was additional parking in other places, and it was a complimentary use.

Mr. Gamester agreed. This was adding to a mixed-use space and there was already a residential building there.

The motion passed unanimously.

Vice Chairman Moreau moved to find that the application meets the requirements of Section 10.5B43.10 and to grant a conditional use permit for a Development Site subject to the requirements and conditions of site plan review approval, seconded by Mr. Gamester.

Mr. Gamester commented that the site was already developed. This has been before the Board a few times for different projects. This achieves Master Plan goals of creating a walkable and accessible area. The pickle ball courts are an enhancement, and this is adding housing stock to the City.

The motion passed unanimously.

Vice Chairman Moreau moved to find that the application meets the requirements of 10.5B11 and 10.5B73 of the Zoning Ordinance and to grant a conditional use permit for density bonus incentives, seconded by Mr. Gamester with the following stipulation:

1) Workforce housing units are subject to a 50 year covenant with a 20% even distribution among living unit sizes.

Mr. Gamester noted that they have heard the developer's comments that it meets the ordinance and statute. The comments from some of the public are to stick to the 80% AMI. They can enforce that and potentially have the developer not follow through with the project. It would have been good to get more than 19 units at 100% AMI. Mr. Gamester commented that it doesn't sit well, but he would vote in favor.

Vice Chairman Moreau commented that it is always good to get more, but it is hard to justify voting against something that meets the ordinance. The 50-year covenant and evenly distributed units of size was a good negotiation. It is better to have some than none. The West End Yards was this Board's first stab on insisting on workforce housing. They didn't get all they requested there either. They will continue working on this.

Mr. Chellman commented that everyone wants more workforce housing and the way to get it is to work with the developer and change regulations. Requesting beyond the ordinance is not a negotiation it's a demand. If the proposal meets the ordinance, then they should not ask them to go beyond that. If the Board chooses to exceed that and the developer agrees, then that's great. Everyone is in agreement that they need more workforce housing. It costs a lot of money to bring a team together and create these plans. They are created based on the rules that are published. The Board needs to be careful about requesting more than that.

Chairman Legg commented that the ordinance defines workforce housing as up to 100% AMI, but it doesn't mandate 100%. "Up to" suggest that the Board the has ability to request less. Chairman Legg understood and appreciated that the developer is looking in the future. It is hard to know what numbers look like. Chairman Legg questioned if they could stipulate that when this project is being developed, they asses the new data and work with city staff to see if they can bring some of the proposed 19 units below the 100% threshold.

Vice Chairman Moreau was concerned about whether or not they could legally do that. They would be approving one thing and then asking them to reconsider and them give more later. Mr.

Chellman agreed and was concerned that the stipulation was not giving them an actual approval. Chairman Legg commented that two years from now the numbers will have changed, and it would be good to add a condition for them to come back and work with the Planning Department on the AMI.

Mr. Gamester commented that it seems like there are too many loose ends with a condition like that. Vice Chairman Moreau agreed and noted that she did not think they could do it legally.

The motion passed unanimously.

Vice Chairman Moreau moved to grant Site Plan approval, seconded by Mr. Gamester with the following stipulations:

Conditions Precedent:

- 1) The site plan and any easement plans and deeds shall be recorded at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.
- 2) Any easement plans and deeds for which the City is a grantor or grantee shall be reviewed and approved by the Planning and Legal Departments prior to acceptance by City Council.
- 3) The applicant shall agree to pay for the services of an oversight engineer, to be selected by the City, to monitor the construction of improvements within the public rights-of-way and on site.
- 4) Owner shall provide an access easement to the City for water valve access and leak detection. The easement shall be reviewed and approved by the planning and legal Departments prior to acceptance by the City Council.
- 5) The applicant or its engineer shall submit a copy of a completed Land Use Development Tracking Form using the Pollutant Tracking and Accounting Program (PTAP) online portal currently managed by the UNH Stormwater Center or similar form approved by the City. Conditions Subsequent:
- 6) The Engineer of Record shall submit a written report (with photographs and engineer stamp) certifying that the stormwater infrastructure was constructed according to the approved plans and specifications and will meet the design performance as proposed.
- 7) A stormwater inspection and maintenance report shall be completed annually and copies shall be submitted to the City's Planning and Public Works Department.

Vice Chairman Moreau commented that there was already a giant building, parking lot and utilities there. This would be changing the use and function and create more symmetry in the site.

The motion passed unanimously.

F. The request of **35 Pines LLC**, **(Owner)**, for the property located at **295 Maplewood**, Unit **1** requesting a Conditional Use Permit Approval in Accordance with Section 10.1112.14 of the Zoning Ordinance, for the provision of no on-site parking spaces where three (3) spaces are required. Said property is shown on Assessor Map 141 Lot 35 and is located in the Character District 4-L2 (CD4-L2) and Historic District. (LU-21-211)

Mr. Gamester moved to extend the Planning Board Meeting past 10:00 p.m., seconded by Vice Chairman Moreau. The motion passed unanimously.

SPEAKING TO THE APPLICATION

Mr. Gamester recused himself from the application.

Patrick Lavoie is the owner of Port City Barbers and spoke to the application. Mr. Lavoie is the sole proprietor of the business and has been in business for over a decade. Mr. Lavoie and his wife closed on this property at the beginning of November. The shop is appointment only and each appointment is booked in 1-hour increments. There are no customer overlaps or additional walk ins. The goal is to keep the clients and community safe during Covid. This model will continue indefinitely. There is parking on Jackson Hill Rd. and at the public boat launch. The surrounding roads have public spaces and metered lots. Many clients walk or bike to their appointment. That eliminates the need for parking completely. This permit is important to allow Mr. Lavoie to continue serving the community and operating his business. This was previously used as an insurance company, and it functioned without parking. This will remain residential units and one commercial space.

PUBLIC HEARING

Chairman Legg asked if anyone was present from the public wishing to speak to, for, or against the petition. Seeing no one rise, the Chair closed the public hearing.

DISCUSSION AND DECISION OF THE BOARD

Vice Chairman Moreau moved to find that the number of off-street parking spaces provided will be adequate and appropriate for the proposed use of the property and to grant the conditional use permit, seconded by Mr. Clark with the following stipulation:

1) If more chairs are added the applicant must come back for a Conditional Use Permit review and amendment.

Vice Chairman Moreau commented that there was already a business with a more intensive sue in this building. The stipulation covers it if any more chairs are added.

The motion passed unanimously.

G. The request of Public Service CO of NH (Owner), for the property located at 300 Gosling Road requesting a Wetland Conditional Use approval according to section 10.1017 is requested for the replacement of 8 utility poles adjacent to Gosling Road. The project proposed temporary impact of 98,984 square feet in the wetland area and of 25,224 square feet in the wetland buffer. The proposal is to replace existing wooden structures with equivalent steel structures. Said property is shown on Assessor Map 214

Lot 3 and is located in the Office Research (OR) and Waterfront Industrial (WI) Districts. (LU-21-205)

SPEAKING TO THE APPLICATION

Lindsay White from GZA Environmental and Ashely Rupect spoke to the application. The CUP is for temporary wetland and buffer impacts for replacing the utility poles. There are 3 transmission lines that run parallel to each other in one corridor. There are 8 poles on Gosling Rd., 5 on Borthwick Ave., and 2 on Greenland Rd. During a routine inspection these poles were determined to be in need of replacement because of deterioration. The proposal is to start in February 2022 and extend to late May. The project requires temporary wetland and buffer impact for access to the poles and timber work pad placement to stage equipment. When the work is complete the timber matting will be removed, and the area will be stabilized with seedless mulch. They met with the Conservation Commission and received approval. They will be submitting an application to DES as well.

Mr. Clark questioned where they would be cleaning the matting before it is moved down the transition line. Ms. Rupect responded that before the matting is removed from a location, they would sweep the mats. They will not transfer anything to another site.

PUBLIC HEARING

Chairman Legg asked if anyone was present from the public wishing to speak to, for, or against the petition. Seeing no one rise, the Chair closed the public hearing.

DISCUSSION AND DECISION OF THE BOARD

Mr. Gamester moved to grant the Wetland Conditional Use Permit as presented, seconded by Mr. Clark.

Mr. Clark commented that these have come to the Board before and for the most part everything works. This is consistent with what they have seen in the past.

The motion passed unanimously.

H. REQUEST TO POSTPONE The request of ADL 325 Little Harbor road Trust (Owner), for the property located at 325 Little Harbor Road requesting a Wetland Conditional Use Permit under section 10.1017. The applicant is proposing 81,865 square feet of disturbance in the tidal wetland buffer the disturbance includes replacement of an existing home with a new home with a footprint of 3,382 square feet, construction of a new garage 1,300 square feet, renovation of an existing guest cottage 1,217 square feet, construction of a pool cabana 368 square feet and replacement of an existing shed 384 square feet along with other impacts/improvements including utility connections,

playground, drainage improvement and extensive landscape improvements. Said property is shown on Assessor Map 205 Lot 2 and is located in the Rural (R) and Single Residence A (SRA) Districts. **REQUEST TO POSTPONE** (LU-21-189)

DISCUSSION AND DECISION OF THE BOARD

Mr. Gamester moved to postpone to the January 20,2022 Planning Board meeting, seconded by Mr. Clark. The motion passed unanimously.

I. The request of **The City of Portsmouth (Owner)**, for property located at **0 Vaughan Street** requesting a Wetland Conditional Use Permit under section 10.1017 to restore a piece of property along the North Mill Pond into a City Park, Greenway and Living Shoreline project. The project as proposed includes restoration of 57,520 square feet of restoration work in the Wetland and Buffer with project impacts of 262 square feet in the wetland and 5,490 square feet of impact in the 100' wetland buffer. The project includes the removal of invasive plants, planting of native species to restore the vegetation on the site. The restoration work is proposed in the subtidal, intertidal, and tidal buffer portions of the site. Said property is shown on the Assessor Map 123 Lot 15 and lies within the Character District 4 (CD-4). (LU-21-187)

SPEAKING TO THE APPLICATION

Patrick Crimmins from Tighe and Bond spoke to the application. This is a piece of land that the City acquired with the AC Hotel approval. The site presents a good opportunity for restoration and a public amenity. The proposal is for a porous asphalt multi use path. Prior renditions included public piers. Those piers were removed to reduce impact. The impact is outlined in the buffer exhibit. There will be 57,664 sf of restoration and a little over 5,000 sf of total impact. The porous asphalt and pier count toward that but will serve as infiltration and provide light penetration. The proposed living shoreline will have a mussel bed that will serve as a natural filter for nutrients. The tidal bank has eroded, so they will stabilize that bank with a two-sill living shoreline to mimic coastal shorelines. They will use salvage rock and sand to grow lower marsh vegetation. The next step up will include native plantings. They will create habitat. The invasive plants that are there now will be removed with the exception of the Norway Maples that are more than 6 inches in caliper. Construction oversight observation is required as part of the DES approval. They have teamed up with UNH and Northeastern to construct the shoreline. After care and maintenance will run for 2-5 years to ensure growth and that the living shoreline is thriving. They met with the Conservation Commission. They had comments and concerns, so they had a work session in November then met with again in December and received approval. The boardwalk was reduced in size, and they eliminated the 1-foot gravel shoulders on the multiuse path. This is truly a restoration project, and it hits on all the criteria.

Mr. Britz commented that this was a City project and was part of the North Mill Pond Greenway.

Mr. Clark questioned what the bulkhead was in the cross section. Mr. Crimmins responded that they were referring to the existing bulkhead that was already out there. Mr. Clark questioned

what kind of mitigation measures they were taking in relation to the historic nature of the site. Mr. Crimmins responded that they were building the site up and capping what's out there. They were not planning to dig down. The only excavation that will occur is for the path. Mr. Clark commented that he has seen a lot of collaborative efforts with the State's Historic Preservation on signage or investigation. Mr. Britz responded that there was a lot of opportunities for interpretive signage. Mr. Clark commented that it was a fantastic opportunity to go above and beyond with signage or art to build on what this area was. Mr. Crimmins responded that they were aligned with the vision and are looking for education opportunities and outreach on the site.

PUBLIC HEARING

Elizabeth Bratter of 159 McDonough St. commented that this is what they should be putting this in with every development along the North Mill Pond. The Board should enforce the living shoreline. Mr. Britz has worked tirelessly to provide public access and still protect the wetland with the Conservation Commission. The Board should approve this.

Chairman Legg asked if anyone was present from the public wishing to speak to, for, or against the petition. Seeing no one rise, the Chair closed the public hearing.

DISCUSSION AND DECISION OF THE BOARD

Mr. Clark moved to grant the Wetland Conditional Use Permit, seconded by Mr. Gamester with the following stipulations:

- 1) The applicant shall incorporate "No Digging" signage into the site signage.
- 2) The applicant shall consider measures in the planting plan to work towards reducing the number of geese on site.

Mr. Clark commented that living shorelines can be tough to get going, but ultimately this is what they should be striving for. It will be interesting to see how this site trickles into the abutting sites.

The motion passed unanimously.

VIII. PRELIMINARY CONCEPTUAL CONSULTATION

A. The request of **Port Harbor Land LLC**, for the property located at **2 Russell Street** requesting Preliminary Conceptual Site Consultation for a mixed use project consisting of office, retail/commercial, and residential uses in one 4-story and two 5-story buildings. The site is located between, Russell Street, Deer Street, Maplewood Avenue and the Railroad Corridor. Said property is located on Assessor Map 124-12 and lies within the Character District 5 (CD-5). (LUPD-21-10)

Brook Sloken spoke to the plan for the building and the site. This was previously approved with an earlier development. They are currently trying to get read on how to move forward. The plan is to break this into 3 different buildings. There will be a rental building, condos, and an office. There will be at grade parking with a liner building on Deer St. and Russell St. Parking will be

under the center of the building. There will be a 4-story office building and the other two buildings will be 5 stories. There will be 30% or more open space. Some of it is on the adjacent site. There will be two view corridors that will allow the passage of street through the site. It will create an opportunity to use some of the site in front of the Sheraton and the piece across the street on Green St.

Mr. Clark commented that he was not a fan of the community space. The Board has seen a lot of good community space in recent large projects. There can be a lot more activation down by Maplewood Ave. Activation on the corner would be great. The plazas there will have the same issue that Portwalk does. It will be cold and shaded the whole time. The buildings as proposed will look like a giant bow of a ship coming up Russel St. The project is shoehorned in. It may make more sense to do workforce housing to get the incentive instead of community space.

Vice Chairman Moreau questioned if they took into account the future traffic circle. Mr. Sloken confirmed that they did take the roundabout into consideration. They are allowing the street to pass through and is allowing a visual corridor from the old part of town into the north. The view corridor is critical because that street carries through town. There are plans for stairs to allow movement across site without having to go to Maplewood Ave. It is important to have a public gathering space.

Vice Chairman Moreau questioned if some of these units would be for sale and others for rent. Mr. Sloken confirmed that one building would be rentals and the condos would be for sale. Vice Chairman Moreau questioned if they were trying to get crossing through the railroad to give access to Portwalk Place. Mr. Sloken responded that they were not. The plan was to provide a sidewalk to the proper crossing. Vice Chairman Moreau commented that they should have a good plan for activating things like trash, restaurant space, storage, snow maintenance.

Mr. Chellman noted that they were proposing some community space in front of the Sheraton and questioned if both properties would come in for a site plan review at the same time. Mr. Crimmins responded that would be the intent. There is a shared parking component that will be reviewed as well.

Chairman Legg commented that he liked the view corridors and the 3 budlings. They do need to work to improve the community space for the incentive. The Board has allowed some hodgepodge community space in the past. The view corridor is great, but not of community space. The building on Russel St. should step down in some way. Chairman Legg strongly encouraged that they try to get incentives through workforce housing. This is better than what was proposed previously, but still has a long way to go. Mr. Sloken commented that this was the same scale of the Sheraton and further away from Market St. than the Sheraton. It doesn't impose on Market St. It is tough making it a usable building and fitting in a narrow site.

X. OTHER BUSINESS

Mr. Clark commented that it was the last Planning Board Meeting for Mr. Gamester, City Council Representative Whelan, Ms. Henkel, Vice Chairman Moreau, and Chairman Legg. Mr. Clark thanked them for their willingness to listen to his comments and their support. Everyone

on the Board put in 10 hours this month just in the meetings. That does not include the amount of time they took to prepare for the meetings. This last packet over 1000 pages long. Mr. Clark said thank you for all of the time and effort they put into this volunteer position.

Mr. Gamester appreciated that he has had the honor to serve for 8.5 years. All of the members, chairs, and professionals have been amazing. It was fun being on the Board and see projects come to fruition. Mr. Gamester stood by every decision he made on this Board. The Board always came at a fair outcome. In addition to all the applications the Board has worked on the CIP, Master Plans and zoning amendments.

Chairman Legg commented that he was grateful Mayor Jack Blalock appointed him to this Board and was grateful to have served as Chair 5 times. Chairman Legg was thankful for the support of the City Staff and their teams. Their professional expertise and dedication to Portsmouth was so appreciated. They made this a better Board and him a better Chair. Chairman Legg was thankful for the members of this Board and the work they have put in to come up with informed decisions. People can't criticize the process that this Board and other Boards take. The Board consists of fully engaged, thoughtful and respectful members. The process the Board followed is the gold standard of how Boards should work. They treated each other, the applicants, and the public with respect. Chairman Legg has been on the Board 6 years and there has been quiet respect the whole time. There have been disagreements, but no one is disagreeable. Unfortunately, that changed 2 years ago. This Board has remained respectful, but others have become openly critical and hostile to this Board and other land use Boards. This Board and other Boards were blamed for what is perceived as over development. This Board's decisions are based on state statutes, the ordinances, and the facts that are presented. Decisions have to be fact based otherwise the courts will correct an overreach. If people want to change the outcomes, then they need to change the ordinances. This Board has put a list together of potential changes. They are waiting for a new Planning Director to come on board and work with them. The ordinances are a living document that needs to be refined. The incoming City Council should make thoughtful ordinance changes and reestablish the respectful treatment of the City's Boards. All of the Board members are volunteers. It takes a lot of time. Chairman Legg appreciated all of the work they have down and was honored to have worked with the other Board members.

XI. ADJOURNMENT

Vice Chairman Moreau moved to adjourn the meeting at 11:45 p.m., seconded by Mr. Gamester. The motion passed unanimously.

Respectfully submitted,

Becky Frey, Secretary for the Planning Board Minutes, Planning Board Meeting, December 30, 2021



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

Memorandum

To: Planning Board

From: Beverly Mesa-Zendt, Incoming Planning Director

Peter Britz, Environmental Planner/Sustainability Coordinator/Interim Planning Director

Stefanie L. Casella, Planner

Date: January 21, 2022

Re: Recommendations for the January 27, 2022 Planning Board Meeting

I. ELECTION OF OFFICERS

In the absence of a seated Chair or Vice Chair, Peter Britz will convene the meeting and call for Chair and Vice Chair nominations. Upon the completion of the election, the Chair will conduct the remainder of the meeting.

Please find the section on Board Membership and Officers as found in the <u>Planning</u> <u>Board Rules and Procedures</u> below:

B. Board Membership and Officers.

...

- 2. Officers: Board members shall elect annually from its membership in January of each year a Chair and Vice-Chair. Unless voted to the contrary by the Board, the vote shall be conducted by secret ballot. (While this is currently in our Rules and Procedures this procedure is inconsistent with State Law and is not followed for Planning Board Elections) The concurring votes of five members in attendance at a meeting shall be necessary to initiate the election of Officers.
- 3. Duties of the Chair: The Chair shall preside at all meetings; shall have complete voting privileges on all matters, including the election of officers; and, report any discussion or action relative to the Board that has taken place since the last meeting.
- 4. Duties of the Vice-Chair: The Vice-Chair shall assist the Chair and, in the absence of the Chair, shall have all the powers and duties of the Chair.

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II. APPROVAL OF MINUTES

A. Approval of the Planning Board minutes from the December 16, 2021 meeting.

Members who were present at the meeting in question are encouraged to review the drafted minutes and make the necessary edits for recorded accuracy. Members who were not present may abstain from the vote.

A quorum of members must be present to formally accept the draft minutes as official record. If a quorum is not present to vote, the minutes will stay in draft form and will be on file as meeting notes.

III. DETERMINATIONS OF COMPLETENESS

SUBDIVISION REVIEW

A. The request of Austin Repair & Renovation LLC, (Owner), for the property located at 27 Shaw Road requesting Preliminary and Final Subdivision approval.

Planning Department Recommendation

Vote to determine that the applications are complete according to the Subdivision Rules and Regulations (contingent on the granting of any required waivers under Sections IV and VI of the agenda) and to accept the applications for consideration.

SITE PLAN REVIEW

A. The request of **Sagamore Corner LLC, (Owner and Applicant),** for the property located at **960 Sagamore Avenue** requesting Site Plan Approval.

Planning Department Recommendation

Vote to determine that this applications is complete according to the Site Plan Review Regulations, (contingent on the granting of any required waivers under Section VI of the agenda) and to accept the applications for consideration.

IV. PUBLIC HEARINGS -- OLD BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature.

If any person believes any member of the Board has a conflict of interest,
that issue should be raised at this point or it will be deemed waived.

It is recommended that Item IVA and IVB be discussed together and voted on separately.

A motion is required to consider these items together.

- A. REQUEST TO POSTPONE Request of Ricci Construction Company Inc., (Owner) and Green & Company Building & Development Corp., (Applicant) for property located at 3400 Lafayette Rd requesting a wetland Conditional Use Permit under section 10.1017 to construct 50 town homes on an undeveloped lot. The (Applicant) is proposing five areas of wetland impact for a total of 21,350 square feet of permanent impact and three areas of temporary impact for a total of 2,350 square feet. Said property is shown on Assessor Map 297 Lot 11 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District and the Natural Resource Protection (NRP) District. REQUEST TO POSTPONE (LU-21-98)
- B. REQUEST TO POSTPONE Request of Ricci Construction Company Inc., (Owner) and Green & Company Building & Development Corp., (Applicant) for property located at 3400 Lafayette Rd requesting Conditional Use Permit for a Development Site in accordance with Section 10.5B40 of the Zoning Ordinance and Site Plan Review approval for construction of a 50-unit multi-family residential development that includes community space and related landscaping, drainage, paving, utilities and other site improvements. Said property is shown on Assessor Map 297 Lot 11 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District and the Natural Resource Protection (NRP) District. REQUEST TO POSTPONE (LU-21-98)

Planning Department Recommendation

Vote to postpone to the February Planning Board meeting.

IV. PUBLIC HEARINGS -- OLD BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature.

If any person believes any member of the Board has a conflict of interest,
that issue should be raised at this point or it will be deemed waived.

C. The request of Gregory J. Morneault and Amanda B. Morneault (Owners) and Darrell Moreau, (Applicant) for property located at 137 Northwest Street requesting a Wetland Conditional Use Permit under Section 10. 1017 of the Zoning Ordinance to impact 5,062 square feet of wetland buffer and 45 square feet of tidal wetland. The proposed new home and existing turnaround is partially within the 100' tidal buffer zone of the North Mill Pond. In addition to the new home the applicant is proposing to remove an existing gravel turnaround and install a new paved parking apron for City vehicles to turn around. This new turnaround and the City pump station are all within a proposed easement. In addition, there is a plan to upgrade the stormwater outfall to protect against erosion. Said property is shown on Assessor Map 122 Lot 2 and lies within the General Residence A (GRA) District and Historic District. (LU-20-222)

Project History

This case was last heard at the November 18, 2021 Planning Board meeting where the applicant presented both a Subdivision and Wetland Conditional Use Permit applications. After the presentations the board voted to grant Preliminary and Final Subdivision and postpone action on the Wetland Conditional Use Permit. The Board encouraged the applicant to continue to work on pulling the new structure away from the wetland area and reduce the amount of impacts to the wetland buffer area. The applicant agreed to do so.

BOA Review and Decision on Variance Request

November 24, 2020, variance request denied.

- 1) Variances from Section 10.521 to allow:
 - a) a lot depth of 44.7 feet for Lot 1 and 23.4 feet for Lot 2 where 70 feet is required for each;
 - b) a lot area per dwelling unit of 5,317 square feet for proposed Lot 2 where 7,500 square feet per dwelling is required;
 - c) a 2.5 foot front yard for proposed Lot 2 where 15 feet is required; and
 - d) a 4 foot rear yard for proposed Lot 2 where 20 feet is required.

January 19, 2021, rehearing request denied.

1) Request for rehearing of board decision to deny variance request on November 24, 2020.

February 16, 2021, variance request granted.

- 1) Variances from Section 10.521 to allow:
 - a) a lot depth of 44.7 feet for Lot 1 and 25.4 feet for Lot 2 where 70 feet is required for each;
 - b) a 3 foot front yard where 15 feet is required; and
 - c) a 6.5 foot rear yard where 20 feet is required.

<u>Technical Advisory Committee Review of Subdivision</u>

The Technical Advisory Committee (TAC) considered the application for preliminary and final subdivision approval and recommended approval to the Planning Board at the September 7, 2021 meeting with the following stipulations:

- 1) Additional room is added in the turnaround area to prevent backing into the street
- 2) A stonewall (or an appropriate substitute approved by the HDC) be added to the left of the proposed driveway area to screen the garage doors from Northwest Street.

Conservation Commission Review of Wetland Conditional Use Permit

This item was heard at the Conservation Commission meeting on Wednesday November 10, 2021. According to Article 10 Section 10.1017.50 the applicant must satisfy the following conditions for approval of this project:

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

The proposed project is in an area which is in need of restoration due to the large amount of debris and invasive vegetation. A restoration and public access project is well suited to his location.

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

The entire property is within the 100' wetland buffer therefore there is no location outside of the buffer that is feasible for this work.

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

This project is planned as a restoration project therefore there are no adverse impacts proposed but a number of improvements to the 100' wetland buffer.

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

There is no construction on this site other than a porous pavement shared use path and a low boardwalk with openings for light and plants. There will be intertidal structural support for the living shoreline component as well. The goal of the project is to restore the site and to provide flood resilience on the site.

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

This is a restoration project which not only restores the site but is responsive to future climate impacts providing resilience to the property.

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

The applicant is proposing to restore a tidal wetland buffer area to a more natural state through plantings or native vegetation protection of the shoreline from erosion and monitoring for future protection.

A motion was made to approve the request for conditional use with the following stipulations:

- 1) City to use porous pavement or pavers in City Turnaround area
- 2) Shrubs to be kept sufficiently clear of turn around to allow so they are not impacted by snow.

The Commission's vote to approve failed 1-5. Therefore, the Conservation Commission does not recommend approval of this application. The Conservation Commission expressed support for the work that was done by the applicant to reduce the building footprint in the buffer and for installing an enhanced landscape buffer. In addition they supported using pervious pavement or pavers for the proposed turn around. While the

applicant reduced the footprint of the home in the buffer from an earlier review by the Commission, they were not satisfied that the footprint was reduced sufficiently to support approval of a wetland Conditional Use Permit.

Please note that the plans as presented to the Planning Board reflect significant changes to the ones originally presented to the Conservation Commission in November.

Please refer to Section 10.1017 of the <u>Zoning Ordinance</u> to Review the Wetland Conditional Use provision.

<u>Planning Department Recommendation</u>

The board should consider if the new plans meet the criteria outlined by the regulations.

- Should the board decide that further review is needed, the Board could vote to send the application back to the Conservation Commission for consideration or ask the applicant to continue to work on the proposed application.
- Should the board find that no further review is needed, the Board could vote to grant the Wetland Conditional Use Permit as presented or with stipulations.

IV. PUBLIC HEARINGS -- OLD BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature.

If any person believes any member of the Board has a conflict of interest,
that issue should be raised at this point or it will be deemed waived.

D. REQUEST TO POSTPONE The request of ADL 325 Little Harbor road Trust (Owner), for the property located at 325 Little Harbor Road requesting a Wetland Conditional Use Permit under section 10.1017. The applicant is proposing 81,865 square feet of disturbance in the tidal wetland buffer the disturbance includes replacement of an existing home with a new home with a footprint of 3,382 square feet, construction of a new garage 1,300 square feet, renovation of an existing guest cottage 1,217 square feet, construction of a pool cabana 368 square feet and replacement of an existing shed 384 square feet along with other impacts/improvements including utility connections, playground, drainage improvement and extensive landscape improvements. Said property is shown on Assessor Map 205 Lot 2 and is located in the Rural (R) and Single Residence A (SRA) Districts. REQUEST TO POSTPONE (LU-21-189)

<u>Planning Department Recommendation</u>

Vote to postpone the public hearing on this request indefinitely until the applicant has completed review with the Technical Advisory Committee and is ready to proceed. The project should be re-advertised and abutters re-noticed when the public hearing is scheduled.

V. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature.

If any person believes any member of the Board has a conflict of interest,

A. The request of Austin Repair & Renovation LLC, (Owner), for the property located at 27 Shaw Road requesting Preliminary and Final Subdivision approval to subdivide one existing lot with 57,354 square feet of lot area and 230 feet of street frontage on Shaw Road and 127 feet of street frontage on Walker Bungalow Road into 2 lots as follows: Proposed Lot 1 with 34,205 square feet of lot area and 230 feet of street frontage on Shaw Road; Proposed Lot 2 with 23,149 square feet of lot area and 127 feet of street frontage on Walker Bungalow Road. Said property is shown on Assessor Map 223 Lot 18 and is located in the Single Residence B (SRB) District. (LU-21-203)

<u>Project Description</u>

This application is proposing the subdivision of one existing lot into two lots. The new lot will have frontage on Walker Bungalow Road and will be tying into the proposed sewer line which is to be extended down Shaw and Walker bungalow Road with substantial completion of the base bid (low pressure sewer installed on Sagamore Avenue north of Sagamore creek, Shaw Road, Walker Bungalow Road, and Cliff Road) by December 30, 2022. As such, the applicant has submitted a waiver request to waive the onsite Sewage Disposal System requirement according to <u>Subdivision Regulation</u> Section VI.11

<u>Technical Advisory Committee Review</u>

The Technical Advisory Committee (TAC) reviewed this request at their December 7, 2021 meeting and recommended approval to the Planning Board with the following stipulations:

- 1. Maintain front yard setback subject to zoning review.
- 2. Show detail of rain garden on lower lot (parent lot) including flowage rights and drainage easement.
- 3. Show how proposed lot 2 will get power and show pole if needed.
- 4. Show septic design/holding tank approved by DES.

The applicant's submission to the Planning Board addresses TAC stipulations 1, 2, and 3. Stipulation 4 has been provided as a Planning Board recommended stipulation below.

Planning Department Recommendation

- 1) Vote to approve the waiver request for Section VI.11 of the Subdivision Regulations.
- 2) Vote to approve Preliminary and Final Subdivision with the following stipulations:
 - a. Lot numbers as determined by the Assessor shall be added to the final plat.
 - b. Property monuments shall be set as required by the Department of Public Works prior to the filing of the plat.
 - c. GIS data shall be provided to the Department of Public Works in the form as required by the City.
 - d. The final plat and all easement deeds shall be recorded concurrently at the Registry of Deeds.
 - e. The applicant can demonstrate the availability of sewer or approved onsite septic or septic holding tank approved by NHDES prior to Building Permit issuance.
 - f. All lending parties have provided release and approval of the subdivision.

V. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature.

If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

B. The request of Monarch Village, LLC (Applicant), on behalf of Neveesha Hospitality, LLC (Owner), for property located at 3548 Lafayette Road requesting Site Plan Review and a Conditional Use Permit as permitted under 10.5B41.10 of the Zoning Ordinance to allow for the demolition of 6 structures; the redevelopment of 6 existing structures to create 6 units in building 8, 15 units in building 2, 5 units in building 4, 2 units in building 5, 9 units in building 7; the construction of 4 new structures to create 12 units in building 3 with a 4,303 square foot footprint, 24 units in building 6 with a 7,048 square foot footprint, a 250 square foot storage structure and an 825 square foot storage structure; creating a total of seventy-five (75) residential units with 123 parking spaces where 113 spaces are required. Said property is shown on Assessor Map 297 Lot 6 and lies within the Gateway Corridor (G1) District. (LU-21-90)

<u>Planning Department Recommendation</u>

Vote to postpone the public hearing on this request. Information requested as part of the Technical Advisory Committee process has not been adequately provided and this application is not ready to proceed.

V. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature.

If any person believes any member of the Board has a conflict of interest,

It is recommended that Item VC and VD be discussed together and voted on separately.

A motion is required to consider these items together.

- **C.** The request of **Sagamore Corner LLC, (Owner and Applicant),** for the property located at **960 Sagamore Avenue** requesting Site Plan Approval to demolish the existing mixed use structure and construct a 6-unit residential structure totaling 21,066 square feet of gross floor area, 21 parking spaces as well as associated utilities, lighting, landscaping, and site improvements. Said property is shown on Assessor Map 201 Lot 2 and is located in the Mixed Residential Business (MRB) District. (LU-21-204)
- D. The request of Sagamore LLC (Owner and Applicant), for the property located at 960 Sagamore Avenue requesting a Wetland Conditional Use Permit approval according to section 10.1017.5 of the Zoning ordinance to impact 1,100 square feet of wetland buffer for grading and to remove 750 square feet of impervious surface in the wetland buffer and construct a new 100 square foot porous paver patio. Said property is shown on Assessor Map 201 Lot 2 and is located in the Mixed Residential Business (MRB) District (LU-21-204)

Description

This application is proposing to redevelop the site formerly known as the Golden Egg restaurant into a new six unit apartment building. This project will be tying into the proposed sewer line which is to be extended to Sagamore Avenue with substantial completion of the base bid (low pressure sewer installed on Sagamore Avenue north of Sagamore creek, Shaw Road, Walker Bungalow Road, and Cliff Road) by December 30, 2022. As such, the applicant has submitted plans for a waste holding tank in lieu of a full septic system.

Conservation Commission Review of Wetland Conditional Use Permit Request

This item was heard at the Conservation Commission meeting on Wednesday December 8, 2021. According to Article 10 Section 10.1017.50 the applicant must satisfy the following conditions for approval of this project:

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

This property is fairly close to a small wetland in the rear. The applicant has taken steps remove all of the imperious surface in the buffer and has provided a method to treat stormwater which will not impact the wetland area.

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

The proposed lot is fairly compact and they have created a design which reduces the impact in the buffer while providing for the housing goals of the project.

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

This project as designed has a net reduction of impervious surface in the buffer which should reduce impacts to the adjacent wetland area. There is a small amount of grading proposed in the buffer which is shown on the grading plan.

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

There does not appear to be areas of vegetation in the buffer impacts. There is some upland vegetation which will be removed in the location of the driveway. There does not appear to be new plantings proposed in the buffer other than lawn around the proposed porous patio.

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

The applicant has taken steps to reduce the impact in the buffer from what is there today and has addressed stormwater treatment with this application as well. This application as proposed reduces the impacts within the 100' wetland buffer.

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

The applicant is proposing to restore some areas of impervious surface in the buffer to porous pavement/pavers. In addition there is some grading in the buffer but no plantings shown in these areas other than lawn. Staff believes native groundcover or grasses along with some buffer plantings such as shrubs could be added to the plan to enhance the functions and values of the adjacent wetland.

The Commission made a motion to recommend approval to the Planning Board with the following stipulations:

- 1. The applicant shall include signage to demonstrate delineation that there is a sensitive resource/wetland area beyond the 10x10 patio area.
- 2. Along the existing stonewall and existing tree line beyond the proposed patio the applicant shall include additional buffer plantings.

The Conservation Commission voted to recommend approval of the Wetland Conditional Use Permit application to the Planning Board with the above stipulations. The motion passed unanimously.

Technical Advisory Committee Review of Site Plan Request

The Technical Advisory Committee (TAC) reviewed this request at their December 7, 2021 meeting and recommended approval to the Planning Board with the following stipulations:

- 1. Label address in the title block of the CUP plan.
- 2. The UG electrical service should be drawn to go from the pole to the building directly.
- 3. Applicant should coordinate with DPW on viable water source prior to building permit issuance.
- 4. DES approval of holding tank.
- 5. Fire service plan.
- 6. The natural stone finish of the proposed retaining wall shall be finalized and reviewed by the Planning Department prior to approval by the Planning Board.
- 7. The proposed community storage room in the basement level shall be reduced in size in order to support egress from parking space #10.

In the updated plans provided to the Planning Board the applicant has satisfied all but numbers 4, 5, and 6 of the above stipulations as articulated by TAC. Stipulations 4, 5, and 6 have been recommended as conditions of approval in the Planning Department Recommendation found below.

Planning Department Recommendation

- 1) Vote to grant the Wetland Conditional Use Permit
- 2) Vote to grant Site Plan Approval with the following stipulations:

Conditions Precedent (to be completed prior to the issuance of a building permit):

- 2.1 The site plan and any easement plans and deeds shall be recorded at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.
- 2.2 Any easement plans and deeds for which the City is a grantor or grantee shall be reviewed and approved by the Planning and Legal Departments prior to acceptance by City Council.
- 2.3 The applicant shall agree to pay for the services of an oversight engineer, to be selected by the City, to monitor the construction of improvements within the public rights-of-way and on site
- 2.4 The Applicant or its engineer shall submit a copy of a completed Land Use Development Tracking Form using the Pollutant Tracking and Accounting Program (PTAP) online portal currently managed by the UNH Stormwater Center or similar form approved by the City.
- 2.5 The Applicant or its engineer shall submit a copy of a completed Land Use Development Tracking Form using the Pollutant Tracking and Accounting Program (PTAP) online portal currently managed by the UNH Stormwater Center or similar form approved by the City.
- 2.6 The applicant can demonstrate the availability of sewer or approved onsite septic or septic holding tank approved by NHDES.
- 2.7 A fire service plan will be provided and approved by the Fire Department.
- 2.8 The applicant will work with the Planning Department to determine a finish stone for the retaining wall.

Conditions Subsequent:

- 2.9 The Engineer of Record shall submit a written report (with photographs and engineer stamp) certifying that the stormwater infrastructure was constructed to the approved plans and specifications and will meet the design performance;
- 2.10 A stormwater inspection and maintenance report shall be completed annually and copies shall be submitted to the City's Planning and Public Works Departments.

...Continued on next page...

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

V. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature.

If any person believes any member of the Board has a conflict of interest,

E. Application of **ADL 325 Little Harbor Road Trust (Owner)**, for property located at **325 Little Harbor Road**, for Conditional Use Permit approval in accordance with Section 10.814 of the Zoning Ordinance for the conversion of an existing accessory structure (formerly caretaker's home) into a Detached Accessory Dwelling Unit with a gross floor area of 1,300 square feet of gross floor area. Said property is shown on Assessor Map 205 Lot 2 and lies within the Rural (R) and Single Residence A (SRA) districts. (Lu-21-220)

Description

This application is requesting the redevelopment of the existing Caretaker's house. As the proposal entails removing the new appendages to the original structure, this project is more in line with work required for a Detached Accessory Dwelling Unit rather than a Garden Cottage. As such, please find the staff review for a DADU below.

In addition to the dimensional requirements of Section 10.521, the <u>Zoning Ordinance</u> requires that an DADU comply with the following standards (Section 10.814.30 and 10.814.50).

Required Standard	Planning Department Comments
The principal dwelling unit and the accessory dwelling unit shall not be separated in ownership.	Applicant has stated, in cover letter, the entire property will remain under the ownership of ADL 325 Little Harbor Road Trust.
Either the principal dwelling unit or the accessory dwelling unit shall be occupied by the owner of the dwelling. When the property is owned by one or more trusts, one of the dwelling units shall be the principal place of residence of the beneficiary(ies) f the trust(s).	Applicant has stated, in cover letter, the owner will continue to live in the principal dwelling unit.
Neither the principal dwelling nor the accessory dwelling unit shall be used for any business, except that the property owner may have a home occupation use in the unit that he or she occupies as allowed or permitted elsewhere in this Ordinance.	Applicant has stated, in cover letter, neither the primary and accessory dwelling will be used for business other than what is permitted in the Ordinance.

Required Standard	Planning Department Comments
Where municipal sewer service is not provided, the septic system shall meet NH Water Supply and Pollution Control Division requirements for the combined system demand for total occupancy of the premises.	Applicant is currently working with the City to extend sewer service to the property.
In a General Residence district, the combination of the principal dwelling and the DADU shall comply with the minimum lot area per dwelling unit specified for the district.	Property is located in the Rural district and is a total of 12.3 acres where the minimum is 5 acres.
In a Single Residence or Rural district, a lot with a DADU shall comply with the minimum lot area for the district, but need not comply with the minimum lot area per dwelling unit.	
The DADU shall not have more than two bedrooms and shall not be larger than 750 sq. ft. gross floor area; except that the maximum gross floor area shall be 1,000 sq. ft. if the lot area is 2 acres or more.	The proposed DADU will be two-bedrooms with a gross floor area of 1,300 square feet. The applicant is requesting dimensional modifications as permitted by section 10.814.70 of
The DADU shall be clearly subordinate to the principal single-family dwelling in scale, height and appearance.	the Zoning Ordinance. Applicant has stated, in cover letter, the proposed DADU is subordinate in height and perimeter façade area, and appearance.
The façade area of the DADU that faces a street on which the lot has frontage shall be no more than 40 percent of the combined visible façade areas of the principal single family dwelling and the DADU facing the same street.	This property does not have street frontage and therefore this standard does not apply.
The building height of the DADU shall be less than the building height of the principal single-family dwelling.	Applicant has stated, in cover letter, the proposed DADU is 21 feet in height where the principal structure is 32 feet.

Required Standard	Planning Department Comments	
The DADU shall be architecturally consistent with the principal dwelling through the use of similar materials, detailing, and other building design elements.	Applicant has stated, in cover letter, the proposed DADU will be architecturally consistent in design, materials, detailing, and other building elements.	
The DADU shall be separated from the single-family dwelling by at least 20 feet.	Applicant has stated, in cover letter, the proposed DADU is 112 feet east of the principal single-dwelling structure.	
The front wall of the DADU shall be set back at least 10 feet further from the front lot line than the existing front wall of the single-family dwelling.	Where this property is an island the front yard requirement is not applicable. However, applicant has stated, in cover letter, the propsed DADU is 20 foot further from the highest observable tide line than the principal structure.	
No portion of the DADU shall be located in any required front yard, regardless of the location of the single-family dwelling.	N/A	

In order to grant a conditional use permit for an DADU, the Planning Board must first make the following findings (Sec. 10.814.60):

Required Findings	Planning Department Comments	
Exterior design of the ADU is consistent with the principal dwelling on the lot.	Applicant has stated, in cover letter, the proposed DADU will use siding similar to that of the pincipal	
dwelling on the lot.	structure.	

Required Findings		Planning Department Comments	
2.	The site plan provides adequate open space, landscaping and offstreet parking for both the ADU and the primary dwelling.	Proposed ADU and principal structure will require a minimum of 3 parking spaces. According to aerial imagery and proposed garage space it appears this requirement is satisfied. Board should confirm with the applicant that adaquate parking will be provided.	
		Applicant has stated, in cover letter, the proposed DADU and overall site renovations will create 94% open space where 75% is required and 2.6% building covereage where 5% is required.	
3.	The ADU will maintain a compatible relationship to adjacent properties in terms of location, design and offstreet parking layout and will not significantly reduce the privacy of adjacent properties.	Applicant has stated, in cover letter, the proposed DADU will not alter or reduce privacy of adjacent properties.	
4.	The ADU will not result in excessive noise, traffic or parking congestion.	Applicant has stated, in cover letter, the proposed DADU will not contribute to excessive noise, traffic, or parking congestion.	

Request for Modifications:

The applicant requests modifications of required standards pursuant to Section 10.814.70 of the Zoning Ordinance as follows:

• To grant 1,300 square feet of gross floor area where 1,000 is allowed.

Planning Department Recommendation

- 1) Vote to grant dimensional modification as permitted by section 10.814.53 of the zoning ordinance to all a maximum of 1,300 square feet of gross floor area where 1,000 is allowed.
- 2) Vote to find the remainder of section 10.518.50 is satisfied by the application.
- 3) Vote to grant the conditional use permit with the following stipulations:
 - 3.1 The applicant can demonstrate the availability of sewer or approved onsite septic or septic holding tank approved by NHDES prior to Building Permit issuance.

3.2 The applicant will add a note on the plans and record an affidavit at the registry that states this DADU will be the only accessory dwelling unit on the property.

VI. PRELIMINARY CONCEPTUAL CONSULTATION

A. The request of **Bailey J. Frederick III (Owner)**, for the property located at **212**, **214** & **216 Woodbury Avenue** requesting Preliminary Conceptual Consultation for a Lot Line Revision, demolition of one existing structure, and the construction of one eight-unit structure, two two-unit structures, and one three-unit structure. Said property is shown on Assessor Map 175 Lot 1; Map 175 Lot 2; Map 175 Lot 3 and lies in the General Residence A (GRA) District. (LUPD-22-3)

Description

The applicant has provided a set of preliminary plans for discussion with the Board.

As authorized by NH RSA 676:4,II, the Site Plan Review Regulations require preliminary conceptual consultation for certain proposals, including (1) the construction of 30,000 sq. ft. or more gross floor area, (2) the creation of 20 or more dwelling units, or (3) the construction of more than one principal structure on a lot. Preliminary conceptual consultation precedes review by the Technical Advisory Committee.

Preliminary conceptual consultation is described in the state statute as follows:

[Preliminary conceptual consultation]... shall be directed at review of the basic concept of the proposal and suggestions which might be of assistance in resolving problems with meeting requirements during final consideration. Such consultation shall not bind either the applicant or the board and statements made by planning board members shall not be the basis for disqualifying said members or invalidating any action taken. The board and the applicant may discuss proposals in conceptual form only and in general terms such as desirability of types of development and proposals under the master plan.

The preliminary conceptual consultation phase provides the Planning Board with an opportunity to review the outlines of a proposed project before it gets to detailed design (and before the applicant refines the plan as a result of review by the Technical Advisory Committee and public comment at TAC hearings). In order to maximize the value of this phase, Board members are encouraged to engage in dialogue with the proponent to offer suggestions and to raise any concerns so that they may be addressed in a formal application. Preliminary conceptual consultation does not involve a public hearing, and no vote is taken by the Board on the proposal at this stage. Unlike Design Review, completion of Preliminary Conceptual Consultation does not vest the project to the current zoning.

Staff Suggestions:

- Board members should review section 2.4.2 Preliminary Conceptual Consultation Phase of the <u>Site Plan Regulations</u>.
- Board members should review sections of the <u>Zoning Ordinance</u> that may apply to this application. Possible sections may include but are not limited to:
 - o Section 10.440 Table of Uses for GRA District
 - o Section 10.1110 Off Street Parking

VI. PRELIMINARY CONCEPTUAL CONSULTATION

B. The request of **635 Sagamore Development LLC (Owner)**, for the properties located at **635 and 695 Sagamore Avenue** requesting Preliminary Conceptual Consultation for the demolition of the existing commercial structure on Lot 19, the construction of five single-unit structures on Lot 19, and the construction of one single-unit structure on Lot 18. Said property is located on Assessor Map 222 Lot 18 and Map 222 Lot 19 and lie within the Single residence A (SRA) District. (LUPD-22-2)

Description

The applicant has provided a set of preliminary plans for discussion with the Board.

As authorized by NH RSA 676:4,II, the Site Plan Review Regulations require preliminary conceptual consultation for certain proposals, including (1) the construction of 30,000 sq. ft. or more gross floor area, (2) the creation of 20 or more dwelling units, or (3) the construction of more than one principal structure on a lot. Preliminary conceptual consultation precedes review by the Technical Advisory Committee.

Preliminary conceptual consultation is described in the state statute as follows:

[Preliminary conceptual consultation]... shall be directed at review of the basic concept of the proposal and suggestions which might be of assistance in resolving problems with meeting requirements during final consideration. Such consultation shall not bind either the applicant or the board and statements made by planning board members shall not be the basis for disqualifying said members or invalidating any action taken. The board and the applicant may discuss proposals in conceptual form only and in general terms such as desirability of types of development and proposals under the master plan.

The preliminary conceptual consultation phase provides the Planning Board with an opportunity to review the outlines of a proposed project before it gets to detailed design (and before the applicant refines the plan as a result of review by the Technical Advisory Committee and public comment at TAC hearings). In order to maximize the value of this phase, Board members are encouraged to engage in dialogue with the proponent to offer suggestions and to raise any concerns so that they may be addressed in a formal application. Preliminary conceptual consultation does not involve a public hearing, and no vote is taken by the Board on the proposal at this stage. Unlike Design Review, completion of Preliminary Conceptual Consultation does not vest the project to the current zoning.

Staff Suggestions:

- Board members should review section 2.4.2 Preliminary Conceptual Consultation Phase of the <u>Site Plan Regulations</u>.
- Board members should review sections of the **Zoning Ordinance** that may apply to this application. Possible sections may include but are not limited to:
 - o Section 10.440 Table of Uses for SRA district

VII. DESIGN REVIEW APPLICATION ACCEPTANCE

A. The request of **Port Harbor Land LLC**, **(Owner)** for the property located at **2 Russell Street and along Russell Street and Deer Street** requesting Design Review for a mixed use project consisting of office, retail/commercial, and residential uses in one 4-story and two 5-story buildings. The site is located between, Russell Street, Deer Street, Maplewood Avenue and the Railroad Corridor. Said properties are located on Assessor Map 124 Lot 12, Assessor Map 118 Lot 28, Assessor Map 119 Lot 4, and Assessor Map 125 Lot 21 and lie within the Character District 5 (CD-5). (LUPD-22-1)

Description

This item is a request for Design Review under the Site Plan Review Regulations. Under the State statute (RSA 676:4,II), the Design Review phase is an opportunity for the Planning Board to discuss the approach to a project before it is fully designed and before a formal application for Site Plan Review is submitted. The Design Review phase is not mandatory and is nonbinding on both the applicant and the Planning Board.

Although the State statute calls this pre-application phase "design review," it does not encompass review of architectural design elements such as façade treatments, rooflines and window proportions. Rather, it refers to site planning and design issues such as the size and location of buildings, parking areas and open spaces on the lot; the interrelationships and functionality of these components, and the impact of the development on adjoining streets and surrounding properties.

The process as outlined in Section 2.4.3 of the Site Review regulations is that the Board first has to determine that the request for design review includes sufficient information to allow the Board to understand the project and identify potential issues and concerns, and, if so, vote to accept the request and schedule a public hearing. *Completion of the design review process also has the effect of vesting the project to the current zoning.*

Design review discussions must take place in a public hearing. At the conclusion of the public hearing process, the Board makes a determination that the design review process for the application has ended.

Section 2.4.3 of the Site Plan Review Regulations is provided below for reference.

<u>Site Plan Review Regulations – Article 2, Section 2.4.3: Design Review Phase</u>

1. The applicant may request to meet with the Board for nonbinding discussions of a potential application that involve more specific design and engineering details than in the preliminary conceptual consultation phase.

- 2. A request for design review accompanied by all plans and exhibits shall be submitted to the Planning Department at least 14 days prior to the date of a scheduled meeting of the Board via the City's online permitting system as well as in hard copy. The total number of hard copies required shall be determined by the Planning Director.
- 3. The request for design review shall include enough of the information listed in Section 2.5.3(1) and plans displaying enough of the information listed in Section 2.5.4(3) so that the Board is able to review the project. Detailed engineering of infrastructure and utilities are not required at the design review phase, but the information listed in Section 2.5.4(3) should be displayed in sufficient detail to enable the Board to understand the proposed project and identify potential issues and concerns.
- 4. At a regular meeting of the Planning Board, the Board shall determine if the request for design review includes sufficient information to allow the Board Site Plan Review Regulations 6 November 2020 to understand the project and identify potential issues and concerns, and shall vote on whether to accept the request for design review and to schedule a public hearing. If the Board determines that the request does not describe the proposed project in sufficient detail, it shall notify the applicant of the specific deficiencies that need to be addressed.
- 5. Design review discussions shall take place in a public hearing at a regularly scheduled meeting of the Planning Board, after notice to abutters, holders of conservation, preservation, or agricultural preservation restrictions, and the general public as required by State statute.
- 6. At any public meeting of the Planning Board, the Board may determine that the design review process of an application has ended and shall inform the applicant in writing within 10 days of such determination.

Staff Recommendation:

The Board should consider if the materials provided have enough detail for the Board to review the project. If so, the board can vote to accept the application as complete and set a date for the Design Review Public Hearing.

VIII. PUBLIC HEARING - CITY COUNCIL REFERRALS

A. Application of **Randi Collins (Owner),** for the restoration of involuntarily merged lots at **77 Meredith Way** to their pre-merger status pursuant to NH RSA 674:39-aa. Said property is shown on Assessor Map 162 Lot 16 and lies within the General Residence A (GRA) district. (RIML-21-5)

Description

At its meeting on November 15, 2021, the City Council considered a request from R. Timothy Phoenix and Monica F. Keiser, on behalf of their client property owners Jeff and Rand Collins, requesting the restoration of involuntarily merged lots at 77 Meredith Way Map 162 Lot 16 to their pre-merger status pursuant to NH RSA 674:39-aa. The Council voted to refer to the Planning Board and Assessor for report back.

Statutory Requirements for Unmerger of Involuntarily Merged Lots

RSA 674:39-aa requires the City Council to vote to restore "to their premerger status" any lots or parcels that were "involuntarily merged" by municipal action for zoning, assessing, or taxation purposes without the consent of the owner. Unlike all other lot divisions, there is no statutory role for the Planning Board in this process nor is there any requirement for the City to hold a public hearing. However, in Portsmouth the City Council has historically referred such requests to the Planning Board to conduct a public hearing.

The statute defines "voluntary merger" and "voluntarily merged" to include "any overt action or conduct that indicates an owner regarded said lots as merged such as, but not limited to, abandoning a lot line" (RSA 674:39-aa, I). It is therefore the City Council's responsibility to determine whether a merger was voluntary (i.e., requested by a lot owner) or involuntary (implemented by the City without the owner's consent). If the merger was involuntary, the Council must vote to restore the lots to their premerger status. Following such a vote, the City GIS and Assessing staff will update zoning and tax maps accordingly. It will then be up to the owner to take any further action to confirm the restoration to premerger status, such as recording a plan at the Registry of Deeds.

It is important to note that the granting of a request to restore lots to their premerger status does not mean that the resulting lots will be buildable or, if already developed, will conform to zoning. The statute states that "The restoration of the lots to their premerger status shall not be deemed to cure any non-conformity with existing land use ordinances" (RSA 674:39-aa, V). For example, the restored lots may not comply with current zoning requirements for lot area, frontage and depth, and the re-establishment of a lot line between any two premerger lots may introduce a new nonconformity with respect to maximum allowed building coverage or a minimum required side yard where a building already exists on one of the premerger lots. In such cases, the owner(s) of the applicable

lot(s) would have to apply to the Zoning Board of Adjustment for the necessary variances to restore zoning compliance or to allow future development.

Assessing Department Review

The City Assessor has reviewed this application and provided a report on her findings. Her review indicates that this request does not meet the requirements set forth in NH RSA 674:39-aa.

Planning Department Recommendation

The Planning Board should determine if the application meets the requirements set forth in NH RSA 674:39-aa and make a recommendation to the City Council.

IX. OTHER BUSINESS

A. Request of London Bridge South Inc. (Owner) for property located at 0 Falkland Way (address now known as 114 Saratoga Way) for a 1-year extension of the Site Plan review approval for the demolition of an existing garage and shed and the construction of a new 4-unit residential building on merged lots with associated parking, stormwater management, lighting, utilities and landscaping as granted on January 21, 2020. (LU-20-164)

Description

This application received Planning Board approval on January 21, 2020. The Site Plan Review approval expires one-year from the date granted. The Planning Board may, for good cause shown, extend such period by as much as 1-year if requested and acted upon prior to the expiration date. The original letter of decision and approved site plan are included in the packet for reference.

Please see Section 2.14 of the <u>Site Plan Review Regulations</u> to reference application approval, expiration and extension steps.

Planning Department Recommendation

Vote to grant a 1-year extension of the Conditional Use Permit and Site Plan Review approval.

IX. OTHER BUSINESS

B. Woodbury Avenue Cooperative, Inc. (Owner), for the property located at 1338 Woodbury Avenue for a 1-year extension of the Site Plan review approval for the demolition of two existing structures and replacement and reconfiguration of existing mobile home units with associated grading, pavement, lighting, utilities, landscaping and other site improvements as granted on March 18, 2021. (LU-20-198)

Description

This application received Planning Board approval on March 18, 2021. The Site Plan Review approval expires one-year from the date granted. The Planning Board may, for good cause shown, extend such period by as much as 1-year if requested and acted upon prior to the expiration date. The original letter of decision and approved site plan are included in the packet for reference.

Please see Section 2.14 of the <u>Site Plan Review Regulations</u> to reference application approval, expiration and extension steps.

Planning Department Recommendation

Vote to grant a 1-year extension of the Conditional Use Permit and Site Plan Review approval.

IX. OTHER BUSINESS

Please refer to the memo from the Planning Director, as provided in the meeting packet, for staff review and recommendation on the remaining items.

- C. The rehearing request of **Duncan McCallum (Rehearing Applicant)**, for property located at 31 Raynes Avenue, 203 Maplewood Avenue, and 1 Raynes Avenue for a Conditional Use Permit as permitted by Section 10.1112.62 of the Zoning Ordinance and according to the requirements of Section 10.1112.14 to allow 113 off-street parking spaces including 18 reserved spaces to be provided on-site and 25 spaces to be provided on a separate lot where a total of 138 are required and Site Plan Review approval for the demolition of three existing buildings and construction of the following: 1) a 5-story mixed use building with 66,676 gross floor area and 16,629 sq. ft. building footprint including 7,720 sq. ft. of commercial use on the ground story and 32 residential units on the upper stories; 2) a 5-story 124-room hotel with 65,980 gross floor area and 14,622 sq. ft. of building footprint; 3) 34,427 sq. ft. of community space as well as associated paving, lighting, utilities, landscaping and other site improvements. Said properties are shown on Assessor Map 123 Lot 14, Map 123 Lot 13, Map 123 Lot 12, Map 123 Lot 10 and lie within the Character District 4 (CD4) District, Downtown Overlay District (DOD), Historic District, and the North End Incentive Overlay District. (LU-21-54)
- D. The rehearing request of **Duncan McCallum (Rehearing Applicant)**, for property located at **31 Raynes Avenue**, **203 Maplewood Avenue**, **and 1 Raynes Avenue** requesting a Wetland Conditional Use Permit under section 10.1017 to construct two buildings 1) a 5 story mixed use commercial and residential building and 2) a five story hotel building with 124 rooms. The project has removed all of the impervious surface from the 25' tidal buffer, proposes 67 square feet of impervious surface in the 25-50' tidal buffer and 21,190 square feet of impervious in the 50-100' tidal buffer. Overall the project is able to demonstrate a reduction of 7,070 square feet of impervious surface in the tidal wetland buffer from the existing condition or a reduction of 10,107 square feet if the reserve parking is not constructed. Said properties are shown on Assessor Map 123 Lot 14, Map 123 Lot 13, Map 123 Lot 12, Map 123 Lot 10 and lie within the Character District 4 (CD4) District, Downtown Overlay District (DOD), Historic District, and the North End Incentive Overlay District. (LU-21-54)

E. The rehearing request of **Katy Sherman (Rehearing Applicant)**, for property located at **99 Bow Street**, requesting to allow the expansion of the existing deck to include expanded seating for the business as well as public access to the Piscataqua River. Said property is shown on Assessor Map 106 as Lot 54 and lies within the Character District 5 (CD5), Downtown Overlay, and Historic Districts. (LU-21-181)

Planning Department Recommendation

Please refer to the memo from the Planning Director as provided in the meeting packet for staff review and recommendation on the matters listed above.

X. ADJOURNMENT



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

Memorandum

To: Planning Board

From: Beverly Mesa-Zendt, Incoming Planning Director

Date: January 21, 2022

Re: Motions for Planning Board Reconsideration

Background

The following motions for reconsideration are before the Planning Board.

- 1. Approved December 16, 2021 Site Plan Application for 1 Raynes Avenue, 203 Maplewood Avenue, and 31 Raynes Avenue
- 2. Approved December 30, 2021 Site Plan Application for 99 Bow Street

There is no statute that either requires or authorizes a planning board to conduct a rehearing once a decision has been rendered. Similarly, there is no statute prohibiting a planning board from conducting such a rehearing. A review of prior court decisions suggests that the planning board can consider such requests, however, the planning board is never *required* to grant the request as a matter of law. This lack of state statutory guidance creates an ambiguity for a planning board in determining its authority with respect to rehearing requests. It also creates a void of criteria to apply in determining whether or not to hold such hearings or how to conduct such hearings.

The New Hampshire Municipal Association provides the following:

Whether the board should consider a rehearing depends in part upon the procedural status of the application, and what type of decision the planning board actually reached in the matter. https://www.nhmunicipal.org/town-city-article/rehearings-planning-board

Staff Recommendation

Staff has consulted with and been advised by the City Attorney's office and recommends that the Planning Board <u>deny</u> both reconsideration requests.

There are many factors to consider when determining whether or not to grant a rehearing and the decision making criteria and procedural requirements should be firmly grounded in state statute, prior court decisions (case law), and local ordinance. However, as noted above, state law is ambiguous with regard to these matters. Nonetheless, state law has provided an appeal mechanism for aggrieved participants including the right to appeal to superior court, to the Housing Appeals Board, or to the Board of Adjustment (if the issue involves an interpretation of the Zoning Ordinance).

The applicants are requesting a rehearing for the decision on 1 Raynes Avenue, 203 Maplewood Avenue, and 31 Raynes Avenue and have filed a separate and parallel petition with the Board of Adjustment on January 14, 2022.

If the Board of Adjustment finds that an error has been made in the interpretation of the zoning ordinance, the Board of Adjustment may provide necessary zoning relief.

Alternatively, the Applicant may also appeal the decision to superior court under the provisions of RSA 677:15 or the Housing Appeals Board pursuant to RSA 679.

Regulating Rules and Future Requests

It is the recommendation of both the City's Planning and Legal Departments that the Planning Board consider adopting its own rules regulating whether or not rehearing requests will be considered and, if so, the process and criteria which will be applicable to those requests. If the Planning Board accepts this recommendation, staff will place this item on a future Planning Board and will seek guidance from both the Planning Board and the City Attorney's office in developing policies and standards that will facilitate the review of such requests in compliance with both the intent and letter of state statutes and with due consideration to the rights of applicants, abutters, and other participants.

AMBIT ENGINEERING, INC. CIVIL ENGINEERS AND LAND SURVEYORS

200 Griffin Road, Unit 3, Portsmouth, NH 03801 Phone (603) 430-9282 Fax 436-2315

3 January 2022

Planning Board City of Portsmouth 1 Junkins Avenue Portsmouth, NH 03801

Re: City of Portsmouth Application for Conditional Use Permit
Tax Map 122, Lot 2
TBD Northwest Street – Single Family Residence
Portsmouth, New Hampshire

Dear Planning Board Members:

On behalf of Darrell Moreau – Applicant, and Amanda & Gregory Morneault – Owners, the accompanying **Revised Site Plan Set** is hereby submitted for review for an ongoing City of Portsmouth Wetland Conditional Use Permit Application request. The project was last discussed at the November 18, 2021 Planning Board meeting. The Planning Board asked whether the proposed structure could be located further to the west, to lessen the impact within the city 100 foot buffer zone. These site plans reflect a revised location of the proposed structure as requested. The change was incorporated as follows:

- The building design was revised to relocate the proposed garage doors to the street side
- The driveway was relocated to come to the structure directly from the street and reduced in size
- The minimum garage width of 22 feet was moved west as far as possible while still maintaining the setbacks granted by the ZBA. The west side of the structure now sits at the point where the allowed 3 foot front setback and the 6.5 foot rear setback are 22 feet apart.
- This allowed the building to be moved approximately 18 feet to the west and reduce the impact in the tidal buffer zone
- The exit door for the proposed garage was moved to the west side and the slider moved to the east side of the structure to accommodate grading
- A porous patio (landing) was added on the east side
- The width of the proposed structure beyond the garage was reduced 3 feet so as to maintain the 3 foot front setback and the 6.5 foot rear setback in the rest of the revised house location, as it was slid to the west

As a result of the above changes the request to permit a total of 5,062 square feet of disturbance within the City of Portsmouth Wetland Buffer has been reduced slightly to 4,935 square feet. This overall reduction does not seem productive, however the real impact has been reduced significantly. The proposed structure, pavement and walkway (the impervious surfaces) within the buffer have been reduced from 1,449 SF to 978 SF; a 32% overall impact reduction. The structural component of the impact reduction has been reduced from 760 SF to 312 SF; for a structure impact reduction of 60%. The net impact area remains almost constant as the area of gravel surface to be removed has increased, and the temporary impact area also increased. The net result, however, is a significant decrease in the proposed impervious surface area in the buffer. In addition with the location of the garage doors facing

the street and the subsequent pavement reduction the overall impervious surface on the lot has been reduced by 825 square feet and the total impervious surface proposed now is less than 20% of lot area.

The site plan revisions are listed herein, specifically:

- Cover Sheet Submission date change
- Subdivision Plan No Change
- Existing Conditions Plan C1 The flood zone line has been added
- Subdivision Site Plan C2 The location, dimensions, and area of the proposed structure and the driveway location have been revised.
- Erosion Control and Grading Plan C3 The site grading has been revised to the new structure location
- Utility Plan C4 The utility connections have been updated to the new structure location
- CUP & NHDES Permit Plan C5 The Disturbed Area Table and impact areas have been revised
- Neighborhood Plan Aerial P1 The plan has been updated to the new house location
- Detail Sheets D1 and D2 a porous patio detail has been added to the construction details

We look forward to the Planning Boards review of this submission and we will be in attendance at the meeting to answer any questions the Board may have on the proposed project.

Respectfully submitted,

John Chagnon

John R. Chagnon Project Engineer Ambit Engineering, Inc.

OWNERS:

GREGORY J. MORNEAULT AMANDA B. MORNEAULT

137 NORTHWEST STREET PORTSMOUTH, N.H. 03801

APPLICANT:

DARRELL MOREAU

1B JACKSON HILL STREET PORTSMOUTH, N.H. 03801 TEL: (603) 512-5116

LAND SURVEYOR & CIVIL ENGINEER:

AMBIT ENGINEERING, INC.

200 GRIFFIN ROAD, UNIT 3 PORTSMOUTH, N.H. 03801-7114 TEL: (603) 430-9282 FAX: (603) 436-2315

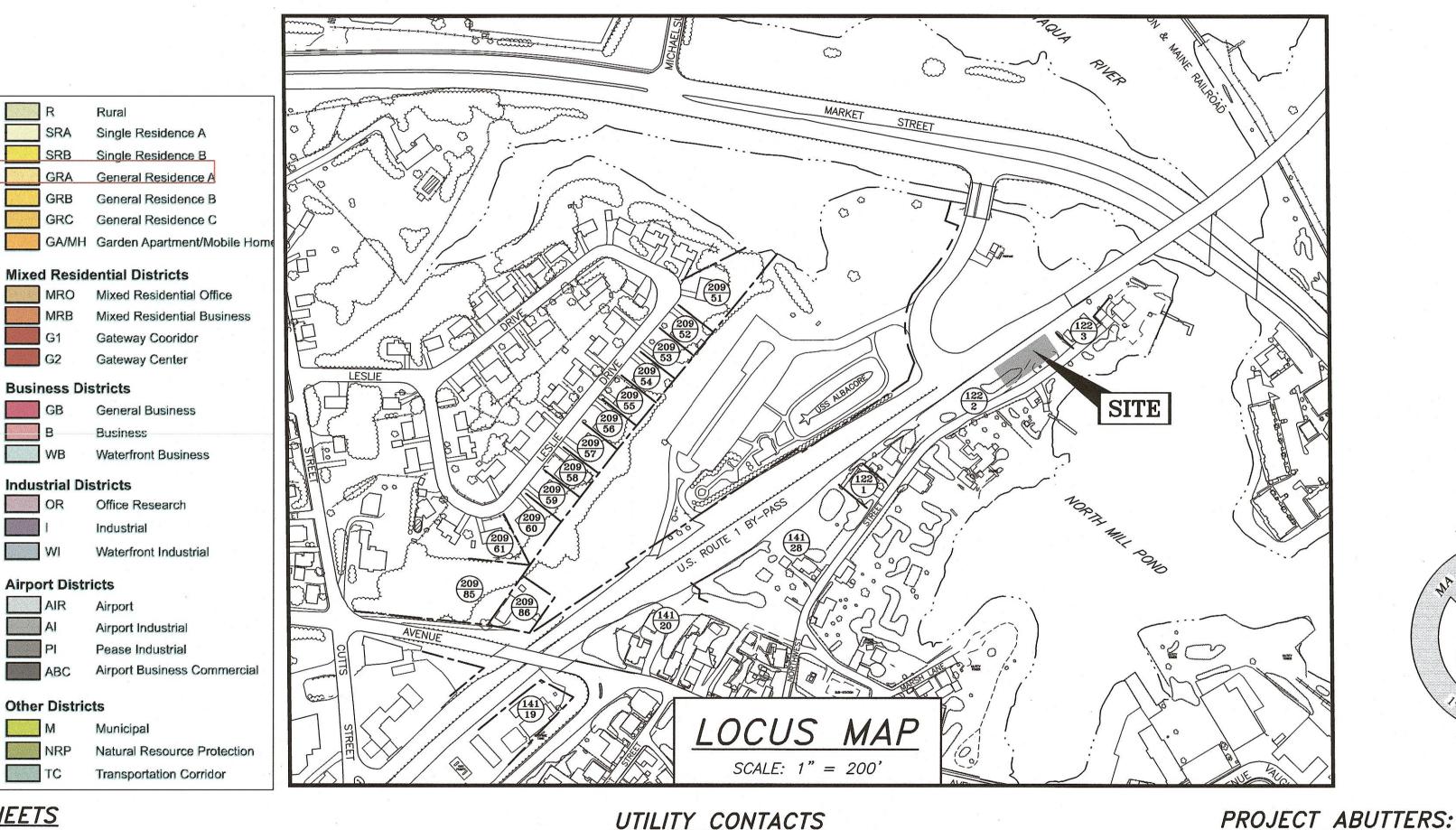
ARCHITECT:

ART FORM ARCHITECTURE, INC.

44 LAFAYETTE ROAD NORTH HAMPTON, NH. 03862 TEL: (603) 431-9559



PROPOSED SUBDIVISION PLAN TBD NORTHWEST STREET PORTSMOUTH, NEW HAMPSHIRE PERMIT PLANS





INDEX OF SHEETS

SUBDIVISION PLAN

EXISTING CONDITIONS PLAN SUBDIVISION SITE PLAN

AIR

Other Districts

M

NRP

EROSION CONTROL & GRADING PLAN

UTILITY PLAN

CUP & NHDES PERMIT PLAN NEIGHBORHOOD PLAN- AERIAL

D1-D2- DETAILS

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

APPROVED BY THE PORTSMOUTH PLANNING BOARD

DATE

CHAIRMAN

UTILITY CONTACTS

ELECTRIC: EVERSOURCE 74 OLD DOVER ROAD ROCHESTER, N.H. 03867 Tel. (603) 332-4227, Ext. 555.5325 ATTN: MARK COLLINS

mark.collins@eversource.com SEWER & WATER:

PORTSMOUTH DEPARTMENT OF PUBLIC WORKS 680 PEVERLY HILL ROAD PORTSMOUTH, N.H. 03801 Tel. (603) 427-1530 ATTN: JIM TOW

EMAIL:

NATURAL GAS: UNITIL 325 WEST ROAD Tel. (603) 6294-5147 ATTN: SUSAN DUPLISA dupliseas@unitil.com

COMMUNICATIONS: FAIRPOINT

COMMUNICATIONS 1575 GREENLAND ROAD GREENLAND, N.H. 03840 Tel. (603) 427-5525 ATTN: JOE CONSIDINE jconsidine@fairpoint.com

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

> MICHAEL GEORGE PETRIN & KATIE MARIE LAVERRIERE 268 DENNETT STREET PORTSMOUTH, NH 03801 6138/647 (12.3% INT.)

ANDREA L. ARDITO

R. BRAD LEBO

PORTSMOUTH, NH 03801

5646/912

121 NORTHWEST STREET

LARRY BOOZ 172 NORTHWEST STREET PORTSMOUTH, NH 03801 5773/2064 D-14146

MICHAEL GEORGE PETRIN & KATIE MARIE LAVERRIERE 268 DENNETT STREET PORTSMOUTH, NH 03801 6138/647 (12.3% INT.)

NATHAN LAVERRIERE 2040 FRANKLIN STREET SAN FRANCISCO, CA 94109 6138/647 (87.7% INT.)

LISA E. GROUX 136 NORTHWEST STREET PORTSMOUTH, NH 03801 4666/602

C - 33849

786/216

NATHAN LAVERRIERE 2040 FRANKLIN STREET SAN FRANCISCO, CA 94109 6138/647 (87.7% INT.)

MARY A. MAHONEY c/o MARY A. MAHONEY TRUST 206 NORTHWEST STREET PORTSMOUTH, NH 03801 6042/1984

THE SOCIETY FOR THE PRESERVATION OF NEW ENGLAND ANTIQUITIES 141 CAMBRIDGE STREET BOSTON, MA 02114

REQUIRED PERMITS NHDES SHORELAND PERMIT: PENDING

LEGEND:

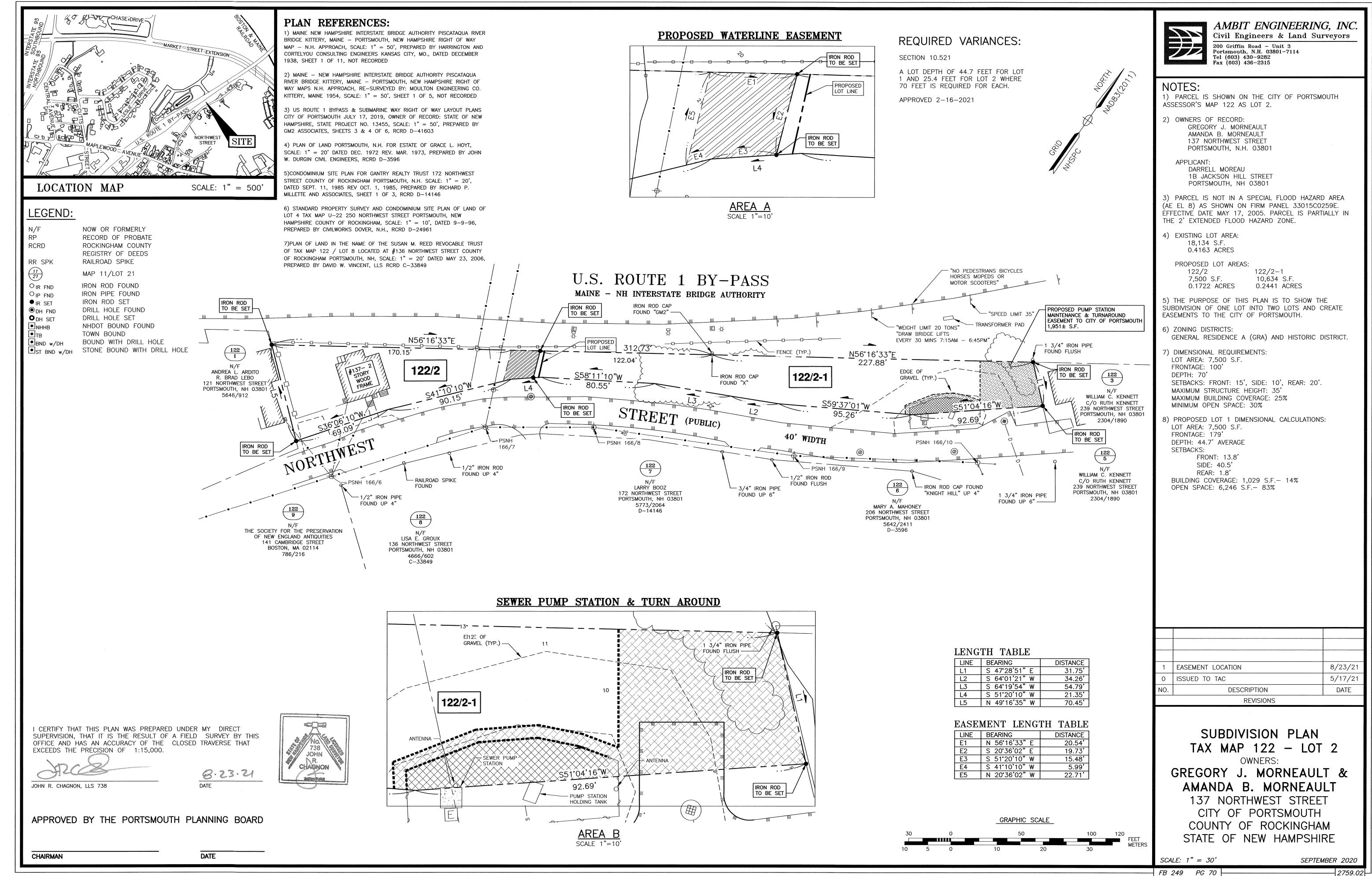
	LLUL	IND.
N/F RP RCRD 11 21 IR FND IP FND IR SET OH FND OH SET	ROCKINGHA REGISTRY (MAP 11/LC IRON ROD IRON PIPE IRON ROD DRILL HOLE DRILL HOLE	F PROBATE M COUNTY OF DEEDS OT 21 FOUND FOUND SET E FOUND
EXISTING	FM ————————————————————————————————————	SEWER PIPE SEWER LATERAL GAS LINE STORM DRAIN FOUNDATION DRAIN WATER LINE
₩ <u>\$</u> 0 —0	✓ C.O.GV	ELECTRIC HANDHOLD/PULLBOX WATER SHUT OFF/CURB STOP PIPE CLEANOUT
	HYD CB SMH DMH	GATE VALVE HYDRANT CATCH BASIN SEWER MANHOLE
(D) (M) #5 TP 1	WMH	DRAIN MANHOLE WATER METER MANHOLE TEST BORING TEST PIT LANDSCAPED AREA
CI COP CMP DI PVC RCP HYD EP EL. FF INV TBM TYP	CI COP CMP DI PVC RCP HYD EP EL. FF INV TBM TYP	CAST IRON PIPE COPPER PIPE CORRUGATED METAL PIPE DUCTILE IRON PIPE POLYVINYL CHLORIDE PIPE REINFORCED CONCRETE PIPE HYDRANT CENTERLINE EDGE OF PAVEMENT ELEVATION FINISHED FLOOR INVERT TEMPORARY BENCH MARK TYPICAL

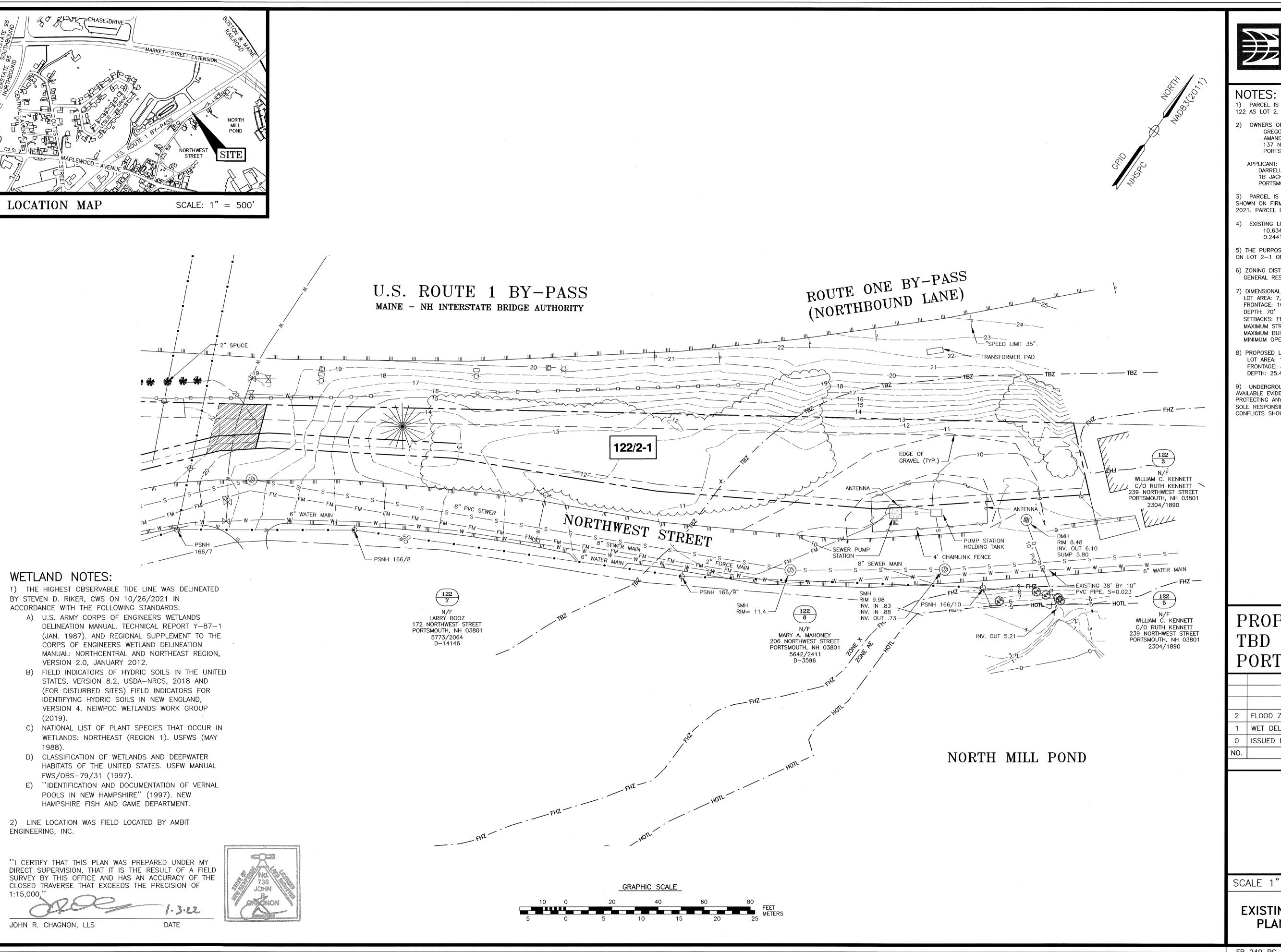
PROPOSED SUBDIVISION PLAN TBD NORTHWEST STREET PORTSMOUTH, N.H.



AMBIT ENGINEERING, INC. Civil Engineers & Land Surveyors 200 Griffin Road - Unit 3 Portsmouth, N.H. 03801-7114

PLAN SET SUBMITTAL DATE: 3 JANUARY 2022







AMBIT ENGINEERING, INC.

Civil Engineers & Land Surveyors 200 Griffin Road - Unit 3 Portsmouth, N.H. 03801-7114 Tel (603) 430-9282 Fax (603) 436-2315

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP

2) OWNERS OF RECORD: GREGORY J. MORNEAULT AMANDA B. MORNEAULT 137 NORTHWEST STREET PORTSMOUTH, N.H. 03801

> APPLICANT: DARRELL MOREAU 1B JACKSON HILL STREET PORTSMOUTH, NH 03801

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA (AE EL 8) AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE DATE JANUARY 29, 2021. PARCEL IS PARTIALLY IN THE 2' EXTENDED FLOOD HAZARD ZONE.

4) EXISTING LOT AREA: 10,634 S.F. 0.2441 ACRES

5) THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON LOT 2-1 OF THE PROPOSED SUBDIVISION.

6) ZONING DISTRICTS:

GENERAL RESIDENCE A (GRA) AND HISTORIC DISTRICT.

7) DIMENSIONAL REQUIREMENTS: LOT AREA: 7,500 S.F. FRONTAGE: 100' DEPTH: 70' SETBACKS: FRONT: 15', SIDE: 10', REAR: 20'. MAXIMUM STRUCTURE HEIGHT: 35' MAXIMUM BUILDING COVERAGE: 25% MINIMUM OPEN SPACE: 30%

8) PROPOSED LOT 2 DIMENSIONAL CALCULATIONS: LOT AREA: 10,634 S.F. FRONTAGE: 357' DEPTH: 25.4 AVERAGE

9) 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.

PROPOSED HOUSING TBD NORTHWEST ST. PORTSMOUTH, NH

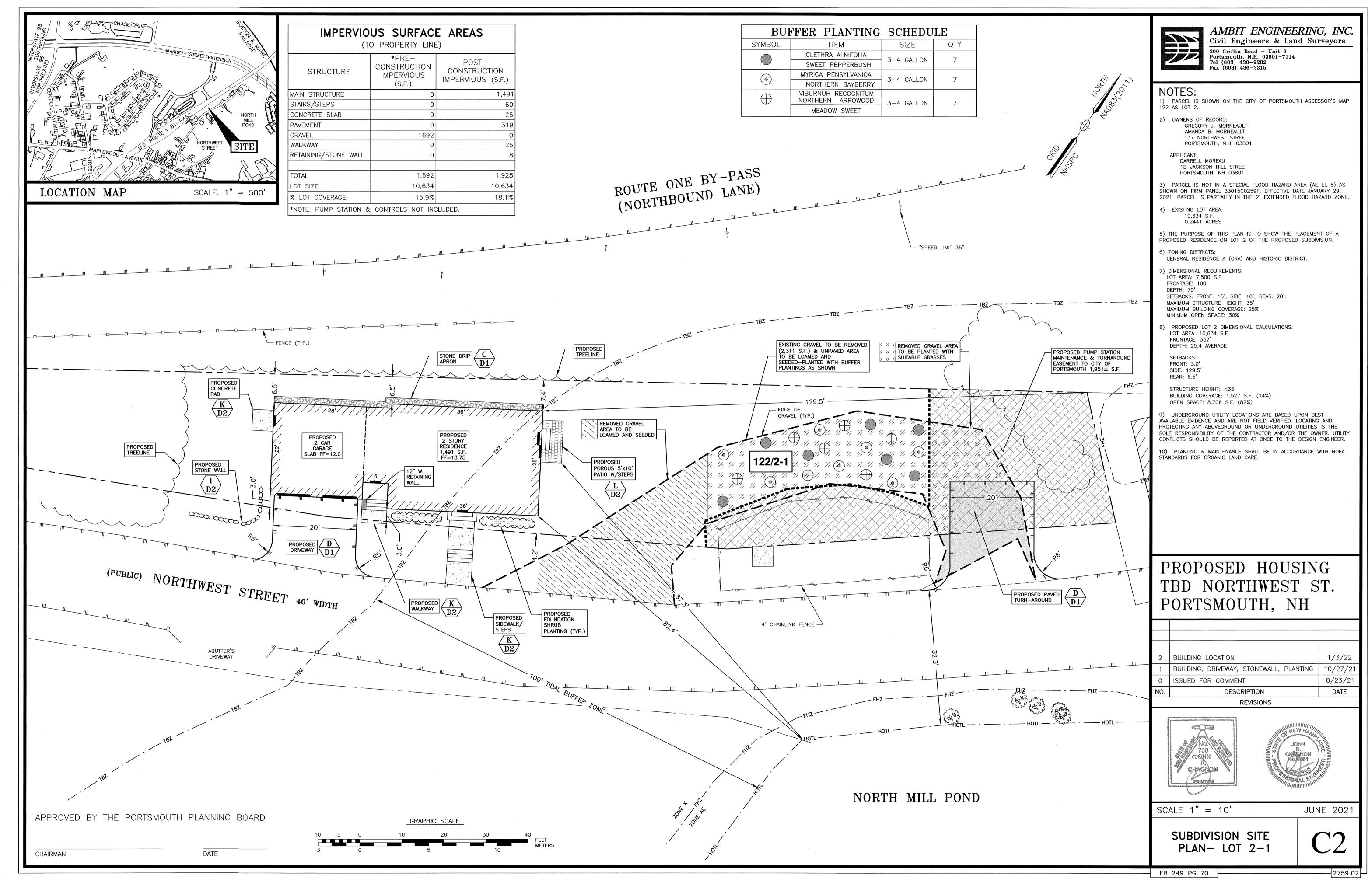
2	FLOOD ZONE LINE	1/3/22
1	WET DELINEATION NOTE	1/27/21
0	ISSUED FOR COMMENT	8/23/21
NO.	DESCRIPTION	DATE
	REVISIONS	

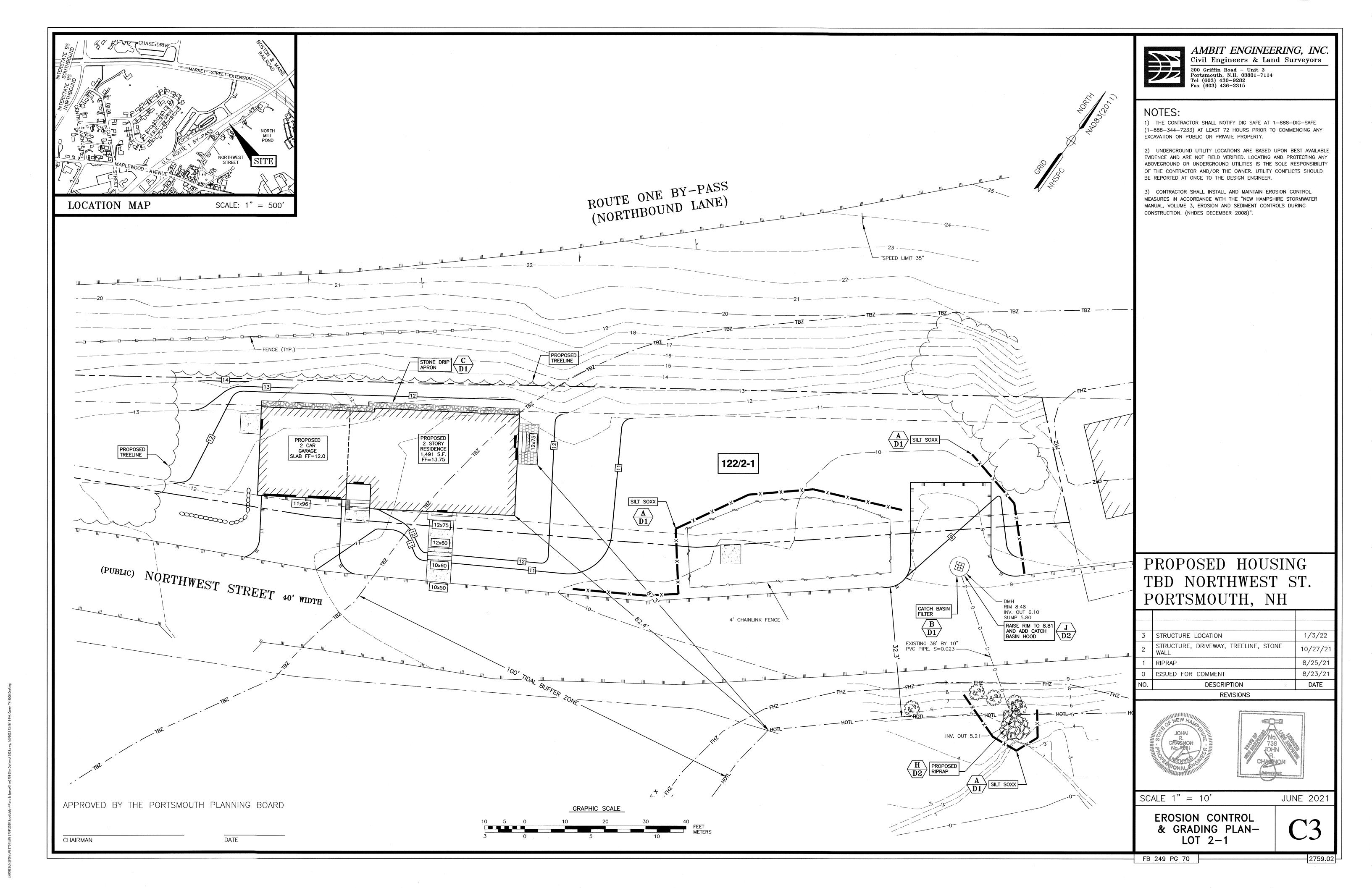
SCALE 1" = 20'

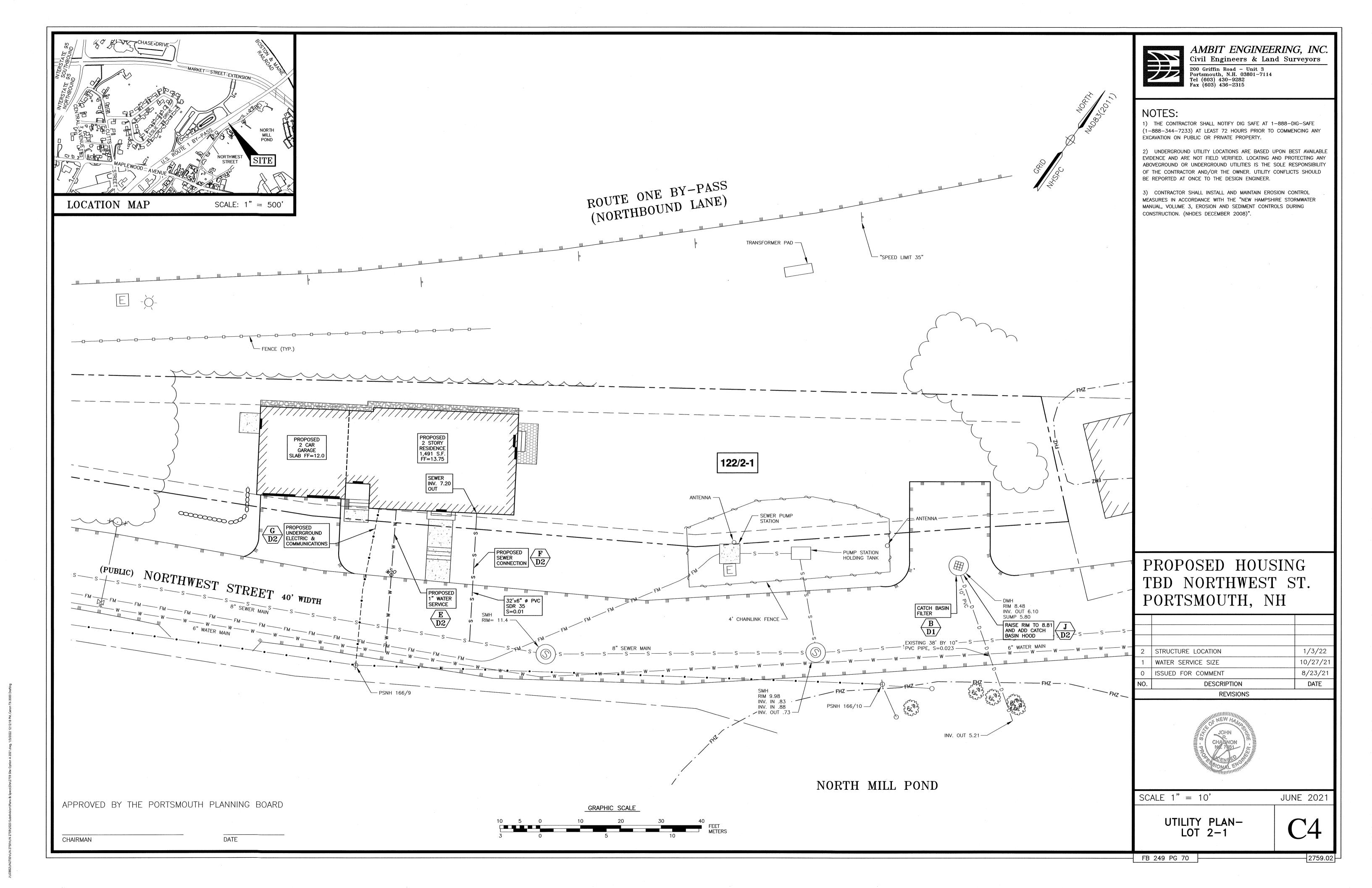
JUNE 2021

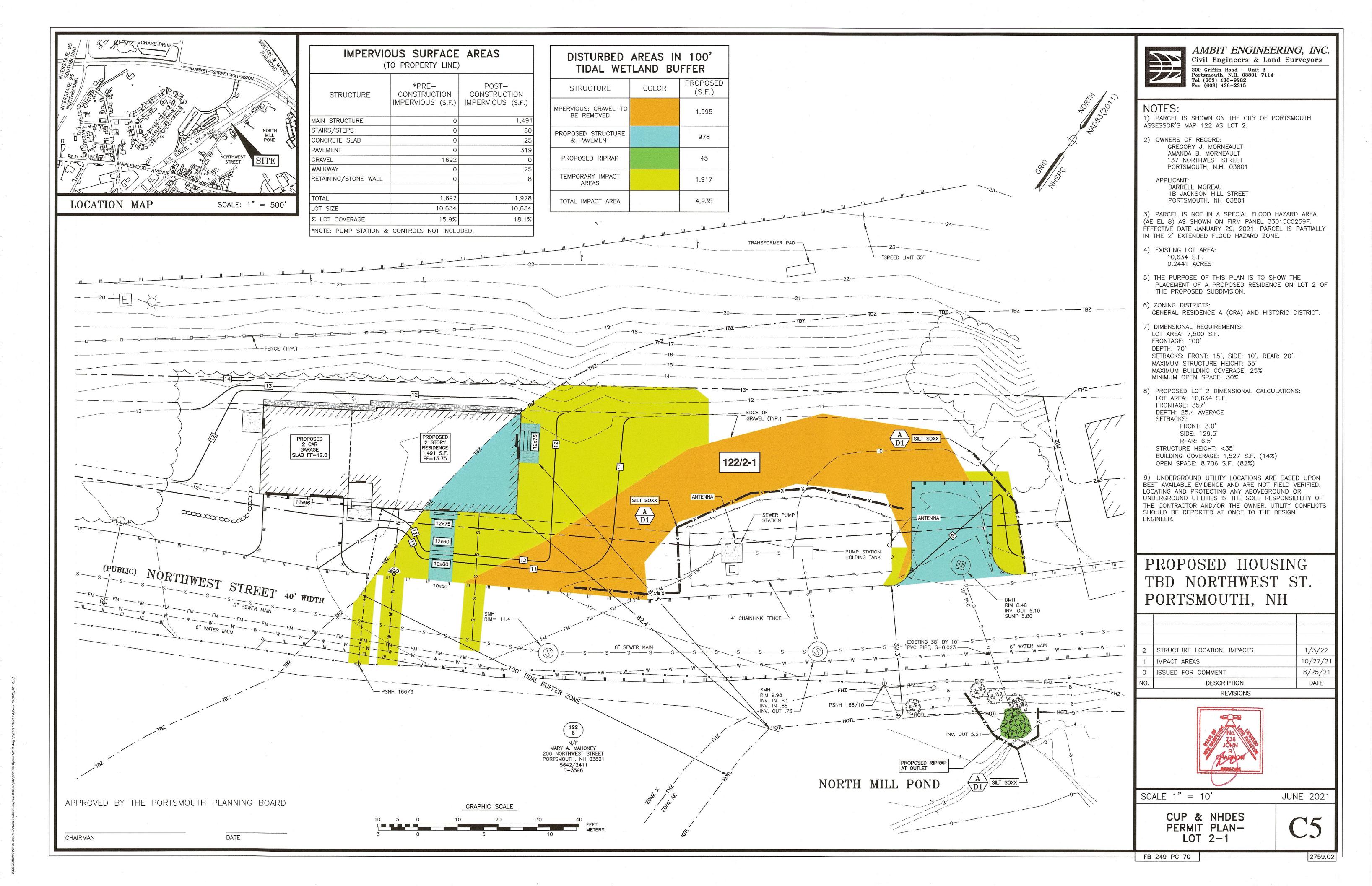
EXISTING CONDITIONS PLAN- LOT 2-1

FB 249 PG 70













AMBIT ENGINEERING, INC. Civil Engineers & Land Surveyors

200 Griffin Road - Unit 3 Portsmouth, N.H. 03801-7114 Tel (603) 430-9282 Fax (603) 436-2315

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 122 AS LOT 2.

2) OWNERS OF RECORD:
GREGORY J. MORNEAULT
AMANDA B. MORNEAULT
137 NORTHWEST STREET
PORTSMOUTH, N.H. 03801

APPLICANT:
DARRELL MOREAU
1B JACKSON HILL STREET
PORTSMOUTH, NH 03801

3) THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED SITE DEVELOPMENT IN CONTEXT TO THE NEIGHBORHOOD.

PROPOSED HOUSING TBD NORTHWEST ST. PORTSMOUTH, NH

1		
1	STRUCTURE LOCATION	1/3/22
0	ISSUED FOR COMMENT	10/27/21
NO.	DESCRIPTION	DATE
REVISIONS		

JUNE 2021

NEIGHBORHOOD PLAN-AERIAL

FB 249 PG 70

INSTALL PERIMETER CONTROLS, i.e., SILTSOXX AROUND THE LIMITS OF DISTURBANCE AND CATCH BASIN SOCK FILTER BEFORE ANY EARTH MOVING OPERATIONS. THE USE OF HAYBALES IS NOT ALLOWED.

CUT BRUSH AND TREES AS REQUIRED. STUMP SITE AND CLEAR TOPSOIL.

INSTALL FOUNDATION AND BACKFILL

ROUGH GRADE SITE, PROVIDE TEMPORARY EROSION PROTECTION TO DITCHES AND SWALES IN THE FORM OF MULCHING, JUTE MESH OR DITCH DAMS.

PLANT LANDSCAPING IN AREAS OUT OF WAY OF BUILDING CONSTRUCTION. PREPARE AND STABILIZE FINAL SITE GRADING BY ADDING TOPSOIL. SEED. MULCH AND FERTILIZER, PER CITY OF PORTSMOUTH ZONING ORDINANCE, ARTICLE 10.1018.24 FERTILIZERS: THE USE OF ANY FERTILIZER IS PROHIBITED IN A WETLAND, VEGETATED BUFFER STRIP OR LIMITED CUT AREA: AND THE USE OF FERTILIZERS OTHER THAN LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZERS IS PROHIBITED IN ANY PART OF A WETLAND BUFFER.

FINISH ALL REMAINING LANDSCAPE WORK.

REMOVE TRAPPED SEDIMENTS FROM COLLECTION DEVICES AS APPROPRIATE, AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF FINAL STABILIZATION OF THE SITE.

GENERAL CONSTRUCTION NOTES

THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE" THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED FOR MORE THAN 45 DAYS.

ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

DUST CONTROL: 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.

SILT FENCES AND SILTSOXX SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. ALL DAMAGED SILT FENCES AND SILTSOXX SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED IN A SECURED LOCATION.

AVOID THE USE OF FUTURE OPEN SPACES (LOAM AND SEED AREAS) WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL USE THE ROADBEDS OF FUTURE ACCESS DRIVES AND PARKING AREAS.

ADDITIONAL TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS—-CONSTRUCT SILT FENCE OR SILTSOXX AROUND TOPSOIL

AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL. STUMPS SHALL BE DISPOSED OF IN AN APPROVED FACILITY.

ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. ALL NON-STRUCTURAL, SITE-FILL SHALL BE PLACED AND COMPACTED TO 90%

THICKNESS UNLESS OTHERWISE NOTED. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIAL, TRASH, WOODY DEBRIS, LEAVES, BRUSH OR ANY DELETERIOUS MATTER SHALL NOT BE

FILL MATERIAL SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.

MODIFIED PROCTOR DENSITY IN LAYERS NOT EXCEEDING 18 INCHES IN

DURING CONSTRUCTION AND UNTIL ALL DEVELOPED AREAS ARE FULLY STABILIZED, ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH ONE HALF INCH OF RAINFALL

THE CONTRACTOR SHALL MODIFY OR ADD EROSION CONTROL MEASURES AS NECESSARY TO ACCOMMODATE PROJECT CONSTRUCTION.

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.

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS

- * 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.

<u>NOFA STANDARDS FOR ORGANIC LAND CARE</u> REFERENCE NOFA STANDARDS FOR ORGANIC LAND CARE MANUAL FOR ALL LAND CARE PRACTICES AT THIS SITE.

NEW LAWN INSTALLATION

-ORDER OF PROCESSES . SOIL TESTING. SOIL TYPE PREFERRED IS CLOSE TO NEUTRAL PH AND HAS A BALANCED FUNGAL TO BACTERIAL RATIO. 2. PLANTING BED PREPARATION WITH SOIL AMENDMENTS AS SPECIFIED BY SOIL TEST RESULTS.

3. SEEDING WITH AN APPROPRIATE MIX OF SEEDS BY HAND, USING A SPREADER OR SEED DRILLER, OR BY ORGANIC HYDROSEEDING. 4. WATERING FREQUENTLY BUT SHALLOWLY, MAINTAINING A "UNIFORMLY MOIST" SEEDBED DURING GERMINATION AND ESTABLISHMENT

<u>LAWN MAINTENANCE</u>

-GRASS SHOULD BE ALLOWED TO GROW 3" OR TALLER IN HEIGHT PRIOR TO FIRST MOWING. GRASS CLIPPINGS SHOULD BE LEFT IN PLACE. -REMOVE NO MORE THAN 1/3 OF GRASS LENGTH PER MOWING.

OCCURRED:

-ORGANIC FERTILIZERS ONLY. OMRI CERTIFIED PRODUCTS (ORGANIC MATERIALS REVIEW INSTITUTE) ARE PREFERRED.

VEGETATIVE PRACTICE

LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE.

ORGANIC FERTILIZERS ONLY. OMRI CERTIFIED PRODUCTS (ORGANIC MATERIALS REVIEW INSTITUTE) ARE PREFERRED.

FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE, PER CITY OF PORTSMOUTH ZONING ORDINANCE, ARTICLE 10.1018.24 FERTILIZERS: THE USE OF ANY FERTILIZER IS PROHIBITED IN A WETLAND, VEGETATED BUFFER STRIP OR LIMITED CUT AREA; AND THE USE OF FERTILIZERS OTHER THAN LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZERS IS

SEED SHALL BE SOWN AT THE RATES SHOWN IN THE TABLE BELOW. 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. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE, AND SHALL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.

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 SHALL BE

A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL GENERAL COVER PROPORTION SEEDING RATE

CREEPING RED FESCUE KENTUCKY BLUEGRASS

50% 100 LBS/ACRE 50%

SLOPE SEED (USED ON ALL SLOPES GREATER THAN OR EQUAL TO 3:1)

CREEPING RED FESCUE TALL FESCUE BIRDSFOOT TREFOIL

42% 16% 48 LBS/ACRE

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE PERCENT BY WEIGHT, ALL SEED SHALL COMPLY WITH APPLICABLE STATE AND FEDERAL SEED LAWS.

42%

FOR TEMPORARY PROTECTION OF DISTURBED AREAS:

MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES: PERENNIAL RYE: 0.7 LBS/1,000 S.F. 1.5 TONS/ACRE

MAINTENANCE AND PROTECTION

THE CONTRACTOR SHALL MAINTAIN ALL LOAM & SEED AREAS UNTIL FINAL ACCEPTANCE AT THE COMPLETION OF THE CONTRACT. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REMOVAL OF STONES AND OTHER FOREIGN OBJECTS OVER 1/2 INCHES IN DIAMETER WHICH MAY APPEAR AND THE FIRST TWO (2) CUTTINGS OF GRASS NO CLOSER THEN TEN (10) DAYS APART. THE FIRST CUTTING SHALL BE ACCOMPLISHED WHEN THE GRASS IS FROM 2 1/2 TO 3 INCHES HIGH. ALL BARE AND DEAD SPOTS WHICH BECOME APPARENT SHALL BE PROPERLY PREPARED. LIMED AND FERTILIZED, AND RESEEDED BY THE CONTRACTOR AT HIS EXPENSE AS MANY TIMES AS NECESSARY TO SECURE GOOD GROWTH. THE ENTIRE AREA SHALL BE MAINTAINED, WATERED AND CUT UNTIL ACCEPTANCE OF THE LAWN BY THE OWNER'S REPRESENTATIVE PER CITY OF PORTSMOUTH ZONING ORDINANCE ARTICLE 10.1018.24 FERTILIZERS: THE USE OF ANY FERTILIZER IS PROHIBITED IN A WETLAND, VEGETATED BUFFER STRIP OR LIMITED CUT AREA: AND THE USE OF FERTILIZERS OTHER THAN LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZERS IS PROHIBITED IN ANY PART OF A WETLAND BUFFER.

THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO PROTECT THE GRASS WHILE IT IS DEVELOPING.

TO BE ACCEPTABLE, SEEDED AREAS SHALL CONSIST OF A UNIFORM STAND OF AT LEAST 90 PERCENT ESTABLISHED PERMANENT GRASS SPECIES. WITH UNIFORM COUNT OF AT LEAST 100 PLANTS PER SQUARE FOOT.

SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT. PER CITY OF PORTSMOUTH ZONING ORDINANCE, ARTICLE 10.1018.24 FERTILIZERS: THE USE OF ANY FERTILIZER IS PROHIBITED IN A WETLAND, VEGETATED BUFFER STRIP OR LIMITED CUT AREA; AND THE USE OF FERTILIZERS OTHER THAN LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZERS IS PROHIBITED IN ANY PART OF A WETLAND BUFFER. ORGANIC FERTILIZERS ONLY. OMRI CERTIFIED PRODUCTS (ORGANIC MATERIALS REVIEW INSTITUTE) ARE PREFERRED.

THE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.

SILTSOXX BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

SILT FENCING AND SILTSOXX SHALL BE REMOVED ONCE VEGETATION IS ESTABLISHED. AND DISTURBED AREAS RESULTING FROM SILT FENCE AND SILTSOXX REMOVAL SHALL BE PERMANENTLY SEEDED.

WINTER NOTES

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 SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% 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.

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.

EROSION CONTROL NOTES

FOR PERMANENT MEASURES AND PLANTINGS:

PROHIBITED IN ANY PART OF A WETLAND BUFFER.

RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.

ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS. FILLTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED FILTREXX INSTALLER.

FILTREXX®

SILTSOXXTM-

COMPOST

WOOD CHIPS FROM ON-SITE

CHIPPING OPERATIONS MAY BE

SILTSOXX AND SPREAD AFTER

REMOVAL OF THE SILTSOXX -

MOUNDED AT THE BASE OF THE

FNGINFFR

LENGTH (L) & WIDTH (W) AS

WATER FLOW

THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED

ELEVATION

<u>PLAN</u>

— FILTREXX® SILTSOXX™

SIZE PER INSTALLERS

(8" - 24" TYP.)

RECOMMENDATION

HARDWOOD

STAKE

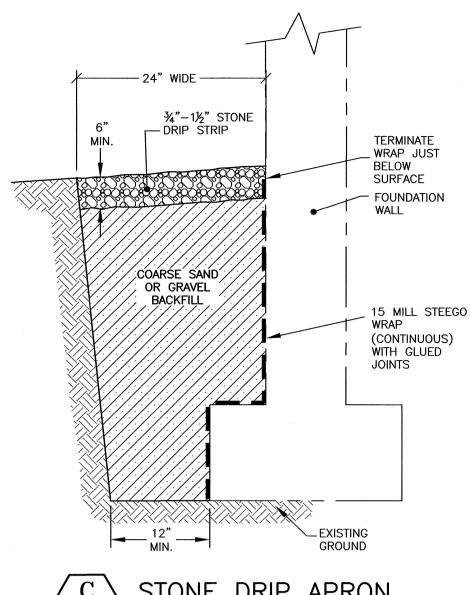
2" x 2" HARDWOOL

STAKES SPACED 10'

APART LINEALLY

SILTSOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS. THE COMPOST FILTER MATERIAL WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE





(UNDER BUILDING DRIP LINE) NT



AMBIT ENGINEERING, INC.

Civil Engineers & Land Surveyors 200 Griffin Road - Unit 3 Portsmouth, N.H. 03801-7114

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.

Tel (603) 430-9282

(603) 436-2315

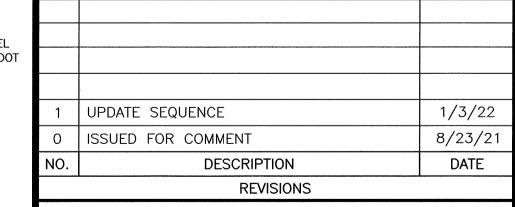
2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN

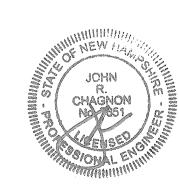
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4) PURSUANT TO RSA 483-B:9 11 (D), NO FERTILIZER SHALL BE APPLIED TO VEGETATION OR SOILS LOCATED WITHIN 25 FEET OF THE REFERENCE LINE OF ANY PUBLIC WATER. BEYOND 25 FEET, SLOW OR CONTROLLED RELEASE FERTILIZER MAY BE USED. SLOW RELEASE NITROGEN MUST CONTAIN NO MORE THAN 2% PHOSPHORUS, AND A NITROGEN COMPONENT WHICH IS AT LEAST 50% SLOW RELEASE NITROGEN COMPONENTS.

5) PURSUANT TO RSA 483-B:9, V (A) (2) (A), NO CHEMICALS INCLUDING PESTICIDES OR HERBICIDES OF ANY KIND, SHALL BE APPLIED TO GROUND, TURF, OR ESTABLISHED VEGETATION WITHIN THE WATERFRONT BUFFER, EXCEPT IF APPLIED BY HORTICULTURE PROFESSIONAL WHO HAVE AN APPLICATION LICENSE OR AS ALLOWED BY SPECIAL PERMIT ISSUED UNDER RSA 541-A. NO CALCIUM CHLORIDE SHALL BE APPLIED WITHIN THE WATERFRONT BUFFER.

PROPOSED HOUSING TBD NORTHWEST ST. PORTSMOUTH, NH





SCALE: AS SHOWN

JUNE 2021

EROSION NOTES & DETAILS

REQUIRED TO FIT NHOOT TYPE GRATE & FRAME. FABRIC **BASKET**

SIDE VIEW 1) INLET BASKETS SHALL BE INSTALLED IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION IS COMPLETE AND SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL PAVEMENT BINDER COURSE IS

2) FILTER FABRIC SHALL BE PUSHED DOWN AND FORMED TO THE SHAPE OF THE BASKET. THE SHEET OF FABRIC SHALL BE LARGE ENOUGH TO BE SUPPORTED BY THE BASKET FRAME WHEN HOLDING SEDIMENT AND, SHALL EXTEND AT LEAST 6" PAST THE FRAME. THE INLET GRATE SHALL BE PLACED OVER THE BASKET/FRAME AND WILL SERVE AS THE FABRIC ANCHOR.

3) THE FILTER FABRIC SHALL BE A GEOTEXTILE FABRIC; POLYESTER, POLYPROPYLENE, STABILIZED NYLON, POLYETHYLENE, OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:

-RAB STRENGTH: 45 LB. MIN. IN ANY PRINCIPAL DIRECTION (ASTM D1682) -MULLEN BURST STRENGTH: MIN. 60 psi (ASTM D774)

4) THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 20 U.S. STANDARD SIEVE AND A MINIMUM PERMEABILITY OF 120 gpm/s.f. (MULTIPLY THE PERMITTIVITY IN SEC.-1 FROM ASTM 54491-85 CONSTANT HEAD TEST USING THE CONVERSION FACTOR OF 74.)

5) THE INLET BASKET SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM REACHING THE DRAINAGE SYSTEM AND/OR CAUSING SURFACE FLOODING

6) SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.

CATCH BASIN INLET BASKET

OVERLAP, APPLY ASPHALT EMULSION O SAW CUT & PLANED SURFACES REMOVE EXISTING PAVEMENT/SHOULDER PRIOR TO PAVING -GRAVEL BASE WITHIN 1'-0" OF SAW CUT. - EXISTING EDGE OF PAVEMENT COLD PLANE PAVEMENT 1" DEEP SLOPE (SEE GRADING PLAN) ????????????? **EXISTING** PAVEMENT -- FXISTING GRAVEL BASE-STABLE SUBGRADE 4" HOT BITUMINOUS CONC. PAVEMENT ---- 6" CRUSHED GRAVEL (NHDOT ITEM 403.11 - MACH. METHOD) BASE COURSE (NHDOT 2½ BINDER COURSE, 19mm SUPERPAVE —— ITEM 304.3) 12 WEARING COURSE, 12.5mm SUPERPAVE -12" GRAVEL SUBBASE (NHDOT ITEM 304.2)

SAW CUT EXISTING PAVEMENT 12"

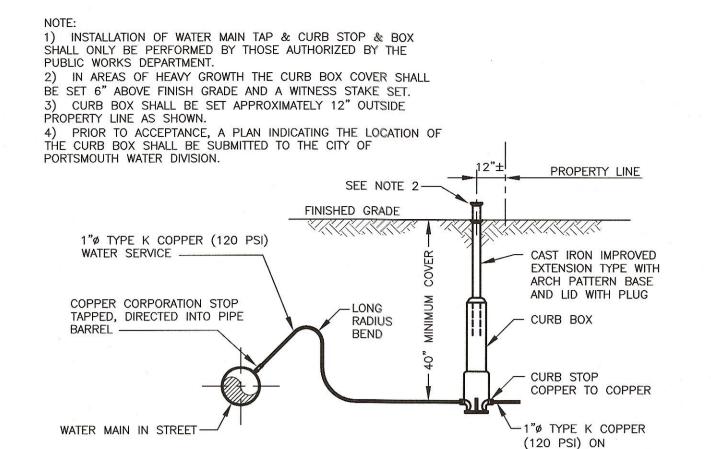
FROM PAVEMENT EDGE AND REMOVE

COLD PLANE EXISTING PAVEMENT TO

36" BEYOND SAW CUT TO CREATE

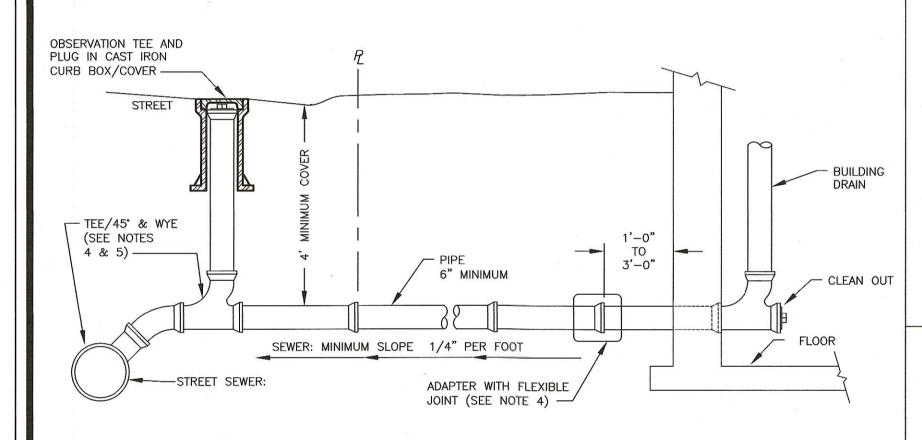
1) PAVEMENT SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS - SECTION 401. 2) CRUSHED GRAVEL AND GRAVEL SUBBASE SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS - SECTION 304, TABLE 1E, AND SHALL BE COMPACTED AS INDICATED IN SECTION 304, 3.6 COMPACTION, AND 3.7 DENSITY TESTING, AND CITY OF CONCORD CONSTRUCTION STANDARDS, SECTION VIII B AND C.

PAVEMENT JOINT DETAIL

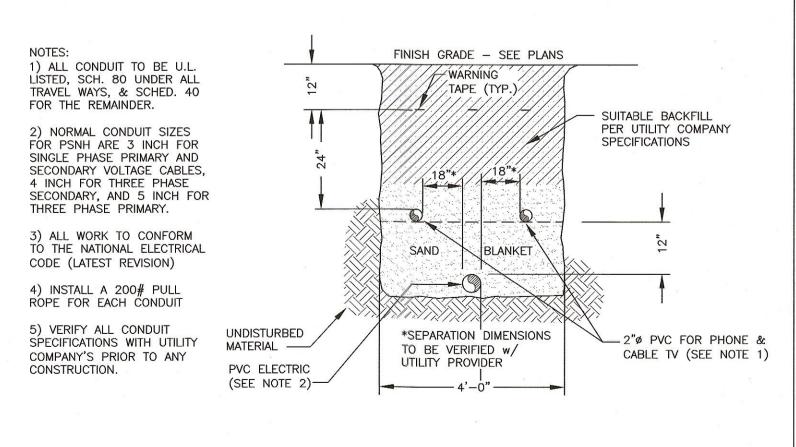




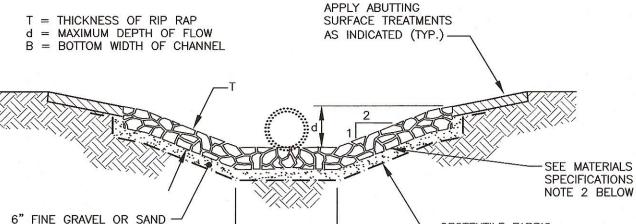
CUSTOMER'S PROPERTY







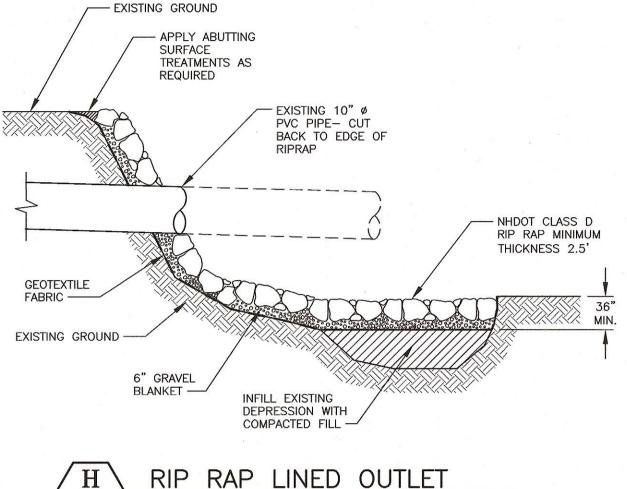
BURIED ELEC/COMM CABLE



TYPICAL CROSS-SECTION

- GEOTEXTILE FABRIC

NTS



RIPRAP GRADATION TABLE

 RIPRAP - 9"

 % OF WEIGHT SMALLER THAN THE GIVEN SIZE
 SIZE OF STONE RANGE IN INCHES

 d100
 18

 d50
 8.5 TO 10.5

 d15
 5.5 TO 7.8

SPECIFICATIONS MATERIALS SPECIFICATIONS:

1) GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF NEW HAMPSHIRE STORM WATER MANAGEMENT AND EROSION CONTROL HANDBOOK BMP FOR ROCK RIP RAP.

2) ANCHOR PINS: STEEL PINS WITH WASHERS OR WOODEN STAKES SHALL BE PLACED TO HOLD GEOTEXTILE FABRIC IN POSITION PER MANUFACTURER'S RECOMMENDATIONS.

3) GRAVEL BLANKET: UNIFORMLY GRADED SCREENED GRAVEL (3/8" TO 1-1/2")

4) RIP RAP: NHDOT CLASS D.

CONSTRUCTION SPECIFICATIONS:

1) THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC AND RIP RAP SHALL BE CLEARED AND GRUBBED TO REMOVE ALL ROOTS, VEGETATION, AND DEBRIS AND PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS. THE EXISTING RETAINING WALL SHALL BE REMOVED.

2) EXCAVATE ANCHOR TRENCH, PLACE STABILIZATION FABRIC AND SECURE TO SUBGRADE WITH ANCHOR PINS. BACKFILL ANCHOR TRENCH WITH COMPACTED NATIVE SUBGRADE SOIL. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING PLACEMENT OF THE ROCK RIP RAP BY PLACING A CUSHION OF GRAVEL OVER THE FABRIC. 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 REPAIR OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.

3) SPREAD GRAVEL BLANKET UNIFORMLY TO DEPTH INDICATED.

4) RIP RAP: PLACE RIP RAP IMMEDIATELY FOLLOWING GRAVEL BLANKET INSTALLATION. LAY RIP RAP STONES INDIVIDUALLY UPWARD FROM THE TOE OF THE SLOPE, WITH LARGER STONES AT THE TOE OF THE SLOPE. FILL VOIDS WITH SPALLS. FINISHED SURFACE TO BE REASONABLY UNIFORM IN APPEARANCE, AND APPROXIMATELY PARALLEL TO AND WITHIN 6" OF THE LINES AND GRADES SHOWN OR ORDERED.

THE ROCK USED FOR RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.

STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE NHDOT CLASS D, CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT DISPLACEMENT OF THE UNDERLYING MATERIALS. HAND PLACEMENT MAY BE REQUIRED TO PREVENT DAMAGE TO ANY ADJACENT AREAS. STONES FOR RIP RAP SHALL BE ANGULAR OR SUBANGULAR. THE STONES SHOULD BE SHAPED SO THAT THE LEAST DIMENSION OF THE STONE FRAGMENT IS NOT LESS THAN ONE THIRD OF THE GREATEST DIMENSION OF THE FRAGMENT. FLAT ROCKS SHALL NOT BE USED FOR RIP RAP. VOIDS IN THE ROCK RIP RAP SHOULD BE FILLED WITH SPALLS AND SMALLER ROCKS.

- FIELDSTONE WALL, DRY LAID LOOK -

1/12 BATTER ON BOTH SIDES.

PROVIDE 2" WEEPS 6' O.C.

MORTARED CENTER



AMBIT ENGINEERING, INC.

Civil Engineers & Land Surveyors

200 Griffin Road - Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282

NOTES:

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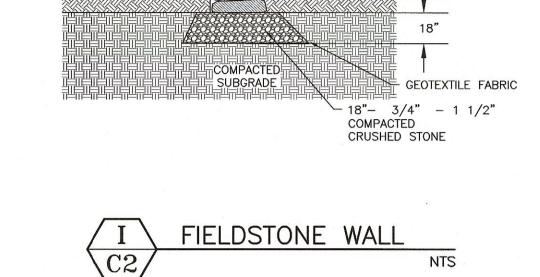
Fax (603) 436-2315

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3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

4) PURSUANT TO RSA 483-B:9 11 (D), NO FERTILIZER SHALL BE APPLIED TO VEGETATION OR SOILS LOCATED WITHIN 25 FEET OF THE REFERENCE LINE OF ANY PUBLIC WATER. BEYOND 25 FEET, SLOW OR CONTROLLED RELEASE FERTILIZER MAY BE USED. SLOW RELEASE NITROGEN MUST CONTAIN NO MORE THAN 2% PHOSPHORUS, AND A NITROGEN COMPONENT WHICH IS AT LEAST 50% SLOW RELEASE NITROGEN COMPONENTS.

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1:12 BATTER 1:12 BATTER





NOTES:

1) EXISTING CATCH BASIN (SEE SHEET C4) TO HAVE "ELIMINATOR" OIL AND FLOATING DEBRIS TRAP INSTALLED.

2) MANUFACTURED BY KLEANSTREAM (NO EQUAL).3) INSTALL DEBRIS TRAP TIGHT TO INSIDE OF STRUCTURE.

4) 1/4" HOLE SHALL BE DRILLED IN TOP OF DEBRIS

C3

"ELIMINATOR" OIL & FLOATING DEBRIS TRAP

SAW CUT TRANSVERSE CONTROL JOINTS

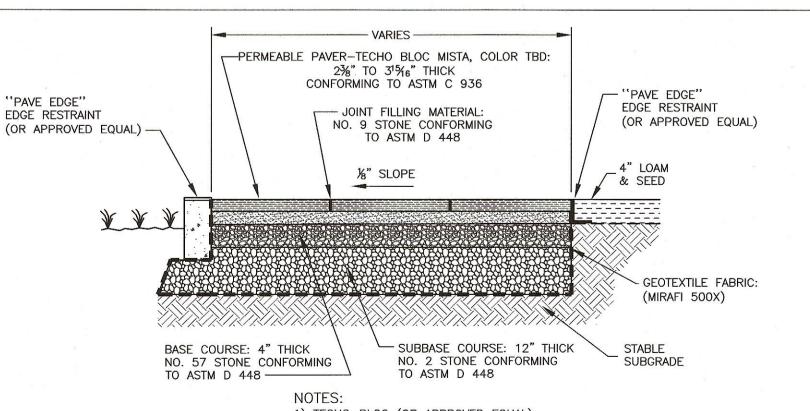
12" CRUSHED GRAVEL BASE
COURSE (NHDOT ITEM 304.3)

*FIBER: 100% VIRGIN POLYPROPYLENE SUCH AS GRACE MICROFIBER, ASTM C116, TYPE 111, PAR.4.1.3. OR EQUAL. APPLIED AT 1 LB. PER C.Y.

K CONCRETE WALKWAY/SLAB

C3

NTS



NOTES:

1) TECHO-BLOC (OR APPROVED EQUAL).

2) INSTALLED PER MANUFACTURERS INSTRUCTIONS.

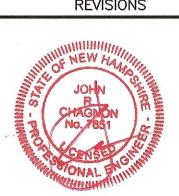
3) PEDESTRIAN TRAFFIC ONLY.

L TECHO-BLOC®POROUS PATIO

HARDSCAPE DESIGN & INSTALLATION
1-410-969-9260

PROPOSED HOUSING TBD NORTHWEST ST. PORTSMOUTH, NH

4	DETAILS E, J, L	1/3/22
3	DETAIL J	11/22/21
2	DETAIL I, J, K	10/27/21
1	DETAIL H	8/25/21
0	ISSUED FOR COMMENT	8/23/21
NO.	DESCRIPTION	DATE
	DEVISIONS	



SCALE: AS SHOWN

JUNE 2021

DETAILS

D2

FB 249 PG 70

2759.02



85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885 603.772.4746 - JonesandBeach.com

December 22, 2021

Portsmouth Planning Board Attn: Chairman of the Planning Board 1 Junkins Ave, Suite 3rd Floor Portsmouth, NH 03801

RE: Planning Board Submission 27 Shaw Road, Portsmouth, NH Tax Map 223, Lot 18 JBE Project No. 21222

Dear Chairman of the Planning Board,

We received TAC Approval with comments and are submitting revised plans to address those items. Review comments are listed below with our responses in bold.

GENERAL COMMENTS:

- Maintain front yard setbacks subject to zoning review.
 RESPONSE: Front yard setbacks are shown on the plan from the property lines as required.
- 2. Show detail of rain garden on lower lot (parent lot) including flowage rights and drainage easement.

RESPONSE: A detail of rain garden on lower lot has been added to sheet C2 and Note 15 on Sheet A1 addresses the flowage rights and drainage easement.

- 3. Show how proposed lot 2 will get power and show pole if needed.

 RESPONSE: In coordination with Eversource, a proposed utility pole is shown on Sheet C2 in the northeasterly most corner of the proposed Lot 18-1.
- 4. Show septic design/holding tank approval by DES.

 RESPONSE: A holding tank application has been submitted to NHDES and their review is pending.

Included with this response letter are the following:

1. One (1) Full Size Plan Set.

Thank you very much for your time.

Very truly yours,
JONES & BEACH ENGINEERS, INC.

Joseph Coronali

Joseph A. Coronati Vice President

cc: Clyde Logue (via email)



85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885 603.772.4746 - JonesandBeach.com

December 22, 2021

Portsmouth Planning Board Attn: Chairman of the Planning Board 1 Junkins Avenue, Suite 3rd Floor Portsmouth, NH 03801

RE: Waiver Request
27 Shaw Road, Portsmouth, NH
Tax Map 223, Lot 18
JBE Project No. 21222

Dear Chairman of the Planning Board,

Jones & Beach Engineers, Inc. respectfully submits a waiver request for the above-referenced parcel on behalf of our client, Clyde Logue.

Portsmouth Subdivision Regulations – Section VI.11 – Onsite Sewage Disposal Systems

We are asking for a waiver from the onsite sewage disposal systems requirement as the city has approved a sewer main to be constructed in Walker Bungalow Road. This proposed sewer main will provide the proposed Map 223 Lot 18-1 with a sewer service. In the interim while the sewer is being constructed, we are proposing to utilize a holding tank on site.

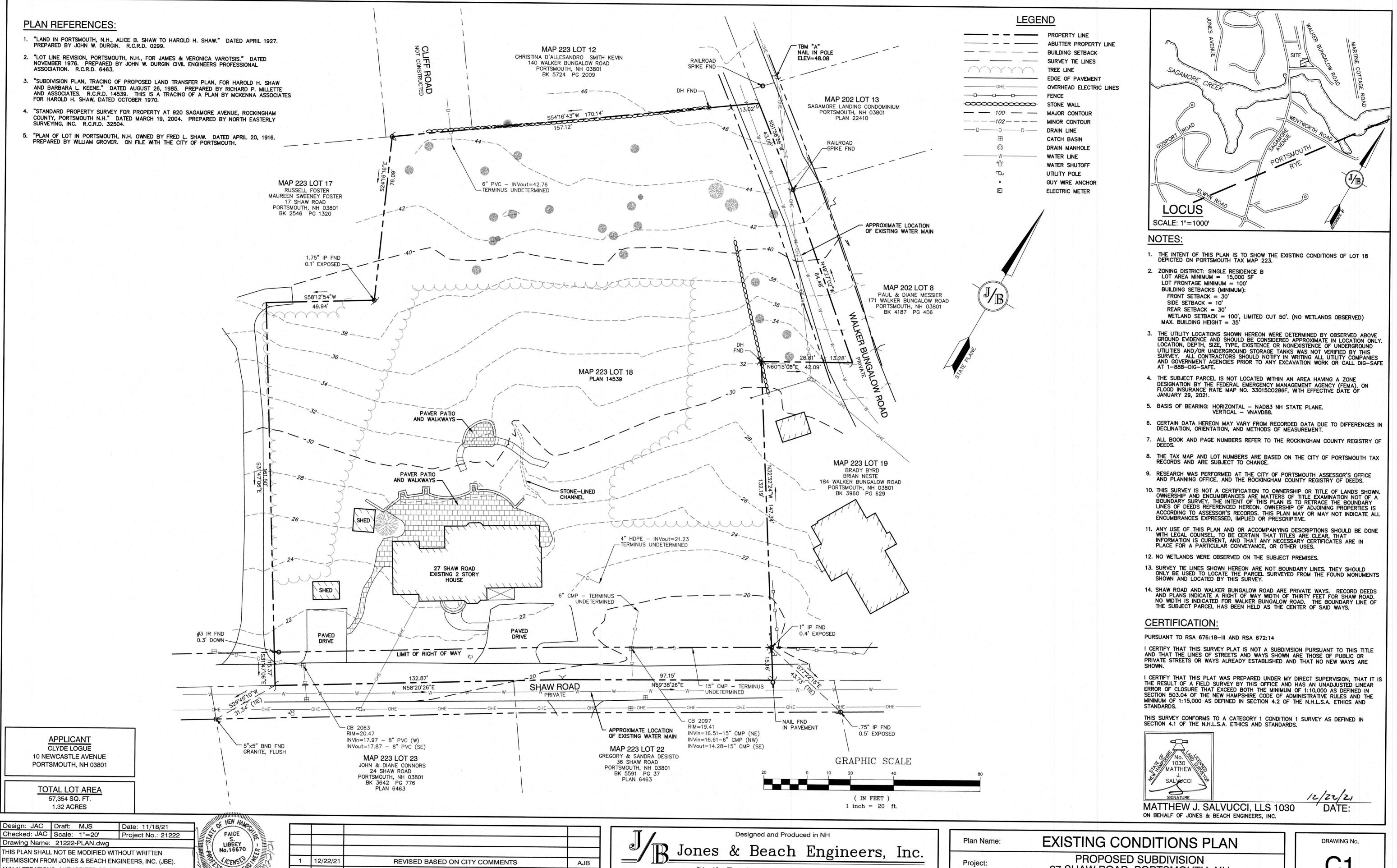
Thank you very much for your consideration. If you have any questions, or need further assistance, please contact our office.

Very truly yours,

JONES & BEACH ENGINEERS, INC.

Andrew Butler, EIT Project Engineer

cc: Clyde Logue (via email)



85 Portsmouth Ave. Civil Engineering Services

603-772-4746

Owner of Record:

FAX: 603-772-0227

E-MAIL: JBE@JONESANDBEACH.COM

ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE

AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

STONAL Y

0 11/22/21

DATE

REV.

ISSUED FOR REVIEW

REVISION

MJS

BY

PO Box 219

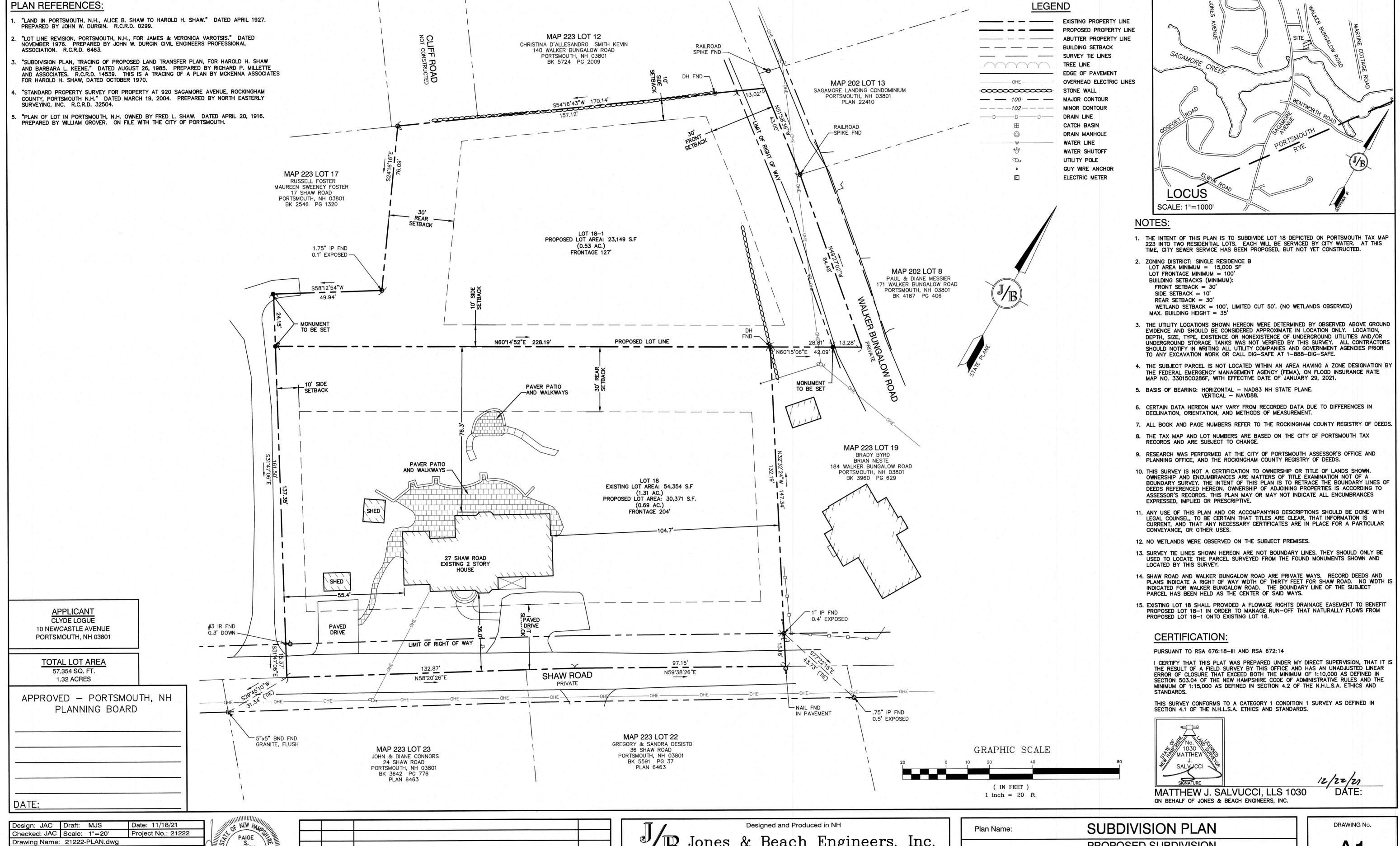
Stratham, NH 03885

SHEET 1 OF 3 JBE PROJECT NO. 21222

27 SHAW ROAD, PORTSMOUTH, NH

AUSTIN REPAIR & RENOVATION LLC BK 6349, PG 2486

4609 RIDGE OAK DRIVE, AUSTIN, TX 78731



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.

12/22/21 LICENSED LES 11/22/21 SIONAL DATE REV.

AJB REVISED BASED ON CITY COMMENTS ISSUED FOR REVIEW MJS BY REVISION

603-772-4746

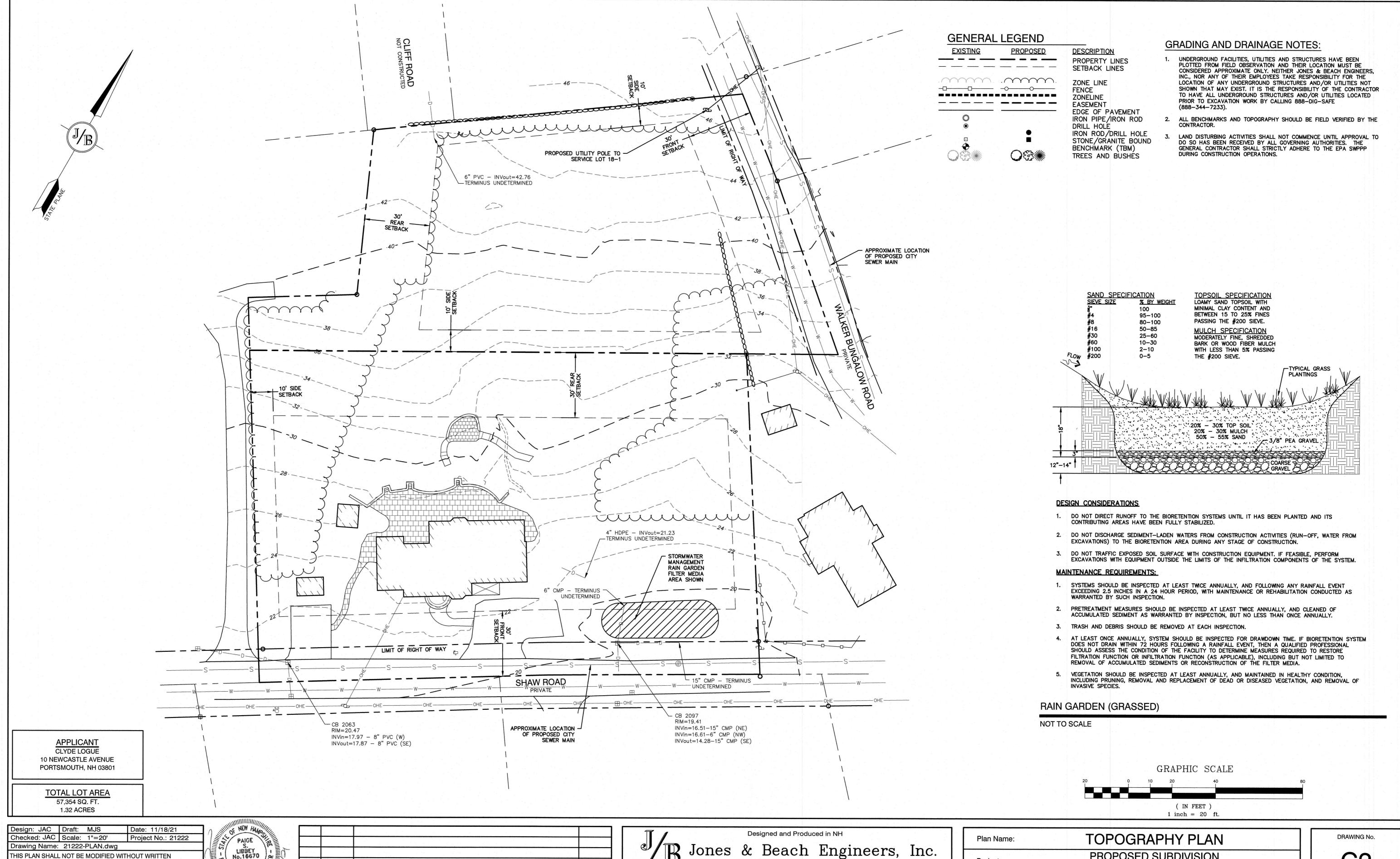
FAX: 603-772-0227

85 Portsmouth Ave. Civil Engineering Services PO Box 219 E-MAIL: JBE@JONESANDBEACH.COM Stratham, NH 03885

PROPOSED SUBDIVISION

Project: 27 SHAW ROAD, PORTSMOUTH, NH AUSTIN REPAIR & RENOVATION LLC BK 6349, PG 2486 Owner of Record: 4609 RIDGE OAK DRIVE, AUSTIN, TX 78731

SHEET 2 OF 3 JBE PROJECT NO. 21222



S. LIBBEY No.16670 CENSE NO SIONAL

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.

12/22/21 REVISED BASED ON CITY COMMENTS AJB 0 11/22/21 ISSUED FOR REVIEW MJS REV. DATE REVISION

85 Portsmouth Ave. Civil Engineering Services

PO Box 219

Stratham, NH 03885

603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Project:

Owner of Record:

PROPOSED SUBDIVISION 27 SHAW ROAD, PORTSMOUTH, NH AUSTIN REPAIR & RENOVATION LLC BK 6349, PG 2486

4609 RIDGE OAK DRIVE, AUSTIN, TX 78731

SHEET 3 OF 3 JBE PROJECT NO. 21222



Civil Site Planning Environmental Engineering

133 Court Street Portsmouth, NH 03801-4413

December 29, 2021

Peter Britz, Interim Planning Director City of Portsmouth Municipal Complex 1 Junkins Avenue Portsmouth, New Hampshire 03801

Re: Application for Site Plan Review Assessor's Map 201, Lot 2 960 Sagamore Avenue Altus Project No. 5079

Dear Peter,

On behalf of the Applicant, Sagamore Corner, LLC, Altus Engineering, Inc. respectfully submits the attached application material for the redevelopment of the former Golden Egg site at 960 Sagamore Avenue. The Proposed development will consist of a new six (6) unit building and a five (5) exterior stall visitor parking lot to serve the new building. Parking for the residents will be located on the garage level of the building. The existing paved parking lot along Sagamore Avenue will be removed and access will be provided from Sagamore Grove. This will eliminate the head-in parking from Sagamore Avenue, which improve traffic operations and reduce conflicts along Sagamore Avenue. The majority of the new parking lot and driveway will be constructed with porous pavement and a sub-surface treatment system will be constructed to treat and manage the stormwater from the roof. There will be a reduction of over 8,400 square feet of paved and gravel area impervious areas.

On December 7, 2021, the project team met with the Technical Advisory Committee (TAC), who voted to recommend approval with seven (7) stipulations. The stipulations are listed below with the comments on how the comments have been or will be addressed for the approval.

Label address in the title block of the CUP plan.
 Response: The title block has been revised to include the property address.

2. The UG electrical service should be drawn to go from the pole to the building directly. Response: The UG electric service has been re-drawn to go directly from the pole.

Tel: (603) 433-2335 E-mail: Altus@altus-eng.com

3. Applicant should coordinate with DPW on viable water source prior to building permit issuance.

Response: The applicant has coordinated with DPW and water service will be provided directly from the main in Sagamore Avenue. Separate connections swill be required for domestic and fire services.

4. DES approval of holding tank

Response: Notes are added to the plan that DES approval is required if the holding tank is required to be installed.

5. Fire service plan.

Response: A Fire sieve plan will be submitted for the building permit application.

6. The natural stone finish of the proposed retaining wall shall be finalized and reviewed by the Planning Department prior to approval by the Planning Board

Response: The owner is working with the Planning Department to determine to finish stone for the retaining wall.

7. The proposed community storage room in the basement level shall be reduced in size in order to support egress from parking space #10.

Response: The community storage room has been reduced in size to support egress as requested.

On December 8, 2021, the project team met with the Conservation Commission, who also voted to recommend approval.

8. The applicant shall include signage to demonstrate delineation that there is a sensitive resource/wetland area beyond the 10x10 patio area.

Response: Signage has been added to the plan to indicate "Sensitive Resource Area / Wetland Buffer" in the area of the patio.

9. Along the existing stonewall and existing tree line beyond the proposed patio the applicant shall include additional buffer plantings.

Response: The Landscape Plan (Sheet L-1) has been revised to include additional plantings to provide a native plan buffer, which consists of a combination of ferns as groundcover, Winterberry (12), and one small Amelanchier.

5079 – 960 Sagamore Ave Page 2 of 3 Enclosed please find the following items for consideration at the January 19th Planning Board Meeting:

- Letter of Authorization (Applicant to Altus)
- Full sized sets of Site Plans
- Wetlands Conditional Use Plan
- "Green" Statement
- Average Grade Plane Worksheets
- Profiles worksheet
- Wetlands and Buffer Evaluation
 - Wetlands Letter
 - NHD Data Review
- Drainage Report
 - o Stormwater Inspection and Maintenance Manual
- Traffic Impact Study (by VAI)
- Septic Approval Plan (The Wright Choice, 2011)
- Site Pictures
- Sitework Cost Estimate
- Site Review Checklist
- Letter of Decision Technical Advisory Committee, dated December 14, 2021.
- Letter of Decision Conservation Commission, dated December 20, 2021.

Please call me if you have any questions or need any additional information.

Sincerely,

ALTUS ENGINEERING, INC.

Cory D. Belden, PE

Associate Principal

ebs/5079-APP-PB-CovLtr-122921.docx

Enclosures

eCopy: Eric Katz, Sagamore Corner, LLC

5079 – 960 Sagamore Ave Page 3 of 3



CITY OF PORTSMOUTH

Planning Department 1 Junkins Avenue Portsmouth, New Hampshire 03801 (603) 610-7216

TECHNICAL ADVISORY COMMITTEE

December 14, 2021

Sagamore Corner LLC 273 Corporate Dr, Suite 150 Portsmouth, NH 03801

RE: Site Plan approval for property located at 960 Sagamore Avenue (LU-21-204)

Dear Owner:

The Technical Advisory Committee, at its regularly scheduled meeting of Tuesday, December 7, 2021, considered your application for Site Plan Approval to demolish the existing mixed use structure and construct a 6-unit residential structure totaling 21,066 square feet of gross floor area, 21 parking spaces as well as associated utilities, lighting, landscaping, and site improvements. Said property is shown on Assessor Map 201, Lot 2 and lies within the Mixed Residential Business (MRB) District. As a result of said consideration, the Committee voted to recommend approval to the Planning Board with the following stipulations:

- 1. Label address in the title block of the CUP plan.
- 2. The UG electrical service should be drawn to go from the pole to the building directly.
- 3. Applicant should coordinate with DPW on viable water source prior to building permit issuance.
- 4. DES approval of holding tank.
- 5. Fire service plan.
- 6. The natural stone finish of the proposed retaining wall shall be finalized and reviewed by the Planning Department prior to approval by the Planning Board.
- 7. The proposed community storage room in the basement level shall be reduced in size in order to support egress from parking space #10.

This matter will be placed on the agenda for the Planning Board meeting scheduled for **Thursday, January 20, 2021**. One (1) hard copy of all plans and supporting reports and exhibits as well as an updated electronic file (in a PDF format) must be filed in the Planning Department and uploaded to the online permit system no later than **Wednesday, December 29, 2021**.

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

Very truly yours,

OF PORTSMOUTH

CITY OF PORTSMOUTH

Planning Department 1 Junkins Avenue Portsmouth, New Hampshire 03801 (603) 610-7216

CONSERVATION COMMISSION

December 20, 2021

Sagamore Corner LLC 273 Corporate Dr, Suite 150 Portsmouth, NH 03801

RE: Wetland Conditional Use Permit Application for property located at 960 Sagamore Avenue (LU-21-204)

Dear Owner:

The Conservation Commission, at its regularly scheduled meeting of **Wednesday**, **December 08**, **2021**, considered your application for a wetland conditional use permit according to section 10.1017.5 of the Zoning ordinance to impact 1,100 square feet of wetland buffer for grading and to remove 750 square feet of impervious surface in the wetland buffer and construct a new 100 square foot porous paver patio.. Said property is shown on Assessor Map 201, Lot 2 and lies within the Mixed Residential Business (MRB) District. As a result of said consideration, the Commission voted to recommend approval of the Wetland Conditional Use Permit Application to the Planning Board with the following stipulations.

- 1. The applicant shall include signage to demonstrate delineation that there is a sensitive resource/wetland area beyond the 10x10 patio area.
- 2. Along the existing stonewall and existing tree line beyond the proposed patio the applicant shall include additional buffer plantings.

This matter will be placed on the agenda for the Planning Board meeting scheduled for **Thursday**, **January 20**, **2021**. One (1) hard copy of any revised plans and/or exhibits as well as an updated electronic file (in a PDF format) must be filed in the Planning Department and uploaded to the online permit system no later than Wednesday, December 29, 2021.

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

Very truly yours,

Barbara McMillan, Chair

Conservation Commission

Barbara McMillen

Letter of Authorization

I, Eric S. Katz, Manager of Sagamore Corner, LLC, hereby authorize Altus Engineering, Inc. of Portsmouth, New Hampshire to represent Sagamore Corner, LLC in all matters concerning engineering and related permitting for the development of property at 960 Sagamore Avenue in Portsmouth, NH. The property is identified on the Assessor's Maps as Tax Map 201, Lot 2. This authorization shall include any signatures required for Federal, State and Municipal permit applications.

Signature

Print Name

/////a/ Date

Witness

Print Name

Date

PAY TO THE CITY of Portamenth NH 30901 603.433.2335

PAY TO THE ORDER OF LAND NINEER THOUSAND NINEETY - FIVE AND Who DOLLARS MAD POLLARS MEMO PSO79 - Site Review Apply.

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Altus Engineering, Inc.

9426



Site Planning
Environmental
Engineering

| 133 Court Street |
| Portsmouth, NH |
| (603) 433-2335

Site Plan Application Fee Calculation 960 Sagamore Avenue Multi-Family Residential Development Altus Project #5079

Per Portmouth Fee Schedule Effective 07/01/21 - 06/30/22

\$500 Base Fee Plus \$5 per \$1,000 Site Costs Plus \$10 per 1000 Site Development Area

Total Fee Not the Exceed \$15,000

		Total Fee:	\$ 3,095.00
Site Development Area:		26,500	\$ 270.00
Wetlands CUP	(>	1,000 sf dist)	\$1,000
Site Costs:	\$	265,000.00	\$ 1,325.00
Base Fee:			\$ 500.00

^{*} Not including public and abutter notifications.



Site Planning
Environmental
Engineering

| 133 Court Street
| Portsmouth, NH |
| (603) 433-2335

960 Sagamore Avenue Portsmouth, NH Engineer's Opinion of Cost

(November 22, 2021 Plan Set)

PROJECT: 5079

Est. Qty	Unit	ITEM DESCRIPTION &	Cos	t/Unit	Total	
1	LS	Site Demolition	\$	30,000.00	\$	30,000.00
1	LS	Clearing, Grubbing and Loam Stripping	\$	5,000.00	\$	5,000.00
45	TON	Hot Bituminous Pavement	\$	90.00	\$	4,050.00
40	TON	Porous Pavement	\$	130.00	\$	5,200.00
240	CY	Gravels	\$	40.00	\$	9,600.00
1	EA	Concrete Pad	\$	2,000.00	\$	2,000.00
1,250	SF	Modular Block Retaining Wall	\$	50.00	\$	62,500.00
200	LF	4" PE Underdrain	\$	25.00	\$	5,000.00
240	LF	8" PE Pipe (smooth interior)	\$	30.00	\$	7,200.00
115	LF	12" PE Pipe (smooth interior)	\$	40.00	\$	4,600.00
4	EA	Drainage Structure	\$	3,000.00	\$	12,000.00
1	EA	Trench Drain	\$	2,500.00	\$	2,500.00
1	EA	Reconstruct Drainage Structure (Curb Inlet)	\$	1,500.00	\$	1,500.00
90	LF	24" Perforated Stormwater Chamber	\$	80.00	\$	7,200.00
1	EA	Septic Holding Tank	\$	15,000.00	\$	15,000.00
3	EA	Bollards	\$	200.00	\$	600.00
220	LF	Vertical Granite Curb	\$	55.00	\$	12,100.00
20	LF	6" SDR 35 Sewer Pipe	\$	45.00	\$	900.00
80	LF	4" D.I. Water Pipe	\$	50.00	\$	4,000.00
90	LF	6" D.I. Water Pipe	\$	60.00	\$	5,400.00
2	EA	Traffic Sign Type C	\$	100.00	\$	200.00
26	LF	Wood Beam Guardrail	\$	75.00	\$	1,950.00
1	LS	Site Elctrical (Incl Generator)	\$	20,000.00	\$	20,000.00
1	LS	Lighting	\$	5,000.00	\$	5,000.00
1	LS	Site Gas (Incl Propane Tank)	\$	15,000.00	\$	15,000.00
1	EA	Concrete Base and Light Pole	\$	3,000.00	\$	3,000.00
1	LS	Misc. Temp. Erosion and Sediment Control	\$	3,000.00	\$	3,000.00
100	SF	Porous Paver (Patio)	\$	25.00	\$	2,500.00
1	LS	Loam and Seed	\$	8,000.00	\$	8,000.00
1	LS	Planted Landscape	\$	10,000.00	\$	10,000.00

**SUBTOTAL: \$ 265,000.00

** Exclusions:

Ledge Removal, Hazardous Waste Remediation, Traffic Control, Offsite Work, Site Construction Monitoring and Reporting



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. 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 Owner/	Applicant: Sagamore	Corner LLC	Date Submitted:	11/22/21
	603-427-5100			tz companies, com
Site Address:	960 Sugamore	Auc	Ma	p: <u>Z01</u> Lot: <u>Z</u>
Zoning District:	MRB	Lot area:	12,929 sq. ft.	

	Application Requirements				
\square	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)	Waiver Requested		
X	Fully executed and signed Application form. (2.5.2.3)	Viewpoint (UP)	N/A		
X	All application documents, plans, supporting documentation and other materials provided in digital Portable Document Format (PDF). (2.5.2.8)	VP	N/A		

	Site Plan Review Application Required Information				
Ø	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested		
X	Statement that lists and describes "green" building components and systems. (2.5.3.1A)	Green Statement			
X	Gross floor area and dimensions of all buildings and statement of uses and floor area for each floor. (2.5.3.1B)	VP	N/A		
X	Tax map and lot number, and current zoning of all parcels under Site Plan Review. (2.5.3.1C)	Site Plan, C-Z	N/A		
X	Owner's name, address, telephone number, and signature. Name, address, and telephone number of applicant if different from owner. (2.5.3.1D)	VP, Cover Sheet	N/A		

	Site Plan Review Application Required Information					
Ø	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested			
X	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. (2.5.3.1E)	Existing Conditions Plan, 3 sheets	N/A			
区	Names, addresses and telephone numbers of all professionals involved in the site plan design. (2.5.3.1F)	Cover Sheet	N/A			
X	List of reference plans. (2.5.3.1G)	Existing Conditions Plan, 1 of 3	N/A			
X	List of names and contact information of all public or private utilities servicing the site. (2.5.3.1H)	Utilities Plan, 6-4	N/A			

	Site Plan Specifications					
Ø	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested			
Ø	Full size plans shall not be larger than 22 inches by 34 inches with match lines as required, unless approved by the Planning Director. Submittals shall be a minimum of 11 inches by 17 inches as specified by Planning Dept. staff. (2.5.4.1A)	Required on all plan sheets	N/A			
X	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			
X	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			
X	Plans shall be drawn to scale. (2.5.4.1D)	Required on all plan sheets	N/A			
X	Plans shall be prepared and stamped by a NH licensed civil engineer. (2.5.4.1D)		N/A			
Ņ	Wetlands shall be delineated by a NH certified wetlands scientist and so stamped. (2.5.4.1E)	Existing Conditions 1 of 3, note 6	N/A			
X	Title (name of development project), north point, scale, legend. (2.5.4.2A)	Cover Sheet, Site Plus	N/A			
X	Date plans first submitted, date and explanation of revisions. (2.5.4.2B)	Title block	N/A			
X	Individual plan sheet title that clearly describes the information that is displayed. (2.5.4.2C)	Required on all plan sheets	N/A			
A	Source and date of data displayed on the plan. (2.5.4.2D)		N/A			

	Site Plan Specifications		
Ø	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
X	A note shall be provided on the Site Plan stating: "All conditions on this Plan shall remain in effect in perpetuity pursuant to the requirements of the Site Plan Review Regulations." (2.5.4.2E)	Site Plan, C-2	N/A
Ø	Plan sheets submitted for recording shall include the following notes: a. "This Site Plan shall be recorded in the Rockingham County Registry of Deeds." b. "All improvements shown on this Site Plan shall be constructed and maintained in accordance with the Plan by the property owner and all future property owners. No changes shall be made to this Site Plan without the express approval of the Portsmouth Planning Director." (2.13.3)	Site Plan, C-Z	N/A
3	Plan sheets showing landscaping and screening shall also include the following additional notes: a. "The property owner and all future property owners shall be responsible for the maintenance, repair and replacement of all required screening and landscape materials." b. "All required plant materials shall be tended and maintained in a healthy growing condition, replaced when necessary, and kept free of refuse and debris. All required fences and walls shall be maintained in good repair." c. "The property owner shall be responsible to remove and replace dead or diseased plant materials immediately with the same type, size and quantity of plant materials as originally installed, unless alternative plantings are requested, justified and approved by the Planning Board or Planning Director." (2.13.4)	Landscape Plan Sheet L-1	N/A

	Site Plan Specifications – Required Exhibit		
Ø	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
	1. Existing Conditions: (2.5.4.3A)	Existing Conditions	
Ø	a. Surveyed plan of site showing existing natural and built features;	1+	
X	b. Zoning boundaries;		
区	c. Dimensional Regulations;		
Ø	d. Wetland delineation, wetland function and value assessment;	1.5	
	e. SFHA, 100-year flood elevation line and BFE data.	N/A	
	2. Buildings and Structures: (2.5.4.3B)		
Ø	Plan view: Use, size, dimensions, footings, overhangs, 1st fl. elevation;	Site Plan, Elevations	
XI.	 Elevations: Height, massing, placement, materials, lighting, façade treatments; 	Elevations, Lighting	
M	c. Total Floor Area;	Elevations	
X	d. Number of Usable Floors;	Elevations	
区	e. Gross floor area by floor and use.	Elevations	
	3. Access and Circulation: (2.5.4.3C)	Site Plan	
区	a. Location/width of access ways within site;	11	
区	 Location of curbing, right of ways, edge of pavement and sidewalks; 	1,4	
Ø	 Location, type, size and design of traffic signing (pavement markings); 		
	d. Names/layout of existing abutting streets;	1)	
¥	e. Driveway curb cuts for abutting prop. and public roads;	', r	
	If subdivision; Names of all roads, right of way lines and easements noted;	N/A	
	 g. AASHTO truck turning templates, description of minimum vehicle allowed being a WB-50 (unless otherwise approved by TAC). 		
_	4. Parking and Loading: (2.5.4.3D)		
	 Location of off street parking/loading areas, landscaped areas/buffers; 	N/A	
図	b. Parking Calculations (# required and the # provided).	Site Plan	
	5. Water Infrastructure: (2.5.4.3E)	21.0	
D	Size, type and location of water mains, shut-offs, hydrants & Engineering data;	Utilities Plan	
	 b. Location of wells and monitoring wells (include protective radii). 	N/A	
	6. Sewer Infrastructure: (2.5.4.3F)	1	
X	 Size, type and location of sanitary sewage facilities & Engineering data. 	Utilities Plan	
	7. Utilities: (2.5.4.3G)		
M	 The size, type and location of all above & below ground utilities; 	Utilities Plan	
	 Size type and location of generator pads, transformers and other fixtures. 	Utilities Plan	

Ø	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
	8. Solid Waste Facilities: (2.5.4.3H)		
V	 The size, type and location of solid waste facilities. 	Utrlitres Plan	
	9. Storm water Management: (2.5.4.3I)		
図	 The location, elevation and layout of all storm-water drainage. 	Grading & Drainage Plan	
	10. Outdoor Lighting: (2.5.4.3J)	3 1,00 1,00	
×	 a. Type and placement of all lighting (exterior of building, parking lot and any other areas of the site) and; b. photometric plan. 	Lighting Plan, 5-1	
×	11. Indicate where dark sky friendly lighting measures have been implemented. (10.1)	11	
	12. Landscaping: (2.5.4.3K)		
X	 Identify all undisturbed area, existing vegetation and that which is to be retained; 	Landscape Plan, L-1	
	 b. Location of any irrigation system and water source. 	N/A	
	13. Contours and Elevation: (2.5.4.3L)		
X	 Existing/Proposed contours (2 foot minimum) and finished grade elevations. 	Grading & Drainage	
	14. Open Space: (2.5.4.3M)		
X	 Type, extent and location of all existing/proposed open space. 	Landscape flan	
	 All easements, deed restrictions and non-public rights of ways. (2.5.4.3N) 	Existing Conditions Plans, 3 shts	
X	Location of snow storage areas and/or off-site snow removal. (2.5.4.30)	Site Plan, C-Z	
	 Character/Civic District (All following information shall be included): (2.5.4.3Q) 	N/A	
	a. Applicable Building Height (10.5A21.20 & 10.5A43.30);		
	 Applicable Special Requirements (10.5A21.30); 		
	 Proposed building form/type (10.5A43); 		
	d. Proposed community space (10.5A46).		

	Other Required Information					
Ø	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested			
X	Traffic Impact Study or Trip Generation Report, as required. (Four (4) hardcopies of the full study/report and Six (6) summaries to be submitted with the Site Plan Application) (3.2.1-2)	Traffic Impact Study (by VAI)				
X	Indicate where Low Impact Development Design practices have been incorporated. (7.1)	Green Statement				
	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)	A/A				
×	Indicate where measures to minimize impervious surfaces have been implemented. (7.4.3)	Green Statement				
Z	Calculation of the maximum effective impervious surface as a percentage of the site. (7.4.3.2)	Drainage Report				
X	Stormwater Management and Erosion Control Plan. (Four (4) hardcopies of the full plan/report and Six (6) summaries to be submitted with the Site Plan Application) (7.4.4.1)	Drainage Report, Stornwater Manual Grading & Drainage Pl	an			

Ø	Final Site Plan Approval Required Info	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
X	All local approvals, permits, easements and licenses required, including but not limited to: a. Waivers; b. Driveway permits; c. Special exceptions; d. Variances granted; e. Easements; f. Licenses. (2.5.3.2A)	Site Plan table Sheet C-Z	
X	Exhibits, data, reports or studies that may have been required as part of the approval process, including but not limited to: a. Calculations relating to stormwater runoff; b. Information on composition and quantity of water demand and wastewater generated; c. Information on air, water or land pollutants to be discharged, including standards, quantity, treatment and/or controls; d. Estimates of traffic generation and counts pre- and post-construction; e. Estimates of noise generation; f. A Stormwater Management and Erosion Control Plan; g. Endangered species and archaeological / historical studies; h. Wetland and water body (coastal and inland) delineations; i. Environmental impact studies.	Drainage Report, Traffic Impact Study, wetland and Buffer Evalvation, NHD data check	

Ø	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
	A document from each of the required private utility service providers indicating approval of the proposed site plan and indicating an ability to provide all required private utilities to the site. (2.5.3.2D)	Pending	
X	A list of any required state and federal permit applications required for the project and the status of same. (2.5.3.2E)	NHDES Wetlands/ Shoreland Permit	

VIEW FROM SAGAMORE AVENUE - WESTSIDE



VIEW FROM SAGAMORE GROVE - NORTHSIDE



VIEW OF BACKYARD - NORTHSIDE



VIEW OF EAST BACKYARD - EASTSIDE



VIEW OF REAR OF EXISTING BUILDING - NORTHSIDE



VIEW OF SIDE YARD - SOUTHSIDE





"Green" Statement MULTI-FAMILY RESIDENTIAL DEVELOPMENT

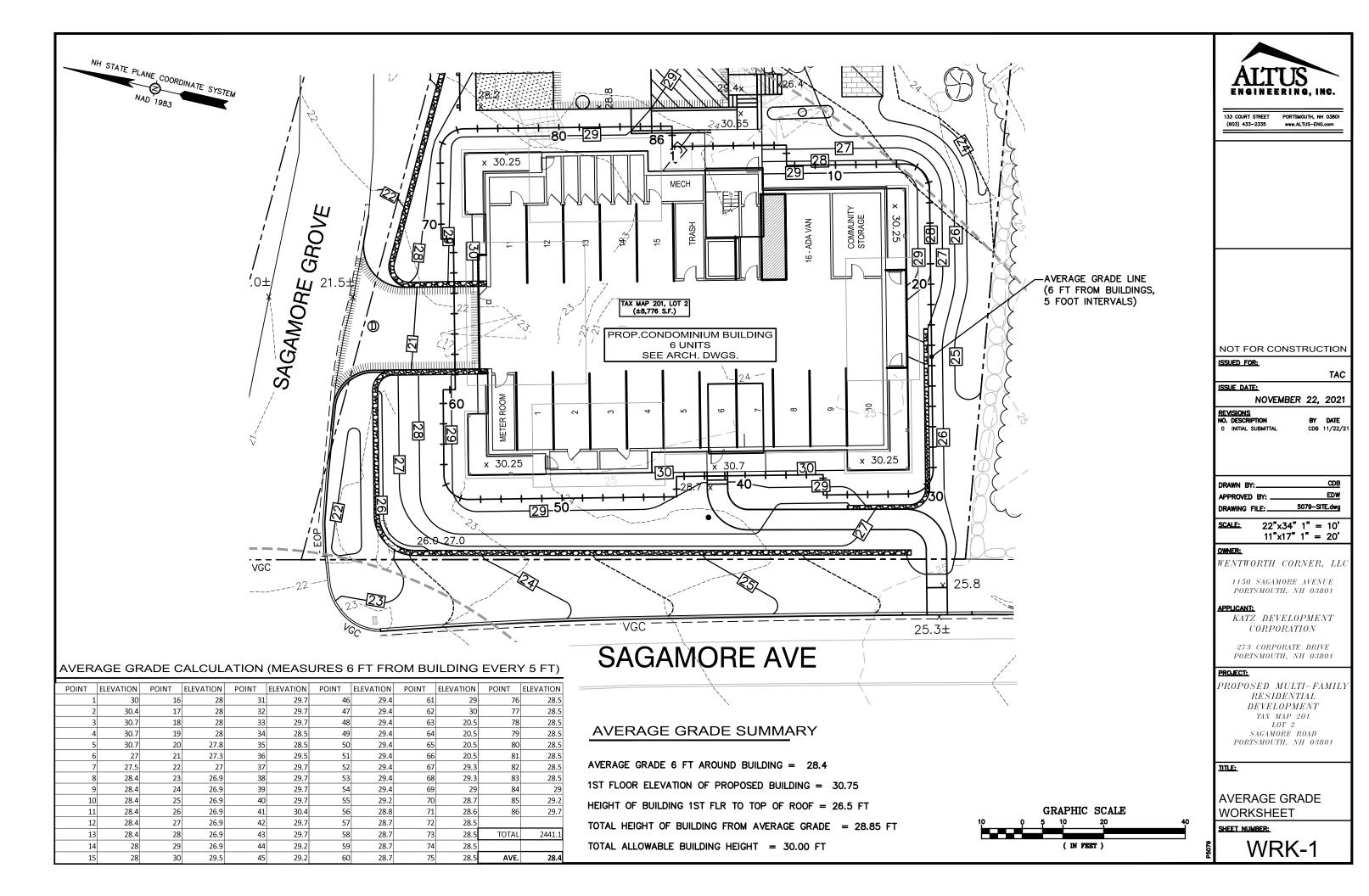
Assessor's Map 201, Lot 2 960 Sagamore Avenue Altus Project 5079

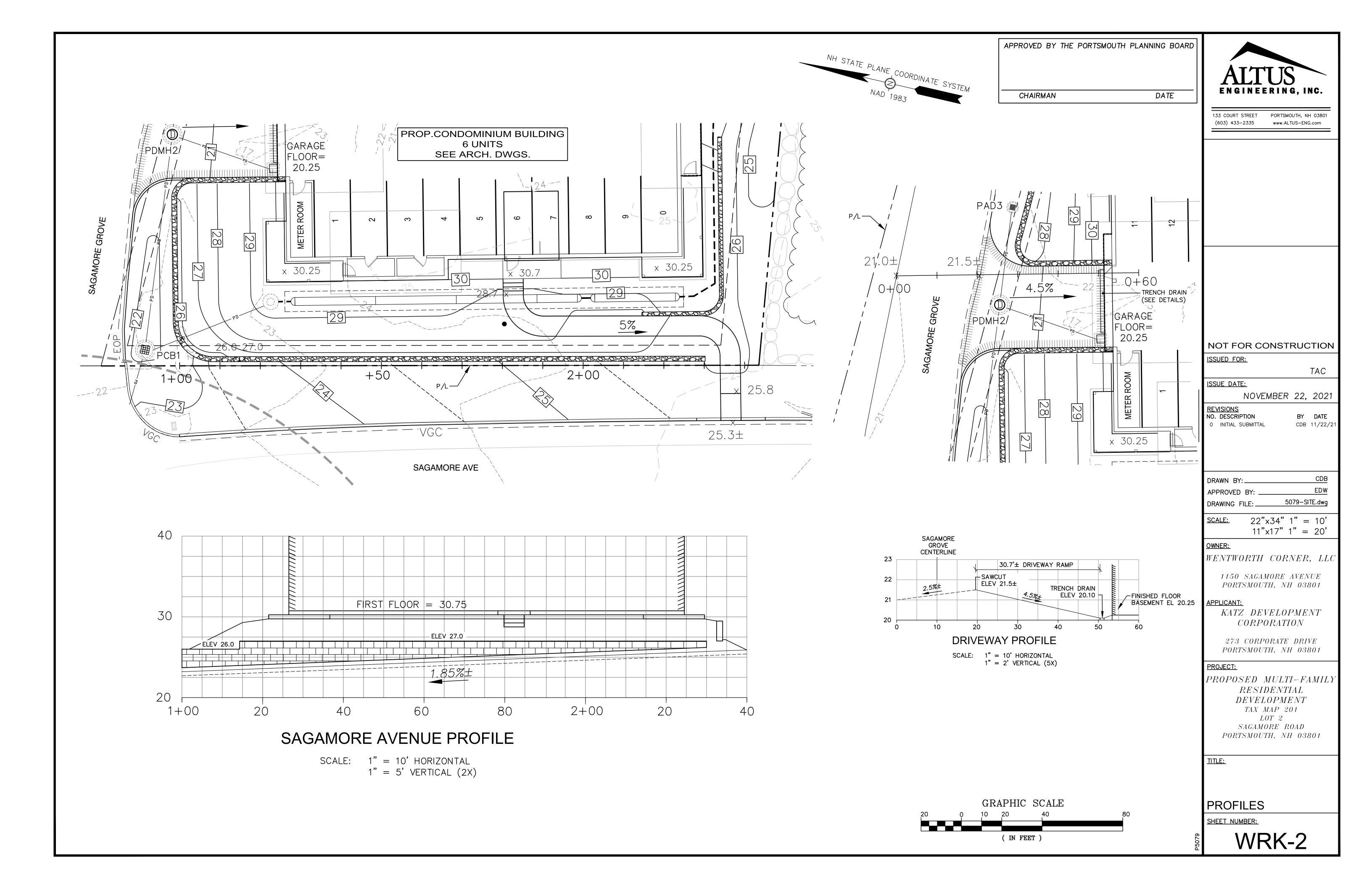
Pursuant to Section 2.5.3.1(a) of the Site Plan Review Regulations, Altus Engineering, Inc. respectfully submits the following list of the project's "green" components for the redevelopment of the former Golden Egg restaurant site to construct a new 6-Unit multi-family residential building at 960 Sagamore Avenue:

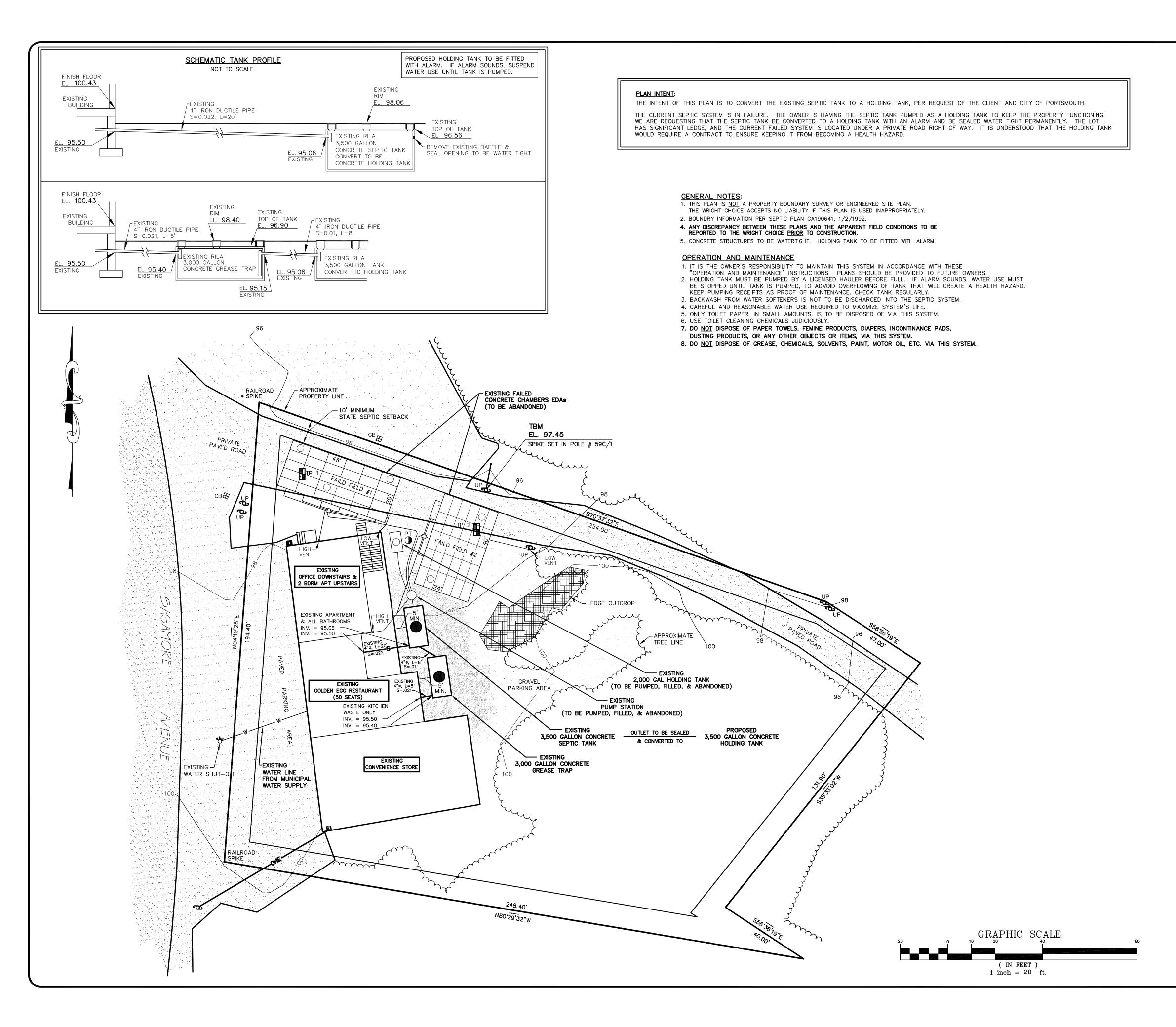
- The existing impervious areas will be decreased by over 6,600 square feet and over 8,400 square feet including the porous pavement area. This will reduce the heat island effect, reduce runoff, and improve the surface water quality.
- The existing site has approximately 26 exterior surface parking stalls to accommodate a restaurant, retail store, and apartment. The proposed development will have all resident parking in the basement garage and only 5 exterior surface visitor parking stalls. This reduces the site impervious and improves stormwater runoff quality.
- The proposed site lighting will have LED fixtures. The light will be mounted at a maximum height of 14-feet. The lights will be dark sky friendly and will exceed the minimum City requirements.
- The existing wetland buffer will have approximately 750 sf of gravel parking area removed. There will be no new impervious surfaces in the 100 ft wetland buffer.
- The existing mature trees along Sagamore Grove will be preserved where possible.
- A robust planting plan and increased green space is proposed to reduce heat island effects.
- The proposed development will have an interior bicycle rack and moped storage area.
- The existing site was constructed prior to stormwater treatment or detention design considerations. Runoff from the site currently discharge directly into the closed drainage system that discharges to Sagamore Creek, or the wetland in the rear of the property. The proposed stormwater management design will treat the runoff with a sub-surface chamber system and porous pavement to reduce the peak rates of runoff to improve the stormwater quality discharge.

Peter Britz, Interim Planning Director November 22, 2021 Page 2

- Low Impact Development (LID) has been used for the proposed site development by incorporating basement level parking, porous pavement surfaces, and stormwater retentions and treatment facilities. The impervious areas are reduced by over 8,400 square feet and peak storm runoff for the 10 year storm event is reduced by 29% for the developed area of the parcel.
- The obsolete building will be replaced with a new building code compliant building with components that will meet or exceed all applicable energy codes.
- The new building will meet or exceed all applicable current energy codes.
- Electric vehicle charging stations will be provided in the garage basement for the residents of the new building.







Test Pit: 1 Designer: Others Job # 11-0136

Date: 10/16/1991 0" — 84" No predominant color, very gravelly sandy loam, massive, friable Large stones starting at 72"

Estimated Seasonal High Water Table: None, Observed Water: None

Restrictive: None, Refusal: None Note: Test Pit from approved septic design <u>CA190641</u>, 1/2/1992 & installed 5/10/1996

Test Pit: 2 Designer: Others Job # 11-0136

Witness: None Date: 10/16/1991 0" - 6" 2.5 Y 6/4, Light yellowish brown, gravelly sand, no structure

6" - 13" 10 YR 6/8, Brownish yellow, medium sand, no structure

13" - 27" 2.5 Y 4/4, Olive brown, gravelly sand, no structure 27" - 50" 5 Y 6/3, Pale olive, gravelly silt loam, no structure 50" - 96" 2.5 Y 6/4, Light yellowish brown, medium sand, no structure

Estimated Seasonal High Water Table: None, Observed Water: None Restrictive: None, Refusal: None

Note: Test Pit from approved septic design <u>CA190641</u>, 1/2/1992 & installed 5/10/1996 Percolation Test:

Designer: Others Witness: None Date: 10/16/1991

Percolation Rate: 2 mins/inch

HOLDING TANK SIZE: EXISTING: <u>3,500</u> GALLON

[NOTE: PER PUMPER, EXISTING TANK IS IN GOOD CONDITION]

DESIGN NOTES:

FOUNDATION DRAINS: NONE NEAREST ABUTTING WELL: OVER 75' NEAREST POORLY DRAINED WETLAND: OVER 75'

NEAREST VERY POORLY DRAINED WETLAND: OVER 75'
NEAREST SURFACE WATER: OVER 75'

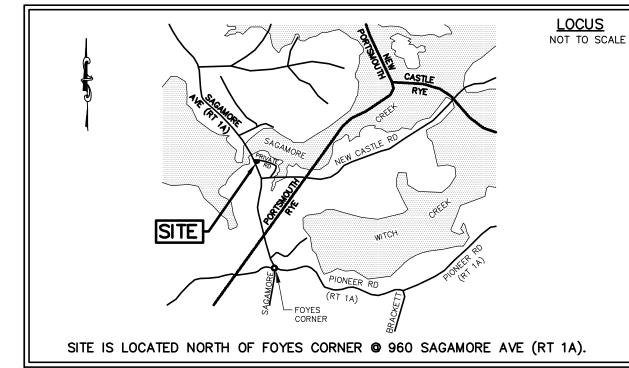
LOT LOADING BY SOILS:

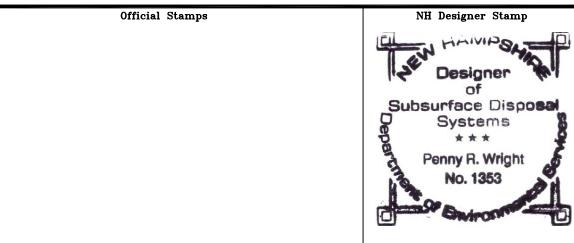
140B - HOLLIS (GROUP 4B) = 1,379 GPD/ACRE \mathbf{x} 1.01 ACRES = 1,392 GPD

TOTAL ALLOWED = 1,392 GPD EXISTING USE = 1.430 GPD

PER REAL WATER METER READINGS: (FROM CA190641 APPROVED PLANS)

YEARLY CONSUMPTION = $\underline{69,800}$ cubic feet/year x 7.48 gallons/cubic feet = $\underline{522,104}$ gallons/year EXISTING DAILY CONSUMPTION = 522,104 gallons/year / 365 days/year = 1.430 GPD





SUBSURFACE SEWAGE DISPOSAL SYSTEM FOR

THE GOLDEN EGG

GOSSELIN LIVING TRUST / THOMAS GOSSELIN, TRUSTEE 960 SAGAMORE AVE PORTSMOUTH, NH 03801

TAX MAP 201, LOT 2

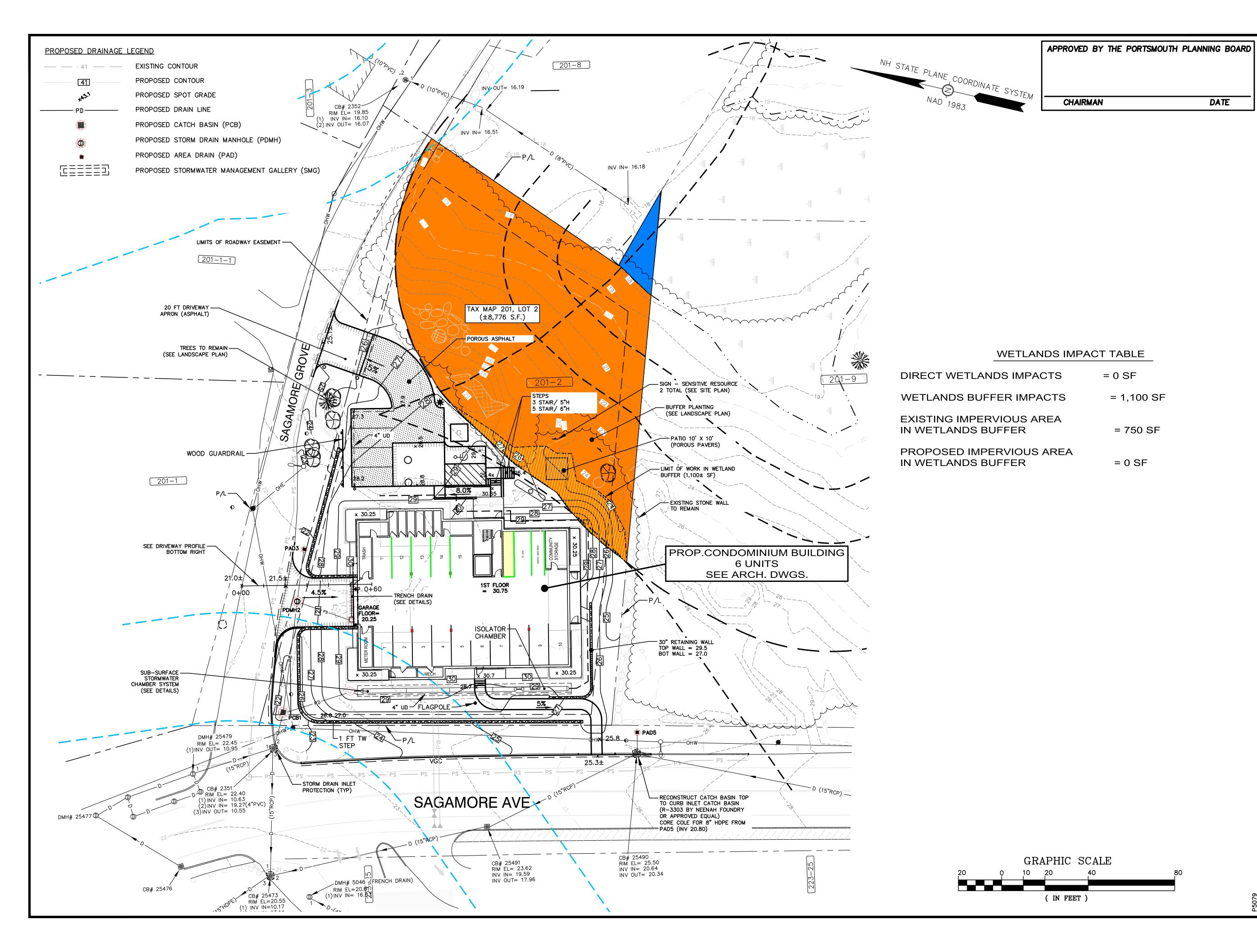
SD#: PREDATES 1967

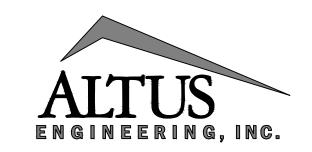
DEED Bk/Pg: 3469 / 2151

11-0136 The Wright Choice 11-0136 10/11 PRW Drawn By:_ Checked By:_

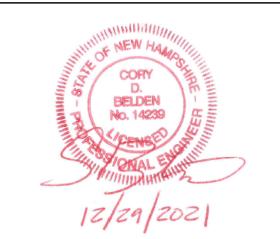
Phone: 603-679-1455

Fax: 603-679-5599 Cell: 603-303-5552 thewrightchoice.pw@gmail.com





133 COURT STREET PORTSMOUTH, NH 03801 (603) 433-2335 www.ALTUS-ENG.com



NOT FOR CONSTRUCTION

ISSUED FOR:

ISSUE DATE:

PLANNING BOARD

BY DATE

DECEMBER 29, 2021 **REVISIONS**

NO. DESCRIPTION

CDB 11/02/2 0 INITIAL SUBMITTAL CDB 11/22/21 TAC WS COMMENTS 2 CC COMMENTS CDB 12/29/21

CDB DRAWN BY:. EDW APPROVED BY: DRAWING FILE:.

22"x34" 1" = 20' 11"x17" 1" = 40'

OWNER / APPLICANT:

SAGAMORE CORNER, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROJECT:

PROPOSED MULTI-FAMILY RESIDENTIALDEVELOPMENT

> 960 SAGAMORE ROAD PORTSMOUTH, NH 03801

TAX MAP 201, LOT 2

TITLE:

WETLANDS CONDITIONAL USE PLAN

SHEET NUMBER:

CUP-1

PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT

960 Sagamore Avenue Portsmouth, NH Assessor's Parcel 201-02

DRAINAGE REPORT

November 2021

Prepared for:

Sagamore Corner, LLC

273 Corporate Drive Portsmouth, NH 03801

Prepared By:

ALTUS ENGINEERING, INC.

133 Court Street Portsmouth, NH 03801 Phone: (603) 433-2335



960 Sagamore Avenue Portsmouth, NH Assessor's Parcel 201-02

TABLE OF CONTENTS

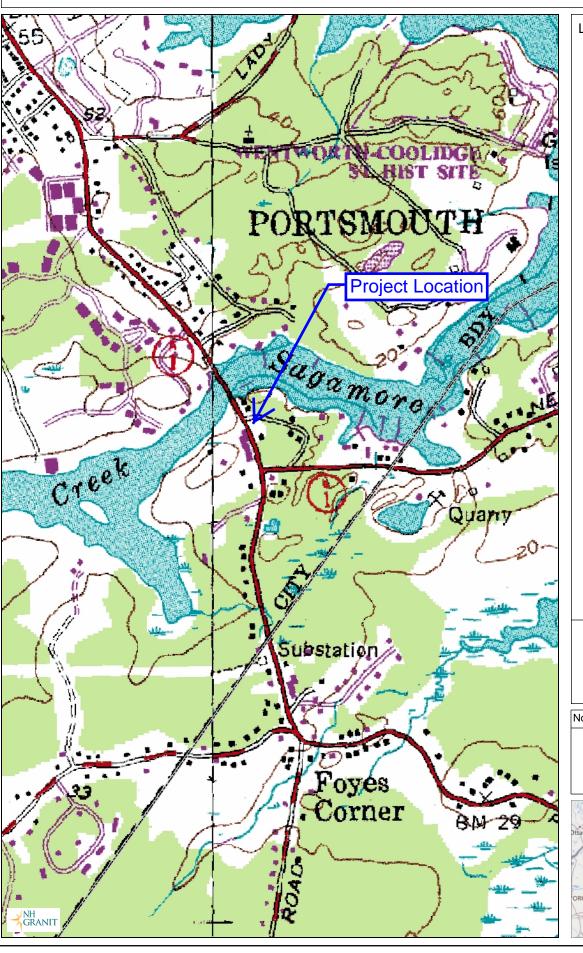
- 1) USGS Site Location Map
- 2) Project Narrative
- 3) FEMA Flood Map
- 4) Aerial Image
- 5) BMP Worksheets
- 6) Soil Data
 - Web Soil Survey
 - Ksat Soil Values
- 7) Drainage Analysis
 - Extreme Precipitation Tables
 - Pre-Development
 - Post Development
- 8) Inspection and Maintenance Manual (Separate Attachment)

Appendix: Plans: DA-1: Pre-Development Drainage Plan (11" x 17")

DA-2: Post-Development Drainage Plan (11" x 17")

Project Plans (22" x 34") (project plans under separate attachment)

960 Sagamore Avenue, Portsmouth, NH



Legend

- State
- County
- \square City/Town

Map Scale

1: 10,000

© NH GRANIT, www.granit.unh.edu Map Generated: 11/15/2021

Notes



Drainage Report

960 Sagamore Avenue Portsmouth, NH Assessor's Parcel 201-02 Altus Project P5079

PROJECT DESCRIPTION

Sagamore Corner, LLC is proposing to re-develop the site located at 960 Sagamore Avenue (Assessor's Map 201, Lot 02) to construct a new multi-family building that will provide six (6) housing units. The property is currently the current home to the former Golden Egg restaurant, a single unit apartment, and a retail store. The Property is identified as Tax Map 201-Lot 2 and is approximately 42,930 square feet (sf) in size and is located in the City's Mixed Residential Business (MRB) zoning district.

The proposed project will demolish the existing buildings and ancillary site features, including the paved parking, gravel parking, and site utilities. The new 6-Unit residential building will be constructed completely outside of the 100 foot wetland buffer, that extends onto the lot. The existing site was constructed in 1970 (according to City assessor data), prior to stormwater regulations, and does not have stormwater treatment on site for the buildings, pavement, and gravel parking lot areas, which total approximately 25,000 square feet, including the paved parking in the Sagamore Avenue right of way. The front of the lot that contains the majority of the developed site drains to the municipal storm drain system in Sagamore Avenue and discharges to Sagamore Creek without treatment or retention. The rear portion of the lot drains to the wetland located in the southeast corner of the property. The proposed project will provide treatment through the use of a sub-surface chamber systems for the roof runoff and porous asphalt for the exterior parking area. The project will minimize site impervious area by constructing covered parking in the basement level of the building. The current site discharges approximately 2,400 square feet of untreated impervious (roof and gravel parking areas) to the wetlands in the rear of the property. The proposed project will remove all gravel parking lot areas draining to the wetlands and collect all of the roof runoff for retention and treatment before discharging to the front of the lot. The proposed project will reduce the total impervious area by over 8,400 sf (1,780 sf of porous pavement) compared to the existing conditions.

The site is located within the *Coastal and Great Bay Regional Communities*, so the rainfall precipitation results obtained from the Northeast Regional Climate Center (NRCC) have been increased by 15% for the hydrologic analysis. The stormwater management system proposed for the site will reduce peak flows and treat site runoff prior to discharging back to the storm drain systems.

Pre-Development (Existing Conditions)

The pre-development site conditions reflect the existing conditions of the site, which include the existing restaurant, apartment, retail store and associated paved and gravel parking areas. The current site primarily discharges to the municipal storm drain system in Sagamore Avenue through a catch basin located at corner of Sagamore Avenue and Sagamore Grove (CB #2351) identified as the Point of Analysis #1 (POA1) on the drainage area plans. The existing parking lot and majority of the existing building drain to the catch basin in this area as untreated sheet flow. Point of Analysis #2 (POA2) is the existing wetland in the rear of the property and includes portions of the roof and gravel parking lot that drain to the wetlands untreated, as well as the undeveloped wooded area in the buffer.

The Pre-Development analysis models the existing conditions for the two points of analysis. The points of analysis are the same for the pre and post development models for comparison of flows prior to construction and after the site is development as shown on the plans. The grades and elevations shown on the plans are based on the site survey completed by James Verra and Associates, dated November 22, 2021 and included in the plan set (3 sheets).

Post-Development (Proposed Site Design)

The Proposed development will construct a new six (6) unit building and a five (5) exterior stall visitor parking lot to serve the new building. Parking for the residents will be located on the garage level of the building. The existing paved parking lot along Sagamore Avenue will be removed and access will be provided from Sagamore Grove. This will eliminate the head-in parking from Sagamore Avenue. The visitor entrance will be from the visitor parking area and an ADA accessible stall and ramp will be provided. The majority of the new parking lot and driveway will be constructed with porous pavement to infiltrate the surface water from the lot and a sub-surface treatment system will be constructed to treat and manage the stormwater from the roof.

The proposed stormwater system is depicted on the Grading and Drainage Plan in the project plans and the attached Post-Development Drainage Plan. For the post development analysis, the site was divided into eight (8) watershed areas to depict the post-development conditions. The same points of analysis that were used in the Pre-Development model were used for comparison of the Pre and Post development conditions. The "Post-Development Drainage Plan" illustrates the proposed stormwater management system. Site topography, existing features, proposed site improvements, proposed grading, drainage and erosion control measures are shown on the accompanying plans. Recommended erosion control facilities are based on the "New Hampshire Stormwater Manual Volumes 1 through 3" prepared by NHDES and Comprehensive Environmental, Inc. as amended.

Drainage Analysis

A complete summary of the drainage model is included in the appendix of this report. The following table compares pre- and post-development peak rates at the two Points of Analysis identified on the plans for the 2, 10, 25, and 50 year storm events:

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

*Rainfall Intensities reflect 15% Increase per AOT	2-Yr Storm (4.12 inch)	10-Yr Storm (5.60 inch)	25-Yr Storm (8.20 inch)	50-Yr Storm (9.91 inch)
POA #1		,		
Pre	0.70	1.35	2.65	3.56
Post	0.53	1.12	2.35	3.22
Net Change	-0.17	-0.23	-0.30	-0.34
	(24.3%)	(17.0%)	(11.3%)	(9.6%)
POA #2				
Pre	3.09	4.40	6.67	8.14
Post	1.63	3.12	4.86	6.14
Net Change	-1.46 (47.2%)	-1.28 (29.1%)	-1.81 (27.1%)	-2.00 (24.6%)

As the above table demonstrates, the proposed peak rates of runoff will be reduced from the existing conditions for all of the analyzed storm events.

Effective Impervious Area

The existing lot is 42,930 square feet that consists of a restaurant, retail store, residential apartment unit, and associated driveways and parking. The existing site effective impervious area is all of the impervious areas on the lot, which total 23,000 square feet, or 53.6% of the lot (not including impervious in Sagamore Ave right of way). The proposed project will construct a new 6-Unit residential building and associated parking and walkways. The exterior parking lot will be reduced to five parking stalls and walkways will be added for access and emergency egress. The total impervious area will be reduced by over 6,000 sf. The proposed improvements will provide stormwater treatment to the new development area, which will reduced the effective impervious area to 6,250 sf (14.6%), a reduction of approximately 16,750 sf or (39% of the site).

CONCLUSION

The proposed six (6) unit residential development will not have an adverse effect on abutting properties and infrastructure as a result of stormwater runoff. The existing site was developed in the 1970's and has no designed stormwater treatment facilities. The proposed improvements will reduce the total impervious area by approximately 8,400 square feet and the effective impervious area will be reduced by 16,750 sf, which is a reduction of 39% (from 53.6% to 14.6%) compared to the existing conditions. The new development will provide stormwater treatment and retention to the new building, parking and walkways with the construction of a stormwater drainage system consisting of porous pavement and a subsurface chamber system. The analysis of the site utilized a 15% increase to the rainfall intensities for seacoast communities, as is recommended by NHDES and the peak runoff rates for the site will be reduced for the all analyzed storm events (2, 10, 25, and 50 year). Appropriate steps will be taken during construction to properly mitigate erosion and sedimentation through the use of Best Management Practices for sediment and erosion control.

CALCULATION METHODS

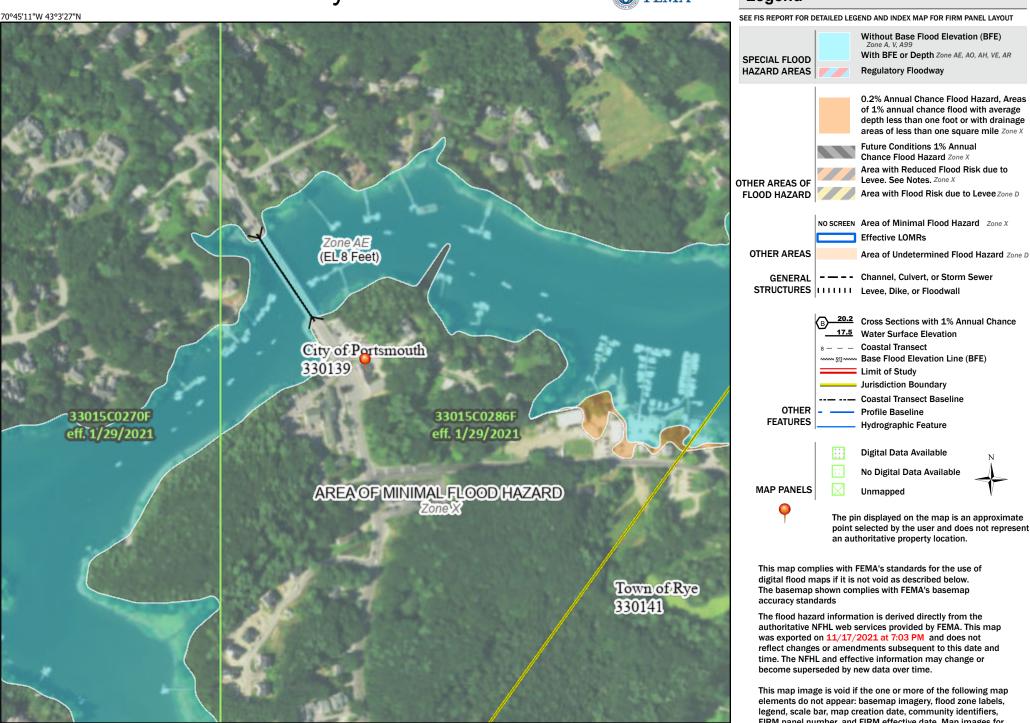
The project lies with the *Coastal and Great Bay Regional Communities* as identified in Section 6 – One-Stop AoT Screening Layers Results. As a result, the rainfall precipitation results obtained from the Northeast Regional Climate Center for the project site have been increased by 15% for the hydrologic analysis. 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 which automates the calculation of Tailwater conditions. A Type III 24-hour rainfall distribution was utilized in analyzing the data for the 2, 10, 25, and 50 Year - 24-hour storm events using rainfall data provided by Northeast Regional Climate Center – Extreme Precipitation Tables.

Disclaimer

Altus Engineering, Inc. 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.

National Flood Hazard Layer FIRMette





Feet

2.000

250

500

1,000

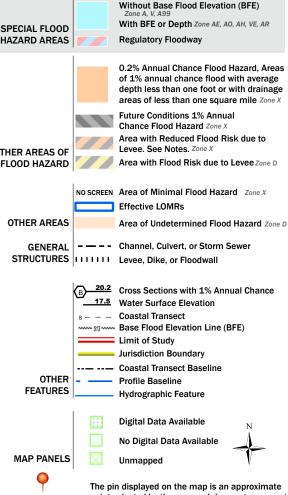
1,500

1:6.000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

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



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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/17/2021 at 7:03 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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





FILTRATION PRACTICE DESIGN CRITERIA (Env-Wq 1508.07)

Type/Node Name: Storm Water Gallery A

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 1508.07(a)?
0.18 ac	A = Area draining to the practice
0.18 ac	A_{I} = Impervious area draining to the practice
1.00 decimal	I = percent impervious area draining to the practice, in decimal form
0.95 unitless	Rv = Runoff coefficient = $0.05 + (0.9 \text{ x I})$
0.17 ac-in	WQV = 1" x Rv x A
621 cf	WQV onversion (ac-in x 43,560 sf/ac x 1ft/12")
155 cf	25% x WQV (check calc for sediment forebay volume)
466 cf	75% x WQV (check calc for surface sand filter volume)
roof	Method of Pretreatment? (not required for clean or roof runoff)
N/A cf	V_{SED} = sediment forebay volume, if used for pretreatment $\leftarrow \geq 25\%WQV$
$\frac{1071}{500}$ sf	A_{SA} = surface area of the practice
1.00 iph	Ksat _{DESIGN} = design infiltration rate ¹
Yes Yes/No	If Ksat (prior to factor of safety) is < 0.50 iph, has an underdrain been provided?
14.9 hours	$T_{DRAIN} = drain time = V / (A_{SA} * I_{DESIGN})$ $\leftarrow \leq 72-hrs$
feet	E_{FC} = elevation of the bottom of the filter course material ²
23.75 feet	E_{UD} = invert elevation of the underdrain (UD), if applicable
- feet	E_{SHWT} = elevation of SHWT (if none found, enter the lowest elevation of the test pit)
- feet	E_{ROCK} = elevation of bedrock (if none found, enter the lowest elevation of the test pit)
(23.75) feet	$D_{FC \text{ to } UD} = \text{depth to } UD \text{ from the bottom of the filter course}$
- feet	$D_{FC \text{ to ROCK}} = \text{depth to bedrock from the bottom of the filter course}$
- feet	$D_{FC \text{ to SHWT}} = \text{depth to SHWT from the bottom of the filter course}$
26.30 ft	Peak elevation of the 50-year storm event (infiltration can be used in analysis)
27.00 ft	Elevation of the top of the practice
YES	50 peak elevation ≤ Elevation of the top of the practice

If a surface sand filter or underground sand filter is proposed:

YES	ac	Drainage Area check.	← < 10 ac
	cf	$V = \text{volume of storage}^3$ (attach a stage-storage table)	← \geq 75%WQV
	inches	D_{FC} = filter course thickness	← 18", or 24" if within GPA
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
	cf	V = volume of storage ³ (attach a stage-storage table)	$\leftarrow \geq WQV$
	inches	D_{FC} = filter course thickness	← 18", or 24" if within GPA
Sheet	<u>-</u> t	Note what sheet in the plan set contains the filter course specification	
	:1	Pond side slopes	← ≥3:1
Sheet	<u></u>	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	
#DIV/0!	:1	ratio of the contributing area to the pervious surface area	← 5:1
	inches	D_{FC} = filter course thickness	← 12", or 18" if within GPA
Sheet	<u> </u>	Note what sheet in the plan set contains the filter course spec.	← 304.1 sand

- 1. Rate of the limiting layer (either the filter course or the underlying soil). Ksat_{design} includes factor of safey. See Env-Wq 1504.14 for guidance on determining the infiltration rate.
- 2. See lines 34, 40 and 48 for required depths of filter media.
- 3. Volume without depending on infiltration. The volume includes the storage above the filter (but below the invert of the outlet stucture, if any), the filter media voids, and the pretreatment area. The storage above the filter media shall not include the volume above the outlet structure, if any.

Designer's Notes:		

Stage-Area-Storage for Pond 10P: Stormwater Gallery A

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
24.00	0	25.06	251	26.12	571
24.02	4	25.08	257	26.14	577
24.04	8	25.10	263	26.16	583
24.06	12	25.12	269	26.18	588
24.08	16	25.14	275	26.20	594
24.10	20	25.16	281	26.22	599
24.12	24	25.18	287	26.24	605
24.14 24.16	28 32	25.20 25.22	293 299	26.26 26.28	610 615
24.18	36	25.22 25.24	305	26.30	621
24.20	40	25.26	311	26.32	626
24.22	44	25.28	317	26.34	631
24.24	48	25.30	323	26.36	636
24.26	52	25.32	329	26.38	641
24.28	56	25.34	336	26.40	646
24.30	60	25.36	342	26.42	651
24.32 24.34	64	25.38	348	26.44	656 661
24.34 24.36	68 72	25.40 25.42	354 360	26.46 26.48	661 665
24.38	76	25.44	366	26.50	670
24.40	80	25.46	373	26.52	674
24.42	84	25.48	379	26.54	678
24.44	88	25.50	385	26.56	682
24.46	92	25.52	391	26.58	686
24.48	96	25.54	397	26.60	690
24.50	100	25.56	403	26.62	694
24.52 24.54	104 109	25.58 25.60	409 416	26.64 26.66	698 702
24.56	113	25.62	422	26.68	702
24.58	118	25.64	428	26.70	710
24.60	123	25.66	434	26.72	714
24.62	128	25.68	440	26.74	718
24.64	133	25.70	446	26.76	722
24.66	138	25.72	452	26.78	726
24.68	144 149	25.74 25.76	458 465	26.80	730
24.70 24.72	154	25.76 25.78	465 471	26.82 26.84	734 738
24.74	160	25.80	477	26.86	742
24.76	165	25.82	483	26.88	746
24.78	170	25.84	489	26.90	750
24.80	176	25.86	495	26.92	754
24.82	182	25.88	501	26.94	758
24.84	187	25.90	507	26.96	762
24.86 24.88	193 198	25.92 25.94	513 519	26.98 27.00	766 770
24.90	204	25.94 25.96	525	27.00	770
24.92	210	25.98	531		
24.94	216	26.00	536		
24.96	221	26.02	542		
24.98	227	26.04	548		
25.00	233	26.06	554		
25.02 25.04	239	26.08	560		
25.04	245	26.10	565		



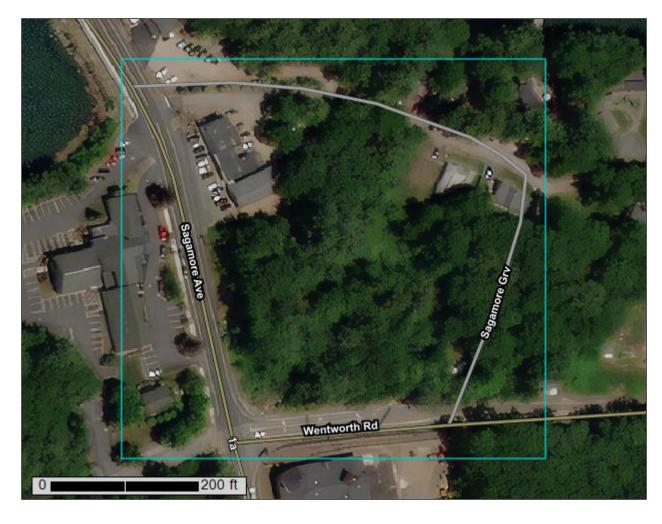
Natural Resources Conservation

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

Sagamore Rd., Portsmouth, Tax Map 2, Lot 2



Preface

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

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

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2 053951).

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

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

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

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Soil Map

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



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

(o)

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 24, Aug 31, 2021

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Jun 14. 2017

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
140B	Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky	4.7	66.1%
699	Urban land	2.4	33.9%
Totals for Area of Interest	,	7.2	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,

Custom Soil Resource Report

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

140B—Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky

Map Unit Setting

National map unit symbol: 2w82m Elevation: 380 to 1,070 feet

Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 145 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Chatfield, very stony, and similar soils: 35 percent Hollis, very stony, and similar soils: 25 percent Canton, very stony, and similar soils: 25 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Chatfield, Very Stony

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Summit, shoulder, backslope Landform position (three-dimensional): Nose slope, side slope, crest

Down-slope shape: Convex

Across-slope shape: Linear, convex

Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or

schist

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

A - 1 to 2 inches: fine sandy loam

Bw - 2 to 30 inches: gravelly fine sandy loam

2R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 0 to 8 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 20 to 41 inches to lithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

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Hydric soil rating: No

Description of Hollis, Very Stony

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Summit, shoulder, backslope Landform position (three-dimensional): Nose slope, side slope, crest

Down-slope shape: Convex

Across-slope shape: Linear, convex

Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or

schist

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 7 inches: gravelly fine sandy loam Bw - 7 to 16 inches: gravelly fine sandy loam

2R - 16 to 26 inches: bedrock

Properties and qualities

Slope: 0 to 8 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 8 to 23 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D

Ecological site: F144AY033MA - Shallow Dry Till Uplands

Hydric soil rating: No

Description of Canton, Very Stony

Settina

Landform: Moraines, hills, ridges

Landform position (two-dimensional): Summit, shoulder, backslope Landform position (three-dimensional): Nose slope, side slope, crest

Down-slope shape: Convex, linear Across-slope shape: Convex

Parent material: Coarse-loamy over sandy melt-out till derived from gneiss, granite, and/or schist

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 5 inches: fine sandy loam Bw1 - 5 to 16 inches: fine sandy loam

Bw2 - 16 to 22 inches: gravelly fine sandy loam 2C - 22 to 67 inches: gravelly loamy sand

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Properties and qualities

Slope: 0 to 8 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent Depth to restrictive feature: 19 to 39 inches to strongly contrasting textural

stratification

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Newfields, very stony

Percent of map unit: 5 percent

Landform: Ground moraines, hills, moraines Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope

Down-slope shape: Linear Across-slope shape: Concave

Hydric soil rating: No

Freetown

Percent of map unit: 5 percent

Landform: Marshes, depressions, bogs, kettles, swamps

Down-slope shape: Concave Across-slope shape: Concave

Hydric soil rating: Yes

Walpole, very stony

Percent of map unit: 3 percent

Landform: Deltas, depressions, outwash plains, depressions, outwash terraces

Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Concave

Hydric soil rating: Yes

Rock outcrop

Percent of map unit: 2 percent Landform: Ridges, hills Hydric soil rating: Unranked

699—Urban land

Map Unit Composition

Urban land: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Minor Components

Not named

Percent of map unit: 15 percent Hydric soil rating: No

Extreme Precipitation Tables

Northeast Regional Climate Center

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

Smoothing Yes

State Location

Longitude 70.748 degrees West **Latitude** 43.054 degrees North

Elevation 0 feet

Date/Time Tue, 09 Nov 2021 08:45:44 -0500

Extreme Precipitation Estimates

add 15%

	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	0.82	1.04	1yr	0.70	0.98	1.21	1.56	2.03	2.67	2.94	3.38	2.36	2.82	3.24	3.96	4.57	1yr
2yr	0.32	0.50	0.62	0.82	1.03	1.30	2yr	0.89	1.18	1.52	1.94	2.49	3.22	3.58	4.12	2.85	3.45	3.95	4.70	5.35	2yr
5yr	0.37	0.58	0.73	0.98	1.25	1.61	5yr	1.08	1.47	1.89	2.44	3.15	4.08	4.60	5.29	3.61	4.42	5.07	5.96	6.73	5yr
10yr	0.41	0.65	0.82	1.12	1.46	1.90	10yr	1.26	1.73	2.24	2.91	3.76	4.88	5.55	5.60	4.32	5.34	6.12	7.14	8.01	10yr
25yr	0.48	0.77	0.97	1.34	1.78	2.35	25yr	1.54	2.15	2.79	3.65	4.76	6.19	7.13	8.20	5.48	6.85	7.85	9.07	10.09	25yr
50yr	0.54	0.87	1.11	1.55	2.09	2.78	50yr	1.80	2.54	3.31	4.35	5.69	7.42	8.62	9.91	6.56	8.29	9.48	10.87	12.02	50yr
100yr	0.60	0.97	1.26	1.79	2.44	3.28	100yr	2.10	3.00	3.93	5.19	6.80	8.88	10.42	11.98	7.86	10.02	11.46	13.03	14.33	100yr
200yr	0.68	1.11	1.44	2.07	2.85	3.87	200yr	2.46	3.54	4.65	6.17	8.12	10.65	12.60		9.42	12.11	13.85	15.63	17.08	200yr
500yr	0.81	1.33	1.73	2.51	3.52	4.81	500yr	3.03	4.42	5.82	7.76	10.28	13.53	16.20		11.97	15.58	17.81	19.89	21.57	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	0.62	0.86	0.93	1.34	1.69	2.26	2.50	1yr	2.00	2.41	2.88	3.21	3.94	1yr
2yr	0.31	0.49	0.60	0.81	1.00	1.19	2yr	0.86	1.16	1.37	1.81	2.33	3.07	3.47	2yr	2.72	3.33	3.84	4.56	5.11	2yr
5yr	0.35	0.54	0.67	0.92	1.17	1.40	5yr	1.01	1.37	1.61	2.11	2.72	3.80	4.20	5yr	3.36	4.04	4.74	5.56	6.26	5yr
10yr	0.39	0.59	0.74	1.03	1.33	1.60	10yr	1.15	1.57	1.80	2.38	3.05	4.38	4.88	10yr	3.88	4.69	5.47	6.44	7.22	10yr
25yr	0.44	0.67	0.83	1.19	1.56	1.90	25yr	1.35	1.86	2.10	2.74	3.52	4.78	5.91	25yr	4.23	5.68	6.69	7.83	8.72	25yr
50yr	0.48	0.73	0.91	1.31	1.77	2.17	50yr	1.53	2.12	2.35	3.05	3.91	5.41	6.82	50yr	4.79	6.56	7.77	9.10	10.06	50yr
100yr	0.54	0.81	1.02	1.47	2.02	2.47	100yr	1.74	2.41	2.63	3.39	4.31	6.10	7.87	100yr	5.40	7.57	9.04	10.58	11.63	100yr
200yr	0.59	0.89	1.13	1.64	2.28	2.81	200yr	1.97	2.75	2.94	3.74	4.74	6.86	9.09	200yr	6.07	8.74	10.50	12.32	13.45	200yr
500yr	0.69	1.02	1.31	1.91	2.72	3.36	500yr	2.34	3.29	3.42	4.26	5.39	8.01	10.98	500yr	7.09	10.56	12.80	15.09	16.30	500yr

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.29	0.44	0.54	0.72	0.89	1.09	1yr	0.77	1.06	1.26	1.74	2.20	2.98	3.18	1yr	2.64	3.06	3.59	4.38	5.05	1yr
2yr	0.34	0.52	0.64	0.87	1.07	1.27	2yr	0.92	1.24	1.48	1.96	2.52	3.43	3.72	2yr	3.03	3.58	4.11	4.86	5.64	2yr
5yr	0.40	0.62	0.77	1.05	1.34	1.63	5yr	1.16	1.59	1.89	2.54	3.26	4.36	4.98	5yr	3.85	4.79	5.40	6.40	7.18	5yr
10yr	0.47	0.72	0.89	1.25	1.62	1.99	10yr	1.39	1.94	2.29	3.11	3.97	5.36	6.23	10yr	4.74	5.99	6.85	7.87	8.79	10yr
25yr	0.58	0.88	1.10	1.57	2.06	2.59	25yr	1.78	2.53	2.97	4.08	5.18	7.75	8.38	25yr	6.86	8.05	9.20	10.38	11.45	25yr
50yr	0.68	1.03	1.28	1.84	2.48	3.15	50yr	2.14	3.08	3.61	5.02	6.36	9.69	10.50	50yr	8.57	10.10	11.51	12.78	14.01	50yr
100yr	0.80	1.20	1.51	2.18	2.99	3.84	100yr	2.58	3.76	4.40	6.19	7.83	12.11	13.16	100yr	10.71	12.65	14.40	15.76	17.15	100yr
200yr	0.93	1.41	1.78	2.58	3.60	4.70	200yr	3.10	4.59	5.37	7.63	9.63	15.17	16.51	200yr	13.43	15.87	18.04	19.43	20.98	200yr
500yr	1.16	1.73	2.22	3.23	4.59	6.11	500yr	3.96	5.97	6.97	10.10	12.71	20.46	22.28	500yr	18.11	21.43	24.31	25.62	27.41	500yr



Soil Series	legend	Ksat low - B	Ksat high - B	Ksat low - C	Ksat high - C	Hyd.	Group	Land Form	Temp.	Soil Textures	Spodosol	Other
	number	in/hr	in/hr	in/hr	in/hr	Grp.					?	
Abenaki	501	0.6	2.0	6.00	99.0	В	2	Outwash and Stream Terraces	frigid	loamy over sandy-skeletal	no	loamy over gravelly
Acton	146	2.0	20.0	2.00	20.0	В	3	Loose till, sandy textures	mesic	sandy-skeletal	no	cobbly loamy sand
Adams	36	6.0	20.0	20.00	99.0	Α	1	Outwash and Stream Terraces	frigid	sandy	yes	, ,
Agawam	24	6.0	20.0	20.00	100.0	В	2	Outwash and Stream Terraces	mesic	loamy over sandy	no	loamy over sand/gravel
Allagash	127	0.6	2.0	6.00	20.0	В	2	Outwash and Stream Terraces	frigid	loamy over sandy	yes	loamy over sandy
Au Gres	516					В	5	Outwash and Stream Terraces	frigid	sandy	yes	single grain, loose
Bangor	572	0.6	2.0	0.60	2.0	В	2	Friable till, silty, schist & phyllite	frigid	loamy	yes	silt loam
Becket	56	0.6	2.0	0.06	0.6	С	3	Firm, platy, sandy till	frigid	loamy	yes	gravelly sandy loam in Cd
Belgrade	532	0.6	2.0	0.06	2.0	В	3	Terraces and glacial lake plains	mesic	silty	no	strata of fine sand
Bemis	224	0.6	0.2	0.00	0.2	С	5	Firm, platy, loamy till	cryic	loamy	no	
Berkshire	72	0.6	6.0	0.60	6.0	В	2	Loose till, loamy textures	frigid	loamy	yes	fine sandy loam
Bernardston	330	0.6	2.0	0.06	0.2	С	3	Firm, platy, silty till, schist & phyllite	mesic	loamy	no	channery silt loam in Cd
Bice	226	0.6	6.0	0.60	6.0	В	2	Loose till, loamy textures	frigid	loamy	no	sandy loam
Biddeford	234	0.0	0.2	0.00	0.2	D	6	Silt and Clay Deposits	frigid	fine	no	organic over clay
Binghamville	534	0.2	2.0	0.06	0.2	D	5	Terraces and glacial lake plains	mesic	silty	no	
Boscawen	220	6.0	20.0	20.00	100.0	Α	1	Outwash and Stream Terraces	frigid	sandy-skeletal	no	loamy cap
Boxford	32	0.1	0.2	0.00	0.2	С	3	Silt and Clay Deposits	mesic	fine	no	silty clay loam
Brayton	240	0.6	2.0	0.06	0.6	С	5	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	
Buckland	237	0.6	2.0	0.06	0.2	С	3	Firm, platy, loamy till	frigid	loamy	no	loam in Cd
Bucksport	895					D	6	Organic Materials - Freshwater	frigid	sapric	no	deep organic
Burnham	131	0.2	6.0	0.02	0.2	D	6	Firm, platy, silty till, schist & phylitte	frigid	loamy	no	organic over silt
Buxton	232	0.1	0.6	0.00	0.2	С	3	Silt and Clay Deposits	frigid	fine	no	silty clay
Cabot	589	0.6	2.0	0.06	0.2	D	5	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	
Caesar	526	20.0	100.0	20.00	100.0	Α	1	Outwash and Stream Terraces	mesic	coarse sand	no	
Canaan	663	2.0	20.0	2.00	20.0	С	4	Weathered Bedrock Till	frigid	loamy-skeletal	yes	less than 20 in. deep
Canterbury	42	2.0	6.0	6.00	20.0	В	2	Loose till, sandy textures	mesic	loamy over sandy	no	loamy over loamy sand
Cardigan	357	0.0	2.0	0.00	2.0	D	4	Friable till, silty, schiet & phyllite	modio	learny	no	20 to 10 in. deep
Catden	296					A/D	6	Organic Materials - Freshwater	mesic	sapric	no	deep organic
Champlain	35	6.0	20.0	20.00	100.0	Α	1	Outwash and Stream Terraces	frigid	gravelly sand	no	
Charles	209	0.6	100.0	0.60	100.0	С	5	Flood Plain (Bottom Land)	frigid	silty	no	
Chariton	ΰŽ	Û.Û	Û.Û	0.00	ů.ů	В	Ž	Loose till, loarny textures	mesic	іоапту	по	fine sandy ioam
Chatfield	89	0.6	6.0	0.60	6.0	В	4	Loose till, bedrock	mesic	loamy	no	20 to 40 in. deep
Chatheld var.	209	0.0	0.0	0.00	0.0	Б	Ü	Loose till, bedrock	HIESIC	юатту	110	niwd to swpd
Chesuncook	126	0.6	2.0	0.02	0.2	С	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	channery silt loam in Cd
Chichester	442	0.6	2.0	2.00	6.0	В		Loose till, sandy textures	frigid	loamy over sandy	no	loamy over loamy sand
Chocorua	395	0.0	0.0	6.00	20.0	D	6	Organic Materials - Freshwater	frigid	sandy or sandy-skeletal	no	organic over sand
Cohas	505	0.6	2.0	0.60	100.0	С	5	Flood Plain (Bottom Land)	frigid	co. loamy over sandy (skeletal)	no	1
Colonel	927	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	yes	loam in Cd
Colton	22	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	
Colton, gravelly	21	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	gravelly surface
Croghan	613 132	20.0	100.0 2.0	20.00	100.0 0.6	B B	3	Outwash and Stream Terraces	frigid	sandy	yes	single grain in C
Dartmouth				0.06				Terraces and glacial lake plains	mesic	silty	no	thin strata silty clay loam
Deerfield	313	6.0	20.0	20.00	100.0	B C	3	Outwash and Stream Terraces	mesic	sandy	no	single grain in C
Dixfield	378 578	0.6	2.0	0.06	0.6 2.0	C	3	Firm, platy, loamy till	frigid	loamy	yes	fine sandy loam in Cd
Dixmont	413	6.0	2.0	6.00	2.0	В	3	Friable till, silty, schist & phyllite Outwash and Stream Terraces	frigid	loamy	yes	silt loam, platy in C
Duane	366	0.6	20.0	0.60	2.0	В	2		frigid	sandy-skeletal	yes	cemented (ortstein)
Dutchess								Friable till, silty, schist & phyllite	mesic	loamy	no	very channery
Eldridge	38	6.0	20.0	0.06	0.6	C B	3	Sandy/loamy over silt/clay	mesic	sandy over loamy	no	20 to 40 in do
Elliottsville	128 238	0.6 2.0	6.0	0.60	2.0 0.2	C	3	Friable till, silty, schist & phyllite	frigid	loamy	yes	20 to 40 in. deep
Flooridae	7.38	∠.∪	0.0	0.00	U.Z		3	Sandy/loamy over silt/clay	mesic	loamy over clayey	no	
Elmridge		2.0	6.0	0.00	0.0	_	^	Candy/laamy	frient d	le empt extended to	r-	
Elmridge Elmwood Finch	338 116	2.0	6.0	0.00	0.2	C	3	Sandy/loamy over silt/clay Outwash and Stream Terraces	frigid frigid	loamy over clayey sandv	no ves	cemented (ortstein)

Sorted by Soil Series K_{sat} B and C horizons SSSNNE special pub no. 5

Soil Series	legend	Ksat low - B	Ksat high - B	Ksat low - C	Ksat high - C	Hyd.	Group	Land Form	Temp.	Soil Textures	Spodosol	Other
	number	in/hr	in/hr	in/hr	in/hr	Grp.					?	
Fryeburg	208	0.6	2.0	2.00	6.0	В	2	Flood Plain (Bottom Land)	frigid	silty	no	very fine sandy loam
Gilmanton	478	0.6	2.0	0.06	0.6	С	3	Firm, platy, loamy till	frigid	loamy	no	fine sandy loam in Cd
Glebe	671	2.0	6.0	2.00	6.0	С	4	Loose till, bedrock	cryic	loamy	yes	20 to 40 in. deep
Gloucester	11	6.0	20.0	6.00	20.0	Α	1	Sandy Till	mesic	sandy-skeletal	no	loamy cap
Glover	NA	0.6	2.0	0.60	2	D	4	Friable till, silty, schist & phyllite	frigid	loamy	no	less than 20 in. deep
Grange	433	0.6	2.0	0.60	2.0	С	5	Outwash and Stream Terraces	frigid	co. loamy over sandy (skeletal)	no	
Greenwood	295					A/D	6	Organic Materials - Freshwater	frigid	hemic	no	deep organic
Groveton	27	0.6	2.0	0.60	6.0	В	2	Outwash and Stream Terraces	frigid	loamy	yes	loamy over sandy
Hadley	8	0.6	2.0	0.60	6.0	В	2	Flood Plain (Bottom Land)	mesic	silty	no	strata of fine sand
Hadley	108	0.6	2.0	0.60	6.0	В	2	Flood Plain (Bottom Land)	mesic	silty	no	strata of fine sand, occ flooded
Hartland	31	0.6	2.0	0.20	2.0	В	2	Terraces and glacial lake plains	mesic	silty	no	very fine sandy loam
Haven	410	0.6	2.0	20.00	100.0	В	2	Outwash and Stream Terraces	mesic	loamy over sandy	no	loamy over sand/gravel
Henniker	46	0.6	2.0	0.06	0.6	С	3	Firm, platy, sandy till	frigid	loamy	no	loamy sand in Cd
Hermon	55	2.0	20.0	6.00	20.0	Α	1	Sandy Till	frigid	sandy-skeletal	yes	loamy cap
Hinckley	12	6.0	20.0	20.00	100.0	Α	1	Outwash and Stream Terraces	mesic	sandy-skeletal	no	
Hitchcock	130	0.6	2.0	0.06	0.6	В	3	Terraces and glacial lake plains	mesic	silty	no	silt loam to silt in C
Hogback	01	2.0	6.0	2.00	0.0	0	1	Leose till, bedreck	frigid	loamy	yes	loce than 20 in. deep
Hollis	86	0.6	6.0	0.60	6.0	C/D	4	Loose till, bedrock	mesic	loamy	no	less than 20 in. deep
Hoosic	510	2.0	20.0	20.00	100.0	Λ	1	Outwash and Otream Terraces	mesic	sandy-skoletal	ino	slate, learny cap
Houghtonville	795	0.6	6.0	0.60	6.0	В	2	Loose till, loamy textures	frigid	loamy	yes	cobbly fine sandy loam
Howland	566	0.6	2.0	0.06	0.2	С	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	silt loam, platy in Cd
Ipswich	397					D	6	Tidal Flat	mesic	hemic/sapric	no	deep organic
Kearsarge	359	0.6	2.0	0.60	2.0	В	4	Friable till, silty, schist & phyllite	mesic	loamy	no	less than 20 in. deep
Kinsman	614	6.0	20.0	6.00	20.0	С	5	Outwash and Stream Terraces	frigid	sandy	yes	
Lanesboro	228	0.6	2.0	0.06	0.2	С	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	channery silt loam in Cd
Leicester	514	0.6	6.0	0.60	20.0	С	5	Loose till, loamy textures	mesic	loamy	no	
Lim	3	0.6	2.0	6.00	20.0	С	5	Flood Plain (Bottom Land)	mesic	loamy	no	
Limerick	109	0.6	2.0	0.60	2.0	С	5	Flood Plain (Bottom Land)	mesic	silty	no	
Lombard	259	0.6	6.0	2.00	20.0	C/D	2	Weathered bedrock, phyllite	frigid	loamy	no	very channery
Lovewell	307	0.6	2.0	0.60	2.0	В	3	Flood Plain (Bottom Land)	frigid	silty	no	very fine sandy loam
Lyman	92	2.0	6.0	2.00	6.0	A/D	4	Loose till, bedrock	frigid	loamy	yes	less than 20 in. deep
Lyme	246	0.6	6.0	0.60	6.0	С	5	Loose till, sandy textures	frigid	loamy	no	
Machias	520	2.0	6.0	6.00	20.0	В	3	Outwash and Stream Terraces	frigid	sandy or sandy-skeletal	yes	strata sand/gravel in C
Macomber	252	0.6	2.0	0.60	2.0	С	4	Friable till, silty, schist & phyllite	frigid	loamy-skeletal	yes	20 to 40 in. deep
Madawaska	28	0.6	2.0	6.00	20.0	В	3	Outwash and Stream Terraces	frigid	loamy over sandy	yes	sandy or sandy-skeletal
ladawaska, _{aquer}	48	0.6	2.0	6.00	20.0	В	3	Outwash and Stream Terraces	frigid	loamy over sandy	yes	sandy or sandy-skeletal
Marlow	76	0.6	2.0	0.06	0.6	С	3	Firm, platy, loamy till	frigid	loamy	ves	fine sandy loam in Cd
Masardis	23	6.0	20.0	6.00	20.0	Α	1	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	slate, loamy cap
Mashpee	315	6.0	20.0	6.00	20.0	В	5	Outwash and Stream Terraces	mesic	sandy	yes	
Matunuck	797			20.00	100.0	D	6	Tidal Flat	mesic	sandy	no	organic over sand
Maybid	134	0.0	0.2	0.00	0.2	D	6	Silt and Clay Deposits	mesic	fine	no	silt over clay
Meadowsedge	894		-		-	D	6	Organic Materials - Freshwater	frigid	peat	no	deep organic
Medomak	406	0.6	2.0	0.60	2.0	D	6	Flood Plain (Bottom Land)	frigid	silty	no	organic over silt
Melrose	37	2.0	6.0	0.00	0.2	С	3	Sandy/loamy over silt/clay	frigid	loamy over clayey	no	silty clay loam in C
Merrimac	10	2.0	20.0	6.00	20.0	A	1	Outwash and Stream Terraces	mesic	gravelly sand	no	loamy cap
Metacomet	458	0.6	2.0	0.06	0.6	С	3	Firm, platy, sandy till	frigid	loamy	no	loamy sand in Cd
Metallak	404	6.0	100.0	6.00	100.0	В	3	Flood Plain (Bottom Land)	frigid	loamy over sandy	no	sandy or sandy-skeletal
Millis	39					C	3	Firm, platy, sandy till	frigid	loamy	yes	loamy sand in Cd
Millsite	251	0.6	6.0	0.60	6.0	C	4	Loose till, bedrock	frigid	loamy	no	20 to 40 in. deep
Monadnock	142	0.6	2.0	2.00	6.0	В	2	Loose till, sandy textures	frigid	pamy over sandy, sandy-skelet	ves	gravelly loamy sand in C
Monarda	569	0.2	2.0	0.02	0.2	D	5	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	J ====, =====, ========================
Monson	133	0.6	2.0	0.60	2.0	D	4	Friable till, silty, schist & phyllite	frigid	loamy	ves	less than 20 in, deep
Montauk	44	0.6	6.0	0.06	0.6	C	3	Firm, platy, sandy till	mesic	loamy	no	loamy sand in Cd
	414	6.0	20.0	6.00	20.0	C	5	Loose till, sandy textures	frigid	.carry		Jana in Ou

	Soil Series	number	NHDES	Ksat low - B	Ksat high - B	Ksat low - C	Ksat high - C	Hyd.	Land Form	Temp.	Soil Textures	Spodosol	Other
			Soil Group	in/hr	in/hr	in/hr	in/hr	Grp.				?	
	Buckland	237	3	0.6	2.0	0.06	0.2	С	Firm, platy, loamy till	frigid	loamy	no	loam in Cd
	Buxton	232	3	0.1	0.6	0.00	0.2	С	Silt and Clay Deposits	frigid	fine	no	silty clay
	Carnorbary	100	_ v	٧.٠	∠. ∨	0.00	٠.٠	- v	r mm, placy, roamy am	mgia	юшту	1.0	louin in ou
С	Chatfield Var.	289	3	0.6	6.0	0.60	6.0	В	Loose till, bedrock	mesic	loamy	no	mwd to swpd
F	O. IOOU		-	0.0	<u></u>	0.02	V. <u>~</u>		ining placy, only any corner a priyinte	g.u		,,,,	onamion, oncloam in ou
⊢	Colonel	927	3	0.6	2.0	0.06	0.6	С	Firm, platy, loamy till	frigid	loamy	yes	loam in Cd
⊢	Croghan	613	3	20.0	100.0	20.00	100.0	В	Outwash and Stream Terraces	frigid	sandy	yes	single grain in C
⊢	Dartmouth Deerfield	132 313	3	0.6 6.0	2.0	0.06 20.00	0.6 100.0	B B	Terraces and glacial lake plains Outwash and Stream Terraces	mesic mesic	silty sandy	no no	thin strata silty clay loam single grain in C
⊢	Dixfield	378	3	0.6	2.0	0.06	0.6	С	Firm, platy, loamy till	frigid	loamy	yes	fine sandy loam in Cd
⊢	Dixmont	578	3	0.6	2.0	0.60	2.0	C	Friable till, silty, schist & phyllite	frigid	loamy	yes	silt loam, platy in C
\vdash	Duane	413	3	6.0	20.0	6.00	20.0	В	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	cemented (ortstein)
H	Eldridge	38	3	6.0	20.0	0.06	0.6	C	Sandy/loamy over silt/clay	mesic	sandy over loamy	no	cemented (ortstein)
	Elmridge	238	3	2.0	6.0	0.00	0.2	C	Sandy/loamy over silt/clay	mesic	loamy over clayey	no	
	Elmwood	338	3	2.0	6.0	0.00	0.2	C	Sandy/loamy over silt/clay	frigid	loamy over clayey	no	
\vdash	Finch	116	3					C	Outwash and Stream Terraces	frigid	sandy	yes	cemented (ortstein)
	Gilmanton	478	3	0.6	2.0	0.06	0.6	C	Firm, platy, loamy till	frigid	loamy	no	fine sandy loam in Cd
	Henniker	46	3	0.6	2.0	0.06	0.6	С	Firm, platy, sandy till	frigid	loamy	no	loamy sand in Cd
	Hitchcock	130	3	0.6	2.0	0.06	0.6	В	Terraces and glacial lake plains	mesic	silty	no	silt loam to silt in C
	Howland	566	3	0.6	2.0	0.06	0.2	С	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	silt loam, platy in Cd
	Lanesboro	228	3	0.6	2.0	0.06	0.2	С	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	channery silt loam in Cd
L	Lovewell	307	3	0.6	2.0	0.60	2.0	В	Flood Plain (Bottom Land)	frigid	silty	no	very fine sandy loam
L	Machias	520	3	2.0	6.0	6.00	20.0	В	Outwash and Stream Terraces	frigid	sandy or sandy-skeletal	yes	strata sand/gravel in C
_	Madawaska	28	3	0.6	2.0	6.00	20.0	В	Outwash and Stream Terraces	frigid	loamy over sandy	yes	sandy or sandy-skeletal
la	dawaska, aquer	48	3	0.6	2.0	6.00	20.0	В	Outwash and Stream Terraces	frigid	loamy over sandy	yes	sandy or sandy-skeletal
⊢	Marlow	76	3	0.6	2.0	0.06	0.6	С	Firm, platy, loamy till	frigid	loamy	yes	fine sandy loam in Cd
⊢	Melrose	37	3	2.0	6.0	0.00	0.2	С	Sandy/loamy over silt/clay	frigid	loamy over clayey	no	silty clay loam in C
⊢	Metacomet	458	3	0.6	2.0	0.06	0.6	С	Firm, platy, sandy till	frigid	loamy	no	loamy sand in Cd
⊢	Metallak Millis	404 39	3	6.0	100.0	6.00	100.0	B C	Flood Plain (Bottom Land) Firm, platy, sandy till	frigid	loamy over sandy	no	sandy or sandy-skeletal loamy sand in Cd
⊢	Montauk	44	3	0.6	6.0	0.06	0.6	C	Firm, platy, sandy till	frigid mesic	loamy loamy	yes no	loamy sand in Cd
⊢	Mundal	610	3	0.6	2.0	0.06	0.6	C	Firm, platy, loamy till	frigid	loamy	yes	gravelly sandy loam in Cd
⊢	Newfields	444	3	0.6	2.0	0.60	2.0	В	Loose till, sandy textures	mesic	loamy over sandy	no	sandy or sandy-skeletal
⊢	Nicholville	632	3	0.6	2.0	0.60	2.0	C	Terraces and glacial lake plains	frigid	silty	yes	very fine sandy loam
\vdash	Ninigret	513	3	0.6	6.0	6.00	20.0	В	Outwash and Stream Terraces	mesic	loamy over sandy	no	sandy or sandy-skeletal
F	Paxton	66	3	0.6	2.0	0.00	0.2	C	Firm, platy, loamy till	mesic	loamy	no	,,
	Peru	78	3	0.6	2.0	0.06	0.6	C	Firm, platy, loamy till	frigid	loamy	yes	
	Pittstown	334	3	0.6	2.0	0.06	0.2	С	Firm, platy, silty till, schist & phyllite	mesic	loamy	no	channery silt loam in Cd
	Plaisted	563	3	0.6	2.0	0.06	0.6	С	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	channery silt loam in Cd
	Podunk	104	3	0.6	6.0	6.00	20.0	В	Flood Plain (Bottom Land)	frigid	loamy	no	loamy to coarse sand in C
	Poocham	230	3	0.6	2.0	0.20	2.0	В	Terraces and glacial lake plains	mesic	silty	no	silt loam in C
	Pootatuck	4	3	0.6	6.0	6.00	20.0	В	Flood Plain (Bottom Land)	mesic	loamy	no	single grain in C
L	Scio	531	3	0.6	2.0	0.60	2.0	В	Terraces and glacial lake plains	mesic	silty	no	gravelly sand in 2C
L	Scituate	448	3	0.6	2.0	0.06	0.2	С	Firm, platy, sandy till	mesic	loamy	no	loamy sand in Cd
L	Sheepscot	14	3	6.0	20.0	6.00	20.0	В	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	gravelly coarse sand
⊢	Sisk	667	3	0.6	2.0	0.00	0.6	С	Firm, platy, loamy till	cryic	loamy	yes	sandy loam in Cd
⊢	Skerry	558	3	0.6	2.0	0.06	0.6	С	Firm, platy, sandy till	frigid	loamy	yes	loamy sand in Cd
⊢	Sudbury	118	3	2.0	6.0	2.00	20.0	В	Outwash and Stream Terraces	mesic	sandy	no	loam over gravelly sand
⊢	Suffield Sunapee	536 168	3	0.6	2.0	0.00	0.2 6.0	C B	Sandy/loamy over silt/clay Loose till, loamy textures	mesic frigid	silty over clayey loamy	no yes	deep to clay C
H	Sunapee Sunapee var	269	3	0.6	2.0	0.60	6.0	В	Loose till, loamy textures Loose till, loamy textures	frigid	loamy	yes	frigid dystrudept
F	Surplus	669	3	0.6	2.0	0.00	0.6	С	Firm, platy, loamy till	cryic	loamy	yes	mwd, sandy loam in Cd
⊢	Sutton	68	3	0.6	6.0	0.60	6.0	В	Loose till, loamy textures	mesic	loamy	no	iliwa, saliay loalii iii Cu
⊢	Telos	123	3	0.6	2.0	0.02	0.2	C	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	channery silt loam in Cd

Extreme Precipitation Tables

Northeast Regional Climate Center

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

Smoothing Yes

State Location

Longitude 70.748 degrees West **Latitude** 43.054 degrees North

Elevation 0 feet

Date/Time Tue, 09 Nov 2021 08:45:44 -0500

Extreme Precipitation Estimates

add 15%

	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	0.82	1.04	1yr	0.70	0.98	1.21	1.56	2.03	2.67	2.94	3.38	2.36	2.82	3.24	3.96	4.57	1yr
2yr	0.32	0.50	0.62	0.82	1.03	1.30	2yr	0.89	1.18	1.52	1.94	2.49	3.22	3.58	4.12	2.85	3.45	3.95	4.70	5.35	2yr
5yr	0.37	0.58	0.73	0.98	1.25	1.61	5yr	1.08	1.47	1.89	2.44	3.15	4.08	4.60	5.29	3.61	4.42	5.07	5.96	6.73	5yr
10yr	0.41	0.65	0.82	1.12	1.46	1.90	10yr	1.26	1.73	2.24	2.91	3.76	4.88	5.55	5.60	4.32	5.34	6.12	7.14	8.01	10yr
25yr	0.48	0.77	0.97	1.34	1.78	2.35	25yr	1.54	2.15	2.79	3.65	4.76	6.19	7.13	8.20	5.48	6.85	7.85	9.07	10.09	25yr
50yr	0.54	0.87	1.11	1.55	2.09	2.78	50yr	1.80	2.54	3.31	4.35	5.69	7.42	8.62	9.91	6.56	8.29	9.48	10.87	12.02	50yr
100yr	0.60	0.97	1.26	1.79	2.44	3.28	100yr	2.10	3.00	3.93	5.19	6.80	8.88	10.42	11.98	7.86	10.02	11.46	13.03	14.33	100yr
200yr	0.68	1.11	1.44	2.07	2.85	3.87	200yr	2.46	3.54	4.65	6.17	8.12	10.65	12.60		9.42	12.11	13.85	15.63	17.08	200yr
500yr	0.81	1.33	1.73	2.51	3.52	4.81	500yr	3.03	4.42	5.82	7.76	10.28	13.53	16.20		11.97	15.58	17.81	19.89	21.57	500yr

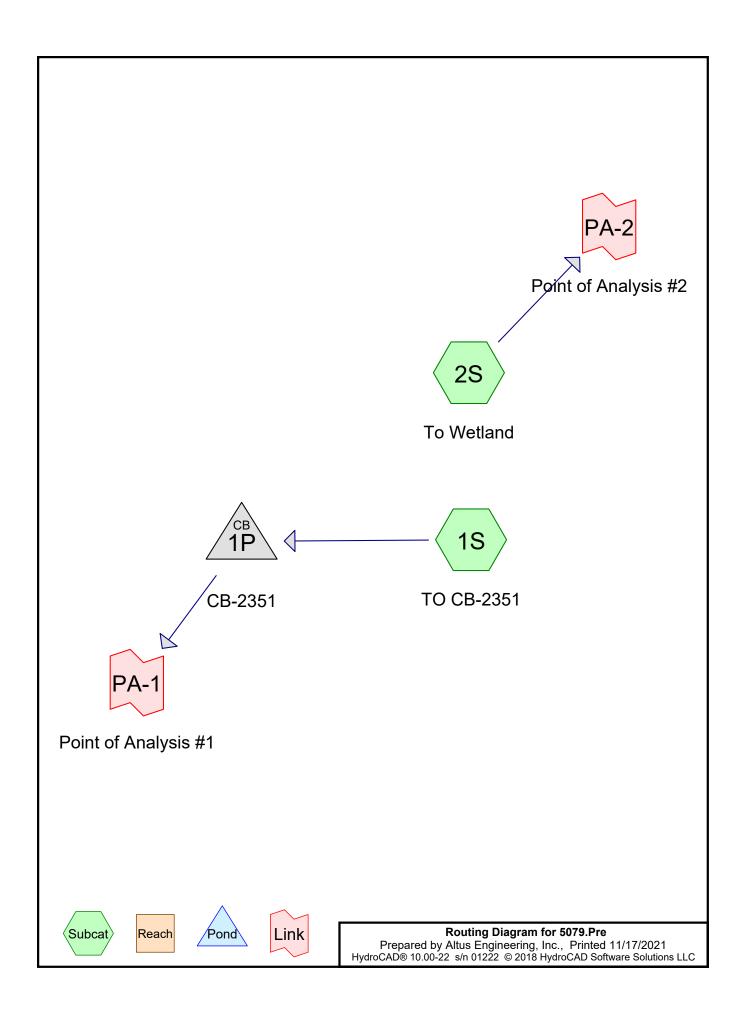
Lower Confidence Limits

	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	0.62	0.86	0.93	1.34	1.69	2.26	2.50	1yr	2.00	2.41	2.88	3.21	3.94	1yr
2yr	0.31	0.49	0.60	0.81	1.00	1.19	2yr	0.86	1.16	1.37	1.81	2.33	3.07	3.47	2yr	2.72	3.33	3.84	4.56	5.11	2yr
5yr	0.35	0.54	0.67	0.92	1.17	1.40	5yr	1.01	1.37	1.61	2.11	2.72	3.80	4.20	5yr	3.36	4.04	4.74	5.56	6.26	5yr
10yr	0.39	0.59	0.74	1.03	1.33	1.60	10yr	1.15	1.57	1.80	2.38	3.05	4.38	4.88	10yr	3.88	4.69	5.47	6.44	7.22	10yr
25yr	0.44	0.67	0.83	1.19	1.56	1.90	25yr	1.35	1.86	2.10	2.74	3.52	4.78	5.91	25yr	4.23	5.68	6.69	7.83	8.72	25yr
50yr	0.48	0.73	0.91	1.31	1.77	2.17	50yr	1.53	2.12	2.35	3.05	3.91	5.41	6.82	50yr	4.79	6.56	7.77	9.10	10.06	50yr
100yr	0.54	0.81	1.02	1.47	2.02	2.47	100yr	1.74	2.41	2.63	3.39	4.31	6.10	7.87	100yr	5.40	7.57	9.04	10.58	11.63	100yr
200yr	0.59	0.89	1.13	1.64	2.28	2.81	200yr	1.97	2.75	2.94	3.74	4.74	6.86	9.09	200yr	6.07	8.74	10.50	12.32	13.45	200yr
500yr	0.69	1.02	1.31	1.91	2.72	3.36	500yr	2.34	3.29	3.42	4.26	5.39	8.01	10.98	500yr	7.09	10.56	12.80	15.09	16.30	500yr

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.29	0.44	0.54	0.72	0.89	1.09	1yr	0.77	1.06	1.26	1.74	2.20	2.98	3.18	1yr	2.64	3.06	3.59	4.38	5.05	1yr
2yr	0.34	0.52	0.64	0.87	1.07	1.27	2yr	0.92	1.24	1.48	1.96	2.52	3.43	3.72	2yr	3.03	3.58	4.11	4.86	5.64	2yr
5yr	0.40	0.62	0.77	1.05	1.34	1.63	5yr	1.16	1.59	1.89	2.54	3.26	4.36	4.98	5yr	3.85	4.79	5.40	6.40	7.18	5yr
10yr	0.47	0.72	0.89	1.25	1.62	1.99	10yr	1.39	1.94	2.29	3.11	3.97	5.36	6.23	10yr	4.74	5.99	6.85	7.87	8.79	10yr
25yr	0.58	0.88	1.10	1.57	2.06	2.59	25yr	1.78	2.53	2.97	4.08	5.18	7.75	8.38	25yr	6.86	8.05	9.20	10.38	11.45	25yr
50yr	0.68	1.03	1.28	1.84	2.48	3.15	50yr	2.14	3.08	3.61	5.02	6.36	9.69	10.50	50yr	8.57	10.10	11.51	12.78	14.01	50yr
100yr	0.80	1.20	1.51	2.18	2.99	3.84	100yr	2.58	3.76	4.40	6.19	7.83	12.11	13.16	100yr	10.71	12.65	14.40	15.76	17.15	100yr
200yr	0.93	1.41	1.78	2.58	3.60	4.70	200yr	3.10	4.59	5.37	7.63	9.63	15.17	16.51	200yr	13.43	15.87	18.04	19.43	20.98	200yr
500yr	1.16	1.73	2.22	3.23	4.59	6.11	500yr	3.96	5.97	6.97	10.10	12.71	20.46	22.28	500yr	18.11	21.43	24.31	25.62	27.41	500yr





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Area Listing (all nodes)

Area	CN	Description
(acres)		(subcatchment-numbers)
0.161	61	>75% Grass cover, Good, HSG B (1S, 2S)
0.187	96	Gravel surface, HSG B (1S, 2S)
0.017	98	Ledge, HSG B (1S, 2S)
0.274	98	Paved parking, HSG B (1S, 2S)
0.126	98	Roofs, HSG B (1S, 2S)
0.290	55	Woods, Good, HSG B (2S)
1.054	80	TOTAL AREA

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Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
0.000	HSG A	
1.054	HSG B	1S, 2S
0.000	HSG C	
0.000	HSG D	
0.000	Other	
1.054		TOTAL AREA

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.161	0.000	0.000	0.000	0.161	>75% Grass cover, Good	1S, 2S
0.000	0.187	0.000	0.000	0.000	0.187	Gravel surface	1S, 2S
0.000	0.017	0.000	0.000	0.000	0.017	Ledge	1S, 2S
0.000	0.274	0.000	0.000	0.000	0.274	Paved parking	1S, 2S
0.000	0.126	0.000	0.000	0.000	0.126	Roofs	1S, 2S
0.000	0.290	0.000	0.000	0.000	0.290	Woods, Good	2S
0.000	1.054	0.000	0.000	0.000	1.054	TOTAL AREA	

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: TO CB-2351 Runoff Area=26,448 sf 56.60% Impervious Runoff Depth=4.57"

Tc=6.0 min CN=91 Runoff=4.40 cfs 0.231 af

Subcatchment 2S: To Wetland Runoff Area=19,478 sf 16.36% Impervious Runoff Depth=2.15"

Tc=12.0 min CN=66 Runoff=1.35 cfs 0.080 af

Pond 1P: CB-2351 Peak Elev=11.72' Inflow=4.40 cfs 0.231 af

Outflow=4.40 cfs 0.231 af

Link PA-1: Point of Analysis #1 Inflow=4.40 cfs 0.231 af

Primary=4.40 cfs 0.231 af

Link PA-2: Point of Analysis #2 Inflow=1.35 cfs 0.080 af

Primary=1.35 cfs 0.080 af

Total Runoff Area = 1.054 ac Runoff Volume = 0.311 af Average Runoff Depth = 3.54" 60.46% Pervious = 0.637 ac 39.54% Impervious = 0.417 ac

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Summary for Subcatchment 1S: TO CB-2351

Runoff = 4.40 cfs @ 11.96 hrs, Volume= 0.231 af, Depth= 4.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 10-yr Rainfall=5.60"

	Α	rea (sf)	CN	Description			
•		4,372	98	Roofs, HSG	ВВ		
		10,058	98	Paved park	ing, HSG B	}	
		6,716	96	Gravel surfa	ace, HSG E	3	
*		540	98	Ledge, HSC	βB		
		4,762	61	>75% Gras	s cover, Go	ood, HSG B	
		26,448	91	Weighted A	verage		
		11,478		43.40% Per	vious Area		
		14,970		56.60% Imp	ervious Are	ea	
				•			
	Tc	Length	Slope	e Velocity	Capacity	Description	
(r	min)	(feet)	(ft/ft) (ft/sec)	(cfs)	•	
-	6.0					Direct Entry,	

Summary for Subcatchment 2S: To Wetland

Runoff = 1.35 cfs @ 12.05 hrs, Volume= 0.080 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 10-yr Rainfall=5.60"

	P	Area (sf)	CN	Description		
		1,125	98	Roofs, HSG	ВВ	
		1,882	98	Paved park	ing, HSG B	В
		1,410	96	Gravel surfa	ace, HSG E	В
*		180	98	Ledge, HS0	∃ B	
		2,232	61	>75% Gras	s cover, Go	Good, HSG B
		12,649	55	Woods, Go	od, HSG B	3
		19,478	66	Weighted A	verage	
		16,291		83.64% Pei	vious Area	a
		3,187		16.36% Imp	ervious Ar	rea
	Tc	Length	Slope	e Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft) (ft/sec)	(cfs)	
	12.0					Direct Entry.

Summary for Pond 1P: CB-2351

Inflow Area	a =	0.607 ac, 5	6.60% Impe	ervious, In	flow Depth =	4.57"	for 10-	yr event	
Inflow	=	4.40 cfs @	11.96 hrs,	Volume=	0.231	af			
Outflow	=	4.40 cfs @	11.96 hrs,	Volume=	0.231	af, Att	en= 0%,	Lag= 0.0 m	nin
Primary	=	4.40 cfs @	11.96 hrs,	Volume=	0.231	af			

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

5079.Pre Type II 24-hr 10-yr Rainfall=5.60"

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Peak Elev= 11.72' @ 11.96 hrs

Flood Elev= 22.40'

Device Routing Invert Outlet Devices

#1 Primary 10.55' **15.0" Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=4.30 cfs @ 11.96 hrs HW=11.70' (Free Discharge) 1=Orifice/Grate (Orifice Controls 4.30 cfs @ 3.64 fps)

Summary for Link PA-1: Point of Analysis #1

Inflow Area = 0.607 ac, 56.60% Impervious, Inflow Depth = 4.57" for 10-yr event

Inflow = 4.40 cfs @ 11.96 hrs, Volume= 0.231 af

Primary = 4.40 cfs @ 11.96 hrs, Volume= 0.231 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Summary for Link PA-2: Point of Analysis #2

Inflow Area = 0.447 ac, 16.36% Impervious, Inflow Depth = 2.15" for 10-yr event

Inflow = 1.35 cfs @ 12.05 hrs, Volume= 0.080 af

Primary = 1.35 cfs @ 12.05 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: TO CB-2351 Runoff Area=26,448 sf 56.60% Impervious Runoff Depth=3.13"

Tc=6.0 min CN=91 Runoff=3.09 cfs 0.158 af

Subcatchment 2S: To Wetland Runoff Area=19,478 sf 16.36% Impervious Runoff Depth=1.16"

Tc=12.0 min CN=66 Runoff=0.70 cfs 0.043 af

Pond 1P: CB-2351 Peak Elev=11.46' Inflow=3.09 cfs 0.158 af

Outflow=3.09 cfs 0.158 af

Link PA-1: Point of Analysis #1 Inflow=3.09 cfs 0.158 af

Primary=3.09 cfs 0.158 af

Link PA-2: Point of Analysis #2 Inflow=0.70 cfs 0.043 af

Primary=0.70 cfs 0.043 af

Total Runoff Area = 1.054 ac Runoff Volume = 0.202 af Average Runoff Depth = 2.30" 60.46% Pervious = 0.637 ac 39.54% Impervious = 0.417 ac

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Summary for Subcatchment 1S: TO CB-2351

Runoff = 3.09 cfs @ 11.96 hrs, Volume= 0.158 af, Depth= 3.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 2-yr Rainfall=4.12"

	Α	rea (sf)	CN	Description					
•		4,372	98	Roofs, HSG					
		10,058	98	Paved parking, HSG B					
		6,716	96	Gravel surface, HSG B					
*		540	98	Ledge, HSG B					
		4,762	61	>75% Grass cover, Good, HSG B					
		26,448	91	Weighted A	verage				
		11,478		43.40% Pervious Area					
		14,970		56.60% Impervious Area					
				•					
	Tc	Length	Slope	e Velocity	Capacity	Description			
(r	min)	(feet)	(ft/ft) (ft/sec)	(cfs)				
-	6.0					Direct Entry,			

Summary for Subcatchment 2S: To Wetland

Runoff = 0.70 cfs @ 12.05 hrs, Volume= 0.043 af, Depth= 1.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 2-yr Rainfall=4.12"

	Area (sf)	CN	Description					
	1,125	98	Roofs, HSG	ВВ				
	1,882	98	Paved park	ing, HSG B	}			
	1,410	96	Gravel surfa	ace, HSG E	3			
*	180	98	Ledge, HSC	βB				
	2,232	61	>75% Gras	s cover, Go	ood, HSG B			
	12,649	55	Woods, Go	od, HSG B				
	19,478	66	Weighted A	verage				
	16,291		83.64% Pervious Area					
	3,187		16.36% Impervious Area					
			•					
	Tc Length	Slop	oe Velocity	Capacity	Description			
(n	nin) (feet)	(ft/	ft) (ft/sec)	(cfs)	•			
1	2.0				Direct Entry.			

Summary for Pond 1P: CB-2351

Inflow Area	=	0.607 ac, 5	6.60% Impe	ervious, Inflow De	epth = 3.13"	for 2-yr event
Inflow	=	3.09 cfs @	11.96 hrs,	Volume=	0.158 af	•
Outflow	=	3.09 cfs @	11.96 hrs,	Volume=	0.158 af, At	en= 0%, Lag= 0.0 min
Primary	=	3.09 cfs @	11.96 hrs,	Volume=	0.158 af	_

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

5079.Pre

Type II 24-hr 2-yr Rainfall=4.12"

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Peak Elev= 11.46' @ 11.96 hrs

Flood Elev= 22.40'

Device Routing Invert Outlet Devices

#1 Primary 10.55' **15.0" Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=3.00 cfs @ 11.96 hrs HW=11.44' (Free Discharge) 1=Orifice/Grate (Orifice Controls 3.00 cfs @ 3.21 fps)

Summary for Link PA-1: Point of Analysis #1

Inflow Area = 0.607 ac, 56.60% Impervious, Inflow Depth = 3.13" for 2-yr event

Inflow = 3.09 cfs @ 11.96 hrs, Volume= 0.158 af

Primary = 3.09 cfs @ 11.96 hrs, Volume= 0.158 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Summary for Link PA-2: Point of Analysis #2

Inflow Area = 0.447 ac, 16.36% Impervious, Inflow Depth = 1.16" for 2-yr event

Inflow = 0.70 cfs @ 12.05 hrs, Volume= 0.043 af

Primary = 0.70 cfs @ 12.05 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: TO CB-2351 Runoff Area=26,448 sf 56.60% Impervious Runoff Depth=7.12"

Tc=6.0 min CN=91 Runoff=6.67 cfs 0.360 af

Subcatchment 2S: To Wetland Runoff Area=19,478 sf 16.36% Impervious Runoff Depth=4.17"

Tc=12.0 min CN=66 Runoff=2.65 cfs 0.155 af

Pond 1P: CB-2351 Peak Elev=12.44' Inflow=6.67 cfs 0.360 af

Outflow=6.67 cfs 0.360 af

Link PA-1: Point of Analysis #1 Inflow=6.67 cfs 0.360 af

Primary=6.67 cfs 0.360 af

Link PA-2: Point of Analysis #2 Inflow=2.65 cfs 0.155 af

Primary=2.65 cfs 0.155 af

Total Runoff Area = 1.054 ac Runoff Volume = 0.516 af Average Runoff Depth = 5.87" 60.46% Pervious = 0.637 ac 39.54% Impervious = 0.417 ac

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Summary for Subcatchment 1S: TO CB-2351

Runoff = 6.67 cfs @ 11.96 hrs, Volume= 0.360 af, Depth= 7.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 25-yr Rainfall=8.20"

	Ar	ea (sf)	CN	Description						
		4,372	98	Roofs, HSG	ВВ					
	1	0,058	98	Paved park	ing, HSG B	}				
		6,716	96	Gravel surfa	ace, HSG E	3				
*		540	98	Ledge, HSC	βB					
		4,762	61	>75% Grass cover, Good, HSG B						
	2	26,448	91	Weighted Average						
	1	1,478		43.40% Per	vious Area					
	1	4,970		56.60% Imp	ervious Are	ea				
				_						
	Tc	Length	Slope	e Velocity	Capacity	Description				
(m	in)	(feet)	(ft/ft) (ft/sec)	(cfs)	-				
	6.0					Direct Entry,				

Summary for Subcatchment 2S: To Wetland

Runoff = 2.65 cfs @ 12.04 hrs, Volume= 0.155 af, Depth= 4.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 25-yr Rainfall=8.20"

	Area (sf) CN	Description	Description					
	1,125	5 98	Roofs, HSG	ВВ					
	1,882	2 98	Paved park	ing, HSG B					
	1,410	96	Gravel surfa	ace, HSG E	3				
*	180	98	Ledge, HS0	₿B					
	2,232	2 61	>75% Gras	s cover, Go	od, HSG B				
	12,649	9 55	Woods, Go	Woods, Good, HSG B					
	19,478	3 66	Weighted A	verage					
	16,291	1	83.64% Per	vious Area					
	3,187	7	16.36% Imp	ervious Ar	ea				
	Tc Leng	th Slo	pe Velocity	Capacity	Description				
(m	in) (fee	et) (ft/	/ft) (ft/sec)	(cfs)					
12	2.0				Direct Entry,				

Summary for Pond 1P: CB-2351

Inflow Area =	0.607 ac, 56.60% Impervious, Inflow	Depth = 7.12" for 25-yr event
Inflow =	6.67 cfs @ 11.96 hrs, Volume=	0.360 af
Outflow =	6.67 cfs @ 11.96 hrs, Volume=	0.360 af, Atten= 0%, Lag= 0.0 min
Primary =	6.67 cfs @ 11.96 hrs, Volume=	0.360 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

5079.Pre

Type II 24-hr 25-yr Rainfall=8.20"

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Peak Elev= 12.44' @ 11.96 hrs

Flood Elev= 22.40'

Device Routing Invert Outlet Devices

#1 Primary 10.55' 15.0" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=6.50 cfs @ 11.96 hrs HW=12.39' (Free Discharge) 1=Orifice/Grate (Orifice Controls 6.50 cfs @ 5.30 fps)

Summary for Link PA-1: Point of Analysis #1

Inflow Area = 0.607 ac, 56.60% Impervious, Inflow Depth = 7.12" for 25-yr event

Inflow = 6.67 cfs @ 11.96 hrs, Volume= 0.360 af

Primary = 6.67 cfs @ 11.96 hrs, Volume= 0.360 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Summary for Link PA-2: Point of Analysis #2

Inflow Area = 0.447 ac, 16.36% Impervious, Inflow Depth = 4.17" for 25-yr event

Inflow = 2.65 cfs @ 12.04 hrs, Volume= 0.155 af

Primary = 2.65 cfs @ 12.04 hrs, Volume= 0.155 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: TO CB-2351 Runoff Area=26,448 sf 56.60% Impervious Runoff Depth=8.81"

Tc=6.0 min CN=91 Runoff=8.14 cfs 0.446 af

Subcatchment 2S: To Wetland Runoff Area=19,478 sf 16.36% Impervious Runoff Depth=5.62"

Tc=12.0 min CN=66 Runoff=3.56 cfs 0.209 af

Pond 1P: CB-2351 Peak Elev=13.07' Inflow=8.14 cfs 0.446 af

Outflow=8.14 cfs 0.446 af

Link PA-1: Point of Analysis #1 Inflow=8.14 cfs 0.446 af

Primary=8.14 cfs 0.446 af

Link PA-2: Point of Analysis #2 Inflow=3.56 cfs 0.209 af

Primary=3.56 cfs 0.209 af

Total Runoff Area = 1.054 ac Runoff Volume = 0.655 af Average Runoff Depth = 7.46" 60.46% Pervious = 0.637 ac 39.54% Impervious = 0.417 ac

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Summary for Subcatchment 1S: TO CB-2351

Runoff = 8.14 cfs @ 11.96 hrs, Volume= 0.446 af, Depth= 8.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 50-yr Rainfall=9.91"

	Α	rea (sf)	CN	Description						
		4,372	98	Roofs, HSG	ВВ					
		10,058	98	Paved park	ing, HSG B	}				
		6,716	96	Gravel surfa	ace, HSG E	3				
*		540	98	Ledge, HSC	₿ B					
		4,762	61	>75% Grass cover, Good, HSG B						
		26,448	91	Weighted Average						
		11,478		43.40% Per	vious Area					
		14,970		56.60% Imp	ervious Ar	ea				
				_						
	Тс	Length	Slope	e Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft) (ft/sec)	(cfs)					
	6.0			·		Direct Entry,				

Summary for Subcatchment 2S: To Wetland

Runoff = 3.56 cfs @ 12.04 hrs, Volume= 0.209 af, Depth= 5.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 50-yr Rainfall=9.91"

	Area (sf) CN	Description	Description					
	1,12	5 98	Roofs, HSG	ВВ					
	1,882	2 98	Paved park	ing, HSG B	}				
	1,410	0 96	Gravel surfa	ace, HSG E	3				
*	180	0 98	Ledge, HS0	Ledge, HSG B					
	2,232	2 61	>75% Gras	s cover, Go	ood, HSG B				
	12,649	9 55	Woods, Go	Woods, Good, HSG B					
	19,478	8 66	Weighted A	Weighted Average					
	16,29°	1	83.64% Per	vious Area					
	3,187	7	16.36% Imp	pervious Ar	ea				
	Tc Leng	th Slo	pe Velocity	Capacity	Description				
(m	nin) (fee	et) (ft.	ft) (ft/sec)	(cfs)					
1:	2.0				Direct Entry,				

Summary for Pond 1P: CB-2351

Inflow Area	a =	0.607 ac, 5	6.60% Impe	ervious, Inflow	Depth = 8.81	" for 50-y	∕r event
Inflow	=	8.14 cfs @	11.96 hrs,	Volume=	0.446 af	-	
Outflow	=	8.14 cfs @	11.96 hrs,	Volume=	0.446 af, A	tten= 0%,	Lag= 0.0 min
Primary	=	8.14 cfs @	11.96 hrs,	Volume=	0.446 af		_

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

5079.Pre Type II 24-hr 50-yr Rainfall=9.91"

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Peak Elev= 13.07' @ 11.96 hrs

Flood Elev= 22.40'

Device Routing Invert Outlet Devices

#1 Primary 10.55' **15.0" Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=7.95 cfs @ 11.96 hrs HW=12.98' (Free Discharge) 1=Orifice/Grate (Orifice Controls 7.95 cfs @ 6.48 fps)

Summary for Link PA-1: Point of Analysis #1

Inflow Area = 0.607 ac, 56.60% Impervious, Inflow Depth = 8.81" for 50-yr event

Inflow = 8.14 cfs @ 11.96 hrs, Volume= 0.446 af

Primary = 8.14 cfs @ 11.96 hrs, Volume= 0.446 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

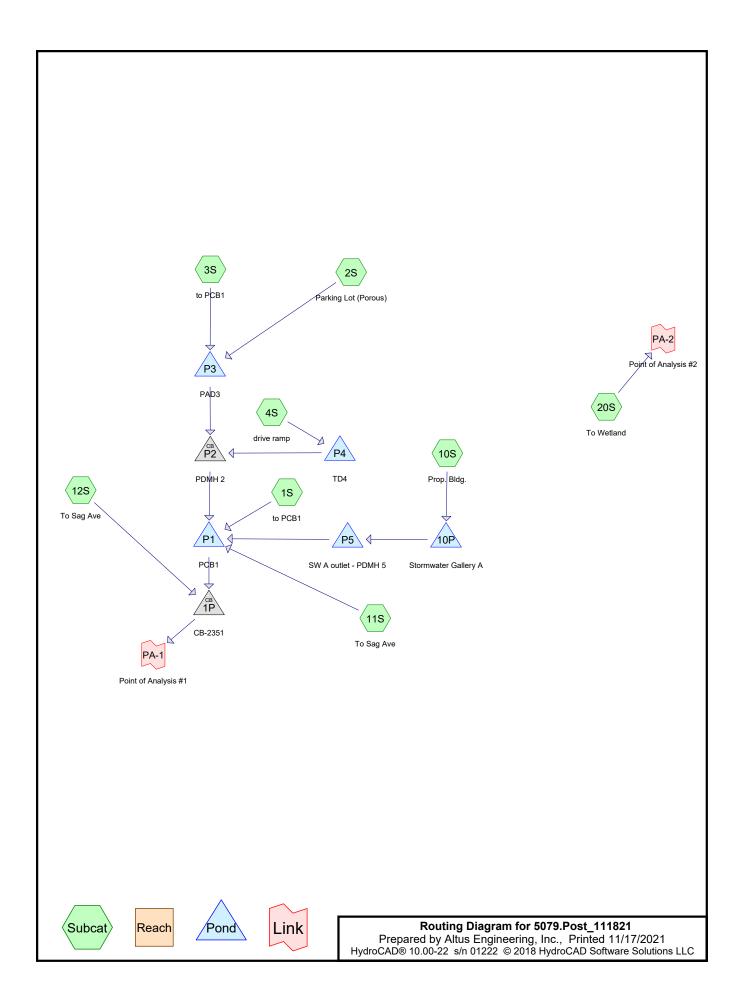
Summary for Link PA-2: Point of Analysis #2

Inflow Area = 0.447 ac, 16.36% Impervious, Inflow Depth = 5.62" for 50-yr event

Inflow = 3.56 cfs @ 12.04 hrs, Volume= 0.209 af

Primary = 3.56 cfs @ 12.04 hrs, Volume= 0.209 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs



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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.336	61	>75% Grass cover, Good, HSG B (1S, 2S, 3S, 11S, 12S, 20S)
0.004	98	Ledge, HSG B (20S)
0.174	98	Paved parking, HSG B (2S, 3S, 4S, 12S, 20S)
0.002	98	Pavers, HSG B (20S)
0.041	98	Porous Pavement, HSG B (2S)
0.189	98	Roofs, HSG B (10S)
0.028	98	Unconnected pavement, HSG B (1S, 2S, 3S, 11S, 12S, 20S)
0.280	55	Woods, Good, HSG B (20S)
1.054	75	TOTAL AREA

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Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
0.000	HSG A	
1.054	HSG B	1S, 2S, 3S, 4S, 10S, 11S, 12S, 20S
0.000	HSG C	
0.000	HSG D	
0.000	Other	
1.054		TOTAL AREA

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.336	0.000	0.000	0.000	0.336	>75% Grass cover, Good	1S, 2S,
							3S, 11S, 12S, 20S
0.000	0.004	0.000	0.000	0.000	0.004	Ledge	208
0.000	0.174	0.000	0.000	0.000	0.174	Paved parking	2S, 3S,
							4S, 12S,
							20S
0.000	0.002	0.000	0.000	0.000	0.002	Pavers	20S
0.000	0.041	0.000	0.000	0.000	0.041	Porous Pavement	2S
0.000	0.189	0.000	0.000	0.000	0.189	Roofs	10S
0.000	0.028	0.000	0.000	0.000	0.028	Unconnected pavement	1S, 2S,
							3S, 11S,
							12S, 20S
0.000	0.280	0.000	0.000	0.000	0.280	Woods, Good	20S
0.000	1.054	0.000	0.000	0.000	1.054	TOTAL AREA	

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Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	P1	16.40	16.20	12.0	0.0167	0.012	12.0	0.0	0.0
2	P2	16.80	16.50	50.0	0.0060	0.012	12.0	0.0	0.0
3	P3	17.00	16.90	20.0	0.0050	0.012	12.0	0.0	0.0
4	P4	17.10	16.90	24.0	0.0083	0.012	8.0	0.0	0.0
5	P5	16.50	16.40	10.0	0.0100	0.012	12.0	0.0	0.0

Type II 24-hr 10-yr Rainfall=5.60"

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: to PCB1	Runoff Area=2,145 sf	5.13% Impervious	Runoff Depth=1.82"

Tc=6.0 min UI Adjusted CN=62 Runoff=0.15 cfs 0.007 af

Subcatchment 2S: Parking Lot (Porous) Runoff Area=3,595 sf 82.48% Impervious Runoff Depth>3.77"

Tc=790.0 min CN=92 Runoff=0.03 cfs 0.026 af

Subcatchment 3S: to PCB1 Runoff Area=2,735 sf 11.52% Impervious Runoff Depth=2.06"

Tc=6.0 min CN=65 Runoff=0.23 cfs 0.011 af

Subcatchment 4S: drive ramp Runoff Area=680 sf 100.00% Impervious Runoff Depth=5.36"

Tc=6.0 min CN=98 Runoff=0.12 cfs 0.007 af

Subcatchment 10S: Prop. Bldg. Runoff Area=8,245 sf 100.00% Impervious Runoff Depth=5.36"

Tc=6.0 min CN=98 Runoff=1.47 cfs 0.085 af

Subcatchment 11S: To Sag Ave Runoff Area=3,695 sf 10.96% Impervious Runoff Depth=1.90"

Tc=6.0 min UI Adjusted CN=63 Runoff=0.28 cfs 0.013 af

Subcatchment 12S: To Sag Ave Runoff Area=5,395 sf 73.03% Impervious Runoff Depth=4.24"

Tc=6.0 min CN=88 Runoff=0.85 cfs 0.044 af

Subcatchment 20S: To Wetland Runoff Area=19,422 sf 12.51% Impervious Runoff Depth=1.82"

Tc=12.0 min CN=62 Runoff=1.12 cfs 0.068 af

Pond 1P: CB-2351 Peak Elev=11.46' Inflow=3.12 cfs 0.191 af

Outflow=3.12 cfs 0.191 af

Pond 10P: Stormwater Gallery A Peak Elev=26.18' Storage=588 cf Inflow=1.47 cfs 0.085 af

Outflow=1.51 cfs 0.082 af

Pond P1: PCB1 Peak Elev=17.32' Storage=12 cf Inflow=2.28 cfs 0.147 af

12.0" Round Culvert n=0.012 L=12.0' S=0.0167 '/' Outflow=2.29 cfs 0.147 af

Pond P2: PDMH 2 Peak Elev=17.11' Inflow=0.34 cfs 0.044 af

12.0" Round Culvert n=0.012 L=50.0' S=0.0060 '/' Outflow=0.34 cfs 0.044 af

Pond P3: PAD3 Peak Elev=17.27' Storage=1 cf Inflow=0.23 cfs 0.037 af

12.0" Round Culvert n=0.012 L=20.0' S=0.0050 '/' Outflow=0.23 cfs 0.037 af

Pond P4: TD4 Peak Elev=17.30' Storage=1 cf Inflow=0.12 cfs 0.007 af

8.0" Round Culvert n=0.012 L=24.0' S=0.0083 '/' Outflow=0.12 cfs 0.007 af

Pond P5: SW A outlet - PDMH 5 Peak Elev=17.26' Storage=10 cf Inflow=1.51 cfs 0.082 af

12.0" Round Culvert n=0.012 L=10.0' S=0.0100 '/' Outflow=1.51 cfs 0.082 af

Link PA-1: Point of Analysis #1 Inflow=3.12 cfs 0.191 af Primary=3.12 cfs 0.191 af

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Type II 24-hr 10-yr Rainfall=5.60"

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Link PA-2: Point of Analysis #2

Inflow=1.12 cfs 0.068 af Primary=1.12 cfs 0.068 af

Total Runoff Area = 1.054 ac Runoff Volume = 0.261 af Average Runoff Depth = 2.97" 58.42% Pervious = 0.616 ac 41.58% Impervious = 0.438 ac

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Summary for Subcatchment 1S: to PCB1

0.15 cfs @ 11.98 hrs, Volume= Runoff 0.007 af, Depth= 1.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 10-yr Rainfall=5.60"

A	rea (sf)	CN	Adj De	Description				
	2,035	61	>7	5% Grass co	ver, Good, HSG B			
	110	98	Ur	connected pa	avement, HSG B			
	2,145	63	62 W	Weighted Average, UI Adjusted				
	2,035		94	94.87% Pervious Area				
	110		5.	13% Impervio	ous Area			
	110		10	0.00% Uncor	nnected			
Tc	Length	Slope		, ,	Description			
(min)	(feet)	(ft/ft)	(ft/sed	c) (cfs)				
6.0					Direct Entry,			

Direct Entry,

Summary for Subcatchment 2S: Parking Lot (Porous)

Runoff 0.03 cfs @ 21.94 hrs, Volume= 0.026 af, Depth> 3.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 10-yr Rainfall=5.60"

	Area (sf)	CN	Description				
	630	61	>75% Grass cover, Goo	d, HSG B			
	825	98	Paved parking, HSG B				
*	1,780	98	Porous Pavement, HSG	Porous Pavement, HSG B			
	360 98 Unconnected pavement, HSG B						
	3,595	92	Weighted Average				
	630		17.52% Pervious Area				
	2,965		82.48% Impervious Area	ì			
	360		12.14% Unconnected				
T	c Length	Slop	 Velocity Capacity I 	Description			
<u>(min</u>	ı) (feet)	(ft/f	(ft/sec) (cfs)				
790.	0		I	Direct Entry,			

Summary for Subcatchment 3S: to PCB1

0.23 cfs @ 11.98 hrs, Volume= 0.011 af, Depth= 2.06" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 10-yr Rainfall=5.60"

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A	rea (sf)	CN	Description				
	2,420	61	>75% Grass cover, Good, HSG B				
	210	98	Paved parking, HSG B				
	105	98	Unconnected pavement, HSG B				
	2,735	65	Weighted Average				
	2,420		88.48% Pervious Area				
	315		11.52% Impervious Area				
	105		33.33% Unconnected				
Тс	Length	Slop					
(min)	(feet)	(ft/f	ft) (ft/sec) (cfs)				
6.0			Direct Entry,				

Summary for Subcatchment 4S: drive ramp

Runoff = 0.12 cfs @ 11.96 hrs, Volume= 0.007 af, Depth= 5.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 10-yr Rainfall=5.60"

A	rea (sf)	CN [CN Description				
	680	98 F	98 Paved parking, HSG B				
	680	•	100.00% Impervious Area				
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description		
6.0					Direct Entry,		

Summary for Subcatchment 10S: Prop. Bldg.

Runoff = 1.47 cfs @ 11.96 hrs, Volume= 0.085 af, Depth= 5.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 10-yr Rainfall=5.60"

A	rea (sf)	CN [Description			
	8,245	98 F	Roofs, HSG B			
•	8,245	100.00% Impervious Area				
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
6.0		•			Direct Entry,	

Summary for Subcatchment 11S: To Sag Ave

Runoff = 0.28 cfs @ 11.98 hrs, Volume= 0.013 af, Depth= 1.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 10-yr Rainfall=5.60"

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A	rea (sf)	CN	Adj	Desc	ription	
	3,290	61		>75%	Grass co	ver, Good, HSG B
	275	98		Unco	nnected pa	avement, HSG B
	130	98		Unco	nnected pa	avement, HSG B
	3,695	65	63	Weig	hted Avera	age, UI Adjusted
	3,290			89.04	1% Perviou	is Area
	405			10.96	6% Impervi	ous Area
	405			100.0	00% Uncon	nected
Тс	Length	Slope	e Ve	locity	Capacity	Description
(min)	(feet)	(ft/ft) (f1	t/sec)	(cfs)	
6.0						Direct Entry,

Summary for Subcatchment 12S: To Sag Ave

Runoff = 0.85 cfs @ 11.96 hrs, Volume= 0.044 af, Depth= 4.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 10-yr Rainfall=5.60"

A	rea (sf)	CN	CN Description					
	3,260	98	Paved park	ing, HSG B	}			
	480	98	Paved park	ing, HSG B				
	730	61	>75% Gras	s cover, Go	ood, HSG B			
	200	98	Unconnecte	ed pavemer	nt, HSG B			
	725	61	>75% Gras	s cover, Go	ood, HSG B			
•	5,395	88	88 Weighted Average					
	1,455		26.97% Per	vious Area				
	3,940		73.03% Imp	ervious Ar	ea			
	200		5.08% Unco	onnected				
Тс	Length	Slope	•	Capacity	Description			
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)				
6.0					Direct Entry,			

Summary for Subcatchment 20S: To Wetland

Runoff = 1.12 cfs @ 12.05 hrs, Volume= 0.068 af, Depth= 1.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 10-yr Rainfall=5.60"

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	Area (sf)	CN	Description				
	2,110	98	Paved parking, HSG B				
*	100	98	Pavers, HSG B				
	40	98	Unconnected pavement, HSG B				
*	180	98	Ledge, HSG B				
	4,810	61	>75% Grass cover, Good, HSG B				
	12,182	55	Woods, Good, HSG B				
	19,422	62	Weighted Average				
	16,992		87.49% Pervious Area				
	2,430		12.51% Impervious Area				
	40		1.65% Unconnected				
	Tc Length	Slop					
<u>(r</u>	min) (feet)	(ft/	ft) (ft/sec) (cfs)				
1	12.0		Direct Entry,				

Summary for Pond 1P: CB-2351

Inflow Area = 0.608 ac, 62.89% Impervious, Inflow Depth > 3.76" for 10-yr event

Inflow = 3.12 cfs @ 11.99 hrs, Volume= 0.191 af

Outflow = 3.12 cfs @ 11.99 hrs, Volume= 0.191 af, Atten= 0%, Lag= 0.0 min

Primary = 3.12 cfs @ 11.99 hrs, Volume= 0.191 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Peak Elev= 11.46' @ 11.99 hrs

Flood Elev= 22.40'

Device	Routing	Invert	Outlet Devices	
#1	Primary	10.55'	15.0" Vert. Orifice/Grate C= 0.600	

Primary OutFlow Max=2.98 cfs @ 11.99 hrs HW=11.44' (Free Discharge) 1=Orifice/Grate (Orifice Controls 2.98 cfs @ 3.20 fps)

Summary for Pond 10P: Stormwater Gallery A

Inflow Area = 0.189 ac,100.00% Impervious, Inflow Depth = 5.36" for 10-yr event

Inflow = 1.47 cfs @ 11.96 hrs, Volume= 0.085 af

Outflow = 1.51 cfs @ 11.99 hrs, Volume= 0.082 af, Atten= 0%, Lag= 1.9 min

Primary = 1.51 cfs @ 11.99 hrs, Volume= 0.082 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 26.18' @ 11.99 hrs Surf.Area= 500 sf Storage= 588 cf

Plug-Flow detention time= 45.0 min calculated for 0.082 af (97% of inflow)

Center-of-Mass det. time= 27.8 min (769.8 - 742.1)

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Volume	Inv	ert Avail.S	Storage	Storage D	escription	
#1	24.0	00'	487 cf			rismatic)Listed below (Recalc) Embedded = 1,217 cf x 40.0% Voids
#2	24.	50'	283 cf	•		rage x 4.5 Inside #1
			770 cf	Total Avai	lable Storage	
Elevatio		Surf.Area (sq-ft)		c.Store c-feet)	Cum.Store (cubic-feet)	
24.0	00	500		0	0	
27.0	00	500		1,500	1,500	
Device	Routing	Inve	rt Outl	et Devices		
#1	Primary	24.50	-		ce/Grate C=	
#2	Primary	26.00	0' 4.0'	long Sharp	o-Crested Vee	e/Trap Weir Cv= 2.62 (C= 3.28)

Primary OutFlow Max=1.45 cfs @ 11.99 hrs HW=26.17' (Free Discharge)

1=Orifice/Grate (Orifice Controls 0.52 cfs @ 5.91 fps)

-2=Sharp-Crested Vee/Trap Weir (Weir Controls 0.93 cfs @ 1.36 fps)

Summary for Pond P1: PCB1

Inflow Area = 0.484 ac, 60.30% Impervious, Inflow Depth > 3.64" for 10-yr event

Inflow = 2.28 cfs @ 11.99 hrs, Volume= 0.147 af

Outflow = 2.29 cfs @ 11.99 hrs, Volume= 0.147 af, Atten= 0%, Lag= 0.1 min

Primary = 2.29 cfs @ 11.99 hrs, Volume= 0.147 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 17.32' @ 11.99 hrs Surf.Area= 13 sf Storage= 12 cf

Plug-Flow detention time= 0.3 min calculated for 0.147 af (100% of inflow)

Center-of-Mass det. time= 0.2 min (887.6 - 887.4)

Volume	Invert	Avail.Storage	Storage Description
#1	16.40'	63 cf	4.00'D x 5.00'H Vertical Cone/Cylinder
Device	Routing	Invert Outl	et Devices
#1	Primary	Inlet	P" Round Culvert L= 12.0' Ke= 0.500 t / Outlet Invert= 16.40' / 16.20' S= 0.0167 '/' Cc= 0.900 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=2.20 cfs @ 11.99 hrs HW=17.29' (Free Discharge) 1=Culvert (Barrel Controls 2.20 cfs @ 3.93 fps)

Summary for Pond P2: PDMH 2

Inflow Area	a =	0.161 ac, 56.49% Impervious	, Inflow Depth > 3.26" for	r 10-yr event
Inflow	=	0.34 cfs @ 11.97 hrs, Volum	e= 0.044 af	
Outflow	=	0.34 cfs @ 11.97 hrs, Volum	e= 0.044 af, Atten=	0%, Lag= 0.0 min

Primary = 0.34 cfs @ 11.97 hrs, Volume= 0.044 af

Type II 24-hr 10-yr Rainfall=5.60"

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Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Peak Elev= 17.11' @ 11.97 hrs

Flood Elev= 30.07'

Device	Routing	Invert	Outlet Devices
#1	Primary	16.80'	12.0" Round Culvert
			L= 50.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 16.80' / 16.50' S= 0.0060 '/' Cc= 0.900
			n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.32 cfs @ 11.97 hrs HW=17.11' (Free Discharge) 1=Culvert (Barrel Controls 0.32 cfs @ 2.33 fps)

Summary for Pond P3: PAD3

Inflow Area = 0.145 ac, 51.82% Impervious, Inflow Depth > 3.03" for 10-yr event

Inflow 0.23 cfs @ 11.98 hrs, Volume= 0.037 af

Outflow 0.23 cfs @ 11.98 hrs, Volume= 0.037 af, Atten= 0%, Lag= 0.1 min =

0.23 cfs @ 11.98 hrs, Volume= 0.037 af Primary

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 17.27' @ 11.98 hrs Surf.Area= 3 sf Storage= 1 cf

Plug-Flow detention time= 0.2 min calculated for 0.037 af (100% of inflow)

Center-of-Mass det. time= 0.1 min (1,195.9 - 1,195.8)

Volume	Invert	Avail.Storage	Storage Description
#1	17.00'	13 cf	2.00'D x 4.00'H Vertical Cone/Cylinder
Device	Routing	Invert Out	et Devices
#1	Primary	Inle	P" Round Culvert L= 20.0' Ke= 0.500 t / Outlet Invert= 17.00' / 16.90' S= 0.0050 '/' Cc= 0.900 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.22 cfs @ 11.98 hrs HW=17.27' (Free Discharge) **1-Culvert** (Barrel Controls 0.22 cfs @ 1.92 fps)

Summary for Pond P4: TD4

0.016 ac,100.00% Impervious, Inflow Depth = 5.36" Inflow Area = for 10-yr event

0.12 cfs @ 11.96 hrs, Volume= Inflow 0.007 af

0.12 cfs @ 11.96 hrs, Volume= Outflow = 0.007 af, Atten= 0%, Lag= 0.1 min

Primary 0.12 cfs @ 11.96 hrs, Volume=

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 17.30' @ 11.96 hrs Surf.Area= 3 sf Storage= 1 cf

Plug-Flow detention time= 0.4 min calculated for 0.007 af (100% of inflow)

Center-of-Mass det. time= 0.4 min (742.4 - 742.1)

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Type II 24-hr 10-yr Rainfall=5.60" Printed 11/17/2021

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Volume	Invert	Avail.Storage	Storage Description
#1	17.10'	9 cf	2.00'D x 3.00'H Vertical Cone/Cylinder
Device	Routing	Invert Out	let Devices
#1	Primary	Inle	' Round Culvert L= 24.0' Ke= 0.500 t / Outlet Invert= 17.10' / 16.90' S= 0.0083 '/' Cc= 0.900 0.012, Flow Area= 0.35 sf

Primary OutFlow Max=0.12 cfs @ 11.96 hrs HW=17.30' (Free Discharge) 1=Culvert (Barrel Controls 0.12 cfs @ 2.00 fps)

Summary for Pond P5: SW A outlet - PDMH 5

Inflow Area = 0.189 ac,100.00% Impervious, Inflow Depth = 5.22" for 10-yr event

Inflow = 1.51 cfs @ 11.99 hrs, Volume= 0.082 af

Outflow = 1.51 cfs @ 11.99 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.0 min

Primary = 1.51 cfs @ 11.99 hrs, Volume= 0.082 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs / 2

Peak Elev= 17.26' @ 11.99 hrs Surf.Area= 13 sf Storage= 10 cf

Flood Elev= 40.50' Surf.Area= 13 sf Storage= 132 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 0.1 min (770.0 - 769.8)

Volume	Invert	Avail.Storage	Storage Description
#1	16.50'	132 cf	4.00'D x 10.50'H Vertical Cone/Cylinder
Device	Routing	Invert Outl	et Devices
#1	Primary	L= 1 Inlet	P'' Round Culvert 10.0' CPP, square edge headwall, Ke= 0.500 1 / Outlet Invert= 16.50' / 16.40' S= 0.0100 '/' Cc= 0.900 10.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.45 cfs @ 11.99 hrs HW=17.24' (Free Discharge) 1=Culvert (Barrel Controls 1.45 cfs @ 3.24 fps)

Summary for Link PA-1: Point of Analysis #1

Inflow Area = 0.608 ac, 62.89% Impervious, Inflow Depth > 3.76" for 10-yr event

Inflow = 3.12 cfs @ 11.99 hrs, Volume = 0.191 af

Primary = 3.12 cfs @ 11.99 hrs, Volume= 0.191 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

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Summary for Link PA-2: Point of Analysis #2

Inflow Area = 0.446 ac, 12.51% Impervious, Inflow Depth = 1.82" for 10-yr event

Inflow = 1.12 cfs @ 12.05 hrs, Volume= 0.068 af

Primary = 1.12 cfs @ 12.05 hrs, Volume= 0.068 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

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Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	P1	16.40	16.20	12.0	0.0167	0.012	12.0	0.0	0.0
2	P2	16.80	16.50	50.0	0.0060	0.012	12.0	0.0	0.0
3	P3	17.00	16.90	20.0	0.0050	0.012	12.0	0.0	0.0
4	P4	17.10	16.90	24.0	0.0083	0.012	8.0	0.0	0.0
5	P5	16.50	16.40	10.0	0.0100	0.012	12.0	0.0	0.0

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: to PCB1 Runoff Area=2,145 sf 5.13% Impervious Runoff Depth=0.93"

Tc=6.0 min UI Adjusted CN=62 Runoff=0.07 cfs 0.004 af

Subcatchment 2S: Parking Lot (Porous) Runoff Area=3,595 sf 82.48% Impervious Runoff Depth>2.59"

Tc=790.0 min CN=92 Runoff=0.02 cfs 0.018 af

Subcatchment 3S: to PCB1 Runoff Area=2,735 sf 11.52% Impervious Runoff Depth=1.10"

Tc=6.0 min CN=65 Runoff=0.12 cfs 0.006 af

Subcatchment 4S: drive ramp Runoff Area=680 sf 100.00% Impervious Runoff Depth=3.88"

Tc=6.0 min CN=98 Runoff=0.09 cfs 0.005 af

Subcatchment 10S: Prop. Bldg. Runoff Area=8,245 sf 100.00% Impervious Runoff Depth=3.88"

Tc=6.0 min CN=98 Runoff=1.08 cfs 0.061 af

Subcatchment 11S: To Sag Ave Runoff Area=3,695 sf 10.96% Impervious Runoff Depth=0.98"

Tc=6.0 min UI Adjusted CN=63 Runoff=0.14 cfs 0.007 af

Subcatchment 12S: To Sag Ave Runoff Area=5,395 sf 73.03% Impervious Runoff Depth=2.84"

Tc=6.0 min CN=88 Runoff=0.59 cfs 0.029 af

Subcatchment 20S: To Wetland Runoff Area=19,422 sf 12.51% Impervious Runoff Depth=0.93"

Tc=12.0 min CN=62 Runoff=0.53 cfs 0.034 af

Pond 1P: CB-2351 Peak Elev=11.17' Inflow=1.63 cfs 0.128 af

Outflow=1.63 cfs 0.128 af

Pond 10P: Stormwater Gallery A Peak Elev=26.09' Storage=564 cf Inflow=1.08 cfs 0.061 af

Outflow=0.85 cfs 0.059 af

Pond P1: PCB1 Peak Elev=16.99' Storage=7 cf Inflow=1.16 cfs 0.098 af

12.0" Round Culvert $\,$ n=0.012 L=12.0' S=0.0167 '/' Outflow=1.16 cfs 0.098 af

Pond P2: PDMH 2 Peak Elev=17.04' Inflow=0.20 cfs 0.029 af

12.0" Round Culvert n=0.012 L=50.0' S=0.0060 '/' Outflow=0.20 cfs 0.029 af

Pond P3: PAD3 Peak Elev=17.19' Storage=1 cf Inflow=0.12 cfs 0.024 af

12.0" Round Culvert n=0.012 L=20.0' S=0.0050 '/' Outflow=0.12 cfs 0.024 af

Pond P4: TD4 Peak Elev=17.27' Storage=1 cf Inflow=0.09 cfs 0.005 af

8.0" Round Culvert n=0.012 L=24.0' S=0.0083 '/' Outflow=0.09 cfs 0.005 af

Pond P5: SW A outlet - PDMH 5 Peak Elev=17.03' Storage=7 cf Inflow=0.85 cfs 0.059 af

12.0" Round Culvert n=0.012 L=10.0' S=0.0100 '/' Outflow=0.84 cfs 0.059 af

Link PA-1: Point of Analysis #1 Inflow=1.63 cfs 0.128 af Primary=1.63 cfs 0.128 af

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Type II 24-hr 2-yr Rainfall=4.12"

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Link PA-2: Point of Analysis #2

Inflow=0.53 cfs 0.034 af Primary=0.53 cfs 0.034 af

Total Runoff Area = 1.054 ac Runoff Volume = 0.164 af Average Runoff Depth = 1.87" 58.42% Pervious = 0.616 ac 41.58% Impervious = 0.438 ac

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Summary for Subcatchment 1S: to PCB1

0.07 cfs @ 11.99 hrs, Volume= Runoff 0.004 af, Depth= 0.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 2-yr Rainfall=4.12"

A	rea (sf)	CN	Adj De	Description					
	2,035	61	>7	5% Grass co	over, Good, HSG B				
	110	98	Un	connected pa	avement, HSG B				
	2,145	63	63 62 Weighted Average, UI Adjusted						
	2,035		94.	87% Perviou	us Area				
	110		5.1	3% Impervio	ous Area				
	110		100	0.00% Uncor	nnected				
_				_					
Tc	Length	Slope			Description				
(min)	(feet)	(ft/ft)	(ft/sec) (cfs)					
6.0					Direct Entry,				

Direct Entry,

Summary for Subcatchment 2S: Parking Lot (Porous)

Runoff 0.02 cfs @ 21.95 hrs, Volume= 0.018 af, Depth> 2.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 2-yr Rainfall=4.12"

	Area (sf)	CN	Description							
	630	61	>75% Grass cover, Goo	d, HSG B						
	825	98	Paved parking, HSG B							
*	1,780	98	Porous Pavement, HSG	В						
	360	98	Unconnected pavement,	HSG B						
	3,595	92	Weighted Average							
	630		17.52% Pervious Area							
	2,965		82.48% Impervious Area	ì						
	360		12.14% Unconnected							
T	c Length	Slop	 Velocity Capacity I 	Description						
<u>(min</u>	ı) (feet)	(ft/f	(ft/sec) (cfs)							
790.	0		Direct Entry,							

Summary for Subcatchment 3S: to PCB1

0.12 cfs @ 11.98 hrs, Volume= 0.006 af, Depth= 1.10" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 2-yr Rainfall=4.12"

Type II 24-hr 2-yr Rainfall=4.12"

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A	rea (sf)	CN	Description							
	2,420	61	>75% Grass	s cover, Go	ood, HSG B					
	210	98	Paved park	ing, HSG B	}					
	105	98	Unconnecte	ed pavemer	nt, HSG B					
	2,735	65	Weighted A	verage						
	2,420		88.48% Per	vious Area						
	315		11.52% Imp	ervious Ar	ea					
	105		33.33% Und	connected						
т.	ما العرب ال	Clan	- Valaaitu	Consoitu	Decembrish					
Tc	Length	Slop		Capacity	Description					
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)						
6.0					Direct Entry,					

Summary for Subcatchment 4S: drive ramp

Runoff = 0.09 cfs @ 11.96 hrs, Volume= 0.005 af, Depth= 3.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 2-yr Rainfall=4.12"

A	rea (sf)	CN [CN Description								
	680	98 F	98 Paved parking, HSG B								
	680	1	100.00% Impervious Area								
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description						
6.0					Direct Entry,						

Summary for Subcatchment 10S: Prop. Bldg.

Runoff = 1.08 cfs @ 11.96 hrs, Volume= 0.061 af, Depth= 3.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 2-yr Rainfall=4.12"

A	rea (sf)	CN E	escription							
	8,245	98 F	Roofs, HSG B							
	8,245	1	100.00% Impervious Area							
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description					
6.0					Direct Entry,					

Summary for Subcatchment 11S: To Sag Ave

Runoff = 0.14 cfs @ 11.99 hrs, Volume= 0.007 af, Depth= 0.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 2-yr Rainfall=4.12"

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A	rea (sf)	CN	Adj	Desc	ription	
	3,290	61		>75%	6 Grass co	ver, Good, HSG B
	275	98		Unco	nnected pa	avement, HSG B
	130	98		Unco	nnected pa	avement, HSG B
	3,695	65	63	Weig	hted Avera	age, UI Adjusted
	3,290			89.04	1% Perviou	is Area
	405			10.96	6% Impervi	ous Area
	405			100.0	00% Úncon	nnected
Тс	Length	Slope	e Ve	locity	Capacity	Description
(min)	(feet)	(ft/ft) (f1	t/sec)	(cfs)	
6.0						Direct Entry,

Summary for Subcatchment 12S: To Sag Ave

Runoff = 0.59 cfs @ 11.97 hrs, Volume= 0.029 af, Depth= 2.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 2-yr Rainfall=4.12"

A	rea (sf)	CN	Description							
	3,260	98	Paved parking, HSG B							
	480	98	Paved parki	ng, HSG B						
	730	61	>75% Grass	s cover, Go	od, HSG B					
	200	98	Unconnecte	d pavemer	nt, HSG B					
	725	61	>75% Grass	cover, Go	od, HSG B					
	5,395	88	Weighted A	verage						
	1,455		26.97% Per	vious Area						
	3,940		73.03% Imp	ervious Ar	ea					
	200		5.08% Unco	nnected						
Тс	Length	Slope	•	Capacity	Description					
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)						
6.0					Direct Entry,					

Summary for Subcatchment 20S: To Wetland

Runoff = 0.53 cfs @ 12.06 hrs, Volume= 0.034 af, Depth= 0.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 2-yr Rainfall=4.12"

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	Area (sf)	CN	Description
	2,110	98	Paved parking, HSG B
*	100	98	Pavers, HSG B
	40	98	Unconnected pavement, HSG B
*	180	98	Ledge, HSG B
	4,810	61	>75% Grass cover, Good, HSG B
	12,182	55	Woods, Good, HSG B
	19,422	62	Weighted Average
	16,992		87.49% Pervious Area
	2,430		12.51% Impervious Area
	40		1.65% Unconnected
		0.1	
,	Tc Length	Slop	
	nin) (feet)	(ft/1	ft) (ft/sec) (cfs)
1	12.0		Direct Entry,

Summary for Pond 1P: CB-2351

Inflow Area = 0.608 ac, 62.89% Impervious, Inflow Depth > 2.52" for 2-yr event

Inflow = 1.63 cfs @ 12.00 hrs, Volume= 0.128 af

Outflow = 1.63 cfs @ 12.00 hrs, Volume= 0.128 af, Atten= 0%, Lag= 0.0 min

Primary = 1.63 cfs @ 12.00 hrs, Volume= 0.128 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Peak Elev= 11.17' @ 12.00 hrs

Flood Elev= 22.40'

Device	Routing	Invert	Outlet Devices	
#1	Primary	10.55'	15.0" Vert. Orifice/Grate C= 0.600	

Primary OutFlow Max=1.61 cfs @ 12.00 hrs HW=11.17' (Free Discharge) 1=Orifice/Grate (Orifice Controls 1.61 cfs @ 2.67 fps)

Summary for Pond 10P: Stormwater Gallery A

Inflow Area = 0.189 ac,100.00% Impervious, Inflow Depth = 3.88" for 2-yr event

Inflow = 1.08 cfs @ 11.96 hrs, Volume= 0.061 af

Outflow = 0.85 cfs @ 12.04 hrs, Volume= 0.059 af, Atten= 21%, Lag= 4.7 min

Primary = 0.85 cfs @ 12.04 hrs, Volume= 0.059 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 26.09' @ 12.03 hrs Surf.Area= 500 sf Storage= 564 cf

Plug-Flow detention time= 56.6 min calculated for 0.059 af (96% of inflow)

Center-of-Mass det. time= 33.5 min (780.9 - 747.4)

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#1

#2

Primary

Primary

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Volume	Invert	Avail.Storage	Storage I	Description	
#1	24.00'	487 cf			ismatic)Listed below (Recalc)
#2	24.50'	283 cf	•		Embedded = 1,217 cf x 40.0% Voids age x 4.5 Inside #1
		770 cf	Total Ava	ailable Storage	
Elevation (feet)			nc.Store pic-feet)	Cum.Store (cubic-feet)	
24.00		500	0	0	
27.00		500	1,500	1,500	
Device R	outing	Invert Ou	tlet Devices	i	

Primary OutFlow Max=0.80 cfs @ 12.04 hrs HW=26.08' (Free Discharge)

-1=Orifice/Grate (Orifice Controls 0.50 cfs @ 5.73 fps)

24.50'

26.00'

-2=Sharp-Crested Vee/Trap Weir (Weir Controls 0.30 cfs @ 0.93 fps)

Summary for Pond P1: PCB1

4.0" Vert. Orifice/Grate C= 0.600

4.0' long Sharp-Crested Vee/Trap Weir Cv= 2.62 (C= 3.28)

Inflow Area = 0.484 ac, 60.30% Impervious, Inflow Depth > 2.44" for 2-yr event

Inflow = 1.16 cfs @ 12.03 hrs, Volume= 0.098 af

Outflow = 1.16 cfs @ 12.03 hrs, Volume= 0.098 af, Atten= 0%, Lag= 0.1 min

Primary = 1.16 cfs @ 12.03 hrs, Volume= 0.098 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 16.99' @ 12.03 hrs Surf.Area= 13 sf Storage= 7 cf

Plug-Flow detention time= 0.4 min calculated for 0.098 af (100% of inflow)

Center-of-Mass det. time= 0.3 min (898.0 - 897.8)

Volume	Invert	Avail.Storage	Storage Description
#1	16.40'	63 cf	4.00'D x 5.00'H Vertical Cone/Cylinder
Device	Routing	Invert Outl	et Devices
#1	Primary	Inlet	P" Round Culvert L= 12.0' Ke= 0.500 t / Outlet Invert= 16.40' / 16.20' S= 0.0167 '/' Cc= 0.900 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.09 cfs @ 12.03 hrs HW=16.97' (Free Discharge) 1=Culvert (Barrel Controls 1.09 cfs @ 3.43 fps)

Summary for Pond P2: PDMH 2

Inflow Area	=	0.161 ac, 5	56.49% Imperviou	ıs, Inflow Depth >	2.13"	for 2-yr event	
Inflow	=	0.20 cfs @	11.98 hrs, Volui	me= 0.029	9 af	•	
Outflow	=	0.20 cfs @	11.98 hrs, Volui	me= 0.029	9 af, Atte	en= 0%, Lag= 0	.0 min
Primary	=	0.20 cfs @	11.98 hrs, Volui	me= 0.029	9 af		

Type II 24-hr 2-yr Rainfall=4.12"

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Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Peak Elev= 17.04' @ 11.98 hrs

Flood Elev= 30.07'

Device	Routing	Invert	Outlet Devices
#1	Primary	16.80'	12.0" Round Culvert
	_		L= 50.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 16.80' / 16.50' S= 0.0060 '/' Cc= 0.900
			n= 0.012. Flow Area= 0.79 sf

Primary OutFlow Max=0.19 cfs @ 11.98 hrs HW=17.03' (Free Discharge) 1=Culvert (Barrel Controls 0.19 cfs @ 2.02 fps)

Summary for Pond P3: PAD3

Inflow Area = 0.145 ac, 51.82% Impervious, Inflow Depth > 1.94" for 2-yr event

Inflow = 0.12 cfs @ 11.98 hrs, Volume= 0.024 af

Outflow = 0.12 cfs @ 11.98 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.1 min

Primary = 0.12 cfs @ 11.98 hrs, Volume= 0.024 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 17.19' @ 11.98 hrs Surf.Area= 3 sf Storage= 1 cf

Plug-Flow detention time= 0.2 min calculated for 0.024 af (100% of inflow)

Center-of-Mass det. time= 0.1 min (1,230.8 - 1,230.7)

Volume	Invert	Avail.Storage	Storage Description
#1	17.00'	13 cf	2.00'D x 4.00'H Vertical Cone/Cylinder
Device	Routing	Invert Outl	et Devices
#1	Primary	Inlet	" Round Culvert L= 20.0' Ke= 0.500 :/ Outlet Invert= 17.00' / 16.90' S= 0.0050 '/' Cc= 0.900 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.11 cfs @ 11.98 hrs HW=17.19' (Free Discharge) 1=Culvert (Barrel Controls 0.11 cfs @ 1.62 fps)

Summary for Pond P4: TD4

Inflow Area = 0.016 ac,100.00% Impervious, Inflow Depth = 3.88" for 2-yr event

Inflow = 0.09 cfs @ 11.96 hrs, Volume= 0.005 af

Outflow = 0.09 cfs @ 11.96 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.1 min

Primary = 0.09 cfs @ 11.96 hrs, Volume= 0.005 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 17.27' @ 11.96 hrs Surf.Area= 3 sf Storage= 1 cf

Plug-Flow detention time= 0.4 min calculated for 0.005 af (100% of inflow)

Center-of-Mass det. time= 0.4 min (747.8 - 747.4)

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Type II 24-hr 2-yr Rainfall=4.12"

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Volume	Invert	Avail.Storage	Storage Description
#1	17.10'	9 cf	2.00'D x 3.00'H Vertical Cone/Cylinder
Device	Routing	Invert Out	let Devices
#1	Primary	Inle	' Round Culvert L= 24.0' Ke= 0.500 t / Outlet Invert= 17.10' / 16.90' S= 0.0083 '/' Cc= 0.900 0.012, Flow Area= 0.35 sf

Primary OutFlow Max=0.09 cfs @ 11.96 hrs HW=17.27' (Free Discharge) 1=Culvert (Barrel Controls 0.09 cfs @ 1.85 fps)

Summary for Pond P5: SW A outlet - PDMH 5

Inflow Area = 0.189 ac,100.00% Impervious, Inflow Depth = 3.74" for 2-yr event

Inflow = 0.85 cfs @ 12.04 hrs, Volume= 0.059 af

Outflow = 0.84 cfs @ 12.04 hrs, Volume= 0.059 af, Atten= 1%, Lag= 0.0 min

Primary = 0.84 cfs @ 12.04 hrs, Volume= 0.059 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs / 2

Peak Elev= 17.03' @ 12.04 hrs Surf.Area= 13 sf Storage= 7 cf

Flood Elev= 40.50' Surf.Area= 13 sf Storage= 132 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 0.2 min (781.1 - 780.9)

Volume	Invert	Avail.Storage	Storage Description
#1	16.50'	132 cf	4.00'D x 10.50'H Vertical Cone/Cylinder
Device	Routing	Invert Outl	et Devices
#1	Primary	L= 1 Inlet	P'' Round Culvert 10.0' CPP, square edge headwall, Ke= 0.500 1 / Outlet Invert= 16.50' / 16.40' S= 0.0100 '/' Cc= 0.900 10.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.79 cfs @ 12.04 hrs HW=17.01' (Free Discharge) 1=Culvert (Barrel Controls 0.79 cfs @ 2.83 fps)

Summary for Link PA-1: Point of Analysis #1

Inflow Area = 0.608 ac, 62.89% Impervious, Inflow Depth > 2.52" for 2-yr event

Inflow = 1.63 cfs @ 12.00 hrs, Volume= 0.128 af

Primary = 1.63 cfs @ 12.00 hrs, Volume= 0.128 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

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Summary for Link PA-2: Point of Analysis #2

Inflow Area = 0.446 ac, 12.51% Impervious, Inflow Depth = 0.93" for 2-yr event

Inflow = 0.53 cfs @ 12.06 hrs, Volume= 0.034 af

Primary = 0.53 cfs @ 12.06 hrs, Volume= 0.034 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Type II 24-hr 25-yr Rainfall=8.20"

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Link PA-1: Point of Analysis #1

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Reach fouling by Stor-ind in the	ans method - 1 ond rodding by otor-ind method
Subcatchment1S: to PCB1	Runoff Area=2,145 sf 5.13% Impervious Runoff Depth=3.71" Tc=6.0 min UI Adjusted CN=62 Runoff=0.32 cfs 0.015 af
Subcatchment2S: Parking Lot (Porous)	Runoff Area=3,595 sf 82.48% Impervious Runoff Depth>5.87" Tc=790.0 min CN=92 Runoff=0.04 cfs 0.040 af
Subcatchment3S: to PCB1	Runoff Area=2,735 sf 11.52% Impervious Runoff Depth=4.06" Tc=6.0 min CN=65 Runoff=0.44 cfs 0.021 af
Subcatchment4S: drive ramp	Runoff Area=680 sf 100.00% Impervious Runoff Depth=7.96" Tc=6.0 min CN=98 Runoff=0.18 cfs 0.010 af
Subcatchment 10S: Prop. Bldg.	Runoff Area=8,245 sf 100.00% Impervious Runoff Depth=7.96" Tc=6.0 min CN=98 Runoff=2.16 cfs 0.126 af
Subcatchment11S: To Sag Ave	Runoff Area=3,695 sf 10.96% Impervious Runoff Depth=3.83" Tc=6.0 min UI Adjusted CN=63 Runoff=0.56 cfs 0.027 af
Subcatchment12S: To Sag Ave	Runoff Area=5,395 sf 73.03% Impervious Runoff Depth=6.76" Tc=6.0 min CN=88 Runoff=1.32 cfs 0.070 af
Subcatchment 20S: To Wetland	Runoff Area=19,422 sf 12.51% Impervious Runoff Depth=3.71" Tc=12.0 min CN=62 Runoff=2.35 cfs 0.138 af
Pond 1P: CB-2351	Peak Elev=11.85' Inflow=4.86 cfs 0.307 af Outflow=4.86 cfs 0.307 af
Pond 10P: Stormwater Gallery A	Peak Elev=26.25' Storage=607 cf Inflow=2.16 cfs 0.126 af Outflow=2.16 cfs 0.123 af
Pond P1: PCB1 12.0" Round	Peak Elev=17.81' Storage=18 cf Inflow=3.66 cfs 0.238 af I Culvert n=0.012 L=12.0' S=0.0167 '/' Outflow=3.63 cfs 0.238 af
Pond P2: PDMH 2 12.0" Round	Peak Elev=17.24' Inflow=0.62 cfs 0.072 af Culvert n=0.012 L=50.0' S=0.0060 '/' Outflow=0.62 cfs 0.072 af
Pond P3: PAD3 12.0" Round	Peak Elev=17.39' Storage=1 cf Inflow=0.44 cfs 0.062 af I Culvert n=0.012 L=20.0' S=0.0050 '/' Outflow=0.44 cfs 0.062 af
Pond P4: TD4 8.0" Round	Peak Elev=17.35' Storage=1 cf Inflow=0.18 cfs 0.010 af I Culvert n=0.012 L=24.0' S=0.0083 '/' Outflow=0.18 cfs 0.010 af
Pond P5: SW A outlet - PDMH 5	Peak Elev=17.46' Storage=12 cf Inflow=2.16 cfs 0.123 af

12.0" Round Culvert n=0.012 L=10.0' S=0.0100 '/' Outflow=2.16 cfs 0.123 af

Inflow=4.86 cfs 0.307 af Primary=4.86 cfs 0.307 af

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Type II 24-hr 25-yr Rainfall=8.20"

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Link PA-2: Point of Analysis #2

Inflow=2.35 cfs 0.138 af Primary=2.35 cfs 0.138 af

Total Runoff Area = 1.054 ac Runoff Volume = 0.448 af Average Runoff Depth = 5.09" 58.42% Pervious = 0.616 ac 41.58% Impervious = 0.438 ac

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Summary for Subcatchment 1S: to PCB1

Runoff = 0.32 cfs @ 11.97 hrs, Volume= 0.015 af, Depth= 3.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 25-yr Rainfall=8.20"

A	rea (sf)	CN	Adj D	escription	
	2,035	61	>7	75% Grass co	ver, Good, HSG B
	110	98	U	nconnected pa	avement, HSG B
	2,145	63	62 W	eighted Avera	age, UI Adjusted
	2,035		94	1.87% Perviou	us Area
	110		5.	13% Impervio	ous Area
	110		10	00.00% Uncor	nnected
-	1	01	\		D
Tc	Length	Slope		, ,	Description
(min)	(feet)	(ft/ft)	(ft/se	c) (cfs)	
6.0					Direct Entry,

Summary for Subcatchment 2S: Parking Lot (Porous)

Runoff = 0.04 cfs @ 21.94 hrs, Volume= 0.040 af, Depth> 5.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 25-yr Rainfall=8.20"

	Area (sf)	CN	Description					
	630	61	>75% Grass	cover, Go	Good, HSG B			
	825	98	Paved parki	ng, HSG B	В			
*	1,780	98	Porous Pave	ement, HS	SG B			
	360	98	Unconnecte	d pavemer	ent, HSG B			
	3,595	92	92 Weighted Average					
	630		17.52% Pervious Area					
	2,965	85 82.48% Impervious Area						
	360	360 12.14% Unconnected						
	Tc Length	Slop	e Velocity	Capacity	Description			
(m	in) (feet)	(ft/1	ft) (ft/sec)	(cfs)				
790	0.0				Direct Entry,			

Summary for Subcatchment 3S: to PCB1

Runoff = 0.44 cfs @ 11.97 hrs, Volume= 0.021 af, Depth= 4.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 25-yr Rainfall=8.20"

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A	rea (sf)	CN	Description				
	2,420	61	>75% Gras	s cover, Go	ood, HSG B		
	210	98	Paved park	ing, HSG B	3		
	105	98	Unconnecte	ed pavemer	ent, HSG B		
	2,735	65	Weighted A	verage			
	2,420		88.48% Pervious Area				
	315		11.52% Impervious Area				
	105						
Tc	Length	Slope	e Velocity	Capacity	Description		
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)			
6.0					Direct Entry,		

Summary for Subcatchment 4S: drive ramp

Runoff = 0.18 cfs @ 11.96 hrs, Volume= 0.010 af, Depth= 7.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 25-yr Rainfall=8.20"

Α	rea (sf)	CN Description							
	680	98 F	98 Paved parking, HSG B						
	680	100.00% Impervious Area							
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
6.0					Direct Entry,				

Summary for Subcatchment 10S: Prop. Bldg.

Runoff = 2.16 cfs @ 11.96 hrs, Volume= 0.126 af, Depth= 7.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 25-yr Rainfall=8.20"

A	rea (sf)	CN E	Description						
	8,245	98 F	8 Roofs, HSG B						
	8,245	100.00% Impervious Area							
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
6.0					Direct Entry,				

Summary for Subcatchment 11S: To Sag Ave

Runoff = 0.56 cfs @ 11.97 hrs, Volume= 0.027 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 25-yr Rainfall=8.20"

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A	rea (sf)	CN	Adj	Desc	ription	
	3,290	61		>75%	6 Grass co	ver, Good, HSG B
	275	98		Unco	nnected pa	avement, HSG B
	130	98		Unco	nnected pa	avement, HSG B
	3,695	65	63	Weig	hted Avera	age, UI Adjusted
	3,290			89.04	1% Perviou	us Area
	405			10.96	6% Impervi	ious Area
	405			100.0	00% Uncon	nnected
Тс	Length	Slope		locity	Capacity	Description
(min)	(feet)	(ft/ft) (ft	/sec)	(cfs)	
6.0						Direct Entry,

Summary for Subcatchment 12S: To Sag Ave

Runoff = 1.32 cfs @ 11.96 hrs, Volume= 0.070 af, Depth= 6.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 25-yr Rainfall=8.20"

A	rea (sf)	CN	Description				
	3,260	98	Paved park	ing, HSG B	}		
	480	98	Paved park	ing, HSG B			
	730	61	>75% Gras	s cover, Go	ood, HSG B		
	200	98	Unconnecte	ed pavemer	nt, HSG B		
	725	61	>75% Gras	s cover, Go	ood, HSG B		
•	5,395	88	Weighted A	verage			
	1,455		26.97% Pervious Area				
	3,940		73.03% Impervious Area				
	200	5.08% Unconnected					
Тс	Length	Slope	•	Capacity	Description		
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)			
6.0					Direct Entry,		

Summary for Subcatchment 20S: To Wetland

Runoff = 2.35 cfs @ 12.04 hrs, Volume= 0.138 af, Depth= 3.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 25-yr Rainfall=8.20"

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	Area (sf)	CN	Description				
	2,110	98	Paved parking, HSG B				
*	100	98	Pavers, HSG B				
	40	98	Unconnected pavement, HSG B				
*	180	98	Ledge, HSG B				
	4,810	61	>75% Grass cover, Good, HSG B				
	12,182	55	Woods, Good, HSG B				
	19,422	62	Weighted Average				
	16,992		87.49% Pervious Area				
	2,430		12.51% Impervious Area				
	40		1.65% Unconnected				
	Tc Length	Slop					
<u>(r</u>	min) (feet)	(ft/	ft) (ft/sec) (cfs)				
1	12.0		Direct Entry,				

Summary for Pond 1P: CB-2351

Inflow Area = 0.608 ac, 62.89% Impervious, Inflow Depth > 6.07" for 25-yr event

Inflow = 4.86 cfs @ 11.97 hrs, Volume= 0.307 af

Outflow = 4.86 cfs @ 11.97 hrs, Volume= 0.307 af, Atten= 0%, Lag= 0.0 min

Primary = 4.86 cfs @ 11.97 hrs, Volume= 0.307 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Peak Elev= 11.85' @ 11.97 hrs

Flood Elev= 22.40'

Device	Routing	Invert	Outlet Devices	
#1	Primary	10.55'	15.0" Vert. Orifice/Grate	C= 0.600

Primary OutFlow Max=4.75 cfs @ 11.97 hrs HW=11.82' (Free Discharge) 1=Orifice/Grate (Orifice Controls 4.75 cfs @ 3.87 fps)

Summary for Pond 10P: Stormwater Gallery A

Inflow Area = 0.189 ac,100.00% Impervious, Inflow Depth = 7.96" for 25-yr event

Inflow = 2.16 cfs @ 11.96 hrs, Volume= 0.126 af

Outflow = 2.16 cfs @ 11.98 hrs, Volume= 0.123 af, Atten= 0%, Lag= 1.3 min

Primary = 2.16 cfs @ 11.98 hrs, Volume= 0.123 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 26.25' @ 11.98 hrs Surf.Area= 500 sf Storage= 607 cf

Plug-Flow detention time= 34.2 min calculated for 0.123 af (98% of inflow)

Center-of-Mass det. time= 21.8 min (758.4 - 736.7)

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Volume	Invert	Avail.Storage	Stora	ge Description
#1	24.00'	487 cf		om Stage Data (Prismatic)Listed below (Recalc)
110	0.4.501	200 1	,	cf Overall - 283 cf Embedded = 1,217 cf x 40.0% Voids
#2	24.50'	283 cf	24.0 " L= 20	Round Pipe Storage x 4.5 Inside #1
		770 of		
		770 cf	rotar	Available Storage
Elevation	Surf.	Area In	c.Store	Cum.Store
(feet)			ic-feet)	(cubic-feet)
24.00		500	0	
27.00		500	1,500	1,500

Device	Routing	Invert	Outlet Devices
#1	Primary	24.50'	4.0" Vert. Orifice/Grate C= 0.600
#2	Primary	26.00'	4.0' long Sharp-Crested Vee/Trap Weir Cv= 2.62 (C= 3.28)

Primary OutFlow Max=2.06 cfs @ 11.98 hrs HW=26.24' (Free Discharge)

1=Orifice/Grate (Orifice Controls 0.53 cfs @ 6.04 fps)

-2=Sharp-Crested Vee/Trap Weir (Weir Controls 1.53 cfs @ 1.60 fps)

Summary for Pond P1: PCB1

Inflow Area = 0.484 ac, 60.30% Impervious, Inflow Depth > 5.89" for 25-yr event

Inflow = 3.66 cfs @ 11.98 hrs, Volume= 0.238 af

Outflow = 3.63 cfs @ 11.98 hrs, Volume= 0.238 af, Atten= 1%, Lag= 0.0 min

Primary = 3.63 cfs @ 11.98 hrs, Volume= 0.238 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 17.81' @ 11.98 hrs Surf.Area= 13 sf Storage= 18 cf

Plug-Flow detention time= 0.3 min calculated for 0.237 af (100% of inflow)

Center-of-Mass det. time= 0.2 min (875.3 - 875.1)

<u>Volume</u>	Invert	Avail.Storage	Storage Description
#1	16.40'	63 cf	4.00'D x 5.00'H Vertical Cone/Cylinder
Device	Routing	Invert Outl	et Devices
#1	Primary	Inlet	" Round Culvert L= 12.0' Ke= 0.500 // Outlet Invert= 16.40' / 16.20' S= 0.0167 '/' Cc= 0.900 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=3.49 cfs @ 11.98 hrs HW=17.76' (Free Discharge) 1=Culvert (Barrel Controls 3.49 cfs @ 4.44 fps)

Summary for Pond P2: PDMH 2

Inflow Area = 0.161 ac, 56.49% Impervious, Inflow Depth > 5.36" for 25-yr event

Inflow = 0.62 cfs @ 11.97 hrs, Volume= 0.072 af

Outflow = 0.62 cfs @ 11.97 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min

Primary = 0.62 cfs @ 11.97 hrs, Volume= 0.072 af

Type II 24-hr 25-yr Rainfall=8.20"

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Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Peak Elev= 17.24' @ 11.97 hrs

Flood Elev= 30.07'

Device	Routing	Invert	Outlet Devices
#1	Primary	16.80'	12.0" Round Culvert
			L= 50.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 16.80' / 16.50' S= 0.0060 '/' Cc= 0.900
			n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.59 cfs @ 11.97 hrs HW=17.23' (Free Discharge) 1=Culvert (Barrel Controls 0.59 cfs @ 2.71 fps)

Summary for Pond P3: PAD3

Inflow Area = 0.145 ac, 51.82% Impervious, Inflow Depth > 5.08" for 25-yr event

Inflow = 0.44 cfs @ 11.97 hrs, Volume= 0.062 af

Outflow = 0.44 cfs @ 11.97 hrs, Volume= 0.062 af, Atten= 0%, Lag= 0.0 min

Primary = 0.44 cfs @ 11.97 hrs, Volume= 0.062 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 17.39' @ 11.97 hrs Surf.Area= 3 sf Storage= 1 cf

Plug-Flow detention time= 0.1 min calculated for 0.061 af (100% of inflow)

Center-of-Mass det. time= 0.1 min (1,158.9 - 1,158.8)

Volume	Invert	Avail.Storage	Storage Description
#1	17.00'	13 cf	2.00'D x 4.00'H Vertical Cone/Cylinder
Device	Routing	Invert Out	let Devices
#1	Primary	Inle	D" Round Culvert L= 20.0' Ke= 0.500 t / Outlet Invert= 17.00' / 16.90' S= 0.0050 '/' Cc= 0.900 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.43 cfs @ 11.97 hrs HW=17.38' (Free Discharge) 1=Culvert (Barrel Controls 0.43 cfs @ 2.28 fps)

Summary for Pond P4: TD4

Inflow Area = 0.016 ac,100.00% Impervious, Inflow Depth = 7.96" for 25-yr event

Inflow = 0.18 cfs @ 11.96 hrs, Volume= 0.010 af

Outflow = 0.18 cfs @ 11.96 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.1 min

Primary = 0.18 cfs @ 11.96 hrs, Volume= 0.010 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 17.35' @ 11.96 hrs Surf.Area= 3 sf Storage= 1 cf

Plug-Flow detention time= 0.3 min calculated for 0.010 af (100% of inflow)

Center-of-Mass det. time= 0.3 min (737.0 - 736.7)

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Type II 24-hr 25-yr Rainfall=8.20"

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Volume	Invert	Avail.Storage	Storage Description
#1	17.10'	9 cf	2.00'D x 3.00'H Vertical Cone/Cylinder
Device #1	Routing Primary	17.10' 8.0 Inle	tlet Devices " Round Culvert L= 24.0' Ke= 0.500 et / Outlet Invert= 17.10' / 16.90' S= 0.0083 '/' Cc= 0.900 0.012, Flow Area= 0.35 sf

Primary OutFlow Max=0.17 cfs @ 11.96 hrs HW=17.35' (Free Discharge) 1=Culvert (Barrel Controls 0.17 cfs @ 2.19 fps)

Summary for Pond P5: SW A outlet - PDMH 5

Inflow Area = 0.189 ac,100.00% Impervious, Inflow Depth = 7.81" for 25-yr event

Inflow = 2.16 cfs @ 11.98 hrs, Volume= 0.123 af

Outflow = 2.16 cfs @ 11.98 hrs, Volume= 0.123 af, Atten= 0%, Lag= 0.0 min

Primary = 2.16 cfs @ 11.98 hrs, Volume= 0.123 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs / 2

Peak Elev= 17.46' @ 11.98 hrs Surf.Area= 13 sf Storage= 12 cf

Flood Elev= 40.50' Surf.Area= 13 sf Storage= 132 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 0.1 min (758.6 - 758.4)

Volume	Invert	Avail.Storage	e Storage Description
#1	16.50'	132 c	f 4.00'D x 10.50'H Vertical Cone/Cylinder
Device	Routing	Invert O	utlet Devices
#1	Primary	L= Inl	2.0" Round Culvert = 10.0' CPP, square edge headwall, Ke= 0.500 let / Outlet Invert= 16.50' / 16.40' S= 0.0100 '/' Cc= 0.900 = 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=2.06 cfs @ 11.98 hrs HW=17.43' (Free Discharge) 1=Culvert (Barrel Controls 2.06 cfs @ 3.53 fps)

Summary for Link PA-1: Point of Analysis #1

Inflow Area = 0.608 ac, 62.89% Impervious, Inflow Depth > 6.07" for 25-yr event

Inflow = 4.86 cfs @ 11.97 hrs, Volume= 0.307 af

Primary = 4.86 cfs @ 11.97 hrs, Volume= 0.307 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

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Type II 24-hr 25-yr Rainfall=8.20"

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Summary for Link PA-2: Point of Analysis #2

Inflow Area = 0.446 ac, 12.51% Impervious, Inflow Depth = 3.71" for 25-yr event

Inflow = 2.35 cfs @ 12.04 hrs, Volume= 0.138 af

Primary = 2.35 cfs @ 12.04 hrs, Volume= 0.138 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Subcatchment 15: to PCR1

Pond P3: PAD3

Type II 24-hr 50-yr Rainfall=9.91"

Runoff Area=2 145 sf 5 13% Impervious Runoff Denth=5 09"

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: to PCB1	Tc=6.0 min UI Adjusted CN=62 Runoff=0.43 cfs 0.021 af
Subcatchment2S: Parking Lot (Porous)	Runoff Area=3,595 sf 82.48% Impervious Runoff Depth>7.26" Tc=790.0 min CN=92 Runoff=0.05 cfs 0.050 af
Subcatchment3S: to PCB1	Runoff Area=2,735 sf 11.52% Impervious Runoff Depth=5.49" Tc=6.0 min CN=65 Runoff=0.59 cfs 0.029 af
Subcatchment 4S: drive ramp	Runoff Area=680 sf 100.00% Impervious Runoff Depth=9.67" Tc=6.0 min CN=98 Runoff=0.22 cfs 0.013 af
Subcatchment10S: Prop. Bldg.	Runoff Area=8,245 sf 100.00% Impervious Runoff Depth=9.67" Tc=6.0 min CN=98 Runoff=2.61 cfs 0.153 af
Subcatchment11S: To Sag Ave	Runoff Area=3,695 sf 10.96% Impervious Runoff Depth=5.22" Tc=6.0 min UI Adjusted CN=63 Runoff=0.76 cfs 0.037 af
Subcatchment 12S: To Sag Ave	Runoff Area=5,395 sf 73.03% Impervious Runoff Depth=8.44" Tc=6.0 min CN=88 Runoff=1.63 cfs 0.087 af
Subcatchment 20S: To Wetland	Runoff Area=19,422 sf 12.51% Impervious Runoff Depth=5.09" Tc=12.0 min CN=62 Runoff=3.22 cfs 0.189 af
Pond 1P: CB-2351	Peak Elev=12.25' Inflow=6.14 cfs 0.386 af Outflow=6.14 cfs 0.386 af
Pond 10P: Stormwater Gallery A	Peak Elev=26.29' Storage=619 cf Inflow=2.61 cfs 0.153 af Outflow=2.60 cfs 0.150 af
Pond P1: PCB1 12.0" Round	Peak Elev=18.36' Storage=25 cf Inflow=4.54 cfs 0.299 af d Culvert n=0.012 L=12.0' S=0.0167 '/' Outflow=4.61 cfs 0.299 af
Pond P2: PDMH 2	Peak Elev=17.31' Inflow=0.81 cfs 0.091 af

Pond P4: TD4 Peak Elev=17.38' Storage=1 cf Inflow=0.22 cfs 0.013 af

12.0" Round Culvert n=0.012 L=50.0' S=0.0060 '/' Outflow=0.81 cfs 0.091 af

12.0" Round Culvert n=0.012 L=20.0' S=0.0050 '/' Outflow=0.59 cfs 0.079 af

Peak Elev=17.46' Storage=1 cf Inflow=0.59 cfs 0.079 af

8.0" Round Culvert n=0.012 L=24.0' S=0.0083 '/' Outflow=0.21 cfs 0.013 af

Pond P5: SW A outlet - PDMH 5 Peak Elev=17.60' Storage=14 cf Inflow=2.60 cfs 0.150 af 12.0" Round Culvert n=0.012 L=10.0' S=0.0100 '/' Outflow=2.60 cfs 0.150 af

Link PA-1: Point of Analysis #1 Inflow=6.14 cfs 0.386 af Primary=6.14 cfs 0.386 af

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Type II 24-hr 50-yr Rainfall=9.91"

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Link PA-2: Point of Analysis #2

Inflow=3.22 cfs 0.189 af Primary=3.22 cfs 0.189 af

Total Runoff Area = 1.054 ac Runoff Volume = 0.578 af Average Runoff Depth = 6.58" 58.42% Pervious = 0.616 ac 41.58% Impervious = 0.438 ac

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Summary for Subcatchment 1S: to PCB1

Runoff = 0.43 cfs @ 11.97 hrs, Volume= 0.021 af, Depth= 5.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 50-yr Rainfall=9.91"

A	rea (sf)	CN	Adj D	Description					
	2,035	61	>7	75% Grass co	ver, Good, HSG B				
	110	98	U	nconnected pa	avement, HSG B				
	2,145	63	62 W	Weighted Average, UI Adjusted					
	2,035		94	94.87% Pervious Area					
	110		5.	13% Impervio	ous Area				
	110		10	00.00% Uncor	nnected				
-	1	01	\		D				
Tc	Length	Slope		, ,	Description				
(min)	(feet)	(ft/ft)	(ft/se	c) (cfs)					
6.0					Direct Entry,				

_....**,**,

Summary for Subcatchment 2S: Parking Lot (Porous)

Runoff = 0.05 cfs @ 21.93 hrs, Volume= 0.050 af, Depth> 7.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 50-yr Rainfall=9.91"

	Area (sf)	CN	Description							
	630	61	>75% Grass	s cover, Go	Good, HSG B					
	825	98	Paved parking, HSG B							
*	1,780	98	Porous Pav	ement, HS	SG B					
	360	98	Unconnecte	d pavemer	ent, HSG B					
	3,595	92	Weighted Average							
	630		17.52% Per	vious Area	a					
	2,965		82.48% Imp	ervious Ar	rea					
	360		12.14% Und	connected						
To	-	Slop	,	Capacity	Description					
(min	(feet)	(ft/f	t) (ft/sec)	(cfs)						
790.0)				Direct Entry,					

Summary for Subcatchment 3S: to PCB1

Runoff = 0.59 cfs @ 11.97 hrs, Volume= 0.029 af, Depth= 5.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 50-yr Rainfall=9.91"

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A	rea (sf)	CN	Description							
	2,420	61	>75% Gras	s cover, Go	ood, HSG B					
	210	98	Paved park	ing, HSG B	}					
	105	98	Unconnecte	ed pavemer	nt, HSG B					
	2,735	65	Weighted A	verage						
	2,420		88.48% Per	vious Area						
	315		11.52% Imp	ervious Ar	ea					
	105		33.33% Und	connected						
_										
Tc	Length	Slope		Capacity	Description					
(min)_	(feet)	(ft/ft) (ft/sec)	(cfs)						
6.0					Direct Entry,					

Summary for Subcatchment 4S: drive ramp

Runoff = 0.22 cfs @ 11.96 hrs, Volume= 0.013 af, Depth= 9.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 50-yr Rainfall=9.91"

A	rea (sf)	CN [Description						
	680	98 F	Paved parking, HSG B						
	680	1	100.00% Impervious Area						
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
6.0					Direct Entry,				

Summary for Subcatchment 10S: Prop. Bldg.

Runoff = 2.61 cfs @ 11.96 hrs, Volume= 0.153 af, Depth= 9.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 50-yr Rainfall=9.91"

A	rea (sf)	CN E	escription					
	8,245	98 F	Roofs, HSG B					
	8,245	1	00.00% Im	pervious A	Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description			
6.0					Direct Entry,			

Summary for Subcatchment 11S: To Sag Ave

Runoff = 0.76 cfs @ 11.97 hrs, Volume= 0.037 af, Depth= 5.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 50-yr Rainfall=9.91"

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A	rea (sf)	CN	Adj	Description				
	3,290	61		>75%	Grass co	ver, Good, HSG B		
	275	98		Unco	nnected pa	avement, HSG B		
	130	98		Unco	nnected pa	avement, HSG B		
	3,695	65	63	Weig	hted Avera	age, UI Adjusted		
	3,290			89.04	1% Perviou	is Area		
	405			10.96	6% Impervi	ous Area		
	405			100.0	00% Uncon	nected		
Тс	Length	Slope	e Ve	locity	Capacity	Description		
(min)	(feet)	(ft/ft) (f1	t/sec)	(cfs)			
6.0						Direct Entry,		

Summary for Subcatchment 12S: To Sag Ave

Runoff = 1.63 cfs @ 11.96 hrs, Volume= 0.087 af, Depth= 8.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 50-yr Rainfall=9.91"

A	rea (sf)	CN	Description							
	3,260	98	Paved park	ng, HSG B	}					
	480	98	Paved park	ng, HSG B	}					
	730	61	>75% Grass	s cover, Go	ood, HSG B					
	200	98	Unconnecte	d pavemer	nt, HSG B					
	725	61	>75% Grass	s cover, Go	ood, HSG B					
•	5,395	88	88 Weighted Average							
	1,455		26.97% Per	vious Area						
	3,940		73.03% Imp	ervious Ar	ea					
	200		5.08% Unco	nnected						
Tc	Length	Slope	•	Capacity	Description					
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)						
6.0					Direct Entry,					

Summary for Subcatchment 20S: To Wetland

Runoff = 3.22 cfs @ 12.04 hrs, Volume= 0.189 af, Depth= 5.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type II 24-hr 50-yr Rainfall=9.91"

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	Area (sf)	CN	Description						
	2,110	98	Paved parking, HSG B						
*	100	98	Pavers, HSG B						
	40	98	Unconnected pavement, HSG B						
*	180	98	Ledge, HSG B						
	4,810	61	>75% Grass cover, Good, HSG B						
	12,182	55	Woods, Good, HSG B						
	19,422	62	Weighted Average						
	16,992		87.49% Pervious Area						
	2,430		12.51% Impervious Area						
	40		1.65% Unconnected						
	Tc Length	Slop							
<u>(r</u>	min) (feet)	(ft/	ft) (ft/sec) (cfs)						
1	12.0		Direct Entry,						

Summary for Pond 1P: CB-2351

Inflow Area =	0.608 ac	62.89% Impervious,	Inflow Denth >	7 63"	for 50-vr event
11111000 / 1100	0.000 40,	OZ.OO /O IIIIPOI VIOGO,	IIIIIOW DOPUI'	1.00	IOI OO VI OVOIIL

0.386 af Inflow

6.14 cfs @ 11.97 hrs, Volume= 6.14 cfs @ 11.97 hrs, Volume= 0.386 af, Atten= 0%, Lag= 0.0 min Outflow

Primary 6.14 cfs @ 11.97 hrs, Volume=

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Peak Elev= 12.25' @ 11.97 hrs

Flood Elev= 22.40'

Device	Routing	Invert	Outlet Devices	
#1	Primary	10.55'	15.0" Vert. Orifice/Grate C= 0.600	

Primary OutFlow Max=5.98 cfs @ 11.97 hrs HW=12.20' (Free Discharge) 1=Orifice/Grate (Orifice Controls 5.98 cfs @ 4.87 fps)

Summary for Pond 10P: Stormwater Gallery A

Inflow Area =	0.189 ac.	100.00% Impervious	. Inflow Depth =	9.67"	for 50-vr event

2.61 cfs @ 11.96 hrs, Volume= 0.153 af Inflow

2.60 cfs @ 11.98 hrs, Volume= 0.150 af, Atten= 0%, Lag= 0.8 min Outflow =

2.60 cfs @ 11.98 hrs, Volume= Primary 0.150 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 26.29' @ 11.98 hrs Surf.Area= 500 sf Storage= 619 cf

Plug-Flow detention time= 29.7 min calculated for 0.150 af (98% of inflow)

Center-of-Mass det. time= 19.3 min (753.7 - 734.5)

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Volume	Inv	ert Avail.S	Storage	Storage I	Description			
#1	24.0	00'	487 cf	f Custom Stage Data (Prismatic)Listed below (Recalc)				
#2	24.	50'	283 cf	1,500 cf Overall - 283 cf Embedded = 1,217 cf x 40.0% Voids cf 24.0" Round Pipe Storage x 4.5 Inside #1 L= 20.0'				
			770 cf	Total Ava	ilable Storage			
Elevatio		Surf.Area (sq-ft)		:.Store c-feet)	Cum.Store (cubic-feet)			
24.0	00	500		0	0			
27.0	00	500		1,500	1,500			
Device	Routing	Inve	rt Outl	et Devices				
#1	Primary	24.5	0' 4.0"	Vert. Orif	ice/Grate C=	0.600		
#2	Primary	26.0	0' 4.0'	long Shar	p-Crested Vee	/Trap Weir Cv= 2.62 (C= 3.28)		

Primary OutFlow Max=2.49 cfs @ 11.98 hrs HW=26.28' (Free Discharge)

-1=Orifice/Grate (Orifice Controls 0.53 cfs @ 6.12 fps)

-2=Sharp-Crested Vee/Trap Weir (Weir Controls 1.96 cfs @ 1.74 fps)

Summary for Pond P1: PCB1

Inflow Area = 0.484 ac, 60.30% Impervious, Inflow Depth > 7.42" for	or 50-yreven	١t
---	--------------	----

4.54 cfs @ 11.97 hrs, Volume= 0.299 af Inflow

Outflow 4.61 cfs @ 11.98 hrs, Volume= 0.299 af, Atten= 0%, Lag= 0.2 min =

4.61 cfs @ 11.98 hrs, Volume= 0.299 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 18.36' @ 11.98 hrs Surf.Area= 13 sf Storage= 25 cf

Plug-Flow detention time= 0.2 min calculated for 0.299 af (100% of inflow)

Center-of-Mass det. time= 0.2 min (869.6 - 869.4)

Volume	Invert	Avail.Storage	Storage Description
#1	16.40'	63 cf	4.00'D x 5.00'H Vertical Cone/Cylinder
Device	Routing	Invert Out	let Devices
#1	Primary	Inle	D" Round Culvert L= 12.0' Ke= 0.500 t / Outlet Invert= 16.40' / 16.20' S= 0.0167 '/' Cc= 0.900 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=4.42 cfs @ 11.98 hrs HW=18.27' (Free Discharge) 1=Culvert (Inlet Controls 4.42 cfs @ 5.63 fps)

Summary for Pond P2: PDMH 2

Inflow Area	a =	0.161 ac, 56.4	49% Impervious,	Inflow Depth > 6.	80" for 50-yr event
Inflow	=	0.81 cfs @ 11	1.97 hrs, Volume=	= 0.091 af	•
Outflow	=	0.81 cfs @ 11	1.97 hrs, Volume=	= 0.091 af,	, Atten= 0%, Lag= 0.0 min
Primary	=	0.81 cfs @ 11	1.97 hrs, Volume=	= 0.091 af	

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Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Peak Elev= 17.31' @ 11.97 hrs

Flood Elev= 30.07'

Device	Routing	Invert	Outlet Devices
#1	Primary	16.80'	12.0" Round Culvert
	-		L= 50.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 16.80 / 16.50 S= 0.0060 '/' Cc= 0.900
			n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.78 cfs @ 11.97 hrs HW=17.30' (Free Discharge) 1=Culvert (Barrel Controls 0.78 cfs @ 2.90 fps)

Summary for Pond P3: PAD3

Inflow Area = 0.145 ac, 51.82% Impervious, Inflow Depth > 6.49" for 50-yr event

Inflow = 0.59 cfs @ 11.97 hrs, Volume= 0.079 af

Outflow = 0.59 cfs @ 11.97 hrs, Volume= 0.079 af, Atten= 0%, Lag= 0.0 min

Primary = 0.59 cfs @ 11.97 hrs. Volume = 0.079 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 17.46' @ 11.97 hrs Surf.Area= 3 sf Storage= 1 cf

Plug-Flow detention time= 0.1 min calculated for 0.079 af (100% of inflow)

Center-of-Mass det. time= 0.1 min (1,143.1 - 1,143.0)

Volume	Invert	Avail.Storage	Storage Description
#1	17.00'	13 cf	2.00'D x 4.00'H Vertical Cone/Cylinder
Device	Routing	Invert Out	et Devices
#1	Primary	Inle	P" Round Culvert L= 20.0' Ke= 0.500 t / Outlet Invert= 17.00' / 16.90' S= 0.0050 '/' Cc= 0.900 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.57 cfs @ 11.97 hrs HW=17.45' (Free Discharge) 1=Culvert (Barrel Controls 0.57 cfs @ 2.45 fps)

Summary for Pond P4: TD4

Inflow Area = 0.016 ac,100.00% Impervious, Inflow Depth = 9.67" for 50-yr event

Inflow = 0.22 cfs @ 11.96 hrs, Volume= 0.013 af

Outflow = 0.21 cfs @ 11.96 hrs, Volume= 0.013 af, Atten= 0%, Lag= 0.1 min

Primary = 0.21 cfs @ 11.96 hrs, Volume= 0.013 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Peak Elev= 17.38' @ 11.96 hrs Surf.Area= 3 sf Storage= 1 cf

Plug-Flow detention time= 0.3 min calculated for 0.013 af (100% of inflow)

Center-of-Mass det. time= 0.3 min (734.7 - 734.5)

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Type II 24-hr 50-yr Rainfall=9.91"

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Volume	Invert	Avail.Storage	Storage Description
#1	17.10'	9 cf	2.00'D x 3.00'H Vertical Cone/Cylinder
Device #1	Routing Primary	17.10' 8.0 Inle	tlet Devices " Round Culvert L= 24.0' Ke= 0.500 et / Outlet Invert= 17.10' / 16.90' S= 0.0083 '/' Cc= 0.900 0.012, Flow Area= 0.35 sf

Primary OutFlow Max=0.21 cfs @ 11.96 hrs HW=17.37' (Free Discharge) 1=Culvert (Barrel Controls 0.21 cfs @ 2.30 fps)

Summary for Pond P5: SW A outlet - PDMH 5

Inflow Area = 0.189 ac,100.00% Impervious, Inflow Depth = 9.52" for 50-yr event

Inflow = 2.60 cfs @ 11.98 hrs, Volume= 0.150 af

Outflow = 2.60 cfs @ 11.98 hrs, Volume= 0.150 af, Atten= 0%, Lag= 0.0 min

Primary = 2.60 cfs @ 11.98 hrs, Volume= 0.150 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs / 2 Peak Elev= 17.60' @ 11.98 hrs Surf.Area= 13 sf Storage= 14 cf

Flood Elev= 40.50' Surf.Area= 13 sf Storage= 132 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 0.2 min (753.9 - 753.7)

<u>Volume</u>	Invert	Avail.Storage	Storage Description
#1	16.50'	132 cf	4.00'D x 10.50'H Vertical Cone/Cylinder
Device	Routing	Invert Outl	et Devices
#1	Primary	L= 1 Inlet	P'' Round Culvert 10.0' CPP, square edge headwall, Ke= 0.500 1 / Outlet Invert= 16.50' / 16.40' S= 0.0100 '/' Cc= 0.900 1.012, Flow Area= 0.79 sf

Primary OutFlow Max=2.51 cfs @ 11.98 hrs HW=17.57' (Free Discharge) 1=Culvert (Barrel Controls 2.51 cfs @ 3.72 fps)

Summary for Link PA-1: Point of Analysis #1

Inflow Area = 0.608 ac, 62.89% Impervious, Inflow Depth > 7.63" for 50-yr event

Inflow = 6.14 cfs @ 11.97 hrs, Volume= 0.386 af

Primary = 6.14 cfs @ 11.97 hrs, Volume= 0.386 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

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Type II 24-hr 50-yr Rainfall=9.91"

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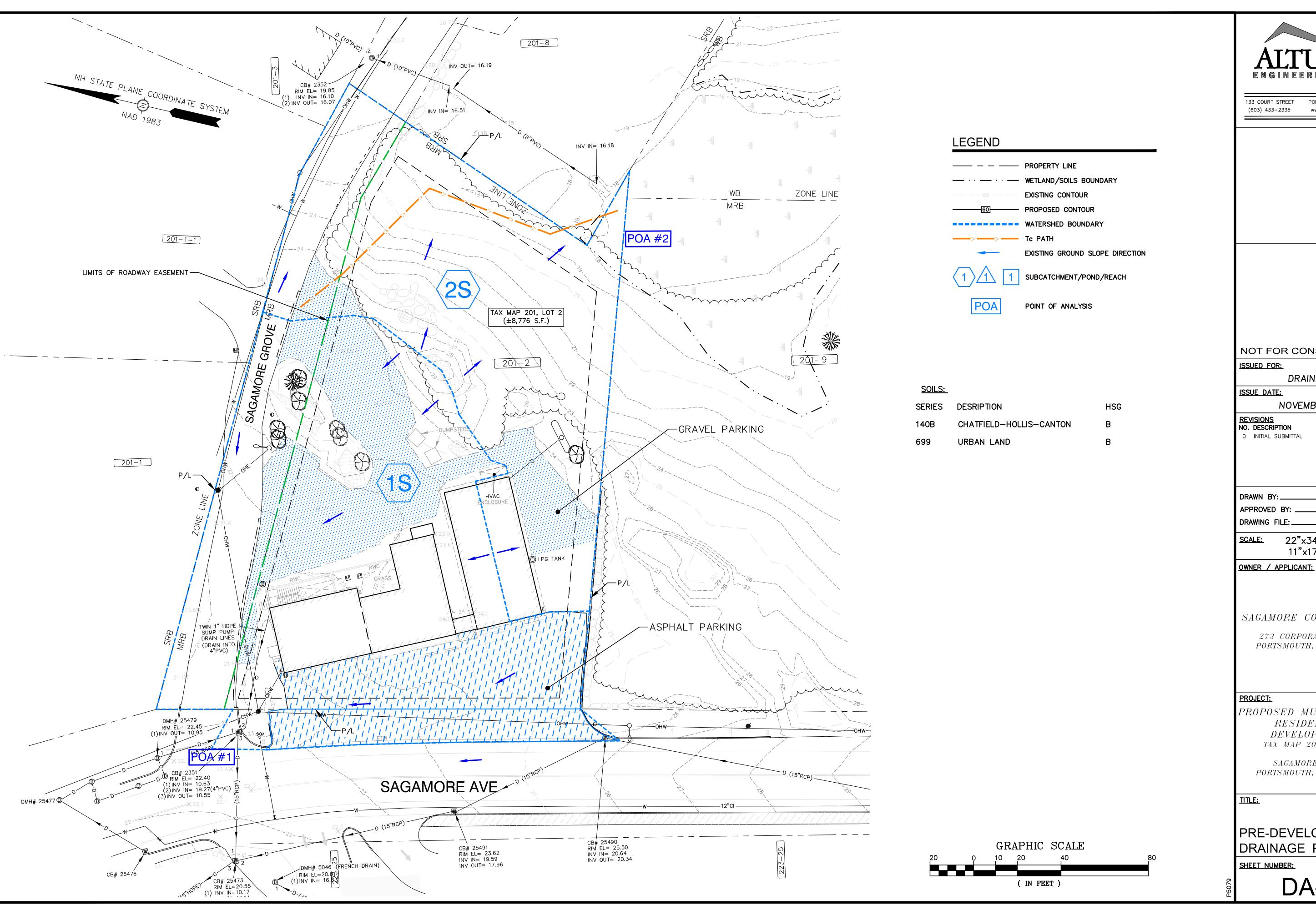
Summary for Link PA-2: Point of Analysis #2

Inflow Area = 0.446 ac, 12.51% Impervious, Inflow Depth = 5.09" for 50-yr event

Inflow = 3.22 cfs @ 12.04 hrs, Volume= 0.189 af

Primary = 3.22 cfs @ 12.04 hrs, Volume= 0.189 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs



ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801 (603) 433-2335 www.ALTUS-ENG.com

NOT FOR CONSTRUCTION

DRAINAGE REPORT

NOVEMBER 22, 2021

BY DATE CDB 11/22/21

22"x34" 1" = 20' 11"x17" 1" = 40'

SAGAMORE CORNER, LLC

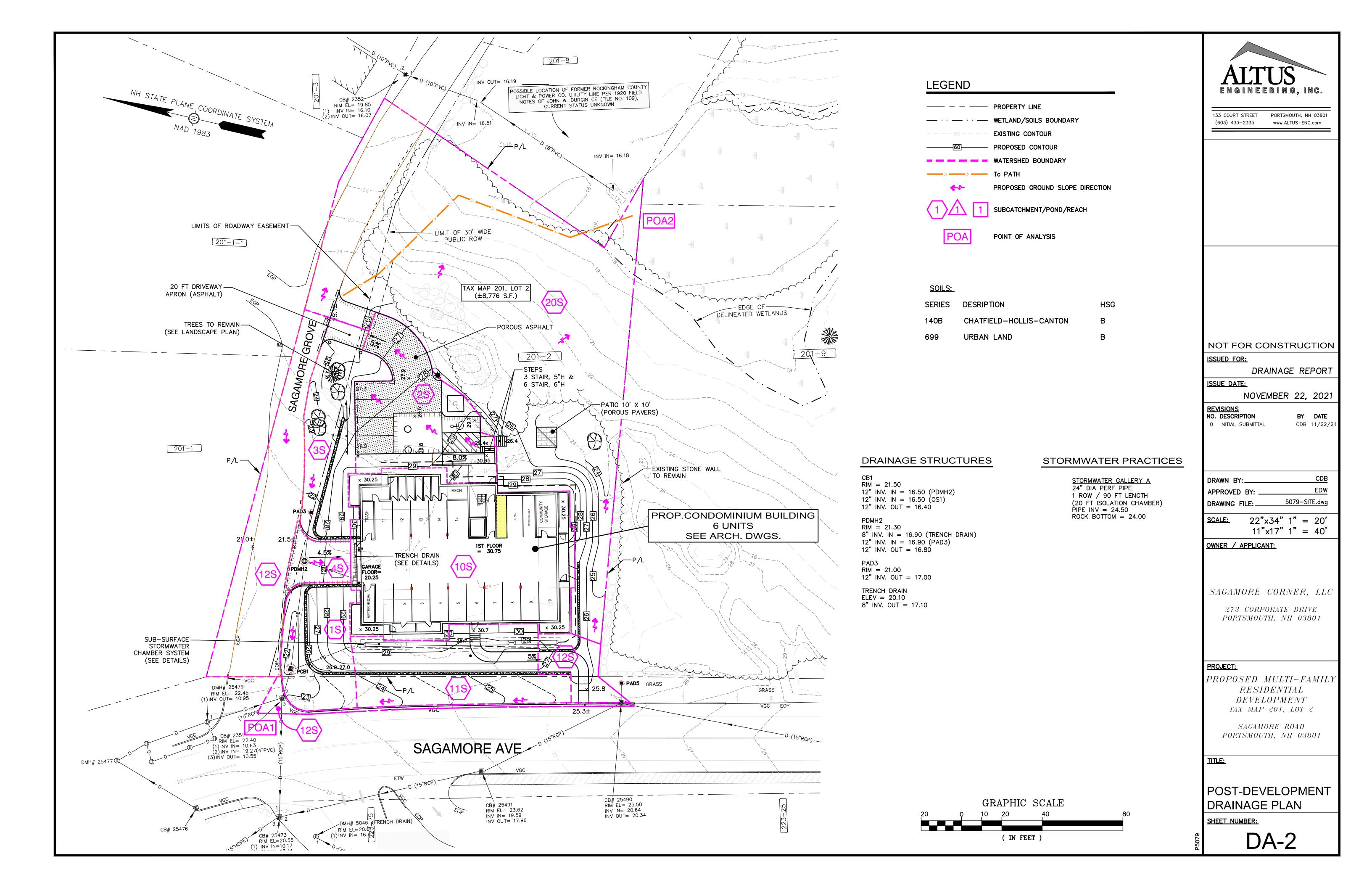
273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROPOSED MULTI-FAMILY RESIDENTIALDEVELOPMENTTAX MAP 201, LOT 2

> SAGAMORE ROAD PORTSMOUTH, NH 03801

PRE-DEVELOPMENT DRAINAGE PLAN

DA-1



STORMWATER MANAGEMENT INSPECTION AND MAINTENANCE MANUAL

FOR

MULTI-FAMILY RESIDENTIAL DEVELOPMENT

960 Sagamore Avenue Portsmouth, NH Assessor's Parcel 201-02

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:	Sagam	ore Corner, LLC	
	Name	Company	Phone
Inspection	and Maintenance :		
-		Name	Phone

NOTE: Inspection and maintenance responsibilities transfer to future property owners.

Included in this Inspection and Maintenance Manual are the following components:

- Drainage Features and Site BMP Functions and Maintenance Descriptions
- Regular Inspection and Maintenance Guidance for Permeable Pavements
- Checklists for Inspection of Permeable Pavements
- Stormwater System Operations and Maintenance Report Form
- Site Grading and Drainage Plan

POROUS PAVEMENTS

Function – Porous pavement (or Pavers) is designed to capture rainwater runoff containing suspended solids, nutrients and pollutants. Proper maintenance of porous pavement is crucial for ensuring its longevity and functionality to infiltrate runoff.

Maintenance

- Reference attached "Regular Inspection and Maintenance Guidance for Permeable Pavements
- New porous pavement shall be inspected several times in the first month after construction and at least annually thereafter. Inspections shall be conducted after major storms to check for surface ponding that might indicate possible clogging.
- Inspect annually for pavement deterioration or spalling.
- Vacuum sweeping shall be performed once a year or as needed to maintain permeability. Power washing may be required prior to vacuum sweeping to dislodge trapped particles.
- Sand and abrasives shall not be used for winter maintenance, as they will clog the pores; deicing materials shall be used instead.
- Never reseal or repave with impermeable materials. If the porous pavement is damaged, it can be repaired using conventional, non-porous patching mixes as long as the cumulative area repaired does not exceed 10 percent of the paved area.

CULVERTS AND DRAINAGE PIPES

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

Maintenance

- Culverts and 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.
- Riprap Areas Culvert outlets and inlets shall be inspected during annual maintenance and operations for erosion and scour. If scour or creek erosion is identified, the outlet owner shall take appropriate means to prevent further erosion. Increased lengths of riprap may require a NHDES Wetlands Permit modification.

SUB-SURFACE STORMWATER TREATMENT SYSTEM

Function – Sub-Surface treatment systems treat runoff prior to directing it to surface stormwater systems by filtering sediment and suspended solids, trapping them in the isolation rows and in the filter rock. Stormwater detention and infiltration can also be provided as the filtering process slows runoff, decreases the peak rate of discharge and promotes groundwater recharge.

The Sub-Surface Stormwater Treatment System shall be inspected and maintained at m a minimum of every 6 months for the first year and annually thereafter. Inspections shall comply with to the requirements of the manufacturer. At a minimum, the following inspection and maintenance requirements are included:

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT

- A. Inspection ports (if present)
 - a.1. Remove/open lid on nyloplast inline drain
 - a.2. Remove and clean flexstorm filter if installed
 - a.3. Using a flashlight and stadia rod, measure depth of sediment and record on maintenance log
 - a.4. Lower a camera into isolator row for visual inspection of sediment levels (optional)
 - a.5. If sediment is at, or above, 3" (80 mm) proceed to step 2. if not, proceed to step 3.
- B. All isolator rows
 - b.1. Remove cover from structure at upstream end of isolator row
 - b.2. using a flashlight, inspect down the isolator row through outlet pipe
 - i) Mirrors on poles or cameras may be used to avoid a confined space entry
 - ii) Follow osha regulations for confined space entry if entering manhole
 - b.3. If sediment is at, or above, 3" (80 mm) proceed to step 2. if not, proceed to step 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS

- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE SYSTEM.

NOTES

- 1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION AND ANNUALLY EVERY YEAR THEREAFTER. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- 2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

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 (as needed) on an annual basis to protect water quality and infiltration capacity. Catch basin debris shall be disposed of at a solid waste disposal facility.

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.

NOTE: SLOW OR CONTROLLED RELEASE FERTILIZE IS REQUIRED WITHIN THE 250 FOOT SHORELAND PROTECTION AREA. SEE PLANS FOR LOCATIONS.

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.

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 basket, 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 drain pipes that may have accumulated during construction.

Once in operation, all paved areas of the site should be swept at least once annually, preferably at the end of winter prior to significant spring rains.

APPENDIX

- A. PERMEABLE PAVEMENTS
 - a. REGULAR INSPECTION AND MAINTENANCE GUIDANCE
 - b. CHECKLIST FOR INSPECTION
- B. STORMWATER SYSTEM OPERATIONS AND MAINTENANCE REPORT
- C. GRADING AND DRAINAGE PLAN

Regular Inspection and Maintenance Guidance for Permeable Pavements

Regular inspection and maintenance is critical to the effective operation of permeable pavement. It is the responsibility of the owner to maintain the pavement in accordance with the minimum design standards. This page provides guidance on maintenance activities that are typically required for these systems, along with the suggested frequency for each activity. Individual systems may have more, or less, frequent maintenance needs, depending on a variety of factors including the occurrence of large storm events, seasonal changes, and traffic conditions.

ACTIVITIES

Visual inspections are an integral part of system maintenance. This includes monitoring pavement to ensure water drainage, debris accumulation, and surface deterioration.

ACTIVITY	FREQUENCY			
CLOGGING AND SYSTEM PERFORMANCE				
Adjacent vegetated areas show no signs of erosion and run-on to permeable pavement. Remedy: Repair or replace any damaged structural parts.	Whenever vacuuming adjacent permeable pavements			
Adjacent non-permeable sections of pavement are clean of debris to prevent debris tracking. Remedy: Vacuuming adjacent pavement non-permeable pavement can be effective at minimizing run-on.				
Check for standing water remaining on the surface of the pavement after a precipitation event within 30 minutes. Remedy: Use of a power washer or compressed air blower at an angle of 30 degrees or less can be effective, particularly in combination with a vacuum or vacuum sweeper.	1-2 times per year, more frequently for high-use sites or sites with higher potential for run-on			
Check for debris accumulation, particularly in the winter. Remedy: Loose debris such as leaves or trash can be removed using a power/leaf blower or gutter broom. Fall and spring cleanup should be accompanied by pavement vacuuming.				
Accumulation of sediment and organic debris on the pavement surface. Remedy: Regular use of a vacuum sweeper can remove sediment and organic debris. The sweeper may be fitted with water jets.				
PAVEMENT CONDITION				
Check for accumulation of snow or other stockpiles of materials such as sand/salt, mulch, soil, yard waste, etc. Stockpiling of these materials on permeable pavements can lead to premature clogging. Remedy: Remove stockpile if possible and check for clogging in storage area. Damage to pavement Remedy: Repairs should be repaired as they are identified	As Needed			

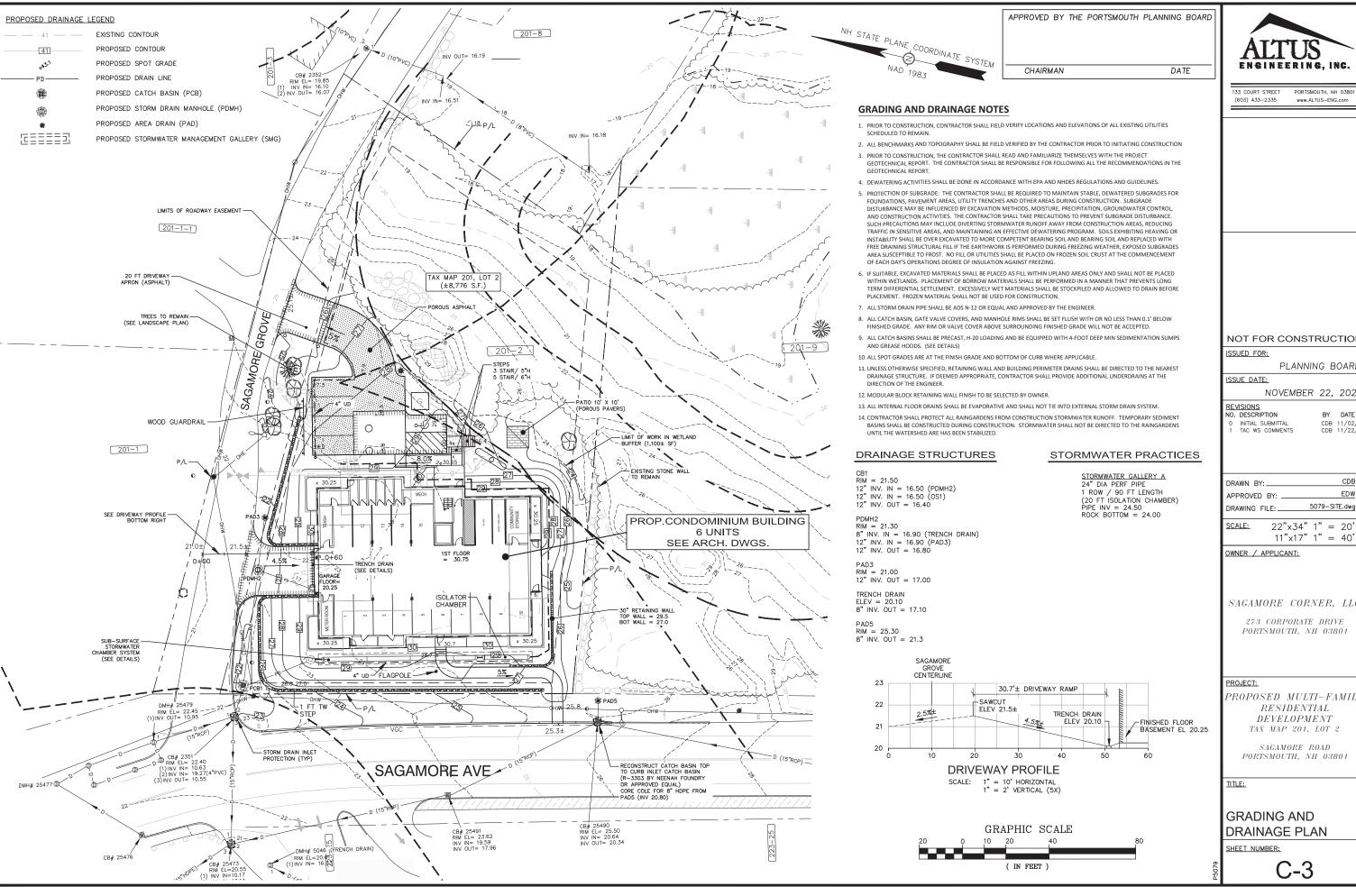
Location:			
Inspector:			
Date:			
Time:			
Site Conditions:			
Date Since Last Rain Event:			
Inspection Items		ory (S) or actory (U)	Comments/Corrective Action
1. Salt / Deicing (Winter/Spring)			
Use salt only for ice management	S	U	
Accumulated salt removed in spring	S	U	
2. Debris Cleanup (1-2 times per year minimum, Spring/Fall))		
Remove sediment and organic debris using vacuum street sweeper	S	U	
Clean catch basins (if available)	S	U	
3. Controlling Run-On			
Adjacent vegetated areas show no signs of erosion and run-on to permeable pavement	S	U	
4. Outlet / Catch Basin Inspection (if available) (1-2 time events)	s per year,	after large stor	m
No evidence of blockage	S	U	
Good condition, no need for cleaning/repair	S	U	
5. Poorly Drained Pavement			
Recently cleaned and vacuumed	S	U	
6. Pavement Condition	•		
No evidence of deterioration	S	U	
7. Signage / Stockpiling (As Needed)	•		
No evidence of damage	S	U	
Proper signage posted indicating usage for traffic load	S	U	
No stockpiling of materials and other unauthorized uses	S	U	
Corrective Action Needed			Due Date
1.			
2.			
3.			
Inspector's Signature			Date

CHECKLIST FOR INSPECTION OF PERMEABLE PAVEMENT

STORM WATER SYSTEM OPERATION AND MAINTENANCE REPORT

		G	eneral Information
Pro	ject Name		
Ow	ner		
Ins	pector's Name(s)		
Inc	pector's Contact Information		
insj	pector's Contact Information		
Dat	e of Inspection		Start Time: End Time:
	Annual Report Post-storm	event Due	to a discharge of significant amounts of sediment
Not	es:		
	General Site Que	estions and Dis	scharges of Significant Amounts of Sediment
	ject	Status	Notes
	ischarge of significant amounts of s e whether any are observed during		indicated by (but is not limited to) observations of the following. Notes/ Action taken:
1	Do the current site conditions refl	ect	
	the attached site plan?	□No	
2	Is the site permanently stabilized,		
	temporary erosion and sediment	□No	
	controls are removed, and stormw		
	discharges from construction activate eliminated?	VILY	
3	Is there evidence of the discharge	of \(\sigma\)Yes	
	significant amounts of sediment to		
	surface waters, or conveyance sys		
	leading to surface waters?		
4	Is there evidence of concentrated		
	of stormwater such as rills or char		
	that cause erosion when such flow not filtered, settled or otherwise to		
	to remove sediment?	eated	
5	Is there evidence of deposits of	□Yes	
	sediment from the site on any adja		
	property or stormwater system.		
6	Is there evidence of discharges from		
	the site to streams running throug	h or □No	
	along the site where visual		
	observations indicate significant		
7	amounts of sediment present in th Is there evidence of invasive spec		
<i>'</i>	within the stormwater treatment a		

Permit Coverage and Plans						
#	BMP/Facility	Inspected	Corrective Action Needed and Notes	Date Corrected		
		□Yes				
		□No				
		□Yes □No				
		□Yes				
		□No				
		□Yes				
		□No				
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PORTSMOUTH, NH 03801 www.ALTUS-ENG.com

NOT FOR CONSTRUCTION

PLANNING BOARD

NOVEMBER 22, 2021

BY DATE CDB 11/02/2 CDB 11/22/2

CDB EDW

5079-SITE.dwg $22" \times 34" 1" = 20"$

SAGAMORE CORNER, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROPOSED MULTI-FAMILY RESIDENTIALDEVELOPMENTTAX MAP 201, LOT 2

> SAGAMORE ROAD PORTSMOUTH, NH 03801

DRAINAGE PLAN

6 York Pond Road, York, Maine 03909 207 363 4532

mcuomosoil@gmail.com

Eric Weinrieb, P.E.
Altus Engineering, Inc.
133 Court Street
Portsmouth, NH 03801-4413

3 December 2019

Dear Mr. Weinrieb;

This letter is in reference to three vacant parcels on Wentworth House Road in Portsmouth, NH, identified as tax map 201, lots 9, 10, and 11. On 14 November 2019 I conducted a wetland delineation to assist you in planning the development of this property.

The City of Portsmouth defines wetlands as follows:

"An area that is inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetlands include, but are not limited to, swamps, marshes, bogs, vernal pools, and similar areas. The following are specifically included in the definition of wetland:

Created wetland: An area that has been transformed from upland to wetland where the upland was not created by human activity such as filling or water diversion.

Inland wetland: A wetland that is not subject to periodic inundation by tidal waters.

Tidal wetland: A wetland whose vegetation, hydrology or

soils are influenced by periodic inundation of tidal waters."

Wetland characteristics were identified using the technical criteria in the Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region. The soil component was classified using the Field Indicators of Hydric Soils in the United States and the Field Indicators for Identifying Hydric Soils in New England. The wetland status of plants were determined using the National List of Plant Species that Occur in Wetlands: Northeast (Region 1). This is the standard used by State and Federal regulators.

A single freshwater wetland was identified along the common boundary of lots 9 and 10. The wetland-upland boundary was marked with 24 sequentially numbered blue flags. This isolated freshwater 'inland' wetland ends along the rear property line of parcel 201/8.

Please contact me if you have questions regarding this work.

Sincerely,

Michael Cuomo NH Wetland Scientist #004

NH Soil Scientist #006

MICHAEL CUOMO
No. 006



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Michael Cuomo, Soil Scientist

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WETLAND AND BUFFER EVALUATION

using the Highway Methodology Workbook Supplement

> 960 Sagamore Road and Wentworth Road

> > Tax map 201, Lot 9

Prepared for:

Altus Engineering, Inc. 133 Court Street Portsmouth, NH

Prepared by:



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PURPOSE

This report uses The Highway Methodology Workbook Supplement (hereafter referred to as the 'Highway Method') to assess the wetlands and buffers at this site. This information is required by City of Portsmouth zoning as part of the Conditional Use Permit application for impact within the wetland buffer. No direct wetland impact is proposed.

SITE

The 'Sagamore Studios' project site is located at the intersection of Wentworth and Sagamore Roads in Portsmouth, NH. This wooded 1.44 acre lot is vacant. A portion of the existing conditions plan is attached at the rear of this report for reference.

WETLAND in the LANDSCAPE

One wetland exists on this site and continues off site to the east. The entire wetland, including the portion off-site, is estimated to be 1/2 acre (about 20,000 square feet) in size. This wetland is regulated by the City because it is greater than 10,000 square feet. It requires a 100 foot buffer, per local zoning.

The wetland receives water from natural subsurface and surface flows, including rain water and snow melt. It is supplemented by flow from a culvert under Wentworth Road. The wetland is not associated with any natural surface water body. Water ponds to shallow depth and for medium duration in this wetland. The wetland does not have the physical characteristics associated with a vernal pool.

The wetland probably extended further to the north and east but was filled at some time in the past when the area was developed. This is inferred by the straight wetland-upland boundaries along these margins of the wetland. The wetland may have flowed north in a small channel to Sagamore Creek prior to development of the Sagamore Grove neighborhood. This is inferred by the presence of a 8" diameter culvert pipe which now flows from the wetland, beneath

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map 201, lots 8 and 3. Two catch basins on these abutting lots identify the apparent route of this pipe.

The wetland has been modified by human activity as described above. The long lasting evidence of this disturbance is reflected in the significant population of non-native invasive plant species which are displacing native plants. Native wildlife is adapted to native plants, so invasive plants generally have reduced wildlife habitat value and disrupt native ecosystems. Invasive shrubs are also found in the uplands on this site. Invasive plants are noted below with an asterisk (*).

VEGETATION AND SOIL

Common plant species in the wetland are listed below by strata. Trees:

American elm (Ulmus americana)
red maple (Acer rubrum)
American ash (Fraxinus americana)

Shrubs:

glossy buckthorn (Rhamnus frangula)*
common winterberry holly (Ilex verticillata)
American cranberrybush (Viburnum trilobum)
northern arrow-wood (Viburnum recognitum)
multiflora rose (Rosa multiflora)*

Herbs:

broad-leaf cattail (Typha latifolia)
purple loose-strife (Lythrum salicaria)*
sensitive fern (Onoclea sensibilis)
fireweed (Epilobium sp.)
buttercup (Ranunculus sp.)
soft rush (Juncus effusus)

* Invasive plants

The soils in the wetland are poorly drained fine textured sediments of glacio-marine origin. This is the Scitico soil series. The soil is typically saturated to the surface for less

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than 9 months of the average year. The soils have increasing clay content with depth and absorb water slowly. Though deep to bedrock, these soils have shallow effective rooting depth.

Using the Classification of Wetlands and Deepwater Habitats of the United States, developed by Cowardin and others, this wetland is labeled 'PEM1' with a 'PFO1' fringe. This indicates the core of the wetland is a freshwater marsh with persistent emergent plants. The edge is a forested freshwater swamp dominated by deciduous trees.

Additional invasive plants noted in the uplands are bittersweet (Celastrus scandens), honeysuckle (Lonicera sp.), barberry (Berberis sp.), Japanese knotweed (Polygonum cuspidatum), and burning bush (Euonymus atropurpureus).

The soils in the upland are dominated by shallow and moderately deep to bedrock medium textured glacial till. This would be the Chatfield and Hollis soil series. There are a number of bedrock outcroppings at the surface.

HIGHWAY METHOD

The wetland and buffer were evaluated using the Highway Method on 8 December 2016 by Michael Cuomo, NH Wetland Scientist #4. The results are summarized on the worksheet attached at the rear of this report and described in detail below.

The Highway Method was developed to rapidly evaluate and compare a series of wetlands, primarily for the purpose of selecting the highway corridor with the least environmental impact from among alternative routes. For the purpose of this work, it provides an evaluation framework for drawing attention to the most important functions the wetland serves. The Highway Method does not produce a numerical score. It provides guidance and a framework for the professional judgment of the evaluator, who selects which functions occur and determines the Principal Function(s). The Highway Method evaluates the entire wetland and buffer, including

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those areas which are off-site and can not be controlled by the applicant.

SUMMARY OF HIGHWAY METHOD RESULTS

The Principal Function served by the wetland is Nutrient Removal. Nutrient Removal is defined in the Highway Method as "...the effectiveness of the wetland as a trap for nutrients in the runoff water from surrounding uplands or contiguous wetlands and the ability of the wetland to process these nutrients into other forms or trophic levels...to prevent ill effects of nutrients entering aquifers or surface waters ..." This wetland performs Nutrient Removal relatively well because of it's ability to trap sediments, the fine textured soil, dense emergent vegetation, and it's cyclical wetting and drying.

The second most important wetland function is Sediment/Toxicant Retention, which "...reduces or prevents degradation of water quality." This wetland performs Sediment/Toxicant Retention relatively well because of it's ability to trap sediments, dense emergent vegetation, and the constricted outlet.

The third most important wetland function is Wildlife Habitat "...the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge." In this case the function is related to the density of wetland vegetation and the wetland as a refuge for small animals in an otherwise developed area along Sagamore Creek.

The wetland performs the Floodflow Alteration function to a limited degree. "This function considers the effectiveness of the wetland in reducing flood damage by water retention for prolonged periods following precipitation events and the gradual release of flood waters." Positive indicators of this function are dense vegetation, constricted outlet, and topography.

Production Export is "...the effectiveness of the wetland to

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produce food or usable products for humans or other living organisms." Wetlands closely associated with waterbodies perform this function best. There is no waterbody associated with this wetland so the function is performed to a limited degree.

Fish and Shellfish Habitat is "...the effectiveness of wetlands, embayments, tidal flats, vegetated shallows, and other environments in supporting marine resources such as fish, shellfish, marine mammals, and sea turtles." The wetland does not support this function because it lacks aquatic habitat.

Sediment/Shoreline Stabilization is "...the effectiveness of a wetland to stabilize streambanks and shorelines against erosion." The wetland is not associated with a waterbody so does not perform this function.

Visual Quality/Aesthetics "...considers the visual and aesthetic quality or usefulness of a wetland." This wetland has no exceptional visual features and is not easily accessible or visible from public places, so the function is performed to a very limited degree.

Recreation "...considers the suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting, and other active or passive recreational activities." Because of the small size, lack of public access, lack of a waterbody, and surrounding development, this wetland does not provide recreational opportunities.

Educational/Scientific Value is "...the suitability of the wetland as a site for an outdoor classroom or as a location for scientific study or research." The disturbed nature, lack of public access, and lack of wetland diversity mean this wetland performs this function to a very limited degree.

Uniqueness/Heritage "...may include archeological sites, critical

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habitat for endangered species, overall health and appearance, it's role in the ecosystem of the area..." The disturbed nature of the wetland and the common occurrence of this wetland type in the area means the wetland does not perform this function. Inquiry to NH Natural Heritage Bureau revealed no endangered species habitat.

Endangered Species Habitat "...considers the suitability of the wetland to support threatened or endangered species." The disturbed nature of the wetland and the common occurrence of this wetland type in the area means the wetland does not perform this function. Inquiry to NH Natural Heritage Bureau revealed no endangered species habitat.

Groundwater Recharge/Discharge is "...the potential for the wetland to serve as a groundwater recharge and/or discharge area...the fundamental interaction between wetlands and aquifers...." Very slow soil permeability and soil transmissivity indicate the wetland does not perform this function.

CONCLUSIONS

All wetlands have value, even those such as this one that are degraded. There is widespread agreement among professionals that degraded wetlands in urban environments can have higher importance than may be reflected in wetland evaluation methods because they offer refuge for small wildlife, provide screening and green space, and are remnant wetlands in urban environments where many wetlands have historically been filled. This degraded wetland also has increased value due to it's physical proximity to Sagamore Creek.

Using the Highway Method as a framework for the functional assessment of this wetland, Nutrient Removal is the principle wetland function.

The wetland performs three other functions: Sediment/Toxicant Retention, Wildlife Habitat, and Floodflow Alteration.

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The wetland does not perform, or performs to a very limited degree the remaining functions the Highway Method considers: Groundwater Recharge/Discharge, Sediment/Shoreline Stabilization, Production Export, Fish & Shellfish Habitat, Endangered Species Habitat, Visual Quality/Aesthetics, Education/Scientific Value, Recreation, and Uniqueness/Heritage.

The wetland has been partially degraded by historical filling of part of the wetland off the subject property. What may be the historical outflow has been culverted and now runs under the yards of abutting properties and under Sagamore Grove in a system of pipes and receives untreated stormwater through catch-basins. The wetland has a number of undesirable invasive plants, a sign of past disturbance, human induced nutrient enrichment, and sediment deposition. Surrounding land uses, medium density residential and commercial development, partially degrade the 100 foot buffer around the wetlands. Much of the off-site wetland buffer contains structures, parking pavement and lawns. The on-site buffer contains invasive shrubs as well as native plants.

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Michael Cuomo, Soil Scientist 6 York Pond Road, York, Maine 03909

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Portion of PRELIMINARY EXISTING CONDITIONS PLAN with photo locations added 960 Sagamore Road and Wentworth Road, Portsmouth, NH Base plan by James Verra and Associates WENTWORTH ROAD SAGAMORE AVENUE



Sagamore Studios photo 1: Bittersweet on buckthorn



Sagamore Studios photo 2: Multiflora rose and bittersweet



Sagamore Studios photo 3: Purple loose-strife



Sagamore Studios photo 4: Forested wetland edge



Sagamore Studios photo 5: Buckthorn along wetland-upland boundary



Sagamore Studios photo 6: View of wetland



Sagamore Studios photo 7: Upland near culvert discharge alongside Wentworth Road

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NEW HAMPSHIRE NATURAL HERITAGE BUREAU NHB DATACHECK RESULTS LETTER

To: Michael Cuomo

6 York Pond Road York, ME 03909

From: NH Natural Heritage Bureau

Date: 12/20/2016 (valid for one year from this date)

Re: Review by NH Natural Heritage Bureau of request submitted 12/13/2016

NHB File ID: NHB16-3737 Applicant: Eric Wiereib

Location: Portsmouth

Tax Maps: 201/9

Project

Description: Commercial bldg proposed for vacant lot. No wetland impact.

Wetland buffer (City requirement) impact

The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 12/13/2016, and cannot be used for any other project.

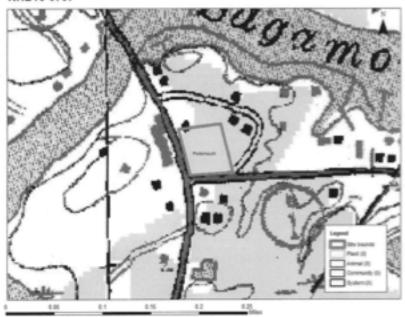
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NEW HAMPSHIRE NATURAL HERITAGE BUREAU NHB DATACHECK RESULTS LETTER

MAP OF PROJECT BOUNDARIES FOR: NHB16-3737

NHB16-3737



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NEW HAMPSHIRE NATURAL HERITAGE BUREAU NHB DATACHECK RESULTS LETTER

To: Michael Cuomo

6 York Pond Road York, ME 03909

From: NH Natural Heritage Bureau

Date: 12/20/2016 (valid for one year from this date)

Re: Review by NH Natural Heritage Bureau of request submitted 12/13/2016

NHB File ID: NHB16-3737 Applicant: Eric Wiereib

Location: Portsmouth

Tax Maps: 201/9

Project

Description: Commercial bldg proposed for vacant lot. No wetland impact.

Wetland buffer (City requirement) impact

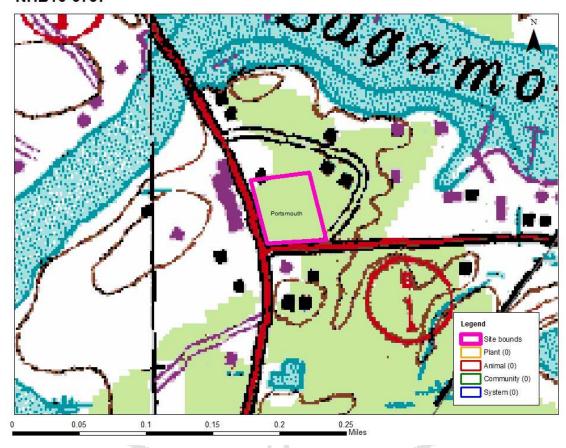
The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 12/13/2016, and cannot be used for any other project.

NEW HAMPSHIRE NATURAL HERITAGE BUREAU NHB DATACHECK RESULTS LETTER

MAP OF PROJECT BOUNDARIES FOR: NHB16-3737

NHB16-3737



MEMORANDUM

TO: Katz Development Corporation

c/o Mr. Eric S. Katz

273 Corporate Drive, Suite 150

Portsmouth, NH 03801

FROM: Mr. Jeffrey S. Dirk, P.E., PTOE, FITE

Managing Partner

Vanasse & Associates, Inc.

35 New England Business Center Drive

Suite 140

Andover, MA 01810-1066

(978) 269-6830 jdirk@rdva.com

Professional Engineer in CT, MA, ME, NH, RI and VA

DATE: May 25, 2021 **RE:** 8992

SUBJECT: Traffic Impact Study

Proposed Multifamily Residential Development – 960 Sagamore Avenue (NH Route 1A)

Portsmouth, New Hampshire

Vanasse & Associates, Inc. (VAI) has conducted a Traffic Impact Study (TIS) in order to determine the potential impacts on the transportation infrastructure associated with the proposed age-targeted multifamily residential development to be located at 960 Sagamore Avenue (NH Route 1A) in Portsmouth, New Hampshire (hereafter referred to as the "Project"). This study evaluates the following specific areas as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; and identifies and analyzes existing traffic conditions and future traffic conditions, both with and without the Project along Sagamore Grove and at the following specific intersections: NH Route 1A at Sagamore Grove; Sagamore Grove at the west Project site driveway; and Sagamore Grove at the east Project site driveway.

Based on this assessment, we have concluded the following with respect to the Project:

- 1. Using trip-generation statistics published by the Institute of Transportation Engineers (ITE),¹ the Project is expected to generate approximately 20 vehicle trips on an average weekday (two-way volume over the operational day of the Project), with 4 vehicle trips expected during the weekday morning peak hour and 6 vehicle trips expected during the weekday evening peak hour;
- 2. In comparison to the existing uses that occupy the site, the Project is expected to generate approximately 188 *fewer* vehicle trips on an average weekday, with 10 *fewer* vehicle trips expected during the weekday morning peak hour, and 12 *fewer* vehicle trips expected during the weekday evening peak hour;
- 3. Given the significant reduction in traffic that is predicted as a result of the Project, the Project will be less impactful on the transportation infrastructure when compared to the existing uses that occupy the Project site;



¹Trip Generation, 10th Edition; Institute of Transportation Engineers; Washington, DC; 2017.

- 4. A review of motorist delays and vehicle queuing at the NH Route 1A/Sagamore Grove intersection indicates that the Project will not result in a significant increase in motorist delays or vehicle queuing, with Project-related impacts defined as an increase in average motorist delay of less than 1.0 seconds with no predicted increase in vehicle queuing; and
- 5. Lines of sight at the Project site driveway intersections were found to meet, exceed or could be made to meet or exceed the recommended minimum distances for safe operation.

In consideration of the above, we have concluded that the Project can be accommodated within the confines of the existing transportation infrastructure in a safe and efficient manner with the implementation of the recommendations defined herein.

The following details our assessment of the Project.

PROJECT DESCRIPTION

The Project will entail the construction of an 8-unit multifamily residential development to be located at 960 Sagamore Avenue (NH Route 1A) in Portsmouth, New Hampshire. The Project site encompasses approximately $0.98\pm$ acres of land that is bounded by Sagamore Grove to the north; areas of open and wooded space to the south and east; and NH Route 1A to the west. The Project site currently contains a mixed-use building that includes a residential unit, $1,420\pm$ square feet (sf) of retail space and 1,230 sf of restaurant space. The existing building and associated appurtenances will be removed to accommodate the Project. Access to the Project site will be provided by way of two new driveways that will intersect the south side of Sagamore Grove approximately 75 feet and 175 feet east of NH Route 1A, respectively. The existing driveway that currently serves the Project site along NH Route 1A will be closed in conjunction with the Project resulting in an overall improvement in safety through the elimination of a conflict point for vehicles, pedestrians and bicyclists along NH Route 1A.



Imagery ©2021 Google



On-site parking will be provided for up to 25 vehicles, or a parking ratio of 3.12 spaces per unit, consisting of 7 exterior parking spaces and 18 parking spaces to be located in a garage beneath the residential building. This parking ratio (3.12 parking spaces per unit) exceeds the requirements of Section 10.1112.30, Off-Street Parking Requirements, of the City of Portsmouth Zoning Ordinance.²

EXISTING CONDITIONS

A comprehensive field inventory of existing conditions within the study area was conducted in May 2021. This inventory included the collection of traffic volume data and vehicle travel speed measurements, as well as a review of existing pedestrian and bicycle accommodations, public transportation services, and motor vehicle crash data. The following summarizes existing conditions within the study area.

Roadways

NH Route 1A

NH Route 1A is a two-lane minor arterial roadway (Tier 5, Class IV) under the jurisdiction of the City of Portsmouth that traverses the study area in a general north-south alignment. In the vicinity of the Project site, NH Route 1A provides two 11± foot wide travel lanes separated by a double-yellow centerline with 6± foot wide marked shoulders provided. The posted speed limit along NH Route 1A within the study area is 30 miles per hour (mph); prevailing travel speeds measured in May 2021 were found to be 35 mph.³ Illumination is provided by way of streetlights mounted on wood poles. Land use along NH Route 1A within the study area consists of the Project site, commercial properties, areas of open and wooded space, and the Sagamore Creek.

Sagamore Grove

Sagamore Grove is a two-lane local road (Tier 5, Class V) under the jurisdiction of the City of Portsmouth that traverses the study area in a general east-west direction for a distance of approximately 475 feet east of NH Route 1A. In the vicinity of the Project site, Sagamore Grove provides a 21± foot wide traveled-way with no marked centerline or shoulders provided. A posted speed limit is not provided along Sagamore Grove and, as such, the statutory speed limit is 30 mph.⁴ Illumination is provided by way of streetlights mounted on wood poles. Land use along Sagamore Grove within the study area consists of the Project site, residential properties and areas of open and wooded space.

Intersection

NH Route 1A at Sagamore Grove

Sagamore Grove intersects NH Route 1A from the east to form a three-way intersection under STOP-sign control. The NH Route 1A approaches consist of a single $11\pm$ foot wide general-purpose travel lane with $6\pm$ foot wide marked shoulders. The Sagamore Grove approach provides a single general-purpose lane that

⁴The statutory speed limit for any business or urban residence district is 30 mph as defined in the 2019 New Hampshire Revised Statutes Section 265:60 *Basic Rule and Maximum Limits*.



²The Zoning Ordinance requires a minimum of 0.5 spaces per dwelling units of less than 500 sf; 1.0 spaces per dwelling units between 500 to 750 sf; and 1.3 spaces for dwelling units greater than 750 sf.

³The prevailing travel speed is also known as the 85th percentile vehicle travel speed, or the speed at which 85 percent of the observed vehicles traveled at or below during the observation period.

is under STOP-sign control with a marked STOP-line provided. A sidewalk is provided along the west side of NH Route 1A and illumination is provided by way of streetlights mounted on wood poles. Land use in the vicinity of the intersection consists of residential properties, Seacoast Mental Health Center, Freedom Boat Club and areas of open and wooded space.

Existing Traffic Volumes

In order to determine existing traffic-volume demands and flow patterns within the study area, automatic traffic recorder (ATR) counts, manual turning movement counts (TMCs) and vehicle classification counts were completed in May 2021. The ATR counts were conducted on NH Route 1A in the vicinity of the Project site on May 12th through May 13th, 2021 (Wednesday through Thursday, inclusive) in order to record weekday traffic conditions over an extended period, with weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak period manual TMCs performed at the intersection of NH Route 1A at Sagamore Grove on May 12, 2021 (Wednesday). These time periods were selected for analysis purposes as they are representative of the peak traffic-volume hours for both the Project and the adjacent roadway network.

In order to evaluate the potential for seasonal fluctuation of traffic volumes within the study area, 2019 peak-hour and average daily traffic count data were reviewed for NHDOT count station No. 02345001, which is located on Route 1, north of North Road in North Hampton. Based on a review of this data, it was determined that traffic volumes for the month of May are approximately 7.2 percent below peak-month conditions and, therefore, the raw traffic count data that forms the basis of this assessment was adjusted upward accordingly (by 7.2 percent) to represent peak-month conditions in accordance with NHDOT standards.

In order to account for the impact on traffic volumes and trip patterns resulting from the COVID-19 pandemic, traffic-volume data collected at NH DOT Continuous Count Station No. 02345001 in May 2021 was compared to May 2019 traffic volumes that were collected at the same location. The 2019 traffic volumes were expanded to 2021 by applying a background traffic growth rate of 1.0 percent per year in order to allow for a comparison of the data. Based on this comparison, the May 2021 traffic volumes that were collected as a part of this assessment were adjusted upward by an additional 15.1 percent.

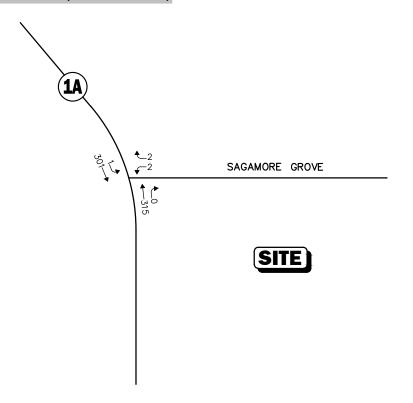
Based on a review of the adjusted (as defined above) traffic count data, NH Route 1A in the vicinity of the Project site accommodates approximately 9,790 vehicles per day on an average weekday under peak-month conditions (two-way, 24-hour volume), with approximately 689 vehicles per hour (vph) during the weekday morning peak hour (8:00 to 9:00 AM) and 852 vph during the weekday evening peak hour (4:30 to 5:30 PM).

Pedestrian and Bicycle Facilities

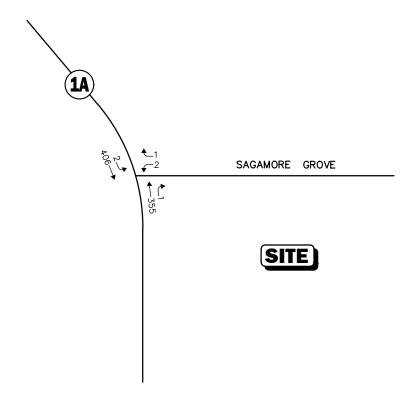
Sidewalks are currently provided along the west side of NH Route 1A. Formal bicycle facilities were not identified within the immediate study area; however, both NH Route 1A and Sagamore Grove provide sufficient width to accommodate bicycle travel in a shared traveled-way configuration (i.e., bicyclists and motor vehicles sharing the traveled-way).⁵ Signs indicating that bicycles may use the full travel lane are provided along Route 1A.

AS

⁵A minimum combined travel lane and paved shoulder width of 14-feet is recommended to support bicycle travel in a shared traveled-way condition.



WEEKDAY EVENING PEAK HOUR (4:30 - 5:30 PM)





2021 Existing
Peak-Month
Peak-Hour Traffic Volumes

Figure 1

Public Transportation Services

Regularly scheduled fixed-route bus service is provided within the City of Portsmouth by way of the Cooperative Alliance for Seacoast Transportation (COAST); however, these services are not directly accessible at the Project site. In addition to fixed-route bus services, COAST operates paratransit services for eligible persons who cannot use fixed-route transit all or some of the time due to a physical, cognitive, or mental disability in compliance with the Americans with Disabilities Act (ADA). COAST and the City of Portsmouth also provide transportation services for eligible seniors, including free transportation to the Seacoast Mental Health Center.

Motor Vehicle Crash Data

Motor vehicle crash information for the intersection of NH Route 1A at Sagamore Grove has been requested from the Portsmouth Police Department in order to examine motor vehicle crash trends occurring at this location. This data will be summarized in a supplemental memorandum as soon as it is received.

FUTURE CONDITIONS

Traffic volumes in the study area were projected to the years 2022 and 2032, which reflect the anticipated opening-year of the Project and a ten-year planning horizon from opening-year, respectively, consistent with NHDOT TIS guidelines. The future condition traffic-volume projections incorporate identified specific development projects by others, as well as general background traffic growth as a result of development external to the study area and presently unforeseen projects. Anticipated Project-generated traffic volumes superimposed upon the 2022 and 2032 No-Build traffic volumes reflect the Build conditions with the Project.

Future Traffic Growth

Future traffic growth is a function of the expected land development in the immediate area and the surrounding region. Several methods can be used to estimate this growth. A procedure frequently employed estimates an annual percentage increase in traffic growth and applies that percentage to all traffic volumes under study. The drawback to such a procedure is that some turning volumes may actually grow at either a higher or a lower rate at particular intersections.

An alternative procedure identifies the location and type of planned development, estimates the traffic to be generated, and assigns it to the area roadway network. This procedure produces a more realistic estimate of growth for local traffic; however, potential population growth and development external to the study area would not be accounted for in the resulting traffic projections.

To provide a conservative analysis framework, both procedures were used, the salient components of which are described below.

Specific Development by Others

The City of Portsmouth has been contacted in order to determine if there were any projects planned within the study area that would have an impact on future traffic volumes at the study intersections. Based on these discussions, no projects were identified at this time that are expected to result in an increase in traffic that would exceed the general background traffic growth rate (discussion follows). A small (11-unit) multifamily residential development to be located at 1169 Sagamore Avenue is in the initial planning stages; however, formal plans have not been submitted to the City at this time.



General Background Traffic Growth

A review of historic traffic growth information compiled by NHDOT for the City of Portsmouth, and the Towns of New Castle and Rye was undertaken in order to determine general traffic growth trends. This data indicates that traffic volumes have fluctuated over the 10-year period between 2009 and 2019, with an average traffic growth rate of 0.54 percent. In order to provide a prudent planning condition for the Project, a slightly higher 1.0 percent per year compounded annual background traffic growth rate was used in order to account for future traffic growth and presently unforeseen development within the study area.

Roadway Improvement Projects

The City of Portsmouth and NHDOT were contacted in order to determine if there were any planned roadway improvement projects expected to be completed within the study area. Based on these discussions, no roadway improvement projects aside from routine maintenance activities were identified to be planned within the study area at this time.

No-Build Traffic Volumes

The 2022 and 2032 No-Build peak-month peak-hour traffic volumes were developed by applying the 1.0 percent per year compounded annual background traffic growth rate to the 2021 Existing peak-month peak-hour traffic volumes. The resulting 2022 No-Build weekday morning and evening peak-month peak-hour traffic volumes are shown on Figure 2, with the corresponding 2032 No-Build peak-month peak-hour traffic volumes shown on Figure 3.

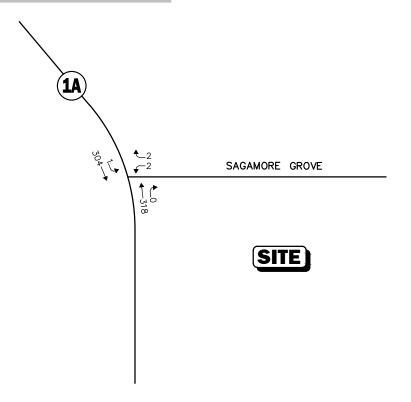
PROJECT-GENERATED TRAFFIC

Design year (2022 and 2032) Build traffic volumes for the study area roadways were determined by estimating Project-generated traffic volumes and assigning those volumes on the study roadways. The following sections describe the methodology used to develop the anticipated traffic characteristics of the Project.

As proposed, the Project will entail the construction of an 8-unit multifamily residential community. In order to develop the traffic characteristics of the Project, trip-generation statistics published by the ITE⁶ for a similar land use as that proposed were used. ITE Land Use Code (LUC) 220, *Multifamily Housing (Low-Rise)*, was used to develop the traffic characteristics of the Project, the results of which are summarized in Table 1.







WEEKDAY EVENING PEAK HOUR (4:30 - 5:30 PM)

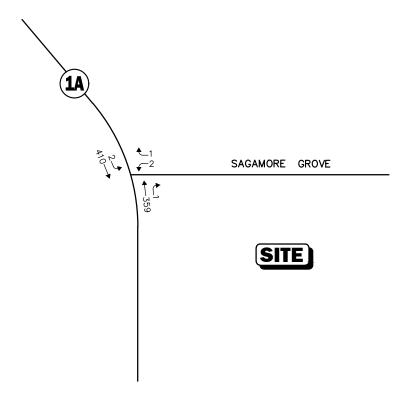
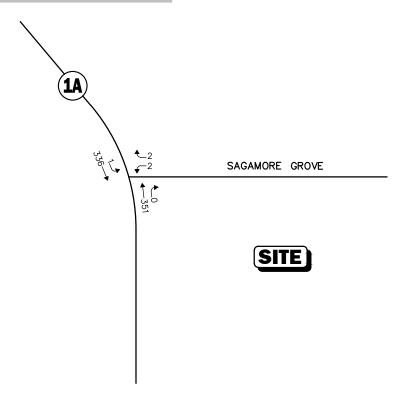


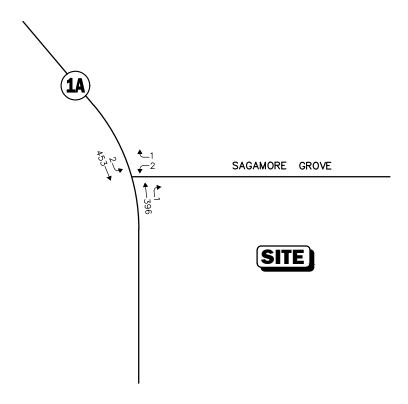


Figure 2
2022 No-Build
Peak-Month

Peak-Hour Traffic Volumes



WEEKDAY EVENING PEAK HOUR (4:30 - 5:30 PM)





2032 No-Build Peak-Month Peak-Hour Traffic Volumes

Figure 3

Table 1
TRIP-GENERATION SUMMARY

	Vehicle Trips									
Time Period	Entering	Exiting	Total							
Average Weekday:	10	10	20							
Weekday Morning Peak Hour:	1	3	4							
Weekday Evening Peak Hour:	4	2	6							

^aBased on ITE LUC 220, Multifamily Housing (Low-Rise), 8 dwelling units.

Project-Generated Traffic Volume Summary

As can be seen in Table 1, the Project is expected to generate approximately 20 vehicle trips on an average weekday (two-way, 24-hour volume, or 10 vehicles entering and 10 exiting), with 4 vehicle trips (1 vehicle entering and 3 exiting) expected during the weekday morning peak hour and 6 vehicle trips (4 vehicles entering and 2 exiting) expected during the weekday evening peak hour.

Table 2 compares the traffic volumes associated with the Project to those of the existing uses that currently occupy the Project site and that will be removed.

Table 2
TRAFFIC VOLUME COMPARISON

		Vehicle Trips	
Time Period/Direction	(A) Proposed Residential Development ^a	(B) Existing Uses ^b	(C= A - B) Difference
Average Weekday Daily:	20	208	-188
Weekday Morning Peak Hour:	4	14	-10
Weekday Evening Peak Hour:	6	18	-12

^aBased on ITE LUC 220, Multifamily Housing (Low-Rise), 8 dwelling units.



^bBased on ITE LUC 210, *Single-Family Detached Housing*, 1 dwelling unit; LUC 820, *Shopping Center*, 1,420 sf, and using the average trip rate given the small size of the demised area; and LUC 932, *High-Turnover (Sit-Down) Restaurant*, 1,230 sf

Traffic-Volume Comparison

As can be seen in Table 2, in comparison to the existing uses that occupy the Project site and that will be removed to accommodate the Project, the Project is expected to generate approximately 188 *fewer* vehicle trips on an average weekday (a 90 percent reduction), with 10 *fewer* vehicle trips expected during the weekday morning peak hour (a 71 percent reduction, and 12 *fewer* vehicle trips expected during the weekday evening peak-hour (a 67 percent reduction).

Based on this comparative analysis, it is clear that the Project will be significantly less impactful on the transportation infrastructure when compared to the existing uses that occupy the Project site.

Trip Distribution and Assignment

The directional distribution of generated trips to and from the Project site was determined based on a review of existing traffic patterns within the study area during the peak periods. The general trip distribution for the Project is shown on Figure 4. The additional traffic expected to be generated by the Project was assigned on the study area roadway network as shown on Figure 5.

Build Traffic Volumes

The 2022 Opening-Year and 2032 Build condition traffic-volumes were developed by adding Project-generated traffic to the corresponding 2022 and 2032 No-Build peak-month peak-hour traffic-volumes. The resulting 2022 Opening-Year Build condition weekday morning and evening peak-month peak-hour traffic volumes are graphically depicted on Figure 6, with the corresponding 2032 Build condition peak-month peak-hour traffic volumes depicted on Figure 7.

TRAFFIC OPERATIONS ANALYSIS

In order to assess the potential impact of the Project on the roadway network, a detailed traffic operations analysis (motorist delays, vehicle queuing and level-of-service) was performed at the study area intersections. Capacity analyses provide an indication of how well transportation facilities serve the traffic demands placed upon them, with vehicle queue analyses providing a secondary measure of the operational characteristics of an intersection or section of roadway under study.

In brief, six levels of service are defined for each type of facility. They are given letter designations ranging from A to F, with level-of-service (LOS) "A" representing the best operating conditions and LOS "F" representing congested or constrained operations. An LOS of "E" is representative of a transportation facility that is operating at its design capacity with an LOS of "D" generally defined as the limit of "acceptable" traffic operations. Since the level-of-service of a traffic facility is a function of the flows placed upon it, such a facility may operate at a wide range of levels of service depending on the time of day, day of week, or period of the year. The Synchro® intersection capacity analysis software, which is based on the analysis methodologies and procedures presented in the 2010 *Highway Capacity Manual* (HCM)⁷ for unsignalized intersections, was used to complete the level-of-service and vehicle queue analyses.

⁷Highway Capacity Manual, Transportation Research Board; Washington, DC; 2010.





Legend:

XX Entering Trips

(XX) Exiting Trips

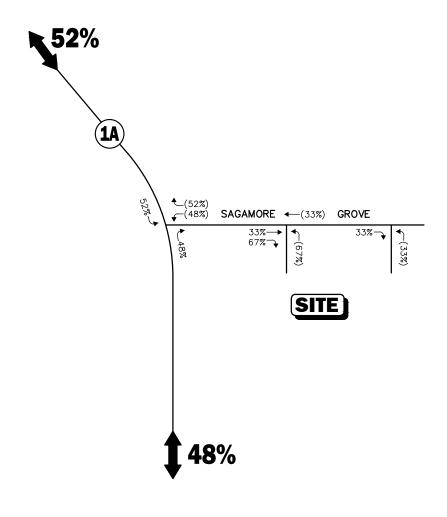
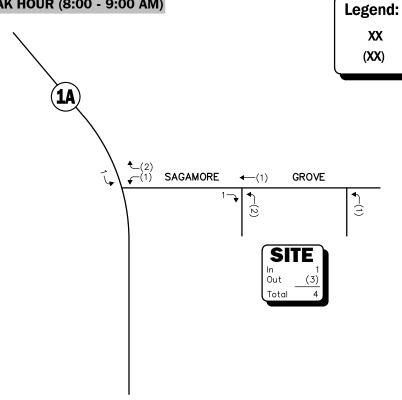


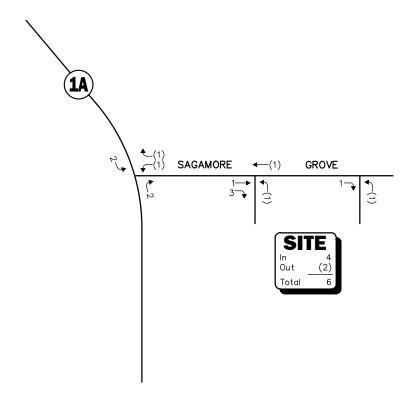


Figure 4

Trip Distribution Map



WEEKDAY EVENING PEAK HOUR (4:30 - 5:30 PM)





Not To Scale

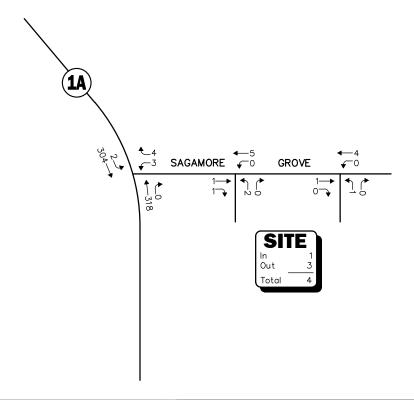
Figure 5



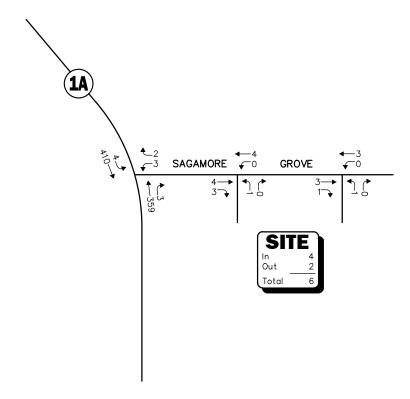
Project-Generated Peak-Hour Traffic Volumes

Entering Trips

Exiting Trips



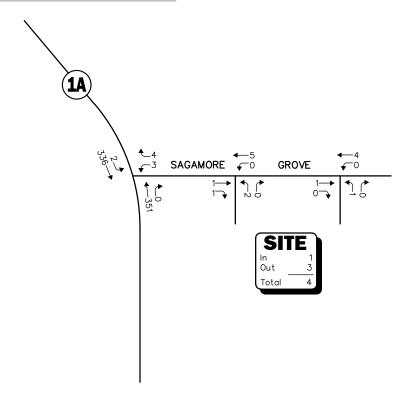
WEEKDAY EVENING PEAK HOUR (4:30 - 5:30 PM)



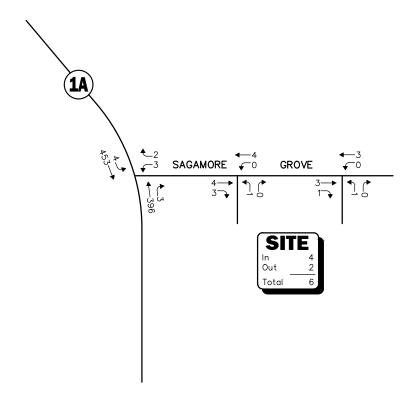


2022 Build Peak-Month Peak-Hour Traffic Volumes

Figure 6



WEEKDAY EVENING PEAK HOUR (4:30 - 5:30 PM)





2032 Build Peak-Month Peak-Hour Traffic Volumes

Figure 7

Analysis Results

The results of the intersection capacity and vehicle queue analyses for the study intersections are summarized in Table 3, with the detailed analysis results presented in the Appendix.

NH Route 1A at Sagamore Grove

Under 2021 Existing, 2022 No-Build and 2022 Opening Year Build peak-month conditions, the critical movements at this unsignalized intersection (all movements from Sagamore Grove) were shown to operate at LOS B during both the weekday morning and evening peak hours. Project-related impacts over 2022 No-Build conditions were defined as an increase in average motorist delay of less than 1.0 seconds with vehicle queuing continuing to be negligible.

Under 2032 No-Build and 2032 Build peak-month conditions, the critical movements were shown to operate at LOS B during the weekday morning peak-hour and at LOS C during the weekday evening peak-hour. Project-related impacts over 2032 No-Build conditions were defined as an increase in average motorist delay of less than 1.0 seconds with vehicle queuing shown to be negligible.

Sagamore Grove at the Project site driveways

All movements at the Project site driveway intersections with Sagamore Grove were shown to operate at LOS A with negligible vehicle queuing under all analysis conditions.



Table 3 UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

		2021 E	xisting			2022 No	-Build			2022 Open	ning Year			2032 No	-Build			2032 I	Build	
Unsignalized Intersection/ Peak Hour/Movement	Demanda	Delay ^b	LOSc	Queue ^d 95 th	Demand	Delay	LOS	Queue 95 th	Demand	Delay	LOS	Queue 95 th	Demand	Delay	LOS	Queue 95 th	Demand	Delay	LOS	Queue 95 th
NH Route 1A at Sagamore Grove																				
Weekday Morning:																				
Sagamore Grove WB LT/RT	4	12.0	В	0	4	12.0	В	0	7	12.0	В	0	4	12.6	В	0	7	12.6	В	0
NH Route 1A NB TH/RT	315	0.0	A	0	318	0.0	A	0	318	0.0	A	0	351	0.0	A	0	351	0.0	A	0
NH Route 1A SB LT/TH	302	0.0	A	0	305	0.0	A	0	306	0.0	A	0	337	0.0	A	0	338	0.0	A	0
Weekday Evening:																				
Sagamore Grove WB LT/RT	3	13.9	В	0	3	14.0	В	0	5	14.0	В	0	3	15.0	C	0	5	15.0	C	0
NH Route 1A NB TH/RT	356	0.0	A	0	360	0.0	A	0	362	0.0	A	0	397	0.0	A	0	399	0.0	A	0
NH Route 1A SB LT/TH	408	0.0	A	0	412	0.0	A	0	414	0.1	A	0	455	0.0	A	0	457	0.1	A	0
Sagamore Grove at the West Project Site Driveway																				
Weekday Morning:																				
Sagamore Grove EB TH/RT									2	0.0	A	0					2	0.0	A	0
Sagamore Grove WB LT/TH									5	0.0	A	0					5	0.0	A	0
Site Driveway NB LT/RT									2	8.6	A	0					2	8.6	A	0
Weekday Evening:																				
Sagamore Grove EB TH/RT									7	0.0	A	0					7	0.0	A	0
Sagamore Grove WB LT/TH									4	0.0	A	0					4	0.0	A	0
Site Driveway NB LT/RT									1	8.6	A	0					1	8.6	A	0
Sagamore Grove at the East Project Site Driveway																				
Weekday Morning:																				
Sagamore Grove EB TH/RT									1	0.0	A	0					1	0.0	A	0
Sagamore Grove WB LT/TH									4	0.0	A	0					4	0.0	A	0
Site Driveway NB LT/RT									1	8.5	A	0					1	8.5	A	0
Weekday Evening:																				
Sagamore Grove EB TH/RT									4	0.0	A	0					4	0.0	Α	0
Sagamore Grove WB LT/TH									3	0.0	A	0					3	0.0	Α	0
Site Driveway NB LT/RT									1	8.6	A	0					1	8.6	A	0



^aDemand in vehicles per hour.

^bAverage control delay per vehicle (in seconds).

^cLevel-of-Service.

^dQueue length in vehicles.

SB = southbound; EB = eastbound; WB = westbound; LT = left-turning movements; TH = through movements; RT = right-turning movements.

SIGHT DISTANCE ASSESSMENT

Sight distance measurements were performed at the Project site driveway intersections with Sagamore Grove in accordance with American Association of State Highway and Transportation Officials (AASHTO)⁸ requirements. Both stopping sight distance (SSD) and intersection sight distance (ISD) measurements were performed. In brief, SSD is the distance required by a vehicle traveling at the design speed of a roadway, on wet pavement, to stop prior to striking an object in its travel path. ISD or corner sight distance (CSD) is the sight distance required by a driver entering or crossing an intersecting roadway to perceive an on-coming vehicle and safely complete a turning or crossing maneuver with oncoming traffic. In accordance with AASHTO standards, if the measured ISD is at least equal to the required SSD value for the appropriate design speed, the intersection can operate in a safe manner. Table 4 presents the measured SSD and ISD at the subject intersections.

Table 4 SIGHT DISTANCE MEASUREMENTS^a

		Feet	
Intersection/Sight Distance Measurement	Required Minimum (SSD)	Desirable (ISD) ^b	Measured
Sagamore Grove at the West Project Site Driveway			
Stopping Sight Distance:			
Sagamore Grove approaching from the east	155		177
Sagamore Grove approaching from the west	80		$80^{\rm c}$
Intersection Sight Distance:			
Looking to the east from the Project Site Driveway	155	280	111/201 ^d
Looking to the west from the Project Site Driveway	80	145	$80^{\rm c}$
Sagamore Grove at the East Project Site Driveway			
Stopping Sight Distance:			
Sagamore Grove approaching from the east	155		315
Sagamore Grove approaching from the west	155		176°
Intersection Sight Distance:			
Looking to the east from the Project Site Driveway	155	280	111/189 ^d
Looking to the west from the Project Site Driveway	155	240	176°

^aRecommended minimum values obtained from *A Policy on Geometric Design of Highways and Streets*, 7th Edition; American Association of State Highway and Transportation Officials (AASHTO); 2018; and based on a 15 mph speed approaching the west Project site driveway from the east and a 25 mph approach speed for all other approaches.

As can be seen in Table 3, with the selective trimming or removal of vegetation located within the site triangle areas of the Project site driveways, the available lines of sight to and from the Project site driveways meet or exceed the recommended minimum sight distances to function in a safe (SSD) manner based on a 25 mph approach speed and with consideration to the reduced speed of vehicles transitioning to/from NH Route 1A.

⁸A Policy on Geometric Design of Highway and Streets, 7th Edition; AASHTO; Washington D.C.; 2018.



-

^bValues shown are the intersection sight distance for a vehicle turning right or left exiting a roadway under STOP control such that motorists approaching the intersection on the major street should not need to adjust their travel speed to less than 70 percent of their initial approach speed.

^cClear line of sight is provided to/from NH Route 1A.

^dWith the selective trimming/removal of vegetation.

SUMMARY

VAI has completed a detailed assessment of the potential impacts on the transportation infrastructure associated with the proposed multifamily residential development to be located at 960 Sagamore Grove in Portsmouth, New Hampshire (hereafter referred to as the "Project"). The following specific areas have been evaluated as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; under existing and future conditions, both with and without the Project. Based on this assessment, we have concluded the following with respect to the Project:

- 1. Using trip-generation statistics published by the ITE,⁹ the Project is expected to generate approximately 20 vehicle trips on an average weekday (two-way volume over the operational day of the Project), with 4 vehicle trips expected during the weekday morning peak hour and 6 vehicle trips expected during the weekday evening peak hour;
- 2. In comparison to the existing uses that occupy the site, the Project is expected to generate approximately 188 *fewer* vehicle trips on an average weekday, with 10 *fewer* vehicle trips expected during the weekday morning peak hour, and 12 *fewer* vehicle trips expected during the weekday evening peak hour;
- 3. Given the significant reduction in traffic that is predicted as a result of the Project, the Project will be less impactful on the transportation infrastructure when compared to the existing uses that occupy the Project site;
- 4. A review of motorist delays and vehicle queuing at the NH Route 1A/Sagamore Grove intersection indicates that the Project will not result in a significant increase in motorist delays or vehicle queuing, with Project-related impacts defined as an increase in average motorist delay of less than 1.0 seconds with no predicted increase in vehicle queuing; and
- 5. Lines of sight at the Project site driveway intersections were found to meet, exceed or could be made to meet or exceed the recommended minimum distances for safe operation.

In consideration of the above, we have concluded that the Project can be accommodated within the confines of the existing transportation infrastructure in a safe and efficient manner with the implementation of the recommendations that follow.

RECOMMENDATIONS

Project Access

Access to the Project site will be provided by way of two new driveways that will intersect the south side of Sagamore Grove approximately 75 feet and 175 feet east of NH Route 1A, respectively. The existing driveway that currently serves the Project site along NH Route 1A will be closed in conjunction with the Project resulting in an overall improvement in safety through the elimination of a conflict point for vehicles, pedestrians and bicyclists along NH Route 1A. The following recommendations are offered with respect to the design and operation of the Project site access and internal circulation:



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- The Project site driveways should be a minimum of 22 feet in width and designed to accommodate the turning and maneuvering requirements of the largest anticipated responding emergency vehicle as defined by the Portsmouth Fire Department.
- ➤ Vehicles exiting the Project site should be under stop control.
- ➤ Drive aisles behind perpendicular parking should be 23-feet wide in order to accommodate parking maneuvers.
- All signs and pavement markings to be installed within the Project site should conform to the applicable standards of the *Manual on Uniform Traffic Control Devices* (MUTCD). 10
- > Signs and landscaping to be installed as a part of the Project within the intersection sight triangle areas of the Project site driveways should be designed and maintained so as not to restrict lines of sight.
- Existing vegetation located along the south side of Sagamore Grove within the sight triangle areas of the Project site driveways should be selectively trimmed or removed and maintained.
- > Snow windrows within sight triangle areas of the Project site driveways should be promptly removed where such accumulations would impede sight lines.
- ➤ Bicycle parking should be provided at an appropriate location within the Project site.

With the implementation of the above recommendations, safe and efficient access can be provided to the Project site and the Project can be accommodated within the confines of the existing transportation infrastructure.

cc: File

M²

¹⁰Manual on Uniform Traffic Control Devices (MUTCD); Federal Highway Administration; Washington, D.C.; 2009.

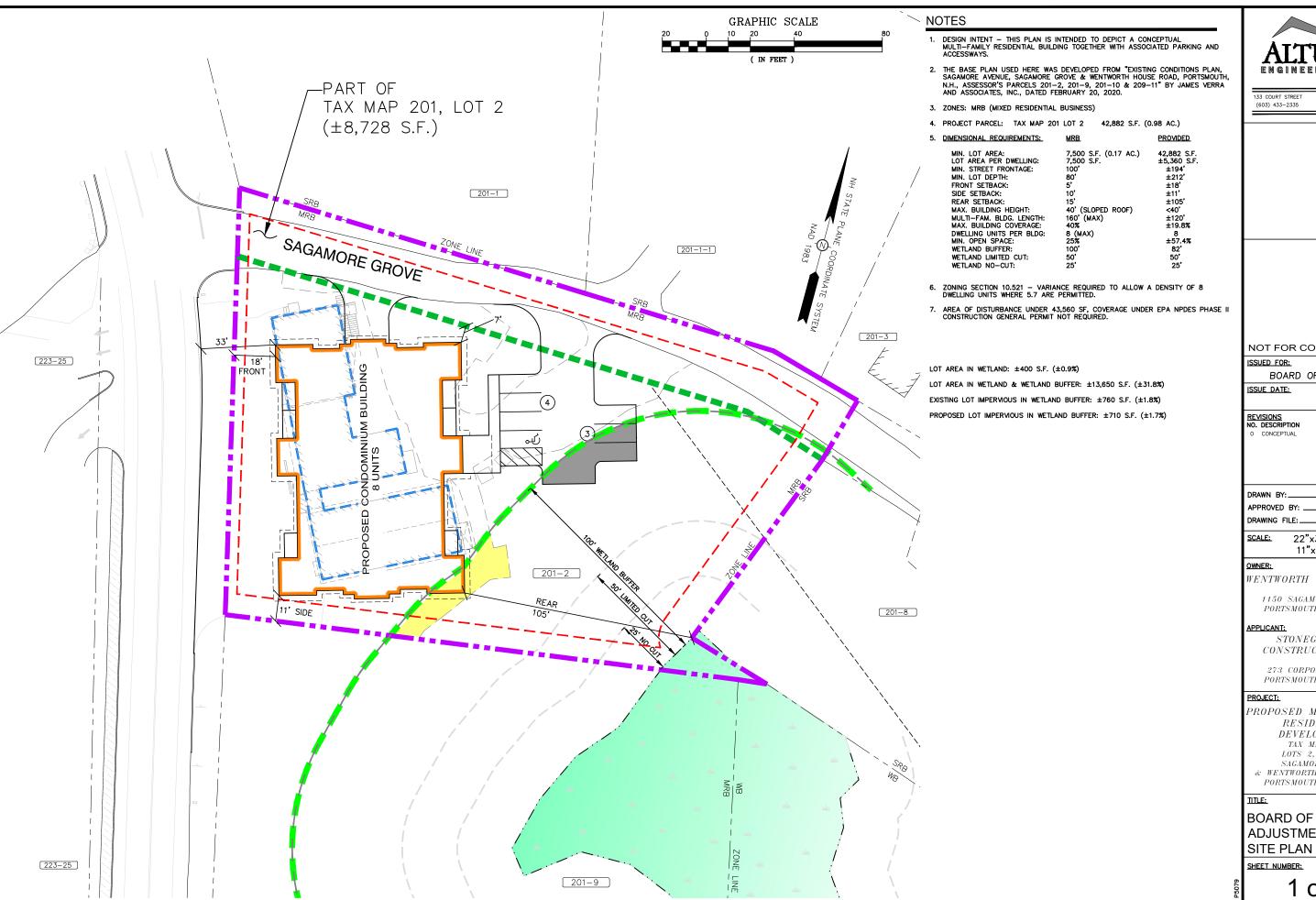
ATTACHMENTS

PROJECT SITE PLAN
AUTOMATIC TRAFFIC RECORDER COUNT DATA
MANUAL TURNING MOVEMENT COUNT DATA
SEASONAL ADJUSTMENT DATA
COVID-19 ADJUSTMENT DATA
VEHICLE TRAVEL SPEED DATA
GENERAL BACKGROUND TRAFFIC GROWTH
TRIP-GENERATION CALCULATIONS
CAPACITY ANALYSIS WORKSHEETS



PROJECT SITE PLAN







133 COURT STREET PORTSMOUTH, NH 03801 www.ALTUS-ENG.com

NOT FOR CONSTRUCTION

ISSUED FOR:

BOARD OF ADJUSTMENT

ISSUE DATE:

MAY 26, 2021

EDW 05/26/2

5079-C016.dwg

REVISIONS NO. DESCRIPTION 0 CONCEPTUAL

EBS DRAWN BY: EDW APPROVED BY: _

SCALE:

22"x34" 1" = 20' 11"x17" 1" = 40'

OWNER:

WENTWORTH CORNER, LLC

1150 SAGAMORE AVENUE PORTSMOUTH, NH 03801

APPLICANT:

STONEGATE NH CONSTRUCTION, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROJECT:

PROPOSED MULTI-FAMILY RESIDENTIALDEVELOPMENTTAX MAP 201 LOTS 2, 9 & 10 SAGAMORE ROAD & WENTWORTH HOUSE ROAD PORTSMOUTH, NH 03801

TITLE:

BOARD OF ADJUSTMENT SITE PLAN

SHEET NUMBER:

1 of 1

AUTOMATIC TRAFFIC RECORDER COUNT DATA



Accurate Counts 978-664-2565

Location: Route 1A

Location: South of Sagamore Grove

City/State: Portsmouth, NH

5/12/2021 NB, Hour Totals SB, Hour Totals Combined Totals Morning Afternoon Time Morning Afternon Morning Afternoon Morning Afternoon Morning Afternoon 12:00 12:15 12:30 12:45 1:00 1:15 1:30 1:45 2:00 2:15 2:30 2:45 3:00 3:15 3:30 3:45 4:00 4:15 4:30 4:45 5:00 5:15 5:30 5:45 6:00 6:15 6:30 6:45 7:00 7:15 7:30 7:45 8:00 8:15 8:30 8:45 9:00 9:15 9:30 9:45 10:00 10:15 10:30 10:45 11:00 11:15 11:30 11:45 Total Percent 35.7% 64.3% 34.8% 65.2% 35.2% 64.8%

Location: Route 1A Location: South of Sagamore Grove City/State: Portsmouth, NH 89920001

5/13/2021	NE	3,	Hour T	otals	SB	,	Hour 1	Totals	Combined	d Totals
Time	Morning	Afternoon	Morning	Afternon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	1	62			1	70				
12:15	0	43			1	93				
12:30	1	72			6	97				
12:45	1	74	3	251	1	92	9	352	12	603
1:00	1	73			1	103				
1:15	1	56			0	88				
1:30	0	74			1	48				
1:45	0	60	2	263	0	63	2	302	4	565
2:00	0	80			0	85				
2:15	1	104			3	113				
2:30	0	85			0	88				
2:45	1	76	2	345	1	88	4	374	6	719
3:00	0	89			2	70				
3:15	1	65			1	110				
3:30	0	82			0	116				
3:45	2	79	3	315	1	86	4	382	7	697
4:00	2	83			0	97				
4:15	2	83			1	98				
4:30	5	61			4	83				
4:45	4	60	13	287	1	129	6	407	19	694
5:00	3	78			4	105				
5:15	3	89			4	82				
5:30	9	73			3	125				
5:45	7	63	22	303	4	111	15	423	37	726
6:00	7	70			9	100				
6:15	14	57			10	93				
6:30	11	43			24	58				
6:45	26	59	58	229	41	52	84	303	142	532
7:00	34	52			36	70				
7:15	32	47			57	59				
7:30	49	55			63	46				
7:45	75	45	190	199	66	42	222	217	412	416
8:00	92	34			70	52				
8:15	70	38			71	41				
8:30	42	32			82	38				
8:45	51	29	255	133	79	34	302	165	557	298
9:00	52	27			52	23				
9:15	50	20			46	16				
9:30	64	10			57	19				
9:45	51	20	217	77	80	21	235	79	452	156
10:00	40	16			67	11				
10:15	65	8			71	13				
10:30	54	7			72	13				
10:45	54	4	213	35	62	5	272	42	485	77
11:00	74	3			70	2				
11:15	68	3			86	7				
11:30	78	5			85	9				
11:45	62	3	282	14	93	4	334	22	616	36
Total	1260	2451			1489	3068			2749	5519
Percent	34.0%	66.0%			32.7%	67.3%			33.2%	66.8%
Grand Total	2483	4652			2941	5794			5424	10446
Percent	34.8%	65.2%			33.7%	66.3%			34.2%	65.8%
						l		l		
^ D.T.		ADT 7005		A D.T. 7 00 F						

AADT: 7,935 ADT: 7,935 ADT

89920001

Accurate Counts 978-664-2565

Location: Route 1A
Location: South of Sagamore Grove
City/State: Portsmouth, NH

5/10/2021	Mond	ay	Tueso	day	Wednes		Thurso		Frida		Saturd		Sunda		Week Av	erage
Time	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,
12:00 AM	*	*	*	*	7	5	3	9	*	*	*	*	*	*	5	7
1:00	*	*	*	*	4	6	2	2	*	*	*	*	*	*	3	4
2:00	*	*	*	*	1	2	2	4	*	*	*	*	*	*	2	3
3:00	*	*	*	*	0	4	3	4	*	*	*	*	*	*	2	4
4:00	*	*	*	*	12	4	13	6	*	*	*	*	*	*	12	5
5:00	*	*	*	*	29	15	22	15	*	*	*	*	*	*	26	15
6:00	*	*	*	*	60	82	58	84	*	*	*	*	*	*	59	83
7:00	*	*	*	*	156	193	190	222	*	*	*	*	*	*	173	208
8:00	*	*	*	*	253	305	255	302	*	*	*	*	*	*	254	304
9:00	*	*	*	*	228	225	217	235	*	*	*	*	*	*	222	230
10:00	*	*	*	*	224	276	213	272	*	*	*	*	*	*	218	274
11:00	*	*	*	*	249	335	282	334	*	*	*	*	*	*	266	334
12:00 PM	*	*	*	*	281	300	251	352	*	*	*	*	*	*	266	326
1:00	*	*	*	*	284	308	263	302	*	*	*	*	*	*	274	305
2:00	*	*	*	*	287	304	345	374	*	*	*	*	*	*	316	339
3:00	*	*	*	*	297	392	315	382	*	*	*	*	*	*	306	387
4:00	*	*	*	*	280	368	287	407	*	*	*	*	*	*	284	388
5:00	*	*	*	*	265	355	303	423	*	*	*	*	*	*	284	389
6:00	*	*	*	*	199	251	229	303	*	*	*	*	*	*	214	277
7:00	*	*	*	*	146	174	199	217	*	*	*	*	*	*	172	196
8:00	*	*	*	*	81	164	133	165	*	*	*	*	*	*	107	164
9:00	*	*	*	*	43	69	77	79	*	*	*	*	*	*	60	74
10:00	*	*	*	*	23	28	35	42	*	*	*	*	*	*	29	35
11:00	*	*	*	*	15	13	14	22	*	*	*	*	*	*	14	18
Total	0	0	0	0		4178	3711	4557	0	0	0	0	0	0	3568	4369
Day	0		0		7602		826		0		0		0		793	
AM Peak					8:00	11:00	11:00	11:00							11:00	11:00
Volume					253	335	282	334							266	334
PM Peak					3:00	3:00	2:00	5:00						\Box	2:00	5:00
Volume					297	392	345	423							316	389
Comb Total	0		0		7602	2	826	8	0		0		0		793	7
ADT	ΑI	DT: 7,935	AA	DT: 7,935												

MANUAL TURNING MOVEMENT DATA



N/S Street : Route 1A E/W Street: Sagamore Grove
City/State: Portsmouth, NH
Weather: Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021 Page No : 1

Groups Printed- Cars - Trucks

	Route	1A	Sagamo	re Grove	Route	e 1A	
	From N	orth	From	East	From	South	
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
07:00 AM	0	31	0	0	24	0	55
07:15 AM	1	38	0	1	31	0	71
07:30 AM	1	45	2	0	41	0	89
07:45 AM	0	57	0	0	57	0	114
Total	2	171	2	1	153	0	329
08:00 AM	0	63	0	0	71	0	134
08:15 AM	1	61	0	1	72	0	135
08:30 AM	0	55	1	0	49	0	105
08:45 AM	0	65	1	1	63	0	130
Total	1	244	2	2	255	0	504
Grand Total	3	415	4	3	408	0	833
Apprch %	0.7	99.3	57.1	42.9	100	0	
Total %	0.4	49.8	0.5	0.4	49	0	
Cars	3	406	4	3	404	0	820
% Cars	100	97.8	100	100	99	0	98.4
Trucks	0	9	0	0	4	0	13
% Trucks	0	2.2	0	0	1	0	1.6

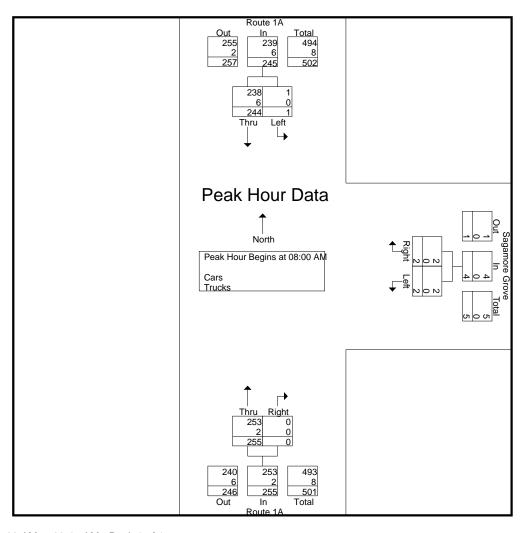
			Route 1A		S	agamore Gro	ve				
			From North			From East			From South		
	Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Ī	Peak Hour Analysis From	07:00 AM to 0	08:45 AM - Pe	eak 1 of 1							
-	Peak Hour for Entire Inter	section Begins	at 08:00 AM	1							
	MA 00:80	0	63	63	0	0	0	71	0	71	134
	08:15 AM	1	61	62	0	1	1	72	0	72	135
	08:30 AM	0	55	55	1	0	1	49	0	49	105
	08:45 AM	0	65	65	1	1	2	63	0	63	130
	Total Volume	1	244	245	2	2	4	255	0	255	504
	% App. Total	0.4	99.6		50	50		100	0		
	PHF	.250	.938	.942	.500	.500	.500	.885	.000	.885	.933
	Cars	1	238	239	2	2	4	253	0	253	496
	% Cars	100	97.5	97.6	100	100	100	99.2	0	99.2	98.4
	Trucks	0	6	6	0	0	0	2	0	2	8
	% Trucks	0	2.5	2.4	0	0	0	0.8	0	0.8	1.6

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH

Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

Page No : 2

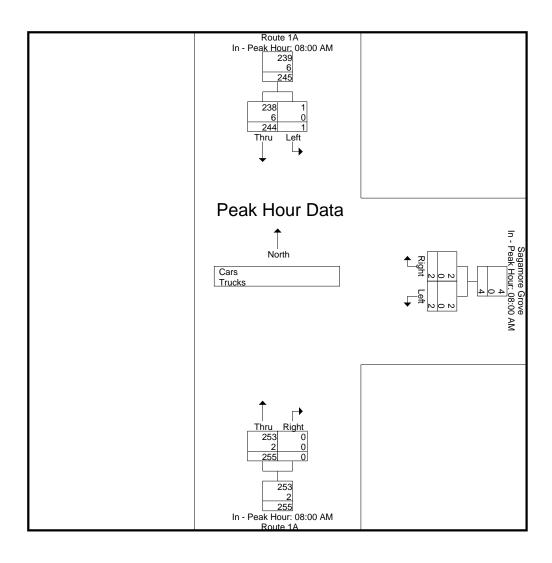


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Peak Hour for Each Appr	<u>oacn Begins a</u>	t:							
	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	63	63	0	0	0	71	0	71
+15 mins.	1	61	62	0	1	1	72	0	72
+30 mins.	0	55	55	1	0	1	49	0	49
+45 mins.	0	65	65	1	1_	2	63	0	63
Total Volume	1	244	245	2	2	4	255	0	255
% App. Total	0.4	99.6		50	50		100	0	
PHF	.250	.938	.942	.500	.500	.500	.885	.000	.885
Cars	1	238	239	2	2	4	253	0	253
% Cars	100	97.5	97.6	100	100	100	99.2	0	99.2
Trucks	0	6	6	0	0	0	2	0	2
% Trucks	0	2.5	2.4	0	0	0	0.8	0	0.8

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021 Page No : 3



N/S Street: Route 1A
E/W Street: Sagamore Grove
City/State: Portsmouth, NH
Weather: Cloudy

Start Date: 5/12/2021 Page No: 4

File Name: 89920001

Site Code: 89920001

Groups Printed- Cars

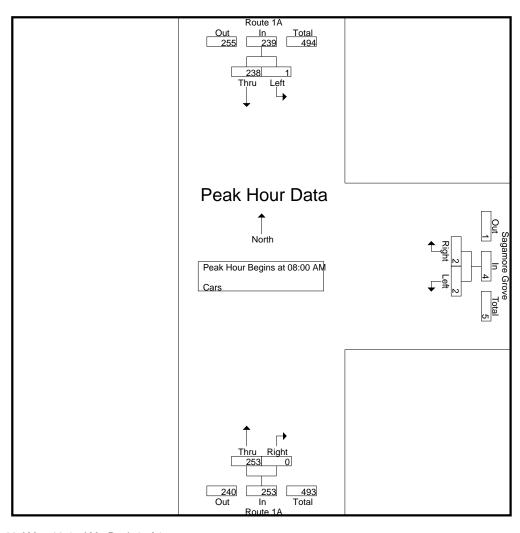
	Route 1	Α	Sagamo	re Grove	Rout	te 1A	
	From No	rth	From	East	From	South	
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
07:00 AM	0	31	0	0	24	0	55
07:15 AM	1	37	0	1	29	0	68
07:30 AM	1	45	2	0	41	0	89
07:45 AM	0	55	0	0	57	0	112
Total	2	168	2	1	151	0	324
08:00 AM	0	62	0	0	71	0	133
08:15 AM	1	57	0	1	72	0	131
08:30 AM	0	54	1	0	48	0	103
08:45 AM	0	65	1	1	62	0	129
Total	1	238	2	2	253	0	496
Grand Total	3	406	4	3	404	0	820
Apprch %	0.7	99.3	57.1	42.9	100	0	
Total %	0.4	49.5	0.5	0.4	49.3	0	

		Route 1A From North		Sa	gamore Gro From East	ove				
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	From South Right	App. Total	Int. Total
Peak Hour Analysis From	07:00 AM to 0	8:45 AM - Pe	eak 1 of 1	•		• •	•			
Peak Hour for Entire Inter	section Begins	at 08:00 AM	1							
08:00 AM	0	62	62	0	0	0	71	0	71	133
08:15 AM	1	57	58	0	1	1	72	0	72	131
08:30 AM	0	54	54	1	0	1	48	0	48	103
08:45 AM	0	65	65	1	1	2	62	0	62	129
Total Volume	1	238	239	2	2	4	253	0	253	496
% App. Total	0.4	99.6		50	50		100	0		
PHF	.250	.915	.919	.500	.500	.500	.878	.000	.878	.932

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

Page No : 5



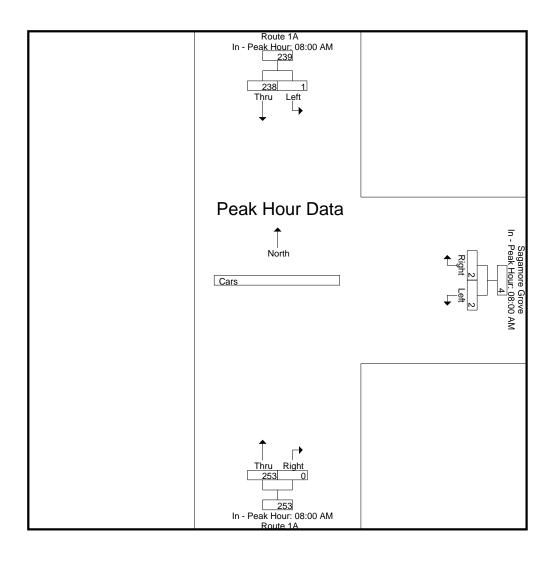
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	62	62	0	0	0	71	0	71
+15 mins.	1	57	58	0	1	1	72	0	72
+30 mins.	0	54	54	1	0	1	48	0	48
+45 mins.	0	65	65	1	1	2	62	0	62
Total Volume	1	238	239	2	2	4	253	0	253
% App. Total	0.4	99.6		50	50		100	0	
PHF	.250	.915	.919	.500	.500	.500	.878	.000	.878

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

Page No : 6



N/S Street: Route 1A
E/W Street: Sagamore Grove
City/State: Portsmouth, NH
Weather: Cloudy

Groups Printed- Trucks

File Name: 89920001 Site Code: 89920001 Start Date: 5/12/2021

Start Date : 5/12/2021 Page No : 7

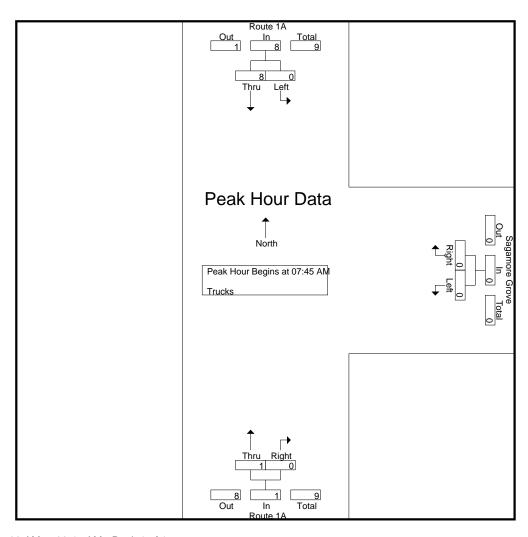
	Route 1A		Sagamoi	re Grove	Route	: 1A	
	From North		From	East	From S	South	
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	1	0	0	2	0	3
07:30 AM	0	0	0	0	0	0	0
07:45 AM	0	2	0	0	0	0	2
Total	0	3	0	0	2	0	5
		1					
08:00 AM	0	1	0	0	0	0	1
08:15 AM	0	4	0	0	0	0	4
08:30 AM	0	1	0	0	1	0	2
08:45 AM	0	0	0	0	1	0	1_
Total	0	6	0	0	2	0	8
Grand Total	0	9	0	0	4	0	13
Apprch %	Õ	100	0	0	100	0	
Total %	0	69.2	0	0	30.8	0	

		Route 1A		5	Sagamore Gr	ove				
		From North			From East			From South		
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From	07:00 AM to	08:45 AM - F	Peak 1 of 1							
Peak Hour for Entire Inter	rsection Begin	ns at 07:45 Al	M							
07:45 AM	0	2	2	0	0	0	0	0	0	2
08:00 AM	0	1	1	0	0	0	0	0	0	1
08:15 AM	0	4	4	0	0	0	0	0	0	4
08:30 AM	0	11	1	0	0	0	1	0	1	2
Total Volume	0	8	8	0	0	0	1	0	1	9
% App. Total	0	100		0	0		100	0		
PHF	.000	.500	.500	.000	.000	.000	.250	.000	.250	.563

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

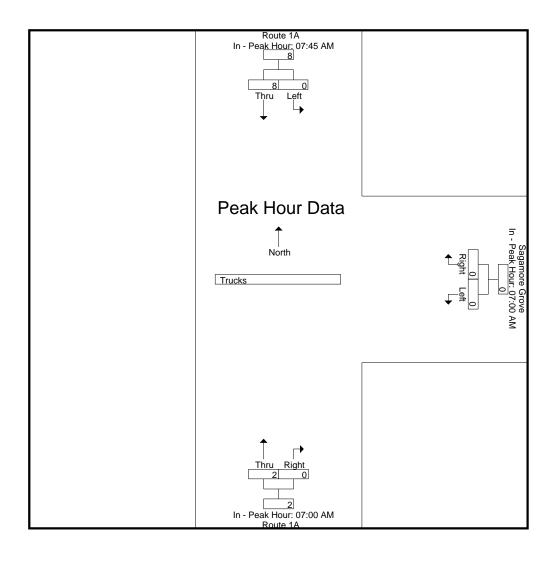
Peak Hour for Each Approach Begins at:

can flour for Each Approach Begins at:										
	07:45 AM			07:00 AM			07:00 AM			
+0 mins.	0	2	2	0	0	0	0	0	0	
+15 mins.	0	1	1	0	0	0	2	0	2	
+30 mins.	0	4	4	0	0	0	0	0	0	
+45 mins.	0	11	1	0	0	0	0	0	0	
Total Volume	0	8	8	0	0	0	2	0	2	
% App. Total	0	100		0	0		100	0		
PHF	.000	.500	.500	.000	.000	.000	.250	.000	.250	

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

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N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

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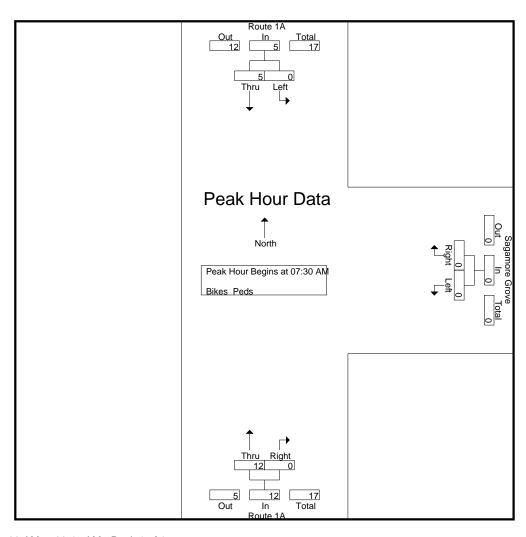
	R	oute 1A		Saga	amore Grov	е	F	Route 1A				
	Fr	om North		F	rom East		Fr	rom South				
Start Time	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	2	0	0	0	0	0	0	0	0	2	2
07:30 AM	0	1	0	0	0	0	5	0	0	0	6	6
07:45 AM	0	2	0	0	0	0	2	0	0	0	4	4_
Total	0	5	0	0	0	0	7	0	0	0	12	12
08:00 AM	0	1	0	0	0	1	2	0	0	1	3	4
08:15 AM	0	1	0	0	0	0	3	0	0	0	4	4
08:30 AM	0	1	0	0	0	0	1	0	0	0	2	2
08:45 AM	0	0	0	0	0	0	1	0	0	0	1	1_
Total	0	3	0	0	0	1	7	0	0	1	10	11
Grand Total Apprch %	0 0	8 100	0	0 0	0 0	1	14 100	0	0	1	22	23
Total %	0	36.4		0	0		63.6	0		4.3	95.7	

		Route 1A From North		S	Sagamore Gro From East	ove				
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From	07:00 AM to 0	08:45 AM - Pe	eak 1 of 1							
Peak Hour for Entire Inter	section Begins	s at 07:30 AM								
07:30 AM	0	1	1	0	0	0	5	0	5	6
07:45 AM	0	2	2	0	0	0	2	0	2	4
08:00 AM	0	1	1	0	0	0	2	0	2	3
08:15 AM	0	1	1	0	0	0	3	0	3	4
Total Volume	0	5	5	0	0	0	12	0	12	17
% App. Total	0	100		0	0		100	0		
PHF	.000	.625	.625	.000	.000	.000	.600	.000	.600	.708

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

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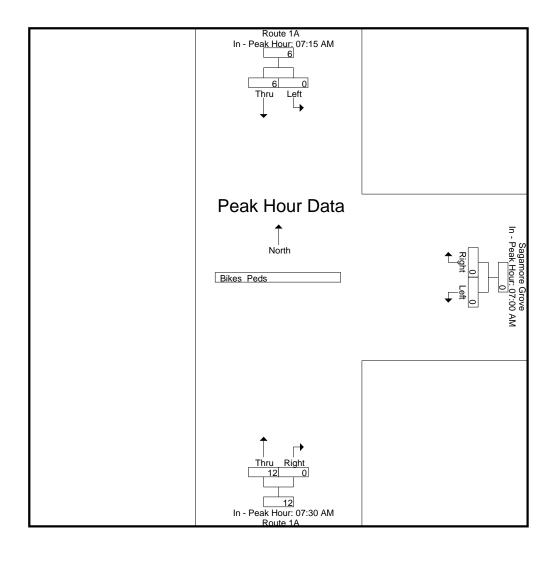


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

reak noul for Each Appr	vacii begins a	aı.								
	07:15 AM			07:00 AM			07:30 AM			
+0 mins.	0	2	2	0	0	0	5	0	5	
+15 mins.	0	1	1	0	0	0	2	0	2	
+30 mins.	0	2	2	0	0	0	2	0	2	
+45 mins.	0	1	1	0	0	0	3	0	3	
Total Volume	0	6	6	0	0	0	12	0	12	
% App. Total	0	100		0	0		100	0		
PHF	.000	.750	.750	.000	.000	.000	.600	.000	.600	

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021 Page No : 12



N/S Street : Route 1A E/W Street: Sagamore Grove
City/State: Portsmouth, NH
Weather: Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021 Page No : 1

Groups Printed- Cars - Trucks

	Route	1A	Sagamoi	re Grove	Rout	e 1A	
	From N	lorth	From	East	From	South	
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
04:00 PM	0	63	0	0	82	0	145
04:15 PM	0	76	0	0	61	0	137
04:30 PM	0	77	0	0	73	0	150
04:45 PM	0	90	0	0	70	0	160
Total	0	306	0	0	286	0	592
05:00 PM	2	81	1	1	69	0	154
05:15 PM	0	81	1	0	76	1	159
05:30 PM	1	81	0	1	66	0	149
05:45 PM	0	61	1	0	73	0	135
Total	3	304	3	2	284	1	597
Grand Total	3	610	3	2	570	1	1189
Apprch %	0.5	99.5	60	40	99.8	0.2	
Total %	0.3	51.3	0.3	0.2	47.9	0.1	
Cars	3	606	3	2	568	1	1183
% Cars	100	99.3	100	100	99.6	100	99.5
Trucks	0	4	0	0	2	0	6
% Trucks	0	0.7	0	0	0.4	0	0.5

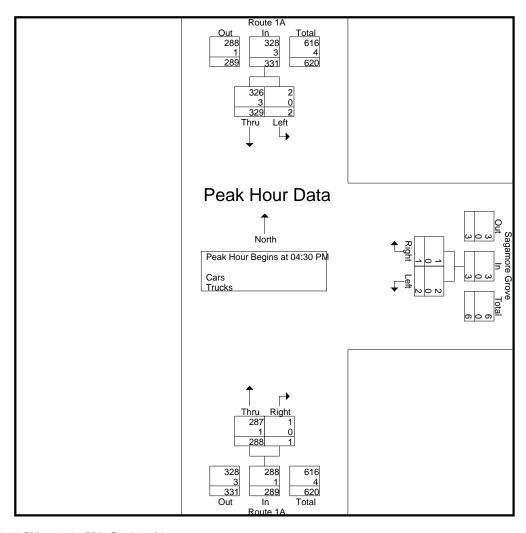
		Route 1A		S	agamore Gro	ve		Route 1A		
		From North			From East			From South		
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From	04:00 PM to	05:45 PM - Po	eak 1 of 1							
Peak Hour for Entire Inter	section Begin	s at 04:30 PM	1							
04:30 PM	0	77	77	0	0	0	73	0	73	150
04:45 PM	0	90	90	0	0	0	70	0	70	160
05:00 PM	2	81	83	1	1	2	69	0	69	154
05:15 PM	0	81	81	1	0	1	76	11	77	159
Total Volume	2	329	331	2	1	3	288	1	289	623
% App. Total	0.6	99.4		66.7	33.3		99.7	0.3		
PHF	.250	.914	.919	.500	.250	.375	.947	.250	.938	.973
Cars	2	326	328	2	1	3	287	1	288	619
% Cars	100	99.1	99.1	100	100	100	99.7	100	99.7	99.4
Trucks	0	3	3	0	0	0	1	0	1	4
% Trucks	0	0.9	0.9	0	0	0	0.3	0	0.3	0.6

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH

Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

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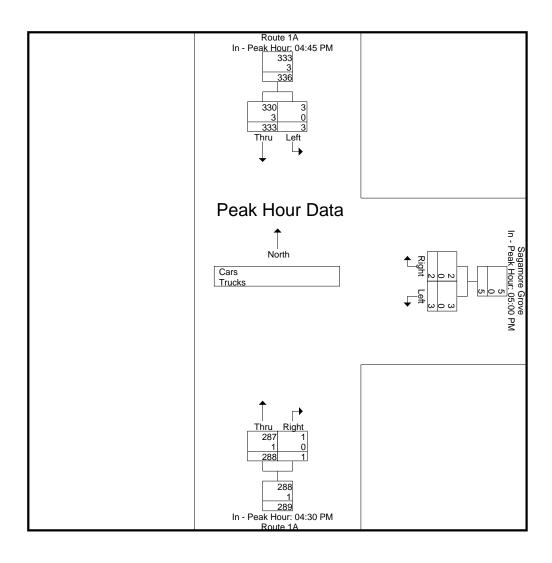


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Peak Hour for Each Appr	oach Begins a	łt:							
	04:45 PM			05:00 PM			04:30 PM		
+0 mins.	0	90	90	1	1	2	73	0	73
+15 mins.	2	81	83	1	0	1	70	0	70
+30 mins.	0	81	81	0	1	1	69	0	69
+45 mins.	1	81	82	1	0	1	76	1	77
Total Volume	3	333	336	3	2	5	288	1	289
% App. Total	0.9	99.1		60	40		99.7	0.3	
PHF	.375	.925	.933	.750	.500	.625	.947	.250	.938
Cars	3	330	333	3	2	5	287	1	288
% Cars	100	99.1	99.1	100	100	100	99.7	100	99.7
Trucks	0	3	3	0	0	0	1	0	1
% Trucks	0	0.9	0.9	0	0	0	0.3	0	0.3

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021 Page No : 3



N/S Street : Route 1A E/W Street: Sagamore Grove
City/State: Portsmouth, NH
Weather: Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021 Page No : 4

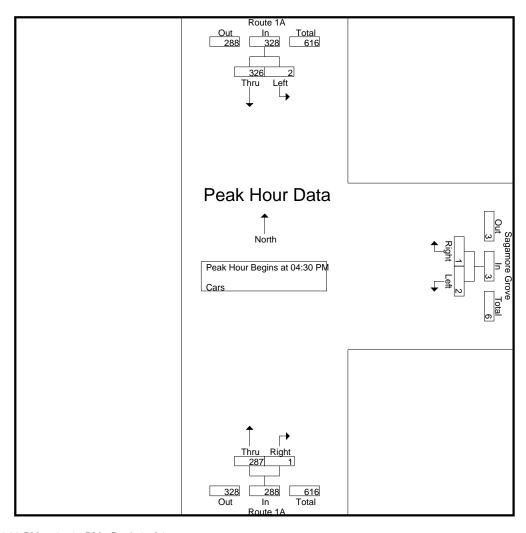
			Groups Printed- (
	Route 1A		Sagamo		Rout	e 1A	
	From Nort	h	From	East	From	South	
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
04:00 PM	0	63	0	0	81	0	144
04:15 PM	0	75	0	0	61	0	136
04:30 PM	0	77	0	0	73	0	150
04:45 PM	0	87	0	0	70	0	157
Total	0	302	0	0	285	0	587
05:00 PM	2	81	1	1	69	0	154
05:15 PM	0	81	1	0	75	1	158
05:30 PM	1	81	0	1	66	0	149
05:45 PM	0	61	1	0	73	0	135
Total	3	304	3	2	283	1	596
Grand Total	3	606	3	2	568	1	1183
Apprch %	0.5	99.5	60	40	99.8	0.2	
Total %	0.3	51.2	0.3	0.2	48	0.1	

		Route 1A		S	Sagamore Gro	ove				
		From North			From East			From South		
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From	04:00 PM to									
Peak Hour for Entire Inter	rsection Begi	ns at 04:30 PN	Л							
04:30 PM	Ō	77	77	0	0	0	73	0	73	150
04:45 PM	0	87	87	0	0	0	70	0	70	157
05:00 PM	2	81	83	1	1	2	69	0	69	154
05:15 PM	0	81	81	1	0	1	75	1	76	158
Total Volume	2	326	328	2	1	3	287	1	288	619
% App. Total	0.6	99.4		66.7	33.3		99.7	0.3		
PHF	.250	.937	.943	.500	.250	.375	.957	.250	.947	.979

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

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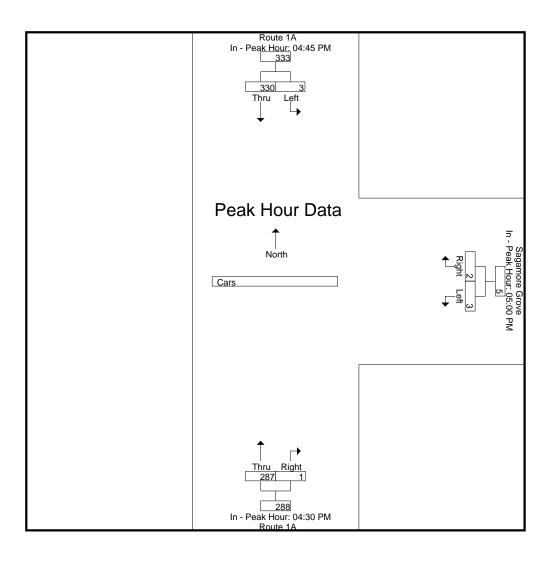
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Peak Hour for Each Appr	oacii begins a	11.							
	04:45 PM			05:00 PM			04:30 PM		
+0 mins.	0	87	87	1	1	2	73	0	73
+15 mins.	2	81	83	1	0	1	70	0	70
+30 mins.	0	81	81	0	1	1	69	0	69
+45 mins.	1	81	82	1	0	1	75	1	76
Total Volume	3	330	333	3	2	5	287	1	288
% App. Total	0.9	99.1		60	40		99.7	0.3	
PHF	.375	.948	.957	.750	.500	.625	.957	.250	.947

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

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N/S Street : Route 1A E/W Street : Route IA

E/W Street : Sagamore Grove

City/State : Portsmouth, NH

Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021 Page No : 7

Groups Printed- Trucks

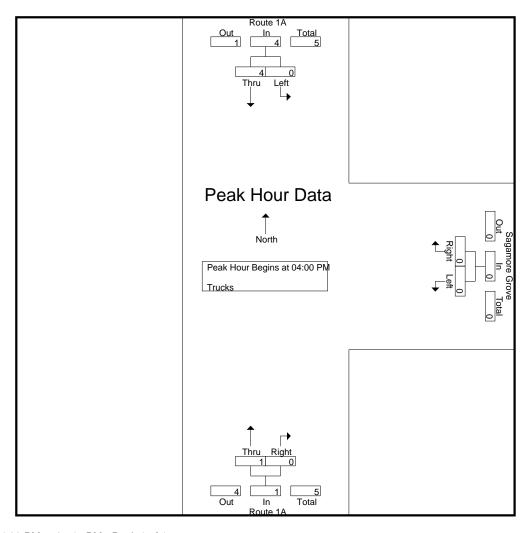
_			Jioupa i filiteu- ii	IUCKS			
	Route 1.	Α	Sagamo	re Grove	Route	e 1A	
	From No	rth	From	East	From	South	
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
04:00 PM	0	0	0	0	1	0	1
04:15 PM	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0
04:45 PM	0	3	0	0	0	0	3
Total	0	4	0	0	1	0	5
05:00 PM	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	1	0	1
05:30 PM	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	1
Grand Total	0	4	0	0	2	0	6
Apprch %	0	100	0	0	100	0	
Total %	0	66.7	0	0	33.3	0	

		Route 1A From North		S	Sagamore Gro From East			Route 1A From South		
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From	04:00 PM to	05:45 PM - Pe	eak 1 of 1							
Peak Hour for Entire Inter	section Begin	s at 04:00 PM	1							
04:00 PM	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	1	1	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	3	3	0	0	0	0	0	0	3
Total Volume	0	4	4	0	0	0	1	0	1	5
% App. Total	0	100		0	0		100	0		
PHF	.000	.333	.333	.000	.000	.000	.250	.000	.250	.417

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

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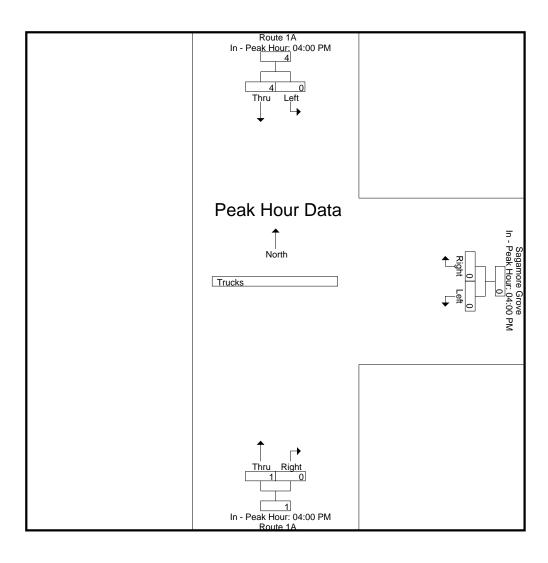
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Peak Hour for Each Appr	oach begins a	สเ.								
	04:00 PM			04:00 PM			04:00 PM			
+0 mins.	0	0	0	0	0	0	1	0	1	
+15 mins.	0	1	1	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	
+45 mins.	0	3	3	0	0	0	0	0	0	
Total Volume	0	4	4	0	0	0	1	0	1	
% App. Total	0	100		0	0		100	0		
PHF	.000	.333	.333	.000	.000	.000	.250	.000	.250	

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

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N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021 Page No : 10

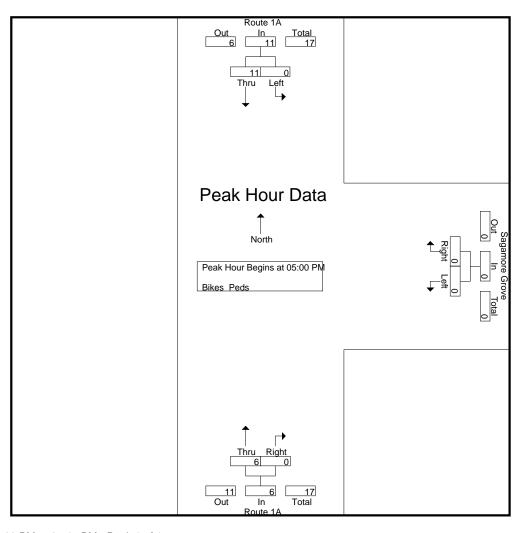
	R	Coute 1A		Saga	more Grove	e		Route 1A				
	Fr	om North		Fi	rom East		F	rom South				
Start Time	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	4	0	0	0	0	1	0	0	0	5	5
04:15 PM	0	1	0	0	0	0	4	0	0	0	5	5
04:30 PM	0	2	0	0	0	0	0	0	0	0	2	2
04:45 PM	0	2	0	0	0	0	0	0	0	0	2	2
Total	0	9	0	0	0	0	5	0	0	0	14	14
05:00 PM	0	2	0	0	0	0	1	0	0	0	3	3
05:15 PM	0	3	0	0	0	0	2	0	4	4	5	9
05:30 PM	0	3	0	0	0	0	1	0	0	0	4	4
05:45 PM	0	3	0	0	0	0	2	0	0	0	5	5
Total	0	11	0	0	0	0	6	0	4	4	17	21
Grand Total	0	20	0	0	0	0	11	0	4	4	31	35
Apprch %	0	100		0	0		100	0				
Total %	0	64.5		0	0		35.5	0		11.4	88.6	

		Route 1A		5	Sagamore Gr					
		From North			From East					
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	2	2	0	0	0	1	0	1	3
05:15 PM	0	3	3	0	0	0	2	0	2	5
05:30 PM	0	3	3	0	0	0	1	0	1	4
05:45 PM	0	3	3	0	0	0	2	0	2	5
Total Volume	0	11	11	0	0	0	6	0	6	17
% App. Total	0	100		0	0		100	0		
PHF	.000	.917	.917	.000	.000	.000	.750	.000	.750	.850

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021

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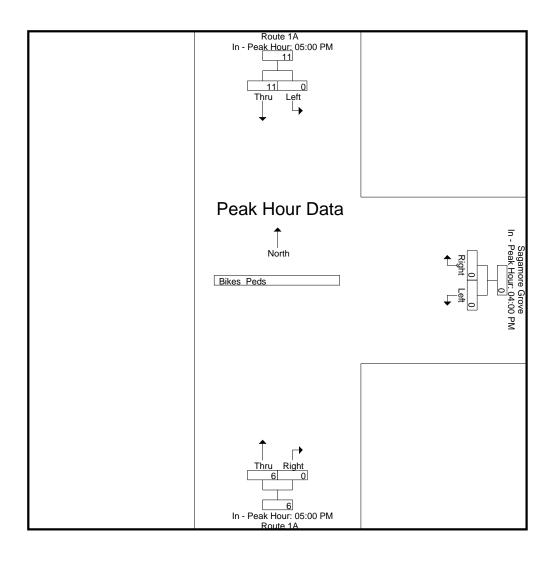


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

	05:00 PM			04:00 PM			05:00 PM					
+0 mins.	0	2	2	0	0	0	1	0	1			
+15 mins.	0	3	3	0	0	0	2	0	2			
+30 mins.	0	3	3	0	0	0	1	0	1			
+45 mins.	0	3	3	0	0	0	2	0	2			
Total Volume	0	11	11	0	0	0	6	0	6			
% App. Total	0	100		0	0		100	0				
PHF	.000	.917	.917	.000	.000	.000	.750	.000	.750			

N/S Street : Route 1A E/W Street : Sagamore Grove City/State : Portsmouth, NH Weather : Cloudy

File Name: 89920001 Site Code: 89920001 Start Date : 5/12/2021 Page No : 12



SEASONAL ADJUSTMENT DATA



New Hampshire DOT 02345001: Monthly Hourly Volume for May 2019

Location ID:02345001Seasonal Factor Group:04County:ROCKINGHAMDaily Factor Group:Functional Class3Axle Factor Group:Location:Lafayette RdGrowth Factor Group:

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	TOTAL	QC Status
1	37	25	12	48	73	246	604	1162	1282	1033	1097	1216	1261	1153	1215	1336	1360	1383	993	632	428	263	150	90	17099	Accepted
2	40	24	14	36	76	244	607	1115	1279	991	1070	1172	1168	1173	1217	1394	1405	1361	932	611	467	244	166	95	16901	Accepted
3	52	29	17	39	73	266	601	1178	1290	1157	1189	1258	1409	1317	1428	1435	1327	1423	936	659	465	359	222	139	18268	Accepted
4	82	41	27	29	37	124	257	565	767	939	1160	1340	1342	1371	1332	1237	1190	1048	817	654	474	342	248	178	15601	Accepted
5	86	51	32	24	28	82	160	362	614	684	1020	1161	1187	1117	1131	1000	926	799	655	445	317	154	148	69	12252	Accepted
6	36	23	19	21	62	267	611	1088	1263	981	984	1140	1216	1168	1229	1410	1474	1434	931	585	414	234	116	67	16773	Accepted
7	42	30	23	36	73	276	610	1164	1339	1040	1016	1129	1240	1177	1282	1383	1458	1398	925	522	357	240	116	59	16935	Accepted
8	39	20	29	39	75	266	632	1289	1354	1100	1095	1258	1320	1290	1331	1402	1412	1463	1066	640	501	312	141	85	18159	Accepted
9	42	22	19	36	74	278	632	1179	1333	1078	1138	1253	1266	1285	1277	1502	1422	1449	964	636	469	264	137	101	17856	Accepted
10	61	32	18	34	72	251	585	1079	1327	1155	1182	1305	1447	1331	1355	1478	1454	1386	934	626	564	356	245	135	18412	Accepted
11	74	43	23	31	44	127	285	600	842	1072	1230	1365	1331	1385	1384	1339	1255	1119	916	746	582	337	230	166	16526	Accepted
12	102	58	27	17	19	68	185	366	651	784	1025	1036	1198	1178	1141	1084	951	757	658	493	343	190	124	88	12543	Accepted
13	30	16	17	33	84	258	653	1122	1275	1036	1116	1276	1242	1151	1282	1366	1451	1418	938	573	345	225	112	60	17079	Accepted
14	34	19	22	45	80	260	582	1143	1362	1014	1065	1248	1269	1221	1276	1405	1372	1415	968	539	364	263	130	78	17174	Accepted
15	55	27	20	43	73	254	635	1176	1314	1092	1183	1206	1336	1269	1262	1491	1499	1376	967	580	491	286	131	100	17866	Accepted
16	42	27	15	42	89	267	615	1178	1365	1091	1097	1309	1379	1231	1379	1468	1557	1528	951	663	535	301	174	123	18426	Accepted
17	69	65	80	67	123	255	607	1134	1221	1088	1117	1364	1397	1277	1396	1476	1481	1403	1034	747	634	420	250	138	18843	Accepted
18	84	43	24	34	47	124	265	591	835	1136	1277	1386	1464	1363	1304	1283	1132	1046	902	690	539	339	266	154	16328	Accepted
19	84	49	26	20	33	97	305	443	665	783	1153	1265	1259	1135	1163	1122	1056	797	730	613	321	196	121	75	13511	Accepted
20	64	26	27	39	86	247	625	1228	1306	1056	1100	1211	1261	1202	1273	1477	1457	1388	890	646	394	271	134	105	17513	Accepted
21	71	57	44	51	88	285	653	1177	1450	1115	1149	1254	1326	1371	1313	1478	1503	1495	940	654	457	272	143	86	18432	Accepted
22	67	49	54	89	119	282	628	1163	1326	1113	1079	1195	1347	1355	1282	1478	1531	1474	1015	660	430	272	126	105	18195	Accepted
23	49	67	49	86	95	247	654	1132	1306	1118	1073	1224	1350	1274	1314	1493	1472	1373	972	695	451	367	220	206	18301	Accepted
	49	67	49	86	95	247	654	1132	1306	1118	1087	1224	1350	12/4	1314	1493	14/2	13/3	9/2	695	451	367	220	206	18301	Accepted

May Average 16913
Peak Month (Aug) 18127
Seasonal Adjustment 1.072

COVID-19 ADJUSTMENT DATA



2019 Average Count Data – Sta. 02345001

May ADT: 16,913

Growth Rate: 1.0%/Year

 $16,913 \times (1.010^2) = 17,253$

2021 Average Count Data – Sta. 02345001

May ADT: 14,995

COVID Adjustment

$$\frac{17,253}{14,995} = 1.151$$

New Hampshire DOT 02345001: Monthly Hourly Volume for May 2021

							02	2345	001:	Mor	ithly	Hou	rly V	olun	ne fo	r Ma	iy 20	21								
Locati Count Functi Locati	y: onal Cla	iss	I 3	0234500 ROCKIN 3 Lafayett	GHAM						1	Seasona Daily Fa Axle Fac Growth	ctor Gr	oup: oup:		04										
	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	TOTAL	QC Status
1	51	29	28	20	46	96	232	467	620	964	1175	1310	1404	1351	1312	1205	1169	957	756	622	451	310	170	116	14861	Accepted
2	60	40	24	14	15	80	148	306	520	702	887	1095	1221	1242	1298	1112	939	828	670	510	371	205	109	80	12476	Accepted
3	32	10	23	14	69	245	560	1029	1109	906	940	1146	1161	1184	1236	1373	1297	1219	784	533	321	211	149	98	15649	Accepted
4	41	28	27	30	74	258	593	995	1130	974	1028	1143	1244	1171	1268	1386	1381	1218	858	520	371	225	173	123	16259	Accepted
5	64	22	24	24	73	228	557	973	1115	956	1001	1113	1231	1178	1240	1357	1304	1275	784	474	298	215	143	82	15731	Accepted
6																										
7																										
8 9																										
10																										
11																										
12																										
13																										
14																										
15																										
16																										
17																										
18																										
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20																										
21																										
22																										
23																										
24																										
25																										
26																										
27																										

VEHICLE TRAVEL SPEED DATA



Accurate Counts 978-664-2565

Location: Route 1A Location: South of Sagamore Grove City/State: Portsmouth, NH Direction: NB,

5/12/2021					> 12 -	> 15 -	> 18 -	> 21 -	> 24 -	> 27 -	> 30 -	> 33 -	> 36 -		
3/ 12/202 I	0 - 3	> 3 - 6		> 9 - 12	15	18	21	24	27	30	33	36	39	> 39	
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	0	1	0	5	0	1	0	7
1:00	0	0	0	0	0	0	0	1	1	2	0	0	0	0	4
2:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	4	2	3	3	0	12
5:00	0	0	0	0	0	0	0	2	4	5	9	7	2	0	29
6:00	0	0	0	1	0	0	1	0	8	11	17	10	8	4	60
7:00	0	0	0	0	0	0	3	4	15	37	47	35	14	1	156
8:00	0	0	0	0	0	0	2	3	15	58	86	56	27	6	253
9:00	0	0	0	0	0	1	2	3	26	56	60	53	23	4	228
10:00	0	0	0	0	1	0	6	11	24	55	72	31	23	1	224
11:00	0	0	0	0	0	2	4	9	33	52	83	46	17	3	249
12:00 PM	0	0	0	0	1	0	4	9	28	67	93	50	24	5	281
1:00	0	0	0	1	0	0	5	10	41	74	88	40	19	6	284
2:00	0	0	0	0	0	0	2	9	46	72	86	54	15	3	287
3:00	0	0	0	0	1	1	2	16	44	81	99	36	12	5	297
4:00	0	0	0	0	0	0	1	9	29	76	82	58	23	2	280
5:00	0	0	0	0	0	0	2	10	33	66	88	53	12	1	265
6:00	0	0	0	0	0	0	0	9	25	39	62	35	22	7	199
7:00	0	0	0	0	1	0	1	4	17	41	46	22	12	2	146
8:00	0	0	0	0	0	0	0	2	8	20	23	23	5	0	81
9:00	0	0	0	0	0	0	0	0	8	8	13	7	7	0	43
10:00	0	0	0	0	0	0	0	2	3	3	7	3	4	1	23
11:00	0	0	0	0	0	0	1	0	2	4	3	2	2	1	15
Total	0	0	0	2	4	4	36	113	411	831	1071	625	275	52	3424
-		Р	ercentile	15th	50th	85th	95th								

Percentile 15th 50th 85th 95th Speed 26.6 31 34.7 36.6

Mean Speed (Average) 32.4 10 MPH Pace Speed 26-35 Number in Pace 2657 Percent in Pace 77.6% Number > 30 MPH 2023 Percent > 30 MPH 59.1%

Accurate Counts 978-664-2565

Location: Route 1A Location: South of Sagamore Grove City/State: Portsmouth, NH Direction: NB,

Direction: NB,															
5/13/2021	_				> 12 -	> 15 -	> 18 -	> 21 -	> 24 -	> 27 -	> 30 -	> 33 -	> 36 -		
	0 - 3	> 3 - 6	> 6 - 9		15	18	21	24	27	30	33	36	39	> 39	
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3
1:00	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
2:00	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
3:00	0	0	0	0	0	0	0	0	1	0	0	1	1	0	3
4:00	0	0	0	0	0	0	0	0	0	5	1	3	2	2	13
5:00	0	0	0	0	0	0	0	1	5	4	4	5	2	1	22
6:00	0	0	1	0	0	0	2	1	3	21	6	11	10	3	58
7:00	0	0	0	0	0	0	0	3	15	34	63	53	17	5	190
8:00	0	0	0	1	0	0	0	4	16	41	77	67	39	10	255
9:00	0	0	0	0	0	0	2	3	22	50	78	36	20	6	217
10:00	0	0	0	0	0	2	3	9	22	55	70	31	18	3	213
11:00	0	0	0	0	0	0	3	6	35	83	92	38	23	2	282
12:00 PM	0	0	0	0	0	0	2	14	27	59	82	44	19	4	251
1:00	0	0	0	0	0	0	3	8	30	59	87	48	19	9	263
2:00	0	0	0	0	0	0	0	5	39	78	117	64	32	10	345
3:00	0	0	0	0	0	0	0	7	38	76	102	59	27	6	315
4:00	0	0	0	0	0	0	0	4	32	61	101	54	29	6	287
5:00	0	0	0	0	0	2	2	15	21	70	96	58	31	8	303
6:00	0	0	1	0	0	0	0	8	27	44	59	59	24	7	229
7:00	0	0	0	0	0	0	1	4	15	48	68	42	18	3	199
8:00	0	0	0	0	0	0	2	3	21	32	39	21	12	3	133
9:00	0	0	0	0	0	1	0	3	17	29	18	5	4	0	77
10:00	0	0	0	0	0	1	0	0	7	5	10	7	3	2	35
11:00	0	0	0	0	0	0	0	0	1	2	8	3	0	0	14
Total	0	0	2	1	0	6	20	99	395	858	1178	711	350	91	3711
		P	Percentile	15th	50th	85th	95th								
			Speed	27.2	31	35.3	37.2								
		Speed (Ο,	33.9											
	10	MPH Pad	ce Speed	26-35											
		Numbe	r in Pace	2868											
		Percen	t in Pace	77.3%											
	N	lumber >	30 MPH	2330											
	F	Percent >		62.8%											
Grand Total	0	0	2	3	4	10	56	212	806	1689	2249	1336	625	143	7135
Stats		P	Percentile	15th	50th	85th	95th								
			Speed	26.6	31	34.7	37.2								
	Mean	Speed (Average)	33.2											
	10	MPH Pac	e Speed	26-35											

10 MPH Pace Speed 26-35 Number in Pace 5525 Percent in Pace 77.4% Number > 30 MPH 4353 Percent > 30 MPH 61.0%

Accurate Counts 978-664-2565

Location: Route 1A Location: South of Sagamore Grove City/State: Portsmouth, NH Direction: SB,

Birootion. OB,															
5/12/2021					> 12 -	> 15 -	> 18 -	> 21 -	> 24 -	> 27 -	> 30 -	> 33 -	> 36 -		
3/ 12/202 I	0 - 3	> 3 - 6		> 9 - 12	15	18	21	24	27	30	33	36	39	> 39	
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	0	0	1	4	0	0	0	5
1:00	0	0	0	0	0	0	0	0	1	0	0	3	2	0	6
2:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
3:00	0	0	0	0	0	0	0	0	0	2	1	0	0	1	4
4:00	0	0	0	0	0	0	0	0	1	1	1	1	0	0	4
5:00	0	0	0	0	0	0	1	0	0	2	3	4	4	1	15
6:00	0	0	0	0	0	0	0	3	8	21	28	7	10	5	82
7:00	0	0	0	0	0	0	0	10	30	47	56	29	18	3	193
8:00	0	0	0	0	0	1	8	21	57	68	80	44	22	4	305
9:00	0	0	0	0	0	2	4	9	46	59	57	28	15	5	225
10:00	0	0	0	0	0	2	1	16	51	61	71	43	25	6	276
11:00	0	0	0	0	1	2	9	37	58	68	88	44	23	5	335
12:00 PM	0	0	0	0	0	2	2	15	36	81	76	52	30	6	300
1:00	0	0	1	1	9	11	12	22	43	73	68	39	26	3	308
2:00	0	0	0	0	2	3	14	13	63	58	73	46	23	9	304
3:00	0	0	1	4	6	6	15	17	65	103	104	39	28	4	392
4:00	0	0	2	1	1	1	9	20	72	80	116	42	22	2	368
5:00	0	0	0	0	2	0	6	19	44	100	105	41	27	11	355
6:00	0	0	0	0	0	0	15	14	40	53	55	44	21	9	251
7:00	0	0	0	0	0	0	3	8	22	32	51	29	22	7	174
8:00	0	0	0	0	0	0	2	12	35	37	48	19	6	5	164
9:00	0	0	0	0	0	0	0	2	8	7	28	14	9	1	69
10:00	0	0	0	0	0	0	0	0	1	4	4	7	10	2	28
11:00	0	0	0	0	0	0	0	0	1	4	5	1	2	0	13
Total	0	0	4	6	21	30	101	238	682	963	1123	576	345	89	4178
		P	ercentile	15th	50th	85th	95th								

Percentile 15th 50th 85th 95th Speed 24.8 30.3 34.7 36.6

Mean Speed (Average) 32.2 10 MPH Pace Speed 24-33 Number in Pace 2949 Percent in Pace 70.6% Number > 30 MPH 2133 Percent > 30 MPH 51.1%

Accurate Counts 978-664-2565

Location: Route 1A Location: South of Sagamore Grove City/State: Portsmouth, NH Direction: SB,

Percent in Pace 71.4% Number > 30 MPH 4312 Percent > 30 MPH 49.4%

Direction: SB,															
5/13/2021	0 - 3	> 3 - 6	>6-9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	0	0	4	3	2	0	0	9
1:00	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
2:00	0	0	0	0	0	0	0	0	1	2	0	0	0	1	4
3:00	0	0	0	0	0	0	0	0	1	0	3	0	0	0	4
4:00	0	0	0	1	0	0	0	0	0	1	0	1	0	3	6
5:00	0	0	0	0	0	0	1	0	2	2	1	4	3	2	15
6:00	0	0	0	0	0	1	2	1	9	13	26	20	9	3	84
7:00	0	0	0	1	0	0	7	22	34	49	54	28	18	9	222
8:00	0	0	0	0	0	0	4	12	57	80	89	40	18	2	302
9:00	0	0	0	0	0	0	1	6	40	67	66	34	15	6	235
10:00	0	0	0	0	1	8	12	28	41	56	63	33	23	7	272
11:00	0	0	0	0	3	1	11	23	58	91	79	42	24	2	334
12:00 PM	0	0	0	0	1	2	16	28	66	85	107	24	19	4	352
1:00	0	0	0	3	4	3	15	34	66	59	68	36	13	1	302
2:00	0	0	2	2	3	2	15	24	50	102	99	46	21	8	374
3:00	0	0	0	0	0	0	3	23	66	102	109	51	22	6	382
4:00	0	0	0	0	2	2	17	22	66	94	132	44	24	4	407
5:00	0	0	0	2	2	7	10	30	75	122	91	45	28	11	423
6:00	0	0	0	0	3	4	11	21	68	65	74	31	23	3	303
7:00	0	0	0	0	0	0	6	13	20	60	62	32	21	3	217
8:00	0	0	0	0	0	0	3	10	30	36	54	23	7	2	165
9:00	0	0	0	0	0	1	1	2	8	15	32	16	4	0	79
10:00	0	0	0	0	0	0	0	4	7	2	10	7	9	3	42
11:00	0	0	0	0	0	0	0	0	3	4	5	5	4	1	22
Total	0	0	2	9	19	31	135	303	768	1111	1227	565	305	82	4557
		P	ercentile	15th	50th	85th	95th								
			Speed	24.8	29.7	34.1	36.6								
		Speed (31.5											
	10	MPH Pad	•	24-33											
			r in Pace	3286											
			t in Pace	72.1%											
		lumber >		2179											
		Percent >		47.8%											
Grand Total	0		6	15	40	61	236	541	1450	2074	2350	1141	650	171	8735
Stats		P	ercentile	15th	50th	85th	95th								
			Speed	24.8	29.7	34.7	36.6								
		Speed (- ,	31.8											
	10	MPH Pad	•	24-33											
		Numbe	r in Pace	6234											

Accurate Counts 978-664-2565

Location: Route 1A Location: South of Sagamore Grove City/State: Portsmouth, NH

Direction: Combined

5/12/2021					> 12 -	> 15 -	> 18 -	> 21 -	> 24 -	> 27 -	> 30 -	> 33 -	> 36 -		
3/12/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	15	18	21	24	27	30	33	36	39	> 39	
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	0	1	1	9	0	1	0	12
1:00	0	0	0	0	0	0	0	1	2	2	0	3	2	0	10
2:00	0	0	0	0	0	0	0	0	0	1	1	1	0	0	3
3:00	0	0	0	0	0	0	0	0	0	2	1	0	0	1	4
4:00	0	0	0	0	0	0	0	0	1	5	3	4	3	0	16
5:00	0	0	0	0	0	0	1	2	4	7	12	11	6	1	44
6:00	0	0	0	1	0	0	1	3	16	32	45	17	18	9	142
7:00	0	0	0	0	0	0	3	14	45	84	103	64	32	4	349
8:00	0	0	0	0	0	1	10	24	72	126	166	100	49	10	558
9:00	0	0	0	0	0	3	6	12	72	115	117	81	38	9	453
10:00	0	0	0	0	1	2	7	27	75	116	143	74	48	7	500
11:00	0	0	0	0	1	4	13	46	91	120	171	90	40	8	584
12:00 PM	0	0	0	0	1	2	6	24	64	148	169	102	54	11	581
1:00	0	0	1	2	9	11	17	32	84	147	156	79	45	9	592
2:00	0	0	0	0	2	3	16	22	109	130	159	100	38	12	591
3:00	0	0	1	4	7	7	17	33	109	184	203	75	40	9	689
4:00	0	0	2	1	1	1	10	29	101	156	198	100	45	4	648
5:00	0	0	0	0	2	0	8	29	77	166	193	94	39	12	620
6:00	0	0	0	0	0	0	15	23	65	92	117	79	43	16	450
7:00	0	0	0	0	1	0	4	12	39	73	97	51	34	9	320
8:00	0	0	0	0	0	0	2	14	43	57	71	42	11	5	245
9:00	0	0	0	0	0	0	0	2	16	15	41	21	16	1	112
10:00	0	0	0	0	0	0	0	2	4	7	11	10	14	3	51
11:00	0	0	0	0	0	0	1	0	3	8	8	3	4	1	28
Total	0	0	4	8	25	34	137	351	1093	1794	2194	1201	620	141	7602
		В	ercentile	15th	50th	85th	05th								

Percentile 15th 50th 85th 95th Speed 26 30.3 34.7 36.6

Mean Speed (Average) 32.3 10 MPH Pace Speed 26-35 Number in Pace 5550 Percent in Pace 73.0% Number > 30 MPH 4156 Percent > 30 MPH 54.7%

Accurate Counts 978-664-2565

Location: Route 1A

Location : South of Sagamore Grove

Percent > 30 MPH

54.6%

City/State: Portsmouth, NH Direction: Combined

> 12 -> 30 -> 15 -> 18 -> 21 -> 24 -> 27 -> 33 -> 36 -5/13/2021 0 - 3 > 3 - 6 >6-9 >9-12 > 39 MPH MPH MPH MPH MPH MPH Time MPH MPH MPH **MPH** MPH MPH **MPH** MPH 12:00 AM 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 PM 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 Total Percentile 15th 50th 85th 95th Speed 25.4 30.3 34.7 36.6 Mean Speed (Average) 32.5 10 MPH Pace Speed 26-35 Number in Pace Percent in Pace 73.0% Number > 30 MPH Percent > 30 MPH 54.5% **Grand Total** 50th 85th Stats Percentile 15th 95th Speed 25.4 30.3 34.7 36.6 Mean Speed (Average) 32.4 10 MPH Pace Speed 26-35 Number in Pace Percent in Pace 73.0% Number > 30 MPH

GENERAL BACKGROUND TRAFFIC GROWTH



General Background Traffic Growth - Daily Traffic Volumes

														Annual
CITY/TOWN	ROUTE/STREET	LOCATION	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Growth Rate
Portsmouth	Lafayette Road	South of South Street	12,000			13,000			12,000	12,240	12,485	11,179	11,313	-1.25%
New Castle	Wentworth Road	At Rye Town Line		4,200			4,000	4,088	4,211	3,551	3,803	3,879	3,167	-2.68%
Portsmouth	South Street	East of US Route 1	5,800			8,800			7,600	7,752	7,907	7,366	7,454	0.46%
Portsmouth	Middle Street	South of Mendum Avenue		10,000			7,900	8,074	8,316	9,628	9,821	10,017	8,793	1.75%
Portsmouth	Middle Street	East of US Route 1	6,200			6,800			7,200	7,344	7,491	6,686	6,766	-0.10%
Portsmouth	Newcastle Avenue	At New Castle Town Line	3,400			2,900			2,900	2,958	3,017	3,163	3,201	0.86%
Portsmouth	Richards Avenue	South of US Route 1	1,800			1,300			1,400	1,428	1,457	1,700	1,720	2.60%
Portsmouth	Newcastle Avenue	East of South Street	1,400			1,400			1,400	1,428	1,457	1,486	1,374	0.15%
Portsmouth	Marcy Street	At Mill Pond Bridge				2,900		6,000	6,180	6,304	5,291	5,397	5,462	4.18%
Portsmouth	Sagamore Avenue	At Sagamore Creek		8,100			6,500	6,643	6,842	7,520	7,670	7,823	7,086	1.14%
Portsmouth	Cass Street	West of US Route 1		2,700			2,400	2,453	2,527	2,953	3,012	3,072	2,557	2.02%
Portsmouth	Junkins Avenue	North of Lincoln Avenue		3,900			3,300	3,373	3,474	2,962	3,021	3,081	2,766	-3.07%
Portsmouth	South Street	West of Monroe Street	4,700		4,700			4,600	4,738	4,833	4,066	4,147	4,197	-1.73%
Portsmouth	Elwyn Road	At Rye Town Line		7,800				7,400	7,790	10,317	10,523	10,733	8,408	4.28%
Rye	Wentworth Road	At Portsmouth City Line		5,200			4,900	5,008	5,158	5,767	5,882	6,000	4,937	1.38%
Rye	Brackett Road	South of NH Route 1A		2,100			1,400	1,431	1,474	1,804	1,840	1,877	1,469	1.08%
Rye	Sagamore Road	South of Berry Brook Lane		4,400			4,700	4,803	4,947	4,394	4,482	4,572	3,840	-1.87%

0.54%

TRIP-GENERATION CALCULATIONS



Multifamily Housing (Low-Rise)

(220)

Vehicle Trip Ends vs: **Dwelling Units**

> Weekday On a:

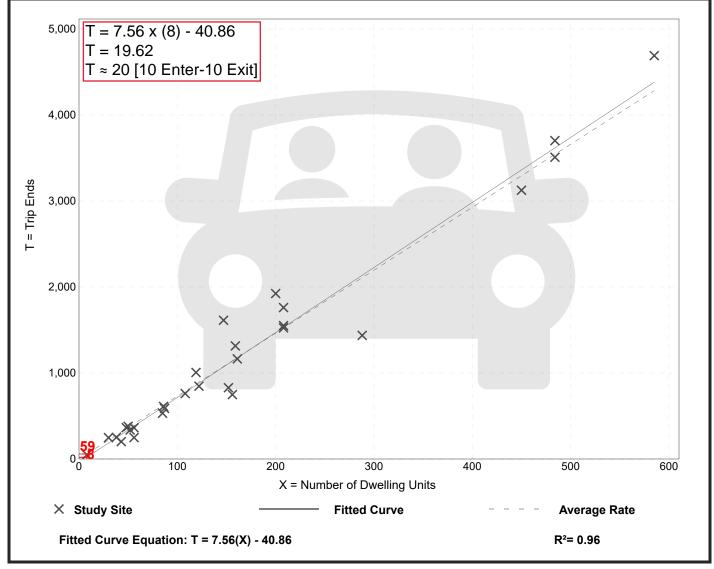
Setting/Location: General Urban/Suburban

Number of Studies: 29 Avg. Num. of Dwelling Units: 168

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.32	4.45 - 10.97	1.31



Multifamily Housing (Low-Rise)

(220)

Vehicle Trip Ends vs: **Dwelling Units**

> Weekday, On a:

> > Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

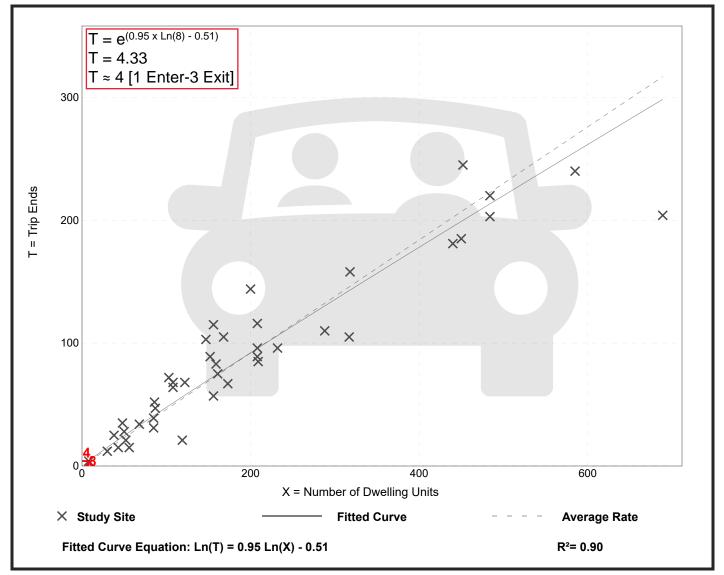
General Urban/Suburban Setting/Location:

42 Number of Studies: Avg. Num. of Dwelling Units: 199

Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.46	0.18 - 0.74	0.12



Multifamily Housing (Low-Rise)

(220)

Vehicle Trip Ends vs: **Dwelling Units**

> Weekday, On a:

> > Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

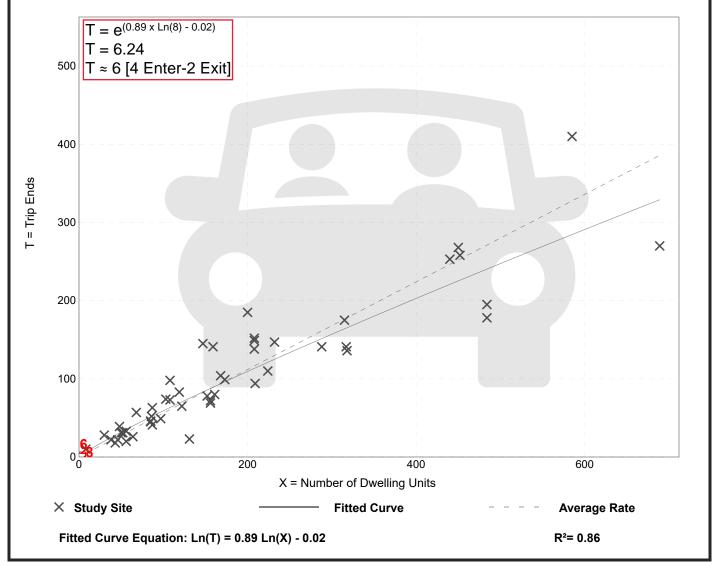
General Urban/Suburban Setting/Location:

50 Number of Studies: Avg. Num. of Dwelling Units: 187

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.56	0.18 - 1.25	0.16



Single-Family Detached Housing

(210)

Vehicle Trip Ends vs: Dwelling Units

Weekday On a:

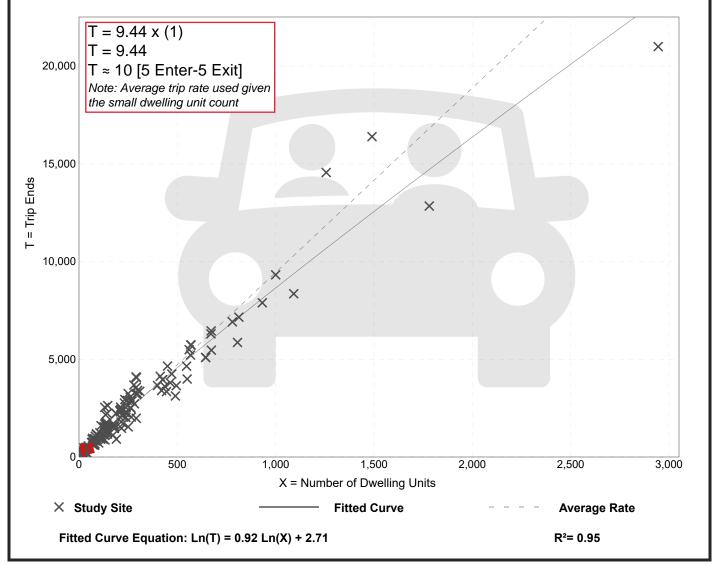
Setting/Location: General Urban/Suburban

159 Number of Studies: Avg. Num. of Dwelling Units: 264

> Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.44	4.81 - 19.39	2.10



Single-Family Detached Housing

(210)

Vehicle Trip Ends vs: Dwelling Units

Weekday, On a:

> Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

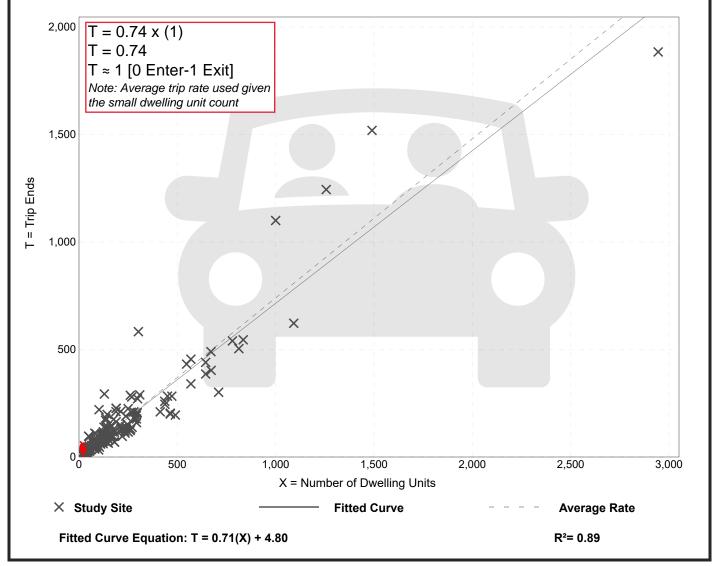
General Urban/Suburban Setting/Location:

173 Number of Studies: Avg. Num. of Dwelling Units: 219

Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.74	0.33 - 2.27	0.27



Single-Family Detached Housing

(210)

Vehicle Trip Ends vs: **Dwelling Units**

> On a: Weekday,

> > Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

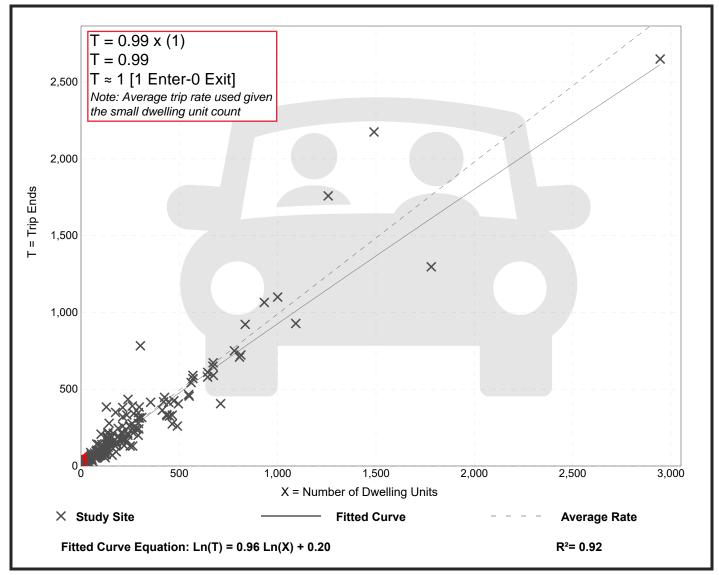
General Urban/Suburban Setting/Location:

190 Number of Studies: Avg. Num. of Dwelling Units: 242

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.99	0.44 - 2.98	0.31



Shopping Center

(820)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Weekday

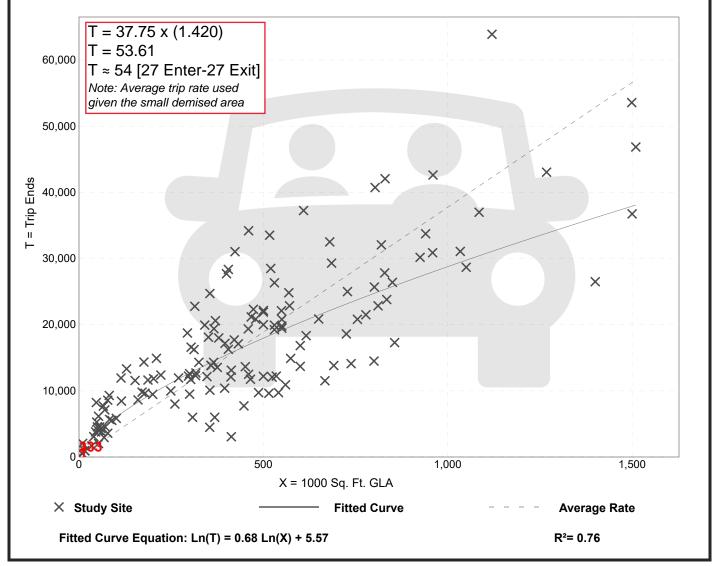
Setting/Location: General Urban/Suburban

Number of Studies: 147 Avg. 1000 Sq. Ft. GLA: 453

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
37.75	7.42 - 207.98	16.41



Shopping Center

(820)

1000 Sq. Ft. GLA Vehicle Trip Ends vs:

> Weekday, On a:

> > Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

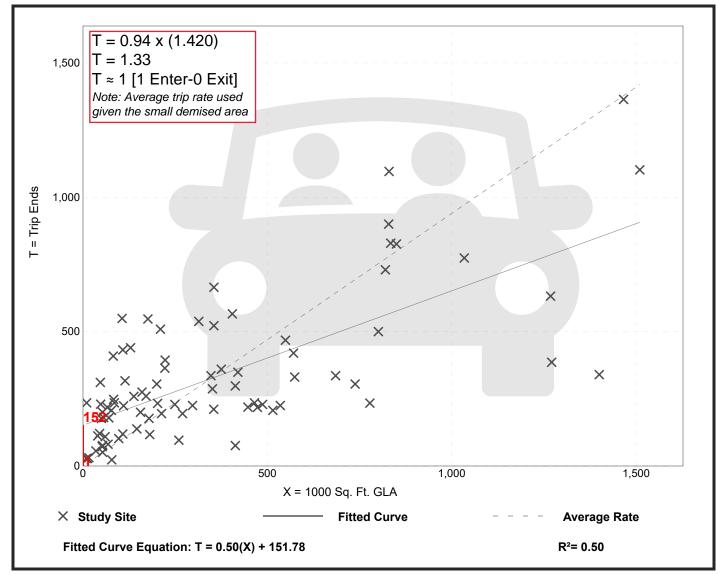
General Urban/Suburban Setting/Location:

Number of Studies: 84 Avg. 1000 Sq. Ft. GLA: 351

Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
0.94	0.18 - 23.74	0.87



Shopping Center

(820)

1000 Sq. Ft. GLA Vehicle Trip Ends vs:

> Weekday, On a:

> > Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

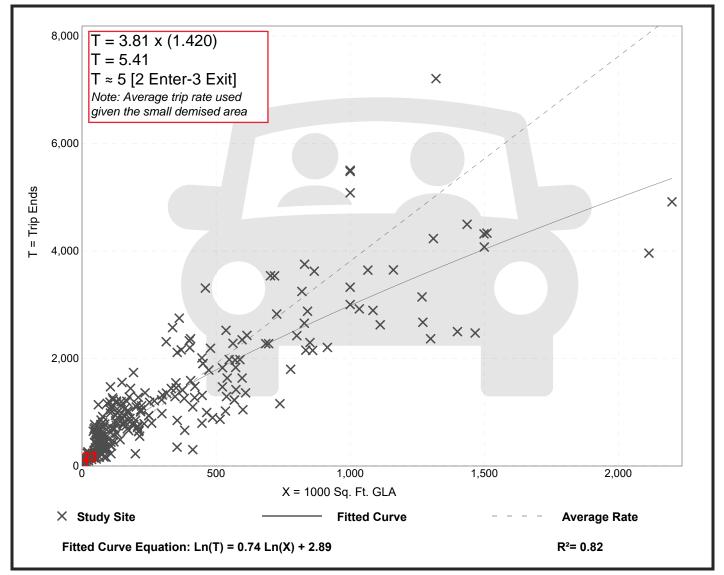
Setting/Location: General Urban/Suburban

Number of Studies: 261 Avg. 1000 Sq. Ft. GLA: 327

Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.81	0.74 - 18.69	2.04



High-Turnover (Sit-Down) Restaurant

(932)

1000 Sq. Ft. GFA Vehicle Trip Ends vs:

> Weekday On a:

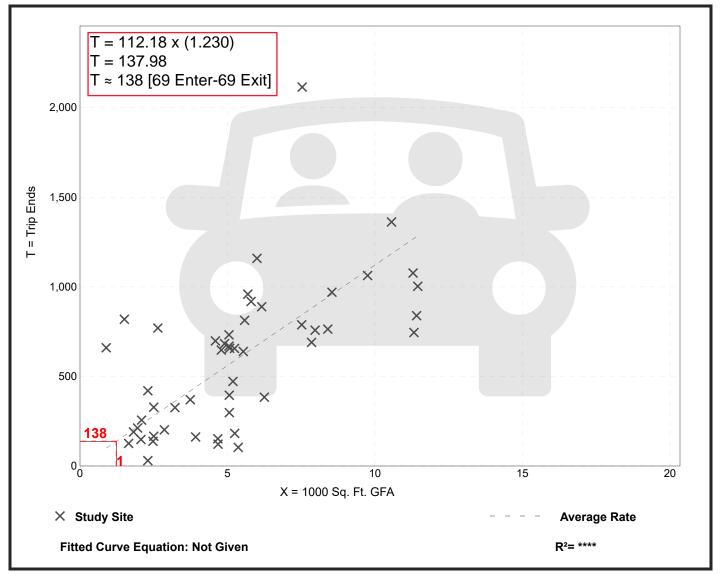
Setting/Location: General Urban/Suburban

Number of Studies: 50 Avg. 1000 Sq. Ft. GFA:

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
112.18	13.04 - 742.41	72.51



High-Turnover (Sit-Down) Restaurant

(932)

1000 Sq. Ft. GFA Vehicle Trip Ends vs:

> On a: Weekday,

> > Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

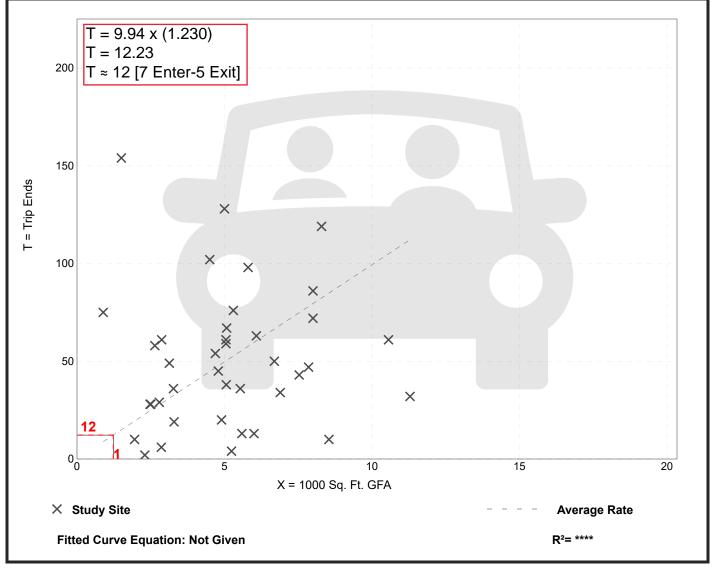
General Urban/Suburban Setting/Location:

Number of Studies: 39 Avg. 1000 Sq. Ft. GFA:

Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.94	0.76 - 102.39	11.33



High-Turnover (Sit-Down) Restaurant

(932)

1000 Sq. Ft. GFA Vehicle Trip Ends vs:

> Weekday, On a:

> > Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

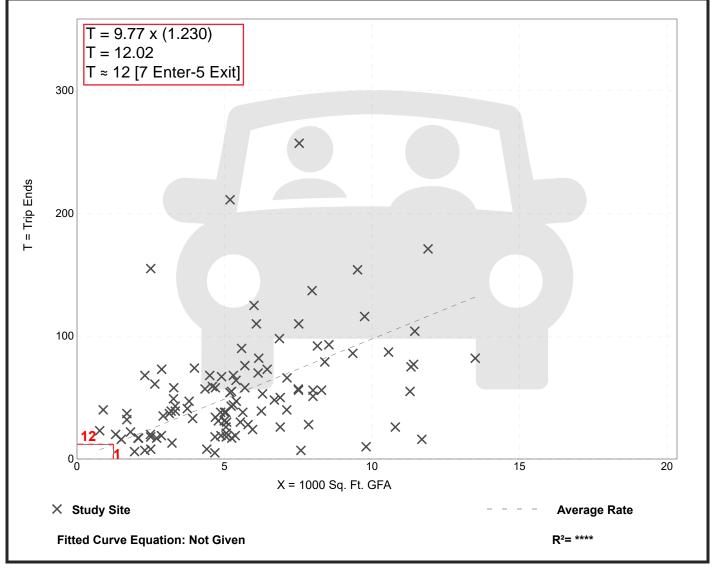
General Urban/Suburban Setting/Location:

Number of Studies: 107 Avg. 1000 Sq. Ft. GFA:

Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.77	0.92 - 62.00	7.37



CAPACITY ANALYSIS WORKSHEETS

NH Route 1A at Sagamore Grove Sagamore Grove at the West Project Site Driveway Sagamore Grove at the East Project Site Driveway



NH Route 1A at Sagamore Grove



-						
Intersection						
Int Delay, s/veh	0.1					
		WDD	NDT	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥	•	^}	^	4	4
Traffic Vol, veh/h	2	2	315	0	1	301
Future Vol, veh/h	2	2	315	0	1	301
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	89	89	94	94
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	4	4	354	0	1	320
	•	•			•	0_0
	linor1		Major1		Major2	
Conflicting Flow All	676	354	0	0	354	0
Stage 1	354	-	-	-	-	-
Stage 2	322	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	_	_	_	_	_
Follow-up Hdwy	3.5	3.3	_	_	2.2	_
Pot Cap-1 Maneuver	422	694	_	-	1216	_
Stage 1	715	-	_	_	1210	_
Stage 2	739		-	_	-	_
	139	-	-	-	-	-
Platoon blocked, %	400	004	-	-	1010	-
Mov Cap-1 Maneuver	422	694	-	-	1216	-
Mov Cap-2 Maneuver	422	-	-	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	12		0		0	
HCM LOS	В					
Minor Lane/Major Mvmt		NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)					1216	-
HCM Lane V/C Ratio		_		0.015		_
HCM Control Delay (s)		-	-	12		0
		-	-		8	
HCM Lane LOS		-	-	В	A	Α
HCM 95th %tile Q(veh)		-	-	0	0	-

-						
Intersection						
Int Delay, s/veh	0.1					
		WDD	NDT	NDD	CDI	CDT
	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥		\$	4	_	4
Traffic Vol, veh/h	2	1	355	1	2	406
Future Vol, veh/h	2	1	355	1	2	406
Conflicting Peds, #/hr	0	0	_ 0	_ 0	0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	38	38	94	94	92	92
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	5	3	378	1	2	441
	_	•	5.5		_	
Major/Minor M	linor1		//ajor1	N	Major2	
Conflicting Flow All	824	379	0	0	379	0
Stage 1	379	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Critical Hdwy	6.4	6.2	_	_	4.1	-
Critical Hdwy Stg 1	5.4	-	_	_	_	_
Critical Hdwy Stg 2	5.4	_	_	_	_	_
Follow-up Hdwy	3.5	3.3	_	_	2.2	_
Pot Cap-1 Maneuver	346	672	_	_	1191	_
	696	- 072	-	-	1131	
Stage 1			-	-	-	-
Stage 2	650	-	-	-	-	-
Platoon blocked, %			-	-	445	-
Mov Cap-1 Maneuver	345	672	-	-	1191	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	696	-	-	-	-	-
Stage 2	649	-	-	-	-	-
A	MD		ND		CD	
Approach	WB		NB		SB	
HCM Control Delay, s	13.9		0		0	
HCM LOS	В					
Minor Lane/Major Mvmt		NBT	NRR\	VBLn1	SBL	SBT
		וטוו	אוטויו			
Capacity (veh/h)		-	-		1191	-
HCM Lane V/C Ratio		-	-	0.019		-
HCM Control Delay (s)		-	-	13.9	8	0
HCM Lane LOS		-	-	В	Α	Α
HCM 95th %tile Q(veh)		-	-	0.1	0	-

0.1					
0.1					
WDI	WDD	NDT	NDD	CDI	CDT
WBL	WBR	NBT	NBR	SBL	SBT
¥	0	}	^	4	4
					304
					304
					_ 0
					Free
-		-		-	None
	-	-	-	-	-
	-		-	-	0
0	-	0	-	-	0
	50			94	94
0	0	1	0	0	2
4	4	357	0	1	323
liner1	N.	Major1	N	Major?	
					^
					0
			-		-
	-	-	-	-	-
		-	-	4.1	-
	-	-	-	-	-
	-	-	-	-	-
		-	-		-
419	692	-	-	1213	-
	-	-	-	-	-
737	-	-	-	-	-
		-	-		-
419	692	-	-	1213	-
419	-	-	-	-	-
	-	-	-	_	_
	_	_	_	_	_
. 50					
14.5					
		0		0	
В					
t	NRT	NRRV	VRI n1	SRI	SBT
		INDIK			ושט
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	-	-			-
	-	-	12	8	0
	-	-	B 0	A 0	A -
	0 # 0 0 50 0 4 linor1 682 357 325 6.4 5.4 5.4 3.5 419 713 737 419 419 713 736 WB	2 2 0 0 Stop Stop - None 0 - # 0 - 50 50 0 0 4 4 Stinor1 None 682 357 357 - 325 - 6.4 6.2 5.4 - 5.4 - 3.5 3.3 419 692 713 - 737 - 419 692 419 - 713 - 713 - 713 - 713 - 713 - 714 - 715 - WB 12 B	2 2 318 0 0 0 0 Stop Stop Free - None 0 # 0 - 0 50 50 89 0 0 1 4 4 357 Stop Stop Free - None - 0 0 # 0 - 0 50 50 89 0 0 1 4 4 357 Stop Stop Free - None - 0 0 0 0 50 50 89 0 0 1 4 - 357 Stop Stop Free - 0 89 0 0 - 0 1 -	2 2 318 0 0 0 0 0 0 Stop Stop Free Free - None - None 0 # 0 - 0 50 50 89 89 0 0 1 0 4 4 357 0	2 2 318 0 1 0 0 0 0 0 0 Stop Stop Free Free Free - None - None - 0 # 0 - 0 0 - 0 50 50 89 89 94 0 0 1 0 0 4 4 357 0 1 Inor1 Major1 Major2 682 357 0 0 357 357 325 5.4 4.1 5.4 5.4 1213 713 1213 713 737 419 692 - 1213 713 713 713 713 WB NB SB 12 0 0 0 WB NB SB 12 0 0 B NBT NBRWBLn1 SBL SBL

-						
Intersection						
Int Delay, s/veh	0.1					
		WDD	NDT	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥		\$		_	
Traffic Vol, veh/h	2	1	359	1	2	410
Future Vol, veh/h	2	1	359	1	2	410
Conflicting Peds, #/hr	0	0	_ 0	0	_ 0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	38	38	94	94	92	92
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	5	3	382	1	2	446
				•	_	
	linor1		//ajor1		Major2	
Conflicting Flow All	833	383	0	0	383	0
Stage 1	383	-	-	-	-	-
Stage 2	450	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	_	_	-
Critical Hdwy Stg 2	5.4	_	_	_	_	_
Follow-up Hdwy	3.5	3.3	_	_	2.2	_
Pot Cap-1 Maneuver	341	669	_	_	1187	_
Stage 1	694	-		_	1107	_
Stage 2	647		-	_	_	_
	047	-	-	-	-	-
Platoon blocked, %	0.40	000	-	-	4407	
Mov Cap-1 Maneuver	340	669	-	-	1187	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	694	-	-	-	-	-
Stage 2	646	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	14		0		0	
HCM LOS	В					
Minor Lane/Major Mvmt		NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)					1187	-
HCM Lane V/C Ratio		_		0.019		_
HCM Control Delay (s)		-	-	14		0
3 ()		-	-		8	
HCM Lane LOS		-	-	В	A	Α
HCM 95th %tile Q(veh)		-	-	0.1	0	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
	₩.	WDIX		ווטוז	ODL	
Lane Configurations Traffic Vol, veh/h	T	4	1 → 318	٥	2	ब 304
	3			0		304
Future Vol, veh/h		4	318	0	2	
Conflicting Peds, #/hr	0 Cton	O Ctop	0		0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	89	89	94	94
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	6	8	357	0	2	323
Major/Minor N	1inor1	N	Major1	I	Major2	
Conflicting Flow All	684	357	0	0	357	0
	357	35 <i>1</i>	-		33 <i>1</i>	-
Stage 1 Stage 2	327			-		
•		6.2	-	-	- 11	-
Critical Hdwy	6.4		-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	417	692	-	-	1213	-
Stage 1	713	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	416	692	-	-	1213	-
Mov Cap-2 Maneuver	416	-	-	-	-	-
Stage 1	713	-	-	-	-	-
Stage 2	734	-	-	-	-	-
Approach	WB		NB		SB	
			0			
HCM Control Delay, s	11.9		U		0.1	
HCM LOS	В					
Minor Lane/Major Mvmt		NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-	539	1213	_
HCM Lane V/C Ratio		_	_	0.026		_
HCM Control Delay (s)		_	-	11.9	8	0
HCM Lane LOS		<u>-</u>	_	В	A	A
HCM 95th %tile Q(veh)			_	0.1	0	-
110111 0001 70010 Q(VOII)				J. 1	- 0	

Intersection						
Int Delay, s/veh	0.3					
		WDD	NDT	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y	•	\$	•		4
Traffic Vol, veh/h	3	2	359	3	4	410
Future Vol, veh/h	3	2	359	3	4	410
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	38	38	94	94	92	92
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	8	5	382	3	4	446
					•	
	Minor1		Major1		Major2	
Conflicting Flow All	838	384	0	0	385	0
Stage 1	384	-	-	-	-	-
Stage 2	454	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	_	-	-	-	-
Critical Hdwy Stg 2	5.4	_	-	_	_	-
Follow-up Hdwy	3.5	3.3	_	_	2.2	_
Pot Cap-1 Maneuver	339	668	_	_	1185	_
Stage 1	693	-	_	_	-	_
Stage 2	644	_	_	-	_	_
Platoon blocked, %	044	-	_	_	_	-
	220	660	-	-	1105	-
Mov Cap-1 Maneuver	338	668	_	-	1185	-
Mov Cap-2 Maneuver	338	-	-	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	641	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	13.8		0		0.1	
			U		0.1	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1	SBL	SBT
Minor Lane/Major Mvm	nt	NBT	NBRV			SBT -
Capacity (veh/h)	nt	-	-	421	1185	-
Capacity (veh/h) HCM Lane V/C Ratio		NBT - -	-	421 0.031	1185 0.004	-
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		- - -	-	421 0.031 13.8	1185 0.004 8	- - 0
Capacity (veh/h) HCM Lane V/C Ratio		-	-	421 0.031	1185 0.004	-

Intersection						
Int Delay, s/veh	0.1					
		WDD	NDT	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥	_	^	_		4
Traffic Vol, veh/h	2	2	351	0	1	336
Future Vol, veh/h	2	2	351	0	1	336
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	89	89	94	94
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	4	4	394	0	1	357
manici ion	- T		007			001
Major/Minor N	/linor1	N	//ajor1	N	Major2	
Conflicting Flow All	753	394	0	0	394	0
Stage 1	394	_	-	-	_	-
Stage 2	359	_	-	_	_	_
Critical Hdwy	6.4	6.2	_	_	4.1	_
Critical Hdwy Stg 1	5.4	-	_	_		_
Critical Hdwy Stg 2	5.4	_			_	_
Follow-up Hdwy	3.5	3.3	_	_	2.2	_
		659	-			
Pot Cap-1 Maneuver	380		-	-	1176	-
Stage 1	686	-	-	-	-	-
Stage 2	711	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	380	659	-	-	1176	-
Mov Cap-2 Maneuver	380	-	-	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	710	_	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	12.6		0		0	
HCM LOS	В					
Minor Lane/Major Mvm	+	NBT	NIDDV	VBLn1	SBL	SBT
•	ι	INDI	INDIX			SDI
Capacity (veh/h)		-	-		1176	-
HCM Lane V/C Ratio		-	-	0.017		-
HCM Control Delay (s)		-	-	12.6	8.1	0
HCM Lane LOS		-	-	В	Α	Α
HCM 95th %tile Q(veh)		-	-	0.1	0	-

-						
Intersection						
Int Delay, s/veh	0.1					
		WDD	NDT	NDD	CDI	CDT
	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥		\$	4	_	4
Traffic Vol, veh/h	2	1	396	1	2	453
Future Vol, veh/h	2	1	396	1	2	453
Conflicting Peds, #/hr	0	0	0	0	0	0
	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	38	38	94	94	92	92
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	5	3	421	1	2	492
	•	_			_	
	nor1		//ajor1		Major2	
Conflicting Flow All	918	422	0	0	422	0
Stage 1	422	-	-	-	-	-
Stage 2	496	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	_	_	-
Critical Hdwy Stg 2	5.4	_	_	_	_	_
Follow-up Hdwy	3.5	3.3	_	_	2.2	_
Pot Cap-1 Maneuver	304	636	_	-	1148	_
Stage 1	666	-		_	-	_
Stage 2	616	_	-	_	_	_
	010	-	-	_	_	-
Platoon blocked, %	000	000	-	-	1110	
Mov Cap-1 Maneuver	303	636	-	-	1148	-
Mov Cap-2 Maneuver	303	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	15		0		0	
HCM LOS	С					
Minor Lane/Major Mvmt		NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)					1148	-
HCM Lane V/C Ratio		_		0.022		_
HCM Control Delay (s)		<u>-</u>	-	15	8.1	0
3 ()		-	-			
HCM Lane LOS		-	-	C	A	Α
HCM 95th %tile Q(veh)		-	-	0.1	0	-

Intersection						
Int Delay, s/veh	0.2					
		WDD	NDT	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	, A.	4	}	^	•	4
Traffic Vol, veh/h	3	4	351	0	2	336
Future Vol, veh/h	3	4	351	0	2	336
Conflicting Peds, #/hr	0	0	_ 0	_ 0	_ 0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	89	89	94	94
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	6	8	394	0	2	357
		_				
	/linor1		Major1	N	Major2	
Conflicting Flow All	755	394	0	0	394	0
Stage 1	394	-	-	-	-	-
Stage 2	361	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	_	4.1	-
Critical Hdwy Stg 1	5.4	_	_	_	_	_
Critical Hdwy Stg 2	5.4	_	_	_	_	_
Follow-up Hdwy	3.5	3.3	_	_	2.2	_
Pot Cap-1 Maneuver	379	659		_	1176	_
Stage 1	686	-	_	_	1170	_
			-	_	_	_
Stage 2	710	-	-	-	-	-
Platoon blocked, %			-	-	4.4=0	-
Mov Cap-1 Maneuver	378	659	-	-	1176	-
Mov Cap-2 Maneuver	378	-	-	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	709	-	-	-	-	-
Annroach	WB		NB		SB	
Approach						
HCM Control Delay, s	12.4		0		0	
HCM LOS	В					
Minor Lane/Major Mvm	l .	NBT	NRRV	VBLn1	SBL	SBT
		HOI	אוטווע			051
Capacity (veh/h)		-	-	500	1176	-
HCM Lane V/C Ratio		-	_	0.028		-
HCM Control Delay (s)		-	-	12.4	8.1	0
HCM Lane LOS		-	-	В	Α	Α
HCM 95th %tile Q(veh)		-	-	0.1	0	-

Sagamore Grove at the West Project Site Driveway



Intersection						
Int Delay, s/veh	1.9					
<u> </u>		EDD	WDI	WDT	NDI	NDD
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	Þ			4	À	
Traffic Vol, veh/h	1	1	0	5	2	0
Future Vol, veh/h	1	1	0	5	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	_	-	0	0	_
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	2	0	2	2
Mymt Flow	1	1	0	6	2	0
WWITH TOW			U	U		U
Major/Minor N	/lajor1	N	Major2		Minor1	
Conflicting Flow All	0	0	2	0	8	2
Stage 1	-	_	-	-	2	-
Stage 2	-	-	-	-	6	-
Critical Hdwy	-	_	4.12	_	6.42	6.22
Critical Hdwy Stg 1	_	_		_	5.42	-
Critical Hdwy Stg 2	_	_	_	_	5.42	_
Follow-up Hdwy	_		2.218		3.518	
Pot Cap-1 Maneuver	_	_	1620	_	1013	1082
		_	1020	-	1013	1002
Stage 1	-	-	-	_		-
Stage 2	-	-	-	-	1017	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1620	-	1013	1082
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1017	-
A mara a ab	ΓD		WD		ND	
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.6	
HCM LOS					Α	
Minor Lane/Major Mvmt	l N	NBLn1	EBT	EBR	WBL	WBT
	. 1					
Capacity (veh/h)		1013	-	-	1620	-
HCM Lane V/C Ratio		0.002	-	-	-	-
HCM Control Delay (s)		8.6	-	-	0	-
HCM Lane LOS		Α	-	-	A	-
HCM 95th %tile Q(veh)		0	-	-	0	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EDD	\\/DI	\\/DT	NDL	NIDD
		EBR	WBL	WBT	NBL	NBR
Lane Configurations	Þ	_		ર્ન	¥	_
Traffic Vol, veh/h	4	3	0	4	1	0
Future Vol, veh/h	4	3	0	4	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	_	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	4	3	0	4	1	0
IVIVIIIL FIOW	4	J	U	4	1	U
Major/Minor Ma	ajor1	N	Major2		Minor1	
Conflicting Flow All	0	0	7	0	10	6
Stage 1	_	_	_	_	6	_
Stage 2	_	_	_	_	4	_
Critical Hdwy	_	_	4.12	_	6.42	6.22
Critical Hdwy Stg 1	_	_	7.12	_	5.42	-
Critical Hdwy Stg 2		_	_		5.42	-
	-	_	2.218		3.518	
Follow-up Hdwy	-					
Pot Cap-1 Maneuver	-	-	1614	-	1010	1077
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	1019	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1614	-	1010	1077
Mov Cap-2 Maneuver	-	-	-	-	1010	-
Stage 1	-	-	-	-	1017	-
Stage 2	_	_	-	_	1019	_
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.6	
HCM LOS					Α	
NA: I /NA : NA :		IDL 4		ED D	MA	MOT
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		1010	-	-	1614	-
HCM Lane V/C Ratio		0.001	-	-	-	-
HCM Control Delay (s)		8.6	-	-	0	-
HCM Lane LOS		Α	-	-	Α	-
HCM 95th %tile Q(veh)		0	-	-	0	-

Intersection						
Int Delay, s/veh	1.9					
		ED.5	14/51	VA/D.T	NE	NES
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	₽			-4	¥	
Traffic Vol, veh/h	1	1	0	5	2	0
Future Vol, veh/h	1	1	0	5	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	+ 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	1	1	0	6	2	0
			_			
	ajor1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	8	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	6	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	_	5.42	-
Follow-up Hdwy	_	_	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	_	1620	_	1013	1082
Stage 1	_	_	-	_	1021	-
Stage 2	_	_	_	_	1017	_
Platoon blocked, %	_	<u>_</u>		_	1017	
•		-	1620	-	1013	1082
Mov Cap-1 Maneuver	-	-		-	1013	
Mov Cap-2 Maneuver	-	-	-	-		-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1017	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.6	
HCM LOS	U		U		Α	
TIGIVI EGG					٨	
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		1013	-	-	1620	-
HCM Lane V/C Ratio		0.002	-	_	-	_
HCM Control Delay (s)		8.6	-	_	0	_
HCM Lane LOS		A	_	_	A	_
HCM 95th %tile Q(veh)		0	_	_	0	_
HOW JOHN JUNIO Q(VOII)		- 0			- 0	

Intersection						
Int Delay, s/veh	0.7					
		ED.5	14/5	VA/D.T.	NE	NES
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	Þ			र्भ	W	
Traffic Vol, veh/h	4	3	0	4	1	0
Future Vol, veh/h	4	3	0	4	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
•	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	4	3	0	4	1	0
	•			•	•	•
	ajor1		Major2		Minor1	
Conflicting Flow All	0	0	7	0	10	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	4	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1614	-	1010	1077
Stage 1	_	_	-	-	1017	-
Stage 2	_	-	_	-	1019	_
Platoon blocked, %	_	_		_	10.0	
Mov Cap-1 Maneuver	_	_	1614	_	1010	1077
Mov Cap-1 Maneuver	_	_	- 1014	_	1010	-
Stage 1	-	-	<u>-</u>	_	1017	-
	-		-	-	1017	
Stage 2	-	-	-	-	1019	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.6	
HCM LOS					A	
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		1010	-	-	1614	-
HCM Lane V/C Ratio		0.001	-	-	-	-
HCM Control Delay (s)		8.6	-	-	0	-
HCM Lane LOS		Α	-	-	Α	-
HCM 95th %tile Q(veh)		0	-	-	0	-

Sagamore Grove at the East Project Site Driveway



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Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
		EDR	VVDL			INDIX
Lane Configurations	ĥ	Λ	۸	<u>र्</u>	Y	٨
Traffic Vol, veh/h	1	0	0	4	1	0
Future Vol, veh/h	1	0	0	4	1	0
Conflicting Peds, #/hr	_ 0	_ 0	0	0	0	0
3	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	1	0	0	4	1	0
N.A' (N.A'	4		4		A	
	ajor1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	5	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	4	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	_	3.518	3.318
Pot Cap-1 Maneuver	_	_	1622	_	1017	1084
Stage 1	_	_	_	_	1022	-
Stage 2	_	_	_	_	1019	_
Platoon blocked, %	_	_		_	1010	
Mov Cap-1 Maneuver	_	_	1622	_	1017	1084
		_			1017	
Mov Cap-2 Maneuver	-		-	-		-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1019	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.5	
HCM LOS	U		U		0.5 A	
I IOIVI LOO					A	
Minor Lane/Major Mvmt	N	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		1017	_	-	1622	_
HCM Lane V/C Ratio		0.001	_	-	-	-
HCM Control Delay (s)		8.5	_	_	0	_
		Δ	-	_	Δ	-
HCM Lane LOS HCM 95th %tile Q(veh)		A 0	-	-	A 0	-

Intersection						
Int Delay, s/veh	1.1					
		EDD	WDI	WDT	NDI	NDD
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	₽		•	નું	¥	•
Traffic Vol, veh/h	3	1	0	3	1	0
Future Vol, veh/h	3	1	0	3	1	0
Conflicting Peds, #/hr	_ 0	_ 0	_ 0	_ 0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	3	1	0	3	1	0
		•			•	
	ajor1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	7	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	_	_	5.42	-
Follow-up Hdwy	_	_	2.218	_	3.518	3.318
Pot Cap-1 Maneuver	_	_	1618	_	1014	1080
Stage 1	_	_	-	_	1019	-
Stage 2	_	_	_	_	1020	_
Platoon blocked, %	_	_		_	1020	
•		_	1618	_	1014	1080
Mov Cap-1 Maneuver	-	-		-		
Mov Cap-2 Maneuver	-	-	-	-	1014	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1020	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.6	
HCM LOS	U		U		0.0 A	
HOW LOS					А	
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		1014			1618	_
HCM Lane V/C Ratio		0.001	_	_	-	_
HCM Control Delay (s)		8.6		_	0	_
HCM Lane LOS		Α	_	_	A	_
HCM 95th %tile Q(veh)		0	_	_	0	
HOW SOUT /OUIE Q(VEII)		U	-	-	U	-

Intersection						
Int Delay, s/veh	1.4					
		EDD	WDI	WDT	NDI	NDD
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	ĵ.	^	•	ન	¥	•
Traffic Vol, veh/h	1	0	0	4	1	0
Future Vol, veh/h	1	0	0	4	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	1	0	0	4	1	0
	•	Ū		•	•	•
	ajor1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	5	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	4	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	_	-	5.42	-
Follow-up Hdwy	-	_	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1622	_	1017	1084
Stage 1	_	_	-	_	1022	-
Stage 2	_	_	_	_	1019	_
Platoon blocked, %	_	_		_	1010	
Mov Cap-1 Maneuver	_	_	1622	_	1017	1084
					1017	1004
Mov Cap-2 Maneuver	-	-	-	-		
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1019	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.5	
HCM LOS	U		U		0.5 A	
I IOIVI LOO					٨	
Minor Lane/Major Mvmt	N	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		1017	_	-	1622	-
HCM Lane V/C Ratio		0.001	_	_	-	_
HCM Control Delay (s)		8.5	_	_	0	_
HCM Lane LOS		A	_	_	A	_
HCM 95th %tile Q(veh)		0	_	_	0	_
How Jour Joure Q(veri)		U			U	

Intersection						
Int Delay, s/veh	1.1					
		EDD	WDI	WDT	NDI	NDD
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	₽		•	નું	¥	•
Traffic Vol, veh/h	3	1	0	3	1	0
Future Vol, veh/h	3	1	0	3	1	0
Conflicting Peds, #/hr	_ 0	_ 0	_ 0	_ 0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	3	1	0	3	1	0
		•			•	
	ajor1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	7	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	_	_	5.42	-
Follow-up Hdwy	_	_	2.218	_	3.518	3.318
Pot Cap-1 Maneuver	_	_	1618	_	1014	1080
Stage 1	_	_	-	_	1019	-
Stage 2	_	_	_	_	1020	_
Platoon blocked, %	_	_		_	1020	
•		_	1618	_	1014	1080
Mov Cap-1 Maneuver	-	-		-		
Mov Cap-2 Maneuver	-	-	-	-	1014	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1020	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.6	
HCM LOS	U		U		0.0 A	
HOW LOS					А	
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		1014			1618	_
HCM Lane V/C Ratio		0.001	_	_	-	_
HCM Control Delay (s)		8.6		_	0	_
HCM Lane LOS		Α	_	_	A	_
HCM 95th %tile Q(veh)		0	_	_	0	
HOW SOUT /OUIE Q(VEII)		U	-	-	U	-

Site Redevelopment Plans

PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT

960 SAGAMORE AVENUE PORTSMOUTH, NH 03801

TAX MAP 201, LOT 2

Issued for:

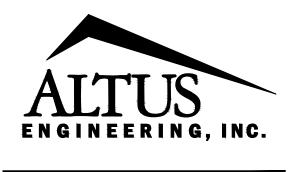
DECEMBER 29, 2021

PLANNING BOARD



SAGAMORE CORNER, LLC 273 CORPORATE DRIVE, STE 150 PORTSMOUTH, NH 03801 (603)427-5100

Civil Engineer:



133 COURT STREE

PORTSMOUTH, NH 03801 www.ALTUS-ENG.com

Sur veyor:

James Verra and Associates, Inc.

LAND SURVEYORS

101 SHATTUCK WAY - SUITE 8 NEWINGTON, N.H. 03801- 7876 603-436-3557

Ar chitect:



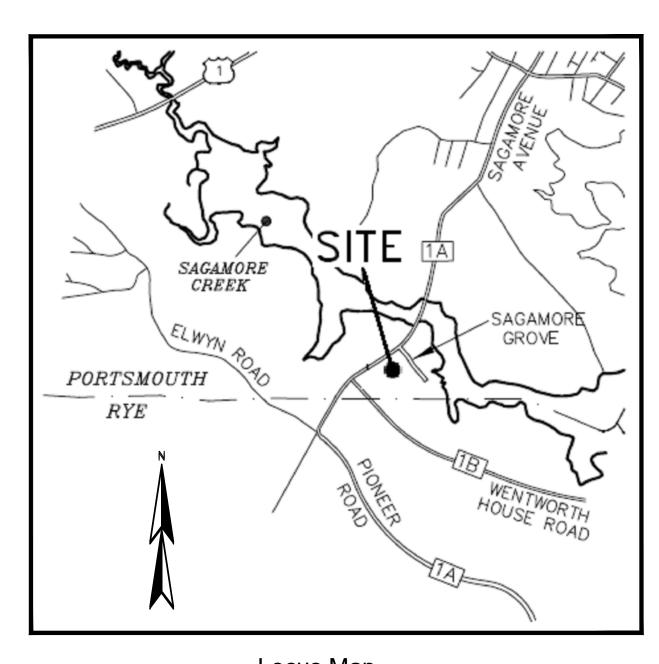
273 CORPORATE DRIVE, SUITE 100 PORTSMOUTH NH 03801 603.436.2551 INFO@JSAINC.COM

Landscape Architect:



Landscape Architecture, LLC

103 Kent Place Newmarket, NH 03857 Tel 603.659.5949 Fax: 603.659.5939



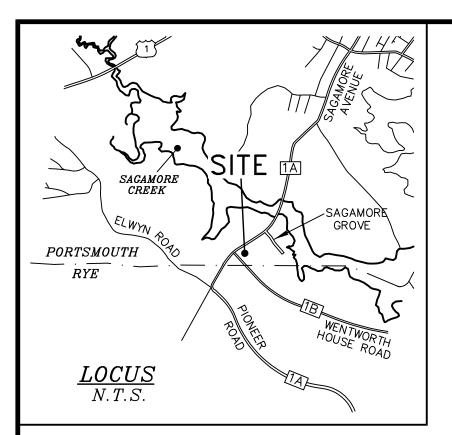
Locus Map Scale: Not to Scale

Sheet Index Title	$Sheet \ No.:$	Rev.	$\it Date$
		Tiev.	
Existing Conditions Plan (by JVA)	3 SHEETS	0	11/22/21
Demolition Plan	C-1	2	12/29/21
Site Plan	C-2	2	12/29/21
Grading and Drainage Plan	C-3	2	12/29/21
Utilities Plan	C-4	2	12/29/21
Erosion Control Notes and Details	C-5	1	11/22/21
Construction Details	C-6	1	11/22/21
Construction Details	C-7	1	11/22/21
Construction Details	C-8	1	11/22/21
Construction Details	C-9	1	11/22/21
Construction Details	C-10	1	11/22/21
Site Lighting Plan (by Visible Light, Inc.)	S-1	0	11/15/21
Landscape Plan (by Woodburn & Co.)	L-1	1	12/28/21
Garage Level Floor Plan (by JSA)	A-1	0	10/04/21
Elevations (by JSA)	A-2	0	10/4/21
Reference: 90% Sagamore Grove Sewer Extension (Wright—Pierce)	C-3A		03/21

Permit Summary

ZONING - THE FOLLOWING TWO VARIANCES WERE GRANTED ON SEPTEMBER 21, 2021.

- 1. SECTION 10.1114.31 -TO ALLOW TWO (2) DRIVEWAYS WHERE ONE (1) IS PERMITTED.
- 2. ZONING SECTION 10.521 TO ALLOW A DENSITY OF SIX (6) DWELLING UNITS WHERE 5.7 ARE PERMITTED.



LEGEND:

STONE WALL ∞ IRON ROD FOUND IRON ROD SET IRON PIPE FOUND BOUND as DESCRIBED DRILL HOLE .PUBLIC SERVICE CO. OF NH PSNH... .VERIZON VΖ ... 110-5 .TAX SHEET — LOT NUMBER **A**. SEE SIGN TABLE RCRD. ROCKINGHAM COUNTY REGISTRY OF DEEDS EOP.. ..EDGE OF PAVEMENT ETW... ..EDGE OF TRAVELLED WAY VGC... ..VERTICAL FACED GRANITE CURB .BOLLARD ..REFLECTOR .SIGN .DOUBLE POST SIGN ..UTILITY POLE ..UTILITY POLE W/TRANSFORMER ..LIGHT POLE ...UTILITY POLE WITH ARM & LIGHT .GUY .ELECTRIC METER ..VERTICAL PROPANE TANK .HORIZONTAL PROPANE TANK .WATER GATE VALVE .WATER SHUT OFF VALVE .HYDRANT .CATCH BASIN \bigcirc .TREE LINE/BRUSH LINE .CONIFEROUS TREE . WATER LINE -w-DRAIN LINE -D- —UGU— .. UNDERGROUND UTILITIES . OVERHEAD WIRES —ОНW— . CEMENT CONCRETE RIP RAP . EXPOSED ROCK/LEDGE ×12.5.. ..SPOT GRADE ..BORING SEE SIGNAGE TABLE SEE BUILDING ELEVATION TABLE

ABUTTERS LIST

507 STATE ST, PORTSMOUTH, NH 03801

MAP-LOT	OWNER OF RECORD	DEED REF.
201-1	955 SAGAMORE REALTY TRUST — 3/12/2008 MICHAEL T. GOODRIDGE, TRUSTEE 39 FERRY RD, SALISBURY, MA 01952	4903/695
201-1-1	WILLIAM L. PINGREE 2013 REV. TRUST 11 SAGAMORE GROVE, PORTSMOUTH, NH 03801	6155/537
201-3	LUCIAN SZMYD & DIANE M. SZMYD 41 HARBORVIEW DR, RYE, NH 03870	4547/2733
201–6	JASON GOULEMAS 2002 FAMILY TRUST JASON GOULEMAS, TRUSTEE LISA M. GOULEMAS 2002 FAMILY TRUST LISA M. GOULEMAS, TRUSTEE 5 SAGAMORE GROVE, PORTSMOUTH, NH 03801	5784/2715
201-7	BRIAN L. NESTE BRADFORD J. BYRD 184 WALKER BUNGALOW, PORTSMOUTH, NH 03801	5222/1547
201-8	WALTER J. ALLEN 1 SAGAMORE GROVE, PORTSMOUTH, NH 03801	2296/878
201-12	SEA LEVEL, LLC PO BOX 4094, PORTSMOUTH, NH 03802—4094	5743/352
201-22	WENTWORTH-SAGAMORE, LLC 1150 SAGAMORE AVE, PORTSMOUTH, NH 03801	
201-26	CITY OF PORTSMOUTH C/O CONSERVATION COMMISSION 1 JUNKINS AVE, PORTSMOUTH, NH 03801	
223-25	SEACOAST MENTAL HEALTH CENTER 1145 SAGAMORE AVE, PORTSMOUTH, NH 03801	
223-25-A	SEACOAST MENTAL HEALTH CENTER 1145 SAGAMORE AVE, PORTSMOUTH, NH 03801	
223-25-B	CITY OF PORTSMOUTH 1 JUNKINS AVE, PORTSMOUTH, NH 03801	
224-19	JUSTIN P. NADEAU & MICHELLE FIRMBACH NADEAU	

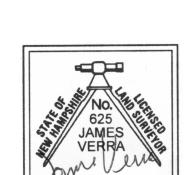
NOTES:

OWNER OF RECORD.. SAGAMORE CORNER, LLC .273 CORPORATE DR. SUITE 150, PORTSMOUTH, NH 03801 ADDRESS... .6350/364 DEED REFERENCE. TAX SHEET / LOT.. 201-2 PARCEL AREA . .42,929 S.F. (0.986 ACRES) ZONED . OWNER OF RECORD .. LIVE FREE REAL ESTATE LLC .314 MIDDLE ST, PORTSMOUTH, NH 03801 ADDRESS... .6172/974 DEED REFERENCE. 201-9 TAX SHEET / LOT. PARCEL AREA .. .59,243 S.F. (1.360 ACRES) ZONED . OWNER OF RECORD ... LIVE FREE REAL ESTATE LLC .314 MIDDLE ST, PORTSMOUTH, NH 03801 ADDRESS.... .6187/68 DEED REFERENCE .. TAX SHEET / LOT. 201-10 PARCEL AREA . .31,857 S.F. (0.731 ACRES) ZONED OWNER OF RECORD ... LIVE FREE REAL ESTATE LLC .314 MIDDLE ST, PORTSMOUTH, NH 03801 ADDRESS.... .6201/1839 DEED REFERENCE.. TAX SHEET / LOT. 201-11 PARCEL AREA .. .14,186 S.F. (0.326 ACRES) ZONED . FRONT YARD SETBACK 5' ZONED: ... MINIMUM LOT AREA 7,500 S.F. SIDE YARD SETBACK10' FRONTAGE...... 100' REAR YARD SETBACK......15' ZONED: .. FRONT YARD SETBACK 30' MINIMUM LOT AREA 20,000 S.F. SIDE YARD SETBACK......30' FRONTAGE 100' REAR YARD SETBACK......20' 3. THE RELATIVE ERROR OF CLOSURE WAS LESS THAN 1 FOOT IN 15,000 FEET. APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE CATCH BASINS, MANHOLES, WATER GATES ETC.) AND INFORMATION

- 4. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE 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.
- ON SITE CONTROL ESTABLISHED USING SURVEY GRADE GPS UNITS. HORIZONTAL DATUM: NAD 1983 (2011) VERTICAL DATUM: NAVD 1988 PRIMARY BM: CITY CONTROL POINT "ALBA"
- 6. WETLANDS DELINEATION 12/2015 & 11/2019 BY MICHAEL CUOMO, NHCWS# 4, 6 YORK POND RD, YORK, ME 03909.
- 7. LOCATION OF "WARRANT HIGHWAY EASEMENT" PER RCRD BOOK 3123, PAGE 2896, DATED OCTOBER 18, 1995 & SHOWN ON "PLAN OF WENTWORTH ROAD (ROUTE 1-B), PORTSMOUTH, HIGHWAY EASEMENT". SAID PLAN IS NOT RECORDED & CAN NOT BE LOCATED BY NHDOT. SEE SAID DEED FOR OTHER RIGHTS GRANTED TO THE STATE OF NH.
- THE SUBJECT TRACT LIES IN ZONE X (NO SCREEN), AREA OF MINIMAL FLOOD HAZARD, AS SHOWN ON FLOOD INSURANCE RATE MAP NO. 33015C0286F, MAP REVISED TO JANUARY 29, 2021, BY FEMA.
- 9. THIS PLAN IS BASED ON A FIELD SURVEY 2016 & 2020 BY JAMES VERRA AND ASSOCIATES, INC.
- SAGAMORE GROVE ROAD IS A PUBLIC WAY. THE UNDERLYING FEE OF THIS PORTION OF THE ROAD REMAINS WITH FRANCES & ARMAND GOSSELIN, THEIR HEIRS, SUCCESSORS & ASSIGNS. SEE ACKNOWLEDGEMENT & RELEASE DATED 3/17/1997, RCRD BOOK 3231, PAGE 470.
- 11. 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. PLAN OF LAND. 1150 SAGAMORE AVENUE, PORTSMOUTH, N.H., RYE CORNER GAS, LLC, DATED 4/8/2015, RCRD PLAN C-38865.
- 2. PLAN OF LAND FOR NC WENTWORTH, LLC, WENTWORTH ROAD, NEW CASTLE, N.H., REVISED TO 8/14/2000, RCRD PLAN C-28285.
- 3. LAND IN PORTSMOUTH, N.H., SADIE P. GOUSE TO FRANCES L. PENDERGAST, DATED 7/1954, RCRD PLAN 02283.
- 4. PLAN OF LAND, PORTSMOUTH, N.H., SADIE P. GOUSE TO JOHN S. DIMOCK, DATED 6/1950, FILE NO. 109, PLAN NO. 1-420, BY JOHN W. DURGIN, CE, NOT RECORDED.
- 5. PLAN OF LAND, PORTSMOUTH, N.H., SADIE P. GOUSE TO LEONARD & EMILY OSTERMAN, DATED 3/1946, FILE NO. 109, PLAN NO. 1-295, BY JOHN W. DURGIN, CE, NOT RECORDED.
- 6. PLAN OF LAND FOR MICHAEL KUCHTEY REVOCABLE TRUST, WENTWORTH ROAD, PORTSMOUTH/RYE, NH, DATED 3/25/1999, RCRD PLAN D-27320.
- 7. RIGHT OF WAY PLAT, SAGAMORE GROVE, PORTSMOUTH, N.H. FOR CITY OF PORTSMOUTH, N.H., DATED 4/9/1995, RCRD PLAN D-25616.
- 8. SUBDIVISION PLAN, TAX MAP 201 LOT 1, OWNER: 955 SAGAMORE REALTY TRUST, 955 SAGAMORE AVENUE, PORTSMOUTH, N.H., REVISED TO 6/29/2016, RCRD PLAN D-39767.
- 9. SUBSURFACE SEWAGE DISPOSAL SYSTEM FOR THE GOLDEN EGG, GOSSELIN LIVING TRUST / THOMAS GOSSELIN, TRUSTEE, 960 SAGAMORE AVENUE, PORTSMOUTH, NH, JOB # 11-0136, REVISED TO 10/22/2011, BY THE WRIGHT CHOICE, NOT RECORDED.

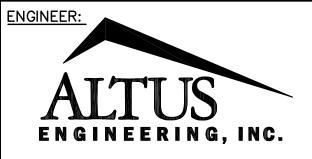


SURVEYOR:

James Verra and Associates, Inc.

LAND SURVEYORS

101 SHATTUCK WAY - SUITE 8 NEWINGTON, N.H. 03801- 7876 603-436-3557 JOB NO: 23655 PLAN NO: 23655-2



133 COURT STREET PORTSMOUTH, NH 03801 (603) 433-2335 www.ALTUS-ENG.com

ISSUED FOR:

DESIGN & PERMITTING

ISSUE DATE: **NOVEMBER 22, 2021**

REVISIONS NO. DESCRIPTION DATE 1 DESIGN & PERMITTING JV 11/22/21

JCS DRAWN BY: APPROVED BY: 23655-2.DWG DRAWING FILE: _

 $22" \times 34" - 1" = 20"$ $11" \times 17" - 1" = 40'$

APPLICANT:

SAGAMORE CORNER, LLC 273 CORPORATE DRIVE SUITE 150 PORTSMOUTH, NH 03801 DEED REF: 6350/364 ASSESSOR'S PARCEL 201-2

LIVE FREE REAL ESTATE LLC 1150 SAGAMORE ROAD PORTSMOUTH, NH 03801 DEED REF: 6172/974 ASSESSOR'S PARCEL 201-9

DEED REF: 6187/68 ASSESSOR'S PARCEL 201-10

DEED REF: 6201/1839 ASSESSOR'S PARCEL 201-11

PROPOSED SITE DEVELOPMENT **PLANS**

SAGAMORE AVENUE, SAGAMORE GROVE & WENTWORTH HOUSE ROAD PORTSMOUTH, N.H.

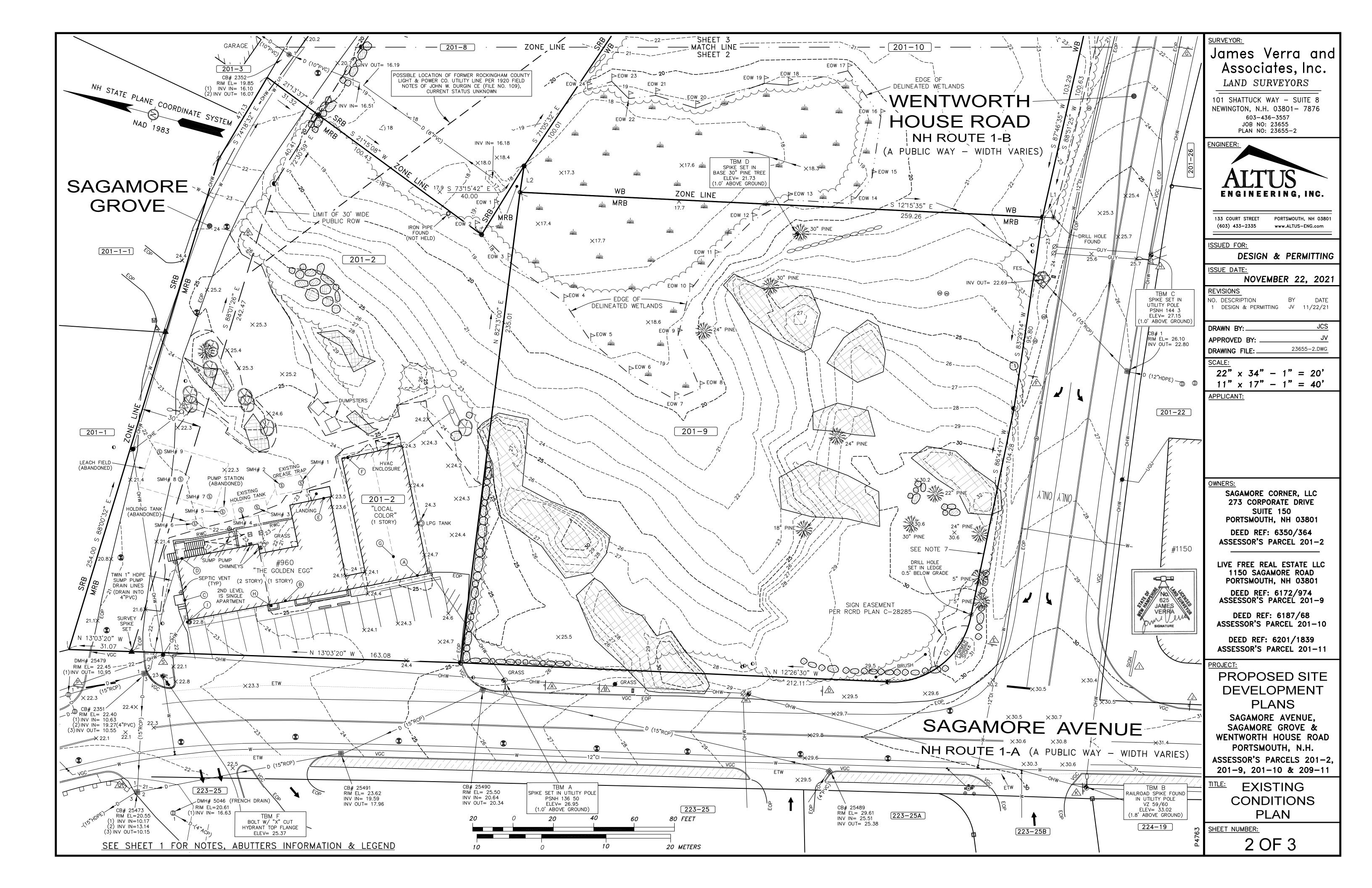
ASSESSOR'S PARCELS 201-2, 201-9, 201-10 & 209-11

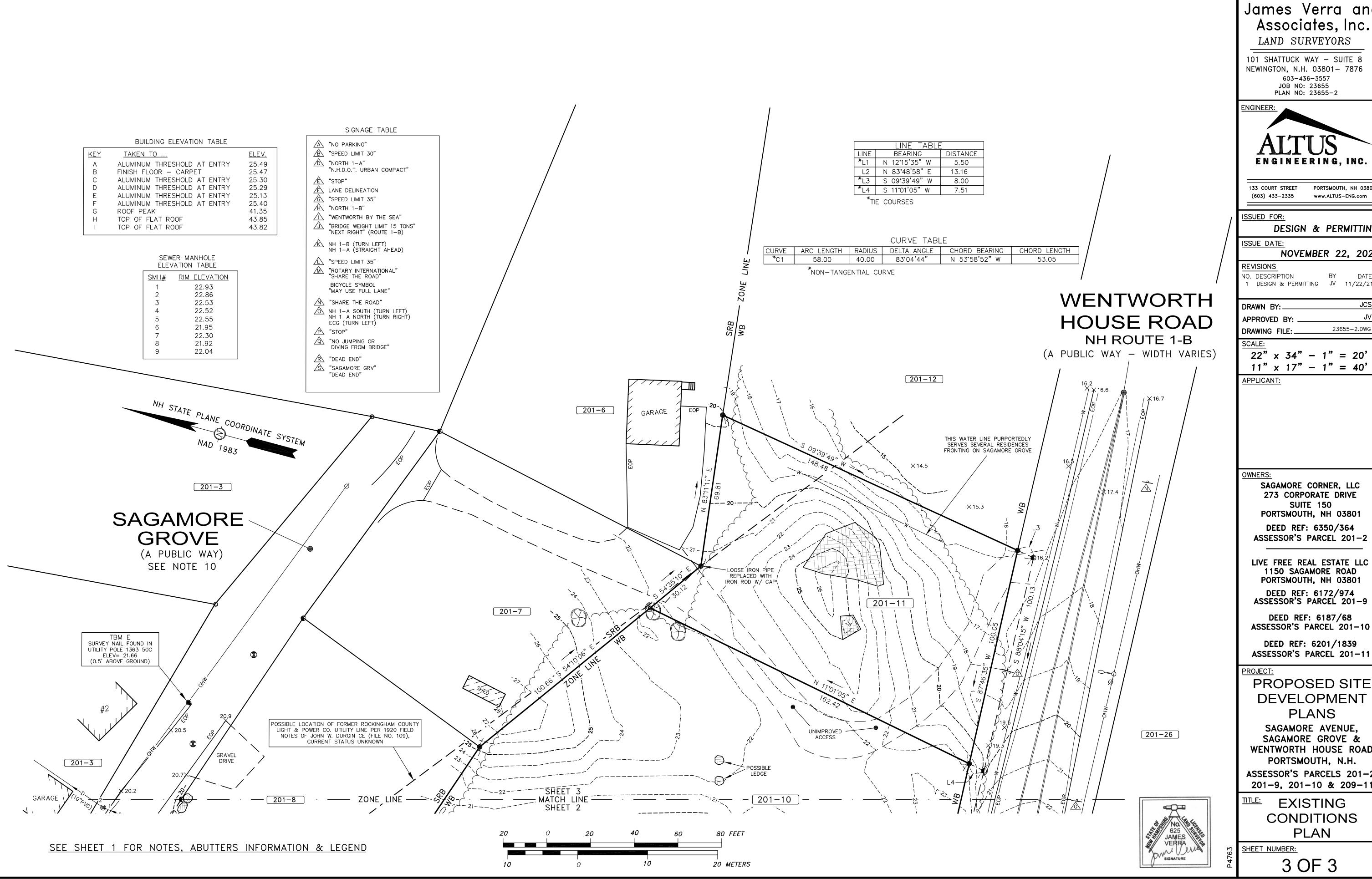
EXISTING CONDITIONS **PLAN**

SHEET NUMBER:

1 OF 3

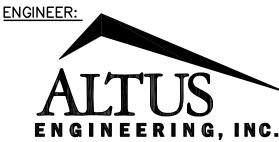
SEE SHEETS 2 & 3 FOR PLANIMETRIC INFORMATION





James Verra and Associates, Inc.

101 SHATTUCK WAY - SUITE 8 NEWINGTON, N.H. 03801- 7876 603-436-3557



133 COURT STREET PORTSMOUTH, NH 03801 www.ALTUS-ENG.com

DESIGN & PERMITTING

NOVEMBER 22, 2021

1 DESIGN & PERMITTING JV 11/22/21

JCS 23655-2.DWG

 $22" \times 34" - 1" = 20'$ $11" \times 17" - 1" = 40"$

SAGAMORE CORNER, LLC 273 CORPORATE DRIVE SUITE 150 PORTSMOUTH, NH 03801 DEED REF: 6350/364 ASSESSOR'S PARCEL 201-2

LIVE FREE REAL ESTATE LLC 1150 SAGAMORE ROAD PORTSMOUTH, NH 03801

DEED REF: 6187/68 ASSESSOR'S PARCEL 201-10

DEED REF: 6201/1839 ASSESSOR'S PARCEL 201-11

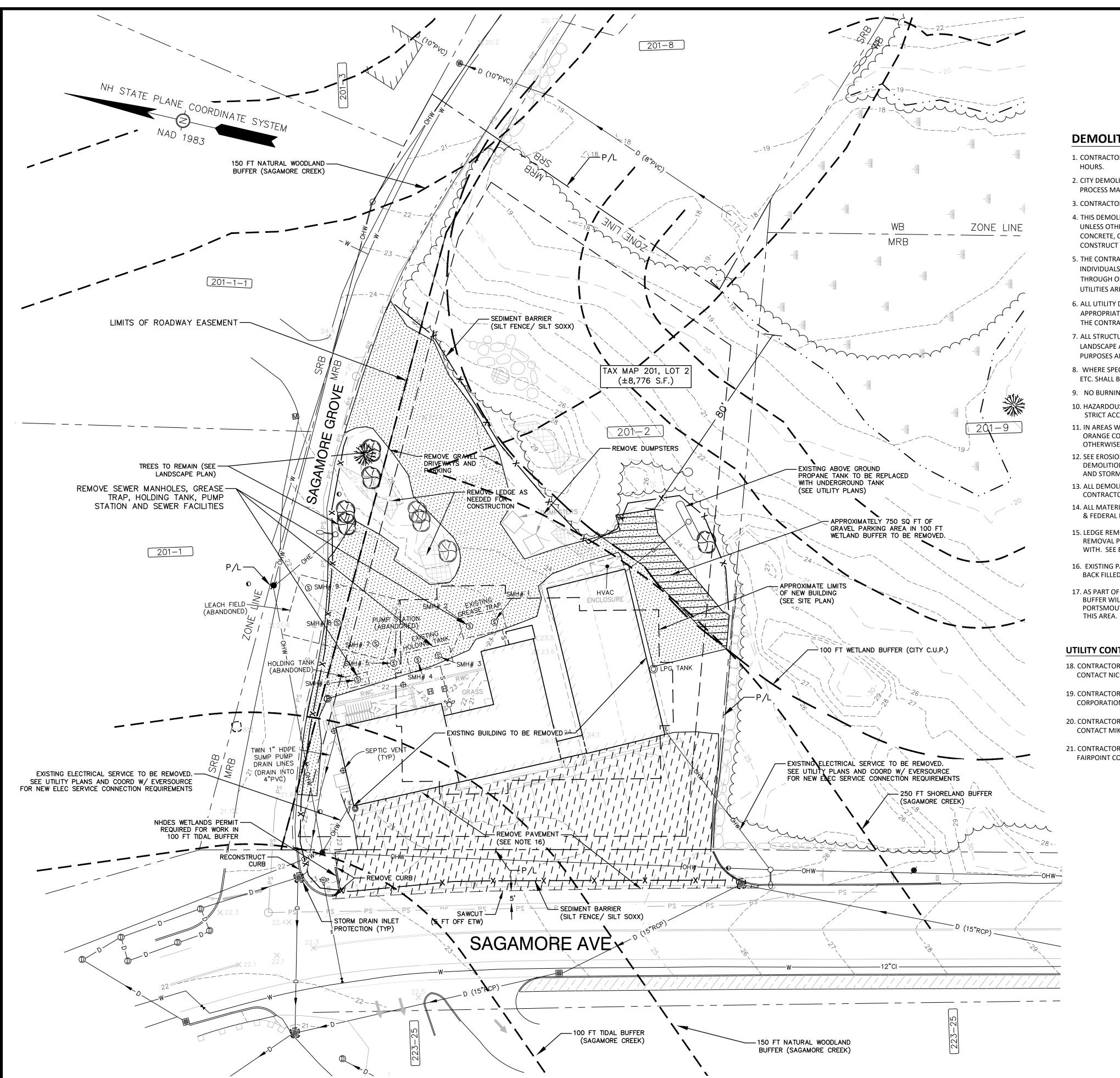
PROPOSED SITE DEVELOPMENT

SAGAMORE AVENUE, SAGAMORE GROVE & WENTWORTH HOUSE ROAD PORTSMOUTH, N.H.

ASSESSOR'S PARCELS 201-2, 201-9, 201-10 & 209-11

EXISTING CONDITIONS

3 OF 3



APPROVED BY THE PORTSMOUTH PLANNING BOARD

DATE CHAIRMAN

DEMOLITION NOTES

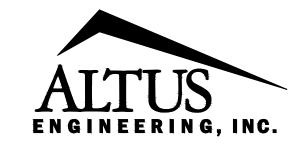
- 1. CONTRACTOR SHALL SAFELY SECURE THE SITE WITH SECURITY FENCING. FENCING SHALL BE LOCKED DURING NON-WORK
- 2. CITY DEMOLITION PERMIT REQUIRED PRIOR TO ANY DEMOLITION ACTIVITIES. CONTRACTOR IS NOTIFIED THAT THIS PERMIT PROCESS MAY REQUIRE A 30-DAY LEAD TIME.
- 3. CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES SCHEDULED TO REMAIN.
- 4. THIS DEMOLITION 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 PAVEMENT, CONCRETE, CURBING, SIGNS, POLES, UTILITIES, FENCES, VEGETATION AND OTHER EXISTING FEATURES AS NECESSARY TO FULLY
- 5. 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.
- 6. ALL UTILITY DISCONNECTIONS/DEMOLITIONS/RELOCATIONS TO BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES AND THE PORTSMOUTH DEPARTMENT OF PUBLIC WORKS. UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELATED EXCAVATION, TRENCHING AND BACKFILLING. 7. ALL STRUCTURES, CURBING, CONCRETE, PAVEMENT AND SUBBASE MATERIALS SHALL BE REMOVED FROM PROPOSED
- LANDSCAPE AREAS AND REPLACED WITH LOAM MATERIALS SUITABLE FOR LANDSCAPE AND/OR STORMWATER MANAGEMENT PURPOSES AND MEETING THE PROJECT SPECIFICATIONS.
- 8. WHERE SPECIFIED TO REMAIN, MANHOLE RIMS, CATCH BASIN GRATES, VALVE COVERS, HANDHOLES, MONITORING WELLS, ETC. SHALL BE ADJUSTED TO FINISH GRADE.
- 9. NO BURNING SHALL BE PERMITTED PER LOCAL REGULATIONS.
- 10. HAZARDOUS MATERIALS ENCOUNTERED DURING DEMOLITION AND CONSTRUCTION ACTIVITIES SHALL BE ABATED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.
- 11. IN AREAS WHERE CONSTRUCTION IS TO BE ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG THE PROPERTY LINE IN ALL AREAS WHERE SILT FENCING IS NOT OTHERWISE REQUIRED.
- 12. SEE EROSION CONTROL PLANS FOR EROSION CONTROL REQUIREMENTS TO BE IN PLACE PRIOR TO START OF DEMOLITION ACTIVITIES, INCLUDING, BUT NOT LIMITED TO; SILT FENCING, STABILIZED CONSTRUCTION SITE EXITS, AND STORM DRAIN INLET PROTECTION.
- 13. ALL DEMOLISHED MATERIALS OR MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE
- 14. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BE LEGALLY DISPOSED IN ACCORDANCE WITH ALL LOCAL, STATE, & FEDERAL REGULATIONS AND CODES.
- 15. LEDGE REMOVAL IS ANTICIPATED ON THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE CITY WITH A LEDGE REMOVAL PLAN. IF BLASTING IS TO BE PERFORMED, ALL STATE AND LOCAL REQUIREMENTS SHALL BE COMPLIED WITH. SEE BEST MANAGEMENT PRACTICES FOR BLASTING NOTES.
- 16. EXISTING PAVEMENT ALONG SAGAMOVE AVENUE TO REMAIN DURING CONSTRUCTION UNTIL FOIUNDATIONS ARE BACK FILLED.
- 17. AS PART OF THIS PROPOSED PROJECT APPROXIMATELY 200 SF OF PAVEMENT WITHIN THE 100-FOOT NHDES WETLANDS BUFFER WILL BE REMOVED AND THE AREA RESTORED TO LAWN OR LANDSCAPING. THE WORK OCCURS WITHIN THE CITY OF PORTSMOUTH RIGHT-OF-WAY. COORDINATE WITH THE CITY DEPARTMENT OF PUBLIC WORKS PRIOR TO ACTIVITY WITHIN

UTILITY CONTACTS:

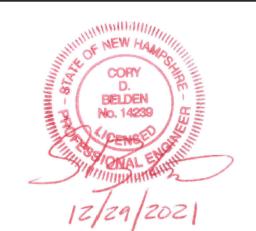
- 18. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL DISCONNECTIONS/INSTALLATIONS WITH EVERSOURCE. CONTACT NICK KOSKO @ 603-332-4227, EXT. 5555334
- 19. CONTRACTOR SHALL COORDINATE ALL NATURAL GAS DISCONNECTIONS/INSTALLATIONS WITH UNITIL CORPORATION. CONTACT DAVID BEAULIEU @ 603-294-5144
- 20. CONTRACTOR SHALL COORDINATE ALL CABLE DISCONNECTIONS/INSTALLATIONS WITH COMCAST. CONTACT MIKE COLLINS @ 603-679-5695 EXT 1037
- 21. CONTRACTOR SHALL COORDINATE ALL TELE-COMMUNICATION DISCONNECTIONS AND INSTALLATION WITH FAIRPOINT COMMUNICATIONS. CONTACT JOE CONSIONE @ 603-427-5255

GRAPHIC SCALE

(IN FEET)



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NOT FOR CONSTRUCTION

ISSUED FOR:

APPROVAL

ISSUE DATE:

DECEMBER 3, 2021

<u>REVISIONS</u> BY DATE NO. DESCRIPTION

O INITIAL SUBMITTAL CDB 11/02/2 TAC WS COMMENTS CDB 11/22/21 2 INITIAL NHDES SUBMITTAL CDB 12/03/21

DRAWN BY:. EDW APPROVED BY: DRAWING FILE:

> 22"×34" 1" = 20' 11"x17" 1" = 40"

OWNER / APPLICANT:

SAGAMORE CORNER, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROJECT:

PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT

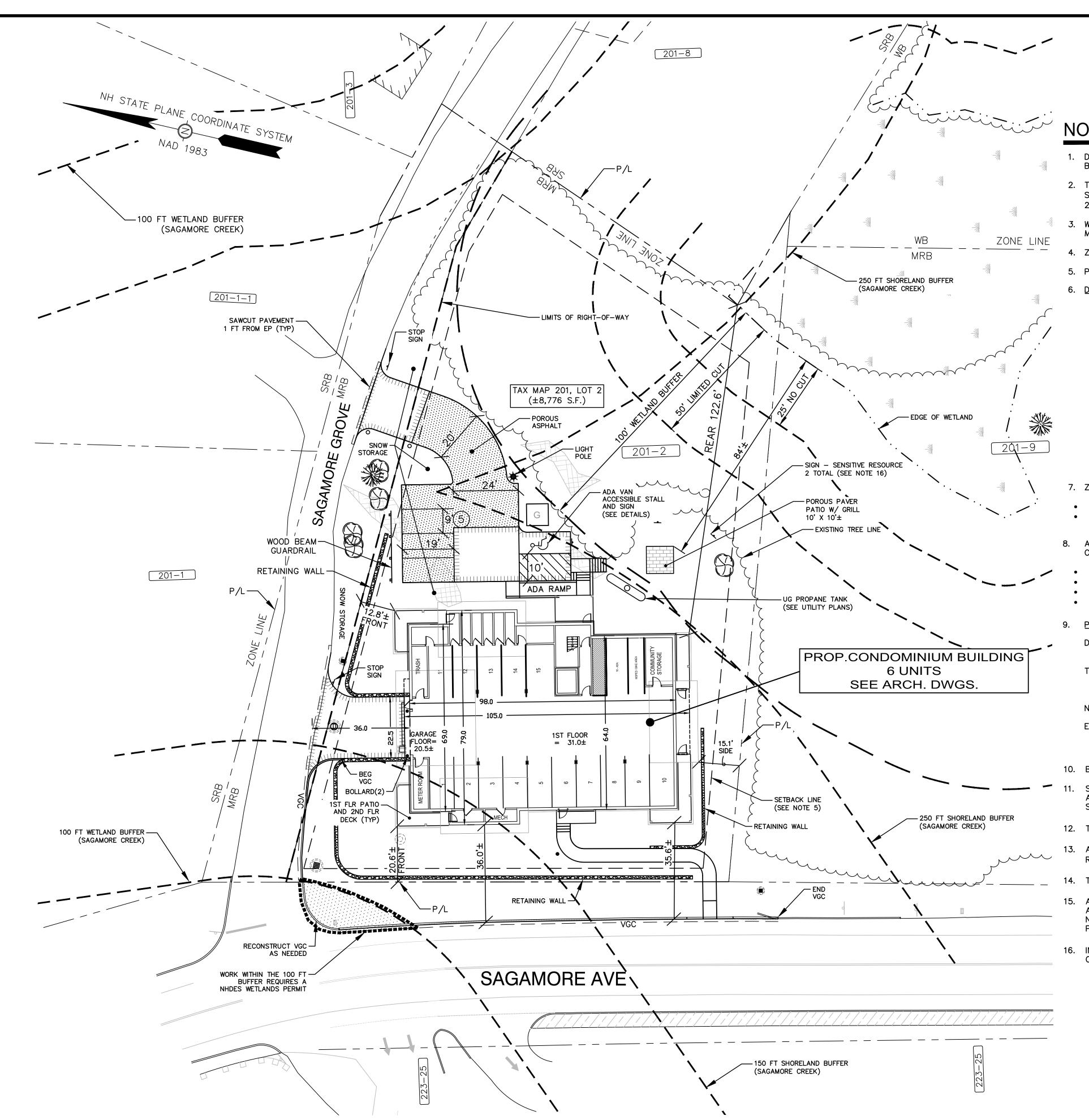
> 960 SAGAMORE ROAD PORTSMOUTH, NH 03801

TAX MAP 201, LOT 2

IDEMOLITION PLAN

SHEET NUMBER:

C-´



APPROVED BY THE PORTSMOUTH PLANNING BOARD

DATE CHAIRMAN

- DESIGN INTENT THIS PLAN IS INTENDED TO DEPICT A CONCEPTUAL MULTI-FAMILY RESIDENTIAL BUILDING TOGETHER WITH ASSOCIATED PARKING AND ACCESSWAYS.
- 2. THE BASE PLAN USED HERE WAS DEVELOPED FROM "EXISTING CONDITIONS PLAN, SAGAMORE AVENUE, SAGAMORE GROVE & WENTWORTH HOUSE ROAD, PORTSMOUTH, N.H., ASSESSOR'S PARCELS 201-2, 201-9, 201-10 & 209-11" BY JAMES VERRA AND ASSOCIATES, INC., DATED NOVEMBER 22, 2021.
- 3. WETLANDS DELINEATION 12/2015 & 11/2019 BY MICHAEL CUOMO, NHCWS# 4, 6 YORK POND RD, YORK,
- 4. ZONES: MRB (MIXED RESIDENTIAL BUSINESS)
- 5. PROJECT PARCEL: TAX MAP 201 LOT 2 42,930 S.F. (±0.99 AC.)

6.	DIMENSIONAL REQUIREMENTS: MIN. LOT AREA: LOT AREA PER DWELLING: MIN. STREET FRONTAGE: MIN. LOT DEPTH: FRONT SETBACK: SIDE SETBACK: REAR SETBACK: MAX. BUILDING HEIGHT:	MRB 7,500 S.F. (0.17 AC.) 7,500 S.F. 100' 80' 5' (±17' EXISTING) 10' (±21' EXISTING) 15' (±111' EXISTING) 30' (FLAT ROOF)	PROVIDED 42,929 S.F. ±7,155 S.F. ±194' ±212' ±20.6'/±12.8' ±15.1' ±122.6' 28.85'
	MAX. BOILDING HEIGHT. MULTI-FAM. BLDG. LENGTH: MAX. BUILDING COVERAGE: DWELLING UNITS PER BLDG: MIN. OPEN SPACE: WETLAND BUFFER: WETLAND LIMITED CUT: WETLAND NO-CUT: DRIVEWAY/RD/PARKING/BLDG:	(±22' - EXISTING TWO STORIES) 160' (MAX) 40% (±12.2% EXISTING) 8 (MAX) 25% (±45.4% EXISTING) 100' (80' EXISTING) 50' 25' ±52.2% (EXISTING)	±105' ±17.9% 6 ±55.0% 84±' 50' 25' ±42.2%

- 7. ZONING THE FOLLOWING TWO VARIANCES WERE GRANTED ON SEPTEMBER 21, 2021.
- SECTION 10.1114.31 -TO ALLOW TWO (2) DRIVEWAYS WHERE ONE (1) IS PERMITTED. • ZONING SECTION 10.521 - TO ALLOW A DENSITY OF SIX (6) DWELLING UNITS WHERE 5.7 ARE
- AREA OF DISTURBANCE UNDER 43,560 SF, COVERAGE UNDER EPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT NOT REQUIRED.
- LOT AREA IN WETLAND: ±400 S.F. (±0.9%)
- LOT AREA IN WETLAND & WETLAND BUFFER: ±13,650 S.F. (±31.8%) EXISTING LOT IMPERVIOUS IN WETLAND BUFFER: ±760 S.F. (±1.8%)
- PROPOSED LOT IMPERVIOUS IN WETLAND BUFFER: 0 S.F. (0%)
- PARKING REQUIREMENTS:

DWELLING UNITS: 1.3 SPACES PER DWELLING UNIT 6 UNITS \times 1.3 = 7.8 SPACES REQUIRED

TOTAL PARKING PROVIDED: 16 SPACES (INTERIOR)

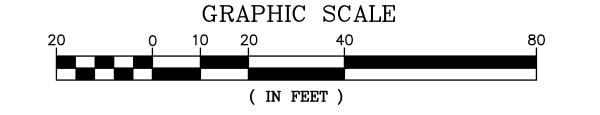
5 SPACES (EXTERIOR) 21 SPACES TOTAL

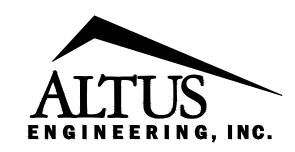
NO MAXIMUM REQUIREMENT

EXISTING PARKING SPACES: 15 PAVED

11 GRAVEL (APPROX) 26 TOTAL

- 10. BICYCLE PARKING WILL BE PROVIDED IN THE BASEMENT OF THE BUILDING.
- SNOW SHALL BE STORED AT THE EDGE OF PAVEMENT, IN UPLAND AREAS SHOWN THEREON. IF ADEQUATE ON-SITE SNOW STORAGE IS NOT AVAILABLE, THE SNOW SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED.
- 12. THE PROPOSED LIGHTING SHALL BE DARK SKY FRIENDLY.
- 13. ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.
- 14. THIS PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- 15. 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.
- 16. INSTALL SIGN INDICATING SENSITIVE RESOURCE, "SENSITIVE RESOURCE AREA / WETLAND BUFFER" OR APPROVED EQUAL.





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REVISIONS NO. DESCRIPTION

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2 INITIAL NHDES SUBMISSION CDB 12/03/21

APPROVED BY:

22"x34" 1" = 20' $11" \times 17" 1" = 40"$

OWNER / APPLICANT:

SAGAMORE CORNER, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROJECT:

PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT

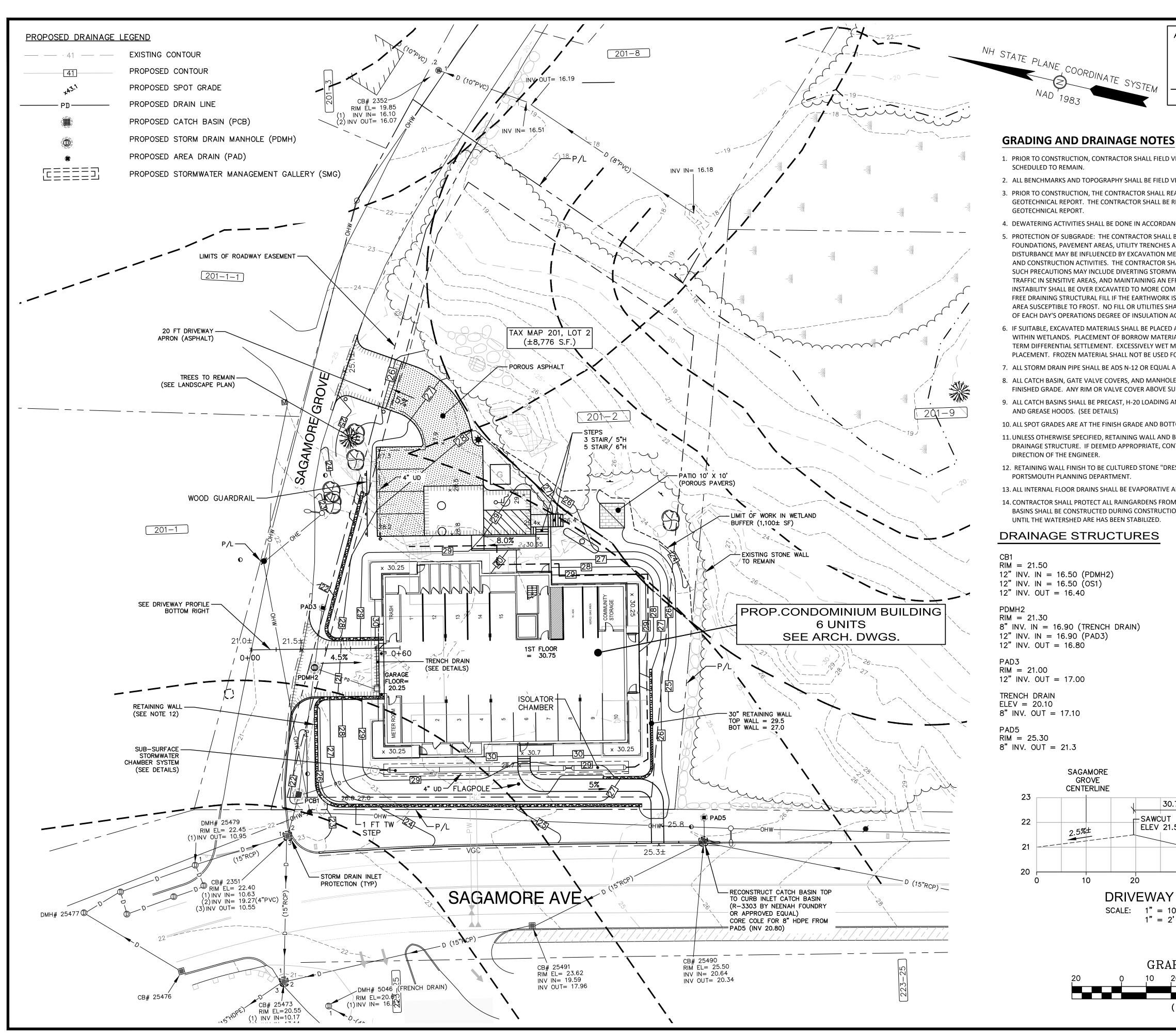
> 960 SAGAMORE ROAD PORTSMOUTH, NH 03801

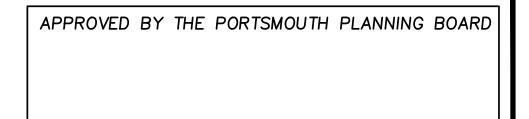
TAX MAP 201, LOT 2

TITLE:

SITE PLAN

SHEET NUMBER:





CHAIRMAN DATE

GRADING AND DRAINAGE NOTES

- 1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES
- 2. ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION
- 3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL READ AND FAMILIARIZE THEMSELVES WITH THE PROJECT GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.
- 4. DEWATERING ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH EPA AND NHDES REGULATIONS AND GUIDELINES.
- 5. 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 BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER, EXPOSED SUBGRADES AREA SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATIONS DEGREE OF INSULATION AGAINST FREEZING.
- 6. 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.
- 7. ALL STORM DRAIN PIPE SHALL BE ADS N-12 OR EQUAL AND APPROVED BY THE ENGINEER.
- 8. ALL CATCH BASIN, GATE VALVE COVERS, AND MANHOLE RIMS SHALL BE SET FLUSH WITH OR NO LESS THAN 0.1' BELOW FINISHED GRADE. ANY RIM OR VALVE COVER ABOVE SURROUNDING FINISHED GRADE WILL NOT BE ACCEPTED.
- 9. ALL CATCH BASINS SHALL BE PRECAST, H-20 LOADING AND BE EQUIPPED WITH 4-FOOT DEEP MIN SEDIMENTATION SUMPS AND GREASE HOODS. (SEE DETAILS)
- 10. ALL SPOT GRADES ARE AT THE FINISH GRADE AND BOTTOM OF CURB WHERE APPLICABLE.
- 11. UNLESS OTHERWISE SPECIFIED, RETAINING WALL AND BUILDING PERIMETER DRAINS SHALL BE DIRECTED TO THE NEAREST DRAINAGE STRUCTURE. IF DEEMED APPROPRIATE, CONTRACTOR SHALL PROVIDE ADDITIONAL UNDERDRAINS AT THE DIRECTION OF THE ENGINEER.
- 12. RETAINING WALL FINISH TO BE CULTURED STONE "DRESSED FIELDSTONE" VENEER, UNLESS OTHERWISE APPROVED F BY PORTSMOUTH PLANNING DEPARTMENT.
- 13. ALL INTERNAL FLOOR DRAINS SHALL BE EVAPORATIVE AND SHALL NOT TIE INTO EXTERNAL STORM DRAIN SYSTEM.
- 14. CONTRACTOR SHALL PROTECT ALL RAINGARDENS FROM CONSTRUCTION STORMWATER RUNOFF. TEMPORARY SEDIMENT BASINS SHALL BE CONSTRUCTED DURING CONSTRUCTION. STORMWATER SHALL NOT BE DIRECTED TO THE RAINGARDENS UNTIL THE WATERSHED ARE HAS BEEN STABILIZED.

DRAINAGE STRUCTURES

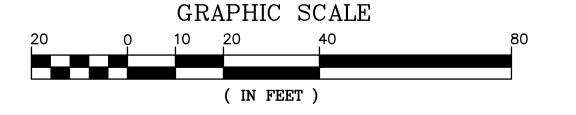
STORMWATER PRACTICES

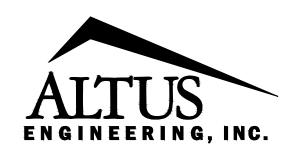
STORMWATER GALLERY A 24" DIA PERF PIPE 1 ROW / 90 FT LENGTH (20 FT ISOLATION CHAMBER) PIPE INV = 24.50ROCK BOTTOM = 24.00

12" INV. OUT = 23.50

OUTLET STRUCTURE RIM = 29.50(SEE CONTROL PLATE DTL, SHT C-6) 6" UD IN = 23.60 12" INV IN - 23.75

SAGAMORE GROVE CENTERLINE 23 30.7'± DRIVEWAY RAMP SAWCUT 22 ELEV 21.5± 2.5% TRENCH DRAIN FINISHED FLOOR
BASEMENT EL 20.25 ELEV 20.10 -DRIVEWAY PROFILE SCALE: 1" = 10' HORIZONTAL 1" = 2' VERTICAL (5X)





PORTSMOUTH, NH 03801 133 COURT STREET (603) 433-2335 www.ALTUS-ENG.com



NOT FOR CONSTRUCTION

ISSUED FOR: PLANNING BOARD

ISSUE DATE:

DECEMBER 29, 2021

RE\	<u>/ISIONS</u>		
NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMITTAL	CDB	11/02/2
1	TAC WS COMMENTS	CDB	11/22/2
2	TAC COMMENTS	CDB	12/29/2

DRAWN BY:. EDW APPROVED BY:

22"×34" 1" = 20' 11"x17" 1" = 40'

OWNER / APPLICANT:

SAGAMORE CORNER, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROJECT:

PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT

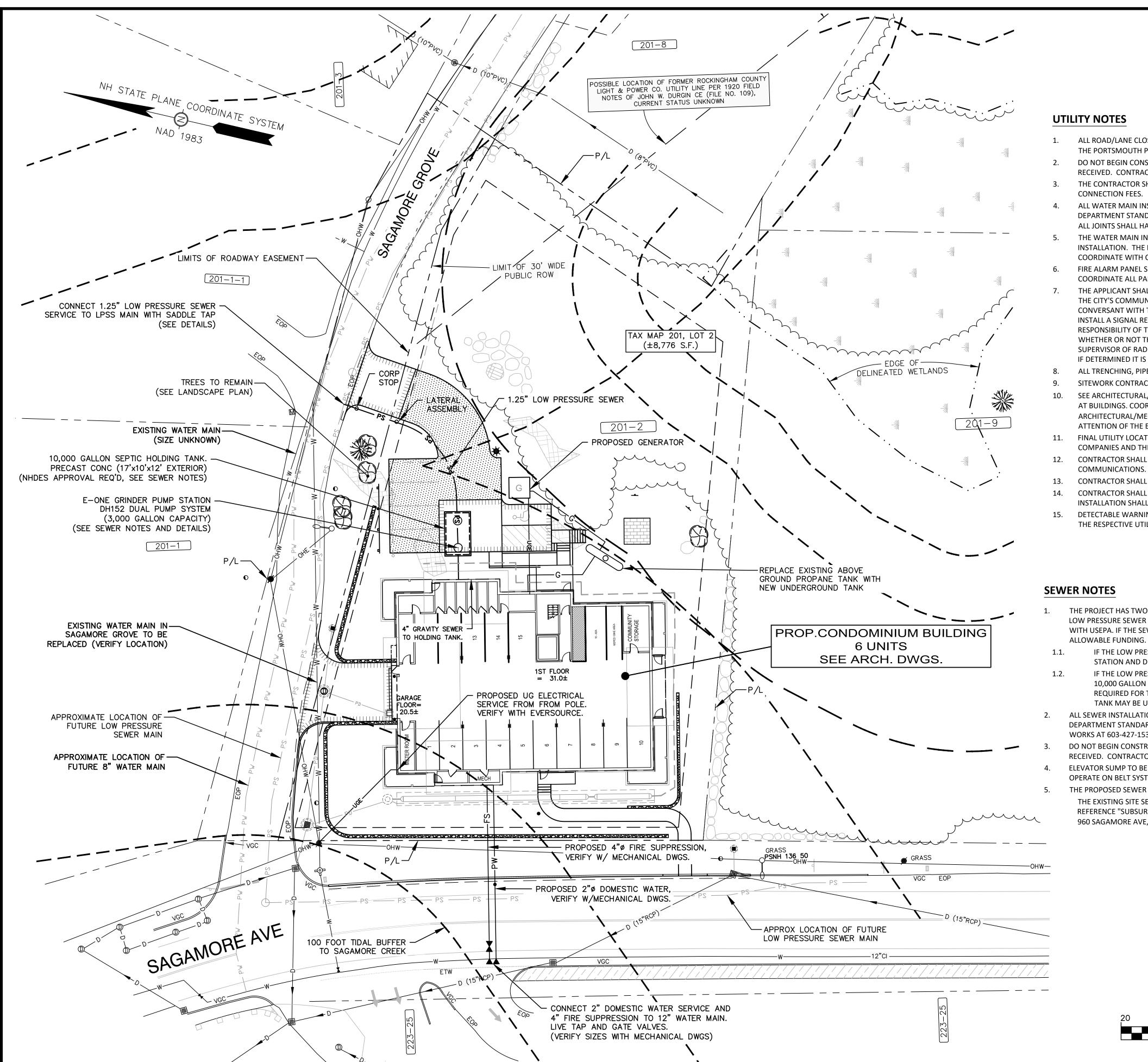
> 960 SAGAMORE ROAD PORTSMOUTH, NH 03801

TAX MAP 201, LOT 2

TITLE:

GRADING AND DRAINAGE PLAN

SHEET NUMBER:





CHAIRMAN DATE

UTILITY NOTES

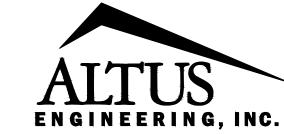
- ALL ROAD/LANE CLOSURES OR OTHER TRAFFIC INTERRUPTIONS ON CITY ROADS SHALL BE COORDINATED WITH THE PORTSMOUTH POLICE DEPARTMENT AND/OR PORTSMOUTH DPW.
- DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE, LOCAL, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH ALL PERMIT CONDITIONS AND REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR POSTING OF ALL BONDS AND PAYMENT OF ALL TAP, TIE-IN AND CONNECTION FEES.
- ALL WATER MAIN INSTALLATIONS AND SERVICE CONNECTIONS SHALL CONFORM TO PORTSMOUTH WATER DEPARTMENT STANDARDS. WATER MAIN SHALL BE WRAPPED WITH A WATER TIGHT POLYETHYLENE WRAPPING. ALL JOINTS SHALL HAVE THREE (3) WEDGES PER JOINT.
- THE WATER MAIN IN SAGAMORE GROVE WILL BE REPLACED AT THE SAME TIME AS THE LOW PRESSURE SEWER INSTALLATION. THE NEW WATER SERVICE SHALL CONNECT TO ACTIVE MAIN LINE SAGAMORE GROVE. COORDINATE WITH CITY OF PORTSMOUTH WATER DEPARTMENT.
- FIRE ALARM PANEL SHALL MONITORED THROUGH A THIRD-PARTY SECURITY COMPANY. CONTRACTOR SHALL COORDINATE ALL PANEL LOCATIONS AND INTERCONNECTIONS WITH FIRE DEPARTMENT.
- THE APPLICANT SHALL HAVE A SITE SURVEY CONDUCTED BY A RADIO COMMUNICATIONS CARRIER APPROVED BY THE CITY'S COMMUNICATION DIVISION. THE RADIO COMMUNICATIONS CARRIER MUST BE FAMILIAR AND CONVERSANT WITH THE POLICE AND RADIO CONFIGURATION. IF THE SITE SURVEY INDICATES IT IS NECESSARY TO INSTALL A SIGNAL REPEATER EITHER ON OR NEAR THE PROPOSED PROJECT, THOSE COSTS SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE APPLICANT SHALL BE REQUIRED TO PAY FOR THE SITE SURVEY WHETHER OR NOT THE SURVEY INDICATES A REPEATER IS NECESSARY. THE OWNER SHALL COORDINATE WITH THE SUPERVISOR OF RADIO COMMUNICATIONS FOR THE CITY. THE SURVEY SHALL BE COMPLETED AND THE REPEATER, IF DETERMINED IT IS REQUIRED, SHALL BE INSTALLED PRIOR TO THE ISSUANCE OF CERTIFICATE OF OCCUPANCY.
- ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL CONFORM TO FEDERAL OSHA AND CITY REGULATIONS.
- SITEWORK CONTRACTOR SHALL COORDINATE ALL WORK WITH MECHANICAL DRAWINGS.
- SEE ARCHITECTURAL/MECHANICAL DRAWINGS FOR EXACT LOCATIONS & ELEVATIONS OF UTILITY CONNECTIONS AT BUILDINGS. COORDINATE ALL WORK WITHIN FIVE (5) FEET OF BUILDINGS WITH BUILDING CONTRACTOR AND ARCHITECTURAL/MECHANICAL DRAWINGS. ALL CONFLICTS AND DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY AND PRIOR TO COMMENCING RELATED WORK.
- FINAL UTILITY LOCATIONS TO BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES AND THE ARCHITECT.
- CONTRACTOR SHALL COORDINATE ALL TELECOMMUNICATIONS INSTALLATIONS WITH CONSOLIDATED COMMUNICATIONS.
- CONTRACTOR SHALL COORDINATE ALL CABLE INSTALLATIONS WITH COMCAST.
- CONTRACTOR SHALL COORDINATE ALL ELECTRICAL INSTALLATIONS WITH EVERSOURCE. ALL ELECTRIC CONDUIT INSTALLATION SHALL BE INSPECTED BY EVERSOURCE PRIOR TO BACKFILL, 48-HOUR MINIMUM NOTICE REQUIRED.
- DETECTABLE WARNING TAPE SHALL BE PLACED OVER THE ENTIRE LENGTH OF ALL BURIED UTILITIES, COLORS PER THE RESPECTIVE UTILITY PROVIDERS.

SEWER NOTES

- THE PROJECT HAS TWO OPTIONS FOR SEWER SERVICE. THE CITY OF PORTSMOUTH INTENDS TO INSTALL A NEW LOW PRESSURE SEWER FORCE MAIN ALONG SAGAMORE GROVE AS AN AGREEMENT TO THE CONSENT DECREE WITH USEPA. IF THE SEWER CONSTRUCTION IS ESTIMATED TO BE COMPLETED IN NOVEMBER OF 2022, PENDING
- IF THE LOW PRESSURE SEWER MAIN IS COMPLETE, THE PROJECT WILL INSTALL AN E-ONE GRINDER PUMP STATION AND DISCHARGE TO THE 2" LOW PRESSURE SEER IN SAGAMORE GROVE.
- IF THE LOW PRESSURE SEWER IN SAGAMORE GROVE IS NOT COMPLETE, THE PROJECT WILL INSTALL A 10.000 GALLON TEMPORARY HOLDING TANK. A PERMIT FROM NHDES SUBSURFACE SYSTEMS BUREAU IS REQUIRED FOR THE INSTALLATION OF THE HOLDING TANK. WHEN THE LPSS IS COMPLETED, THE HOLDING TANK MAY BE USED TO HOUSE THE NEW E-ONE PUMP STATION.
- ALL SEWER INSTALLATIONS AND SERVICE CONNECTIONS SHALL CONFORM TO PORTSMOUTH WATER AND SEWER DEPARTMENT STANDARDS. CONTRACTOR SHALL CONTACT CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS AT 603-427-1530 TO COORDINATE INSPECTION OF SEWER AND WATER WORK.
- DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE, LOCAL, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH ALL PERMIT CONDITIONS AND REQUIREMENTS.
- ELEVATOR SUMP TO BE CONSTRUCTED MONOLITHICALLY AND SEALED TO BE WATER TIGHT. ELEVATOR TO OPERATE ON BELT SYSTEM, NOT HYDRAULICS. EMERGENCY PUMP IN ELEVATOR SUMP TO TIE INTO SEWER. THE PROPOSED SEWER DESIGN FLOW IS 1,260 GPD, BASED ON 70 GPD PER PERSON AND 3 OCCUPANTS PER UNIT.
- THE EXISTING SITE SEPTIC IS PERMITTED AT 1,430 GPD CAPACITY BASED ON METERED FLOW. REFERENCE "SUBSURFACE SEWERAGE DISPOSAL SYSTEM" FOR THE GOLDEN EGG, GOSSELIN LIVING TRUST, 960 SAGAMORE AVE, PORTSMOUTH, NH 03801, BY THE WRIGHT CHOICE, 10/22/2011.

GRAPHIC SCALE

(IN FEET)



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- CDB 11/02/21 O INITIAL SUBMITTAL TAC WS COMMENTS CDB 11/22/21 2 TAC COMMENTS CDB 12/29/21

DRAWN BY:. EDW APPROVED BY: 5079-SITE.dwg

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OWNER / APPLICANT:

SAGAMORE CORNER, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROJECT:

PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT

> 960 SAGAMORE ROAD PORTSMOUTH, NH 03801

TAX MAP 201, LOT 2

TITLE:

UTILITIES PLAN

SHEET NUMBER:

SEDIMENT AND EROSION CONTROL NOTES

PROJECT NAME AND LOCATION

Owner

SAGAMORE CORNER, LLC 273 CORPORATE DRIVE PORTSMOUTH, NH 03801

DESCRIPTION

The project consists of the redevelopment of a commercial retail property on Sagamore Road. The existing building will be razed and replaced with a modern 2—story residential building containing six (6) new residential units, underground parking, and site amenities. Stormwater will be managed and treated with sub—surface chambers and porous pavement. Site improvements include underground utilities, landscaping and associated site improvements.

<u>DISTURBED AREA</u>

The total area to be disturbed on the parcel and for the building, driveway, parking area, drainage, and utility construction is approximately 26,500 SF± (less than 1—acre). 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 adn erosion control during constyruction are still required.

NPDES CONSTRUCTION GENERAL PERMIT— exempt

Contractor shall is NOT required to prepare a Stormwater Pollution Prevention Plan (SWPPP) or file an NOI (Notice of Intent) in accordance with federal storm water permit requirements under the USEPA—NPDES Construction General Permit.

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 bulding, disconnect and remove utilities.
- 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 prior to directing flow to them.
- 6. Construct Foundations and underground garage parking, install temporary septic holding tank.
- 7. Construct building. Construct pavement & driveway access.
- 8. Construct stormwater treatment chambers.
- 9. Loam and seed disturbed areas.
- 10. 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 a municipal closed drainage system outletting to Sagamore Creek.

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 —

<u>Type</u> Hay or Straw	Rate per 1,000 s.f. 70 to 90 lbs. from	<u>Use and Comments</u> Must be dry and free m mold. May be used ngs.
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		* The organic matter content is between 80 and 100%, dry weight basis. * Particle size by weight is 100% passing a 6"screen and a minimum of 70 %, maximum of 85%, passing a 0.75" screen * The organic portion needs to be fibrous elongated. * Large portions of silts, clays or fine so not acceptable in the mix. * Soluble salts content is less than 4.0

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.

mmhos/cm.

* The pH should fall between 5.0 and 8.0.

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. Syntheti

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:

roquii ornioi			
<u>Physical Prop</u> Filtering Effici		<u>Test</u> VTM-51	Requirements 75% minimum
Tensile Streng 20% Maximum	•	VTM-52	Extra Strength 50 lb/lin in (min) Standard Strength 30 lb/lin in (min)

Tow 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

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 $1\frac{1}{2}$ ", 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.
- 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.

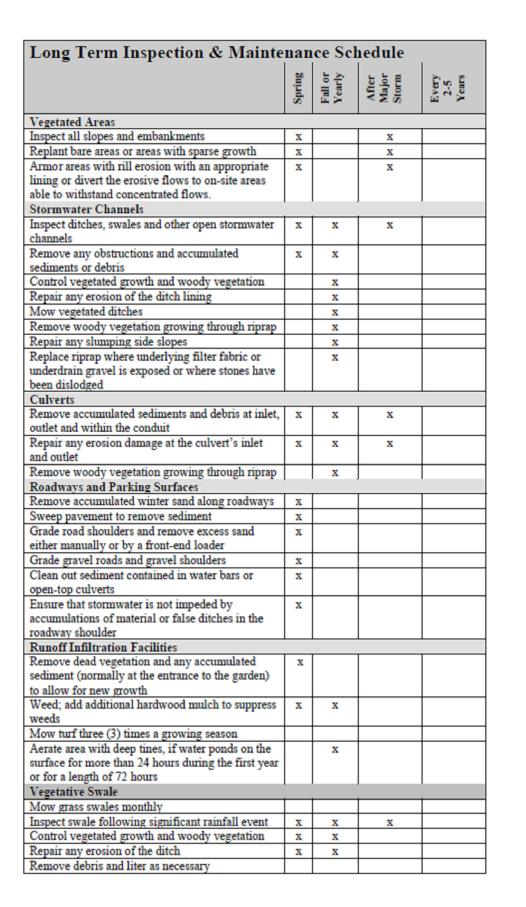
- 3. Seed Mixture (See Landscape Drawings for additional information):
- 3.1. Lawn seed mix shall be a fresh, clean new seed crop. The Contractor shall furnish a dealer's guaranteed statement of the composition of the mixture and the percentage of purity and germination of each variety.
- 3.2. Seed mixture 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.

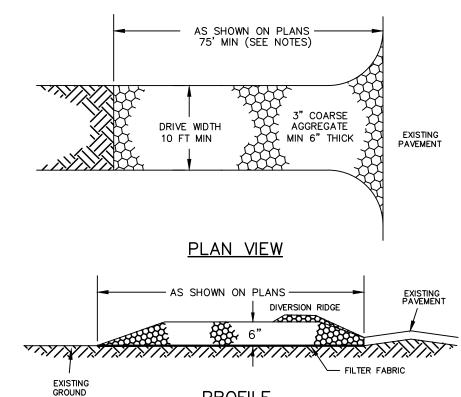
WINTER CONSTRUCTION NOTES

- 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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APPROVED BY THE PORTSMOUTH PLANNING BOARD

DATE

CHAIRMAN

CONSTRUCTION SPECIFICATIONS

1. REFERENCE NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3 (LATEST EDITION), SECTION 4.2
"TEMPORARY CONSTRUCTION EXIT" REQUIREMENTS AND BMP DETAIL.

PROFILE

- "TEMPORARY CONSTRUCTION EXIT" REQUIREMENTS AND BMP DETAIL.

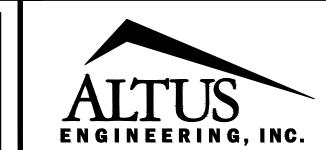
 2. STONE SIZE 3" COARSE AGGREGATE
- THICKNESS SIX (6) INCHES (MINIMUM).
 LENGTH 75 FOOT MINIMUM, OR 50 FOOT ALLOWED WHEN DIVERSION RIDGE IS PROVIDED.
- . <u>WIDTH</u> 1/2 OF DRIVEWAY (10 FOOT MINIMUM).
 . <u>FILTER FABRIC</u> MIRAFI 600X OR APPROVED EQUAL.
- . <u>FILTER FABRIC</u> MIRAFI 600X OR APPROVED EQUAL.
 . <u>SURFACE WATER CONTROL</u> 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.

 8. 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.

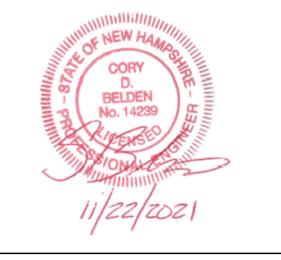
 9. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS—OF—WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

STABILIZED CONSTRUCTION EXIT NOT TO SCALE

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.



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NOT FOR CONSTRUCTION

ISSUED FOR:

PLANNING BOARD

CDB 11/22/2

5079-SITE.dwa

ISSUE DATE: NOVEMBER 22, 2021

1 TAC WS COMMENTS

REVISIONS
NO. DESCRIPTION

O INITIAL SUBMITTAL

CDB 11/02/2

DRAWN BY: _____ CDB
APPROVED BY: ____ EDW

SCALE: 22"x34" 1" = 20' 11"x17" 1" = 40'

OWNER / APPLICANT:

DRAWING FILE: _

SAGAMORE CORNER, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROJECT:

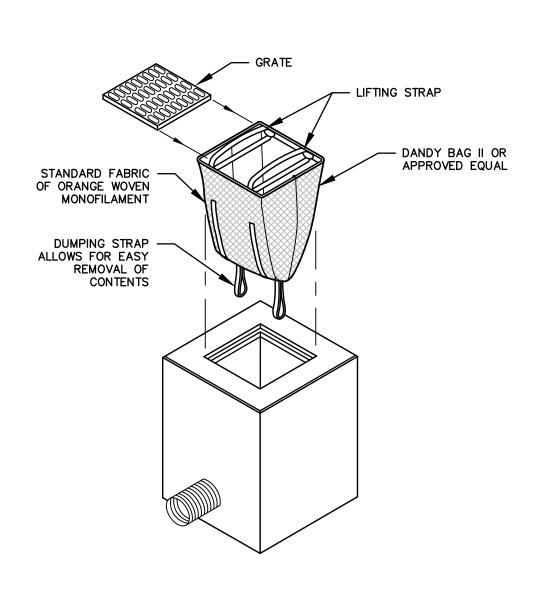
PROPOSED MULTI-FAMILY
RESIDENTIAL
DEVELOPMENT
TAX MAP 201, LOT 2

SAGAMORE ROAD PORTSMOUTH, NH 03801

דודו ב.

EROSION CONTROL NOTES AND DETAILS

SHEET NUMBER:



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.

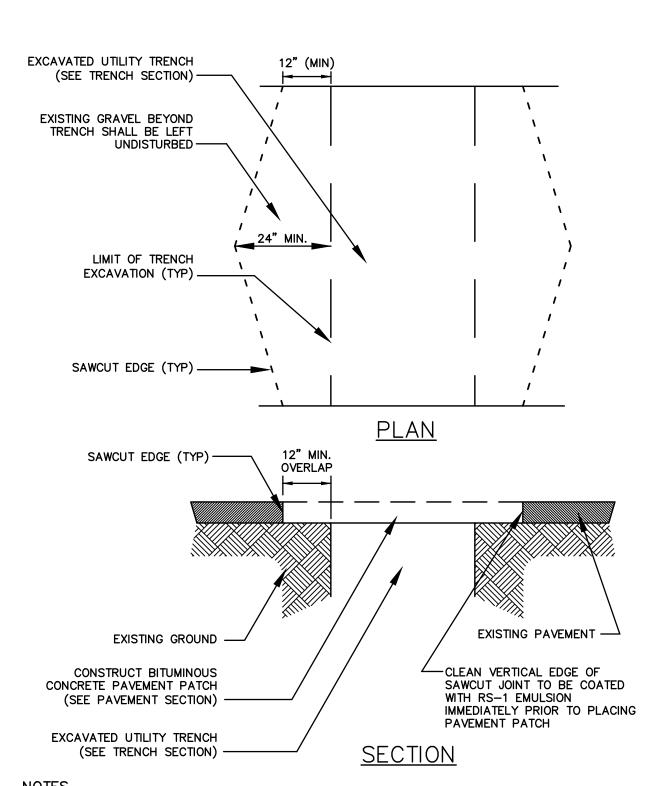
MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF THE UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE CATCH BASIN INSERT. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY THE UNIT, LIFT THE 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

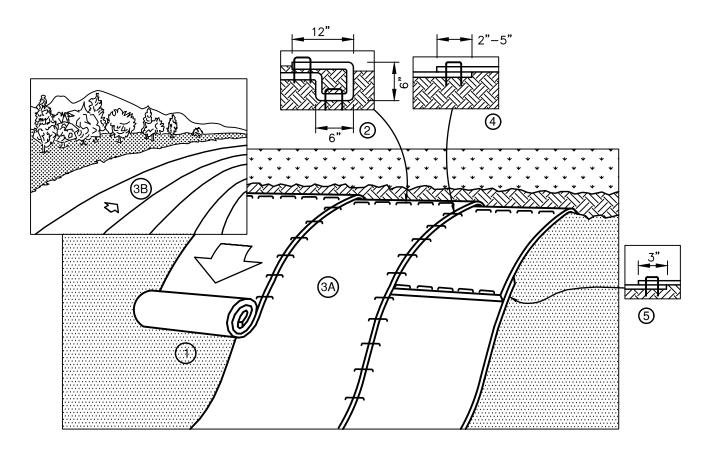
INLET PROTECTION NOT TO SCALE



- 1. MACHINE CUT EXISTING PAVEMENT.
- 2. ALL TEMPORARY, DAMAGED OR DEFECTIVE PAVEMENT SHALL BE REMOVED PRIOR TO PLACEMENT OF PERMANENT TRENCH REPAIRS.
- 3. DIAMOND PATCHES, SHALL BE REQUIRED FOR ALL TRENCHES CROSSING ROADWAY. DIAMOND PATCHES SHALL MEET NHDOT REQUIREMENTS.

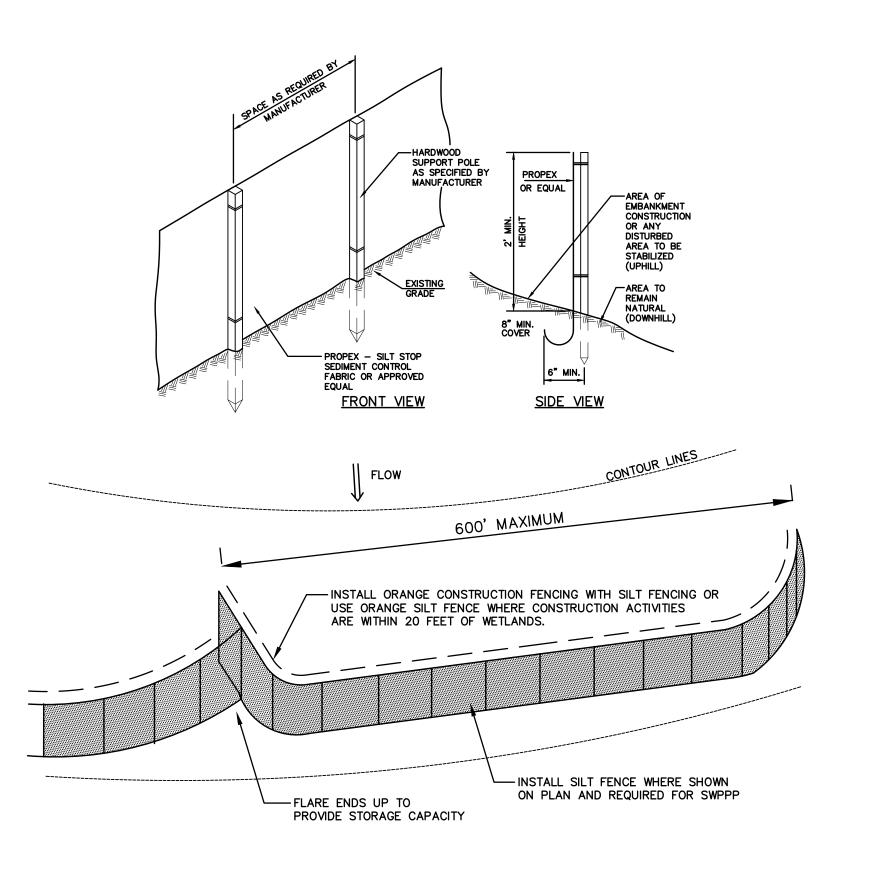
TYPICAL TRENCH PATCH

NOT TO SCALE



- 1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME,
- 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 APPROPRIÁTE 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

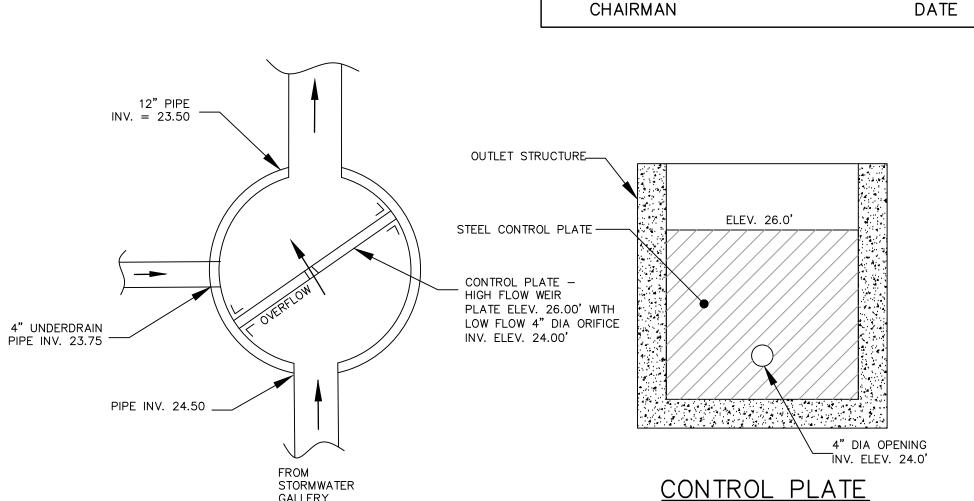


SILT AND ORANGE CONSTRUCTION FENCE DETAIL

NOT TO SCALE

APPROVED BY THE PORTSMOUTH PLANNING BOARD

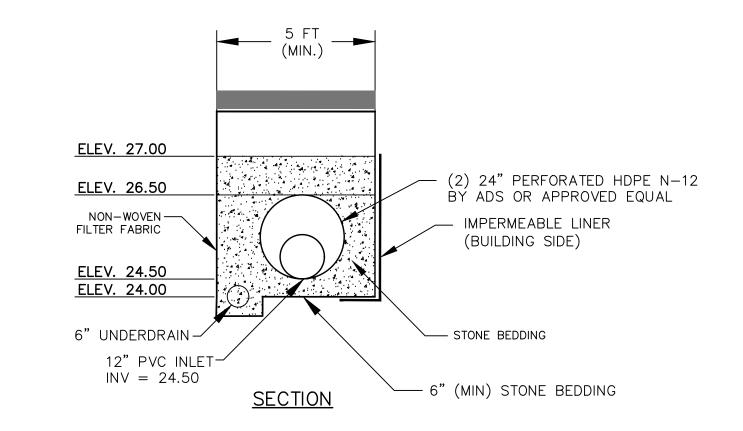
NOT TO SCALE



OUTLET CONTROL STRUCTURE

STORMWATER

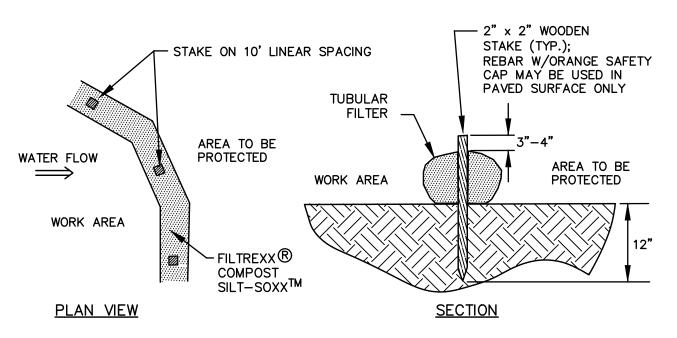
GALLERY



NOTE: PERFERATED PIPES TO BE LAYED FLAT. 6" MINIMUM THICKNESS OF ROCK ABOVE AND BELOW PIPE

STORMWATER MANAGEMENT GALLERY

NOT TO SCALE

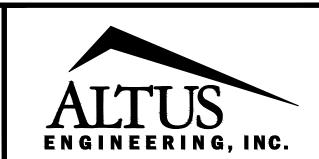


NOTES:

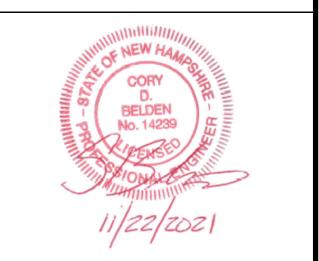
1. SILTSOXX OR APPROVED EQUAL SHALL BE USED FOR TUBULAR SEDIMENT BARRIERS. 2. ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS.

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



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NOT FOR CONSTRUCTION

ISSUED FOR:

PLANNING BOARD

ISSUE DATE: NOVEMBER 22, 2021

REVISIONS

NO. DESCRIPTION BY DATE O INITIAL SUBMITTAL CDB 11/02/2 TAC WS COMMENTS CDB 11/22/2

DRAWN BY: _ EDW APPROVED BY: DRAWING FILE: _

SCALE: 22"x34" 1" = 20' 11"x17" 1" = 40"

OWNER / APPLICANT:

SAGAMORE CORNER, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

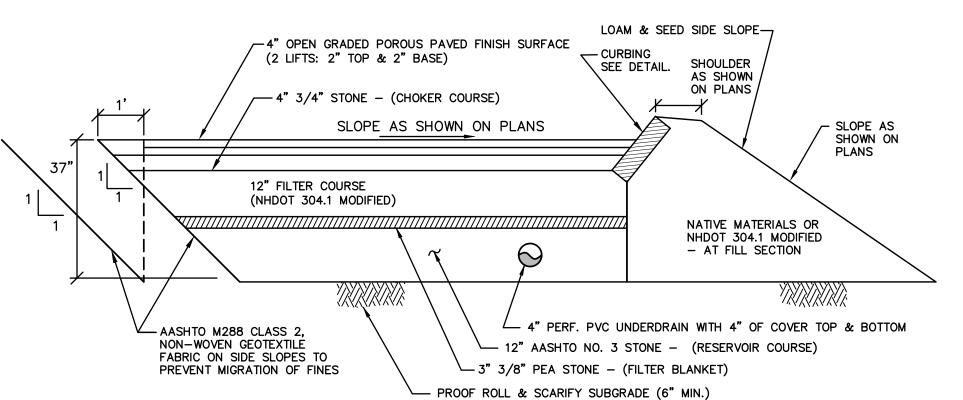
PROJECT:

PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENTTAX MAP 201, LOT 2

> SAGAMORE ROAD PORTSMOUTH, NH 03801

CONSTRUCTION DETAILS

SHEET NUMBER:



MATER	IAL GRADATIONS				,		
RESERVOIR COURSE		CHOKER COURSE STONE		GRAVEL FILTER COURSE (NHDOT 304.1 MODIFIED)		3/8" PEA STONE	
SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT
2-1/2" 2" 1-1/2" 1" 1/2"	100 90 - 100 35 - 70 0 - 15 0 - 5	1-1/2" 1" 1/2" # 4 # 8	100 95 - 100 25 - 60 0 - 10 0 - 5	6" # 4 # 200	100 70 - 100 0 - 6	1/2" 3/8" # 4 # 8 # 16	100 85 - 100 10 - 30 0 - 10 0 - 15

POROUS PAVEMENT CROSS SECTION NOT TO SCALE

NOTES:

- DESIGN OF POROUS PAVEMENT SHALL BE IN ACCORDANCE WITH UNHSC DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS.
- CONTRACTOR TO REMOVE ANY EXISTING BURIED LAYERS OF LOAM OR UNSUITABLE MATERIAL DURING THE EXCAVATION OF THE PARKING AREA AND/OR WHENEVER ENCOUNTERED IN TRENCHES.
- 3. A PROFESSIONAL ENGINEER SHALL INSPECT SITE PREPARATION AND INSTALLATION OF POROUS
- 4. THE TOP LAYER (WEARING COURSE) SHALL BE PRE-BLENDED PG 76-28 MODIFIED WITH SBS. THE BASE COURSE SHOULD BE, AT A MINIMUM, PG 64-28 WITH 5 POUNDS OF FIBER PER TON ASPHALT MIX. IF SUFFICIENT STAGING OR USE OF THE BASE COURSE SECTION WILL BE REQUIRED PRIOR TO THE APPLICATION OF THE WEARING COURSE, THE ENGINEER MAY DECIDE TO USE PRE-BLENDED PG 64V-28 MODIFIED WITH SBS ON BOTH COURSES.
- 5. CONTRACTOR SHALL PROVIDE SUBMITTALS FOR POROUS PAVEMENT & SUBGRADE MATERIALS AS NOTED IN THE ABOVE SPECIFICATION A MINIMUM OF 14-DAYS PRIOR TO COMMENCING CONSTRUCTION.
- 6. THE CONSTRUCTION OF THE POROUS PAVEMENT SHALL BE IN ACCORDANCE WITH THE UNHSC DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS.

NHDOT ITEM 403.12 - HOT
BITUMINOUS CONCRETE
PAVEMENT (4" NOMINAL)

1-1/2" WEARING COURSE, (TYPE 12 mm)
2-1/2" BINDER COURSE, (TYPE 19 mm)

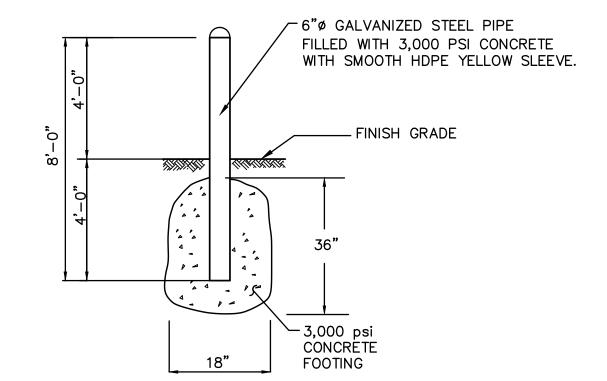
SLOPE AS SHOWN ON PLANS

TACK COAT BETWEEN PAVEMENT COURSES

NATIVE SUBGRADE
(OR FILL WHERE
REQUIRED)

NHDOT ITEM 304.3 - 6" CRUSHED GRAVEL

PENDING GEOTECH REPORT PAVEMENT CROSS SECTION

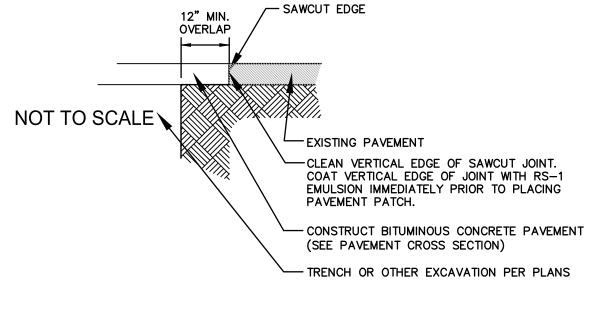


CHAIRMAN

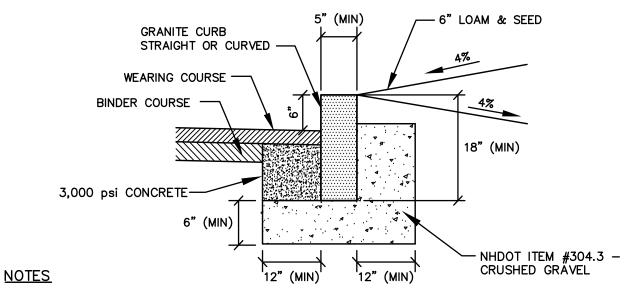
APPROVED BY THE PORTSMOUTH PLANNING BOARD

DATE

BOLLARD NOT TO SCALE



TYPICAL PAVEMENT SAWCUT NOT TO SCALE



- SEE PLANS FOR CURB LOCATION.
- 2. SEE PLANS FOR PAVEMENT CROSS SECTION.
- 3. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
- 4. MINIMUM LENGTH OF CURB STONES = 4'.
- 4. MINIMUM LENGTH OF CORB STONES = 4.
- 5. MAXIMUM LENGTH OF CURB STONES = 10'.

CUT WHEN CALL FOR ON THE PLANS.

6. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES — SEE CHART.

7. CURB ENDS TO ROUNDED AND BATTERED FACES TO BE

- 8. CURB SHALL BE INSTALLED PRIOR TO PLACEMENT OF TOP PAVEMENT COURSE.
- 9. JOINTS BETWEEN CURB STONES SHALL BE MORTARED.
- RADIUS
 MAX. LENGTH

 21'
 3'

 22'-28'
 4'

 29'-35'
 5'

 36'-42'
 6'

 43'-49'
 7'

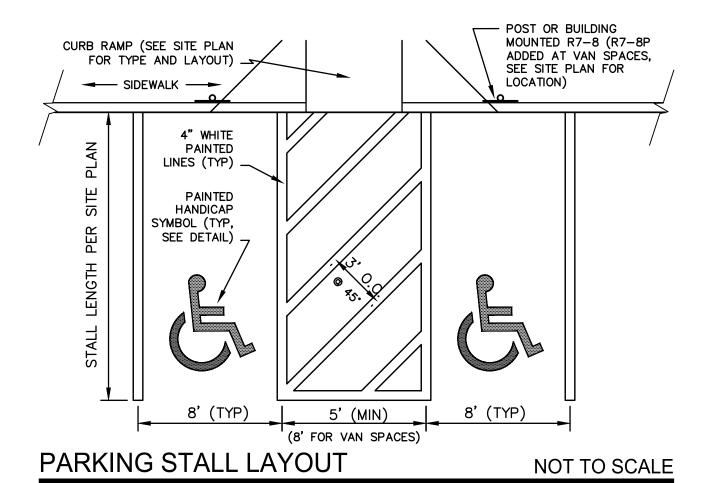
 50'-56'
 8'

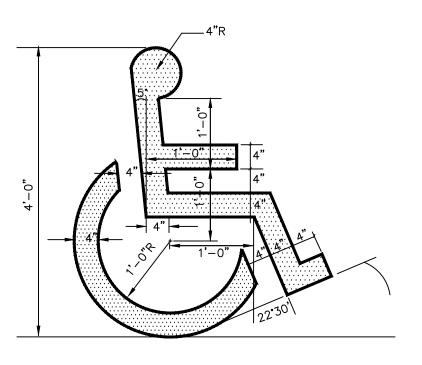
 57'-60'
 9'

 OVER 60'
 10'

VERTICAL GRANITE CURB

NOT TO SCALE



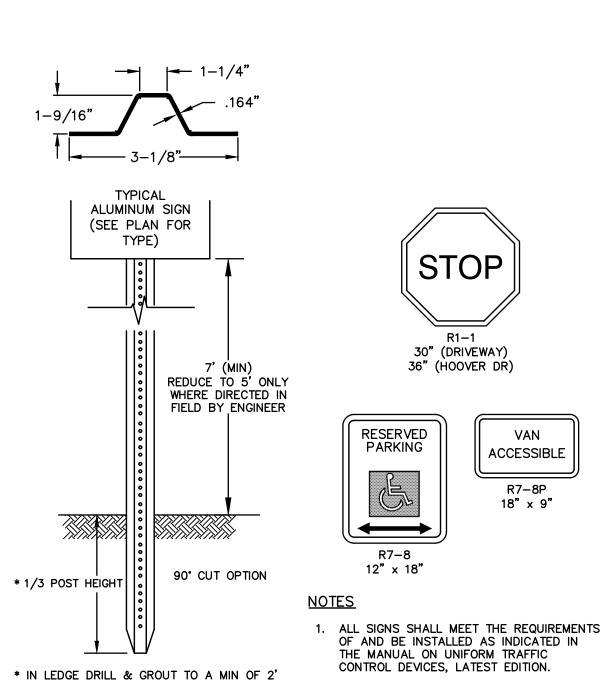


<u>NOTES</u>

1. SYMBOL TO BE PAINTED IN ALL HANDICAPPED ACCESSIBLE SPACES IN WHITE PAINT (BLUE-PAINTED SQUARE BACKGROUND OPTIONAL).

PAINTED ADA SYMBOL

NOT TO SCALE



NOT TO SCALE

LENGTH: AS REQUIRED

SIGN DETAILS

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)

ALTUS
ENGINEERING, INC.

133 COURT STREET (603) 433-2335

PORTSMOUTH, NH 03801 www.ALTUS-ENG.com

CORY
D. BELDEN
No. 14239

NOT FOR CONSTRUCTION

ISSUED FOR:

PLANNING BOARD

ISSUE DATE: NOVEMBER 22, 2021

REVISIONS

NO. DESCRIPTION
O INITIAL SUBMITTAL

1 TAC WS COMMENTS CDB 11/22/2

BY DATE

CDB 11/02/2

DRAWN BY: _____ CDB
APPROVED BY: _____ EDW

SCALE: 22"x34" 1" = 20'

11"x17" 1" = 40"

OWNER / APPLICANT:

DRAWING FILE: _

SAGAMORE CORNER, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROJECT:

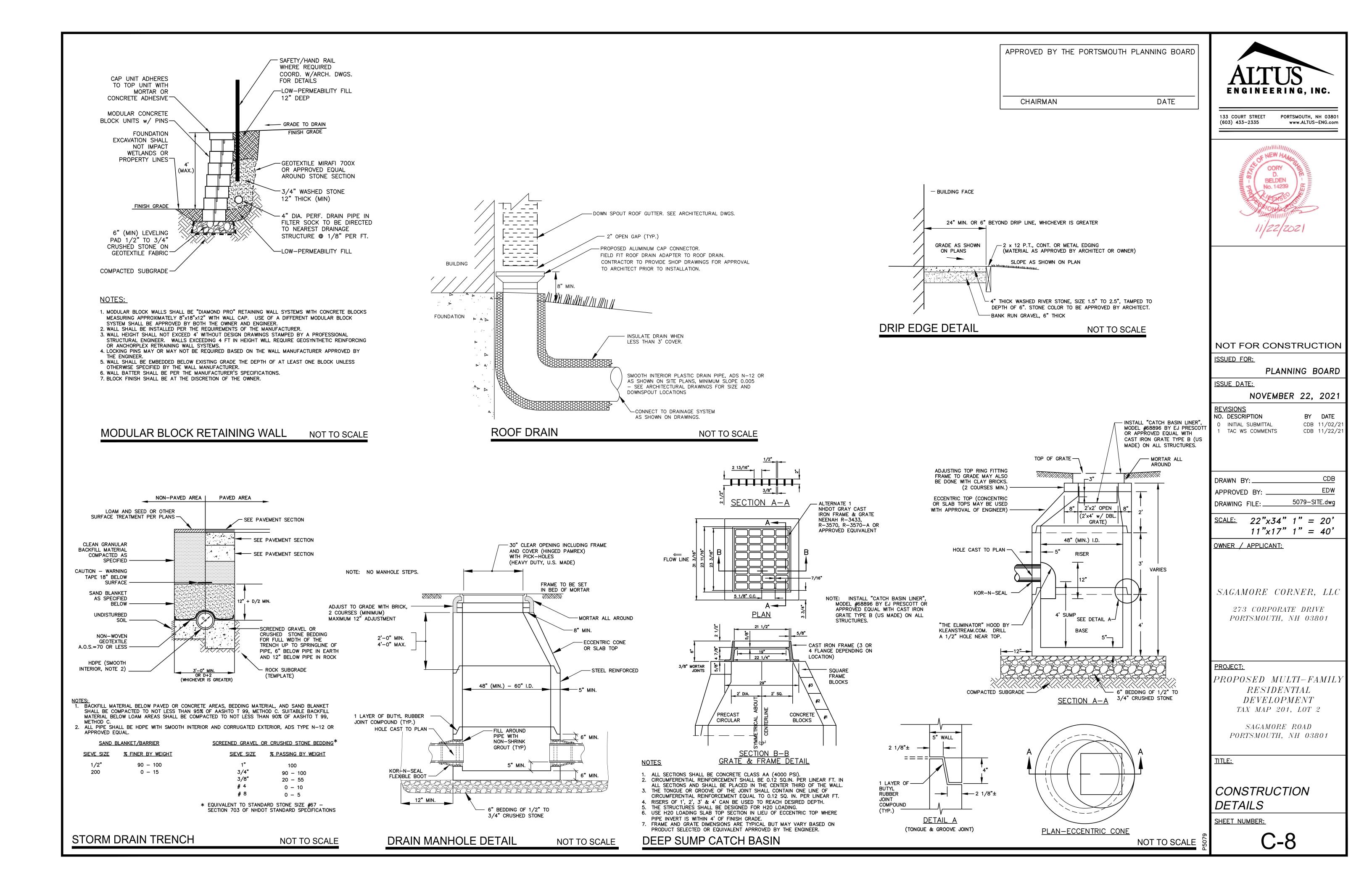
PROPOSED MULTI-FAMILY
RESIDENTIAL
DEVELOPMENT
TAX MAP 201, LOT 2

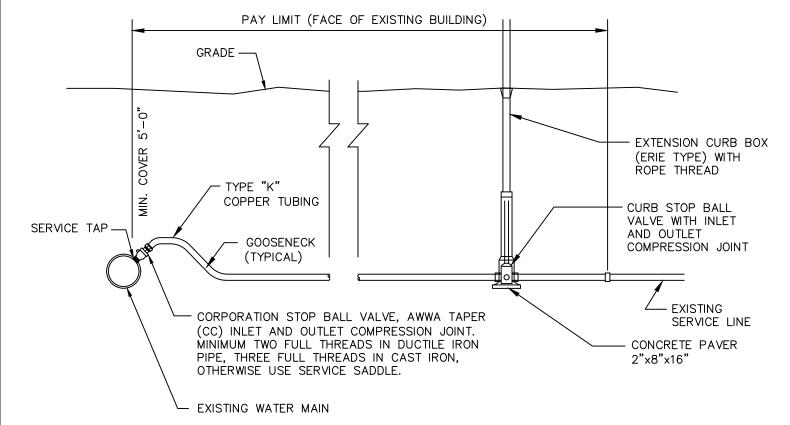
SAGAMORE ROAD PORTSMOUTH, NH 03801

TITLE:

CONSTRUCTION DETAILS

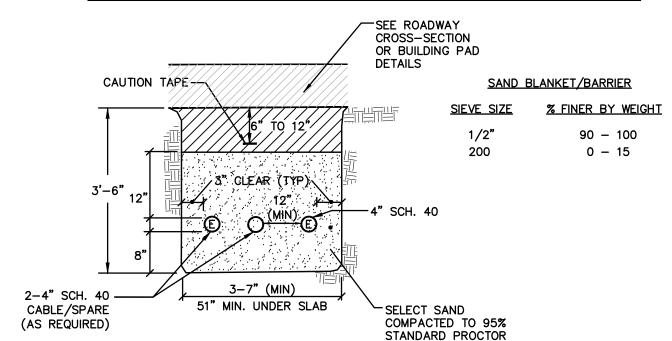
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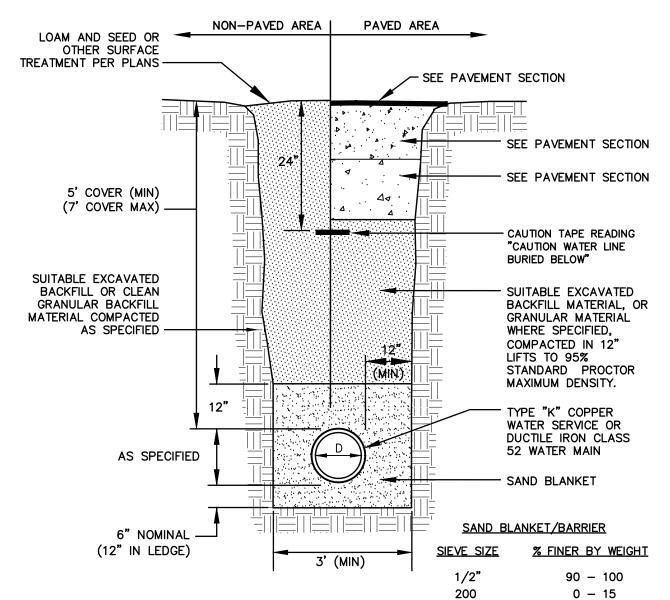
- PROVIDE NEW LINE USING CONTINUOUS LENGTHS OF COPPER. NO COUPLING ALLOWED IN ROADWAY WITHOUT APPROVAL OF ENGINEER.
- 2. TAPS TO BE MADE AT APPROXIMATELY 2:00 & 10:00
- PROVIDE FOR SERVICE LINE CONTRACTION AND EXPANSION BY INSTALLING "S" IN SERVICE LINE NEAR MAIN.
- 4. IF SERVICE IS INSTALLED WITH LESS THAN 5' COVER, INSULATE OVER LINE.
- REMOVE EXISTING CURB STOP.
- 6. CONNECT CURB STOP TO EXISTING SERVICE LINE AT PROPERTY LINE OR AT LOCATION APPROVED BY THE ENGINEER (NO COUPLING WITHOUT APPROVAL OF ENGINEER) AFTER PRESSURE TESTING AND DISINFECTION.
- SHUT OFF EXISTING CORPORATION AND REMOVE OR ABANDON EXISTING SERVICE
- 8. CURB BOX SHALL BE SET IN THE GRASS/LANDSCAPE AREA BETWEEN CURB AND SIDEWALK UNLESS DIRECTED OTHERWISE.
- 9. 2" OR LARGER SERVICE CONNECTIONS SHALL USE A STAINLESS STEEL SERVICE SADDLE.

SERVICE CONNECTION DETAIL NOT TO SCALE



- 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.

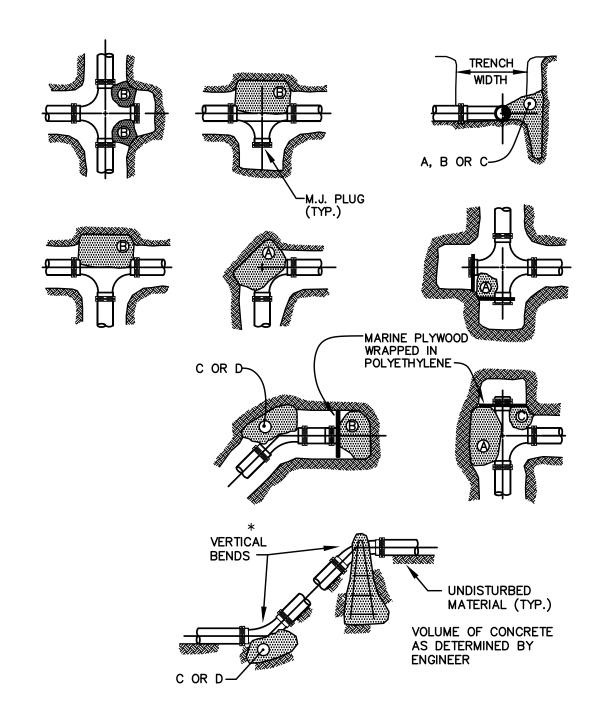
ELECTRIC / COMMUNICATION TRENCH NOT TO SCALE



- 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,
- 2. WATER MAINS SHALL BE POLY WRAPPED.
- 3. WATER MAINS SHALL HAVE 3 WEDGES PER JOINT

WATER TRENCH

NOT TO SCALE



150 psi	BLOCKING BEARING ON UNDISTURBED MATERIAL							
	REACTION	PIPE SIZE						
Ш	TYPE	4"	6"	8"	10"	12'		
TEST PRESSURE	A 90° B 180° C 45° D 22-1/2° E 11-1/4°	0.89 0.65 0.48 0.25 0.13	2.19 1.55 1.19 0.60 0.30	3.82 2.78 2.12 1.06 0.54	11.14 8.38 6.02 3.08 1.54	17.2 12.0 9.32 4.74 2.38		

- 1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCHWALL HAS BEEN DISTURBED, EXCAVATE BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
- ON BENDS AND TEES, EXTEND THRUST
 BLOCKS FULL LENGTH OF FITTING.
 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 POLYETHYLENE (6 MIL) SHALL BE PLACED AROUND FITTINGS PRIOR TO CONCRETE PLACEMENT.

THRUST BLOCKING DETAIL

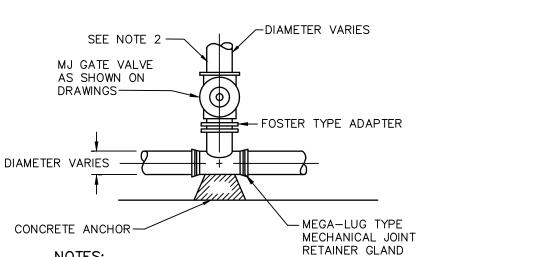
NOT TO SCALE

SEWER TRENCH SECTION NOT TO SCALE

(WHICHEVER IS GREATER)

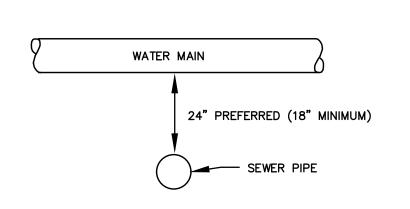
BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T99, METHOD C. SUITABLE BACKFILL

MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99,



- 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 DETAIL NOT TO SCALE



- 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.

PAVED AREA

SEE PAVEMENT/PATH SECTION

SEE PAVEMENT SECTION

SEE PAVEMENT SECTION

+ D/2 MIN.

─ INSTALL 2 LAYERS OF 2" THICK BY 2'

WIDE RIGID EPS INSULATION, WHERE

COVER IS LESS THAN 6 FEET (TYP.)

-CRUSHED STONE BEDDING AS

6" BELOW PIPE IN EARTH AND

CRUSHED STONE BEDDING *

% PASSING BY WEIGHT

100

90 - 100

20 - 55

0 - 10

0 – 5

SPECIFIED FOR FULL WIDTH

OF THE TRENCH UP TO

12" BELOW PIPE IN ROCK

SPRINGLINE OF PIPE

ROCK SUBGRADE

(TEMPLATE)

<u>SIEVE SIZE</u>

3/4"

3/8"

WATER / SEWER CROSSING

LOAM AREA

4" COMPACTED

LOAM & SEED-

CLEAN GRANULAR

BACKFILL MATERIAL

SAND BLANKET

COMPACTED AS SPECIFIED -

CAUTION - WARNING TAPE 18" BELOW SURFACE -

AS SPECIFIED BELOW

METHOD C.

200

SAND BLANKET

% FINER BY WEIGHT

90 - 100

0 - 15

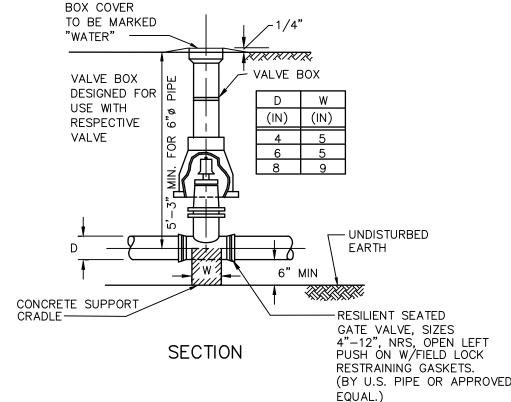
 st EQUIVALENT TO STANDARD STONE SIZE #67 - SECTION

703 OF NHDOT STANDARD SPECIFICATIONS

UNDISTURBED SOIL

NOT TO SCALE

APPROVED BY THE PORTSMOUTH PLANNING BOARD CHAIRMAN DATE



WATER VALVE DETAIL

STANDARD TRENCH NOTES:

100% 90 - 100%

0-10%

20 - 55%

2" IS IN CONTACT WITH THE PIPE.

400 RESPECTIVELY.

BELOW GRADE

ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: BACKFILL AS

STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN OF THE DRAWING.

PASSING #4 SIEVE

PASSING #8 SIEVE

3. SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT

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

DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR

5. BASE COURSE AND PAVEMENT SHALL MEET THE REQUIREMENTS OF THE NEW

HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE

MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.

EXCLUDE DEBRIS; PIECES OF PAVEMENT; ORGANIC MATTER; TOP SOIL; ALL WET

STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES - DIVISIONS 300 AND

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

W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATION

FEET BELOW FINISHED GRADE, BUT NOT LESS THAT 1 FOOT ABOVE THE TOP OF

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

OR SOFT MUCK, PEAT, OR CLAY; ALL EXCAVATED LEDGE MATERIAL; ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION; AND ANY MATERIAL WHICH, AS

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

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL

PASSING 1 INCH SCREEN

PASSING 3/4 INCH SCREEN

PASSING 3/8 INCH SCREEN

2. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY.

LOAM, ORGANIC MATTER AND MEETING ASTM C33, STONE SIZE NO. 67.

OR CRUSHED STONE 1-1/2 INCH TO 1/2 INCH SHALL BE USED.

ISSUED FOR: NOT TO SCALE

ISSUE DATE:

PLANNING BOARD

NOT FOR CONSTRUCTION

ENGINEERING, INC.

CORY

BELDEN

No. 14239

PORTSMOUTH, NH 03801

www.ALTUS-ENG.com

133 COURT STREET

(603) 433-2335

NOVEMBER 22, 2021

REVISIONS

NO. DESCRIPTION BY DATE INITIAL SUBMITTAL CDB 11/02/2 TAC WS COMMENTS CDB 11/22/2

DRAWN BY: EDW APPROVED BY:

SCALE: 22"x34" 1" = 20"11"x17" 1" = 40"

<u>OWNER / APPLICANT:</u>

DRAWING FILE: _

SAGAMORE CORNER, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROJECT:

PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT

> SAGAMORE ROAD PORTSMOUTH, NH 03801

THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION . FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE. CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE NEW HAMPSHIRE

REQUIREMENTS FOR CLASS A (3000#) CONCRETE AS FOLLOWS: CEMENT: 6.0 BAGS PER CUBIC YARD WATER: 5.75 GALLONS PER MAXIMUM SIZE OF AGGREGATE: 1 INCH CONCRETE BAG CEMENT ENCASEMENT IS NOT ALLOWED FOR PVC PIPE.

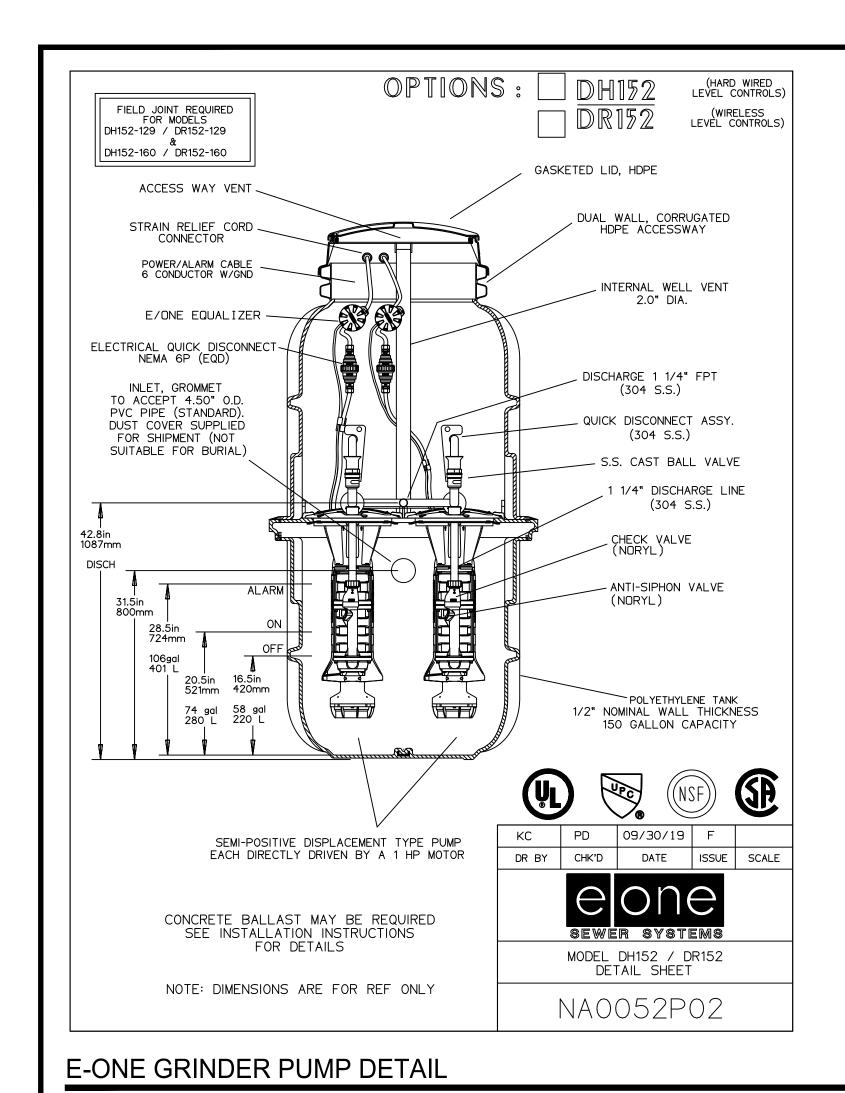
10. CONCRETE FULL ENCASEMENT: IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MINIMUM). BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.

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.

TAX MAP 201, LOT 2

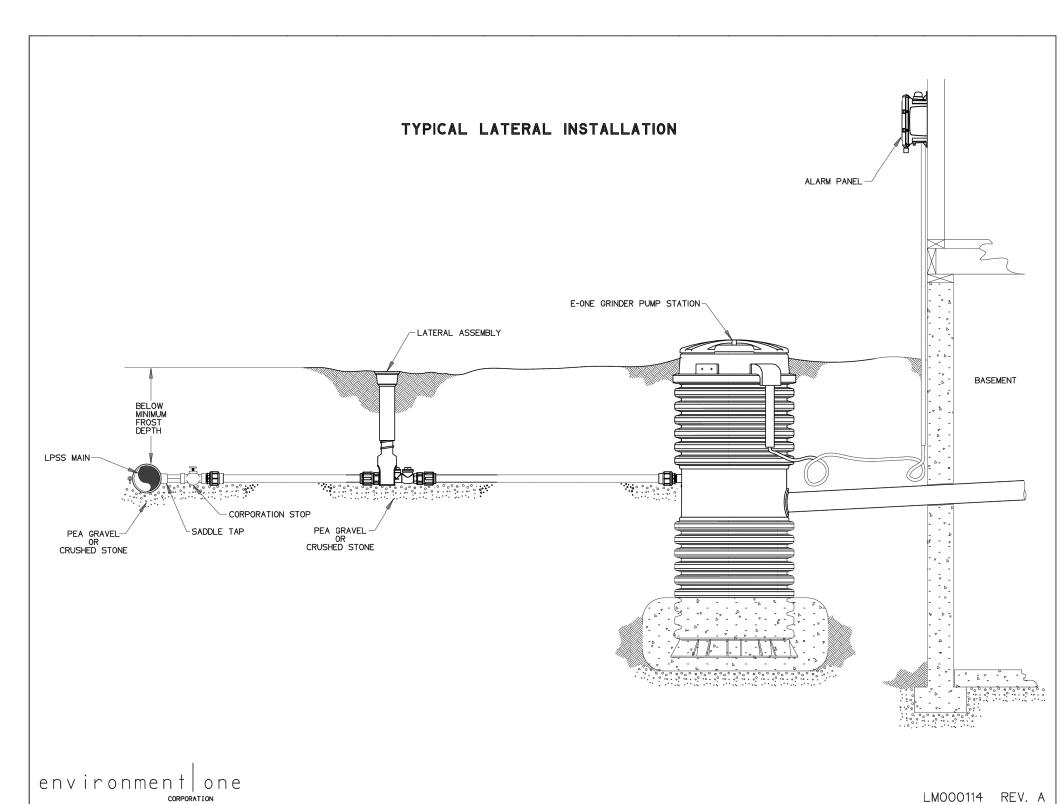
CONSTRUCTION **DETAILS**

<u>SHEET NUMBER:</u>



NOT TO SCALE

NOT TO SCALE



E-ONE TYPICAL SEWER SERVICE INSTALLATION

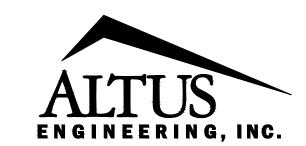
SHIM SECTION-3'-6" High 7 Tons 12'-0" SHIM SECTIONS 6.1 Tons BASE - 20" High 9.7 Tons

ROOF SLAB-

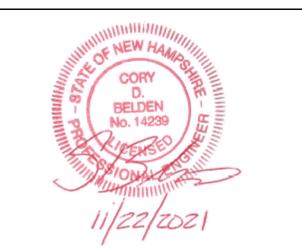
10.5 Tons

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN DATE



133 COURT STREET PORTSMOUTH, NH 03801 (603) 433-2335 www.ALTUS-ENG.com



NOT FOR CONSTRUCTION

ISSUED FOR:

ISSUE DATE:

NOVEMBER 22, 2021

TAC

REVISIONS NO. DESCRIPTION

BY DATE O INITIAL SUBMITTAL CDB 11/22/2

DRAWN BY:_ EDW APPROVED BY:

DRAWING FILE: _ SCALE: 22"x34" 1" = 10"

11"x17" 1" = 20'

OWNER / APPLICANT:

SAGAMORE CORNER, LLC 273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROJECT:

PROPOSED MULTI-FAMILY RESIDENTIALDEVELOPMENTTAX MAP 201, LOT 2

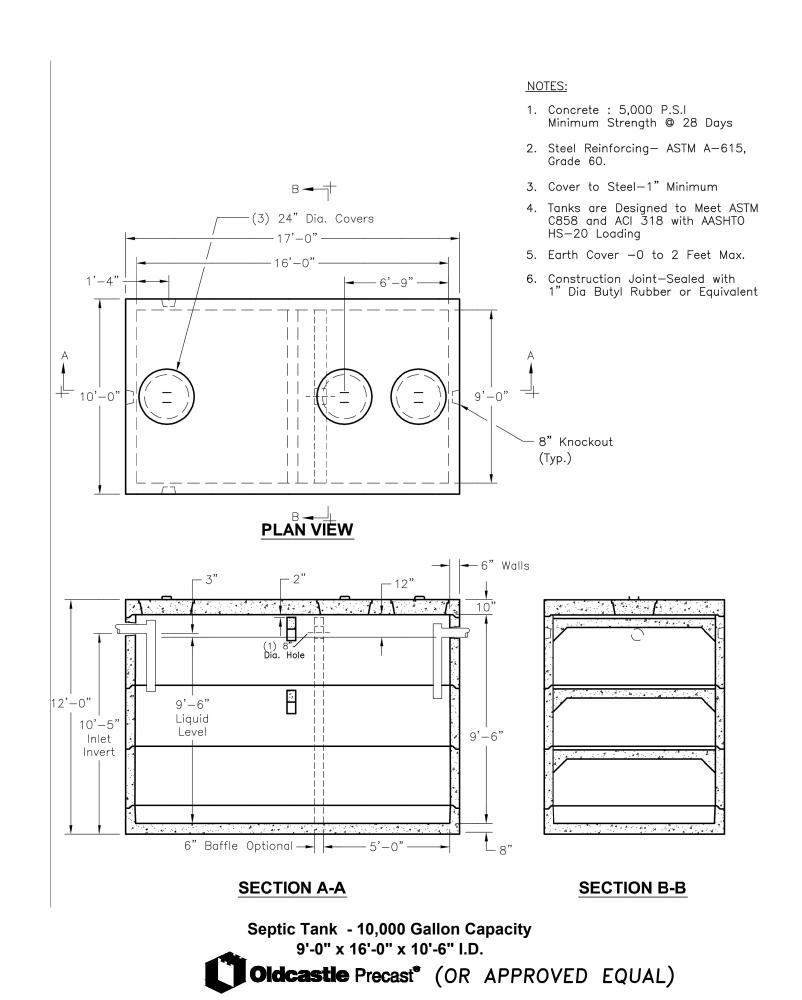
> 960 SAGAMORE ROAD PORTSMOUTH, NH 03801

TITLE:

CONSTRUCTION **DETAILS**

SHEET NUMBER:

C-10



SEPTIC HOLDING TANK DETAIL (10,000 GALLON CAPACITY)

NOT TO SCALE

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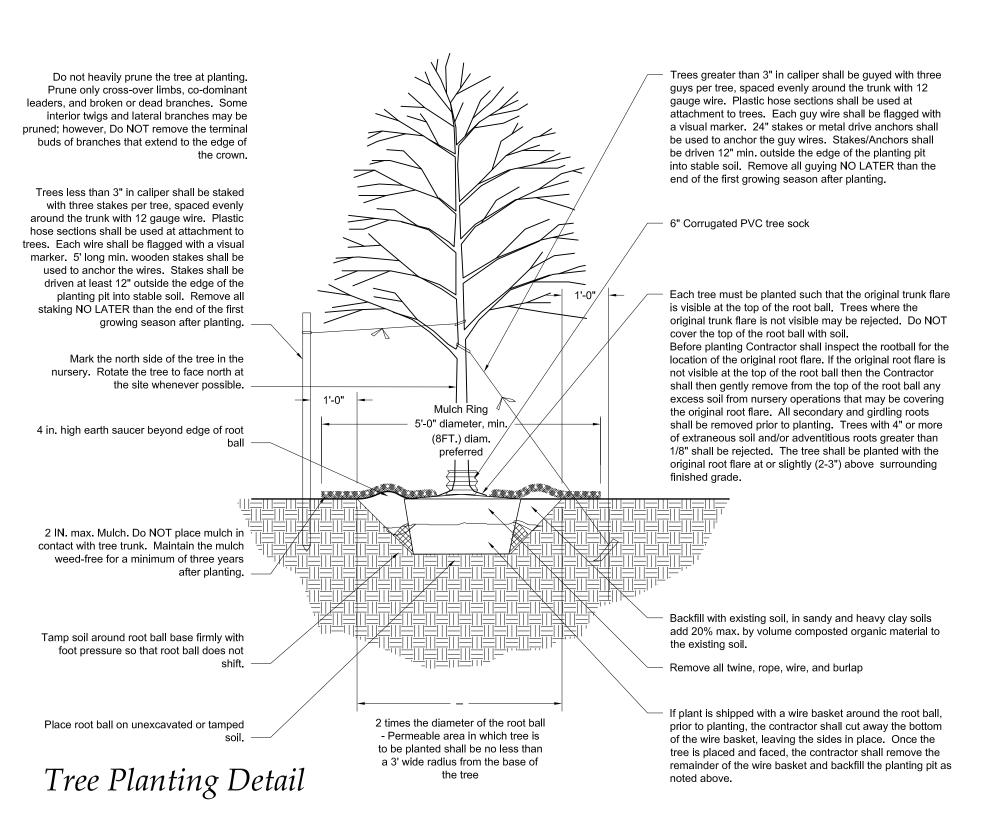
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Statistics							+0.0	+0.0		0.0	+0.0	+0.0	†0.0 1
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	1	+0.0	+ + +	+0.0	+	+0.0	+0.0
Driveway	+	1.7 fc	4.1 fc	0.2 fc	20.5:1	8.5:1	+0.0	+0.0	0.0	0.0	+0.0	+0.0	+0.0
Ground	+	0.2 fc	33.2 fc	0.0 fc	N/A	N/A	0.0	0.0	+ +	.0 0.0	0.0	0.0	0.0
Parking Lot	+	1.0 fc	6.1 fc	0.1 fc	61.0:1	10.0:1	0.0	+0.0	+ + +	.0 0.0	0.0	0.0	0.0
Under Canopy	+	10 fc	16 fc	5 fc	3.2:1	2.0:1			0	0.0	†0.0	0.0	0.0

Designer
Heidi G. Connors
Visible Light, Inc.
24 Stickney
Terrace
Suite 6
Hampton, NH
Date2
11/15/2021
Scale
1"=10'
Drawing No.

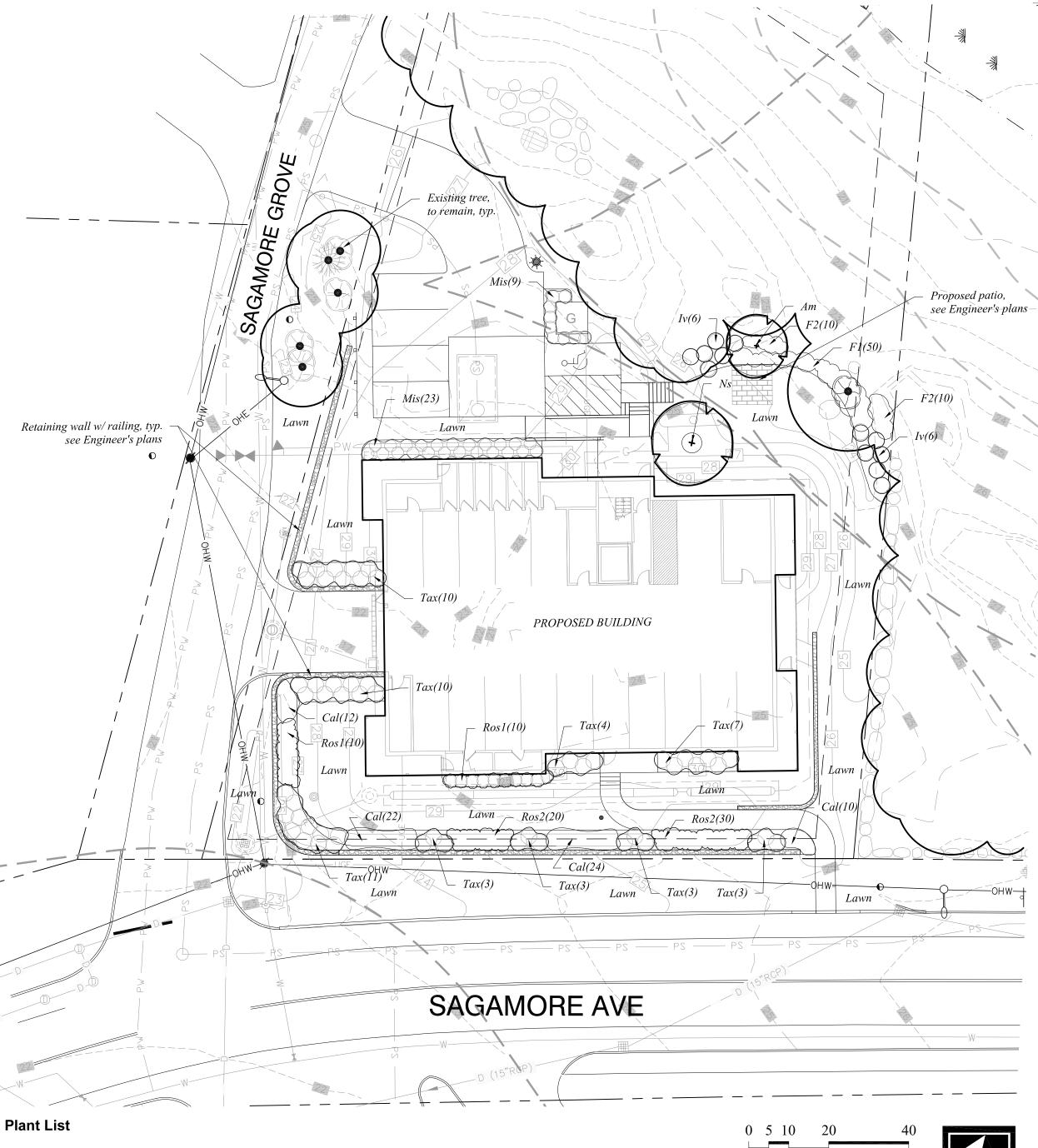
S-1

Summary



Landscape Notes

- 1. Design is based on drawings by Altus Engineering received 11/15/2021 and may require adjustment due to actual field
- 2. The contractor shall follow best management practices during construction and shall take all means necessary to stabilize and protect the site from erosion.
- Erosion Control shall be in place prior to construction.
- 4. Erosion Control to consist of Hay Bales and Erosion Control Fabric shall be staked in place between the work and Water bodies, Wetlands and/or drainage ways prior to any construction.
- 5. The Contractor shall verify layout and grades and inform the Landscape Architect or Client's Representative of any discrepancies or changes in layout and/or grade relationships prior to construction.
- 6. It is the contractor's responsibility to verify drawings provided are to the correct scale prior to any bid, estimate or installation. A graphic scale bar has been provided on each sheet for this purpose. If it is determined that the scale of the drawing is
- incorrect, the landscape architect will provide a set of drawings at the correct scale, at the request of the contractor. 7. Trees to Remain within the construction zone shall be protected from damage for the duration of the project by snow fence or other suitable means of protection to be approved by Landscape Architect or Client's Representative. Snow fence shall be located at the drip line at a minimum and shall include any and all surface roots. Do not fill or mulch on the trunk flare. Do not disturb roots. In order to protect the integrity of the roots, branches, trunk and bark of the tree(s) no vehicles or construction equipment shall drive or park in or on the area within the drip line(s) of the tree(s). Do not store any refuse or construction materials or portalets within the tree protection area.
- 8. Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the
- 9. The Contractor shall verify exact location and elevation of all utilities with the respective utility owners prior to construction. Call DIGSAFE at 1-888-344-7233.
- 10. The Contractor shall procure any required permits prior to construction.
- 11. Prior to any landscape construction activities Contractor shall test all existing loam and loam from off-site intended to be used for lawns and plant beds using a thorough sampling throughout the supply. Soil testing shall indicate levels of pH, nitrates, macro and micro nutrients, texture, soluble salts, and organic matter. Contractor shall provide Landscape Architect with test results and recommendations from the testing facility along with soil amendment plans as necessary for the proposed plantings
- to thrive. All loam to be used on site shall be amended as approved by the Landscape Architect prior to placement. 12. Contractor shall notify landscape architect or owner's representative immediately if at any point during demolition or construction a site condition is discovered which may negatively impact the completed project. This includes, but is not limited to, unforeseen drainage problems, unknown subsurface conditions, and discrepancies between the plan and the site. If a contractor is aware of a potential issue, and does not bring it to the attention of the landscape architect or owner's
- representative immediately, they may be responsible for the labor and materials associated with correcting the problem. 13. The Contractor shall furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery-grown under climatic conditions similar to those in the locality of the project. Plants shall conform to the botanical names and standards of size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. in the American Standard of Nursery Stock, American Standards Institute, Inc. 230 Southern Building, Washington, D.C. 20005.
- 14. A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.
- 15. All plants shall be legibly tagged with proper botanical name. 16. The Contractor shall guarantee all plants for not less than one year from time of acceptance.
- 17. Owner or Owner's Representative will inspect plants upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during or after the progress of the work. The Owner reserves the right to inspect and/or select all trees at the place of growth and reserves the right to approve a representative sample of each type of shrub, herbaceous perennial, annual, and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same species used in this work.
- 18. No substitutions of plants may be made without prior approval of the Owner or the Owner's Representative for any reason.
- 19. All landscaping shall be provided with the following:
- a. Outside hose attachments spaced a maximum of 150 feet apart, and b. An underground irrigation system, or
- c. A temporary irrigation system designed for a two-year period of plant establishment.
- 20. If an automatic irrigation system is installed, all irrigation valve boxes shall be located within planting bed areas. 21. The contractor is responsible for all plant material from the time their work commences until final acceptance. This includes but is not limited to maintaining all plants in good condition, the security of the plant material once delivered to the site, and watering of plants. Plants shall be appropriately watered prior to, during and after planting. It is the contractor's responsibility to provide clean water suitable for plant health from off site, should it not be available on site.
- 22. All disturbed areas will be dressed with 6" of topsoil and planted as noted on the plans or seeded except plant beds. Plant beds shall be prepared to a depth of 12" with 75% loam and 25% compost.
- 23. Trees, ground cover, and shrub beds shall be mulched to a depth of 2" with one-year-old, well-composted, shredded native bark not longer than 4" in length and ½" in width, free of woodchips and sawdust. Mulch for ferns and herbaceous perennials shall be no longer than 1" in length. Trees in lawn areas shall be mulched in a 5' diameter min. saucer. Color of mulch shall be
- 24. In no case shall mulch touch the stem of a plant nor shall mulch ever be more than 3" thick total (including previously applied mulch) over the root ball of any plant.
- 25. Secondary lateral branches of deciduous trees overhanging vehicular and pedestrian travel ways shall be pruned up to a height of 6' to allow clear and safe passage of vehicles and pedestrians under tree canopy. Within the sight distance triangles at vehicle intersections the canopies shall be raised to 8' min.
- 26. Snow shall be stored a minimum of 5' from shrubs and trunks of trees. 27. Landscape Architect is not responsible for the means and methods of the contractor.



TREES Botanical Name Common Name B&B multistemmed Amelachier canadensis 'Glenform' Glenform Serviceberry 7-8' ht. Nyssa Sylvatica Black Tupelo 2.5-3" Cal

CHDIIDO

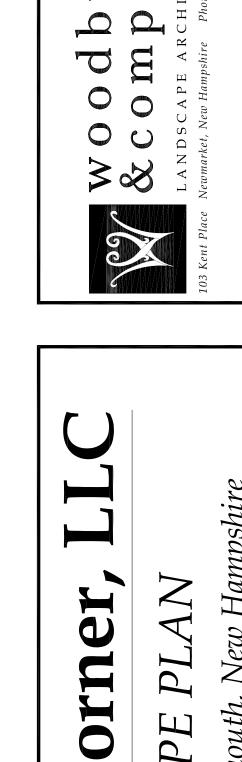
SHRUBS					
Symbol	Botanical Name	Common Name	Quantity	Size	Comments
lv	llex verticillata ' Red Sprite'	Red Sprite Winterberry	12	3 gal	
Ros1	Rosa 'Sunny Knockout'	Sunny Knockout Rose	20	5 gal	
Ros2	Rosa 'Apricot Drift'	Apricot Drift Rose	50	3 gal	
Tax	Taxus media 'Greenwave'	Greenwave Yew	54	5 gal	

PERENNIALS, GROUNDCOVERS, VINES and ANNUALS

Symbol	Botanical Name	Common Name	Quantity	Size	Comments
Cal	Calamagrostis acutifolia 'Karl Foerster'	Feather Reed Grass	68	2 gal	
F1	Dennstaedia punctiloba	Hayscented Fern	50	2 qt.	
F2	Mattateucia struthiopteris	Ostrich Fern	20	2qt.	
Mis	Miscanthus sinensis 'Morning Light'	Morning Light Maiden Grass	32	2 gal	
\sim .	CD (11 3 T				

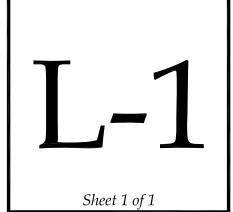
City of Portsmouth Notes

- A. The property owner and all future property owners shall be responsible for the
- maintenance, repair and replacement of all required screening and landscape materials. B. All required plant materials shall be tended and maintained in a healthy growing condition, replaced when necessary, and kept free of refuse and debris. All required fences and walls shall be maintained in good repair.
- C. The property owner shall be responsible to remove and replace dead or diseased plant materials immediately with the same type, size and quantity of plant materials as originally installed, unless alternative plantings are requested, justified and approved by the Planning Board or Planning Director.

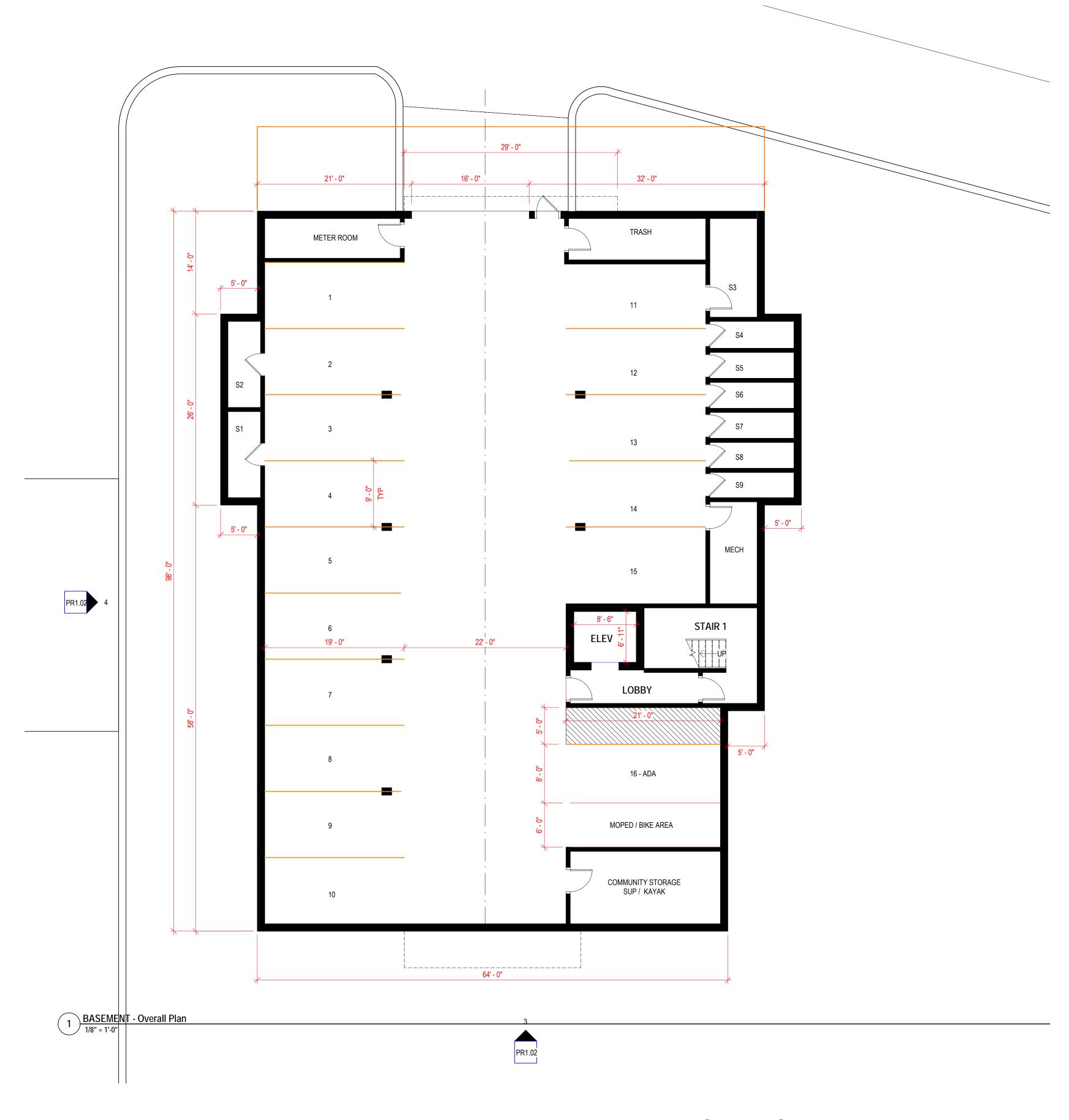


Drawn By: Checked By: 1'' = 20' - 0''Scale: November 22, 2021 Date: Revisions: December 28, 2021

7



© 2021 Woodburn & Company Landscape Architecture, LLC



GARAGE LEVEL PLAN







Elevation 6 - a
1/8" = 1'-0"





3 Elevation 8 - a 1/8" = 1'-0"

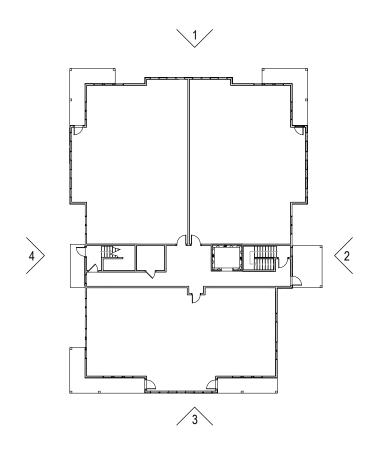
GROSS FLOOR AREAS:

Basement = 6872 (PARKING, UTILITIES, STORAGE)

1ST FLOOR = 7097 (RESIDENTIAL)

2ND FLOOR = 7097 (RESIDENTIAL)

TOTAL - 21,066 GROSS FLOOR AREA

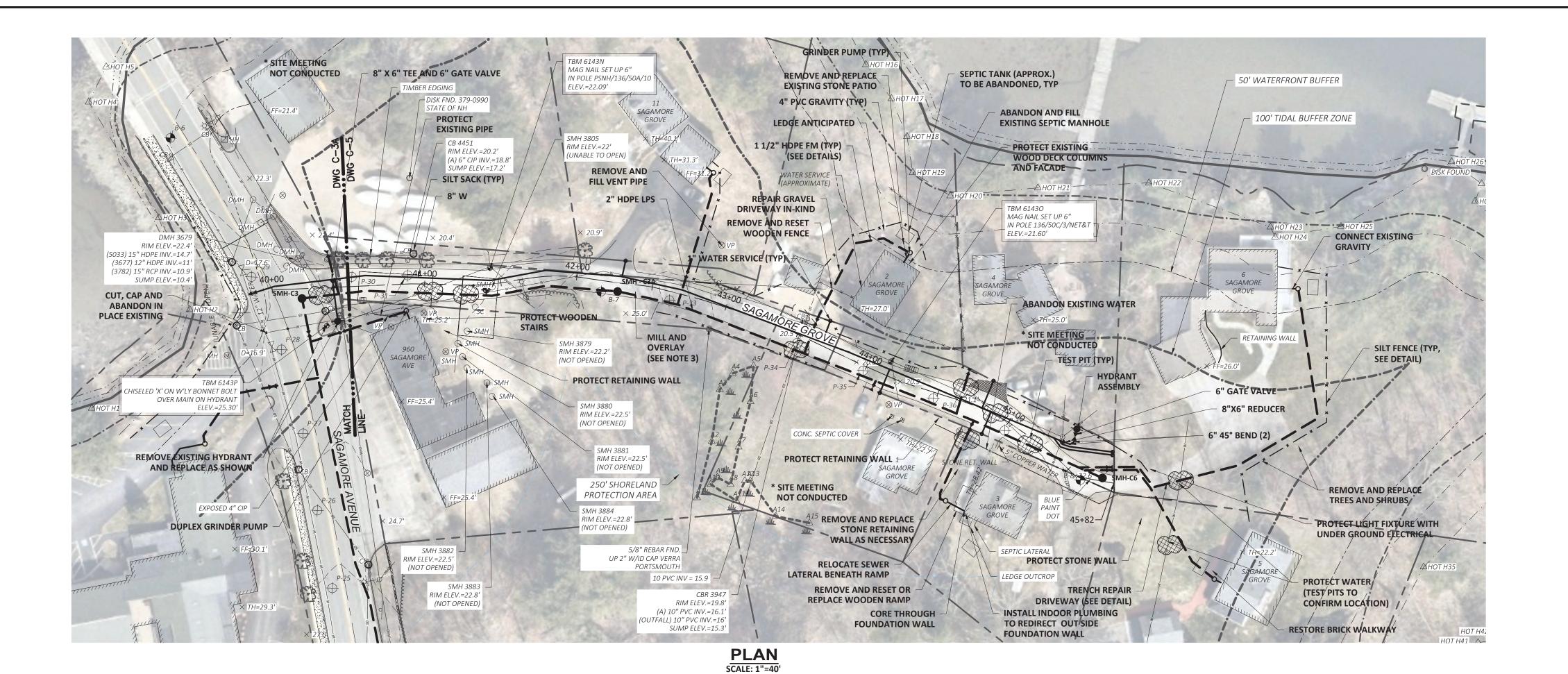


ELEVATIONS









REMOVE AND DISPOSE OF EXISTING LEACHING BASIN WITHIN THE LIMITS OF THE ROW, ABANDON IN PLACE AT LIMIT OF ROW **REMOVE AND** DISPOSE OF **EXISTING** - APPROXIMATE EXISTING GRADE AT ROAD CENTER **LEACHING BASIN** ____11.25° BEND 8" STUB - 2" HDPE LPS __10" SD **11.25° BEND** 11.25° BEND 11.25° BEND 11.25° BEND NV ELEV = 15.3'±-**− 8" X 6" HYD T**EE 11.25° BEND — - 2" HDPE LPS INV ELEV = 17.3'±

43+00

PROFILE

VERT:1"=4' HORIZ:1"=40'

SCALES

44+00

45+00

45+80

NOTES

- 1. WORK OUTSIDE CITY OWNED EASEMENTS AND RIGHTS OF WAY ARE NOT AUTHORIZED UNTIL HOMEOWNER AND CITY SIGN OFFS ARE EXECUTED.
- 2. ALL AREAS (EXCEPT GRAVEL DRIVEWAYS) THAT ARE EXCAVATED, FILLED OR OTHERWISE DISTURBED BY THE CONTRACTOR AND ARE NOT TO BE PAVED OR FILLED WITH GRAVEL OR RIPRAP SHALL BE LOAMED, GRADED, FERTILIZED, SEEDED AND MULCHED. ALL AREAS ARE TO RECEIVE A MINIMUM OF 6" OF TOPSOIL. REFER TO SPECIFICATION SECTION

40+00

41+00

42+00

3. SEE DETAIL SHEETS FOR PAVING RECOMMENDATIONS.



SAGAMORE AVENUE SEWER EXTENSION

PROJECT

Engineering a Better Envelopment of the state of the s



Civil Site Planning Environmental Engineering

133 Court Street Portsmouth, NH 03801-4413

November 24, 2021

Peter Britz, Interim Planning Director
Attn: Barbara McMillan, Conservation Commission Chair
City of Portsmouth Municipal Complex
1 Junkins Avenue
Portsmouth, New Hampshire 03801

Re: Wetlands Conditional Use Permit Application

Assessor's Map 201, Lot 2 960 Sagamore Avenue Altus Project No. 5079

Dear Peter and Barbara,

On behalf of the Applicant, Sagamore Corner, LLC, Altus Engineering, Inc. respectfully submits a Wetlands Conditional Use Permit application for the redevelopment of the former Golden Egg site at 960 Sagamore Avenue. The Proposed development will consist of a new six (6) unit building and a five (5) exterior stall visitor parking lot to serve the new building. Parking for the residents will be located on the garage level of the building. The existing paved parking lot along Sagamore Avenue will be removed and access will be provided from Sagamore Grove, which will eliminate the head-in parking from Sagamore Avenue and traffic conflicts. The majority of the new parking lot and driveway will be constructed with porous pavement and a sub-surface treatment system will be constructed to treat and manage the stormwater from the roof. There will be a reduction of over 8,400 square feet of impervious and gravel area. All existing impervious surfaces (over 750 square feet) in the 100 ft buffer will be removed. A 10 ft x 10 ft porous patio is proposed in the same location.

Per Section 10.1017.50 for criteria for approval of a conditional use permit, the following responses are provided;

- (1) The land is reasonably suited to the use, activity or alteration.

 The property use is residential in the MRB District and will replace an existing restaurant, retail store, and apartment. This is a reasonable use as allowed by the zoning distict.
- (2) There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.

 The proposed project will remove over 750 square feet of gravel parking area in the wetland buffer. A small 10 ft x 10 ft porous patio will be constructed in the location of the former parking area. There will be no impervious area in the buffer.

Tel: (603) 433-2335 E-mail: Altus@altus-eng.com

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

The proposed project will reduce approximately 8,400 square feet of impervious from the site and 750 square feet in the wetland buffer. Stormwater treatment will be provided where none currently exists. Peak runoff flows will be significantly reduced and treatment provided to improve water quality runoff.

(4) Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals; and *There will not be any impacts to the natural wooded wetland buffer.*

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

The proposed project will remove over 750 square feet of impervious area in the buffer and no new impervious is proposed. Stormwater treatment will be provided where none currently exists. Peak runoff flows will be significantly reduced and treatment provided to improve water quality runoff.

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

There will be no impacts to the vegetated buffer strip, which exists in its natural state.

Enclosed please find eight (8) copies of the following items for consideration at the December 8th Conservation Commission Meeting:

- Site Plans (1 full size, 7 half size)
- Wetlands Conditional Use Plan
- "Green" Statement
- Wetlands and Buffer Evaluation
 - Wetlands Letter
 - o NHD Data Review
- Drainage Report (summary)

Please call me if you have any questions or need any additional information.

Sincerely,

ALTUS ENGINEERING, INC.

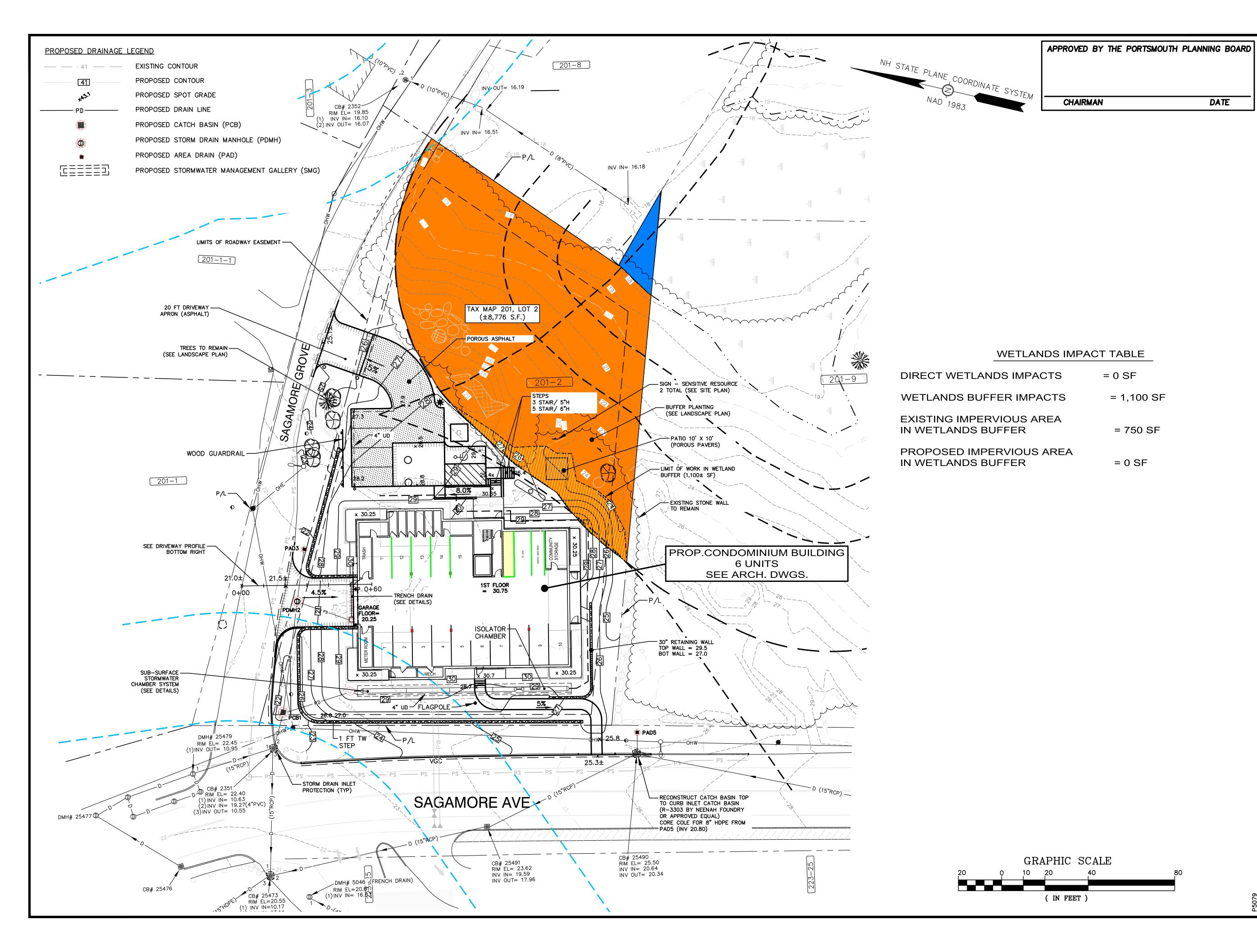
Cory D. Belden, PE Associate Principal

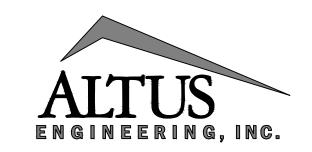
ebs/5079-CUP-PB-CovLtr-112221.docx

Enclosures

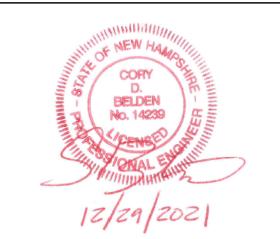
eCopy: Eric Katz, Sagamore Corner, LLC

5079 – 960 Sagamore Ave Page 2 of 2





133 COURT STREET PORTSMOUTH, NH 03801 (603) 433-2335 www.ALTUS-ENG.com



NOT FOR CONSTRUCTION

ISSUED FOR:

ISSUE DATE:

PLANNING BOARD

BY DATE

DECEMBER 29, 2021 **REVISIONS**

NO. DESCRIPTION

CDB 11/02/2 0 INITIAL SUBMITTAL CDB 11/22/21 TAC WS COMMENTS 2 CC COMMENTS CDB 12/29/21

CDB DRAWN BY:. EDW APPROVED BY:

22"x34" 1" = 20' 11"x17" 1" = 40'

OWNER / APPLICANT:

DRAWING FILE: .

SAGAMORE CORNER, LLC

273 CORPORATE DRIVE PORTSMOUTH, NH 03801

PROJECT:

PROPOSED MULTI-FAMILY RESIDENTIALDEVELOPMENT

> 960 SAGAMORE ROAD PORTSMOUTH, NH 03801

TAX MAP 201, LOT 2

TITLE:

WETLANDS CONDITIONAL USE PLAN

SHEET NUMBER:

CUP-1





December 29, 2021

Dexter Legg, Chair Portsmouth Planning Board 1 Junkins Ave, 3rd Floor Portsmouth, NH 03801

RE: Planning Board DADU CUP Application
325 Little Harbor Road, Portsmouth, NH – Tax Map 205 Lot 2

Dear Mr. Legg:

On behalf of our client, ADL 325 Little Harbor Road Trust, please find a Planning Board Detached Accessory Dwelling Unit (DADU) Conditional Use Permit (CUP) submission relative to the above-referenced project. The following materials, along with this letter, have been submitted online and hard copies are also included in this submission:

- DADU CUP Application (1 copy);
- Client Authorization Letter (1 copy);
- Original DADU CUP Permit, dated June 24, 2019 (1 copy);
- Original DADU CUP Permit Extension, dated June 22, 2020 (1 copy);
- Site Photos of Lady Isle Guest Cottage (1 copy); AND
- Site Development Plans entitled "Permit Plans for DADU CUP, Tax Map 205 Lot 2, Lady Isle Guest Cottage, 325 Little Harbor Road, Portsmouth New Hampshire", prepared by TFMoran, Inc., dated December 29, 2021 (1 copy at 22"x34").

A previous request to renovate the existing caretaker's house, was previously approved by the Planning Board on June 20, 2019 for a DADU with a gross floor area of 2,435 SF. An extension was granted until June 20, 2021, however, before this time, the original builder, Peter Kasnet, unexpectedly passed away. Due to this unfortunate event, the client hired a new builder, Youngblood Builders, and new architect, G. P. Schafer.

Based on the new team's input, a number of modifications to the renovated property were suggested, enough to warrant re-permitting the project. The originally permitted DADU proposed renovations of the entire existing structure. The current project team realized demolishing additions of the house would be more in line with the history and character of the originally built house. Modifications to the originally approved DADU include revised architecture and a smaller footprint with less gross floor area.





December 29, 2021

Property Description

The property is a single-family residence at 325 Little Harbor Road, located on a private island, known as Lady Isle and also Belle Isle. The site is 12.3 acres within the Rural Zoning District and surrounded by the Piscataqua River. The property currently contains a 2-story house, guest cottage, carriage house, barn, horse barn, horse paddock, and shed.

The intent of the applicant is to renovate the easternly half of the island containing the building and yard areas. The proposal is to demolish the existing house, carriage house, and paddock and to construct a 2-story single-family home, garage, pool, pool cabana, and playground; renovate an existing barn and guest cottage; and replace an existing shed and barn with a new shed and barn. TFM's previously submitted Site Development Plans for Lady Isle Site Renovation depicts associated improvements, including and not limited to access, grading, utilities, and landscaping.

In this submission, we are applying for a Conditional Use Permit for a Detached Accessory Dwelling Unit (DADU). The property contains only one principal dwelling. The remaining dwelling on the property is a vacant house. The structure was built in the 1800's and formerly served as a caretaker's house for a private school that previously occupied the island. The existing house footprint and gross floor area are 1,300 SF and 2,056 SF, respectively. The proposed construction is to demolish the appendages of the existing structure and renovate the remaining, original structure to a 2-story guest cottage, serving as a detached accessory dwelling unit. The proposed footprint and gross floor area are 660 SF and 1,300 SF, respectively.

In accordance with the City of Portsmouth Zoning Ordinances, Article 10.814, the proposal complies with the following regulations:

The principal dwelling unit and the accessory dwelling unit shall not be separated in ownership.

The proposed project to renovate the existing detached accessory dwelling unit will not affect the ownership of the property. Ownership will remain with the ADL 325 Little Harbor Road Trust.

Either the principal dwelling unit or the accessory dwelling unit shall be occupied by the owner of the dwelling as his or her principal place of residence.

The owner, ADL 325 Little Harbor Road Trust, will continue to occupy the principal dwelling unit.

Neither the principal dwelling unit nor the accessory dwelling unit shall be used for any business, except that the property owner may have a home occupation use in the unit that he or she occupies as allowed or permitted elsewhere in this Ordinance.

Neither the primary dwelling unit nor the accessory dwelling unit will be used for business, other than what is allowed.



December 29, 2021

In a Rural district, a lot with a DADU shall comply with the minimum lot area for the district, but need not comply with the minimum lot area per dwelling unit.

The minimum lot area is 5 acres per dwelling unit. The lot area is 12.3 acres.

The DADU shall not have more than two bedrooms and shall not be larger than 750 SF gross floor area; except that the maximum gross floor area shall be 1,000 SF if the lot area is 2 acres or more.

We respectfully request dimensional modifications to maintain the historical portion of the existing structure. The stricture is a 2-story structure constructed in the 1800's, located on a 12.3 acre parcel. The existing structure is an approximately 24' tall, 3-bedroom house with a gross floor area of 2,056 SF, which has a number of additions. The renovated DADU proposes to remove appendages of the existing structure, maintaining the historic, original structure, which is a proposed 21' tall, 2-bedroom house with a gross floor area of 1,300 SF. Reducing the DADU to 1,000 SF or less would require demolition of a portion of the original, historic, existing structure. Given the size of the lot and the historical value of the building, we believe it's better to leave the 660 SF footprint and 1,300 SF gross floor area, rather than demolish additional portions of a historical building.

The DADU shall be clearly subordinate to the principal single-family dwelling in scale, height and appearance.

The facade area and building height of the DADU is subordinate to the principal single-family dwelling. The perimeter facade of the DADU versus principal dwelling is approximately 125 FT and 440 FT, respectively. Additionally, the height of the DADU versus the principal dwelling is approximately 21 FT and 32 FT, respectively. The DADU is also architecturally consistent with the principal dwelling, using similar materials, detailing, and other building design elements.

The DADU shall be separated from the single-family dwelling by at least 20 feet.

The renovated guest cottage meets the separation requirements and is located 112' east of the proposed principal single-family dwelling.

The front wall of the DADU shall be set back at least 10 feet further from the front lot line than the existing front wall of the single-family dwelling.

The property is an island, so a front yard is not applicable. The DADU, however, is located approximately 70' from the highest observable tide line (HOTL) whereas the principal dwelling is located 50 FT from the HOTL, which is at least a 20 FT differential.

No portion of the DADU shall be located in any required front yard, regardless of the location of the single-family dwelling.

The property is an island, so a front yard is not applicable. The DADU, however, is located approximately 70' from the HOTL.



December 29, 2021

Exterior design of the ADU is consistent with the existing principal dwelling on the lot.

The DADU will be re-sided similar to the proposed principal dwelling on the lot.

The site plan provides adequate and appropriate open space, landscaping and off-street parking for both the ADU and the primary dwelling.

The proposed renovation to the guest cottage removes almost half of the existing structure and replaces it with open space and landscaping. The overall Lady Isle site renovations provides adequate and appropriate open space and landscaping, exceeding Zoning requirements for open space (75% required, 94% proposed) and meeting building coverage requirements (5% required, 2.6% proposed). Off-street parking is provided adjacent to both the DADU and primary dwelling.

The ADU will maintain a compatible relationship to adjacent properties in terms of location, design, and offstreet parking layout, and will not significantly reduce the privacy of adjacent properties.

The DADU is an existing structure located on an island. It will not alter or reduce privacy of adjacent properties.

The ADU will not result in excessive noise, traffic or parking congestion.

The building being converted to a DADU exists on site today. It is currently an unoccupied building. Once converted, the owner will have the ability to host guests on the property, since the main dwelling only has four bedrooms. Since the DADU is still owned by the principal dwelling owner, it will be occupied on a selected basis. This will not contribute to excessive noise, traffic, or parking congestion.



December 29, 2021

Work on the island requires approvals for a City Wetland CUP, NHDES Wetlands Permit, NHDES Shoreland Permit, NHDES Alteration of Terrain (AoT) Permit, NHDES Wastewater Permit, and EPA's NOI for Construction General Permit, all of which are pending.

We appreciate your consideration of these matters and look forward to presenting this project to you in the near future.

We respectfully request that we be placed on the upcoming agenda for the January 20th Planning Board Meeting.

Respectfully, **TFMoran, Inc.**

Corey Colwell, LLS

Division Manager | Princiapl

Hannah Giovannucci, PE

amah Siorann

Civil Project Manager

JCC/heg

cc: Anthony Dilorenzo, ADL 325 Little Harbor Road Trust (via e-mail)

Jim Youngblood, Youngblood Builders (via jim@youngbloodbuilders.com)

Mickey Benson, GPSchafer (via mbenson@gpschafer.com)

Matthew Cunningham, MCLD (via matthew@matthew-cunningham.com)

Stephan Roberts, Hoefle, Phoenix, Gormley & Roberts (via sroberts@hpgrlaw.com)



CITY OF PORTSMOUTH

Planning Department 1 Junkins Avenue Portsmouth, New Hampshire 03801 (603) 610-7216

PLANNING BOARD

June 24, 2019

ADL Portsmouth Residence Trust 549 US Highway 1 Bypass Portsmouth, NH 03801

RE: Conditional Use Permit for property located at 325 Little Harbor Road

Dear Applicant:

The Planning Board, at its regularly scheduled meeting of Thursday, June 20, 2019, considered your application for Conversion of an existing accessory structure (formerly caretaker's home) into an Detached Accessory Dwelling Unit with a gross floor area of 2,435sq.ft. Said property is shown on Assessor Map 205 Lot 02 and lies within the Rural District. As a result of said consideration, the Board voted to:

1. Grant a modification from the following sections:

- 1.1) Section 10.814.52 of the Zoning Ordinance for approval of a DADU with 3 bedrooms and 2,435+/- s.f. of gross floor area where 2 bedrooms and 1,000 s.f. is the maximum allowed.
- 1.2) Section 10.814.532 of the Zoning Ordinance for a building height of 24.2' where the maximum allowed must be less than the building height of the principal single-family dwelling.
- 2. Find that the application satisfies the remaining requirements of 10.814.50.

3. Grant the conditional use permit as presented, with the following stipulations:

3.1) In accordance with Sec. 10.814.90 of the Zoning Ordinance, the owner is required to obtain a certificate of use from the Planning Department verifying compliance with all standards of Sec. 10.814, including the owner-occupancy requirement, and shall renew the certificate of use annually.

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

Unless otherwise indicated above, applicant is responsible for applying for and securing a building permit from the Inspection Department prior to starting any project work. All stipulations of approval must be completed prior to issuance of a building permit unless otherwise indicated above.

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

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

Very truly yours,

Juliet T. H. Walker, AICP, Planning Director

for Dexter Legg, Chairman of the Planning Board

CC:

Corey Colwell, LLS, MSC a division of TFMoran, Inc. Rosann Maurice-Lentz, City Assessor Robert Marsilia, Building Inspector Peter Rice, Director of Public Works



CITY OF PORTSMOUTH

Planning Department 1 Junkins Avenue Portsmouth, New Hampshire 03801

(603) 610-7216

PLANNING BOARD

June 22, 2020

ADL Portsmouth Residence Trust 549 US Highway 1 Bypass Portsmouth, NH 03801

RE: Conditional Use Permit for property located at 325 Little Harbor Road

Dear Applicant:

The Planning Board, at its meeting of Thursday, June 18, 2020, considered your request for 1-year extension of the Conditional Use Permit for the conversion of an existing accessory structure into a Detached Accessory Dwelling Unit that was granted on June 20, 2019.

As a result of said consideration, the Board voted to grant your request for an extension with the approval now expiring on June 20, 2021.

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

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

Very truly yours,

Dexter R. Legg, Chairman of the Planning Board

cc: Robert Marsilia, Chief Building Inspector Rosann Maurice-Lentz, City Assessor

Corey Colwell, LLS, MSC a division of TFMoran, Inc. Rosann Maurice-Lentz, City Assessor Robert Marsilia, Building Inspector Peter Rice, Director of Public Works



Site Photos

Lady Isle Guest Cottage
325 Little Harbor Road, Portsmouth, NH

Taken on October 25, 2018

Photo #1: View from existing driveway, from right to left, of western side of guest cottage, barn, and carriage house





Photo #3: Southern side and rear of existing guest cottage



Photo #4: Eastern side of existing guest cottage





RESOURCE LIST

PORTSMOUTH, NH 03801

PLANNING/ZONING DEPARTMENT

1 JUNKINS AVENUE PORTSMOUTH, NH 03801 603-610-7296 PETER BRITZ, INTERIM PLANNING DIRECTOR

BUILDING DEPARTMENT

I JUNKINS AVENUE PORTSMOUTH, NH 03801 603-610-7261 ROBERT MARSILIA, CHIEF BUILDING INSPECTOR

PUBLIC WORKS 680 PEVERLY HILL ROAD PORTSMOUTH, NH 03801 603-427-1530 PETER RICE, DIRECTOR OF PUBLIC WORKS

POLICE DEPARTMENT 3 JUNKINS AVENUE PORTSMOUTH, NH 03801 603-427-1500

MARK NEWPORT, INTERIM CHIEF

FIRE DEPARTMENT 170 COURT STREET PORTSMOUTH, NH 03801 603-427-1515 TODD GERMAIN, CHIEF

ASSOCIATED PROFESSIONALS

ARCHITECT G.P. SCHAFER ARCHITECT, PLLC 19 UNION SQUARE WEST, 4TH FLOOR NEW YORK CITY, NY 10003 212-965-1355 MICKEY BENSON, PRINCIPAL

ECOLOGICAL SERVICES PARTERRE ECOLOGICAL 67 SMITH PLACE, UNIT 12A CAMBRIDGE, MA 02138 617-482-2230 RYAN CORRIGAN, MSED, MCH

LANDSCAPE ARCHITECT MATTHEW CUNNINGHAM LANDSCAPE ARCHITECTURE DESIGN LLC 411 MAIN STREET STONEHAM, MA 02180 617-905-2246 MATTHEW CUNNINGHAM, PRINCIPAL

WETLAND SCIENTIST MARC JACOBS, CERTIFIED WETLAND SCIENTIST PO BOX 417 GREENLAND, NH 603-686-5097

WILDLIFE ASSESSOR GZA GEOENVIRONMENTAL, INC. 5 COMMERCE PARK NORTH BEDFORD, NH 03110 603-232-8739 TRACY TARR, ASSOCIATE PRINCIPAL

LADY ISLE GUEST COTTAGE

325 LITTLE HARBOR ROAD PORTSMOUTH, NEW HAMPSHIRE

DECEMBER 29, 2021







REV. DATE DESCRIPTION

INDEX OF SHEETS

SHEET	SHEET TITLE
C-00	COVER
C-01	NOTES & LEGEND
S-01	EXISTING CONDITIONS PLAN
C-02	SITE LAYOUT PLAN
C-03	GRADING & UTILITY PLAN
REFERENCE PLAN	S BY ASSOCIATED PROFESSIONALS
A-1.01 TO 1-2.0	O RENOVATED GUEST COTTAGE FOR LADY ISLE PLANS BY G.P. SCHAFER

LANDSCAPE ARCHITECTURE PLANS & AERIALS BY MCLD

PERMITS/APPROVALS NUMBER APPROVED EXPIRES PORTSMOUTH PLANNING BOARD & CONSERVATION COMMISSION WETLAND CUP PORTSMOUTH PLANNING BOARD NH FISH & GAME NHDES WETLANDS & 2/15/2018 2/15/2023 2014-02662 PERMIT AMENDMENT NHDES SHORELAND & 2/26/2018 2017-02665 2/26/2023 NHDES ALTERATION OF TERRAIN NHDES SEWER EPA NPDES ENOI CGP & SWPPP

NOTE: ADDITIONAL PERMITS AND APPROVALS MAY BE REQUIRED PRIOR TO CONSTRUCTION.

APPROVED BY THE CITY OF PORTSMOUTH PLANNING BOARD

ON	
BOARD MEMBER	AND
BOARD MEMBER	

PERMIT PLANS FOR DADU CUP

TAX MAP 205 LOT 2

COVER

LADY ISLE GUEST COTTAGE 325 LITTLE HARBOR ROAD, PORTSMOUTH, NH

OWNED BY & PREPARED FOR **ADL 325 LITTLE HARBOR ROAD TRUST**

SCALE: NTS

DECEMBER 29, 2021



Structural Engineers

170 Commerce Way, Suite 102 Portsmouth, NH 03801 Phone (603) 431-2222 Fax (603) 431-0910 www.tfmoran.com

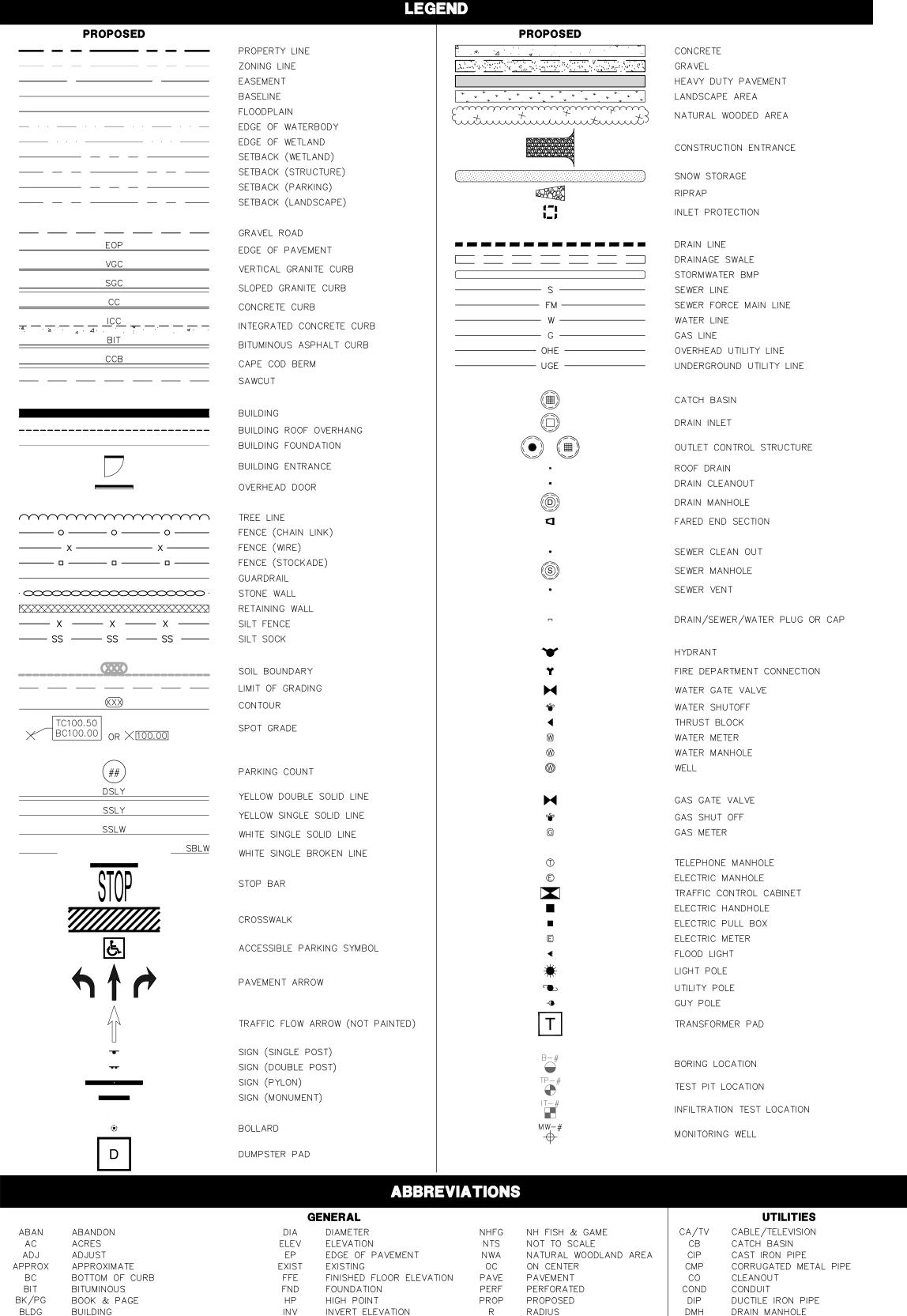
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This plan is not effective unless signed by a duly authorized officer of homas F. Moran, Inc.

THESE PLANS ARE PERMIT DRAWINGS ONLY AND HAVE NOT BEEN DETAILED FOR CONSTRUCTION OR BIDDING.



REMOVE AND DISPOSE

TEMPORARY BENCHMARK

REMOVE AND RESET

RIM FI FVATION

RIGHT OF WAY

SQUARE FFF1

TOP OF CURB

TOP OF WALL

UNDERGROUND

SIDEWALK

TEST PIT

TYPICAL

WITH

REMOVE

RETAIN

SLOPE

R&D

R&R

REM

RET

RIM

ROW

TYP

UG

INFILTRATION TEST

LANDSCAPE AREA

NOW OR FORMERLY

LENGTH

MAXIMUM

MINIMUM

MAX

LINEAR FEET

BMP

BW

COORD

BEST MANAGEMENT PRACTICE

CONDITIONAL USE PERMIT

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DETACHED ACCESSORY DWELLING UNIT

BOTTOM OF SLOPE

BOTTOM OF WALL

CONCRETE

48 Constitution Drive, Bedford, N.H. 03110

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COORDINATE

F&C

F&G

FES

FΜ

HDPE

НН

HW

HYD

ocs

PVC

RCP

RD

SMH

SOS

TSV

FRAME AND COVER

FRAME AND GRATE

FORCE MAIN

HANDHOLE

HEADWALL

LIGHT POLE

ROOF DRAIN

UTILITY POLF

SEWER MANHOLE

HYDRANT

FLARED END SECTION

HIGH DENSITY POLYETHYLENE PIPE

OUTLET CONTROL STRUCTURE

POLYVINYL CHLORIDE PIPE

SEDIMENT OIL SEPARATOR

TAPPING SLEEVE, VALVE, AND BOX

REINFORCED CONCRETE PIPE

GENERAL NOTES

- 1. THESE PLANS ARE PERMIT DRAWINGS ONLY AND HAVE NOT BEEN DETAILED FOR CONSTRUCTION OR BIDDING.
- 2. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN, INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE
- 3. THE CONDITIONAL USE PERMIT APPROVAL FOR THE DETACHED ACCESSORY DWELLING UNIT (DADU) SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- 4. ALL IMPROVEMENTS SHOWN ON THE 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.
- 5. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF PORTSMOUTH, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ALL WORK TO CONFORM TO CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS. ALL WORK WITHIN THE RIGHT-OF-WAY OF THE CITY AND OR STATE SHALL COMPLY WITH APPLICABLE STANDARDS COORDINATE ALL WORK WITHIN THE RIGHT-OF-WAY WITH APPROPRIATE CITY, COUNTY, AND/OR STATE AGENCY.
- 6. THE SITE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH APPLICABLE SECTIONS OF ENV-WQ 1500. THE SITE CONTRACTOR SHALL NOTIFY THE ENGINEER IN ADVANCE OF CONSTRUCTION OF EACH STORMWATER FACILITY TO COORDINATE REQUIRED INSPECTIONS. THE CONTRACTOR SHALL TAKE PROGRESS PHOTOS DURING CONSTRUCTION OF ALL STORMWATER DRAINAGE COMPONENTS AND SEND TO THE ENGINEER.
- 7. SEE EXISTING CONDITIONS PLAN FOR THE HORIZONTAL AND VERTICAL DATUM.
- 8. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION. VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION.
- 9. CONTACT EASEMENT OWNERS PRIOR TO COMMENCING ANY WORK WITHIN THE EASEMENTS. 10. PRIOR TO COMMENCING ANY SITE WORK, ALL LIMITS OF WORK SHALL BE CLEARLY MARKED
- IN THE FIELD. 11. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES

ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN

- 12. TFMORAN, INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE
- PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD. 13. TEMPORARY FENCING SHALL BE PROVIDED AND COVERED WITH A FABRIC MATERIAL TO
- CONTROL DUST MITIGATION.
- 14. ALL DEMOLITION SHALL INSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKWAYS, AND ANY OTHER ADJACENT OPERATING FACILITIES. PRIOR WRITTEN PERMISSION FROM THE OWNER/DEVELOPER AND LOCAL PERMITTING AUTHORITY IS REQUIRED IF CLOSURE/OBSTRUCTIONS TO ROADS, STREET, WALKWAYS, AND OTHERS IS DEEMED NECESSARY. CONTRACTOR TO PROVIDE ALTERNATE ROUTES AROUND CLOSURES/OBSTRUCTIONS PER LOCAL/STATE/FEDERAL REGULATIONS.
- 15. ALL DEMOLITION AND RENOVATION OF STRUCTURES SHALL COMPLY WITH ENV-A 1800 FOR ASBESTOS MANAGEMENT AND CONTROL.
- 16. REFER TO ARCHITECTURAL PLANS FOR LAYOUT OF BUILDING FOUNDATIONS AND CONCRETE ELEMENTS WHICH ABUT THE BUILDING SUCH AS STAIRS, SIDEWALKS, LOADING DOCK RAMPS, PADS, AND COMPACTOR PADS. DO NOT USE SITE PLANS FOR LAYOUT OF FOUNDATIONS.
- 17. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.
- 18. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
- 19. CONTRACTOR'S GENERAL RESPONSIBILITIES:
- A. BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS, AND STANDARDS AND CONDITIONS OF ALL PROJECT-SPECIFIC PERMITS AND APPROVALS AS LISTED ON THE COVER SHEET TO THESE PLANS OR OTHERWISE REQUIRED.
- B. NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES OF PROPOSED LAYOUT AND/OR EXISTING FEATURES.
- EMPLOY A LICENSED SURVEYOR TO DETERMINE ALL LINES AND GRADES AND LAYOUT OF SITE ELEMENTS AND BUILDINGS.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE TO BECOME FAMILIAR WITH THE SITE AND ALL SURROUNDING CONDITIONS. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
- E. TAKE APPROPRIATE MEASURES TO REDUCE, TO THE FULLEST EXTENT POSSIBLE, NOISE, DUST, AND UNSIGHTLY DEBRIS. CONSTRUCTION ACTIVITIES SHALL BE CARRIED OUT BETWEEN THE HOURS IN ACCORDANCE WITH THE APPLICABLE MUNICIPAL ORDINANCES AND REGULATIONS OF THE CITY OF PORTSMOUTH.
- F. MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
- G. IN ACCORDANCE WITH RSA 430:53 AND AGR 3800, THE CONTRACTOR SHALL NOT TRANSPORT INVASIVE SPECIES OFF THE PROPERTY, AND SHALL DISPOSE OF INVASIVE SPECIES ON-SITE IN A LEGAL MANNER.
- H. COORDINATE WITH ALL UTILITY COMPANIES AND CONTACT DIGSAFE (811 OR 888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
- PROTECT NEW AND EXISTING BURIED UTILITIES DURING INSTALLATION OF ALL SITE ELEMENTS. DAMAGED UTILITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL
- J. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMORAN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
- K. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
- L. VERIFY LAYOUT OF PROPOSED BUILDING FOUNDATIONS WITH ARCHITECT AND THAT PROPOSED FOUNDATION MEETS PROPERTY LINE AND WETLAND SETBACKS PRIOR TO COMMENCING ANY FOUNDATION CONSTRUCTION.
- M. PROVIDE AN AS-BUILT PLAN AT THE COMPLETION OF THE PROJECT TO THE PLANNING DIRECTOR AND PER CITY REGULATIONS.
- N. IF ANY DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS HAVE BEEN MADE, THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER DESCRIBING ALL SUCH DEVIATIONS, AND BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE

GENERAL NOTES (CONTINUED)

- 19. CONTRACTOR'S GENERAL RESPONSIBILITIES (CONTINUED):
- O. THIS PROJECT IS SUBJECT TO THE AOT PERMIT LISTED ON THE COVER SHEET. THE CONTRACTOR SHALL CONFORM TO ALL CONDITIONS OF THE PERMIT AND PROVIDE THE FOLLOWING DOCUMENTATION TO OWNER AND ENGINEER:
- 1) ADVANCE WRITTEN NOTICE AT LEAST ONE WEEK PRIOR TO COMMENCING ANY WORK UNDER THE PERMIT.
- 2) IF ANY UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS WERE INSTALLED, FOR EACH SUCH SYSTEM:
 - A) REPRESENTATIVE PHOTOGRAPHS OF THE SYSTEM AFTER COMPLETION
 - BUT PRIOR TO BACKFILLING; AND B) A LETTER SIGNED BY A QUALIFIED ENGINEER WHO OBSERVED THE
- SYSTEM PRIOR TO BACKFILLING, THAT THE SYSTEM CONFORMS TO THE APPROVED PLANS AND SPECIFICATIONS.
- 3) UPON COMPLETION OF CONSTRUCTION, WRITTEN CERTIFICATION THAT: A) ALL WORK UNDER THE PERMIT HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
 - B) IF ANY DEVIATIONS FROM THE APPROVED PLANS WERE MADE, WRITTEN DESCRIPTIONS AND AS-BUILT DRAWINGS OF ALL SUCH DEVIATIONS, STAMPED BY A QUALIFIED ENGINEER, SHALL BE PROVIDED.

GRADING & DRAINAGE NOTES

WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT.

- 1. THE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NHDES ENV-WQ 1500 AS APPLICABLE.
- 2. THE CONTRACTOR SHALL PREPARE, MAINTAIN, AND EXECUTE A S.W.P.P.P. IN ACCORDANCE
- 3. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14
- DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE. 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE
- TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
- 5. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR INFORMATION ABOUT SOIL AND GROUNDWATER CONDITIONS. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL ENGINEER'S RECOMMENDED METHODS TO ADDRESS ANY SOIL AND GROUNDWATER ISSUES THAT ARE FOUND ON SITE, INCLUDING AND NOT LIMITED TO DEWATERING METHODS, PERIMETER DRAINS AND TIE INTO STORMWATER MANAGEMENT SYSTEM, ETC.
- 6. COORDINATE WITH GEOTECHNICAL/STRUCTURAL PLANS FOR SITE PREPARATION AND OTHER BUILDING INFORMATION
- . COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILED GRADING AT BUILDING, AND SIZE AND LOCATION OF ALL BUILDING SERVICES.
- 8. COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ROOF DRAIN INFORMATION.
- 9. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING,
- 10. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE, RAMPS, AND LOADING
- 11. THE SITE SHALL BE GRADED SO ALL FINISHED PAVEMENT HAS POSITIVE DRAINAGE AND SHALL NOT POND WATER DEEPER THAN 1/4" FOR A PERIOD OF MORE THAN 15 MINUTES
- 12. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
- 13. ALL SIDEWALK AND OTHER CURB REVEALS SHALL BE 6" WITH A TOLERANCE OF PLUS OR MINUS 3/8". WHERE SIDEWALK IS TO BE FLUSH, THE PAVEMENT REVEAL SHALL BE 1/4" WITH A TOLERANCE OF 1/8".
- 14. THE FINISHED GRADE AT BOTTOM OF ALL ACCESSIBLE RAMPS SHALL BE FLUSH WITH PAVEMENT WITH A TOLERANCE OF PLUS OR MINUS 1/4".
- 15. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE PRIOR TO INSTALLATION OF FINISHED PAVEMENT.
- 16. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE
- 17. STORMWATER DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
- 18. NO FILL SHALL BE PLACED IN ANY WETLAND AREA.
- 19. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
- 20. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER, AND MULCH.
- 21. DENSITY REQUIREMENTS:
 - MINIMUM DENSITY* LOCATION 95%

ASTM D-1556 OR ASTM D-6938.

SIDEWALKS, AND ALIGNMENTS.

- BELOW PAVED OR CONCRETE AREAS 95% TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL 90%
- BELOW LOAM AND SEED AREAS *ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH





1. LENGTH OF PIPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED

UTILITY NOTES

- 2. ALL PROPOSED UTILITY WORK, INCLUDING MATERIAL, INSTALLATION, TERMINATION, EXCAVATION, BEDDING, BACKFILL, COMPACTION, TESTING, CONNECTIONS, AND CONSTRUCTION SHALL BE COORDINATED WITH AND COMPLETED IN ACCORDANCE WITH THE APPROPRIATE REQUIREMENTS, CODES, AND STANDARDS OF ALL CORRESPONDING UTILITY ENTITIES AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
- 4. COORDINATE ALL WORK ADJACENT TO PROPOSED BUILDINGS WITH ARCHITECTURAL BUILDING DRAWINGS. CONFIRM UTILITY PENETRATIONS AND INVERT ELEVATIONS ARE COORDINATED PRIOR TO INSTALLATION.
- 5. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
- 6. THE EXACT LOCATION OF NEW UTILITY CONNECTIONS SHALL BE DETERMINED BY THE CONTRACTOR IN COORDINATION WITH UTILITY COMPANY, COUNTY AGENCY, AND/OR PRIVATE
- 7. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER THE UTILITY INSTALLATION COMPLETE AND
- 8. ALL UTILITY COMPANIES REQUIRE INDIVIDUAL CONDUITS. CONTRACTOR TO COORDINATE WITH TELEPHONE, CABLE, AND ELECTRIC COMPANIES REGARDING NUMBER, SIZE, AND TYPE OF CONDUITS REQUIRED PRIOR TO INSTALLATION OF ANY CONDUIT.
- 9. SANITARY SEWER SHALL BE CONSTRUCTED TO THE STANDARDS AND SPECIFICATIONS AS SHOWN ON THESE PLANS. ALL SEWER MAINS AND FITTINGS SHALL BE PVC AND SHALL CONFORM TO ASTM F 679 (SDR 35 MINIMUM). FORCE MAINS AND FITTINGS SHALL CONFORM TO NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. SANITARY MANHOLES SHALL CONFORM TO NHDES WATER DIVISION WASTEWATER ENGINEERING BUREAU STANDARDS AND SPECIFICATIONS SHOWN HEREON.
- 10. ON-SITE WATER DISTRIBUTION SHALL BE TO CITY OF PORTSMOUTH STANDARDS AND SPECIFICATIONS. WATER MAINS SHALL HAVE A MINIMUM OF 5.5' COVER. WHERE WATER PIPES CROSS SEWER LINES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SHALL BE 10' MINIMUM. WHERE A SANITARY LINE CROSSES A WATER LINE, SEWER LINE MUST BE CONSTRUCTED OF FORCE MAIN MATERIALS (PER ENV-WQ 704.08) FROM BUILDING OR MANHOLE TO MANHOLE, OR SUBSTITUTE RUBBER-GASKETED PRESSURE PIPE FOR THE SAME DISTANCE. WHEN SANITARY LINES PASS BELOW WATER LINES, LAY PIPE SO THAT NO JOINT IN THE SANITARY LINE WILL BE CLOSER THAN 6' HORIZONTALLY TO THE
- 11. THRUST BLOCKS SHALL BE PROVIDED AT ALL LOCATIONS WHERE WATER LINE CHANGES DIRECTIONS OR CONNECTS TO ANOTHER WATER LINE.
- 12. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRING TO ALL SIGNS AND LIGHTS. CONDUIT TO BE A MINIMUM OF 24" BELOW FINISH GRADE.
- 13. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES.
- 14. THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL INSPECTIONS, TESTING, AND RELATED SERVICES AND SUBMIT COPIES OF ACCEPTANCE TO THE OWNER, UNLESS OTHERWISE
- 15. PROVIDE PERMANENT PAVEMENT REPAIR FOR ALL UTILITY TRENCHES IN EXISTING ROAD OR PAVEMENT TO REMAIN. SAW CUT TRENCH, PAVEMENT, AND GRANULAR BASE THICKNESS TO

MATCH EXISTING PAVEMENT. OBTAIN ALL PERMITS REQUIRED FOR TRENCHING.

- 16. UNLESS OTHERWISE SPECIFIED, ALL UNDERGROUND STRUCTURES, PIPES, CHAMBERS, ETC. SHALL BE COVERED WITH A MINIMUM OF 18" OF COMPACTED SOIL BEFORE EXPOSURE TO
- 17. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING: DRAINAGE PRIVATE

WATER MUNICIPAL

ELECTRIC **EVERSOURCE**

COMCAST, CONSOLIDATED COMMUNICATIONS, ETC. TELEPHONE CABLE COMCAST

PERMIT PLANS FOR DADU CUP

TAX MAP 205 LOT 2

NOTES & LEGEND

LADY ISLE GUEST COTTAGE 325 LITTLE HARBOR ROAD, PORTSMOUTH, NH

OWNED BY & PREPARED FOR **ADL 325 LITTLE HARBOR ROAD TRUST**

SCALE: NTS

DECEMBER 29, 2021



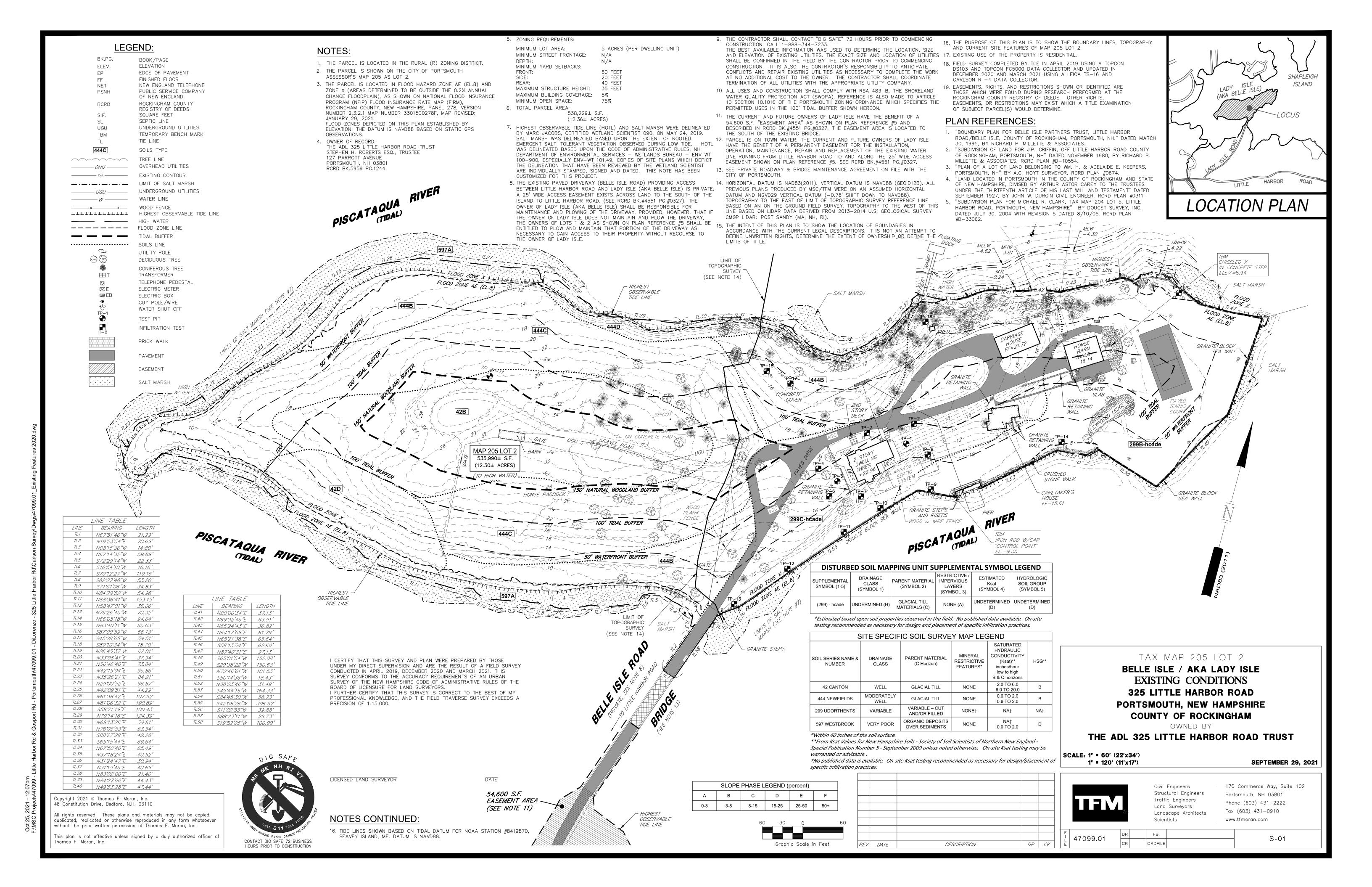
ivil Engineers Structural Engineers ffic Engineers ind Surveyors andscape Architects cientists

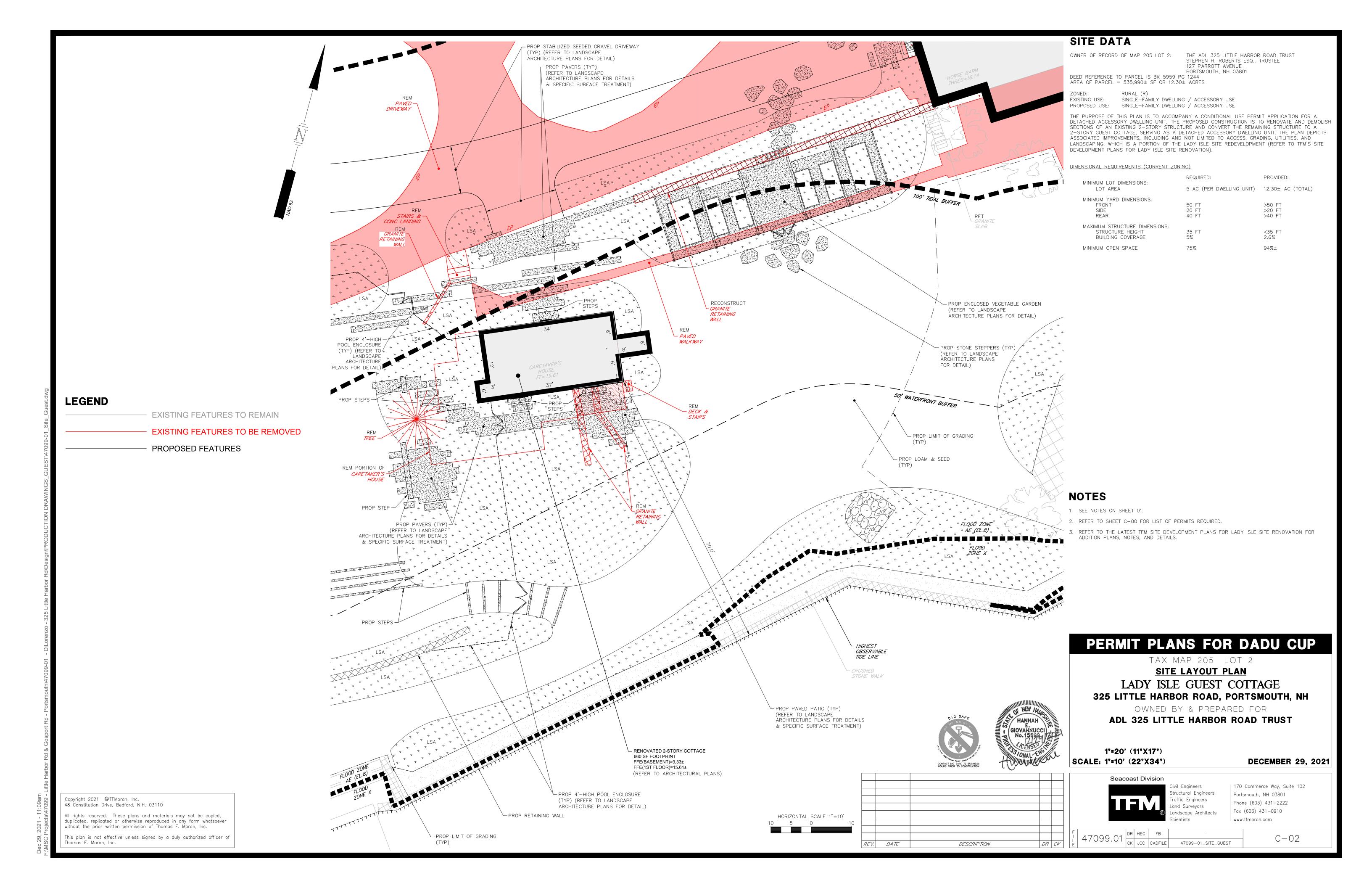
170 Commerce Way, Suite 102 Portsmouth, NH 03801 Phone (603) 431-2222 Fax (603) 431-0910 www.tfmoran.com

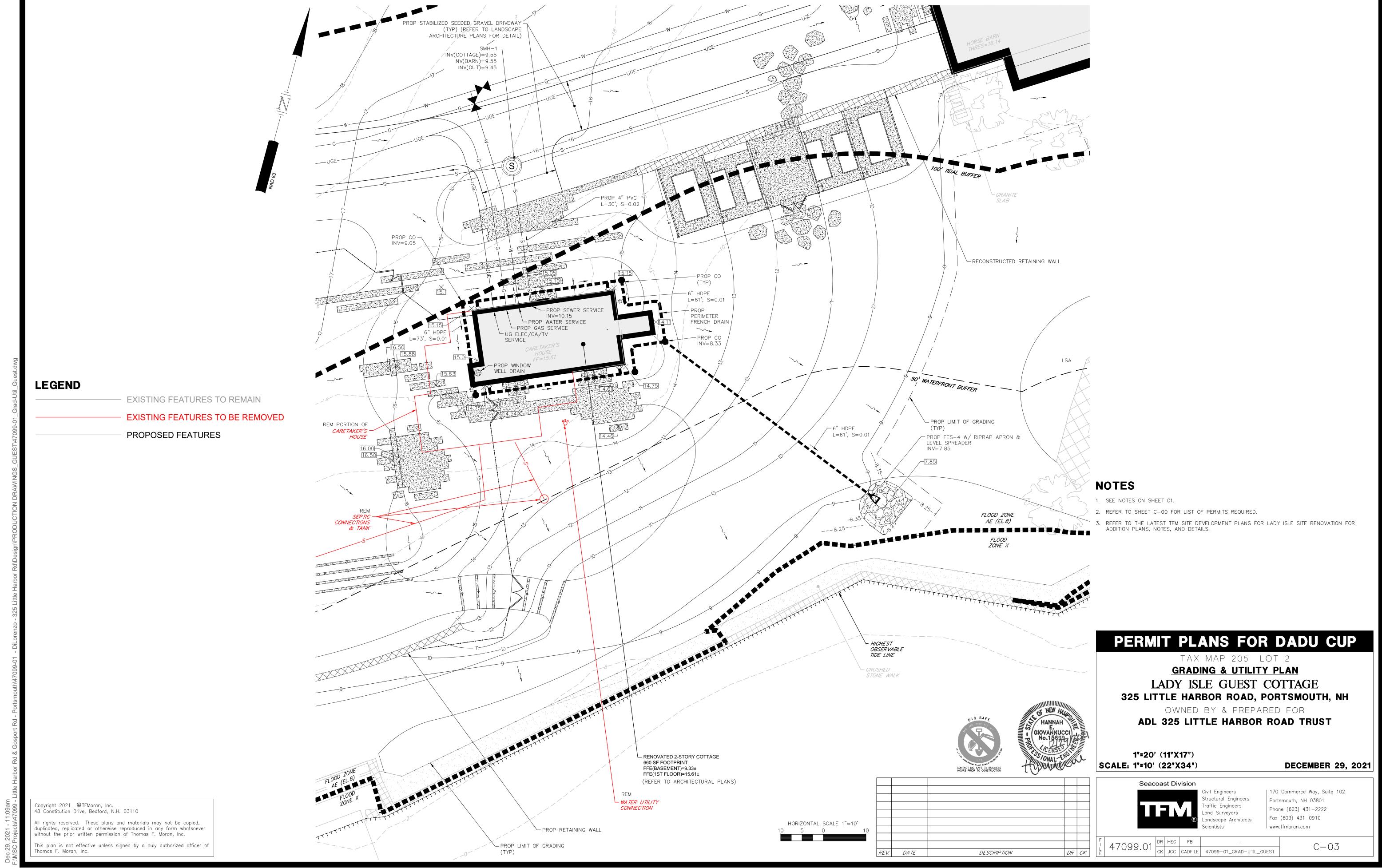
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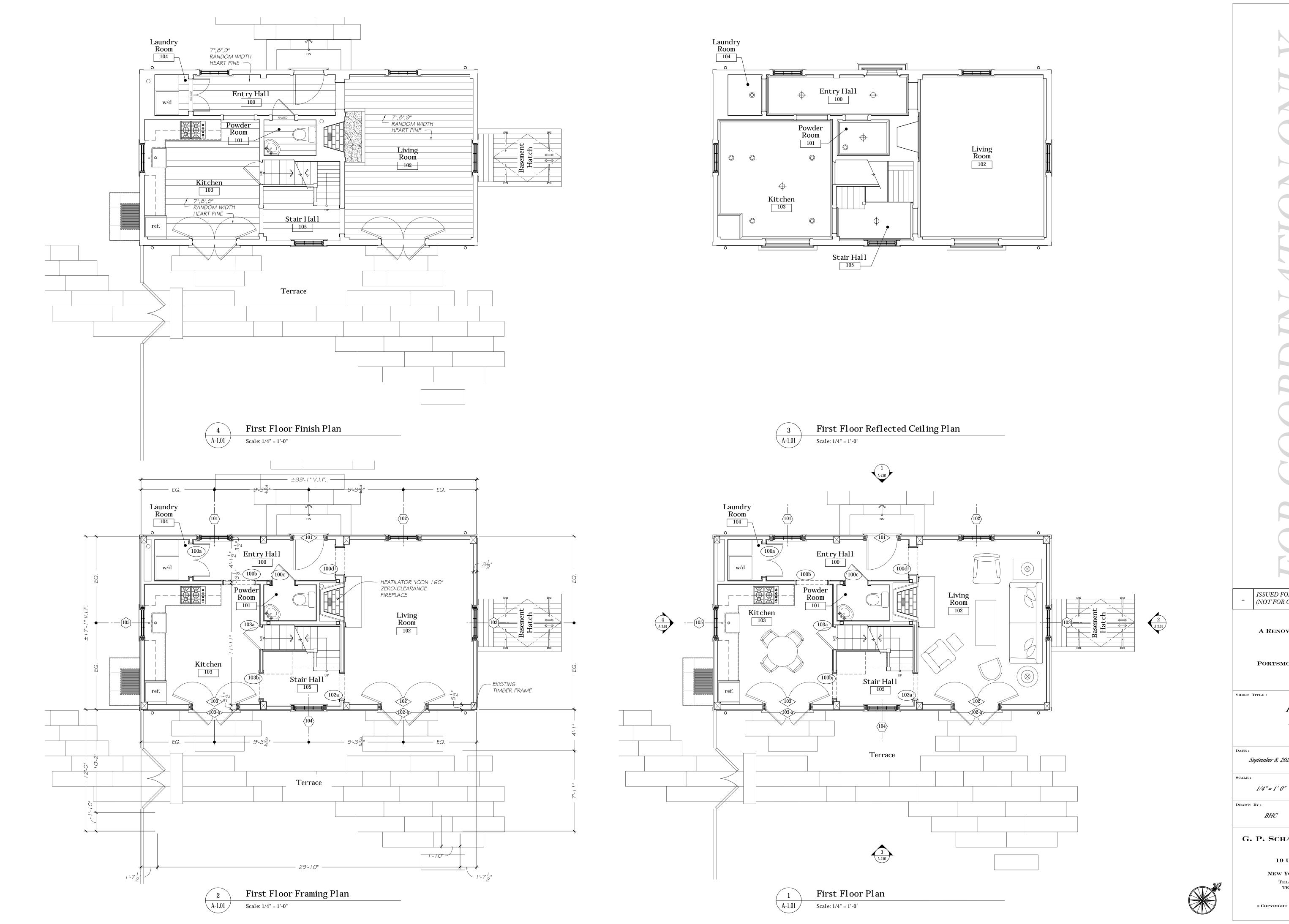
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REV. DATE **DESCRIPTION** DR CK









ISSUED FOR PRICING 9/8/20 (NOT FOR CONSTRUCTION)

A RENOVATED GUEST COTTAGE

LADY ISLE PORTSMOUTH, NEW HAMPSHIRE

First Floor Plan, Framing Plan, RCP & FFP

September 8, 2020

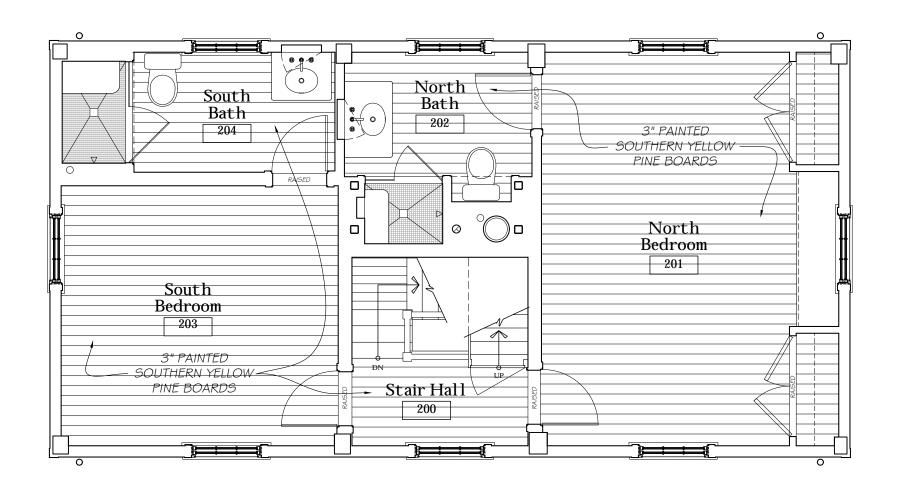
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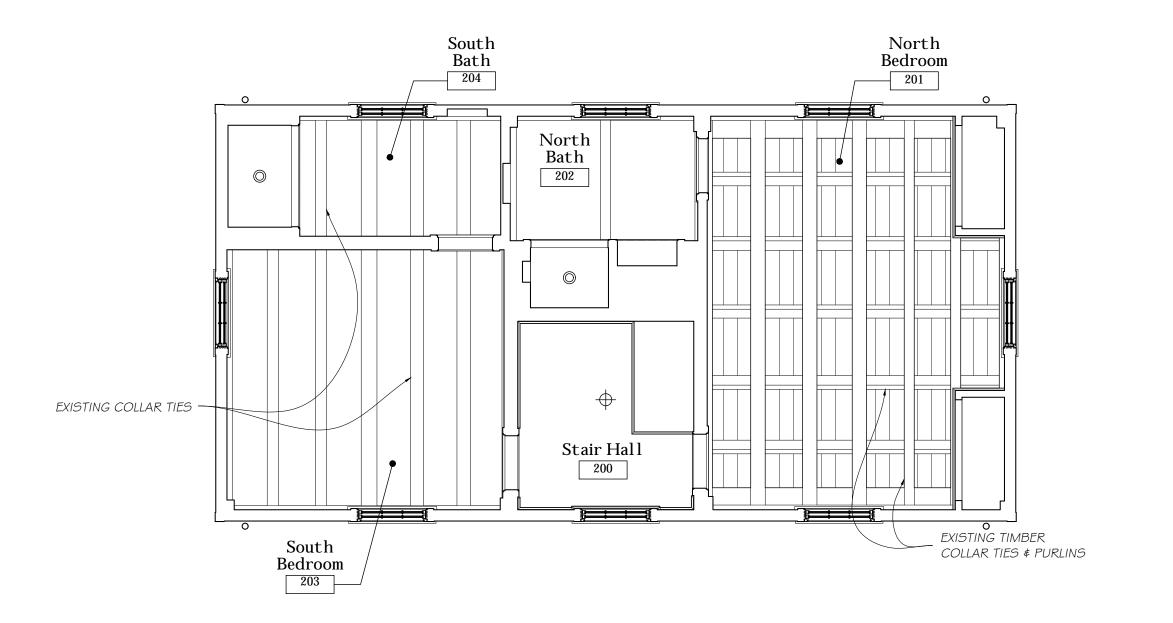
SHEET NUMBER:

G. P. SCHAFER ARCHITECT, DPC

19 Union Square West 4TH FLOOR NEW YORK, NEW YORK 10003 TELEPHONE: 212-965-1355 TELEFAX: 212-965-1356

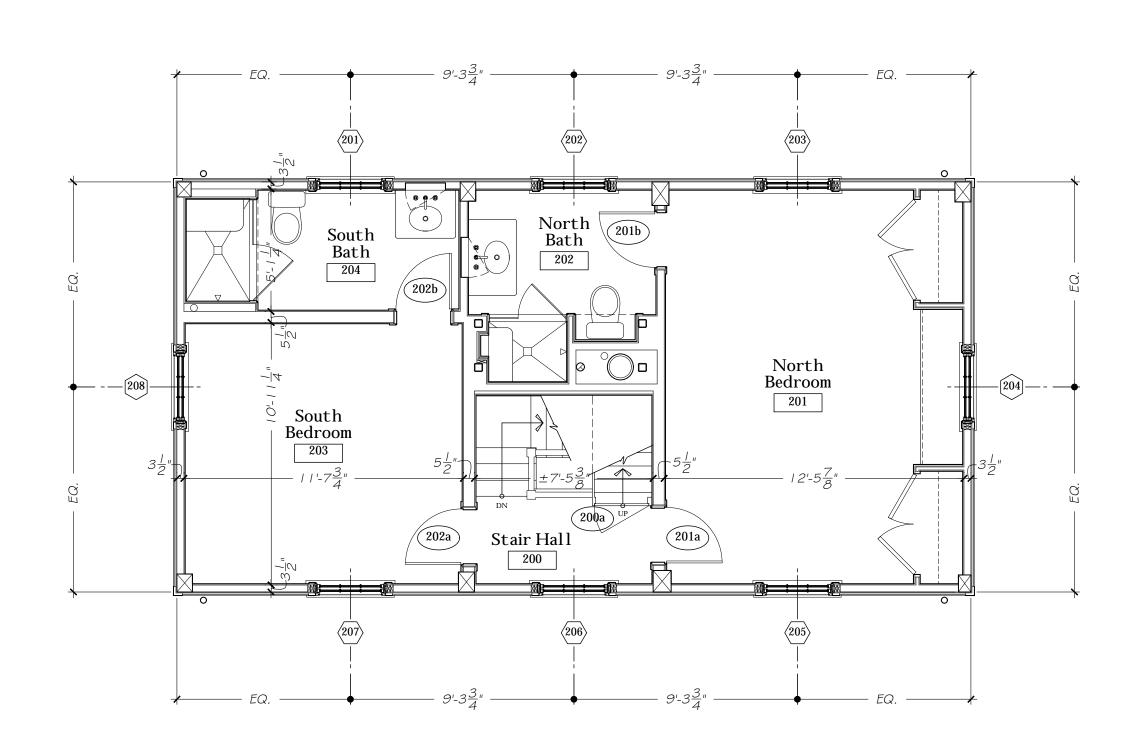
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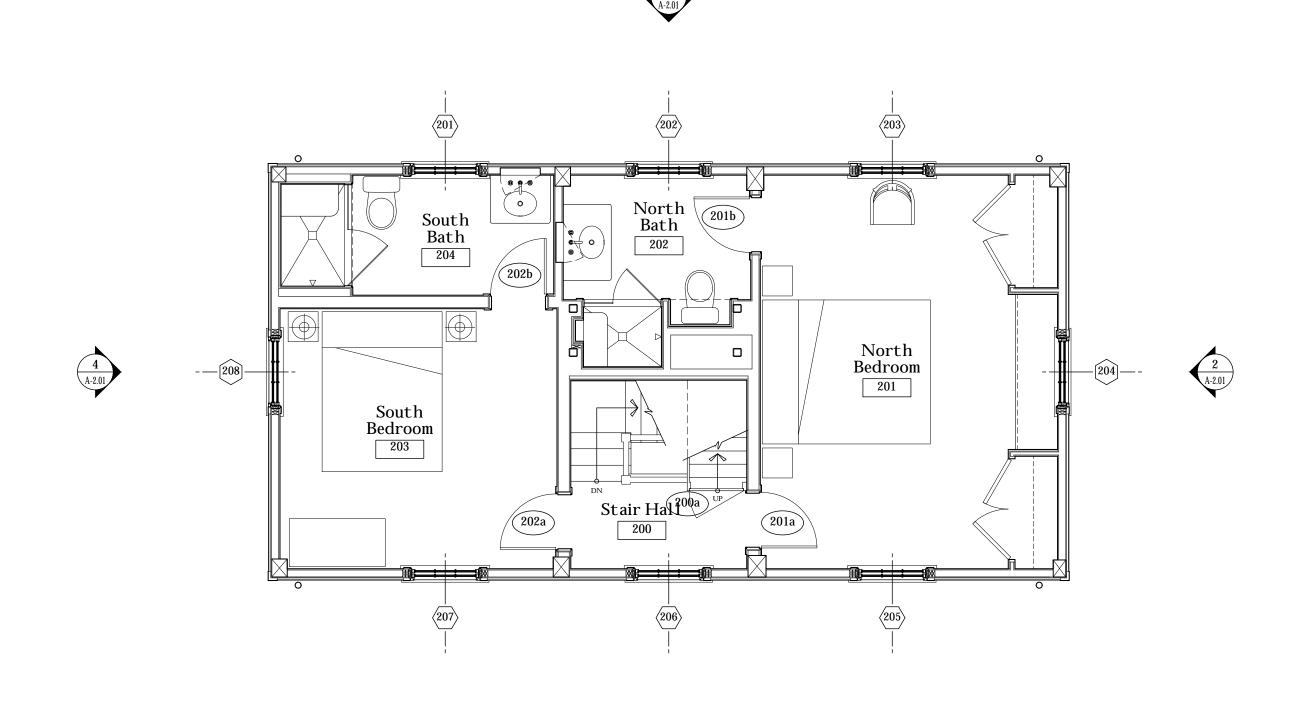
Second Floor Finish Plan

Scale: 1/4" = 1'-0"



3 Second Floor Reflected Ceiling Plan

Scale: 1/4" = 1'-0"





Second Floor Framing Plan

A-1.02

Scale: 1/4" = 1'-0"

Second Floor Plan

-1.02 Scale: 1/4" = 1'-0"

ISSUED FOR PRICING (NOT FOR CONSTRUCTION)

9/8/20

A RENOVATED GUEST COTTAGE

LADY ISLE PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:

Second Floor Plan, Framing Plan, RCP & FFP

September 8, 2020

1/4" = 1'-0"

Drawn By:

ВНС

A-1.02

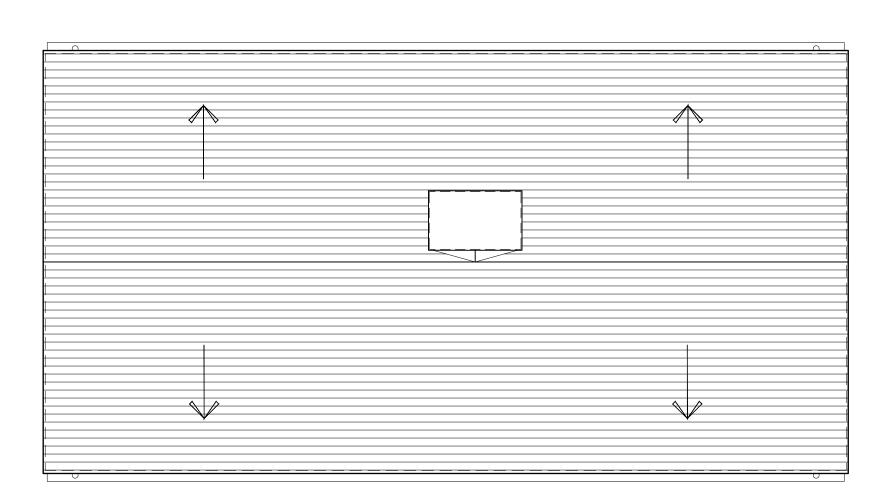
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Roof Plan Scale: 1/4" = 1'-0"



(NOT FOR CONSTRUCTION)

A RENOVATED GUEST COTTAGE

9/8/20

LADY ISLE PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:

Roof Plan

SHEET NUMBER: September 8, 2020

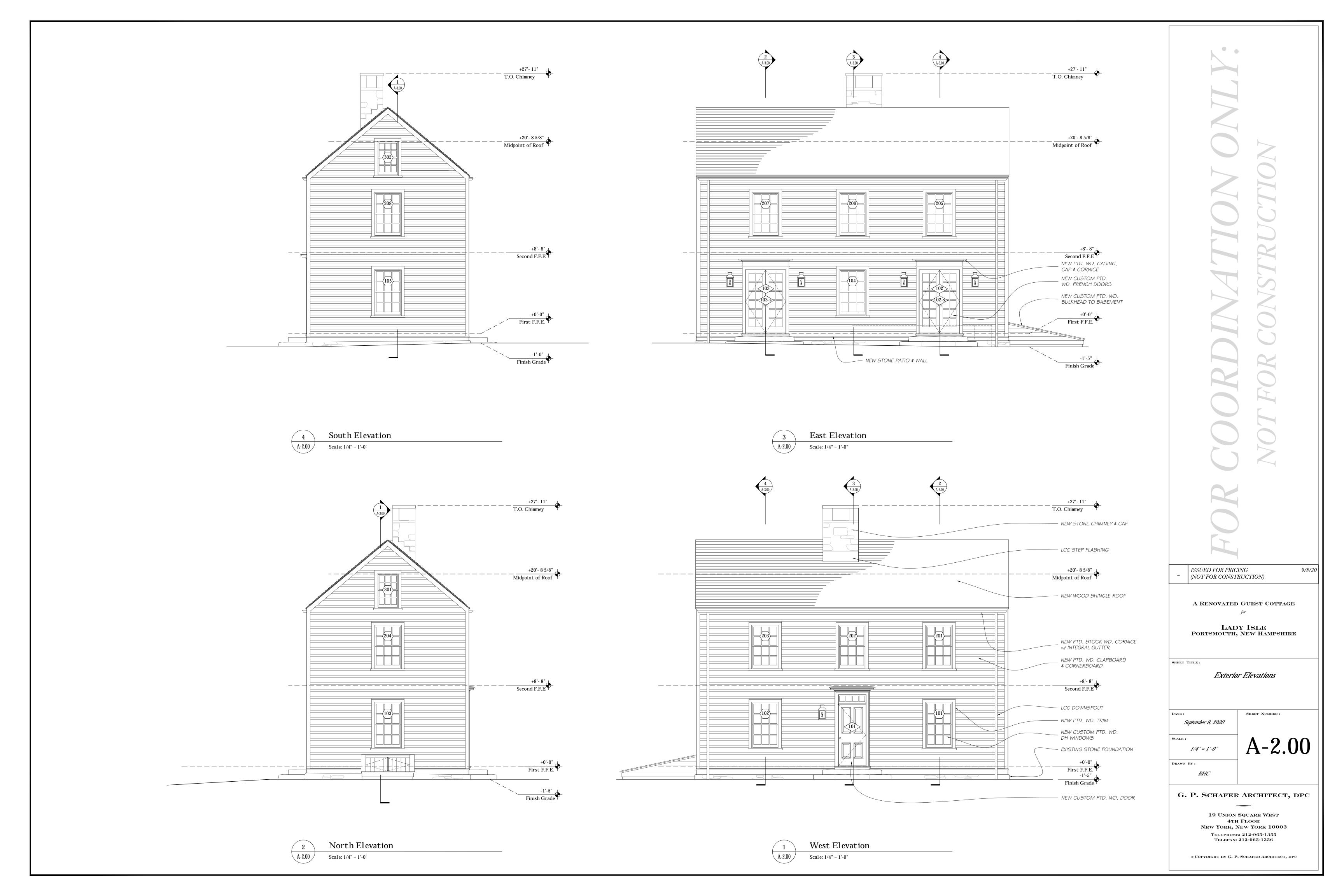
1/4"=1'-0"

DRAWN BY: PH

G. P. SCHAFER ARCHITECT, DPC

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325 Little Harbor Road, Portsmouth NH

General Notes:

1. Existing conditions and topographic data are from a site plan of land dated March 2, 2021; prepared by: Thomas F. Moran Inc., 170 Commerce Way, Suite 102, Portsmouth, NH, 03801 - Tel: (603) 431.2222

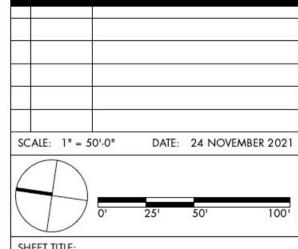
Existing conditions supplemented from data collected by: Matthew Cunningham Landscape Design LLC, 411 Main Street, Stoneham, MA 02180 - Tel: (617) 905.2246

3. Do not scale drawings



M A T T H E W
CUNNINGHAM
LANDSCAPE

DESIGN LLC
matthew-cunningham.com



LANDSCAPE PLAN

SHEET NUMBER:

L1.0



325 Little Harbor Road, Portsmouth NH

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3. Do not scale drawings



M A T T H E W
CUNNINGHAM
L A N D S C A P E
D E S I G N L L C

SCALE: 1" = 30'-0" DATE: 24 NOVEMBER 2021

matthew-cunningham.com

0' 15' 30'

SHEET TITI

LANDSCAPE PLAN

SHEET NUMBER:

L1.1



325 Little Harbor Road, Portsmouth NH

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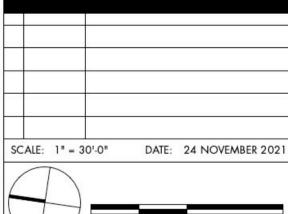


MATTHEW CUNNINGHAM

LANDSCAPE

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DESIGN LLC



SHEET TITLE:

PLANTING PLAN

SHEET NUMBER:



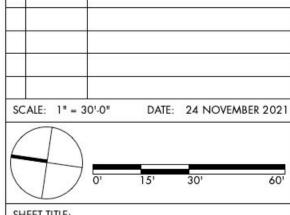
1. Existing conditions and topographic data are from a site plan of land dated March 2, 2021; prepared by: Thomas F. Moran Inc., 170 Commerce Way, Suite 102, Portsmouth, NH, 03801 - Tel: (603) 431.2222

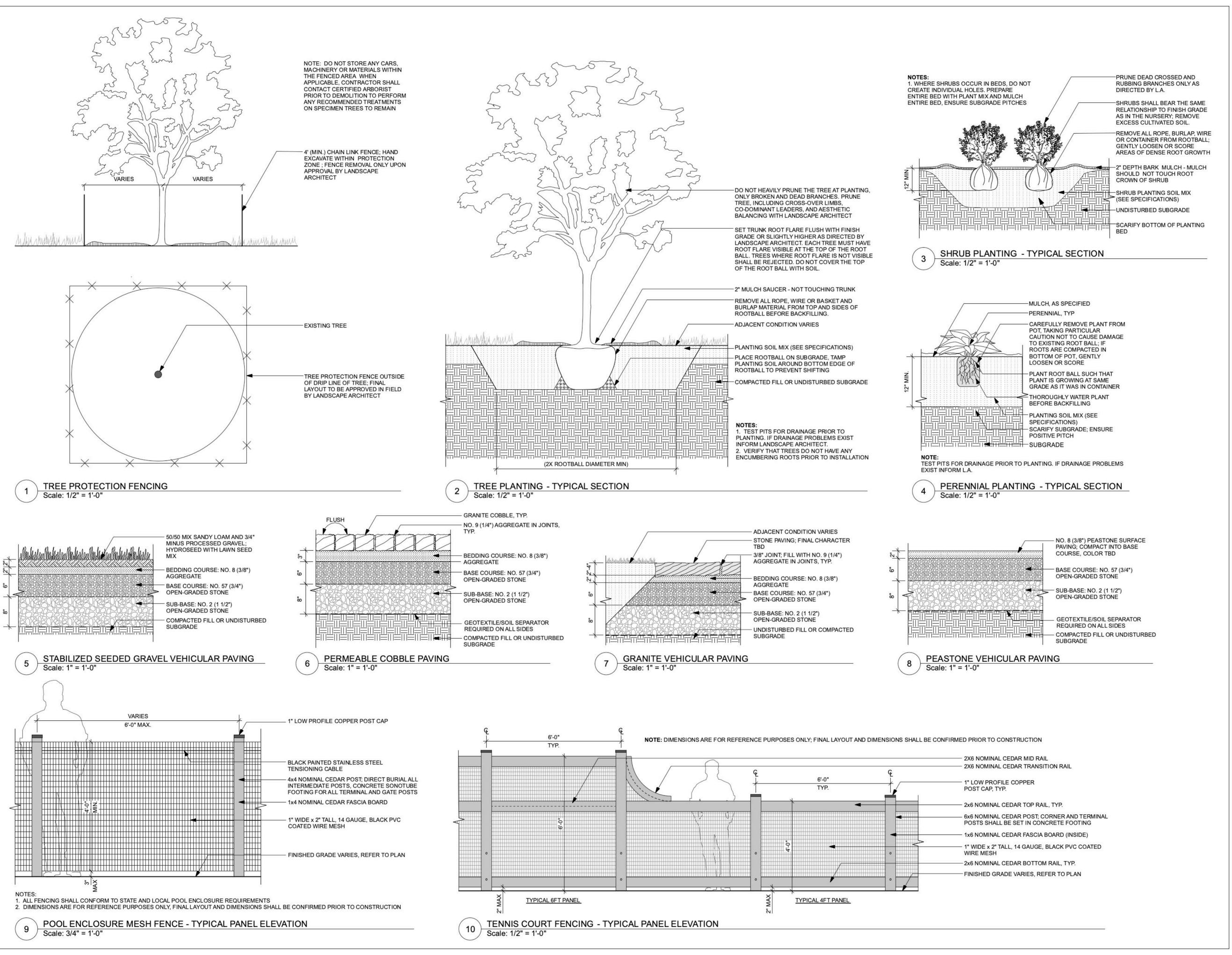
Existing conditions supplemented from data collected by: Matthew Cunningham Landscape Design LLC, 411 Main Street, Stoneham, MA 02180 - Tel: (617) 905.2246



MATTHEW CUNNINGHAM LANDSCAPE DESIGN LLC

matthew-cunningham.com





325 Little Harbor Road, Portsmouth NH

General Notes:

1. Existing conditions and topographic data are from a site plan of land dated March 2, 2021; prepared by: Thomas F. Moran Inc., 170 Commerce Way, Suite 102, Portsmouth, NH, 03801 - Tel: (603) 431.2222

2. Existing conditions supplemented from data collected by: Matthew Cunningham Landscape Design LLC, 411 Main Street, Stoneham, MA 02180 - Tel: (617) 905.2246

3. Do not scale drawings

LANTING

MATTHEW

J.

CUNNINGHAM

OD161

OF NEW HINDS

M A T T H E W
CUNNINGHAM

LANDSCAPE

DESIGN LLC

matthew-cunningham.com

SCALE: AS NOTED DATE: 24 NOVEMBER 2021

SHEET TITLE:

LANDSCAPE DETAILS

SHEET NUMBER:

L1.4



























PLANNING BOARD EXISTING AERIAL PHOTOS (06/02/21)

G. P. SCHAFER ARCHITECT



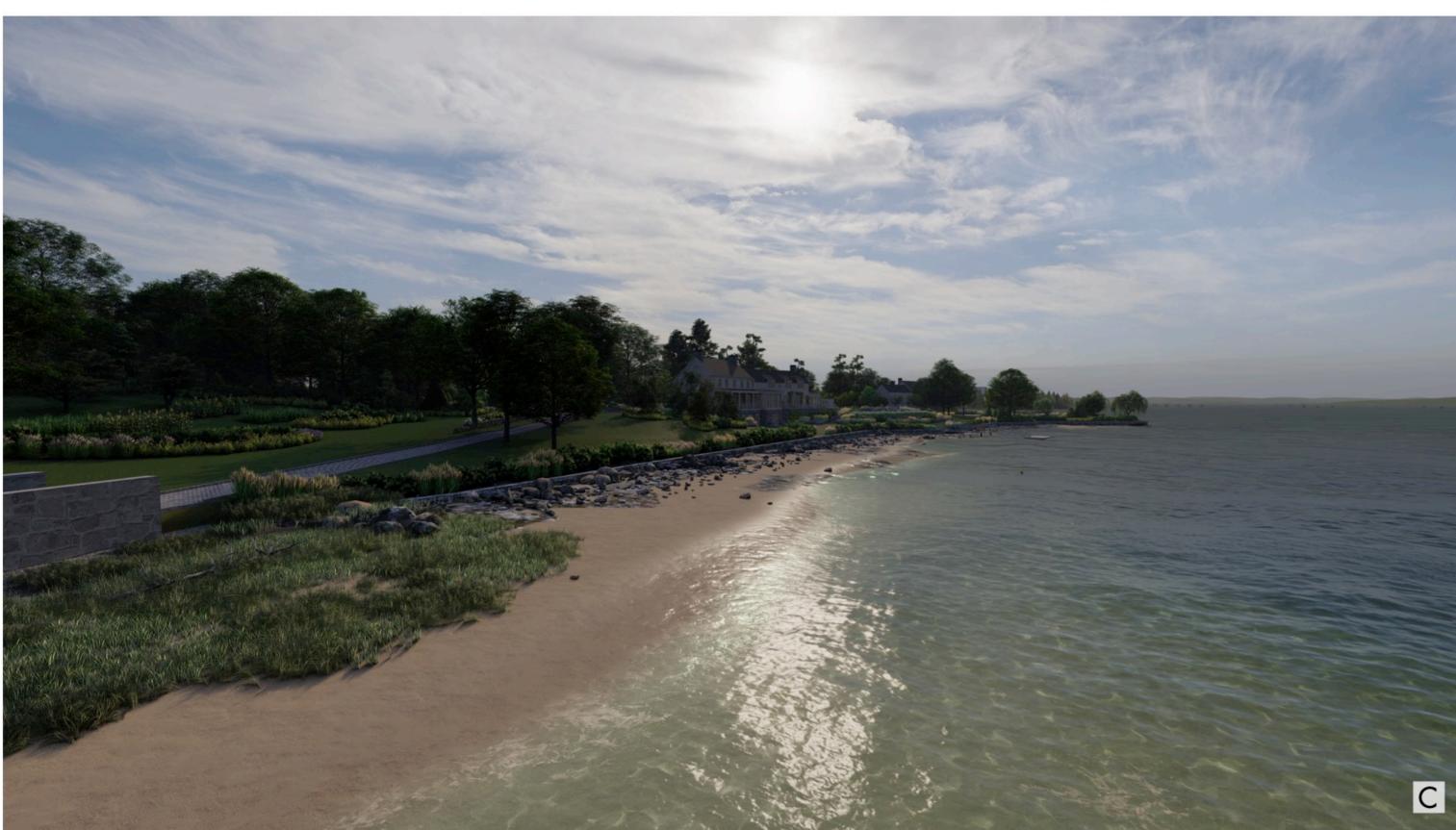
Civil Engineers Structural Engineers Traffic Engineers Land Surveyors Landscape Architects Scientists



















85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885 603.772.4746 - JonesandBeach.com

January 6, 2021

Portsmouth Planning Board Attn: Chairman of the Board 1 Junkins Avenue, Suite 3rd Floor Portsmouth, NH 03801

RE: Conceptual Application

212, 214 & 216 Woodbury Avenue, Portsmouth, NH

Tax Map 175, Lots 1, 2, 3 JBE Project No. 21254

Dear Chairman of the Board,

Jones & Beach Engineers, Inc., respectfully submits a Conceptual Application on behalf of the applicant, Tuck Realty Corporation. The intent of this application is to keep the existing structures on Lots 2 & 3 and reduce their lot sizes. The existing dilapidated structure on Lot 1 will be removed and this lot will be consolidated with the back land of Lots 2 & 3. This consolidated parcel (Lot 1) will then have an 8-unit condominium development proposed consisting of a single family, 2 duplexes and one 3-unit structure. Access will be from Boyd Street for condominium parcel. Architectural plans have not been generated yet, but the homes are planned to be 2-stories and fit in with the abutting structure.

The following items are provided in support of this Application:

- 1. Completed Conceptual Application (submitted online).
- 2. Letters of Authorization.
- 3. Current Deeds.
- 4. One (1) Full Size Plan Set Folded.

If you have any questions or need any additional information, please feel free to contact our office. Thank you very much for your time.

Very truly yours,

JONES & BEACH ENGINEERS, INC.

Joseph A. Coronati

Vice President

cd: Michael Garrepy, Tuck Realty Corporation (via email)

FEE SCHEDULE Planning Department Effective 07/01/21 - 06/30/22

PLANNING BOARD

Subdivision:

Subdivision Residential\$500.00 plus \$200.00 per lot Non-Residential\$700.00 plus \$300.00 per lot
Subdivision Amendment: Administrative approval\$200.00 TAC or Planning Board approval\$500.00
Lot line revision/verification\$250.00
Lot Line Revision Amendment Administrative approval\$100.00 TAC or Planning Board approval\$150.00
Lot Consolidation - No Subdivision\$175.00
Restoration of Involuntarily Merged Lots\$250.00
Preliminary Conceptual Consultation\$200.00
Design Review\$500.00
Site Plan Review:
All developments\$500.00 plus \$5.00 per \$1,000 of site costs only plus \$10.00 per 1,000 s.f. of site development area
Total fee not to exceed (cap)\$15,000.00
Site Plan Minor Amendment: Administrative approval\$200.00 Administrative approval after work has been done\$500.00 TAC or Planning Board approval\$800.00
Preliminary Conceptual Consultation\$200.00
Design Review\$500.00

Planning Department Fee Schedule (Effective 07/01/21 – 06/30/22)

Wetlands Conditional Use Permit:

Area of disturbance in wetland or	wetland buffer:
Up to 250 sq. ft	\$100.00
Up to 1,000 sq. ft	\$500.00
Greater than 1,000 sq. ft	\$1,000.00

Conditional Use Permit (Non-Wetland)

Conditional Use Permit (Non-Wetland)......\$200.00

BOARD OF ADJUSTMENT

	itial Applications		
1.	-2 dwelling units	\$150.00	
3	and over	\$250.00	plus \$50.00 for each unit over 4
	otal fee not to exceed (cap)\$		
R	Residential accessory structure only	\$50.00	
Non-Res	sidential Applications	\$300.00	plus \$5.00 per \$1,000 of valuation of new construction
Т	otal fee not to exceed (cap)\$	3,000.00	
Signs	§	\$200.00	
Appeal o	of Administrative Decision	\$50.00	

HISTORIC DISTRICT COMMISSION

Work Session (prior to application for approval) \$200.00 per work session

Residential Applications

1 dwelling unit	\$100.00
2 dwelling units	\$100.00
3 dwelling units	
	\$400.00 plus \$100.00 for each unit over 4
Total fee not to exceed (cap)	

Accessory structure, mechanical equipment or replacement of doors/windows only...... \$100.00

Planning Department Fee Schedule (Effective 07/01/21 – 06/30/22)

Non-Residential Applications \$50	00.00 plus \$5.00 per \$1,000 of valuation of new construction
Total fee not to exceed (cap)\$5,00	
Accessory structure, mechanical equipment	
or replacement of doors/windows only\$10	00.00
Signs \$10	00.00
Amendment to Certificate of Approval:	
Administrative approval\$10	00.00
Administrative approval after work has been done \$50	00.00
Commission approval\$80	00.00

ZONING PERMITS

Certificate of conformity\$	50.00
Letter of interpretation\$1	00.00

Letter of Authorization

We, Frederick Bailey & Joyce Nelson, owners of property located at 212, 214 & 216 Woodbury Avenue & 6 Boyd in Portsmouth, NH, known as Tax Map 175, Lots 1, 2, 3 & 13 do hereby authorize Jones & Beach Engineers, Inc. ("JBE"), Garrepy Planning Consultants, LLC ("GPC"), and Hoefle, Phoenix, Gormley & Roberts, PLLC ("HPGR") to act on its behalf concerning the previously mentioned property.

I hereby appoint JBE, GPC and HPGR as agents to act on our behalf in the Planning Board and Zoning Board application process, to include any required signatures.

Frederick Bailey

As Partners and Individually

Date

Joyce Nelson

As Portners and Individually

Data

Letter of Authorization

I, Turner Porter, Tuck Realty Corporation, PO Box 190, Exeter, NH 03833, developer of property known as Tax Map 175, Lots 1, 2, 3, do hereby authorize Jones & Beach Engineers, Inc., PO Box 219, Stratham, NH, to act on my behalf concerning the previously-mentioned property. The parcels are located on 212, 214 & 216 Woodbury Avenue in Portsmouth, NH.

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

Witness

Turner Porter

Tuck Realty Corporation

KNOW ALL MEN BY THESE PRESENTS that we, Seron E. Nelson and Peter A. Nelson, both of 19 Buckingham Drive, Bow, NH 03304 for nominal (less than \$1.00) consideration paid, do hereby release and disclaim any and all claim to or interest in and do hereby give and grant to the other parties of interest, to wit, Frederick J. Bailey III of 27 Kirriemuir, Stratham, NH and Loyce S. Nelson of 19 Buckingham Drive, Bow, NH with QUIT-CLAIM COVENANTS, the following undivided interest in the following described tract of land, to wit:

All of the Grantors estate's right, title and interest in and to eight certain tracts of land with the buildings thereon situated in Portsmouth, County of Rockingham, State of New Hampshire, bounded and described as follow:

TRACTS I, III, V, VI, AND VII.

Beginning at land of the State of New Hampshire at a concrete post in the ground which is a New Hampshire Highway Bound situated at the northeasterly corner of the premises hereby conveyed, which bound is also located at the northwesterly corner of land of Spectrum Enterprises, Inc.; thence turning and running S 14 degrees 15' E along land of Spectrum Enterprises, Inc., a distance of two hundred sixty-seven and 40/100 (267.40) feet to a drill hole in a boulder at other land formerly of Colony Motor Hotel, Inc.; thence turning and running S 14 degrees 08' E along land formerly of Colony Motor Hotel, Inc., a distance of ninety-six and 14/100 (96.14) feet to a corner of other land formerly of Colony Motor Hotel, Inc.; thence turning and running N 82 degrees 49' W along other land formerly of Colony Motor Hotel, Inc. a distance of one hundred twelve and no/100 (112.00) feet to the northeast corner of such other land formerly of Colony Motor Hotel, Inc. (There is also included in the aforesaid tract the right to use so much, if any, of the area owned by the grantor south of such line as is now occupied by the pool or cooling tower now located on the aforesaid tract); thence turning and running S 14 degrees 08' E along such other land formerly of Colony Motor Hotel, Inc. a distance of one hundred fifty and no/100 (150.00) feet to the northerly sideline of Boyd Road at the southeasterly corner of the premises hereby conveyed, thence turning and running N 82 degrees 49' W along the northerly sideline of the said Boyd Road a distance of two hundred ninety-eight and no/100 (298.00) feet to a point in such sideline; thence turning and running N 84 degrees 25' 10" W still along the northerly sideline of Boyd Road a distance of one hundred seven and 39/100 (107.39) feet to an iron pipe set in the ground at land of the State of New Hampshire; thence turning and running N 13 degrees 10'55" E along land of the State of New Hampshire a distance of twenty-four and 88/100 (24.88) feet to and iron pipe set in the ground; thence turning and running N 20 degrees 19' 40" E still along land of the State of New Hampshire a distance of two hundred seventy-two and 92/100 (272.92) feet to an iron pipe set in the ground; thence turning and running N 43 degrees 09' 40" E still along land of the State of New Hampshire a distance of seventy-seven and 61/100 (77.61) feet to an iron pipe set in the ground; thence turning and running N 67 degrees 00'10" E still along land of the State of New Hampshire a distance of two

hundred fifty-four and 38/100 (254.38) feet to the New Hampshire Highway Bound at the place of beginning.

The foregoing described premises include (as Tract VII) the whole of the premises conveyed by the State of New Hampshire to Colony Motor Hotel, Inc. by deed dated November 12, 1975, and recorded in the Rockingham County Registry of Deeds, Book 2247, Page 0552; (as Tract VI) the whole of the premises conveyed by Parkwood, Inc. to Colony Motor Hotel, Inc. by deed dated February 6, 1973, and recorded in the Rockingham County Registry of Deeds, Book 2196, Page 1564; the whole of Tract I (original motel lot) and Tract III (original adjunct to pool lot), and Tract V (triangular lot at corner of State land) as conveyed by Frederick J Bailey and Seron W. Bailey to Colony Motor Hotel, Inc. by deed dated June 30, 1976, and recorded in the Rockingham County Registry of Deeds, Book 2261, Page 0479, together with all grantor's right, title and interest in and to rights of way, easements, options, etc., as set forth on the last page of said Baileys to Colony deed in Book 2261, Page 0479.

There is expressly excepted and reserved to the State of New Hampshire as to the tract adjacent to the Portsmouth Traffic Circle the rights by said State reserved to itself in said deed by the State of New Hampshire to Colony Motor Hotel, Inc. dated November 12, 1975 recorded in said Rockingham County Registry of Deeds, Book 2247, Page 0552 in the following terms as therein set forth, namely:

"There is expressly excepted and reserved to the grantor herein all rights of access, light, air and view, appurtenant to the parcel herein conveyed, over, from and to US Route 1 By-Pass and the Woodbury Avenue Ramp along the first four (4) described courses with the exception of two (2) points of access, as presently existing along the fourth described course at the new right of way line established by this conveyance, said two (2) points of access being as shown on the plan herein above referred to.

Attached hereto is a copy of the relevant portion of the plan referred to above."

Former easement reserved by deed of Parkwood, Inc. to Colony Motor Hotel, Inc. dated February 6, 1973, recorded in Rockingham County Registry of Deeds, Book 2196, Page 1564, reserving easement to Frederick J. Bailey and Seron W. Bailey over strip of land 20 feet in width along southerly side of restaurant property, having since become meaningless, was terminated by conveyance of such easement in total by said Frederick J. Bailey and Seron W. Bailey by deed to Colony Motor Hotel, Inc. dated July 24, 1981, recorded on July 29, 1981, in said Rockingham Deeds, Book 2394, Page 1324.

TRACT II.

A certain parcel of land with the buildings thereon, situate in said Portsmouth, and County of Rockingham and State of New Hampshire, on the northerly side of Boyd Road, so -called, and bounded and described as follows:

Beginning on said Road at the southwesterly corner of land formerly owned by one Taccetta at a stake in the ground and thence running in a northerly direction in part by said land formerly of said Taccetta and in part by Tract IV in this deed one hundred and fifty (150) feet to a stake in the ground at land formerly of Joseph Cohen, (now Tract III in this deed); thence turning and running in a generally westerly direction by said land (Tract III herein) one hundred and twelve (112) feet to a stake in the ground; thence turning and running still by land formerly of said Hazel E. Wood (Tract I in this deed) in a generally southerly direction one hundred and fifty (150) feet to said Boyd Road to a stake in the ground; thence turning and running by said Boyd Road in a generally easterly direction one hundred and twelve (112) feet to said stake in the ground at said southwesterly corner of said land formerly of said Taccetta to the place begun at.

Tract II above described being the same premises as Tract II conveyed by deed of Frederick J. Bailey and Seron W. Bailey dated June 30, 1976, recorded Rockingham County Registry of Deeds, Book 2261, Page 0479.

TRACT IV.

A certain lot or parcel of land with the buildings thereon, situated on the westerly side of Woodbury Avenue, in said Portsmouth, and County of Rockingham and State of New Hampshire, and more particularly bounded and described as follows:

Beginning at the northeasterly side of the premises herein described at the southeast corner of land now or formerly of Priscilla Hamilton; thence running by said Woodbury Avenue, S 21 degrees 30' E, 85.0 feet, to land formerly of Vincent Taccetta, Jr.; thence turning and running by said Taccetta, Jr. land S 68 degrees 30' W, 99.2 feet to a point at said Taccetta Jr., land; thence turning and running still by said Taccetta, Jr. land S 85 degrees 23' W, 203.8 feet to land formerly of Parkwood, Inc., (now Tract II in this deed), thence turning and running by said land (Tracts II and III in this deed and other land formerly of Colony Motor Hotel, Inc.) N 14 degrees 50' W, 86.5 feet to land formerly of said Hamilton, thence turning and running by said Hamilton land, N 80 degrees 24' E, 290.4 feet to Woodbury Avenue and the point of the beginning.

Reserving and excepting from the above described premises a strip of land along the southerly side thereof conveyed to Vincent Taccetta, Jr. et al by deed dated June 21, 1966, recorded in the Rockingham County Registry of Deeds, Book 1833, Page 435.

Tract IV being the same premises as Tract IV conveyed by deed of Frederick J. Bailey and Seron W. Bailey, dated June 30, 1976, and recorded in the Rockingham County Registry of Deeds, Book 2261, Page 0479.

The foregoing premises all being that portion of the same premises conveyed by deed of Colony Motor Hotel, Inc. dated December 15, 1986, recorded in the Rockingham County Registry of Deeds, Book 2652, Page 550.

The foregoing premises all being conveyed to by deed of Frederick J. Bailey and Frederick J. Bailey III as co-executors Estate of Seron W. Bailey dated January 1, 1987, recorded in the Rockingham County Registry of Deeds, Book , Page and by Frederick J. Bailey, Frederick J. Bailey III, and Joyce S. Nelson as Trustees of Seron W. Bailey Trust A by Deed dated December 31, 1989 and recorded in Book 2823 Page 1009.

The premises hereby conveyed, namely Tracts I-VII inclusive, are also conveyed subject to any and all existing rights or easements or record with respect to poles, wires or other facilities of public utilities and to any and all existing access, view and other rights and easements of the State of New Hampshire and/or others for highway or right of way purposes.

TRACT VIII.

Beginning at the intersection of the Easterly Sideline of said By-Pass and the Southerly sideline of Boyd Road; thence running Easterly by said Road Forty-five (45) feet, more or less, to the Westerly sideline of a proposed street known as Center Street; thence turning and running Southeasterly by said proposed street Two Hundred Forty-nine (249) feet to the Northerly sideline of a proposed street known as Garden Street; thence continuing in a straight line across said Garden Street Fifty (50) feet and continuing further in a straight line Fifty (50) feet to land now, or formerly of, one Regan; thence turning and running Westerly by land of said Regan and land of another Two Hundred (200) feet, more or less, to the Easterly sideline of said By-Pass One Hundred (100) feet, more or less, to land of Harry E. Yoken, et. al or Darley Realty Company; thence continuing in a general Northeasterly direction Three Hundred Nine (309) feet, more or less, by the Easterly sideline of said By-Pass to the point of beginning, subject, however, to such rights, if any, as the public or adjoining owners may have in that portion of Garden and Inland Street, so called, included in the above description, and meaning and intending to convey all right of the grantor in Center Street, Garden Street, and Inland Street as shown on Plan of Land belonging to Frank Jones, recorded in Rockingham County Records, Book 584, Page 481, and also shown on Plan of Spadea Lots, Garden and Center Streets, Portsmouth, New Hampshire, by John W. Durgin, C. E., recorded in Rockingham Records, Plat 53, page 10, excepting, however, from the above description a parcel of land one hundred twenty (120) feet in length and twenty-five (25) feet in depth extending from the Northerly sideline of Garden Street Northeasterly along the Easterly sideline of said By-Pass, all as shown on said Plan.

To have and to hold the same, with all the rights, privileges, and appurtenances thereunto appertaining unto and to the use of the said Frederick J. Bailey III, and Joyce S. Nelson, and their successors and assigns forever.

Either statutory minimum or no Documentary Stamps are required, as this is a release and disclaimer of an interest. Non comment trasful.

IN WITNESS WHEREOF Seron E. Nelson and Peter A. Nelson have affixed their hands under seal this 277 day of December, 2002.

In the presence of:

STATE OF NEW HAMPSHIRE ROCKINGHAM, SS.

2002

Personally appeared the above named, Seron E. Nelson and acknowledges the foregoing instrument be of her free act and deed.

> Before me, lotary Public JANE H. DODGE, Notary Pu Commission Expires September

STATE OF NEW HAMPSHIRE ROCKINGHAM, SS.

Personally appeared the above named Peter A. Nelson and acknowledges the foregoing instrument to of his free act and deed.

Before me,

tary Public Notary Public My Commission Expires September 25, 2007 8:08

WARRANTY DEED

We, Mitchell A. Hyder, Edward A. Hyder, Henry K. Hyder, Jr., A. Robert McGuire, and Henry K. Hyder III, all as Trustee's of the Mitchell A. Hyder and Edward A. Hyder Irrevocable Trust of 1993, of One Raynes Avenue, Portsmouth, Rockingham County,

Frederick J. Bailey, III and Joyce S. Welson with a mailing address of 27 FOR CONSIDERATION PAID GRANT TO / Kirriemuir Road, Stratham, New Hampshire 03885, as tenants in partnership in accordance with the Bailey Nelson Partnership.

with Warranty Covenants

A certain tract or parcel of land, with the buildings thereon, situate in Portsmouth, County of Rockingham and State of New Hampshire, and more particularly bounded and described as follows:

Beginning on the Westerly side of Woodbury Avenue at the Northeasterly comer of land now or formerly of James and Mary Verna; thence running S 68° 30' W, by said Verna land, ninety-nine and two-tenths (99.2) feet, more or less, to other land of said Verna; thence N 21° 30' W by said Verna land, ten (10) feet, thence S 68° 30' W by said Verna land, seventy-two (72) feet, thence S 80° 24' W, by said Verna land in part, and by land of John F. and Gloria C. Collins in part sixty-eight and three-tenths (68.3) feet; thence N 84° 6' N by said Collins land, seventy-four and five-tenths (74.5) feet to land formerly of Edward C. Berry; thence by said Berry land in part and by land of Parkwood, Inc. in part, N 14° 50' W, eighty-six and five-tenths (86.5) feet to land formerly of Vincent Taccetta; thence by land formerly of Vincent Taccetta, N 85° 23' E. one hundred sixteen and nine-tenths (116.9) feet; thence still by land formerly of Vincent Taccetta, N 70° 23' 30" W, one hundred eighty-two and four-tenths (182.4) feet to Woodbury Avenue; thence S 21° 30' E, by said Woodbury Avenue, one hundred four and four-tenths (104.4) feet to the point of beginning.

Being parcel No. 6 as described in Deed at Registry of Deeds in Book 3005, Page 1883 dated August 31, 1993.

Executed as a sealed instrument this 16 day of Nov. 2005.

MITCHELL A. HYDER EDWARD A. HYDER **IRREVOCABLE TRUST OF 1993**

Henry K. Hyder, Jr.

STATE OF NEW HAMPSHIRE

7 HUNDRED AND 50

STAIR	OF NEW HAMPSHIRE
THE SECOND	WENTER OF MASSACHUSETTS
ESSEX, SS	Avvenson N 2005
personally appeared Henry K. Hyde identification, which was personal to on the preceding or attached docur	2/2005, before me, the undersigned notary public, er III proved to me through satisfactory evidence of knowledge, to be the person whose name is signed ment, and acknowledged to me that he signed it
voluntarily for its stated purpose, S/A 7	Notary Public NOTARY PUBLIC My Commission Expires w Hampahi My Commission Expires him which was a few Hampahi My Commission Expires him was a few Hampahi My Commission Hampahi
EGGEX, ss	<u>Nov</u> 16, 2005
personally appéared Henry K. Hyd identification, which was personal to on the preceding or attached docu voluntarily for its stated purpose,	er, Jr., proved to me through satisfactory evidence of knowledge, to be the person whose name is signed ment, and acknowledged to me that he signed it Notary Public My Commission Expires STARIES, Commission Expired August 2.
officer personally appeared Mitch	2005, before me, Letter And the undersigned ell A. Hyder, known to me (or satisfactorily proven) to scribed to the within instrument and acknowledged purposes therein contained. et my hand and official seal. Notary Public My Commission Expires: 42109
State of the state	

State of New Hampshire County of Rockingham

On this the day of 2005, before me, the undersigned officer, personally appeared Edward A. Hyder, 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.

In witness whereof I hereunto set my hand and official seal.

BK 4582 PG 0890



Michael a Janderell

Notary Public

My Commission Expires: 421 09

State of New Hampshire County of Rockingham

On this the 6 day of 2005, before me, the undersigned officer, personally appeared A. Robert McGuire, 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.

In witness whereof I hereunto set my hand and official seal.

Notary Public

My Commission Expires: 4/21/09

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WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that JOSEPH M. VERNA, married, of 347 Meadow Road, Portsmouth, Rockingham County, New Hampshire, and GLORIA C. COLLINS, an unremarried widow, of 6 Boyd Road, Portsmouth, New Hampshire,

for consideration paid, grants to FREDERICK J. BAILEY, III, and JOYCE NELSON, of 27 Kirriemuir Road, Stratham, Rockingham County, New Hampshire, as tenants in partnership in accordance with the Bailey Nelson Partnership, with WARRANTY COVENANTS, the following described premises:

A certain tract or parcel of land with the buildings thereon situate in Portsmouth, County of Rockingham, State of New Hampshire, being shown as Lot 1 on a plan entitled "Lot Line Adjustment Plan for John & Gloria Collins in Portsmouth, NH" dated October 27, 1988, Scale 1"=20", prepared by Seacoast Engineering Associates, Inc., recorded at the Rockingham County Registry of Deeds as Plan D#18914, and being more particularly bounded and described as follows:

Beginning on Woodbury Avenue at land now or formerly of Margaret H. Taccetta, and running by said Woodbury Avenue South 21°30"East 141.9 feet to a point; thence by a curve whose radius is 12.97 feet, Southerly and Westerly to a point on Boyd Road; thence by said last named road North 86°8'West 240.56 feet to land now or formerly of John F. and Gloria C. Collins; thence turning and running North 01°16'23" West, by land now or formerly of said Collins, a distance of 74.00 feet to a point; thence turning and running North 80°24'02" East, by land now or formerly of Hyder Management, a distance of 36.83 feet to a point; thence turning and running North 68°30'00" East, by land now or formerly of said Hyder Management a distance of 72.00 feet to a point; thence turning and running North 68°30'00"East, a distance of 99.20 feet to the point of beginning.

Together with a right of way for all purposes to and from said conveyed premises and Woodbury Avenue over adjoining land now or formerly of Margaret H. Taccetta ten feet wide and carrying that width back 99.2 feet from said Avenue; and subject to a similar right of way, as appurtenant to said land of Margaret H. Taccetta over the land conveyed,

to and from said premises now or formerly of said Margaret H. Taccetta and said Woodbury Avenue, adjoining the aforementioned right of way and similarly ten feet wide and carrying that width back 99.2 feet form said Avenue; the two rights of way together constituting a strip of land 20 feet wide and 99.2 feet deep, over which the two adjoining properties have mutual rights of way. Being a part of the premises described in the deed from Guisseppe Vincini to Croce Taccetta, dated October, 5, 1923, and recording in the Rockingham County Registry of Deeds in Book 781, Page 24.

SUBJECT TO all plans, easements, covenants and restrictions of record, if any.

The is not homestead property of the Grantors and the Grantors release all other interest in the property.

Meaning and intending to describe and convey the same premises conveyed by Corrective Quitclaim Deed to Christine V. Harris, having a life estate, and remainder interest of Joseph M. Verna, and Gloria C. Collins, from Christine V. Harris, Trustee under the Trust created under the Will of James Verna, dated September 15, 2006, and recorded contemporaneously with this deed at the Rockingham County Registry of Deeds.

IN WITNESS WHEREOF, signed this 15th day of September, 2006.

OSEPH M. VERNA

GLORIA C. COLLINS

STATE OF NEW HAMPSHIRE COUNTY OF ROCKINGHAM

Personally appeared this 15th day of September, 2006, the above-named Joseph M. Verna and Gloria C. Collins, acknowledged the foregoing instrument to be their voluntary act and deed. Before me,

My commission expires:





WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, That I, GLORIA C. COLLINS, Trustee of the Gloria C. Collins Living Revocable Trust of 1999, established u/d/t dated September 14, 1999, a single woman, with an address of 6 Boyd Road in Portsmouth, County of Rockingham and State of New Hampshire, for consideration paid, grant to, FREDERICK J. BAILEY, III, and JOYCE S. NELSON, both of 27 Kirrimiur Road, Stratham, County of Rockingham, State of New Hampshire, as joint tenants with rights of survivorship, WITH WARRANTY COVENANTS, the following described premises:

PORTSMOUTH, NEW HAMPSHIRE

A certain tract or parcel of land, with the buildings thereon, situate at 6 Boyd Road, in the City of Portsmouth, County of Rockingham, and State of New Hampshire, being more particularly bounded and described as follows:

Beginning at a point on the northerly sideline of Boyd Road, at land now or formerly of Christine Harris, thence turning and running N 86° 08′ 00″ W, along the northerly sideline of Boyd Road, a distance of 85.00 feet to a point; thence turning and running N 14° 30′ 00″ W, by land now or formerly of F.J. and F.J. III Bailey and J.S. Nelson, a distance of 53.10 feet to a point; thence turning and running N 14° 48′ 57″ W, by land now or formerly of said F.J. and F.J. III Bailey and J.S. Nelson, a distance of 20.00 feet to a point at land now or formerly of Hyder Management; thence turning and running S 84° 06′ 04″ E, by land now or formerly of said Hyder Management, a distance of 74.53 feet to a point; thence turning and running N 80° 24′ 02″ E, by land of said Hyder Management, a distance of 10.47 feet to a point; thence turning and running S 15° 08′ 02″ E, by land now or formerly of Christine Harris, a distance of 73.01 feet to the point of beginning.

Meaning and intending to convey the same premises conveyed to Gloria C. Collins, Trustee of the Gloria C. Collins Living Revocable Trust of 1999 by deed dated October 24, 2005, said deed being recorded in the Rockingham County Registry of Deeds at Book 4570, Page 1092.

Also conveying a certain tract or parcel of land with any improvements thereon situate in Portsmouth, County of Rockingham, State of New Hampshire, being a triangular shaped parcel shown on a plan entitled, "Lot Line Adjustment Plan for John & Gloria Collins in Portsmouth, NH" dated October 27, 1988, Scale 1" = 20', prepared by Seacoast Engineering Associates, Inc., recorded at the Rockingham County Registry of Deeds as Plan D-18914, and being more particularly bounded and described as follows:

Beginning at a point on the Northerly sideline of Boyd Road, at the Southeasterly corner of other land of the Grantor; thence turning and running N 15° 08′ 02″ E, along land of the Grantor, a distance of 73.01 feet to a point at land now or formerly of Hyder Management; thence turning and running N 80° 24′ 02″ E by land of said Hyder Management, a distance of 21.00 feet to a point; thence turning and running S 01° 16′ 23″ W by land now or formerly of Christine Harris a distance of 74.00 feet to the point of beginning.

The within conveyed parcel of land being the premises conveyed to the Grantor by Warranty Deed of Christine V. Harris, Trustee, dated September 15, 2006 and recorded in the Rockingham County Registry of Deeds at Book 4708, Page 0976.

The said John F. Collins was deceased on December 4, 1990.

The undersigned Trustee as Trustee under The Gloria C. Collins Living Revocable Trust of 1999 created by Gloria C. Collins, as grantor under Trust Agreement dated September 14, 1999, has full and absolute power in said Trust Agreement to convey any interest in real estate and improvements thereon held in said Trust and no purchaser or third party shall be bound to inquire whether the Trustee has said power or is properly exercising said power or to see to the applications of any Trust asset paid to the Trustee for the conveyance thereof. The Trust has not been revoked and is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand, this 25th day of November, 2013.

GLORIA C. COLLINS, Trustee

oria C. Collins T'ee

STATE OF NEW HAMPSHIRE COUNTY OF ROCKINGHAM

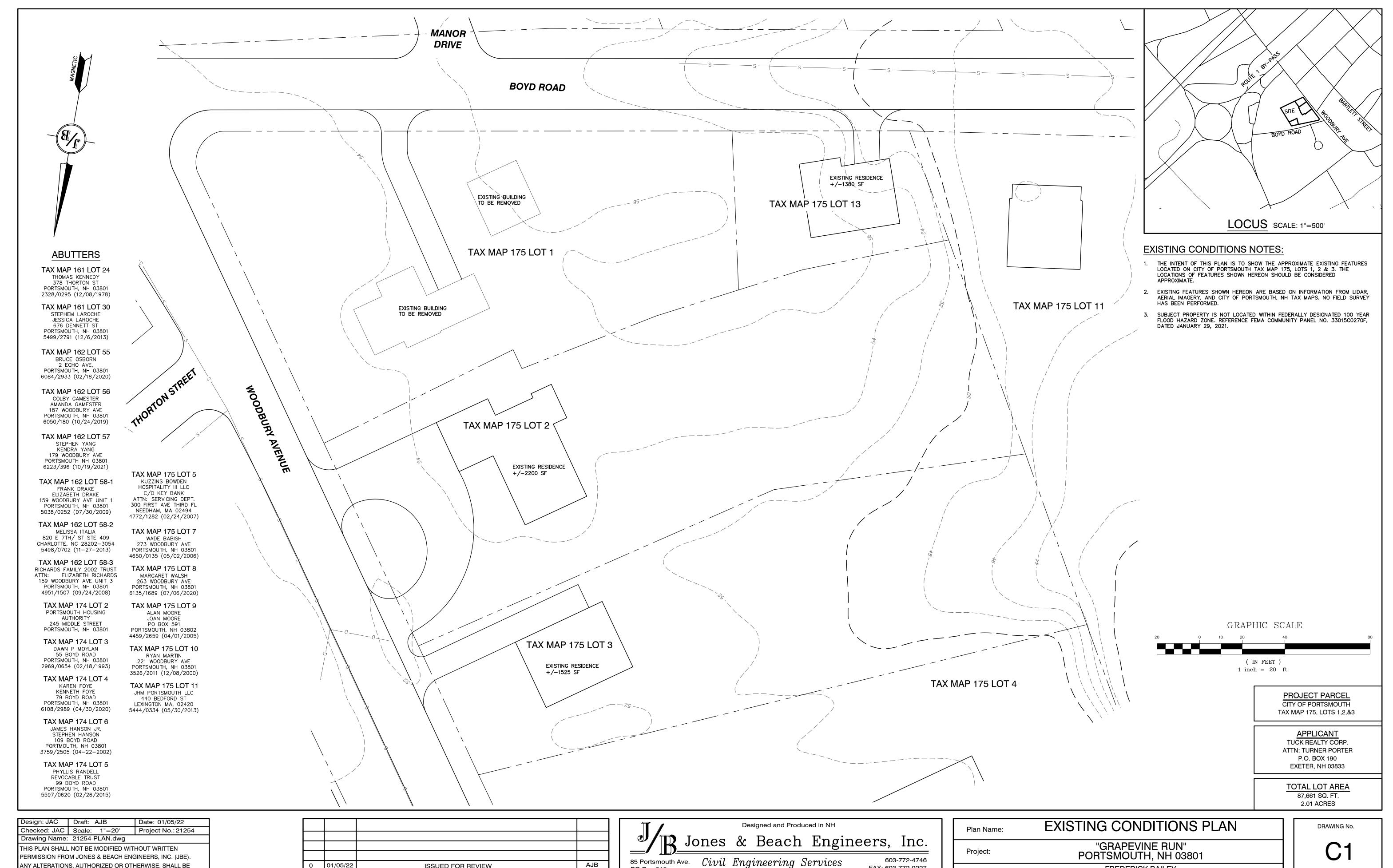
November 25, 2013

Personally appeared the above-named Gloria C. Collins, Trustee of the Gloria C. Collins Living Revocable Trust of 1999, and acknowledged the above instrument to be her free act and deed,

Before me,

My commission expires:

PUBLICATION



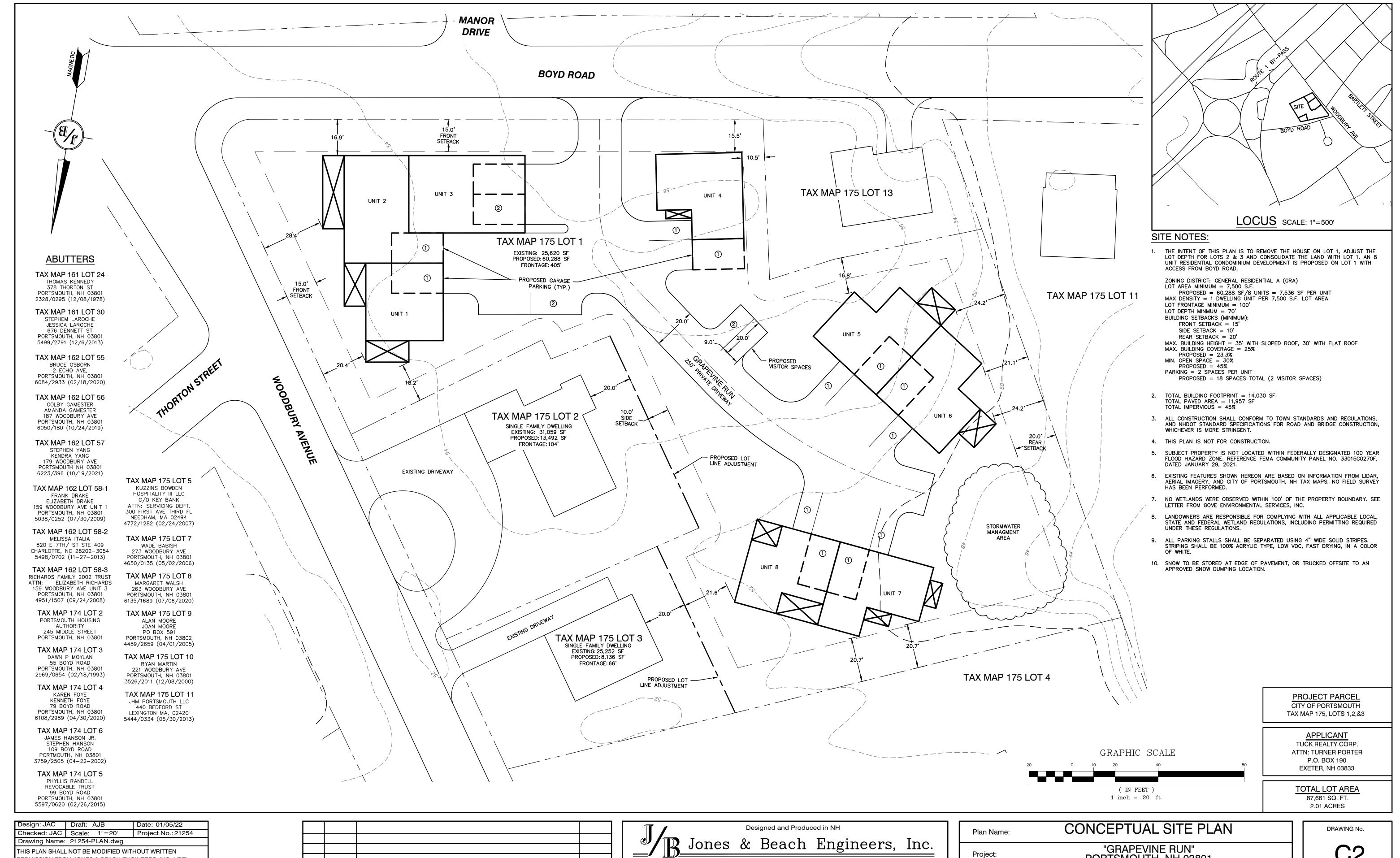
ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

0	01/05/22	ISSUED FOR REVIEW	AJB
REV.	DATE	REVISION	BY

/				
85 Portsmouth Ave. PO Box 219	Civil	Engineering	Services	603-772-4746 FAX: 603-772-0227
Stratham, NH 03885			E-MAIL: JBE@J	ONESANDBEACH.COM

Plan Name:	EXISTING CONDITIONS PLAN
Project:	"GRAPEVINE RUN" PORTSMOUTH, NH 03801
Owner of Record:	FREDERICK BAILEY 4 SHORE ROAD WOLFEBORO, NH 03894

SHEET 1 OF 2 JBE PROJECT NO. 21254



Boolgin of to	בי בי	(0)	Date: 01/00/22
Checked: JAC	Scale:	1"=20'	Project No.: 21254
Drawing Name:	21254-F	PLAN.dwg	
THIS PLAN SHALL	NOT BE	MODIFIED WITI	HOUT WRITTEN
PERMISSION FRO	M JONES	& BEACH ENG	GINEERS, INC. (JBE).
	•		HERWISE, SHALL BE
AT THE USER'S S	OLE RISK	AND WITHOUT	LIABILITY TO JBE.

01/05/22	ISSUED FOR REVIEW	AJB
DATE	REVISION	BY

1 /	Designed and Produced in NH					
J/R	Jones	&	Beach	Engine	ers,	Inc.
85 Portsmouth A	ve Cinil	Fno	in corin a	Saminas	603	-772-4746

85 Portsmouth Ave.	Cinil	Engineering	Services	603-772-4746
PO Box 219	00000	Drug trucer trug	De101003	FAX: 603-772-0227
Stratham, NH 03885			E-MAIL: JBE@J	ONESANDBEACH.COM

Plan Name:	CONCEPTUAL SITE PLAN
Project:	"GRAPEVINE RUN" PORTSMOUTH, NH 03801
Owner of Record:	FREDERICK BAILEY 4 SHORE ROAD WOLFEBORO, NH 03894

SHEET 2 OF 2 JBE PROJECT NO. 21254



85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885 603.772.4746 - JonesandBeach.com

January 6, 2021

Portsmouth Planning Board Attn: Chairman of the Board 1 Junkins Avenue, Suite 3rd Floor Portsmouth, NH 03801

RE: Conceptual Application 635 Sagamore Avenue, Portsmouth, NH Tax Map 222, Lots 18 & 19 JBE Project No. 18134.1

Dear Chairman of the Board,

Jones & Beach Engineers, Inc., respectfully submits a Conceptual Application on behalf of the applicant & owner, 635 Sagamore Development, LLC. The intent of this application is to remove the existing structures know as Luster King and keep the existing house of Tax Map 222, Lot 18. The back land of Lot 18 will be constructed with Tax Map 222, Lot 19 and a 6-unit single-family condominium development proposed. The homes will be accessed via a common driveway from Sagamore Avenue. The wide curb cut that currently exists for Luster King will be narrowed for just the driveway. The new development will be tied into the new sewer line being installed for this area.

The following items are provided in support of this Application:

- 1. Completed Conceptual Application (submitted online).
- 2. Letters of Authorization.
- 3. Current Deed.
- 4. One (1) Full Size Plan Set Folded.

If you have any questions or need any additional information, please feel free to contact our office. Thank you very much for your time.

Very truly yours,

JONES & BHACH/ENGINEERS, INC.

Joseph A. Coronati

Vice President

co Michael Garrepy, 635 Sagamore Development, LLC (via email)

FEE SCHEDULE Planning Department Effective 07/01/21 - 06/30/22

PLANNING BOARD

Subdivision:

	Subdivision Residential\$500.00 plus \$200.00 per lot Non-Residential\$700.00 plus \$300.00 per lot
	Subdivision Amendment: Administrative approval\$200.00 TAC or Planning Board approval\$500.00
	Lot line revision/verification\$250.00
	Lot Line Revision Amendment Administrative approval\$100.00 TAC or Planning Board approval\$150.00
\	Lot Consolidation – No Subdivision\$175.00
	Restoration of Involuntarily Merged Lots\$250.00
	Preliminary Conceptual Consultation\$200.00
	Design Review\$500.00
Site P	lan Review:
	All developments\$500.00 plus \$5.00 per \$1,000 of site costs only plus \$10.00 per 1,000 s.f. of site development area
	Total fee not to exceed (cap)\$15,000.00
	Site Plan Minor Amendment: Administrative approval\$200.00 Administrative approval after work has been done\$500.00 TAC or Planning Board approval\$800.00
	Preliminary Conceptual Consultation\$200.00
	Design Review\$500.00

Planning Department Fee Schedule (Effective 07/01/21 – 06/30/22)

Wetlands Conditional Use Permit:

Area of disturbance in wetland or wetland buffe	er:
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Up to 250 sq. ft	\$100.00
Up to 1,000 sq. ft	\$500.00
Greater than 1,000 sq. ft	

Conditional Use Permit (Non-Wetland)

Conditional Use Permit (Non-Wetland)......\$200.00

BOARD OF ADJUSTMENT

Residential Applications

1-2 dwelling units	\$150.00
3 and over	\$250.00 plus \$50.00 for each unit over 4
Total fee not to exceed (cap)	

Residential accessory structure only\$50.00

Non-Residential Applications \$300.00 plus \$5.00 per \$1,000 of valuation of new construction

Total fee not to exceed (cap) \$3,000.00

Signs......\$200.00

Appeal of Administrative Decision\$50.00

HISTORIC DISTRICT COMMISSION

Work Session (prior to application for approval) \$200.00 per work session

Residential Applications

1 dwelling unit	\$100.00
2 dwelling units	\$100.00
3 dwelling units	\$250.00
4 dwelling units and over	\$400.00 plus \$100.00 for each unit over 4
Total fee not to exceed (cap)	\$5,000.00

Accessory structure, mechanical equipment

or replacement of doors/windows only......\$100.00

Planning Department Fee Schedule (Effective 07/01/21 – 06/30/22)

Non-Residential Applications
Total fee not to exceed (cap)\$5,000.00
Accessory structure, mechanical equipment
or replacement of doors/windows only\$100.00
Signs \$100.00
Amendment to Certificate of Approval:
Administrative approval\$100.00
Administrative approval after work has been done \$500.00
Commission approval\$800.00

ZONING PERMITS

Certificate of conformity\$	50.00
_etter of interpretation\$1	00.00



Letter of Authorization

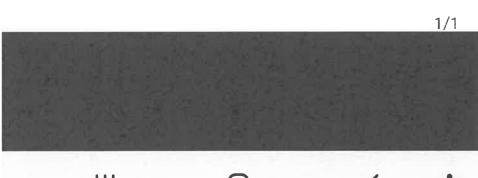
I, Thomas P. Nicholson, owner of property located at 695 Sagamore Avenue in Portsmouth, NH, known as Tax Map 222, Lot 18, do hereby authorize Jones & Beach Engineers, Inc. ("JBE"), Garrepy Planning Consultants, LLC ("GPC"), and Hoefle, Phoenix, Gormley & Roberts, PLLC ("HPGR") to act on his behalf concerning the previously mentioned property.

I hereby appoint JBE, GPC and HPGR as agents to act on my behalf in the Planning Board and Zoning Board application process, to include any required signatures.

Thomas P. Nicholson

, Individually

//2/22 Date



Letter of Authorization

635 Sagamore Development, LLC, owner of property located at 635 Sagamore Avenue in Portsmouth, NH, known as Tax Map 222, Lot 19, do hereby authorize Jones & Beach Engineers, Inc. ("JBE"), Garrepy Planning Consultants, LLC ("GPC"), and Hoefle, Phoenix, Gormley & Roberts, PLLC ("HPGR") to act on its behalf concerning the previously mentioned property.

I hereby appoint JBE, GPC and HPGR as agents to act on behalf of 635 Sagamore Development, LLC in the Planning Board and Zoning Board application process, to include any required signatures.

635 Sagamore Development, LLC

Timothy L. Black, Duly Authorized

January 5, 2022 Date







Raymond O. Curti and Norma O. Curti, Trustees of the Curti Family Trust of 1993

of 21 Spur Road, Dover, New Hampshire 03820

for consideration paid, grant to Thomas P. Nicholson,

of 726 Middle Street, Portsmouth New Hampshire 03801

with warranty covenants

A certain tract of land together with the buildings thereon, situated on Sagamore Avenue in Portsmouth, County of Rockingham, State of New Hampshire, bounded and described as follows:

Beginning at a point at the southeasterly corner of the tract herein conveyed at land now or formerly of Louise A. Davis; thence running in a westerly direction by said Davis land, 276 feet, more or less, to land now or formerly of Lawrence M. Kimball and L. Myrtle Kimball; thence turning and running in a northerly direction by said Kimball land, to feet, more or less, to land now or formerly of Benjamin L. and Ruth B. Smith; thence turning and running in an easterly direction by said Smith land to Sagamore Avenue; thence turning and running in a southerly direction along said Sagamore Avenue, 90 feet, more or less to the point of beginning.

Meaning and intending to described the same premises conveyed to Raymond W. Curti and Norma O. Curti as Trustees of the Curti Family Trust of 1993 by deed of Raymond W. Curti and Norma O. Curti dated August 9, 1993 and recorded at Book 3003, Page 932, Rockingham County Registry of Deeds. See also deed dated September 4, 1987 recorded at Book 2701, Page 2519, Rockingham County Registry of Deeds.

Signed this 21st day of March, 1997.

Raymond O. Curti, Trustee of the Curti Family Trust of 1993

Marma O. Curti, Trustee of the Curti Family Trust of 1993

State of New Hampshire

Rockingham, ss:

21st day of March, 1997

Personally appeared Raymond O. Curti and Norma O. Curti, Trustees of the Curti Family Trust of 1993, known to me, or satisfactorily proven, to be the person whose name subscribed to the foregoing instrument and acknowledged that they executed the same for the purposes therein contained.

My Commission Expires:

Justice of the Peace/Notary Public

MARY DRISCOLL PEYSER
Notary Public
My Commission Expires 10/23/01



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ROCKINGHAM COUNTY REGISTRY OF DEEDS Book: 6332 Page: 1158

E # 21060614 09/24/2021 09:32:59 AM Book 6332 Page 1158 Page 1 of 2 Register of Deeds, Rockingham County

Carey ann Seasy

LCHIP ROA585829 25.00
TRANSFER TAX RO109828 5,807.00
RECORDING 14.00
SURCHARGE 2.00

WARRANTY DEED

KNOW ALL BY THESE PRESENTS, that I, WILLIAM A. HINES, married person, TRUSTEE OF THE WILLIAM A. HINES FAMILY REVOCABLE TRUST a/k/a The Hines Family Revocable Trust of 2006, of 635 Sagamore Avenue, Portsmouth, New Hampshire 03801, for consideration paid, hereby grant to 635 SAGAMORE DEVELOPMENT, LLC, a New Hampshire limited liability company with a mailing address of 3612 Lafayette Road, Dept. 4, Portsmouth, New Hampshire 03801 with WARRANTY COVENANTS, the following described premises:

A certain tract of land with the buildings thereon, situate on Sagamore Avenue in said Portsmouth, more particularly described as follows:

Beginning at a point on Sagamore Avenue at land now or formerly of Arnold, thence running Westerly by said Arnold land three hundred (300) feet, more or less, to land now or formerly of W.W. and D.M. Johnston; thence turning and running Northwesterly by said Johnston land one hundred and twenty-four (124) feet; thence turning and running Northerly also by said Johnston land one hundred sixty-two (162) feet to land now or formerly of C.W. Walker; thence turning and running Easterly by said Walker land four hundred nineteen (419) feet to Sagamore Avenue; thence turning and running Easterly one hundred forty (140) feet; thence turning and running Westerly one hundred forty (140) feet; thence turning and running Easterly one hundred forty (140) feet; thence turning and running Easterly one hundred forty (140) feet to Sagamore Avenue; the last three bounds being land of Smith; thence turning running Southerly by said Sagamore Avenue one hundred sixty (160) feet to the point of beginning.

EXCEPTING AND RESERVING to the said William A. Hines and his wife Bonnie Hines a life estate in the above-described property permitting them to reside in the existing residential apartment on the property for the remainder of William A. Hines natural life, plus one year unless Bonne Hines shall have predeceased.

Meaning and intending to convey the same premises conveyed to the Grantor by deed of William A. Hines dated February 11, 2008 and recorded in the Rockingham County Registry of Deeds at Book 4885, Page 1538.

BY SIGNING BELOW, William A. Hines and Bonnie Hines release all homestead rights to the Premises.

Return to:

Book: 6332 Page: 1159

TRUSTEE CERTIFICATE

I, William A. Hines, Trustee of the William A. Hines Family Revocable Trust A/K/A The Hines Family Revocable Trust of 2006, hereby covenant that said Trust is duly organized under the laws of the State of New Hampshire; that I am the sole trustee pursuant to said Declaration of Trust; that said Trust is still in full force and effect; that I have the power thereunder to convey as aforesaid; and that, in making this conveyance, I have, in all respects, acted pursuant to the authority vested in and granted to me therein and no purchaser or third party shall be bound to inquire whether the Trustee has said power or are properly exercising said power or to see to the application of any trust assets paid to the Trustee for a conveyance thereof.

Signed this 3rd day of September, 2021.

William A. Hines, Trustee of the William A. Hines Family Revocable Trust A/K/A The Hines Family Revocable Trust of 2006

Donne

Mill A. Elz.

STATE OF NEW HAMPSHIRE COUNTY OF ROCKINGHAM

On this, the 3rd day of September, 2021, before me, the undersigned Officer, personally appeared William A. Hines, Trustee of the William A. Hines Family Revocable Trust A/K/A The Hines Family Revocable Trust of 2006, known to me, or satisfactorily proven, to be the person whose name is subscribed to the foregoing instrument, and acknowledged that he executed the same for the purposes set forth therein.

Justice of the Peace/Notary Public

EXPIRES

My commission expires:

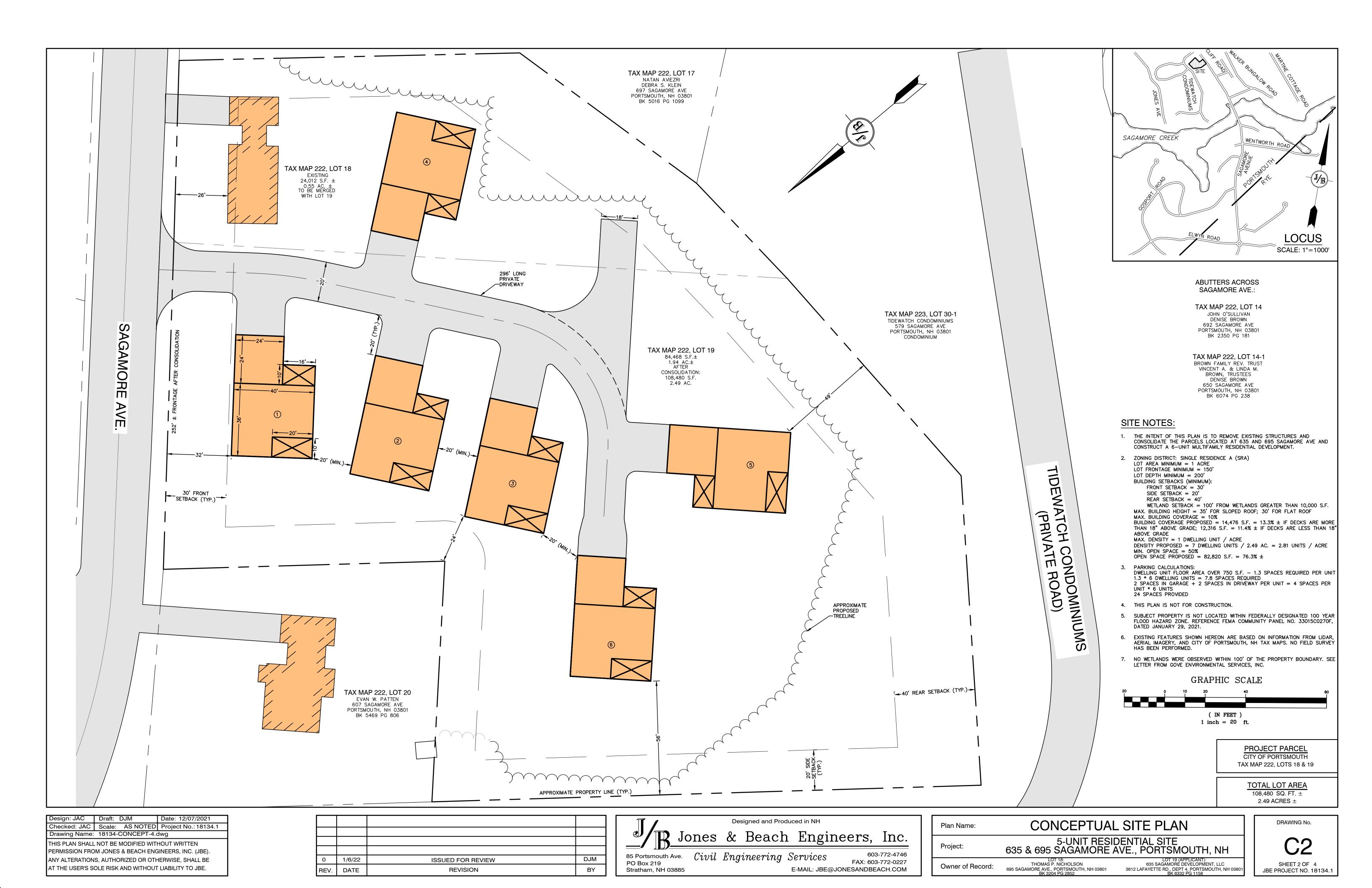
STATE OF NEW HAMPSHIRE COUNTY OF ROCKINGHAM

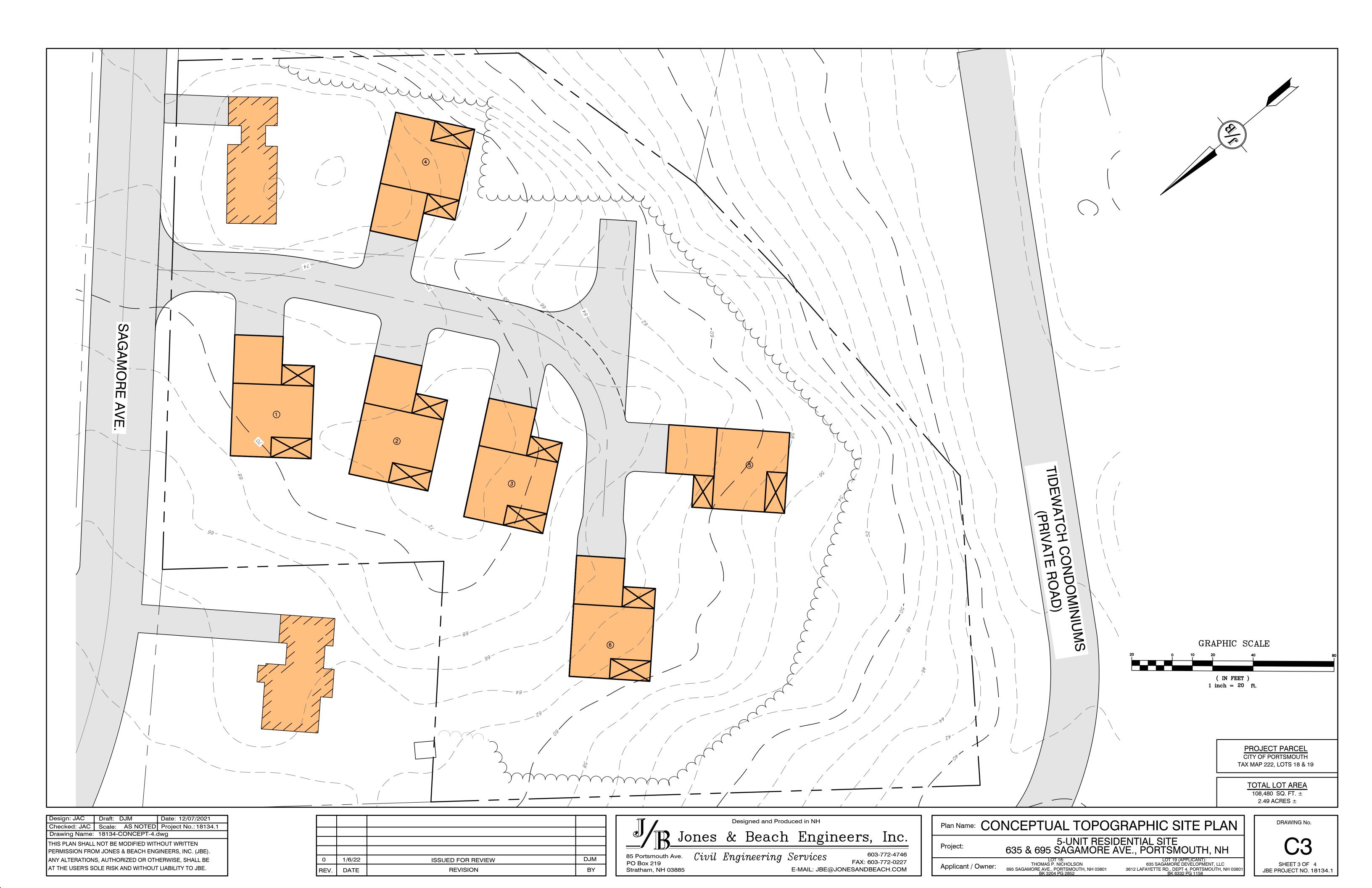
On this, the 3rd day of September, 2021, before me, the undersigned Officer, personally appeared Bonnie Hines, known to me, or satisfactorily proven, to be the person whose name is subscribed to the foregoing instrument, and acknowledged that she executed the same for the purposes set forth therein.

Justice of the Peace/Notary Public

My commission expires:









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.

DJM 0 1/6/22 ISSUED FOR REVIEW REV. DATE REVISION BY

B Jones & Beach Engineers, Inc.

85 Portsmouth Ave. Civil Engineering Services
PO Box 219
Stratham, NH 03885

E-MAIL: JBE@. Services 603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	TRUCK TURNING PLAN 5-UNIT RESIDENTIAL SITE 635 & 695 SAGAMORE AVE., PORTSMOUTH, NH	
Project:		
Applicant / Owner:	LOT 18: THOMAS P. NICHOLSON 695 SAGAMORE AVE., PORTSMOUTH, NH 03801 BK 3204 PG 2852	LOT 19 (APPLICANT): 635 SAGAMORE DEVELOPMENT, LLC 3612 LAFAYETTE RD., DEPT 4, PORTSMOUTH, NH 03801 BK 6332 PG 1158

SHEET 4 OF 4 JBE PROJECT NO. 18134.1



T5037-002 January 6, 2022

Mr. Peter Britz, Interim Planning Director City of Portsmouth Planning Department 1 Junkins Avenue Portsmouth, New Hampshire 03801

Re: Request for Design Review Proposed Mixed Use Development, 2 Russell Street, Portsmouth, NH

Dear Peter,

On behalf of Port Harbor Land, LLC (owner/applicant), we are pleased to submit the following information to support a request for Design Review with the Planning Board for the above referenced project:

- One (1) full size & one (1) half size copy of the Site Plan Set, dated January 4, 2022;
- One (1) copy of the Community Space Exhibit, dated January 4, 2022;
- One (1) copy of the Truck Turning Exhibit, dated January 4, 2022;
- One (1) copy of the Precedent Images Plans, prepared by SGA, dated January 5, 2022

Under a separate cover a Design Review application fee check of \$500 has been submitted to the Planning Department by the applicant.

The proposed project is located along Deer Street and Russell Street on properties identified as Map 118 Lot 28, Map 119 Lot 4, Map 124 Lot 12, and Map 125 Lot 21 on the City of Portsmouth Tax Maps which are located in the Character District 5 (CD5). The project includes three buildings consisting of office, retail/commercial, and residential uses. The buildings consist of a 4-story office building at the corner of Deer Street and Maplewood Avenue, 5-story mixed-use residential building at the corner of Deer Street and Russell Street with below ground parking, first floor residential lobby, commercial space and parking and upper floor residential units, and a 5-story mixed-use residential building along Russell Street with first floor residential lobby and commercial space and upper floor residential units. The project also consists of significant on-site and off-site improvements including wide sidewalks, roadway improvements, community space, stormwater management, lighting, landscaping, and utilities.

The project is proposing over 30% community space for Map 118 Lot 28 in order to meet the requirements to receive a Conditional Use Permit (CUP) for an increased building footprint. The CUP will allow the project to consolidate parking under the building on the corner of Deer and Russell Streets. The project is also providing 20% community space for Map 124 Lot 12 and Map 125 Lot 21 in order to receive the Incentives to Development Standards allowed in the North End Incentive Overlay District.

The applicant is seeking to meet with the Planning Board for Design Review Phase. As such, the applicant also respectfully requests a vote from the Planning Board at the January 20, 2022 meeting to accept a request for Design Review Phase so that public hearing can be scheduled for the February 17, 2022 Planning Board meeting.



If you have any questions or need any additional information, please contact Neil Hansen by phone at (603) 433-8818 or by email at nahansen@tighebond.com.

Neil A. Hansen, PE

Project Manager

Sincerely,

TIGHE & BOND, INC.

Patrick M. Crimmins, PE

Vice President

Copy: Port Harbor Land, LLC (via email)

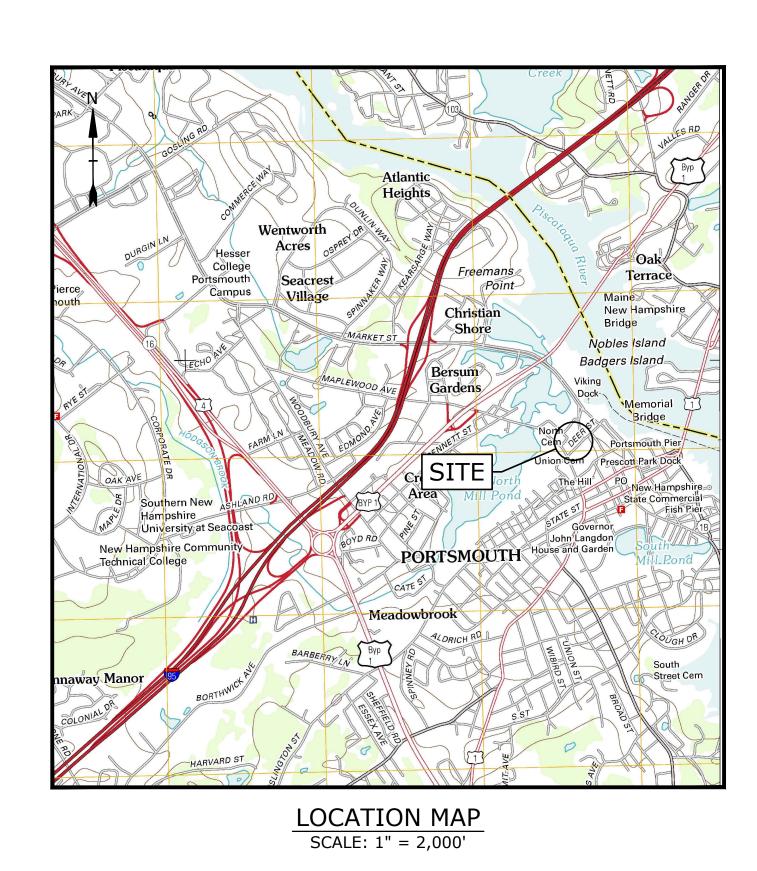
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NORTH END MIXED USE DEVELOPMENT

RUSSELL STREET & DEER STREET PORTSMOUTH, NEW HAMPSHIRE JANUARY 4, 2021

LIST OF DRAWINGS			
SHEET NO.	SHEET TITLE	LAST REVISED	
	COVER SHEET	1/4/2022	
G-100	GENERAL NOTES AND LEGEND 1/4/202		
C-101	EXISTING CONDITIONS & DEMOLITION PLAN 1/4/202		
C-102	C-102 SITE PLAN 1/4/20		
C-103	GRADING & DRAINAGE PLAN 1/4/20		
C-104	UTILITIES PLAN 1/4/202		
C-501	EROSION CONTROL NOTES AND DETAILS SHEET 1/4/202		
C-502 DETAILS SHEET 1/4/2		1/4/2022	
C-503 DETAILS SHEET 1/4/2		1/4/2022	
C-504 DETAILS SHEET 1/4/202		1/4/2022	
C-505 DETAILS SHEET 1/4/20		1/4/2022	

LIST OF PERMITS		
LOCAL	STATUS	DATE
SITE PLAN REVIEW PERMIT	NOT SUBMITTED	
LOT LINE REVISION PERMIT	NOT SUBMITTED	
CONDITIONAL USE PERMIT	NOT SUBMITTED	
STATE		
NHDES - SEWER CONNECTION PERMIT	NOT SUBMITTED	
NHDES - ALTERATION OF TERRAIN PERMIT	NOT SUBMITTED	



PREPARED BY:

lighe&Bond

PORTSMOUTH, NEW HAMPSHIRE 03801 603-433-8818

OWNER/APPLICANT:

TAX MAP 118, LOT 28,
TAX MAP 124, LOT 12 &
TAX MAP 125, LOT 21
PORT HARBOR LAND, LLC
1000 MARKET STREET, BUILDING ONE
PORTSMOUTH, NEW HAMPSHIRE 03801

COMPLETE SET 11 SHEETS

<u>DEMOLITION NOTES:</u>

- 1. THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE 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.
- THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES. CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION
- 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.
- COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
- 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.
- 6. 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.
- 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
- 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.
- 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.
- 10. UTILITIES SHALL BE TERMINATED AT THE MAIN LINE PER UTILITY COMPANY STANDARDS. THE CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES LOCATED WITHIN THE LIMITS
- 11. CONTRACTOR SHALL VERIFY ORIGIN OF ALL DRAINS AND UTILITIES PRIOR TO REMOVAL/TERMINATION TO DETERMINE IF DRAINS OR UTILITY IS 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.
- 12. PAVEMENT REMOVAL LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE. ADDITIONAL PAVEMENT REMOVAL MAY BE REQUIRED DEPENDING ON THE CONTRACTOR'S OPERATION. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT REMOVAL PRIOR TO BID.
- 13. 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.
- 14. COORDINATE ALL WORK WITHIN THE PUBLIC RIGHT OF WAYS WITH THE CITY OF
- 15. 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
- 16. CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY THE CONTRACTOR, THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED SURVEYOR TO REPLACE DISTURBED MONUMENTS.
- 17. PROVIDE INLET PROTECTION BARRIERS AT ALL CATCH BASINS/CURB INLETS WITHIN CONSTRUCTION LIMITS AS WELL AS CATCH BASINS/CURB INLETS THAT RECEIVE RUNOFF FROM CONSTRUCTION ACTIVITIES. INLET PROTECTION BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. INLET PROTECTION BARRIERS SHALL BE "STORMWATER INLET FILTER" BY BLOCKSOM & CO. OR EQUAL. INSPECT BARRIERS WEEKLY AND AFTER EACH RAIN EVENT OF 0.25 INCHES OR GREATER. CONTRACTOR SHALL COMPLETE A MAINTENANCE INSPECTION REPORT AFTER EACH INSPECTION. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED OR SEDIMENT HAS ACCUMULATED TO 1/3 THE DESIGN DEPTH OF THE BARRIER.
- 18. 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.
- 19. SEE ROADWAY IMPROVEMENT PLANS FOR OFF-SITE DEMOLITION.
- 20. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.
- 21. 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.
- 22. SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL UTILITIES TO BE REMOVED AND PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT
- 23. THE CONTRACTOR SHALL REMOVE AND SALVAGE EXISTING GRANITE CURB FOR REUSE.

EROSION CONTROL NOTES:

- INSTALL EROSION CONTROL BARRIERS AS SHOWN AS FIRST ORDER OF WORK.
- SEE GENERAL EROSION CONTROL NOTES ON "EROSION CONTROL NOTES & DETAILS SHEET". PROVIDE INLET PROTECTION AROUND ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS AS WELL AS CATCH BASINS/CURB INLETS THAT RECEIVE RUNOFF FROM CONSTRUCTION ACTIVITIES. MAINTAIN FOR THE DURATION OF THE PROJECT.
- INSTALL STABILIZED CONSTRUCTION EXIT(S).
- INSPECT INLET PROTECTION AND PERIMETER EROSION CONTROL MEASURES DAILY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
- ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER AND MULCH.
- CONSTRUCT EROSION CONTROL BLANKET ON ALL SLOPES STEEPER THAN 3:1.
- PRIOR TO ANY WORK OR SOIL DISTURBANCE COMMENCING ON THE SUBJECT PROPERTY, INCLUDING MOVING OF EARTH, THE APPLICANT SHALL INSTALL ALL EROSION AND SILTATION MITIGATION AND CONTROL MEASURES AS REQUIRED BY STATE AND LOCAL PERMITS AND APPROVALS.
- CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO, SPRINKLING WATER ON UNSTABLE SOILS SUBJECT TO ARID CONDITIONS.
- 10. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
- 11. ALL CATCH BASIN SUMPS AND PIPING SHALL BE THOROUGHLY CLEANED TO REMOVE ALL SEDIMENT AND DEBRIS AFTER THE PROJECT HAS BEEN FULLY PAVED.
- 12. TEMPORARY SOIL STOCKPILE SHALL BE SURROUNDED WITH PERIMETER 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.

- 13. SAFETY FENCING SHALL BE PROVIDED AROUND STOCKPILES OVER 10 FT.
- 14. CONCRETE TRUCKS WILL BE REQUIRED TO WASH OUT (IF NECESSARY) SHOOTS ONLY WITHIN AREAS WHERE CONCRETE HAS BEEN PLACED. NO OTHER WASH OUT WILL BE ALLOWED.

- STRIPE PARKING AREAS AS SHOWN, INCLUDING PARKING SPACES, STOP BARS, ADA SYMBOLS, PAINTED ISLANDS, CROSS WALKS, ARROWS, LEGENDS AND CENTERLINES SHALL BE THERMOPLASTIC MATERIAL. THERMOPLASTIC MATERIAL SHALL MEET THE REQUIREMENTS OF AASHTO M249. (ALL MARKINGS EXCEPT CENTERLINE AND MEDIAN ISLANDS TO BE CONSTRUCTED USING WHITE TRAFFIC PAINT. CENTERLINE AND MEDIAN ISLANDS TO BE CONSTRUCTED USING YELLOW TRAFFIC PAINT. ALL TRAFFIC PAINT SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F").
- 2. ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS, LATEST
- SEE DETAILS FOR PARKING STALL MARKINGS, ADA SYMBOLS, SIGNS AND SIGN POSTS.
- 4. CENTERLINES SHALL BE FOUR (4) INCH WIDE YELLOW LINES. STOP BARS SHALL BE EIGHTEEN
- 5. PAINTED ISLANDS SHALL BE FOUR (4) INCH WIDE DIAGONAL LINES AT 3'-0" O.C. BORDERED BY FOUR (4) INCH WIDE LINES.
- 6. THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED LAND SURVEYOR TO DETERMINE ALL LINES AND GRADES. 7. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAW CUT LINE WITH RS-1
- EMULSION IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE. 8. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND CITY CODES & SPECIFICATIONS.
- 9. COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH
- 10. CONTRACTOR TO SUBMIT AS-BUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL FORMAT (.DWG FILE) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR.
- 11. SEE BUILDING DRAWINGS FOR ALL CONCRETE PADS & SIDEWALKS ADJACENT TO BUILDING.
- ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS. 13. CONTRACTOR TO PROVIDE BACKFILL AND COMPACTION AT CURB LINE AFTER CONCRETE FORMS FOR SIDEWALKS AND PADS HAVE BEEN STRIPPED. COORDINATE WITH BUILDING
- 14. COORDINATE ALL WORK ADJACENT TO BUILDING WITH BUILDING CONTRACTOR.
- 15. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- 16. THE STREET LIGHTING TYPE TO BE DISTRICT STYLE FIXTURE AND POLE TO MATCH EXISTING LIGHTING ON SOUTH SIDE OF DEER STREET.
- 17. ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.
- 18. THE APPLICANT SHALL HAVE A SITE SURVEY CONDUCTED BY A RADIO COMMUNICATIONS CARRIER APPROVED BY THE CITY'S COMMUNICATIONS DIVISION. THE RADIO COMMUNICATIONS CARRIER MUST BE FAMILIAR AND CONVERSANT WITH THE POLICE AND RADIO CONFIGURATION. IF THE SITE SURVEY INDICATES IT IS NECESSARY TO INSTALL A SIGNAL REPEATER EITHER ON OR NEAR THE PROPOSED PROJECT, THOSE COSTS SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE OWNER SHALL COORDINATE WITH THE SUPERVISOR OF RADIO COMMUNICATIONS FOR THE CITY.
- 19. ALL TREES PLANTED ARE TO BE INSTALLED UNDER THE SUPERVISION OF THE CITY OF PORTSMOUTH DPW USING STANDARD INSTALLATION METHODS.
- 20. THE APPLICANT SHALL PREPARE A CONSTRUCTION MITIGATION AND MANAGEMENT PLAN (CMMP) FOR REVIEW AND APPROVAL BY THE CITY'S LEGAL AND PLANNING DEPARTMENTS.
- 21. A TEMPORARY SUPPORT OF EXCAVATION (SOE) PLAN SHALL BE PREPARED BY THE APPLICANT'S CONTRACTOR TO CONFIRM ANY TEMPORARY ENCUMBRANCES OF THE CITY'S RIGHT-OF-WAY. IF LICENSES ARE REQUIRED FOR THE SOE, THE APPLICANT WILL BE
- REQUIRED TO OBTAIN THESE FROM THE CITY PRIOR TO CONSTRUCTION 22. ALL EXCESS SNOW SHALL BE HAULED OFF-SITE IN ACCORDANCE TO ALL LOCAL AND STATE LAWS. PROPOSED SNOW STAGING AREAS HAVE BEEN PROVIDED TO SHOW TEMPORARY SNOW STORAGE AREAS.
- 23. AREAS DESIGNATED FOR FIRE EMERGENCY ACCESS SHALL BE KEPT CLEAR OF SNOW.

SITE RECORDING NOTES:

- 1. THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- 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.
- THIS IS NOT A BOUNDARY SURVEY AND SHALL NOT BE USED AS SUCH.

GRADING AND DRAINAGE NOTES:

COMPACTION REQUIREMENTS:

CONTRACTOR.

- BELOW PAVED OR CONCRETE AREAS TRENCH BEDDING MATERIAL AND
- SAND BLANKET BACKFILL
- BELOW LOAM AND SEED AREAS
- * 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.

95%

95%

90%

- 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. 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 CONTRACTOR SHALL THOROUGHLY CLEAN ALL CATCH BASINS AND DRAIN LINES, WITHIN THE
- LIMIT OF WORK, OF SEDIMENT IMMEDIATELY UPON COMPLETION OF CONSTRUCTION. 7. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES.
- ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED FERTILIZER AND MULCH. ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NHDOT STANDARD
- SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION. 10. ALL PROPOSED CATCH BASINS SHALL BE EQUIPPED WITH OIL/GAS SEPARATOR HOODS AND 4' SUMPS.
- 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 OF ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.
- 12. CONTRACTOR TO SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR.
- 13. SEE EXISTING CONDITIONS & DEMOLITION PLAN FOR BENCH MARK INFORMATION.

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.

- COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
- NATURAL GAS UNITIL
- WATER CITY OF PORTSMOUTH

• ELECTRIC - EVERSOURCE

- SEWER CITY OF PORTSMOUTH
- COMMUNICATIONS FAIRPOINT AND COMCAST
- SEE EXISTING CONDITIONS & DEMOLITION PLAN FOR BENCHMARK INFORMATION. 4. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
- 5. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE.
- 6. 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 PORTSMOUTH WATER DEPARTMENT.

- ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.
- COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT CONSTRUCTION.
- 10. CONNECTION TO EXISTING WATER MAIN SHALL BE CONSTRUCTED TO THE CITY OF PORTSMOUTH STANDARDS.
- 11. 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.
- 12. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
- 13. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES.
- 14. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
- 15. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING
- 16. 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.
- 17. 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**
- 18. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES.
- 19. 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
- 20. THE CONTRACTOR SHALL CONTACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL
- 21. CONTRACTOR TO SUBMIT AS-BUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL FORMAT (.DWG 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 OR PROFESSIONAL ENGINEER.
- 22. SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN
- PORTSMOUTH. 24. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF PORTSMOUTH.

23. HYDRANTS, GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF

- 25. ALL SEWER PIPE WITH LESS THAN 6' OF COVER IN PAVED AREAS OR LESS THAT 4' OF COVER IN UNPAVED AREAS SHALL BE INSULATED. 26. 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. 27. 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. 28. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PROVIDED BY THE PROJECT ELECTRICAL
- 29. CONTRACTOR SHALL CONSTRUCT ALL UTILITIES AND DRAINS TO WITHIN 10' OF THE FOUNDATION WALLS AND CONNECT THESE TO SERVICE STUBS FROM THE BUILDING.

LEGEND ______ PROPOSED SAWCUT LIMIT OF WORK ________ PROPOSED SILT SOCK APPROXIMATE LIMIT OF PAVEMENT TO BE REMOVED PROPOSED CONSTRUCTION EXIT **BUILDING TO BE REMOVED** LOCATION OF PROPOSED BUILDING PROPERTY LINE PROPOSED PROPERTY LINE PROPOSED EDGE OF PAVEMENT PROPOSED CURB PROPOSED BUILDING PROPOSED PAVEMENT SECTION PROPOSED CONCRETE SIDEWALK PROPOSED BRICK SIDEWALK PROPOSED BOLLARD PROPOSED MAJOR CONTOUR LINE PROPOSED MINOR CONTOUR LINE PROPOSED DRAIN LINE (TYP) ______ INLET PROTECTION SILT SACK PROPOSED CATCHBASIN

PROPOSED DOUBLE GRATE CATCHBASIN PROPOSED DRAIN MANHOLE PROPOSED YARD DRAIN EXISTING STORM DRAIN EXISTING SANITARY SEWER EXISTING SANITARY SEWER TO BE REMOVED

_____T____T_____T____ EXISTING UNDERGROUND TELECOMMUNICATION EXISTING WATER EXISTING GAS EXISTING UNDERGROUND ELECTRIC ____E___ EXISTING OVERHEAD UTILITY

PROPOSED SANITARY SEWER PROPOSED WATER -----PG------PROPOSED GAS PROPOSED UNDERGROUND ELECTRIC

EXISTING CATCHBASIN

PROPOSED UNDERGROUND **TELECOMMUNICATION** PROPOSED UNDERGROUND COMBINED ELECTRIC & TELECOMMUNICATION

> **EXISTING DRAIN MANHOLE** EXISTING SEWER MANHOLE EXISTING WATER VALVE EXISTING HYDRANT EXISTING ELECTRIC MANHOLE

EXISTING TELEPHONE MANHOLE PROPOSED SEWER MANHOLE PROPOSED WATER VALVE PROPOSED HYDRANT PROPOSED GAS VALVE PROPOSED ELECTRIC MANHOLE PROPOSED LIGHT POLE BASE

GRAPHIC SCALE

North End Mixed Use Development

Two International Group

Russell Street & Deer Street Portsmouth, NH

MARK DATE DESCRIPTION

T5037-00

AS SHOWN

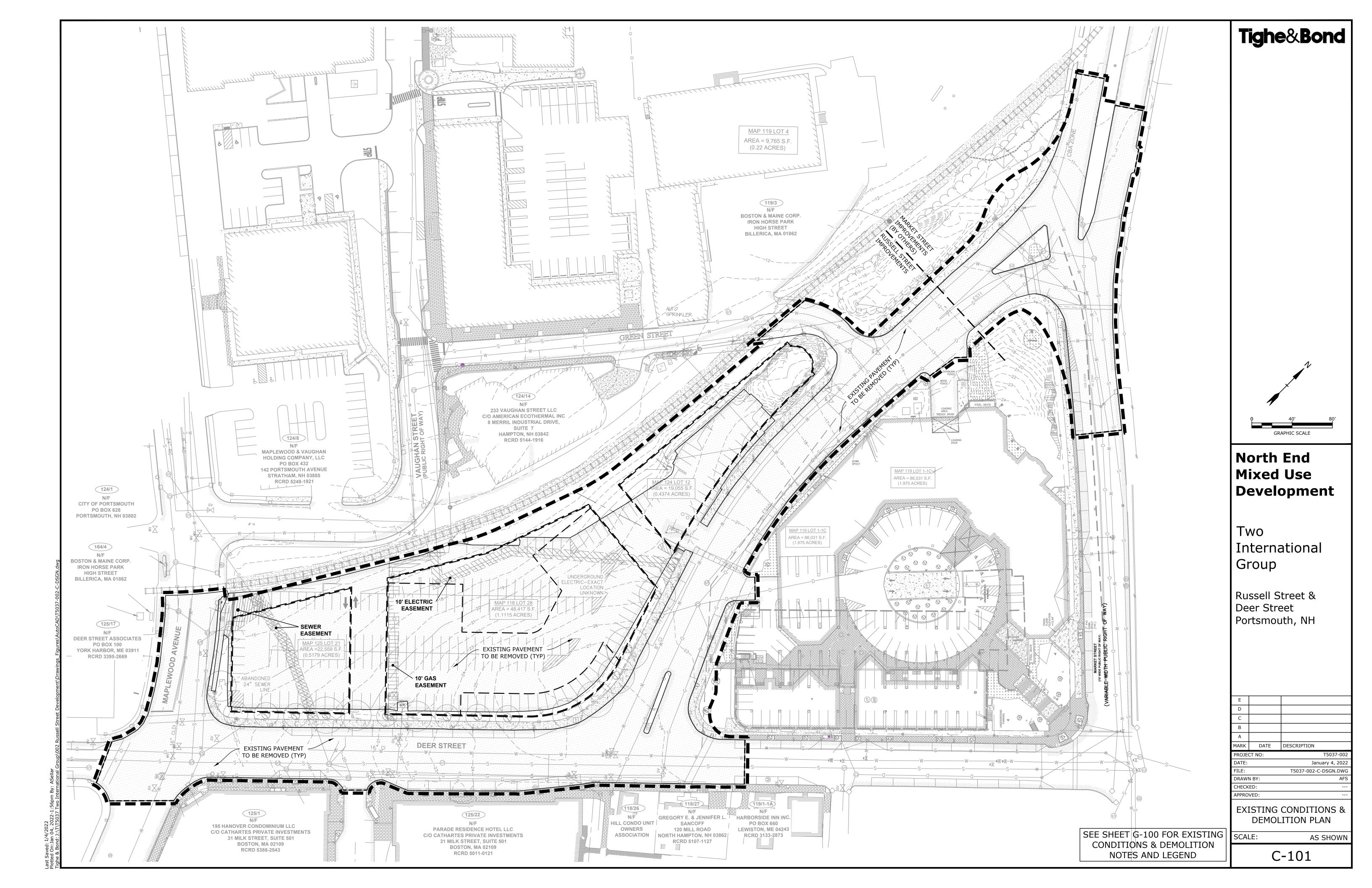
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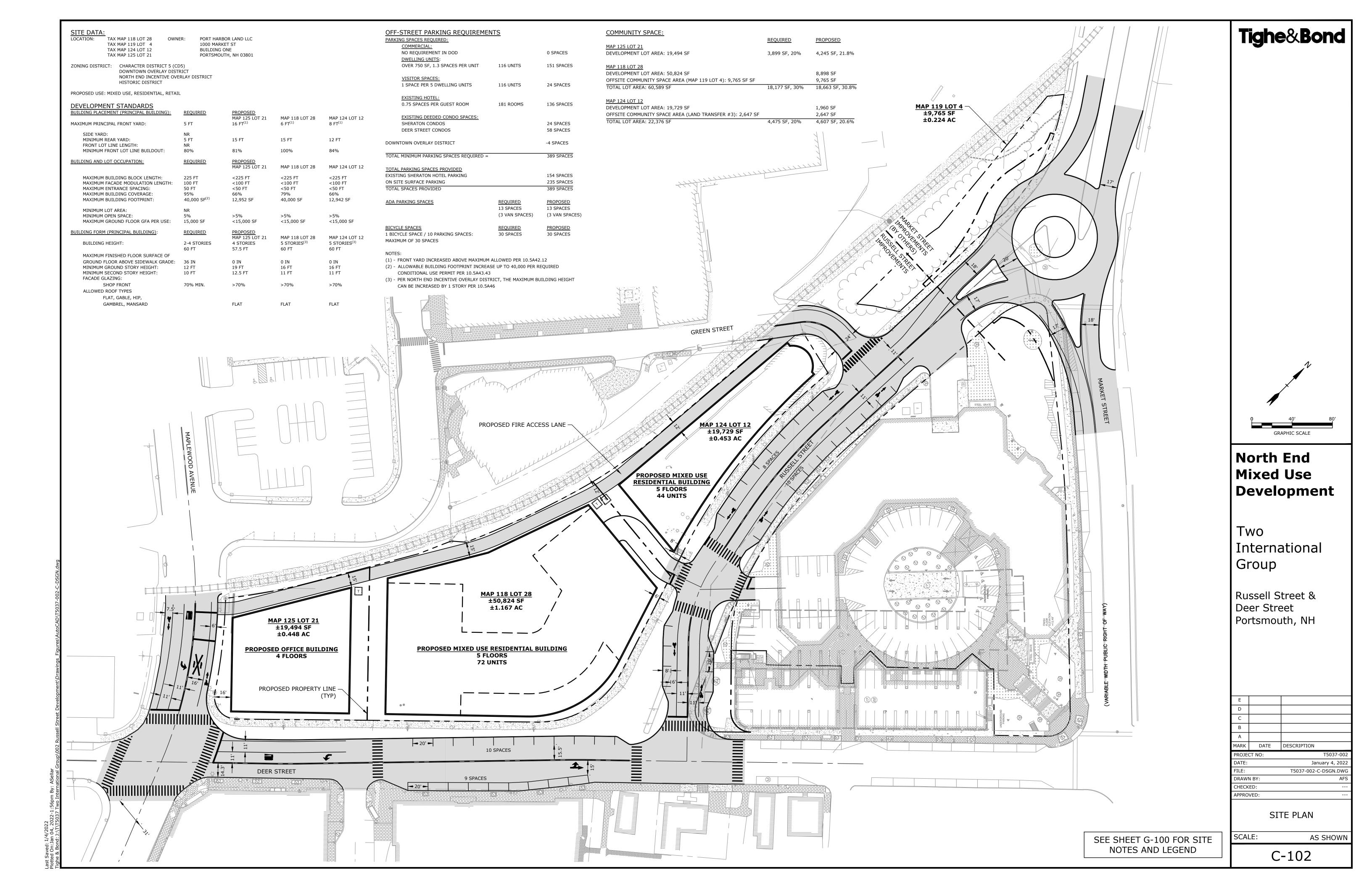
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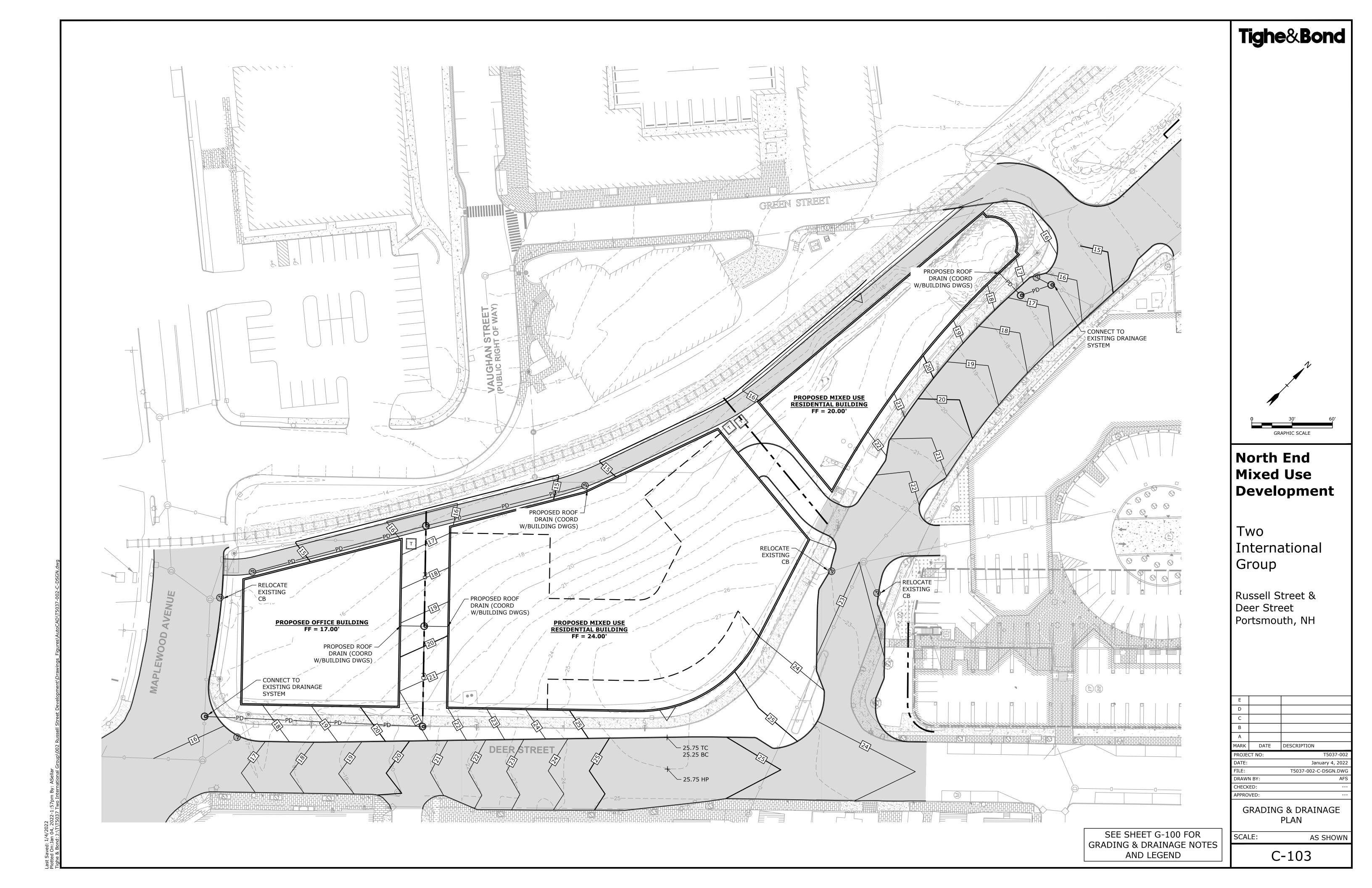
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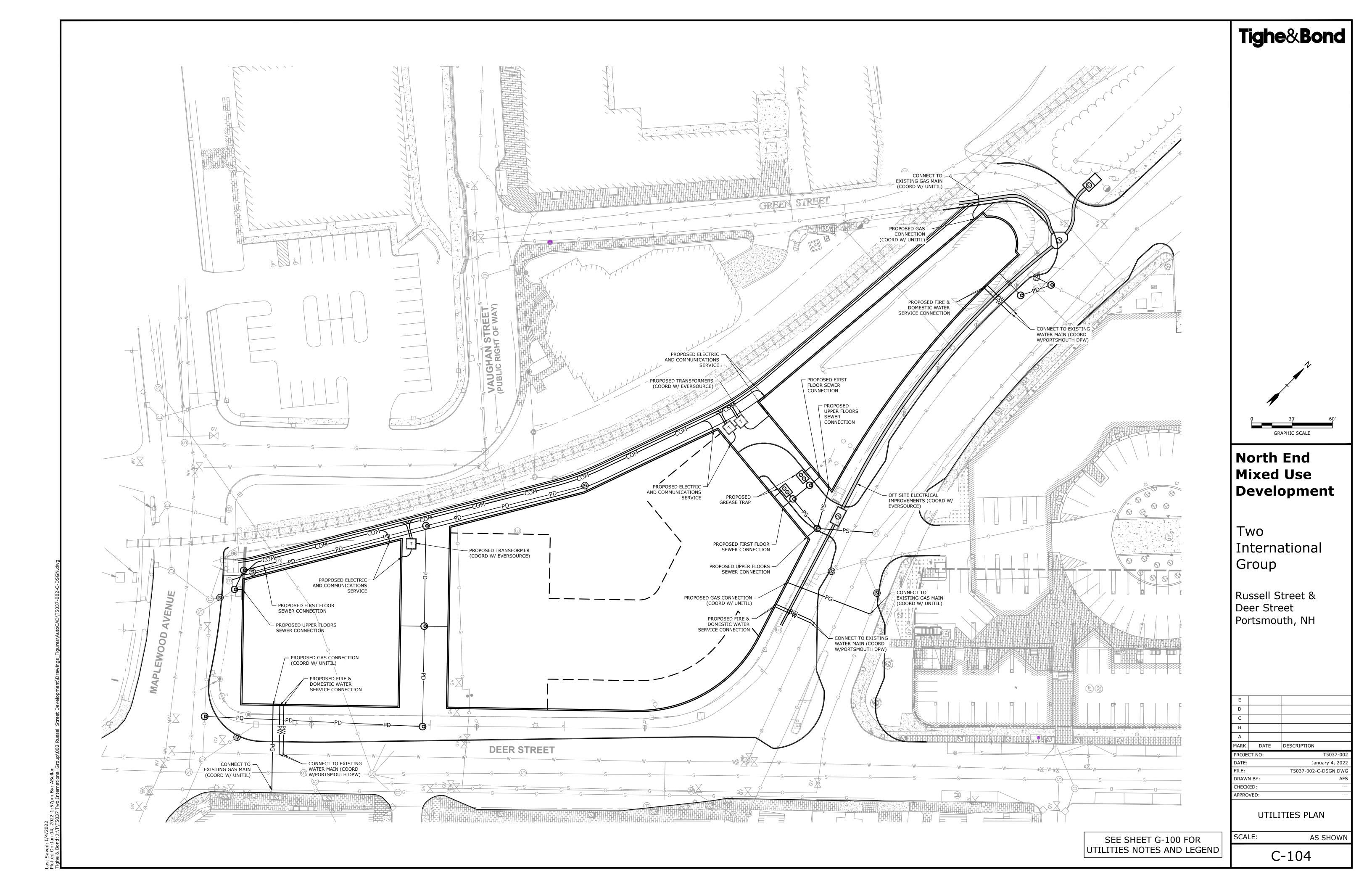
GENERAL NOTES AND LEGEND

G-100









PROJECT APPLICANT: PORT HARBOR LAND, LLC 1000 MARKET STREET, BUILDING ONE

PORTSMOUTH, NH 03801

PROPOSED MIXED USE DEVELOPMENT PROJECT MAP / LOT: MAP 118 / LOT 28 PROJECT ADDRESS: RUSSELL STREET & DEER STREET MAP 124 / LOT 12 PORTSMOUTH, NH 03801

MAP 125 / LOT 21 PROJECT LATITUDE: 43°-04'-43" N PROJECT LONGITUDE: 70°-45'-41" W

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE CONSTRUCTION OF AN OFFICE BUILDING AND TWO MIXED USE RESIDENTIAL BUILDINGS WITH ASSOCIATED SITE IMPROVEMENTS.

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 2.1 ACRES.

SOIL CHARACTERISTICS

BASED ON THE USCS WEB SOIL SURVEY THE SOILS ON SITE CONSIST OF URBAN LAND WHICH IS EXCESSIVELY DRAINED SOILS WITH A HYDROLOGIC SOIL GROUP RATING OF A.

NAME OF RECEIVING WATERS THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA A CLOSED DRAINAGE SYSTEM TO THE CITY OF PORTSMOUTH'S CLOSED DRAINAGE SYSTEM WHICH ULTIMATELY FLOWS TO NORTH MILL POND THEN TO THE PISCATAQUA RIVER.

CONSTRUCTION SEQUENCE OF MAJOR ACTIVITIES:

CUT AND CLEAR TREES.

- CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS:
- NEW CONSTRUCTION
- CONTROL OF DUST CONSTRUCTION DURING LATE WINTER AND EARLY SPRING ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS TO BE

STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMPS PRIOR TO DIRECTING RUNOFF

- TO THEM. CLEAR AND DISPOSE OF DEBRIS.
- CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.
- GRADE AND GRAVEL ROADWAYS AND PARKING AREAS ALL ROADS AND PARKING AREA SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL
- BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER
- EROSION CONTROL MEASURES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED. SEDIMENT TRAPS AND/OR BASINS SHALL BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.
- 0. FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
- INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
- COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 13. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

SPECIAL CONSTRUCTION NOTES:

THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE. 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.

- ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION"
- PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EROSION CONTROL MEASURES AS REQUIRED IN THE PROJECT MANUAL CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALES,
- SILT FENCES, MULCH BERMS, SILT SACKS AND SILT SOCKS AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK.
- SILT SACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE
- PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.
- THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
- ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND
- INSPECT ALL INLET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE
- EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1

STABILIZATION:

- 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; 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
- D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.; E. 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.
- WINTER STABILIZATION PRACTICES: A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT
 - 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
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS;
- AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT;
- 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 WASTE DISPOSAL: 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;

EVENTS;

- B. MULCHING.
- 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
- 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.

- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION
- 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
- DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.

OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

- 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

OFF SITE VEHICLE TRACKING

THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE(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; 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. VEGETATIVE PRACTICE:

- A. FOR 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; 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;
- q. 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 2 LBS/ACRE REDTOP

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.

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

CONCRETE WASHOUT AREA:

PERMANENT MEASURES.

- 1. THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE:
- A. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY;
- B. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER;
- C. CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM
- DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS; D. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES:

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

12. LANDSCAPE IRRIGATION.

- A. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED
- 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
- PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION:

- CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. 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 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
- 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 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;
- ii. 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.
- iii. SECURE FUEL STORAGE AREAS AGAINST UNAUTHORIZED ENTRY;
- iv. INSPECT FUEL STORAGE AREAS WEEKLY;
- v. 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;
- vi. COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
- vii. 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.
- viii. 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
 - (4) USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES; (5) PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS
- ix. 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/ORGANIZATION/COMMISSIONER/PIP/FACTSHEETS/DWGB/DOCUMENTS/DWGB-22-6.PDF FERTILIZERS
- FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS; ii. ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO
- STORMWATER; STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
- c. PAINTS: ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR
- iii. EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

ii. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM;

D. SPILL CONTROL PRACTICES - IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

a. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY

- POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES; b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT
- NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE;

ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY;

- i. 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; 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; CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES

AND REPAIR ACTIVITIES;

1. THIS PROJECT EXCEEDS ONE (1) ACRE OF DISTURBANCE AND THUS REQUIRES A SWPPP. THE SWPPP SHALL BE PREPARED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN UPDATED COPY OF THE SWPPP ONSITE AT ALL TIMES

2. THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT

- SHALL BE FOLLOWED AS PART OF THIS PROJECT: A. OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWPPP SHALL BE MADE BY THE CONTRACTOR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR
- AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR; C. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE
- D. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

FLOW— **−**FLOW ~PERFORATED RISER DIKE, IF **PLAN VIEW** IF USING PIPE NECESSARY, WEIR OR OUTLET TO DIVERT EMBANKMENT IF FLOW INTO USING STONE TRAP -EXCAVATION FOR **OUTLET OR PIPE** REQUIRED STORAGE OUTLET 3:1 MAX. SLOPE **SECTION VIEW** SIDE SLOPES TO

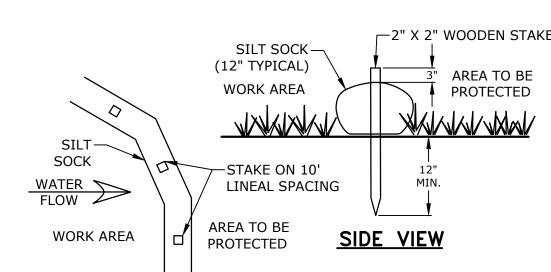
THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA AS

- THE MAXIMUM CONTRIBUTING AREA TO A SINGLE TRAP SHALL BE LESS
- STORAGE FOR EACH ACRE OF DRAINAGE AREA. TRAP OUTLET SHALL BE MINIMUM OF ONE FOOT BELOW THE CREST OF THE
- TRAP SHALL DISCHARGE TO A STABILIZED AREA

SOILS ARE STABILIZED.

MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF

SEDIMENT TRAP



PLAN VIEW SILT SOCK SHALL BE SILT SOXX BY FILTREXX OR APPROVED EQUAL 2. INSTALL SILT SOCK IN ACCORDANCE WITH..

SILT SOCK NO SCALE

75' (MIN) (W/O BERM) 50' (MIN) WITH 3"-6" DIVERSION BERM PROVIDED FULL DRIVE WIDTH SLOPE (10' MIN) **PLAN VIEW DIVERSION BERM-**(OPTIONAL) 75' (MIN) (W/O BERM) 50' (MIN) WITH 3"-6" 3" CRUSHED **DIVERSION BERM PROVIDED** STONE-(MIN) PAVEMENT FXISTING -6" (MIN) √ GROUND – MIRAFI FW-700 SIDE VIEW

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT FROM THE SITE. WHEN WASHING IS REQUIRED, IT SHALL BE DONE SO RUNOFF DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS

STABILIZED CONSTRUCTION EXIT NO SCALE

OR EQUAL

North End Mixed Use Development

Two Internationa Group

Russell Street & Deer Street Portsmouth, NH

MARK DATE DESCRIPTION

January 4, 202

AS SHOWN

T5037-002-C-DTLS.DWG

EROSION CONTROL NOTES

AND DETAILS SHEET

PROJECT NO

CHECKED:

APPROVED:

SCALE:

DATF:

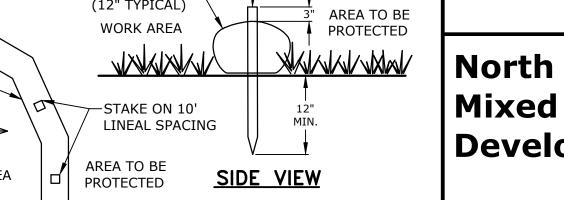
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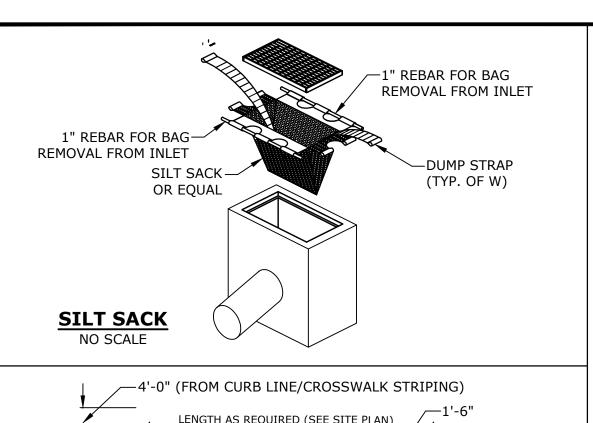
ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED

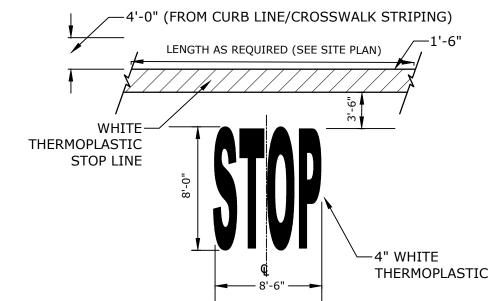
A. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE

BE STABILIZED

- THAN 5 ACRES. THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600 CUBIC FEET OF
- TRAP SHALL BE CLEANED WHEN 50 PERCENT OF THE ORIGINAL VOLUME IS
- AND STABILIZED. SEDIMENT TRAPS MUST BE USED AS NEEDED TO CONTAIN RUNOFF UNTIL

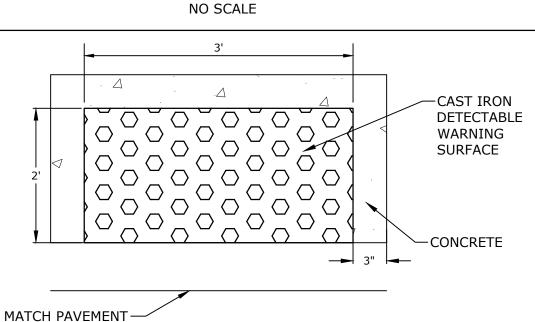






- PAVEMENT MARKINGS TO BE INSTALLED IN LOCATIONS AS SHOWN ON SITE
- STRIPING SHALL BE CONSTRUCTED USING WHITE THERMO PLASTIC, REFLECTERIZED PAVEMENT MARKING MATERIAL MEETING THE REQUIREMENTS OF ASTM D 4505

STOP BAR AND LEGEND



FINISH GRADE.

0" TOLERANCE.

- 1. DETECTABLE WARNING SURFACE SHALL BE 2' X 3' CAST IRON PANEL SET IN
- 2. DETECTABLE WARNING SURFACE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

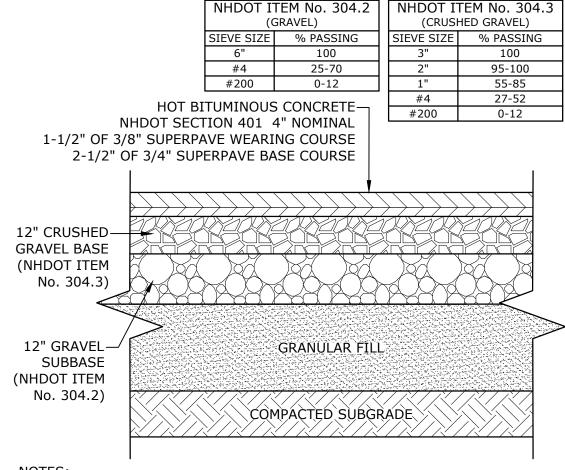
CAST IRON DETECTABLE WARNING SURFACE NO SCALE

NHDOT ITEM No. 304.2 NHDOT ITEM No. 304.3 (GRAVEL) (CRUSHED GRAVEL) SIEVE SIZE % PASSING SIEVE SIZE % PASSING 25-70 95-100 55-85 #200 0-12 27-52 HOT BITUMINOUS CONCRETE-#200 0-12 NHDOT SECTION 401 3" NOMINAL 1" OF 3/8" SUPERPAVE WEARING COURSE 2" OF 3/4" SUPERPAVE BASE COURSE 4" CRUSHED-**GRAVEL BASE** (NHDOT ITEM No. 304.3) 8" GRAVEL-GRANULAR FILL SUBBASE (NHDOT ITEM No. 304.2) ĆOMPÁČTĘĎ SUBGRÁDE NOTES:

- 1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
- 2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
- 3. A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE PAVEMENT
- PRIOR TO PLACING WEARING COURSE. 4. REFER TO CITY SPECIFICATIONS FOR ASPHALT MIX DESIGN.

ON-SITE PAVEMENT SECTION

NO SCALE



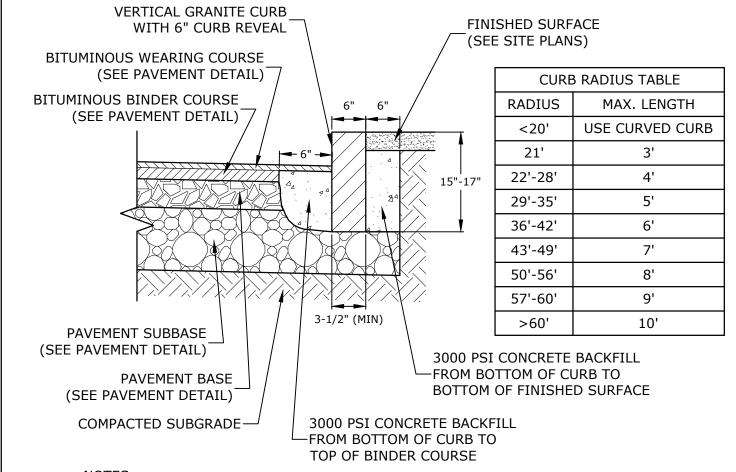
- 1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
- 2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
- 3. A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE PAVEMENT
- PRIOR TO PLACING WEARING COURSE.

4. REFER TO CITY SPECIFICATIONS FOR ASPHALT MIX DESIGN.

CITY RIGHT-OF-WAY PAVEMENT SECTION NO SCALE

PAVED ROADWAY-

(TYPICAL)



NHDOT ITEM No. 304.3

(CRUSHED GRAVEL)

95-100

55-85

0-12

SIEVE SIZE % PASSING

#4 27-52

#200

1:12 SLOPE

LIGHT-ON-DARK OR DARK-ON-LIGHT).

- 1. SEE SITE PLAN(S) 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.

6' TIP DOWN → 5'-0" MIN. → 6' TIP DOWN →

SECTION B-B

12:1 MAX.

CURB REVEAL

-CURB TIP-DOWN

" REVEAL

SIDEWALK FLUSH

WITH PAVEMENT

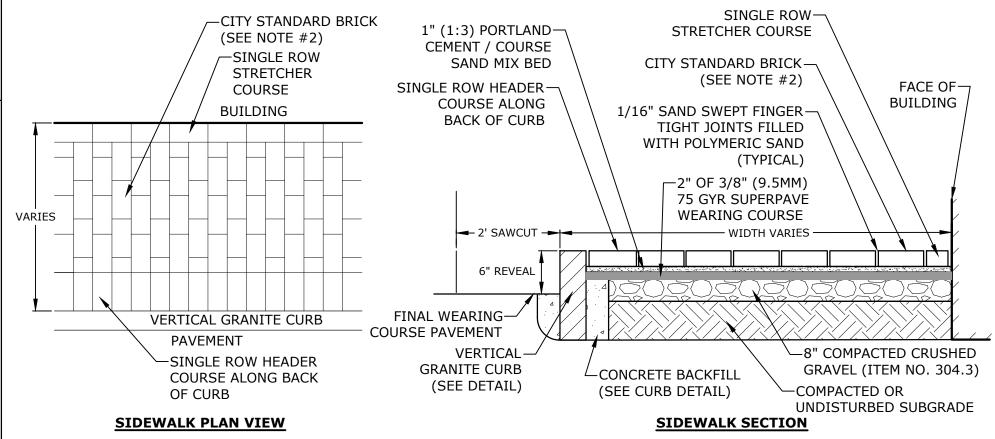
7. JOINTS BETWEEN STONES SHALL HAVE A MAXIMUM SPACING OF 1/2" AND SHALL BE MORTARED.

VERTICAL GRANITE CURB NO SCALE

CURB TIP-DOWN-

5" THICK -

CONCRETE

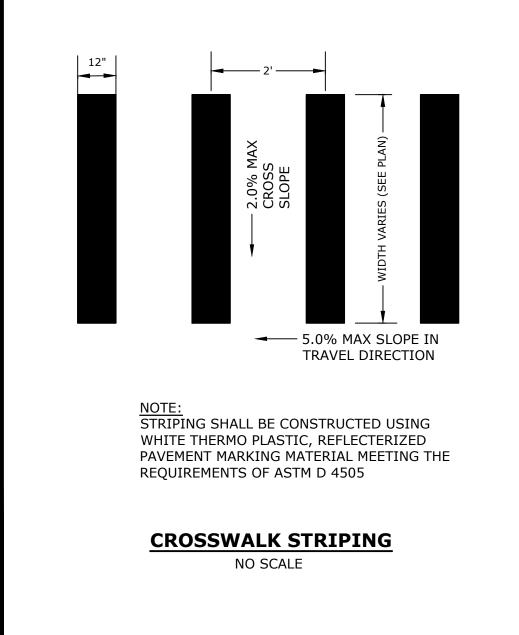


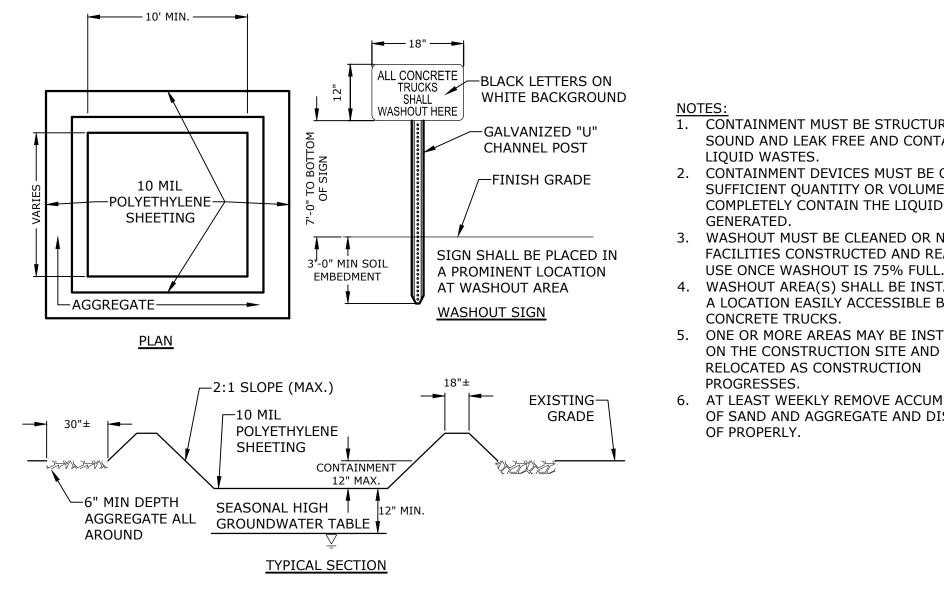
- BRICK SIDEWALK SHALL BE INSTALLED AS DETAILED AND PER CITY OF PORTSMOUTH REQUIREMENTS/SPECIFICATIONS AND SHALL
- INCLUDE A CONTINUOUS APPROVED PAVER EDGE RESTRAINT SYSTEM AT ALL LOCATIONS NOT ADJACENT TO CURB OR BUILDINGS. 2. CITY STANDARD BRICK SHALL BE TRADITIONAL EDGE, PATHWAY, FULL RANGE 2.25"X4"X8" PAVER, BY PINE HALL BRICK, INC. BRICK
- 3. BEDDING MATERIAL SHALL BE A PORTLAND CEMENT / COURSE SAND MIX THAT IS 1 PART PORTLAND CEMENT AND 3 PARTS COURSE SAND. SAND SHALL CONFORM WITH ASTM C-33 AND CEMENT SHALL BE PORTLAND CEMENT TYPE I/TYPE II.

MATERIAL SAMPLES SHALL BE PROVIDED TO DPW PRIOR TO INSTALLATION FOR REVIEW AND APPROVAL

BRICK SIDEWALK

NO SCALE



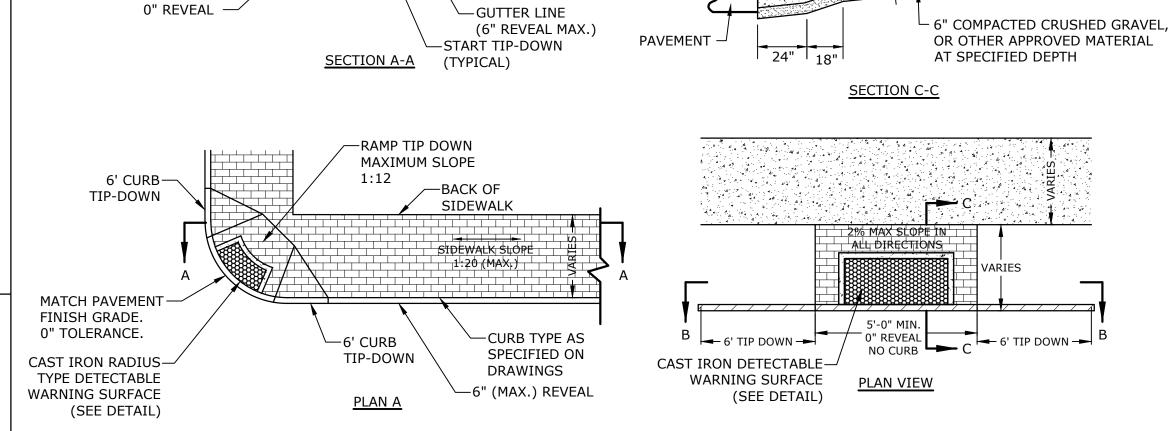


1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL

- 2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES
- 3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO
- 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
- 6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

CONCRETE WASHOUT AREA

NO SCALE



SIDEWALK SLOPE

1:20 (MAX.)

- NOTES:
 1. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS.
- 2. A 6" COMPACTED CRUSHED GRAVEL BASE (NHDOT ITEM No. 304.3) SHALL BE PROVIDED BENEATH RAMPS.
- 3. DETECTABLE WARNING PANEL SHALL BE CAST IRON SET IN CONCRETE (SEE DETAIL.)
- 4. PROVIDE DETECTABLE WARNING SURFACES ANYTIME THAT A CURB RAMP, BLENDED TRANSITION, OR LANDING CONNECTS TO A
- 5. LOCATE THE DETECTABLE WARNING SURFACES AT THE BACK OF THE CURB ALONG THE EDGE OF THE LANDING.
- 6. THE MAXIMUM RUNNING SLOPE OF ANY SIDEWALK CURB RAMP IS 12:1, THE MAXIMUM CROSS SLOPE IS 2%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.
- 7. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. ROADWAY SHOULDER SLOPES ADJOINING SIDEWALK CURB RAMPS SHALL BE A MAXIMUM OF 5% (FULL WIDTH) FOR A DISTANCE OF 2 FT. FROM THE ROADWAY CURBLINE.
- WITHIN THE CROSSWALK MARKINGS. 9. DETECTABLE WARNING PANELS SHALL BE A MINIMUM OF 2 FEET IN DEPTH. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED
- PERPENDICULAR TO THE GRADE BREAK BETWEEN THE RAMP, BLENDED TRANSITION, OR LANDING AND THE STREET. 10. THE TEXTURE OF THE DETECTABLE WARNING FEATURE MUST CONTRAST VISUALLY WITH THE SURROUNDING SURFACES (EITHER

8. THE BOTTOM OF THE SIDEWALK CURB RAMP OR LANDING, EXCLUSIVE OF THE FLARED SIDES, SHALL BE WHOLLY CONTAINED

NO SCALE

CONCRETE WHEELCHAIR ACCESSIBLE RAMP

MARK DATE DESCRIPTION PROJECT NO: T5037-00

North End

Mixed Use

International

Russell Street &

Portsmouth, NH

Deer Street

Two

Group

Development

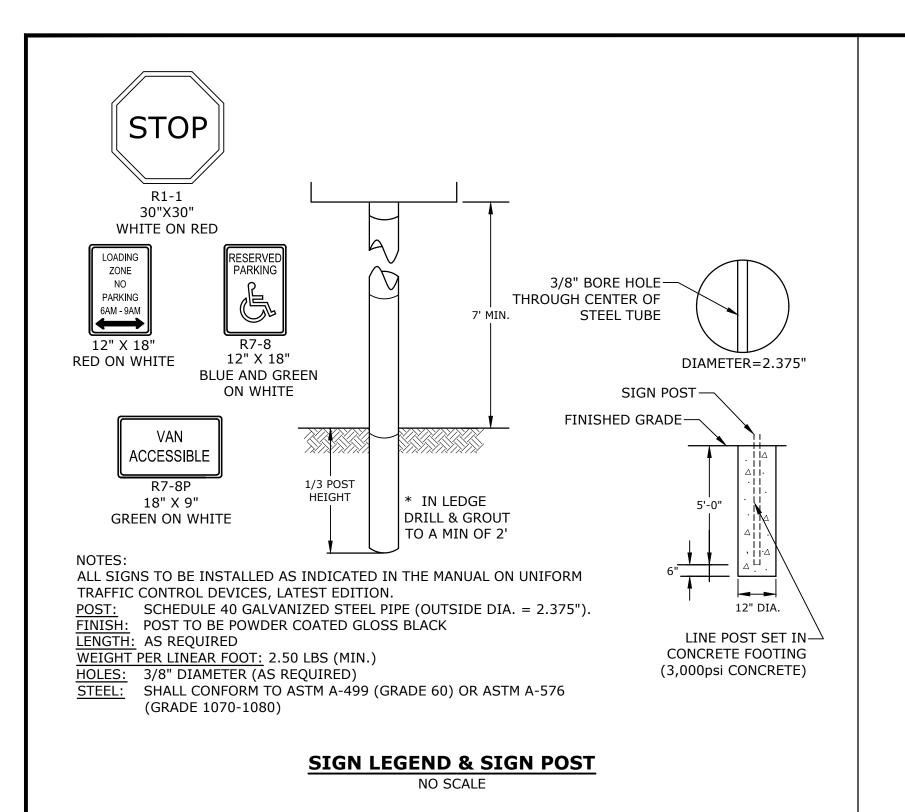
DATE: January 4, 2022 T5037-002-C-DTLS.DWG DRAWN BY: CHECKED: APPROVED:

DETAILS SHEET

AS SHOWN

SCALE:

C-502



CONSTRUCT R7-8 & -R7-8b SIGNS (SEE SITE PLAN) PAINTED ISLAND 4" WIDE PAINTED WHITE LINES (TYP) 8' (MIN.)

- 1. ALL PAINT SHALL BE FAST DRYING TRAFFIC PAINT, MEETING THE REOUIREMENTS OF AASHTO M248-TYPE F. PAINT SHALL BE APPLIED AS SPECIFIED BY MANUFACTURER.
- 2. SYMBOLS & PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN W/DISABILITIES ACT.

ACCESSIBLE PARKING STALL

NO SCALE

NHDOT ITEM No. 304.4

(CRUSHED STONE - FINE)

% PASSING

SIEVE SIZE

-MANHOLE FRAMES AND COVERS SHALL BE

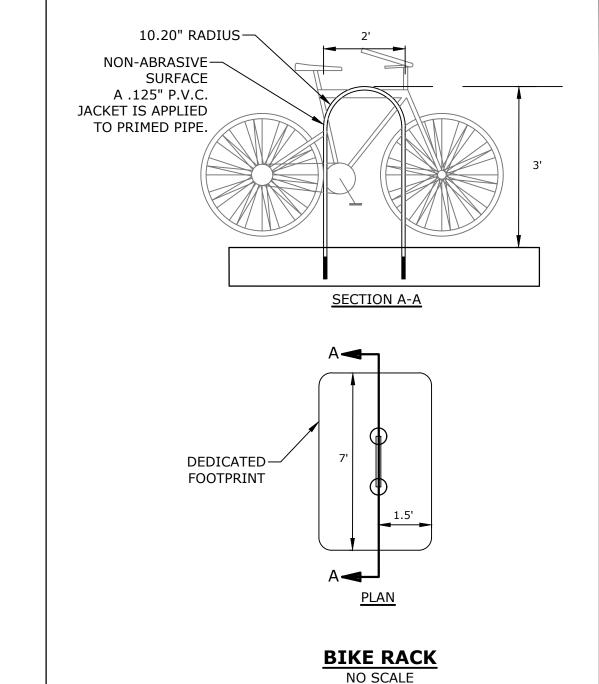
OF HEAVY DUTY DESIGN AND PROVIDE A

LOCAL REQUIREMENTS.

1. SYMBOL SHALL BE CONSTRUCTED IN ALL ACCESSIBLE SPACES USING WHITE THERMOPLASTIC, REFLECTORIZED PAVEMENT PARKING MATERAL MEETING THE REQUIREMENTS OF ASTM D 4505. 2. SYMBOL SHALL BE CONSTRUCTED TO THE LATEST ADA, STATE AND

ACCESSIBLE SYMBOL

NO SCALE



Tighe&Bond

1. ALL CATCH BASIN OUTLETS TO HAVE "ELIMINATOR" OIL AND FLOATING DEBRIS TRAP MANUFACTURED BY KLEANSTREAM (NO EQUAL)

2. INSTALL DEBRIS TRAP TIGHT TO INSIDE OF STRUCTURE. 3. 1/4" HOLE SHALL BE DRILLED IN

TOP OF DEBRIS TRAP

"ELIMINATOR" OIL **FLOATING DEBRIS TRAP**





Russell Street & Deer Street Portsmouth, NH

Е			
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MARK	DATE	DESCRIPTION	
PROJE	CT NO:		T5037-002

DATF: January 4, 202 T5037-002-C-DTLS.DWG DRAWN BY:

DETAILS SHEET

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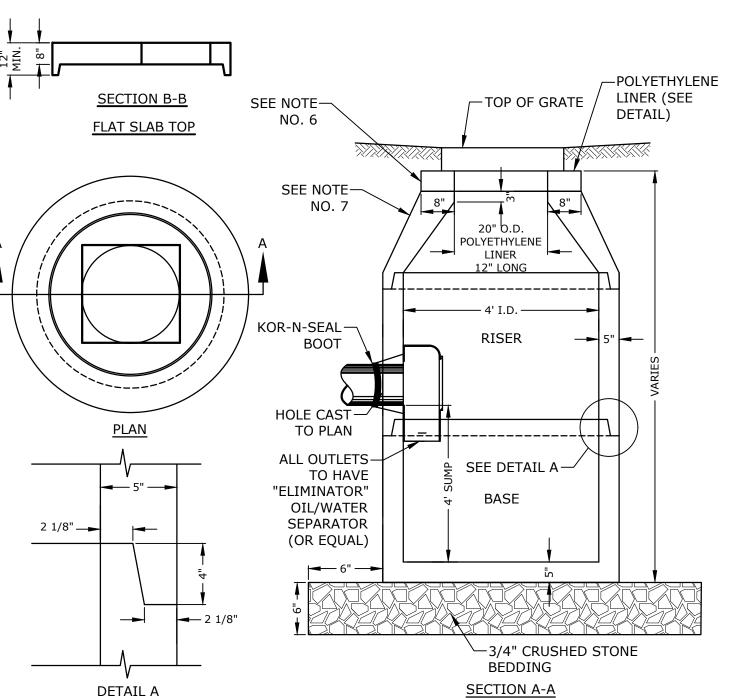
SCALE: AS SHOWN

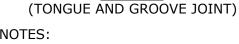
C-503

- CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS
- THE TONGUE AND THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL
- REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.

- PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
- THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
- 10. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZNTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BE

NO SCALE





- ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi)
- 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.
- THE TONGUE AND GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL
- REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
- RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
- THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING. FITTING FRAME TO GRADE MAY BE DONE WITH PREFABRICATED ADJUSTMENT RINGS OR CLAY BRICKS (2
- COURSES MAX.). CONE SECTIONS MAY BE EITHER CONCENTRIC OR ECCENTRIC, OR FLAT SLAB TOPS MAY BE USED WHERE
- PIPE WOULD OTHERWISE ENTER INTO THE CONE SECTION OF THE STRUCTURE AND WHERE PERMITTED. PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE
- 10. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS. 11. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
- 12. "ELIMINATOR" OIL/WATER SEPARATOR SHALL BE INSTALLED TIGHT TO INSIDE OF CATCHBASIN.

4' DIAMETER CATCHBASIN NO SCALE

2" 100 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) WORD "DRAIN" SHALL 1-1/2" 85-100 BE PLAINLY CAST INTO THE CENTER OF 3/4" 45-75 EACH COVER. #4 10-45 —ADJUST TO GRADE WITH CONCRETE #200 0-5 GRADE RINGS OR CLAY BRICKS, FRAME 8" MIN. TO BE SET IN FULL BED OF MORTAR. (2 COURSES MAX). -SEE STRUCTURE JOINTS DETAIL 30" ─➤ (TYP.) ─MORTAR ALL JOINTS 5" MIN ECCENTRIC TOP -MIN. 0.12 sq. in. STEEL PER VERTICAL FOOT, PLACED ACCORDING TO AASHTO DESIGNATION M199 HEIGHT OF RISER VARY FROM 1' TO 4' **→** 48" ± 1" DIA. **→** -PIPE OPENING TO BE PRECAST IN RISER SECTION —1 - #3 BAR AROUND OPENING FOR PIPES 18" DIAMETER AND OVER, 1" COVER 5" MIN -INVERT OF STRUCTURE TO BE CONCRETE CLASS "B" ←3/4" CRUSHED STONE BEDDING KOR-N-SEAL BOOT-6" MIN. OR EQUAL

PROVIDE "V" OPENING FINISH-CONST. BRICK SHELF-SUBGRADE 6" TYP.

1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE.

AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.

THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.

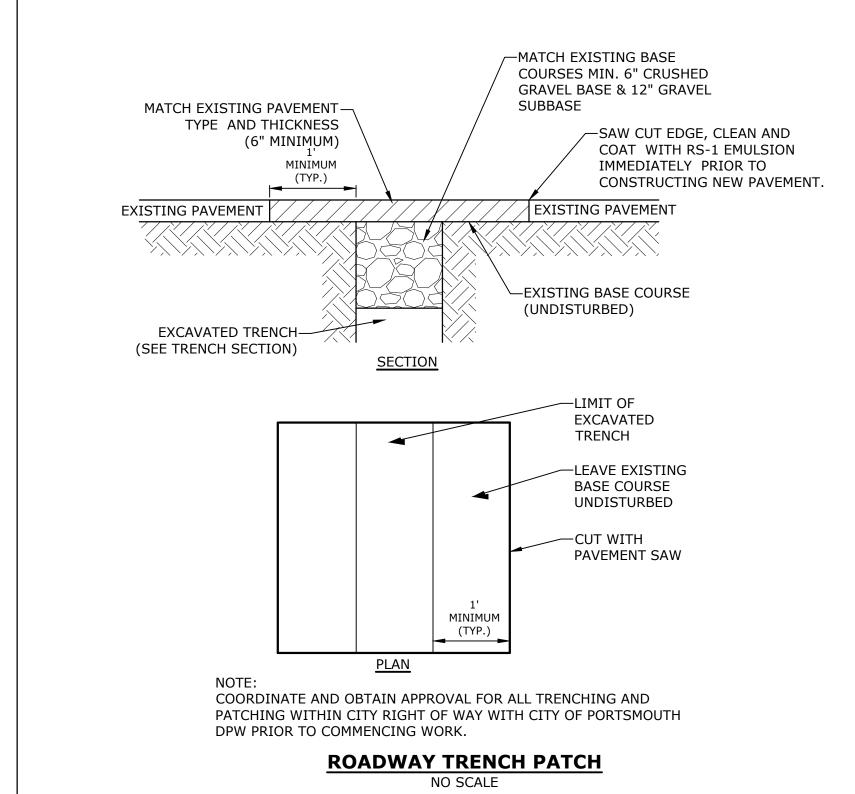
CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6" MINIMUM THICKNESS)

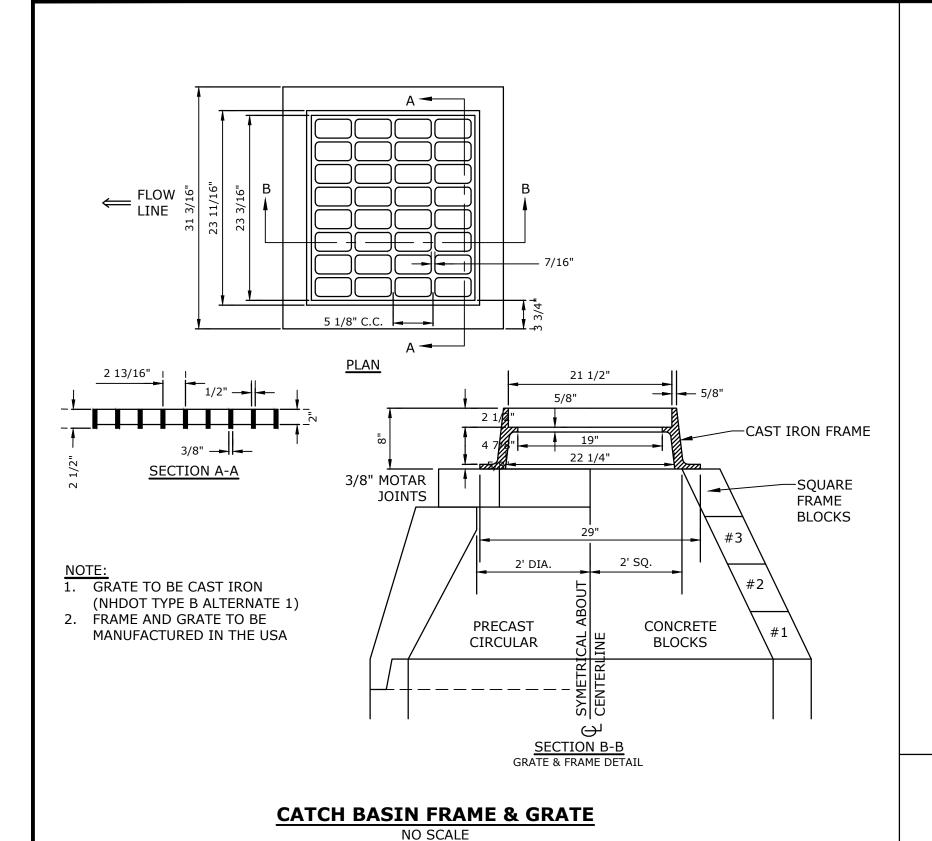
THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.

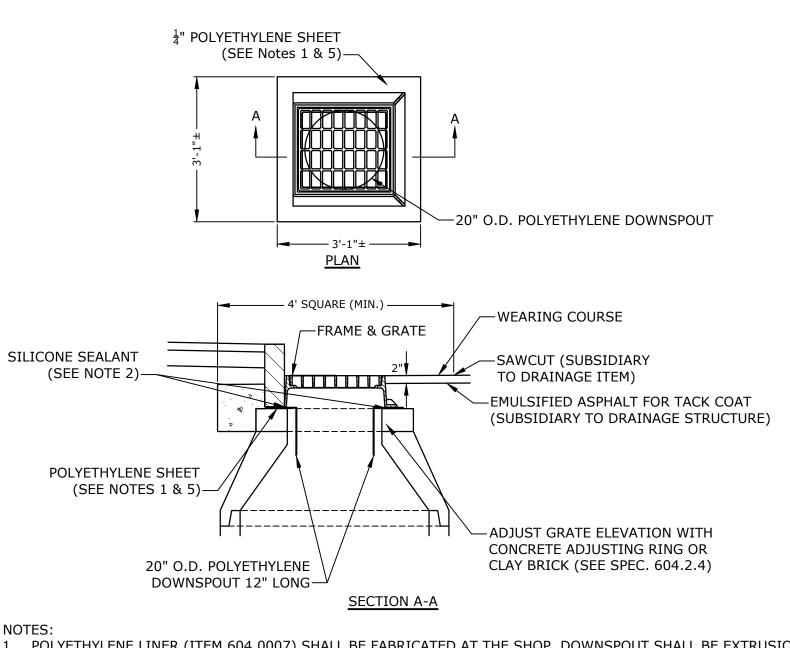
OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN

NO HOLES CLOSER THAN 3" TO JOINTS.

4' DIAMETER DRAIN MANHOLE







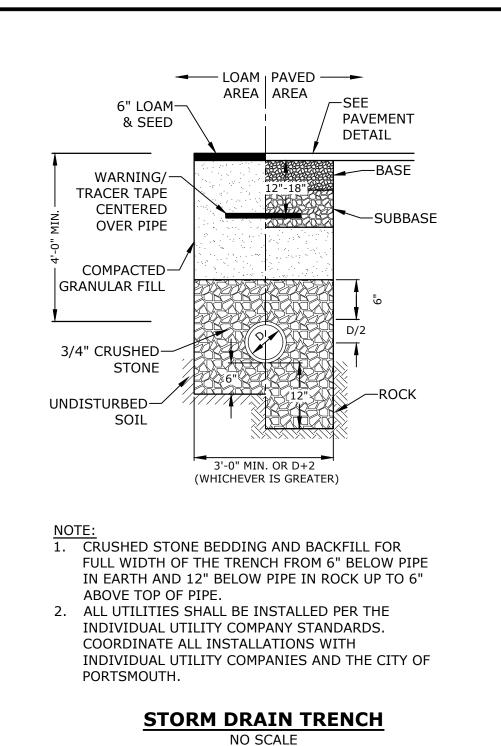


FRAME AND POLYETHYLENE SHEET.

2. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT (SUBSIDIARY TO ITEM 604.0007) BETWEEN

- 3. PLACE CLASS AA CONCRETE TO 2" BELOW THE TOP OF THE GRATE ELEVATION (SUBSIDIARY TO DRAINAGE
- STRUCTURE). 4. USE ON DRAINAGE STRUCTURES 4' MIN. DIAMETER ONLY.
- TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE ON THE FRAME FOR THE CATCH BASIN
- BEFORE PLACING CONCRETE (EXCEPT AS SHOWN WHEN USED WITH 3-FLANGE FRAME AND CURB). 6. THE CENTER OF THE GRATE & FRAME MAY BE SHIFTED A MAXIMUM OF 6" FROM THE CENTER OF THE DOWNSPOUT
- IN ANY DIRECTION.
- 7. PLACED ONLY IN DRAINAGE STRUCTURES IN PAVEMENT.
- 8. SEE NHDOT DR-04, "DI-DB, UNDERDRAIN FLUSHING BASIN AND POLYETHYLENE LINER DETAILS", FOR ADDITIONAL INFORMATION.
- 9. CATCHBASINS WITHIN CITY RIGHT OF WAY SHALL HAVE A POLYETHYLENE LINER

POLYETHYLENE LINER NO SCALE



SLIP RESISTANT SURFACE 1-1/2" FLAT FACE GOTHIC FLUSH (4) BOLT SLOTS 1" - WIDE ON 36" TO 30 STAINLESS STEEL CAM LOCK MPIC® MULTI-TOOL **PICKBAR** - T-GASKET -Ø33-3/4"-

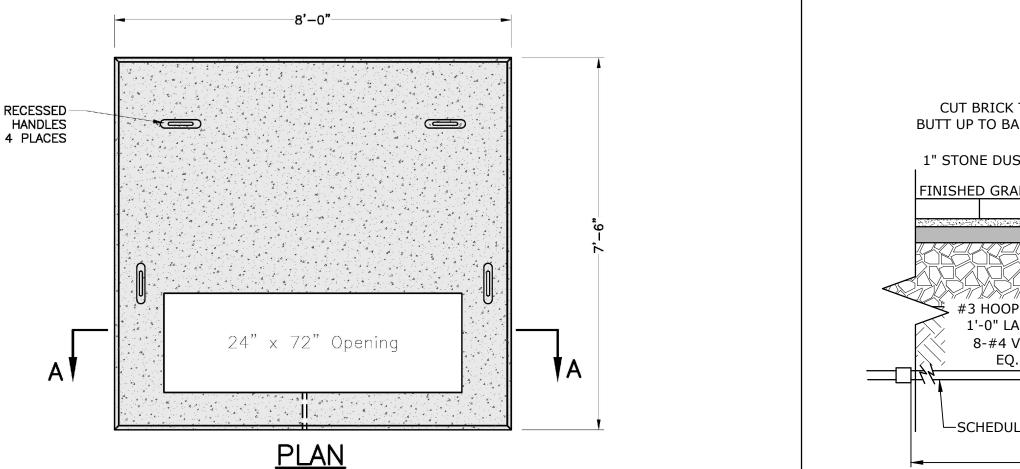
SECTION A-A

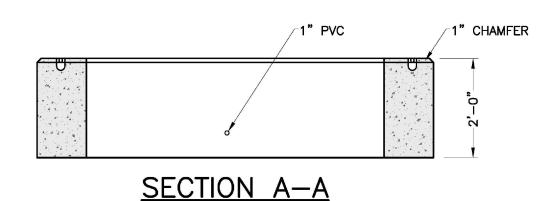
- 1. MANHOLE FRAME AND COVER SHALL BE 32" HINGED ERGO XL
- 2. ALL DIMENSIONS ARE NOMINAL.
- 3. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
- A. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING. B. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME 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. 4. LABEL TYPE OF MANHOLE WITH 3" HIGH LETTERS IN HE CENTER

DRAIN MANHOLE FRAME & COVER



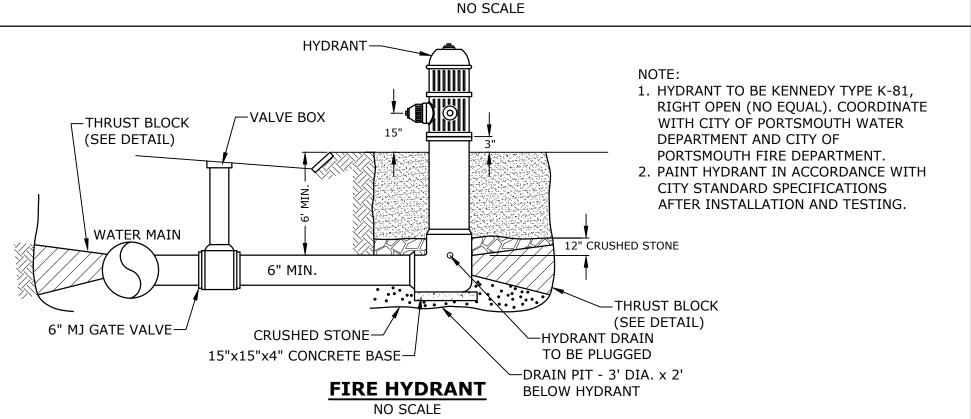


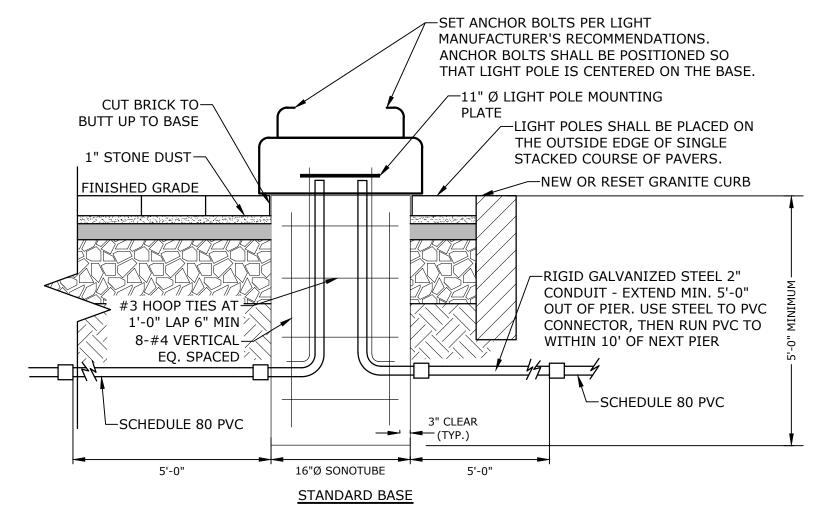
NOTES:
1. DIMENSIONS SHOWN REPRESENT TYPICAL REQUIREMENTS. MANHOLE LOCATIONS AND REQUIREMENTS SHALL BE COORDINATED WITH EVERSOURCE PRIOR TO CONSTRUCTION 2. CONCRETE MINIMUM STRENGTH - 4,000

PSI @ 28 DAYS 3. STEEL REINFORCEMENT - ASTM A615, GRADE 60

4. PAD MEETS OR EXCEEDS EVERSOURCE SPECIFICATIONS

3-PHASE TRANSFORMER PAD





1. REFER TO ELECTRICAL PLANS FOR WIRING DETAILS.

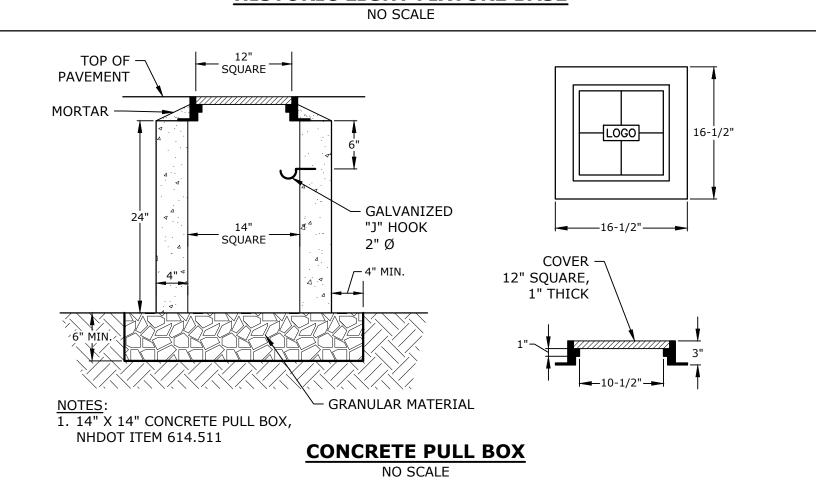
REQUIREMENTS.

- CONCRETE: 4000 PSI, AIR ENTRAINED STEEL: 60 KSI 3. LIGHT POLE FOUNDATIONS SHALL BE PLACED PRIOR TO INSTALLATION OF BRICK PAVERS.
- 4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL, TO INCLUDE PERFORMANCE SPECIFICATIONS, CALCULATIONS AND NH LICENSED STRUCTURAL ENGINEER'S STAMP FOR LIGHT POLE FOUNDATION.

WHERE SPREAD FOOTINGS ARE REQUIRED PRIOR TO CONSTRUCTION. SEE NOTE#4 FOR SUBMITTAL

STANDARD BASE SHALL BE CONSTRUCTED UNLESS THERE IS CONFLICT WITH THE EXISTING DUCT BANK. SPREAD FOOTING BASE SHALL BE USED IN LIEU OF STANDARD BASE IN LOCATIONS WHERE TOP OF DUCT BANK ELEVATION WILL CONFLICT WITH STANDARD POLE BASE DEPTH. CONTRACTOR SHALL VERIFY LOCATIONS

HISTORIC LIGHT FIXTURE BASE

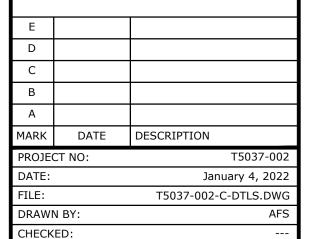


North End Mixed Use Development

Tighe&Bond

Two International Group

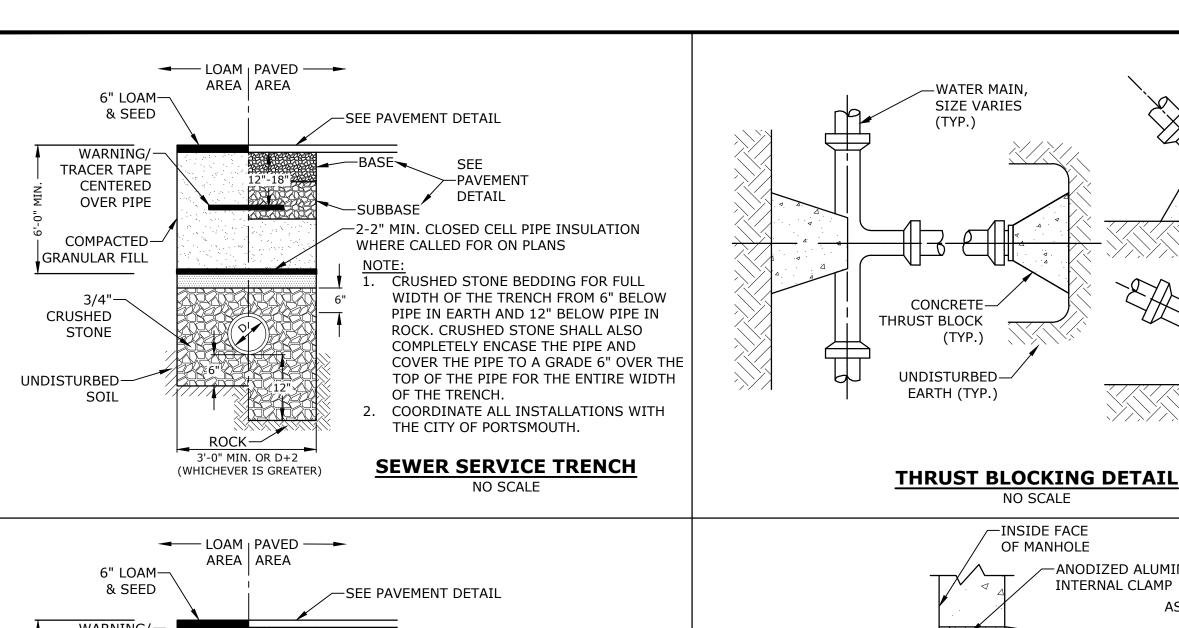
Russell Street & Deer Street Portsmouth, NH



APPROVED: **DETAILS SHEET**

SCALE: AS SHOWN

C-504



NO SCALE

-PAVEMENT

ABOVE TOP OF PIPE.

PORTSMOUTH.

SAND BEDDING AND BACKFILL FOR

WATER MAIN SHALL BE INSTALLED

INSTALLATIONS WITH THE CITY OF

UNLESS OTHERWISE

-MANUFACTURED

TYPICAL SECTION

WYE CONNECTOR

ALLOWED BY ENGINEER

BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12"

STANDARDS. COORDINATE ALL

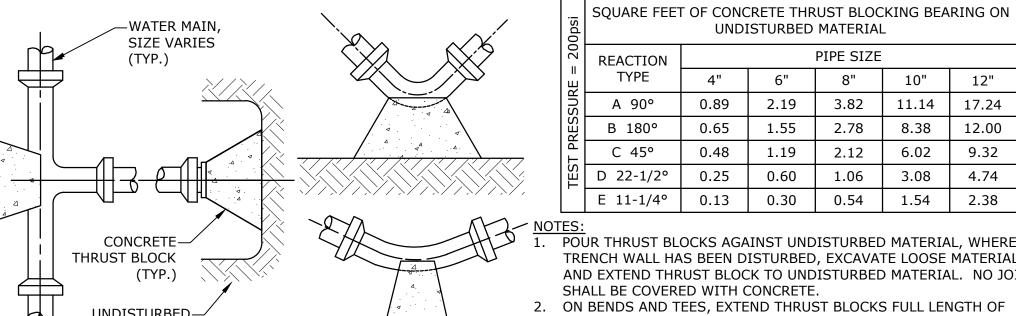
PER CITY OF PORTSMOUTH

WATER TRENCH

NO SCALE

FULL WIDTH OF THE TRENCH FROM 6"

-SEE PAVEMENT DETAIL



UNDISTURBED MATERIAL 10" 12" 11.14 17.24 8.38 12.00 6.02 9.32 3.08 4.74 2.38 1.54

POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS

- 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.

NOTE 3)

—APPROVED PREFORMED

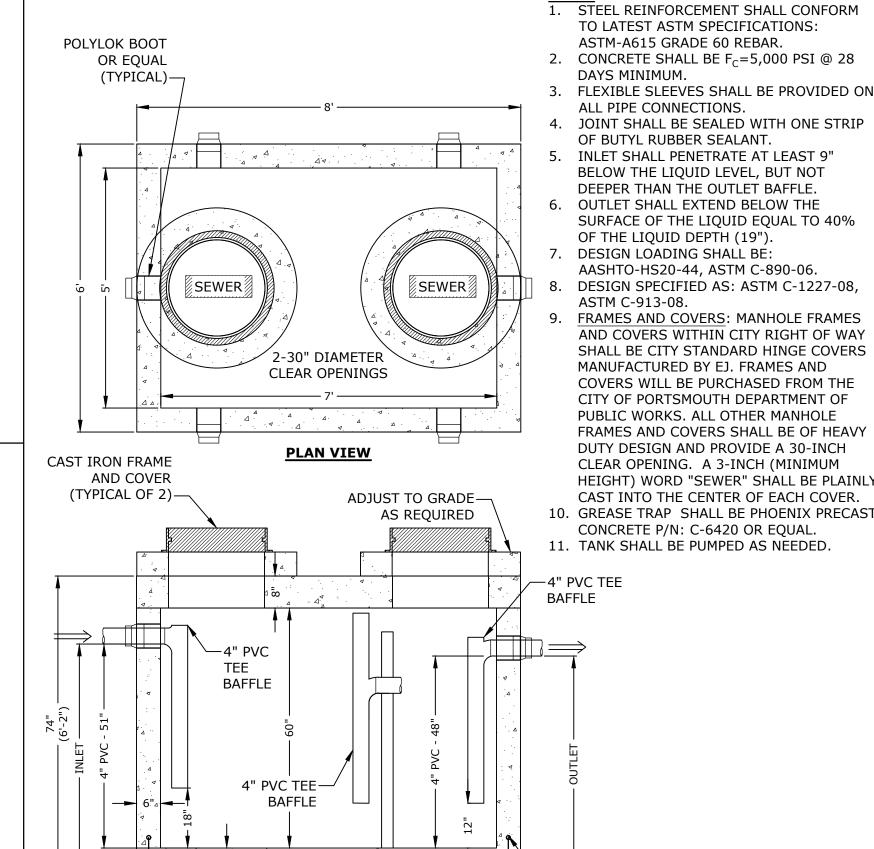
O-RING

BITUMASTIC SEALANT (SEE

-RUBBER-LIKE

O-RING SET

IN RECESS



1,000 GALLON GREASE TRAP NO SCALE

-WATERSTOP

6" TYP.

SUBGRADE

TYPICAL SECTION

STONE

(TYPICAL)

WARNING/ -BASE√ SEE TRACER TAPE -PAVEMENT CENTERED DETAIL OVER PIPE COMPACTED-SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" ≝GRANULAR FILL BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE. SPRING LINE GAS SHALL BE INSTALLED PER UNITIL **BEDDING AND** STANDARDS. COORDINATE ALL BACKFILL MATERIAL INSTALLATIONS WITH UNITIL AND THE CITY OF PORTSMOUTH. UNDISTURBED-SOIL **GAS TRENCH** ROCK-

3'-0" MIN. OR D+2

(WHICHEVER IS GREATER)

■ LOAM | PAVED ■ ■

AREA AREA

ROCK—

3'-0" MIN. OR D+2

(WHICHEVER IS GREATER)

—PLUG OR CONNECT TO EXISTING—

45° BEND-

VARIES

STANDARD SERVICE LATERAL CONNECTION

SERVICE CONNECTION

6" LOAM-

& SEED

WARNING

CENTERED

OVER PIPE

COMPACTED-

SPRING LINE

BEDDING AND-

SOIL

6" MIN. DIA.

-SEWER

-45° BEND LATERAL

MANUFACTURED

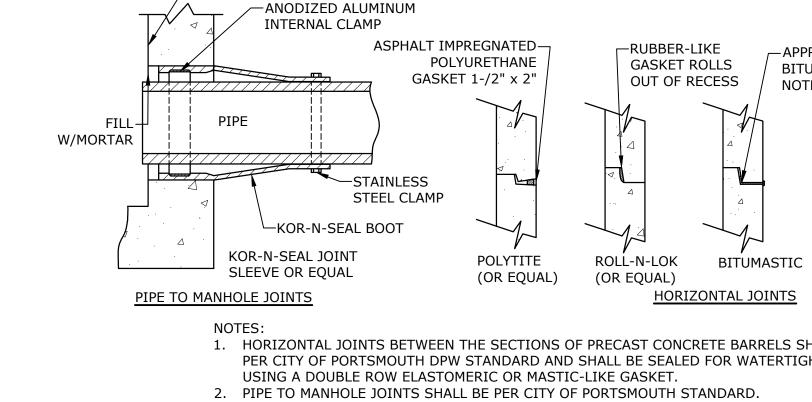
WYE CONNECTOR

BACKFILL MATERIAL

UNDISTURBED-

GRANULAR FILL

TRACER TAPE

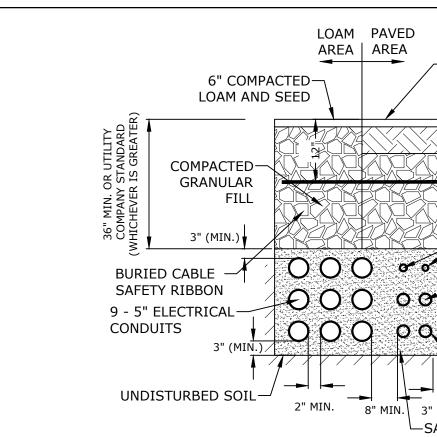


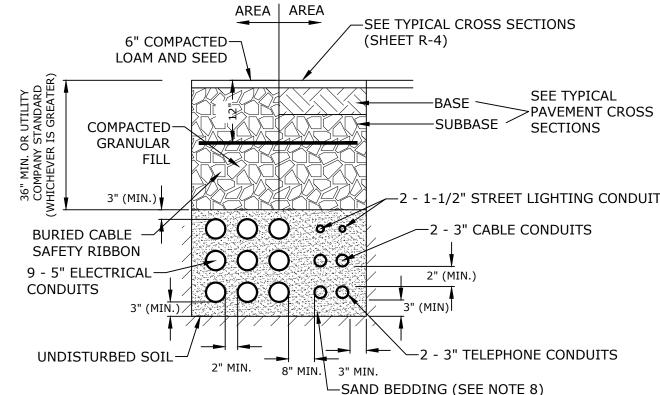
1. HORIZONTAL JOINTS BETWEEN THE SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE PER CITY OF PORTSMOUTH DPW STANDARD AND SHALL BE SEALED FOR WATERTIGHTNESS 2. PIPE TO MANHOLE JOINTS SHALL BE PER CITY OF PORTSMOUTH STANDARD.

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.

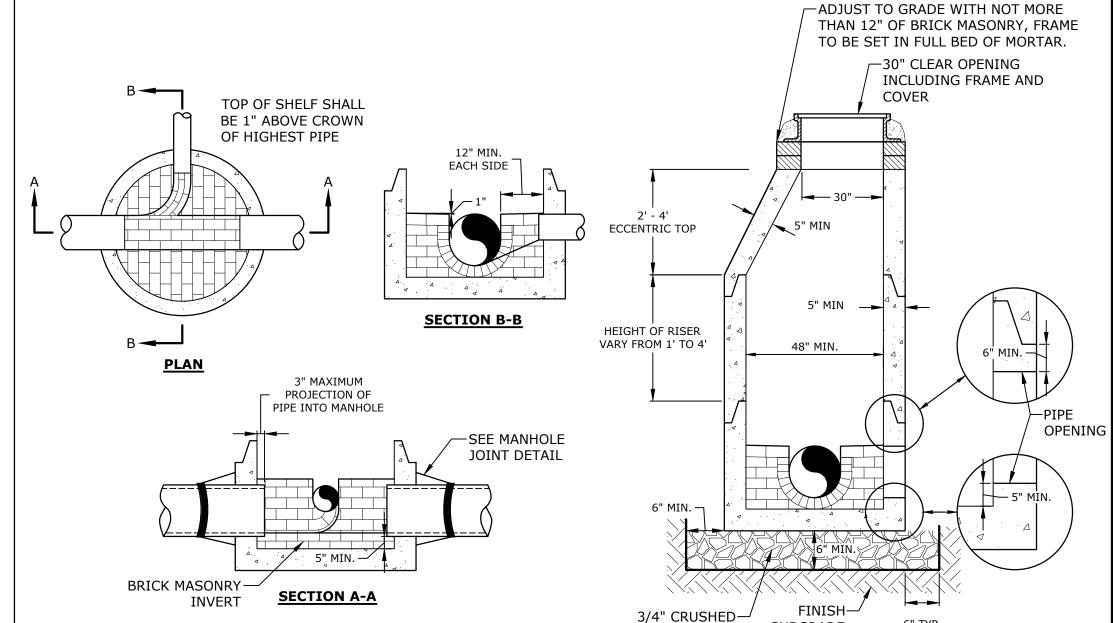
MANHOLE JOINTS NO SCALE





- NUMBER, MATERIAL, AND SIZE OF UTILITY CONDUITS TO BE DETERMINED BY LOCAL UTILITY OR AS SHOWN ON ELECTRICAL DRAWINGS. CONTRACTOR TO PROVIDE ONE SPARE CONDUIT FOR EACH UTILITY TO BUILDING.
- DIMENSIONS SHOWN REPRESENT OWNERS MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS MAY BE GREATER BASED ON UTILITY COMPANY STANDARDS, BUT SHALL NOT BE LESS THAN THOSE SHOWN. NO CONDUIT RUN SHALL EXCEED 360 DEGREES IN TOTAL BENDS.
- A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE UTILITY COMPANY IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT.
- UTILITY COMPANY MUST BE GIVEN THE OPPORTUNITY TO INSPECT THE CONDUIT PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS SHOULD THE UTILITY COMPANY BE UNABLE TO INSTALL ITS CABLE IN A SUITABLE MANNER.
- 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
- ALL 90° SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL. SWEEPS WITH A 36 TO 48 INCH
- SAND BEDDING TO BE REPLACED WITH CONCRETE ENCASEMENT WHERE COVER IS LESS THAN 3 FEET, WHEN LOCATED BELOW PAVEMENT, OR WHERE SHOWN ON THE UTILITIES PLAN.

ELECTRICAL AND COMMUNICATION CONDUIT



SECTION VIEW

- 1. INVERT AND SHELF TO BE PLACED AFTER EACH LEAKAGE TEST.
- 2. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT.
- 3. INVERT BRICKS SHALL BE LAID ON EDGE.
- 4. TWO (2) COATS OF BITUMINOUS WATERPROOF COATING SHALL BE APPLIED TO ENTIRE EXTERIOR OF MANHOLE.
- 5. 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.
- 6. HORIZONTAL JOINTS SHALL BE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT. 7. BARREL AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE DESIGNED FOR H20 LOADING, AND CONFORMING TO ASTM C478-06.

SEWER MANHOLE NO SCALE

North End Mixed Use Development

Two International Group

Russell Street & Deer Street Portsmouth, NH

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С		
В		
Α		
MARK	DATE	DESCRIPTION
PROJECT NO:		T5037-002
DATE:		January 4, 2022
FILE:		T5037-002-C-DTLS.DWG
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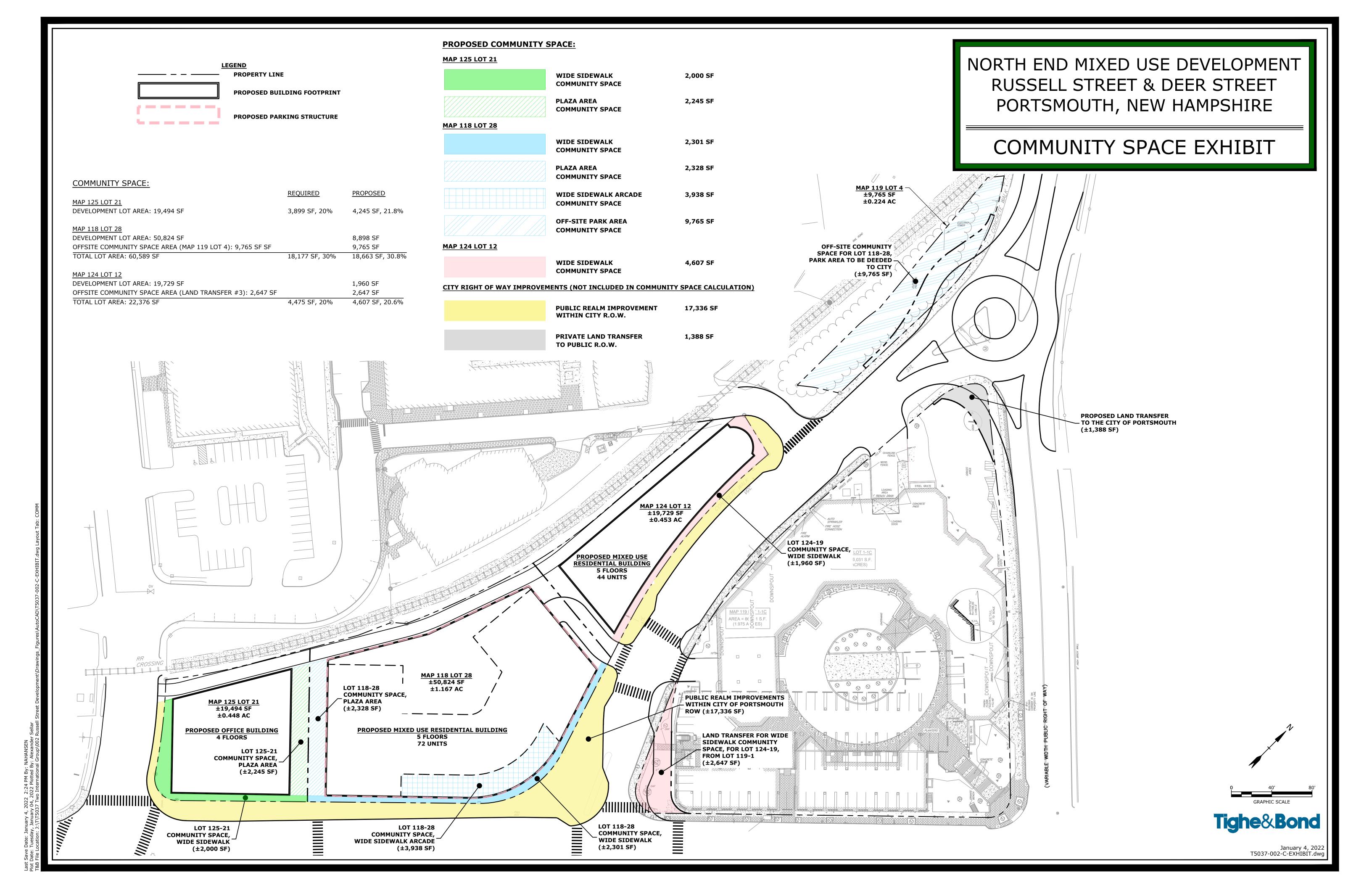
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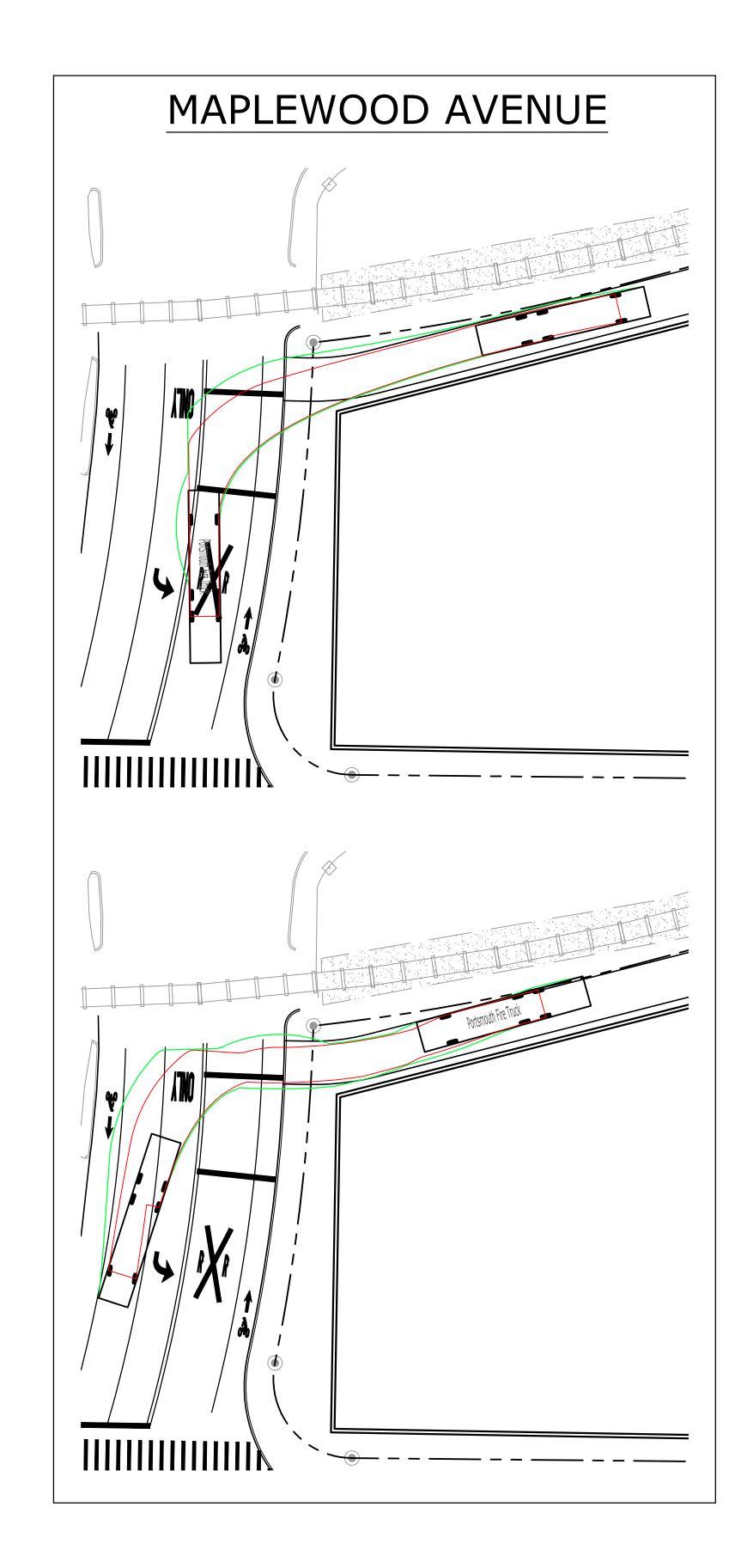
DETAILS SHEET

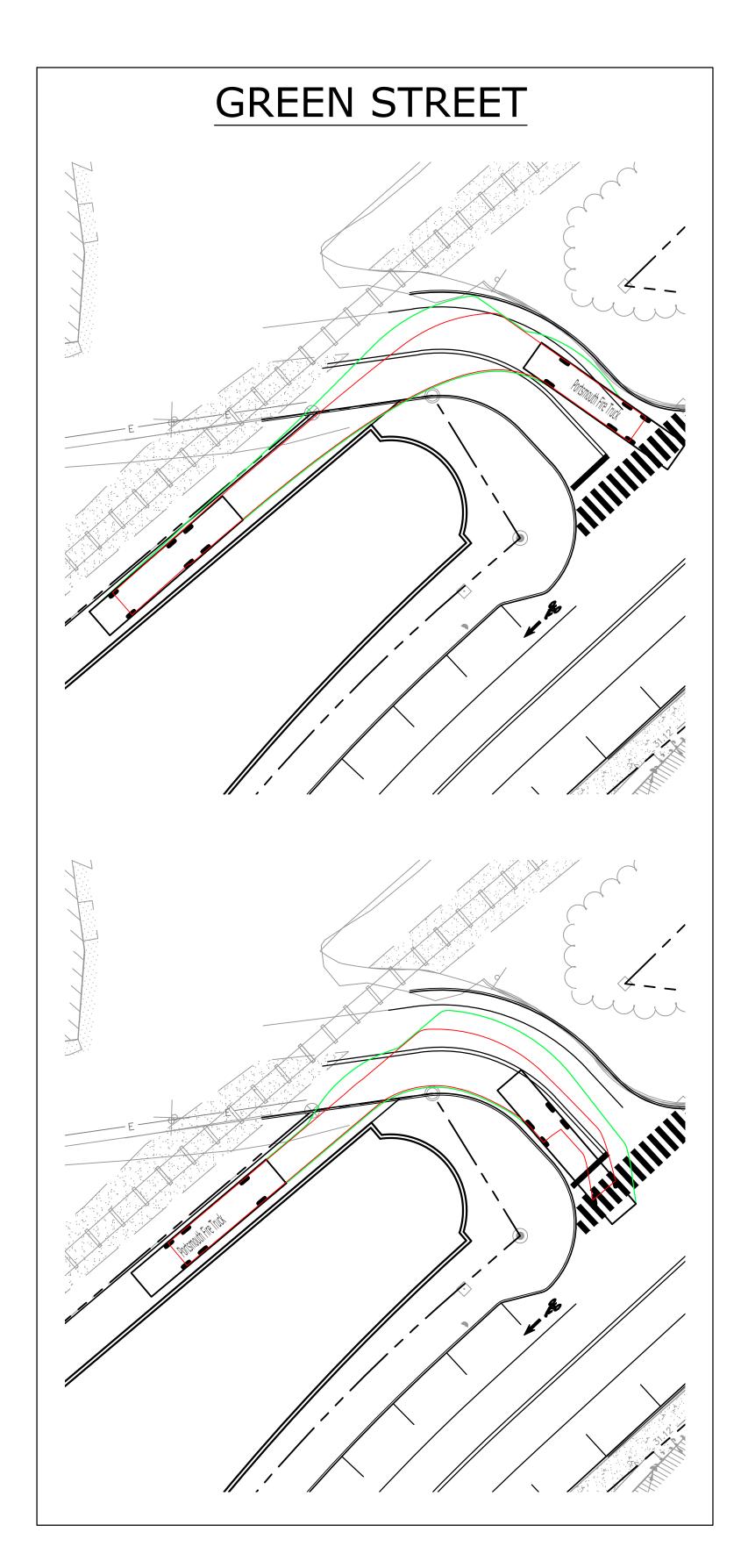
SCALE: AS SHOWN

C-505

NO SCALE

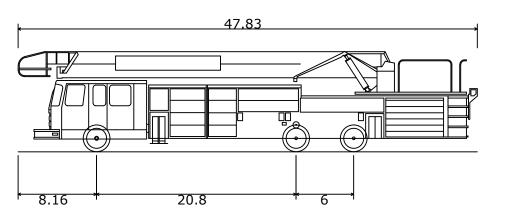






NORTH END MIXED USE DEVELOPMENT RUSSELL STREET & DEER STREET PORTSMOUTH, NEW HAMPSHIRE

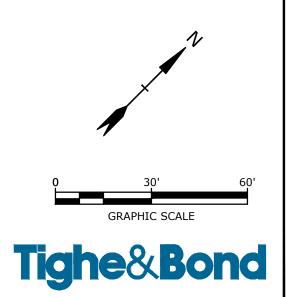
FIRE TRUCK TURNING EXHIBIT



Portsmouth Fire Truck Overall Length Overall Width Overall Body Height Min Body Ground Clearance Track Width Lock-to-lock time Max Steering Angle (Virtual)

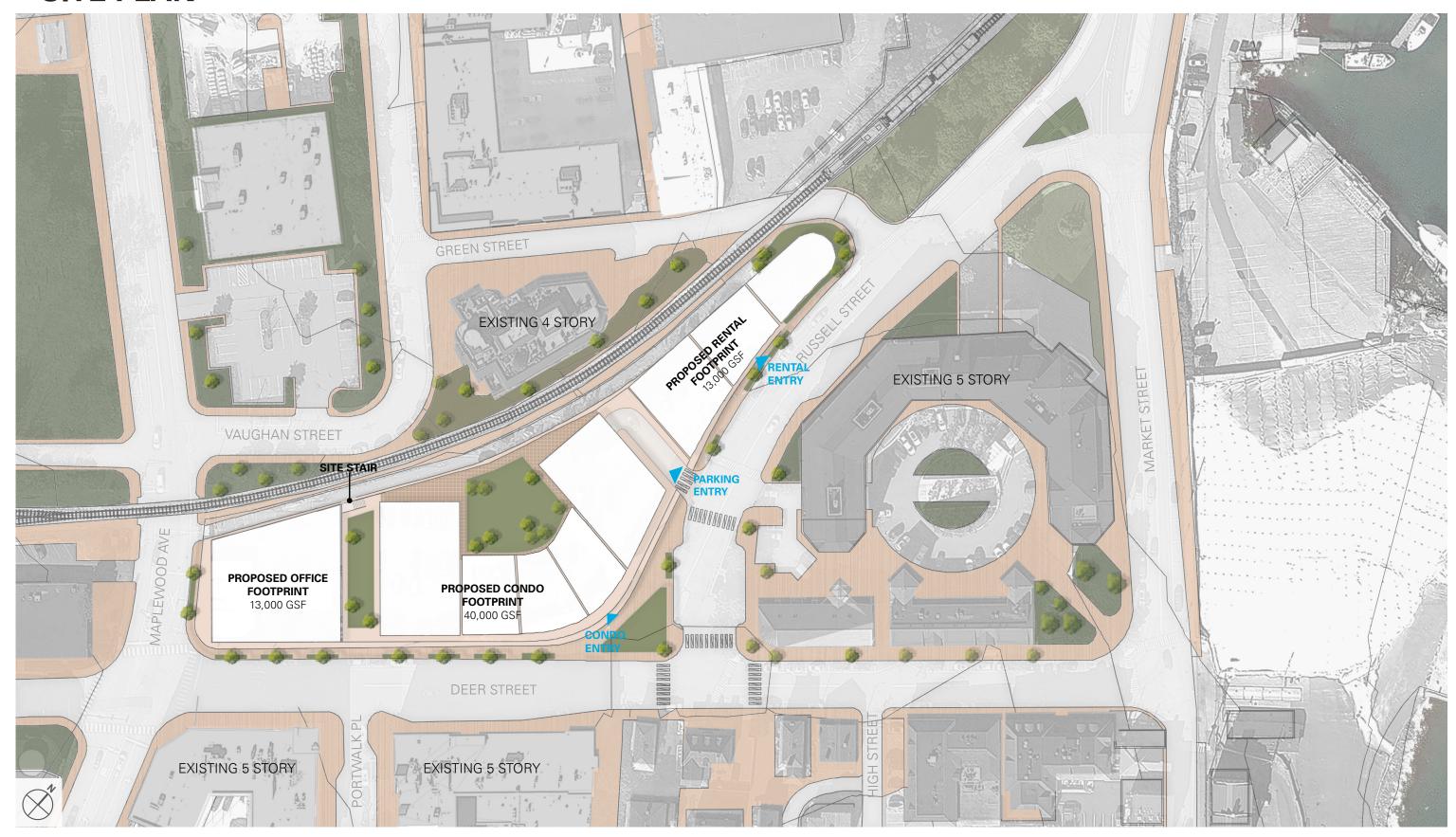
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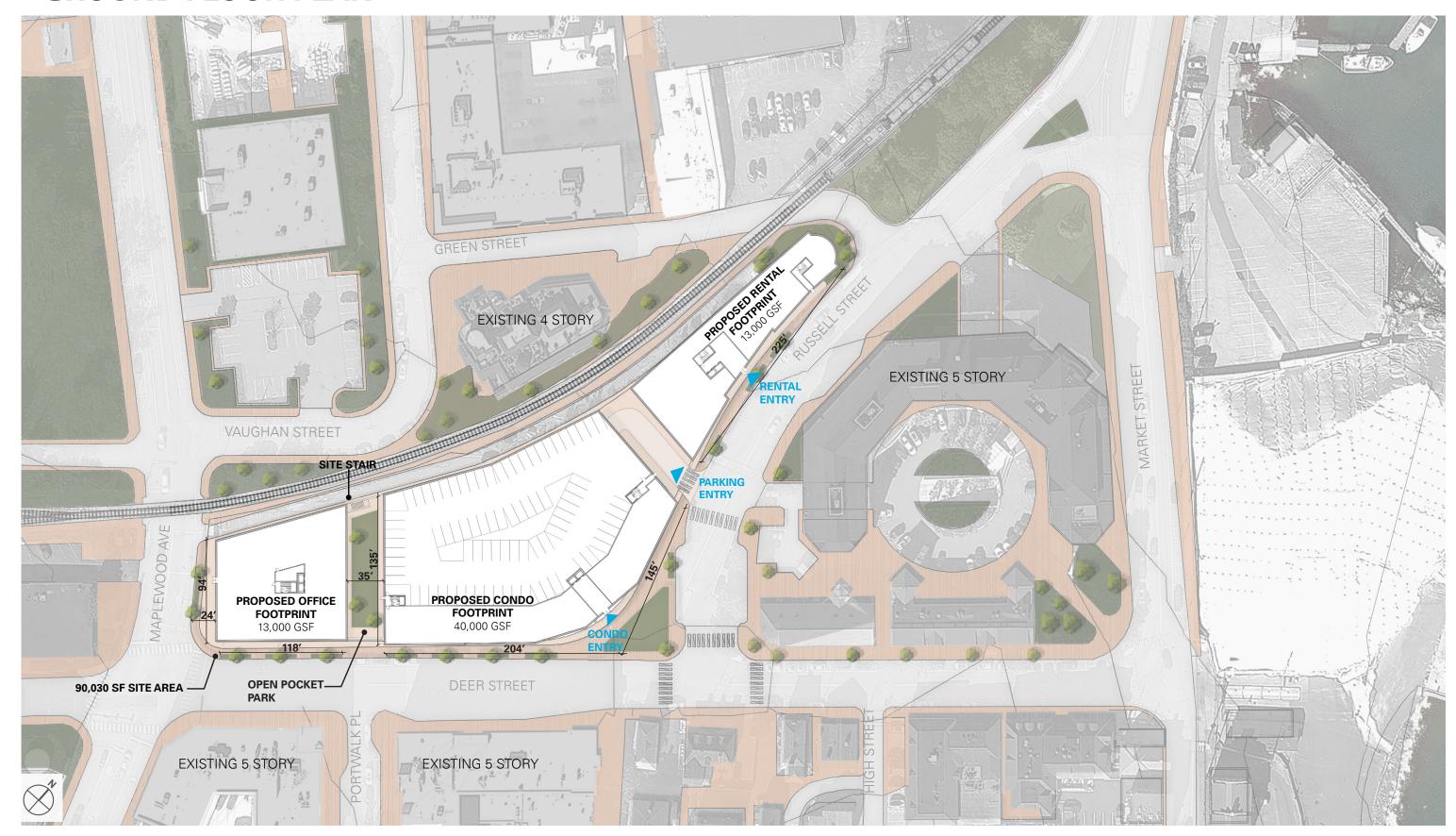


January 4, 2022 T5037-002-C-DSGN.dwg

SITE PLAN

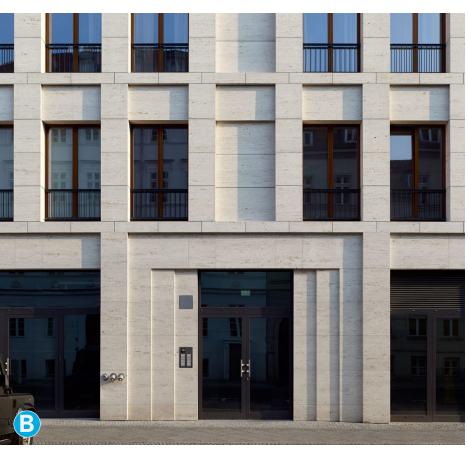


GROUND FLOOR PLAN



PRECEDENT IMAGES - FACADE









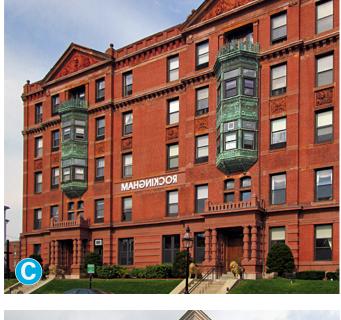




PRECEDENT IMAGES - LOCAL PORTSMOUTH

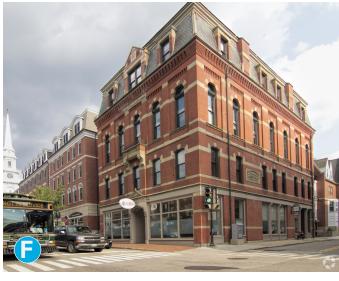










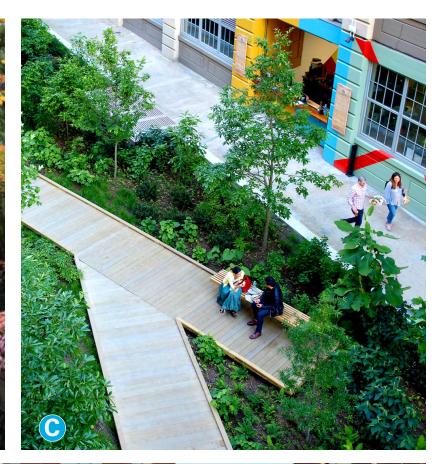




PRECEDENT IMAGES - COMMUNITY SPACE













HOEFLE, PHOENIX, GORMLEY & ROBERTS, PLLC

127 Parrott Avenue, P.O. Box 4480 | Portsmouth, NH, 03802-4480 Telephone: 603.436.0666 | Facsimile: 603.431.0879 | www.hpgrlaw.com

October 20, 2021

Karen Conard, City Manager City Council City of Portsmouth One Junkins Avenue Portsmouth, NH 03801

RE: Restoration of Involuntary Merged lots Jeff & Randi Collins 77 Meredith Way, Map 162, Lot 16

Dear Mayor Becksted and City Council Members:

On behalf of Jeff and Randi Collins, ("Collins"), we submit the following documents and commentary in support of Collins' Application for Un-Merger of 3 lots located at 77 Meredith Way which were involuntarily merged by the City of Portsmouth:

I. EXHIBITS

- A. <u>10/7/2021 Application for Restoration of Involuntarily Merged Lots.</u>
- B. Authorization
- C. <u>Existing Conditions Plan TF Moran.</u>
- D. Plan of Elm Place, 1856; Rockingham County Registry of Deeds Plan 008.
- E. Current & Historical Tax Cards.
- F. Current and Historical Tax Maps.
- G. Deed Chain.

II. HISTORY

The square-shaped lot acquired by Collins is currently improved with one single family home 11.5 feet from the southwest (left) lot line and a shed 4.9 ft. from the southwest (left lot line)(the "Property"). The rest of the lot is undeveloped. The lot as it exists today was originally comprised of three 50 ft. by 150 ft. parcels shown as Lots 55, 56, and 57 in an 1856 plan titled Plan of Elm Place and recorded at the Rockingham County Registry of Deeds ("RCRD") as Plan 008 and developed with a home on lot 57 (Exhibits C & D). Examination of early Portsmouth tax maps from 1927, 1935, and 1956 depict the Property as two lots: one is 100 ft. by 150 ft. and the other is 50 ft. by 100 ft. (Exhibit D). Only the 1935 map assigns lot numbers, depicting the

STEPHEN H. ROBERTS

R. PETER TAYLOR

Property as lots 45 and 46. A later tax map from 1979 depicts the Property as one lot. Similarly, the earliest tax card available (1950) describes only the 100 ft. by 150 ft. lot containing the existing 32 ft. wide home, the next two tax cards (1972 and 1983-86) describe a primary site and secondary site on the same card, before transitioning to a description of one single site by 1994. (Exhibit E).

III. REQUEST TO UNMERGE

Pursuant to RSA 674:39-aa, lots involuntarily merged by the municipality before September 18, 2010 shall, upon request of the owner, be restored to their pre-merger status provided that the request is submitted before December 31, 2021 and no previous owner:

- a.) voluntarily merged their lot pursuant to the process in RSA 674:39-a, or
- b) "any overt action or conduct that indicates that an owner regarded said lots as merged such as, but not limited to, abandoning a lot line."

"The municipality shall have the burden of proof to show that any previous owner voluntarily merged his or her lots." RSA 674:39-aa, II(b).

An examination of the deed chain back to 1898 demonstrates that the Property was described as a single square parcel of land measuring 150 ft. on each side (Exhibit G) without reference to the recorded Plan of Elm Place. (Exhibit D). The mere description of the Property as one parcel alone is not enough to for a municipality to demonstrate an overt act of merger. Roberts v. Windham, 165 N.H. 236 (2013). Evaluation of an owner's claim of involuntary merger considers several factors including the legal description of the land and the "meaning and intending to convey" clause of the deed, but also the physical characteristics of the lot, including building placement, and the conduct of the owners. Id. As the Existing Conditions Plan demonstrate here, the only developed area of the lot is the existing home on the first (Lot 57) of the three lots on the 1856 Plan. A review by the undersigned of the assessor records indicates that the rest of the Property remained undeveloped. (Exhibit E). Early tax maps and tax cards depict the Property as two separate lots, with the tax cards in conflict regarding the size of the developed portion. Building records available only include repairs of the existing home, not construction of additional structures on the undeveloped portion of the parcel. Accordingly, there is no indication that the Parcels were merged by use, occupation, or any overt action or conduct indicating that any owner in the chain of title regarded the lots as merged. RSA 674: 39-a. In addition, review of Assessor Records and the chain of title from 1898 through the present reveal

that no voluntary lot merger was submitted or recorded. Accordingly, no voluntary lot merger by document exists.

RSA 674:30-aa, first enacted in 2011 and revised in 2016, requires the Council to approve unmerger. Based upon the foregoing information and evidence, the Property originally shown as three lots in 1956 and shown in the 1927, 1935 and 1956 tax maps as two lots were involuntarily merged into the single lot depicted on the current tax map and tax card. Accordingly, Collins has met the requirements for unmerger. We respectfully request that the Council grant the Unmerger Application and restore the Property to its pre-merger status as required by RSA 674:39aa (II).

Respectfully submitted,

Jeff & Randi Collins

By:

R. Timothy Phoenix Monica F. Kieser

Encl.

cc:

Jeff & Randi Collins

Peter Britz, Acting Planning Director

Rosann Maurice-Lentz

Robert P. Sullivan, City Attorney

CITY OF PORTSMOUTH, NH

APPLICATION FOR RESTORATION OF INVOLUNTARILY MERGED LOTS



PURSUANT TO RSA 674:39-aa

Name of Property Owner(s): Jeffrey and Randi Collins
Mailing Address: _77 Meredith Way Portsmouth, NH 03801
Telephone Number: c/o Counsel Tim Phoenix 436.0666
Email Address: c/o Counsel tphoenix@hpgrlaw.com
Street Location of Parcels Affected by the Requested Restoration:
77 Meredith Way
Properties Requested to be Restored (attach additional sheet if needed):
Parcel 1.
Current Deed Reference: Book 6274 Page 1666 Date Recorded
Tax Map Lot Number
Parcel 2
Current Deed Reference: Book Page Date Recorded
Tax Map Lot Number
Parcel 3
Current Deed Reference: Book Page Date Recorded
Tax Map Lot Number
Please state when you believe the involuntary merger took place:
Please see attached letter.
Signature(s) of Property Owner(s):
Signature: Moll Name: JEFFREY CALLINS Date: 10/9/21
Signature: Mandi Collins Name: RRND1 Collins Date: 10/8/21



Monica Kieser

From: Jeff Collins <jeffreycollins@yahoo.com>

Sent: Friday, October 8, 2021 5:33 AM **To:** Monica Kieser; Tim Phoenix

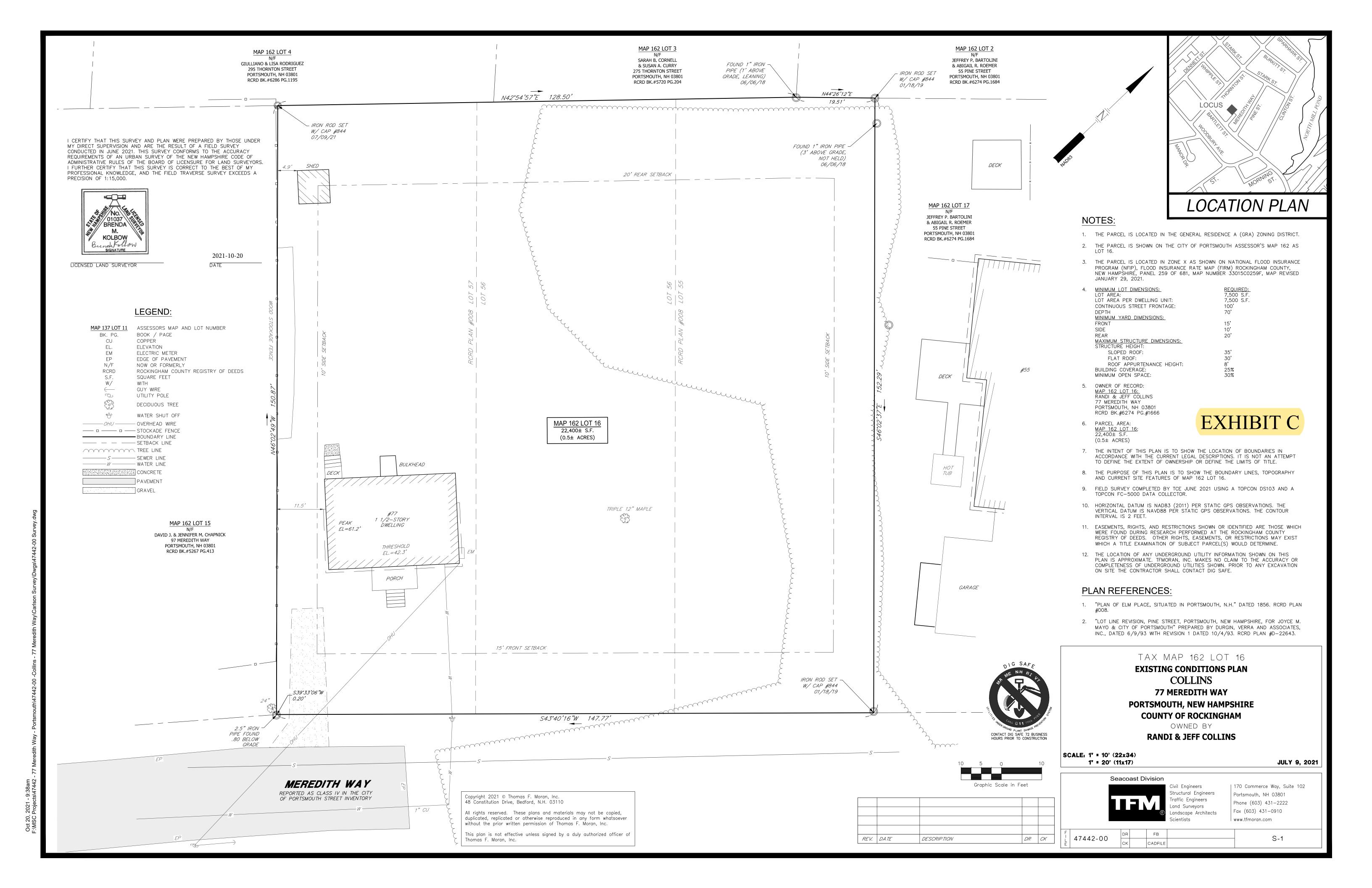
Cc: Randi Collins **Subject:** Authorization

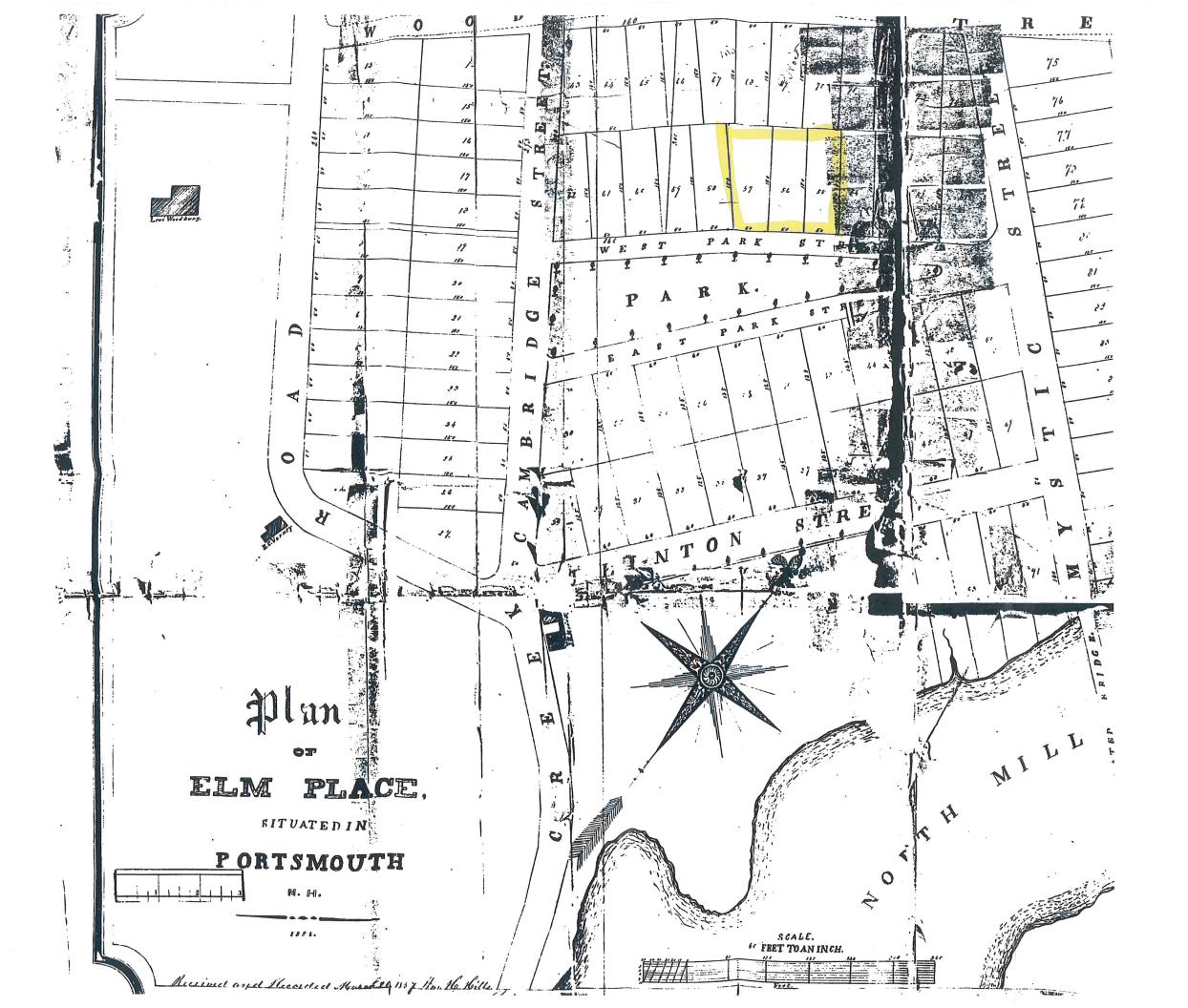
To whom it may concern,

We authorize Hoefle, Phoenix, Gormley & Roberts, PLLC to execute all applications before the City of Portsmouth Council and Land Use Boards and to take any and all actions necessary throughout the application and permitting process related to our property at 77 Meredith Way (Tax Map 162, 16) including but not limited to attendance and presentation at public hearings.

Jeff and Randi Collins

Jeff Collins c. 774.278.8676 w. 603.435.3900 x100





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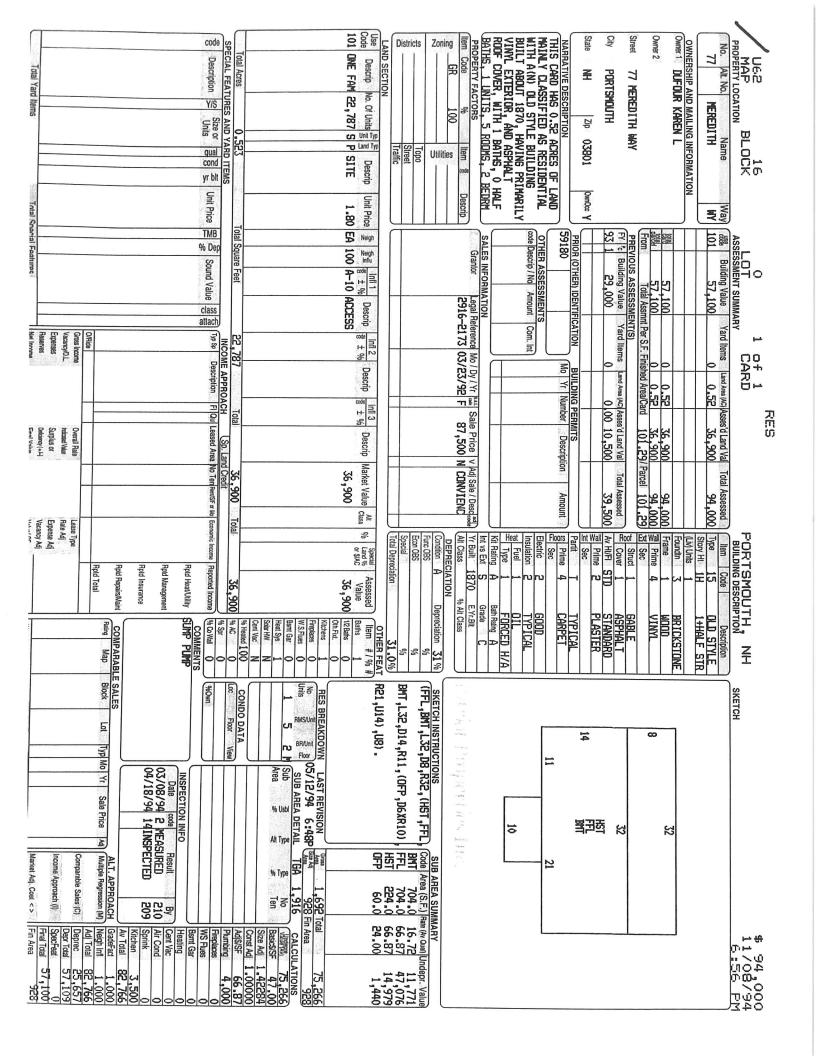
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CARD O1 OF O1 O1 O1 O1 O1 O1			61,000		2562/157			d St	217, Broad		& CO	Richa	hilbrick
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ERECTED CDU REPLACEMENT COST DEPR. TRUE VALUE	SIZE RAIL GRADE	CONSTRUCTION	NO.	GARAGE			O.F.	CONCRETE BLOCK
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TOTAL SPECIAL FEATURES						+ 000	& PCHS.	WALLS
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SPECIAL FEATURES FOR COMMERCIAL BUILDINGS	4			AUUIIIUNS			COOL	DOOLE
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OFFICES	MULTI FAMILY	7 STONE 9 CONCRETE	5 STUCCO	1 BRICK 3 GLASS	\ <		WOOD BANELING	VAC. LOT DWELLING OTHER
√ STORES	SINGLE FAMILY		LL CODES	EXTERIOR WALL CODES	B I 2 3		2000	(
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Total Yard Items Total S	Description Size or all Conditions of Units of Units or Units Units Original Unit	Use Code Descrip No. Of Units E Descrip Unit Price 101 CINE FAM 22,787 S P SITE 1.80	PROPERTY LOCATION Name No. All No. NEREDITH OWNERSHIP AND MAILING INFORMATION THIS CARD HAS 0.52 ACKES OF LAND MAIRLY CLASSIFIED AS RESIDENTIAL WITH A (N) OLD STYLE BUILDING EUILI ABOUT 1870, HAVING FRIMARILY VINVL EXTERIOR, AND ASPHALT ROOF COVER, WITH 1 BATHS, 0 HALF BATHS, 1 UNITS, 5 RODMS, 2 BEDRM PROPERTY FACTORS Them Code ON TOPO Street Treffic LAND SECTION Treffic
Total Special Features	TMB % Dep Sound Value class attach	PEA 100 A-10 ACCESS Total Square Feet	ASSESSMEN
8	Typ Sp Description FI Qu Lead	Infl 2 Descrip Infl 3 Descrip 管土物 Descrip でまれる Total INCOME APPROACH Commonweal Commo	Illems
	FI Qui Leased Area No Ten Rent/SF et Mil Economic Income Overall Rate Indiaed/Value Page Adj Surplus or Deturny (++) Vacancy Adj	Descrip Market Value class 96 36,900 36,900 Total Sp. Land Credit	100 38,300 3
WI. Av. \$/SF	Reported Income Rpid Heat/Utility Rpid Management Rpid Insurance Rpid Repairs/Maint Rpid Total	Sapecial Assessed	1000 1 1 1 1 1 1 1 1
VSF Av. Rating Indicated Value	E SALES Block Lot Typ	RES BREAKDOWN No Units RMS/Unit RES BREAKDOWN No Units RMS/Unit R	Description Description Description DESTYLE HALF STR ICKSTONE DIVENTED NYC
	Sale Price Sale Price Market Adj. Comparable Sale	ST REVISION AMAZON A	무등개별이 무 무 무 무 무 무 무 무 무 무 무 무 무 무 무 무 무 무 무
Value/SF OF ST	WS Flues Heating Heating Cent Vac Air Cond Sprink Kitchen Av Total GradeFact Neigh Inf Adj Total SpecFeat Depr Total SpecFeat Fin Area	1018	SCALE = 20 FT/IN SCALE = 20 FT/IN B AREA SUMMARY B AREA (S.F.) Faire (w Comb) Undept. Value 17 704.0 16.72 11,771 17704.0 66.87 47,076 224.0 66.87 14,979 60.0 24.00 1,440

1 1.07

Tot	B Use Code Description 1 1010 SINGLE FAM M	Permit Id Issue Date Type	APPT LETTER SENT 1/4/13	Nbhd 131		Year Code Desc	RECORD OF OWNERSHIP DUFOUR KAREN L	PORTSMOUTH NH 03801	DUFOUR KAREN L 77 MEREDITH WAY
otal Card Land Units 0.523	Zone Frontage Depth GRA	Description		Nbhd Name	Total	EXEMPTIONS Amount	BK-VOL 2916	OLDAC IN 59780 PHOTO WARD PREC. 1/2 HSE GIS ID 35046	
AC	Land Units Unit Price 22,787 SF 7.5	Amount Insp Date %		NOTES	0.00	Code	/PAGE SALEDATE Q/U 2173 03-23-1992		0 All Public 1 8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9
Parcel Total Land Area 0.5231	Size Ad Site Con 1 1.0	% Comp Date Comp		Tracing		OTHER ASSESSMENTS Description Number Amo	VI SALE PRICE 0	EX/Cr Appli Assoc Pid#	STRT / ROAD LOCATION Paved 2+ Off-St PKG TAL DATA CONDOC
	\	Comments		Batch		NTS Total Amount Comm Int			Description RESIDNTL RES LAND
	Notes- Adj	Date I I Type O7-13-2017 PM O3-06-2000 ET O9-06-2000 O9-06-2000 ET O9-06-2000 O9-06-2000 ET O9-06-2000 O9-06-2000 O9-06-2000 ET O9-06-2000 O9-06-2000 O9-06-2000 ET O9-06-2000 O9-06-	Special Land Value Total Appraised Parcel Value Valuation Method	Appraised At (b) Value (bidg) Appraised Ob (B) Value (Bldg) Appraised Land Value (Bldg)	Appraised Bldg. Value (Card)	429500 Total This signature acknowledges	Year C 2019 10	Total 429.50	CURRENT ASSESSMENT Code Assessed 1010 138,900 1010 290,600
Total Land Value	Special Pricing Adj 1.0000	CHANGE H. S Cd FR FR 10 1 1 1 1 1 0 2 0 2		909) 19)	APPRAISED VALUE SUMMARY alue (Card)	429500 Total 429500 Total Total Total A29500 Total This signature acknowledges a visit by a Data Collector or Assessor	2 2 0		Assessed 138,900 290,600
Value 290,600	Adj Unit P Land Value 12.75 290,600	Purpost/Result Field Review Stat Update Field Review Stat Update Field Review Stat Update Measu/LtrSnt Letter Sent Entry + Sign No one home No one home	429,500 C	290,600	138,90	Total 429500 Assessor	Asso	VISION	2229 PORTSMOUTH, NH

	BAS Fir FOP Po TQS Th UBM Ba		Code	WB Fireplaces Extra Openings Metal Fireplace Extra Openings Bsmt Garage	Total Half Baths Total Xtra Fixtrs Total Rooms: Bath Style: Kitchen Style:	Heat Fuel Heat Type: AC Type: Total Bedrooms Total Bthrms:	Interior Wall 2 Interior Fir 1	Exterior Wall 2 Roof Structure: Roof Cover Interior Wall 1	Grade: Stories: Occupancy Exterior Wall 1	Element Style:	Vision ID 3504
Ttl Gross	First Floor Porch, Open Three Quarter Story Basement, Unfinished		OB - OUTBUIL Description L/B	98 0 0 0 0	: irs bs	ns	12	6. 2 03 03		06 Cd	35046 CONSTRU
Ttl Gross Liv / Lease Area	rescription an ter Story Unfinished	BUILDING	OB - OUTBUILDING & YARD ITEMS(L)		Avg Quality Avg Quality	Oil Warm Air None 2 Bedrooms	Hardwood	Gable/Hip Asph/F Gls/Cmp Plastered	C+ Vinyl Siding	Description Conventional	5046 Acc CONSTRUCTION DETAIL
1,040	2704 0 336 0	BUILDING SUB-AREA SUMMARY	rice Yr Blt					Ф		ption	Account # 35046
1,922	704 66 448 704		ဂူ <mark>×</mark>	Condition Condition % Percent Good RCNLD Dep % Ovr Dep Ovr Comment	Year Remodeled Pepreciation % Functional Obsol External Obsol Trend Factor	Building Value New Year Built Effective Year Built Depreciation Code	Adj. Base Rate	(0	Code	Element	
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RECORD OF BUILDINGS

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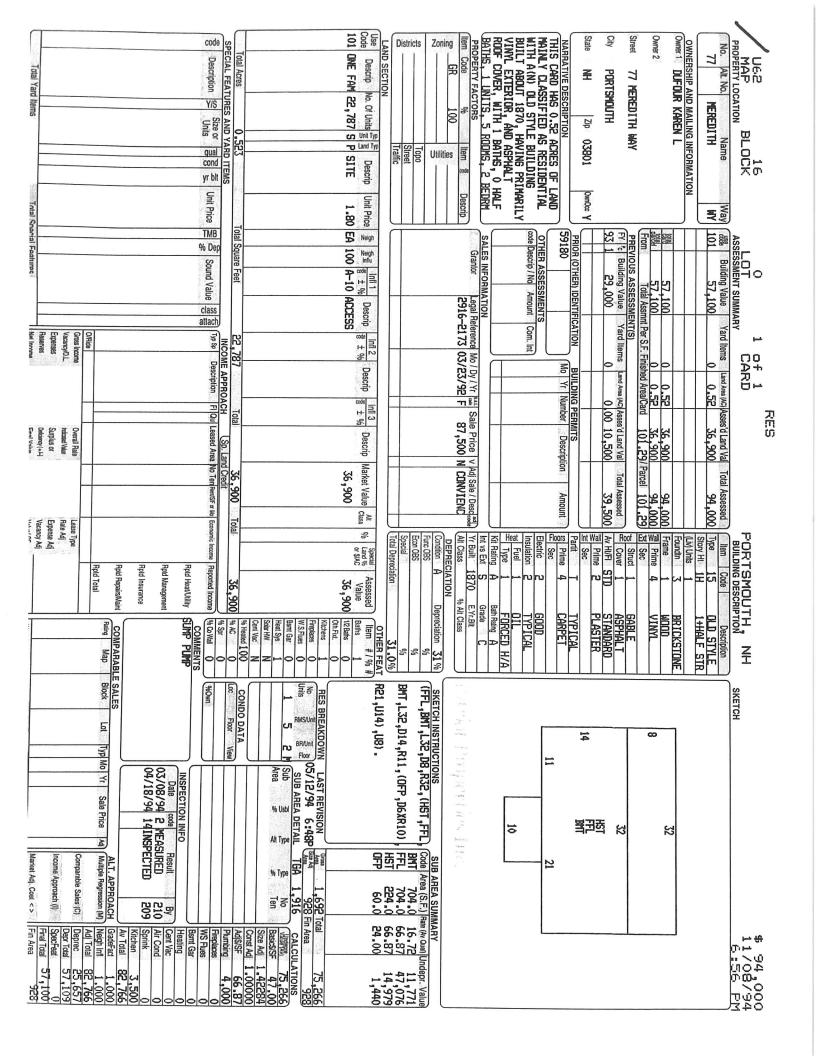
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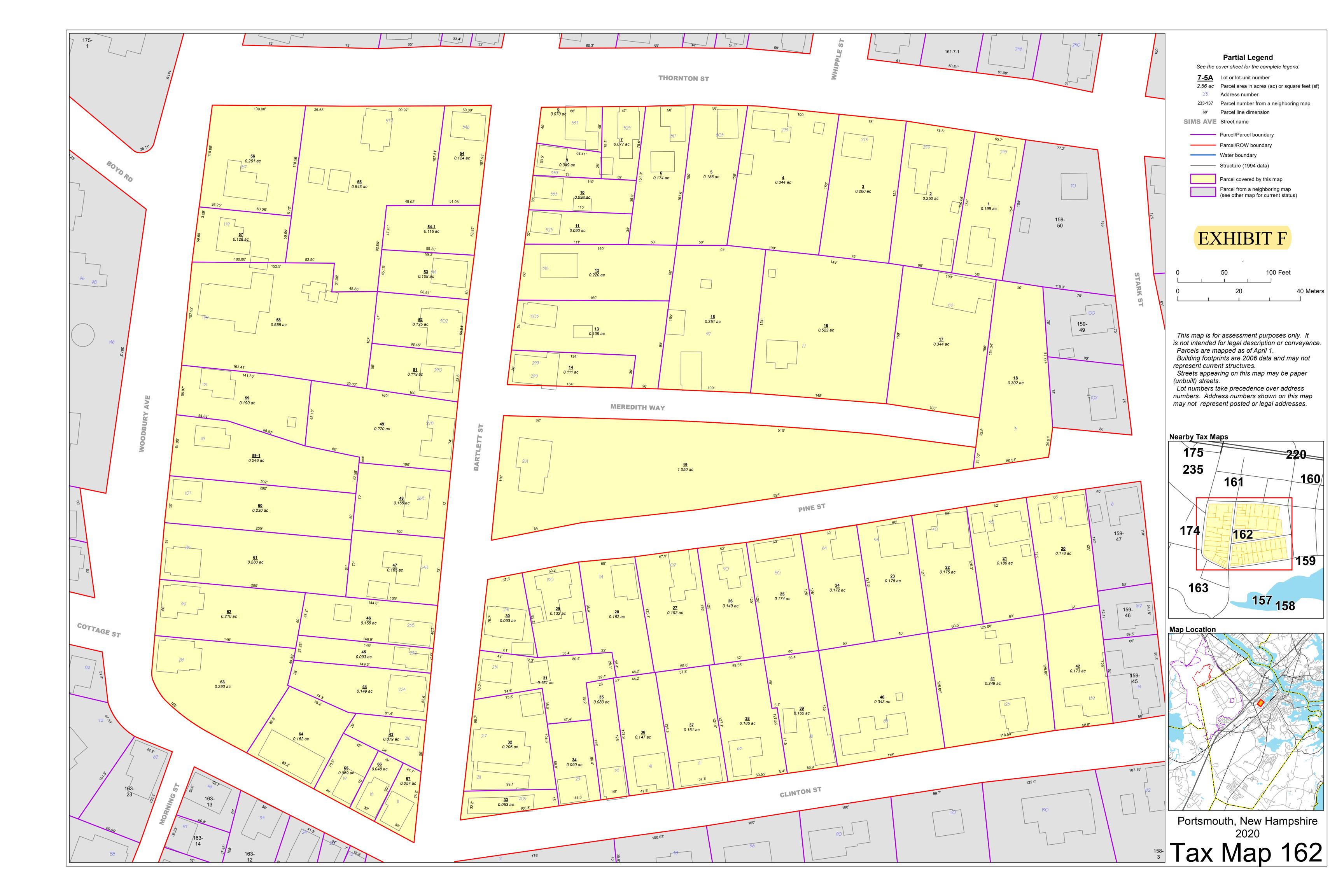
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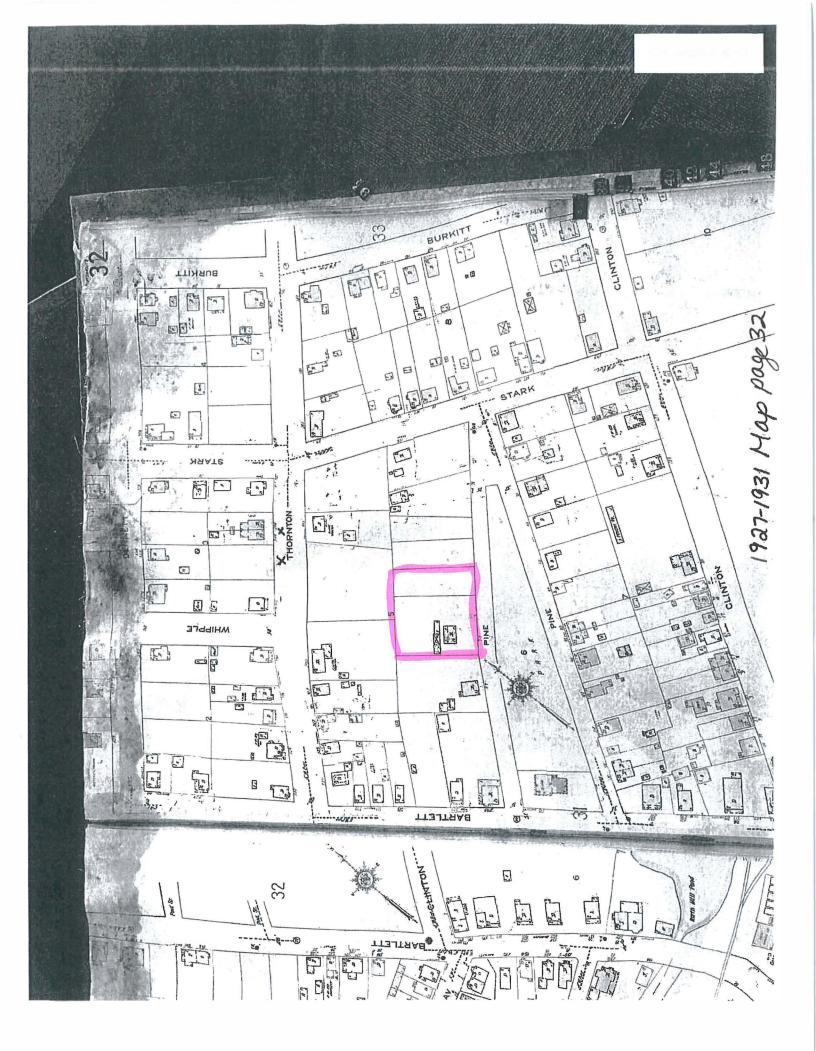
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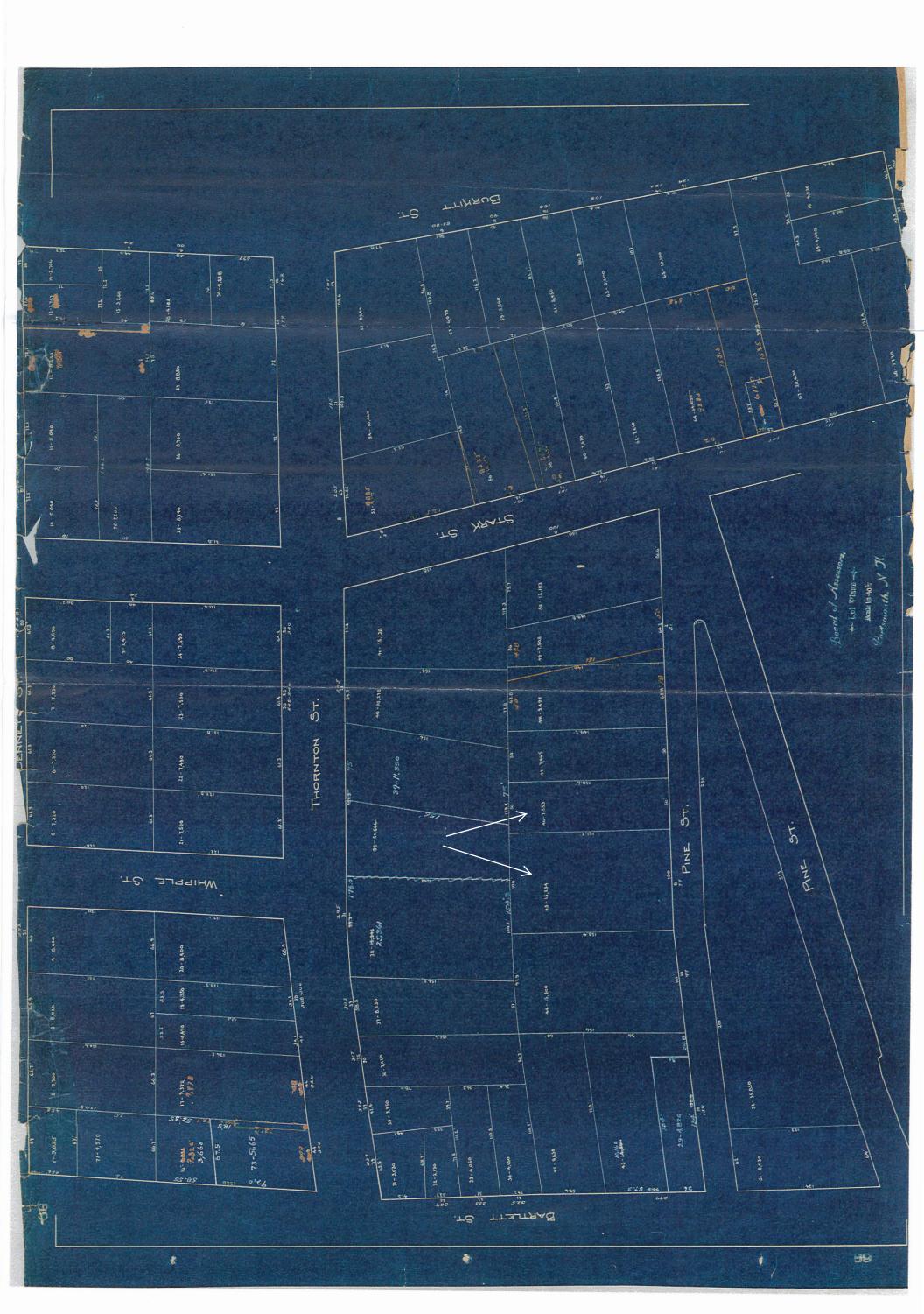


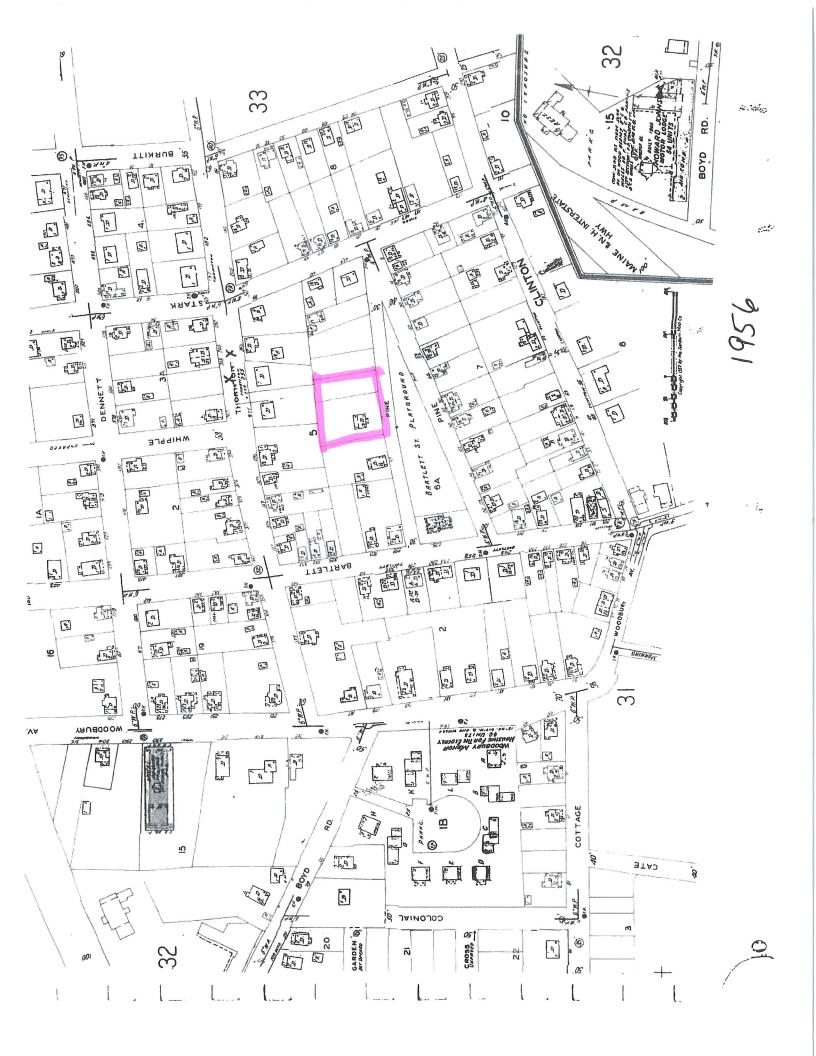
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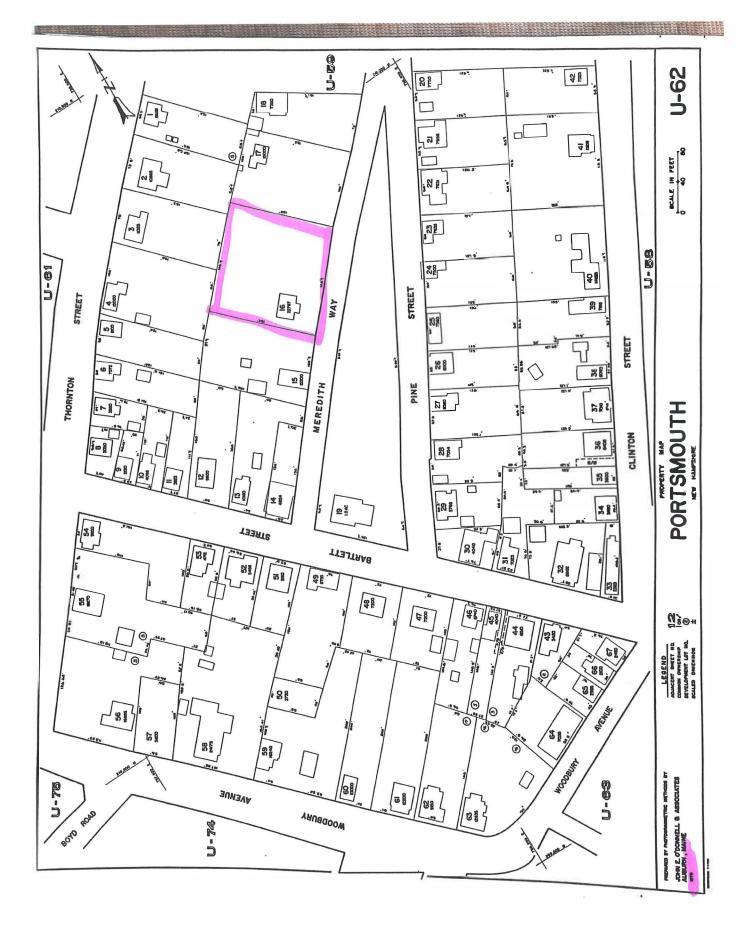
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25.00

Book: 6274 Page: 1666

E # 21029791 05/04/2021 03:15:39 PM Book 6274 Page 1666 Page 1 of 2

Register of Deeds, Rockingham County

LCHIP ROA561516 **TRANSFER TAX RO105780** 8,850,00 RECORDING

14.00 SURCHARGE 2.00

RETURN TO:

Stewart Title Company - New Hampshire 110 Corporate Drive, Suite 1 Portsmouth, NH 03801

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS THAT I/We Karen L. Dufour, a single person, of 77 Meredith Way, Portsmouth, NH 03801, for consideration paid, grant(s) to Randi Collins and Jeff Collins, a married couple, of 55 Pine Street, Portsmouth, NH 03801, as joint tenants, with WARRANTY COVENANTS, the following described premises:

A certain lot of land, together with the buildings thereon, situated in the City of Portsmouth, County of Rockingham and State of New Hampshire, being further bounded and described as follows:

Southerly by Pine Street;

Easterly by land now or formerly of Carroll Shershun;

Northerly by land now or formerly of Martin J. Early, Margaret Tebbetts, Douglas Arey and Carol Arey; and

Westerly by land now or formerly of Laurence Robbins and Bella Robbins.

Said property being further described by instrument recorded in the Rockingham County Registry of Deeds in Book 2916, Page 2173.

I/We the grantor(s) hereby release all rights of homestead and any other interests therein in and to the above described premises.

Reference is made to title vested in Karen L. Dufour by virtue of a Warranty Deed from Charles B. Doleac dated March 23, 1992 and recorded in the Rockingham County Registry of Deeds in Book 2916, Page 2173.

EXECUTED this 4th day of May, 2021.

4 olyon

File No.: 1190419 Warranty Deed

Book: 6274 Page: 1667

State of New Hampshire County of Rockingham

On this 4th day of May, 2021, personally appeared, before me, the above named Karen L. Dufour, known to me or satisfactorily proven to be the person(s) whose name(s) is/are subscribed to the foregoing instrument, and acknowledged that he/she/they executed the same as his/her/their free act and deed.

Justice of the Peace/Notary Public

Print Name: Stephante M. Thompson

My commission expires: 6.19. 2024

File No.: 1190419 Warranty Deed KNOW ALL MEN BY THESE PRESENTS, That CHARLES B. DOLEAC, a married person, of Little Harbour Road, Portsmouth, New Hampshire,

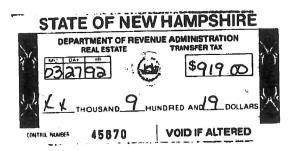
for consideration paid, grants to KAREN L. DUFOUR, of 50 Snell Road, #4, Dover, New Hampshire,

with warranty communia to the said Karen L. Dufour, the following-described real estate:

A certain lot of land, together with the buildings thereon, situated in the City of Portsmouth, County of Rockingham and State of New Hampshire, being further bounded and described as follows:

Southerly by Pine Street; Easterly by land now or formerly of Carroll Shershun; Northerly by land now or formerly of Martin J. Early, Margaret Tebbets, Douglas Arey and Carol Arey; and Westerly by land now or formerly of Laurence Robbins and Bella Robbins.

Being the same premises conveyed to Charles B. Doleac by Warranty Deed of Richard S. Philbrick and Harriet Philbrick, dated January 3, 1986 and recorded in the Rockingham County Registry of Deeds on January 3, 1986 at Book 2580, Page 2091.



THIS IS NOT HOMESTEAD PROPERTY.

wood-promotive	
Signed this	23 day of March 1992
	Charles B. Doleac 1.5
	L.S.
	1.5
State of New Hampshire	

ROCK INGHAM

88.:

March 23, 111/192

Charles B. Doleac, Personally appeared

known to me, or satisfactorily proven, to be the person

whose name

subscribed to the foregoing instrument and acknowledged that

executed the same

for the purposes therein contained.

Jandra Weston Before me. >

RICHARD S. PHILBRICY and HARRIET KNOW ALL MEN BY THESE PRESENTS, That PHILBRICK, husband and wife, of 217 Broad Street, Portsmouth, County of Rockingham, and State of New Hampshire,

for consideration paid, grant to CHARLES B. DOLEAC, of Little Harbor Road, Portsmouth, County of Rockingham, and State of New Hampshire,

with warranty communits to the said Charles B. Doleac, the following described real estate:

A certain lot of land together with the buildings thereon situated in Portsmouth, NH and being further bounded and described as follows:

Southerly by Pine Street; Easterly by land now or formerly of Carroll Shershun; Northerly by land now or formerly of Martin J. Early, Margaret Tebbets, Douglas Arey and Carol Arey; and Westerly by land now or formerly of Laurence Robbins and Bella Robbins.

Being the same premises conveyed to Richard S. Philbrick and Harriet Philbrick by deed of Helen Jakimczyk, dated September 5, 1985, and recorded in the Rockingham County Registry of Deeds in Book 2562, Page 157.

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-	4	TAX ON TRANSFER OF REAL PROPERTY	Ξ
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	-	P.B.	=
		11.869	•

Wa	being.

said grantee

all rights of homestead and other interests therein.

Signed this

day of January

. 1986

witness Bath

Harriet Philbrick

State of New Hampshire

for the purposes therein contained.

ROCKINGHAM

January 3,

A. D. 19 86

Richard S. Philbrick and Harriet Philbrick Personally appeared

known to me, or satisfactorily proven, to be the person s

whose names

subscribed to the foregoing instrument and acknowledged that

MARYANN E. TOWLE, Motary Politic Before me. / LUCY and Towley My Commission Expires January 12, 224.

Institut of the Peace - Notary Public "mine

KNOW M.J. MEN BY THESE PRESENTS, that Helen Jakimczyk, of West Lynn, Massachusetts
in consideration of

BK2562 P0157

one dollar and other valuable consideration

pandly Richard S. Philbrick & Harriet Philbrick of Portsmouth 217 Broad Street, Parlament, N.H.

the receipt whereof I do healy acknowledge, do
give, grant, bargain, self and convey unto the said Richard S. Philbrick and
flarriet Philbrick their heir and assigns forcer,
a certain lot or parcel of land

hereby

A certain lot of land together with the buildings thereon situated in Portsmouth, NH and being further bounded and described as follows:

Southerly ty Pine Street;
Easterly by land now or formerly of Carroll Shershun;
Northerly by land now or formerly of Martin J. Early,
Margaret Tebbets, Douglas Arcy and Carol Arey; and
Westerly by land now or formerly of Laurence Robbins and
and Bella Robbins.

Meaning and intending to convey and hereby conveying the same parcel which was conveyed to the grantor herein by deed of Joseph Zabroski et al dated July 11. 1972 and recorded in the Rockingham County Registry of Deeds in Book 2157 Page 30. See also the Affidavit of the Grantor to be recorded herewith. The grantor is also conveying as the surviving joint tenant; John F. Jakimczyk having died on July 14, 1978 in West Lynn, Massachusetts.



To Have and to Hold — the aforegranted and bargained premises with all the privileges and appartenances thereof to the said Richard C. Philbrick and Harriet Philbrick

their hous and assigns, to them and their use and behoof forever,

And a COVENANT with the said Grantes , their hors and assigns, that I am lawfully seized in fee of the premises that they are tree of all encumbrances

that I have good right to sell and convey the same to the said Grantees—to hold as aforesaid, and that I and my heirs shall and will WARRANT and DEFEND the same to the said Grantees, their heirs and assigns forceer, against the lawful claims and demands of all persons.

An Mitness Whereof. Harriet Jakimczyk, being an unremarried widow

icenses un thin dender director of the state
Biggerd. Bealed and Delivered in presence of:

Callsone J. Journy ,

Helm Julianczyk

State of Mateur Hew Hampshire

September 5, 1085

Personally appeared the above named lielen Jakine zyk

fier act and deed.

and acknowledged the about

CATHERINE J. YOUNGS, Notary Public Viv Commission Expires October 28, 1988

instrument to be her

Sefere in MI Care as Clorer go

i

BK2157 PG032

Know all Men by these Presents:

THAT I, Helen Jakimczyk, of West Lynn, County of Essex, State of Massachusetts,

for consideration paid, grant to Helen Jakimczyk and John F. Jakimczyk, both of West Lynn, County of Essex, State of Massachusetts,
with warranty covenants to the said Helen Jakimczyk and John F. Jakimczyk,

as joint tenants with rights of survivorship, the

12 0 12

A certain lot of land with a building thereon situated in Portsmouth, County of Rockingham, State of New Hampshire, and bounded and described as follows:

Southerly by Pine Street; Easterly by land of Carroll Shershun; Northerly by land of Martin J. Early, Margaret Tebbets, and Douglas and Carol Arey; and Westerly by land of Laurence and Bella Robbins.

Being the same premises conveyed to the grantor by Deed dated July 11, 1972, to be recorded herewith.

> (wife of said grantor, release to said grantee all right of (husband

(curtsey and homestead and other interests therein.

Witness my hand and seal

this 25thday of

, 1972.

STATE OF NEW HAMPSHIRE

COUNTY OF ROCKINGHAM

On this the 25th day of July , 19 72, before me, Lawrence W. Guptill, Jr. the undersigned officer, personally appeared Helen Jakimczyk

known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument and acknowledged that She executed the same for the purpose therein contained.

In witness whereof I hereunto set my hand and official seal.

Formence W Ang

Justice of the Peace.

Consideration less than \$100.00.

PG030

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, Joseph Zabroski, of Chelsea in the County of Suffolk and the State of Massachusetts: Stella Carideo of Everett in the County of Middlesex and the State of Massachusetts: Mary Gronski of Saugus in the County of Essex and the State of Massachusetts: and John Zabroski of Lynn in the County of Essex in the State of Massachusetts

for consideration less then One Hundred (\$100.00) Dollars grant to Helen Jakimczyk of West Lynn. County of Essex in the State of Massachusetts,

WITH WARRANTY COVENANTS to the said Helen Jakimczyk,

A certain lot of land with a building thereon situated in said Portsmouth, and bounded and described as follows:

Southerly by Pine Street; Easterly by land of Carroll Shershun; Northerly by land of Martin J. Early; Margaret Tebbets, and Douglas and Carol Arey; and Westerly by land of Laurence and Bella Robbins.

Being the same premises being conveyed to Kostanty Zabrockij a/k/a Kostanty Zabrocki by Warranty Deed of Mary Coakley, dated October 28, 1919 and recorded in Rockingham County, Registry of Deeds in Book 734, Page 223.

We, Vinci Zabroski, Willis Gronski, Eleanor Zabroski (wife of said grantors, release to said grantee all rights of (dower and homestead and other interests therein.

Witness Our Hands and Seals this // th day of July 1972.

WITNESS:

Jane Weinlerg

John Cronin

New / Bule

Joseph K 3 drawker To Stella Carifer = 100 Mary Strongles Willis Trongles

Han L Jahrock

STATE OF MASSACHUSETTS

COUNTY OF SUFFOLK

On this the Twelfth day of July 1972, before me, NATHAN M. GOLDISETC the undersigned officer, personally appeared Joseph Zabroski and Vinci Zabroski known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

In witness whereof I hereunto set my hand and official seal.

N.P.S.

My commission expires:

NOTARY PUBLIC

MY COMMISSION EXPIRES

JAN. 7, 1977

Notary Public

BK2157 PG031

STATE OF MASSACHUSETTS

SUFFOLK COUNTY OF MINISTERY

day of July 1972, before me, the undersigned officer, personally appeared Stella Carideo known to me (or satisfactorily proven) to be the person whose name is subscribed to the within insersement and acknowledged that they executed the same for the purpose therein contained.

In witness whereof I hereunto set my hand and afficial

NOTARY PUBLIC
MY COMMISSION EXPIRES
NPS. JAN. 7, 1977
My commission expires:

Notary Public

STATE OF MASSACHUSETTS

COUNTY OF ESSEX

On this the TWENT FIRST day of July 1972, before me, William T. Sheehan, the undersigned officer, personally appeared Mary Gronski and Willis Gronski known to me (of satisfactorily proven) to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

In witness whereof I hereunto set my hand and official

Subscribed and sworn to before me this twenty william first day of July, 1972.

My commission expires:

William T. Sheehan (my term ex-Notary Public expires 7/31 75)

STATE OF MASSACHUSETTS

COUNTY OF ESSEX

On this the elevent day of July 1972, before me, Wallace T. Nates the undersigned officer, personally appeared John Zabroski and Eleanor Zabroski known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

In witness whereof I hereunto set my hand and official seal.

Justice of the Peace Notary Public

c My commission expires:

John. 6 (1 4 5 LM)
3131/24
EC 63 231 3131/25

	THAT I, Mary leachley of Totamouth in the	
of Raid		Jobrockij Jabrockij
t	the receipt whereof \mathcal{I} do hereby acknowledge, have given, granted, bargained and sold, do give grant, bargain sell alien enfectf convey and confirm unto the said.	and by these presents () N 13 To be able
R (do give, grant, hargain, sell, alien, enfeoff, convey and confirm unto the said tauty fabrocker Cic heirs and assig	del, to
acertai	etauty fabrockie " Cic heirs and assign in lott of land evitle the buildings of	ns forever, by wail,
in Rac	id Portruouete, and bounded and	describeda e la locus.
and lo	enly by Twe Street; toately by land a and of one Trouve; Troublely by laced	of Hours for Freehour,
and Il	besterly by land funerly of beliables of boundon,	lucudenn noen
Being	lu deed sloted fune 2,1910, and re	by brobelle J. Eleac-
Robbine	egham leventy Record Book 654 To	ebeded in
(<i>f</i> ,	
	*	
	Ÿ.	

To have and to hold the said granted premises, with all the privileges and appurtenances to the same belonging, to the said Kortauty Sabwelling and heirs and assigns, to the said Kortauty Sabwelling and their only proper use and benefit forever. And the said Clary leveling and their only proper use and benefit forever. And the said Clary leveling and the heirs and assigns, that until the delivery hereof the lawful owner of the said premises, and we said seized and possessed thereof in the own right in fee simple; and have full power and lawful authority to grant and convey the same in manner aforesaid; that the said premises are free and clear from all and every incumbrance whatsoever; and that and heirs executors and administrators, shall and will warrant and defend the same to the said Koetauth Sabwelling and assigns, against the lawful glaims and demands of any person or persons whomsoever.

And I, Muchael Lowarty release my right of dower in the above mentioned premises.

And we and each of us do hereby release discharge and waive all such rights of exemption from attachment and levy or sale on execution and such other ights whispeys in paid premises and to each and every part thereof, as our farther of us, by the Statute of the State of New Hampshire, pessed by my and a statute of the state of New Hampshire, pessed by my and a statute of the state of New Hampshire, Pessed by my my board of said State.

3in 10itness inhereoffly have hereunto sebruhand and seal, this twenty rightly and the defendenced of remities from attachment and levy or sale on recently or by any other thereof, as our fast the order of said State.

The 10itness inhereoffly have hereunto sebruhand and seal, this twenty rightly and the defendenced of said State.

The 10itness inhereoffly have hereunto sebruhand and seal, this twenty rightly and the defendenced and the same the seal of the said premises and the seal and the same the seal of the said state.

The 10itness inhereoff in presence of us Lordone thousand nine hundred and the said

1

(G. F. Seal.)

BEFORE ME.

P. A. P.O.

ingham and State of New Hamp fluie married woman For and in Consideration of the sum of Une dollar to Well in hand, before the delivery hereof, well and truly paid by Mary les abelief of the Rame Volkmouth Coaleley

the receipt whereof \mathscr{S} do hereby acknowledge, have given, granted, bargained and sold, and by these presents do give, grant, bargain, sell,

The lines Q Po. To heirs and assigns forever. lot of land with the develinghouse ethereone situate in Raid Vorthusouth upon the northerly side of what was formerly known as West Park Street and now careed Time Street and bring munter Four paid Street Bounded at follows Viz: Southerly by Raid Street about one hundred and Jefly (150) feet; Cafterly by land of Soplina leaver and land of one Drowne one Sundred and Jefly (150) feet, Wortherly by land of Harry & Freeman one bundred and fifty feet (150') and Mesterly by land formerly of Charles H. Mendeum now owned or occupied by one Reardon one tumored and fifty feet (150'). Being the same premises conseyed time by balvin lage hugher by deed recorded in Rackingham learnty Kegistry of Deeds.

> To have and to hold the said granted premises, with all the privileges and apportenances to the same belonging, to the said levakler and Elec heirs and assigns, to Peec executors and administrators, do hereby covenant, grant, and agree to and with the said levakley and Lec heirs and assigns, that until the delivery hyreof seized and possessed thereof in lawful owner of the said premises, and in fee simple; and have full power and lawful authority to grant and convey the same in manner aforesaid; that the said premises are free and clear from all and every incumbrance whatsoever; and that heirs, executors and administrators, shall and will warrant and defend the same to the said levakley And we and each of us do hereby release, discharge and waive all such rights of incrers in said premises and in each and every past thereof, as our Family Homestead of Hampshire, passed July 4-1851, assilied "Man act housement the Homestead of Fam IN WITNESS WHEREOF, LE have hereunto set hand & and seal & this Reserved in the year of our Lord one thousand nine hundred and 1910. Signed, sealed and delivered in presence of STATE OF NEW HAMPSHIRE, Rockingham ss. Personally appearing the above named Labelle and acknowledged the foregoing instrument to be eltein voluntary act and deed.Justice of the Peace. Received and Recorded, June 14 - 9.50 D. W. 1910.

Suffold, SS. May 9th A.D. 1908.

Cersonally appeared the above named Thomas J. Emery and acknowledged the foregoing instrument to be his robustary act and deed - Before me Seo. W. Estatrook

Justice 9 the Peace.

Received and Recorded Apr. 13, -4 P.M. 1910.

John W.A. Seen Register

Deed Dage hust. Del. t My 1. 16. J. Maskey by mail.

Throw all June By The fe Trepents, That I, Calvin Vage of Voit smouth in etre learnly of Jockingliam and State of New Hampfline, at Lan Tente under the last will bind testament of Hartian Jones, late of said Voithmoute, alceased, while will has been duly proved and allowed by the trobate levert for paid Columnty of Kockingham, for and in confideration of etec sum of our dollar it we paid by Sabel J. Markey of Raid Voitpiliante, the receipt of which is hereby acknowled ged, and because in my best judgment it it for your 2 make this convey ance, curder and by virtue and in execultion of etre ferevers in Raid will contained, have bargained and Rold, good do belieby Jargain, sell, release, and convey & etre Raid Sakel J. Washey, then being and a spigns forever, a certain lot of langer, with the develing house ethereon, Citualed in Raid Voltemante upon the Youtherly Ride of what ina & formerly, known out Mest Oark Street and les now called Pine Street, and Vering Tro. I, on Raid street, bounded furtherly by said street one thundred and fifty (150) feet, Captury My land of Sophia Searcy and land fore, Drowne, one hunared and fifty (150) flet, Houterle, by land, of Harry J. Them an one hundred and Fifty (150) feet and Westerly by land formerly of leliances H. Grenden, now owned or occupied by Mrs. Reardon, one hundred and Jefly (150) feet.

The fremises intended to be conveyed are the Rame seferibed in still deed of Lyaia a. White and others is the Raid Gattan Jones, dated August 16; 1889, and recorded in Registry of Deed & for Raid County of Rockinghoun, Bork 576, Dage 291.

Jo Have and To Hold stee above granted premises the stee Raid I fake I. Maskey and I her heirs and askingus the and elicie Role up and benefit forever. In Witness Whereast, I have become set my hand and. Real elicit thirteened day of fully, a. D. 1909.

Ligited, Realed and allikered

in free ferree of:

to perfum and observe the condition of this deed render ing the Surplus if any, to them or their heirs and corigns; and chighere by you chimselves and their hims and assigns, cereact with the grantees, chimourinos, Successors and assigns, that, in case a rale shall be made empler the foregoing power they will, when request, execute and deliver to the purchases in purchases a cled ordered of release confirming the bale. And it is agreed that the grantees, its succession, assigns. crany person or persons in their behalf, may penchareat any Sall made as a fuesaid, and that no other pinchaser shall be answerable for the application of the purchase minagional chat suitil default in the performance or observance of some one of the cenclitins of this deed, they and thein him and assigno may hold and enjug the granted primises and receive the rents and profits thereof. In Withis Wheney, We the out Lewind He Pillsbury and Second day of august, in the year Out thus and sight hundiget and eighty mine. Signed and Seeled Lemond H. Pillsbury, ES Quelyn S. Pillsbury, ES in pusenei of. Hom Ballantonie Chailer M. Bill. Dommonn Earth of Masrachusetts. Essex 88, Gejogist 22, 1889, Then permally appeared the above named Temone H. Pillshing and Quelyn S. Pillshing and a eknowledgel the finging instrument to be their ofthe act and deed, Charles M. Bell. Sintier of the Reace. equiel and Regarded. august 23, 1889, Diman B. Hay Register. menall meuber thine Presents. That We. Legelie a. While of Baston in the lunity of Suk folk and Congression calle of Missiachusetts, and Ella Fr Mhile Dal Jones. Shartford of Gilford in the Country of Bernap and State of New Hampshire. clet. S. M. Ouws. Forandin consideration of the sum of Our dollar and other valuable considerations to us in hand before the deliney hereafor well and truly paint by Nathan Jones of Portmeuch in the Concelly of Rockingham in quil State of new Manuel

Luto the said graute his kins and assigns forms, A cutain percel of land with the buildings theum, situated in Portominth aforsaid, and burnded as follows; Beginning an West Pork St, and rusning nucharly bijland formuly of Chamain Pickering, Que hundred and fifty feet; thence Eastilf one hundred and fifty feet, thence Southerly by land cfirming of Sophia J. Moran Que hundred and fifty feet; there Westerly by West Pontost, to the point began at, One hundred and Jeft feet, Being the same premises formuly conveyed by Smah & Wastin Logdia O. White and Frank M. Shackford by her deed of Dely 10 th, 1888, recorded in Rockingham Records, Book 510. Falio 255, To have and to held the out granted premises, mich all the privileges and appentinances to the come belinging to the said grante and his him and assigns, to his and this celly proper use and benefit forms, And we the quiel granters and our himsapeliction and administratus, do hereby covenant grant anelagues to cincl with the said grante and his him and gorigns. chat until the delicing thereof re are the lawful ourses of the said premisesand are surject and presessed cheart in our une night in fer simple, and have full pener and lauful authority to gravit and consequite Dame in mamura fuesail, that the out punis an fulame class spim all and every incumbance whatever; and that we and our herrs, executus and administrature, shall and ciell warrant and defend the conce to the caid greater and his him and assigns against the lacofeel oferies and clemands of any person or persons a housewer. And I Hrayk M. Shoer ford hunland of the saigl Ella F. Shoer ford, And I. Henry While, hinhand of the ouil Lydia O. Milein consideration hury do herefy relinguish all of an right in the befece mentained pinnises. And we and each of in do hereby release, do they canel waine all such eights of exemption from allachment and leay or vale on execution, and such actor nights whatever in ouil punises, and winch and every part thereof as our family homestead, as are reserved or se-Reyel to us, or either of us by the Statue of the State of mullampshill a anyact in amendment theut, orang other static of soul State, In Within Where f We have hereute set our hands and Sexlewhi Sixlougth day of Ougust in the sear of an Lord, 1889. Signed Sealed and clerged in presence of us; 26. Clark. 1,20 Dmith. Frank M. Shaefford. Legalier Or While. J. W. Omen Heury White. State of New Youm hohis. Belknap, 88, aug, 16 th, a. 19, 1889, Punalles anhoused the above named Elles oft, Shear Smit

	That I Dorah I. Martin of Portomouth in the Country of
:-	P 1 1 P P P P P P P P P P P P P P P P P
	Azeknigham and State of New Hampshire.
•	for and in consideration of the sum of One dollars
*	to my in hand before the delivery hereof, well and truly paid by Sydia a. While of Boston in muliu
	the State of Massachusetts, and Frank M Shackford of White etab
	Committee to the state of the state of the state
	Lacinia in the County of Bellnap, and State of new Hampshin
•	have remised, released and forever Quitclaimed, and by these presents do remise, release and forever quitclaim unto the said (Delivered to
5 · · ·	Sydia N. Mile ra Frank M. Shuckford - heirs and assigns forever. M. Bufford.
	All my right lite and intrust in and to a certain parcel of land
	with the buildings cheren situated in said Portmouth and bumded
	as follows; beginning ou West Park Steel and running mounty by
	lend firmerly of Chargin Rickering Que hundred only of the fuet
H 1 H	the Bodist One Viencenne one numoned one offty bell
	theore Easterly One hundred and fifty feet, there Southely lyland
	Ammuly of Suphia J. Mugan one hundred and fifty fleet, Thence
	Mesterly by West Park Steet to the point began at One hundred
	CONEL CLASSING GLEC,
	Being the Same premises conveyed to Joseph Lollartic by Lydia A. While and others by deed Oct 21, 1878, and recorded in
0	A. While and others len deed Oct 21. 1878, and regarded in
_	Rockrigham Records Silv 510 Folis 36
	in the contract of the contract of
• *-	remnul
20 to 120 to 2	To HAVE and to HOLD the said premises, with all the privileges and appurtenances thereunto belonging, to the said
	While and Sha exford, thin heirs and assigns forever; and
** ** ** **	do hereby covenant with the said Multe and Shackford
	that I will warrant and defend the said premises to them the said Mule and Shaelford
	and thur heirs and assigns, against the lawful claims and demands of
	any person or persons claiming by, from or under Meli
,	And I,
	the consideration nforesaid, do hereby release my right of dower in said premises.
	A second
	And we, the said and lack of us do hereby releve duckage and mail all such
	rights of exemption of an attachment and lenger sale an execution
j	in consideration aforesaid, do hereby grant and release to said
	mel Duch alter rights whatver in said formers, and in lach and energy but
(Mutath Cos our Stamult Manusterel as are usual or secured to us, or beilty afers, by the
	Stutivas the statuted new Bampher panel Inf 4.1887, on execution," passed July 4, 1881.
	IN WINES WHEREOF 3 have hereunto setory hand and seal , this Leuth
	day of
-	I FIRMAL IN THE STATE OF THE ST
*	Filly in the year of Lord 100 One chanand Eight husted and Eight Eight
	SIGNED, SEALED AND DELIVERED IN PRESENCE OF US:
	in the year of Lord 100 one channel Eight Model and Eight Eight Stand Sealed and Delivered in Presence of US: Marcelles Bufford Sarah L. Martin (L. S.)
	SIGNED, SEALED AND DELIVERED IN PRESENCE OF US:
8	SIGNED, SEALED AND DELIVERED IN PRESENCE OF US:
	SIGNED, SEALED AND DELIVERED IN PRESENCE OF US:
	Marcelles Bufford Sanah L. Martin Les John J. Laskey
-	State of Men Dampshire, Rockingham, es. July 10. Personally appeare the above named Danah & Martino AD. 1888.
-	Marcelles Bufford Sarah L. Martin & Solar State of Men Shampshire, Rockingham, ss. July 10. Personally appeared the above named Sarah L. Martin Martin and acknowledged the foregoing instrument to be her voluntary act and deed.
-	State of Men Dampshire, Rockingham, es. July 10. Personally appeare the above named Danah & Martino AD. 1888.

	State of Massachusetts, and Mary Jane Shackford. of Lake Villiage, in the State of new Mampshirs.
While Etal Martin	for and in consideration of the sum of One dollar to up in hand before the delivery hereof, well and truly paid by Posefoh L. Martine of Fortamouth, in the lount of Rockingham and Stato of New Hampshire,
Delivered to M.Bufford mail,	have remised, released and forever Quitelaimed, and by these presents do remise, release and forever quitelaim unto the said forever. **Joseph L., Mostlin, and forever Quitelaimed, and by these presents do remise, release and forever quitelaim unto the said heirs and assigns forever.
	lifty feet, thence Easterly by land of Joseph Q, martin and Phinsas D. Hoyt, one hundred and and fifty feet, thence Southerly by land of Sophie D. Moran, one hundred and fifty feet, thence
	Westerly by West Pask Street, to the point begun at one hindered and fifty feet.
1,1878; ile: Lettern fWE levee,	Joseph Libertine heirs and assigns forever; and me do hereby covenant with the said Joseph Libertine Libertine heirs and assigns forever; and me do hereby covenant with the said Joseph Libertine. that WE will warrant and defend the said premises to him the said Joseph Libertine. his heirs and assigns, against the lawful claims and demands of
Getober 3, ratio apply about the whole apply app	And We the Husbands for the consideration aforesaid, do hereby release my right of dower in said premises. And we, the said all and each of us and wife of said
the soul fell the winder in	all the right, title, interest, claim or demand which we, or either of us have in or to the above described premises, by virtue of an act of the Legislature of the State of New Hampshire, entitled "An act to exempt the Homestead of Families from attachment and levy or sale on execution," passed July 4, 1851. In withess whereof me have hereunto set ow hand and seals, this twenty first day of
heelt, com brakleger, n the ableger,	October, in the year of Lord 1848. SIGNED, SEALED AND DELIVERED IN PRESENCE OF US: Many A. Wallace Emma White Lydia A. While (I.S.) So, Clark, Til Mr+ Mrs. Lenny While (I.S.) E. H. Blaisdell, Shaekford, Many Jane Shaekford (I.S.) State of New Sampshire, Many Jane Shaekford (I.S.) A. D. 1898.
rate appear	State of New Sampshire, Hoshingham, ss. October 24th A. D. 1878. Personally appeared the above named Many Jane Shashfood and Nathanial Shashfood. and acknowledged the foregoing instrument to be Ikin voluntary act and deed. Before me: S. C. Clark, Justice of the Peace.

tenor of a certain note given by said Farah Hunting ton bearing date even herewith said last mentioned sum of three hundred und twenty dollars, without interest thereon, then this deid and also said note shall be wide otherwise they shall remain in full force.

In witness whereof I the said Sarah Huntington have hereunto see my hands and seal this Elestenth clay of March in the year of our Lord one thousand sight hundred and fifty three

Executade and delivered

Parker Mevill Co. N. Hunting ton,

Sarah Hutington.

Se. 3.

State of New Hampshire, Rocking ham Is March 11.1833. Then the afore written aforement by her signed and sealed to be her deed.

Before me, Parker Merrill, Justice of the Feace.

Received and Recorded March 19. 1853.

J. Hamilton Shaply Register,

White
White
Odlin Eppe

Eller all men by thise presents that I William White of Baver-hill, in the bounty of Esper and Commonwealth of Massachusetts yeoman in consideration of one hundred and sixty seven dollars the paul by Legalia White, of Haverhill aforesaid, sinche woman, the receipt where of I do hereby acknowledge; have remised, released, and forwer quitolaimed, and do formy-self and my hiers by these presents remise, release, and forwer quitolaim, unto the said Legalia White, her hiers and assigns, all my right title zinterest gelim in y to a lot of land situate in Salem in the County of Nocking ham and I take of Newhamps hire, containing about twenty six acres and 143, rods, blee all my right of the to about one hundred acres of land, being number fiften, sight hange, second olivision right of Newben Brench, in Warren in the County of Braften, in said State, Also lot number twenty five, third division, right of said French containing about swenty acres in Warren aforsaid. The said pieces or lots being my part of my inhuitance thereof, in the estate of my late, sister, Fanny Whittier.

To have und to hold the afore-mentioned premises, with all the priviles to ance appertinances thereunts belonging, to her the said Lydia White her heirs and assigns to her & their use frever, so that mither I the said William White, mor my heirs or any other person or persons, claiming from or under me, or them, or in the name right, or stead of me, or them, shall or will, by any way or means, have, claim, or demands, any sight or title, to the aforesaid premises or their appertenances, or to any part or parcel thereof, forever.

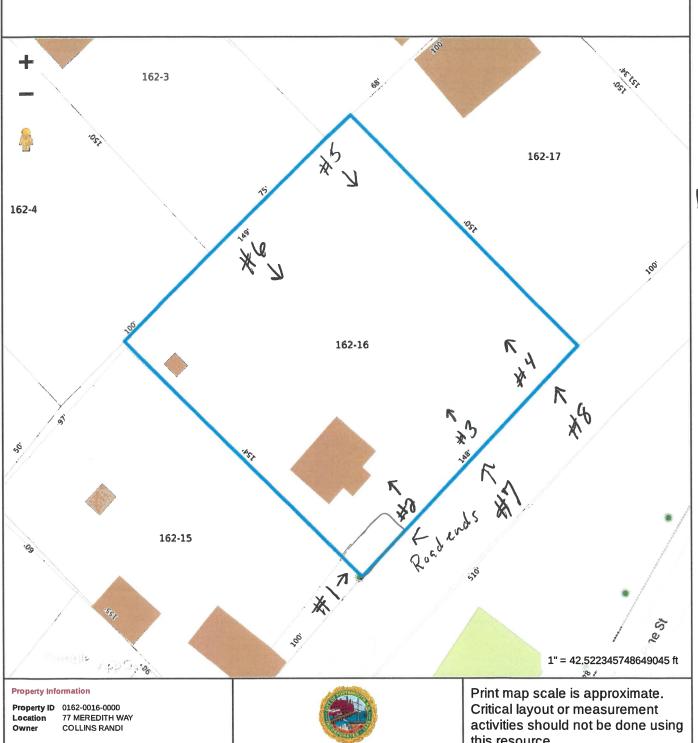
In witness whereof I the said William White, and I Priscilla White, wife of said William in token of relinguishment of dower have hereunto set our hands and seeds this minth of February in the year of our Lord one thrusands ight hundred and twenty seven

Signed, Geales, and delivered, in parisence of us

William White Priscilla White

1. S.

Curily Stavers. State of Hew Hamp storie July 13, Kocklinghow S. Then feer formally appeared the above cramed balum Page, Trustee whose stre wice of Haction James and acknowledged the foregoing instrument to the sing free act and deed. Before me, Coward W. Welford Received and Recorded april 19-1 3.40 P.M. 1910. Shu W.A. Gaeen Legister Know all men by these presents that I batherine beede wife of Alphens Beede within named in rousederation of of Dower. me dollar to me haid by William I. Farrow within marned do hereby release to said William I. Farrow all Beede my right of dower in the within described fremises. Farrow. In witness whereof I have hereto act my hand and Del. L real this 14 day of may A. D. 1891 9. N. B. J. Bartlett Catherine Beede (28) Lee B- 493 Tigned sealed + delivered in presence of Edwin A. Beede 1?-275 Received and Recorded april 2-10 a. m. 1910. John WA. Green Register Mortgage. Know all Then by these Tresents, That we , John I senite of beliefter in the country Webfler of Rockingham and State of Yew Hamphine, and DEC. I- Wary E. Smith of the came bluefter wife of stee Raid base for John H. Semittet in confideration of Due Thousand dollars paid by Leonge I Metglet of the Rame lelipster the receipt whereof ut do beleby abbuowledge, do hereby give, grant, bargain, Rele and courty, unt the Raid Leonge S. Webster his Heins and Uspigns forever. Weertain priege or pearcel of land Returated in Raid lebetter and bounded and deferited as follows, vig: On the Route by land of Denjamin Wills on the west by land of Jamiel G. Fredele on the worth by land of Sanduel Waston and Frederice Waston Production the east by land of the heirs of George Marden containing "thirty acres made or less, being precipely etre parke greenistes conveyed & John H. Smith By Benaids lkofford Mary hit's wife Benjamin F. Splofford and List wefe, by etien deel of warranty dated



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 4/1/2019 Data updated 7/17/2019

this resource.

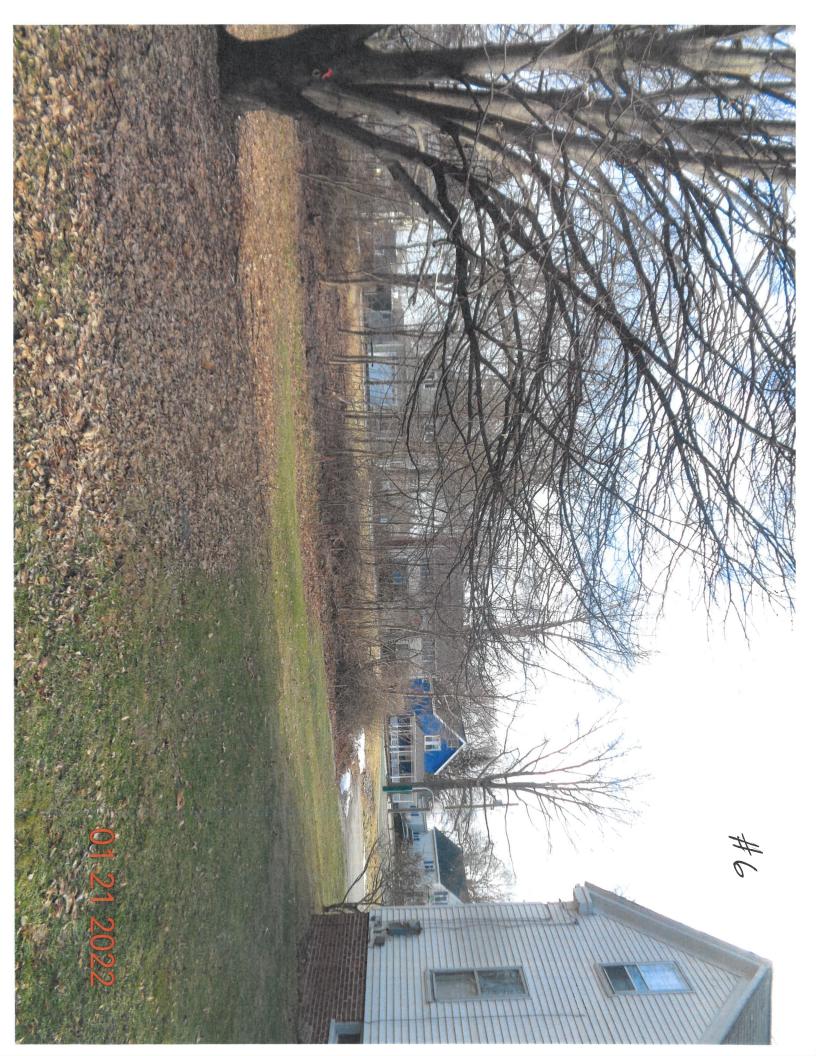


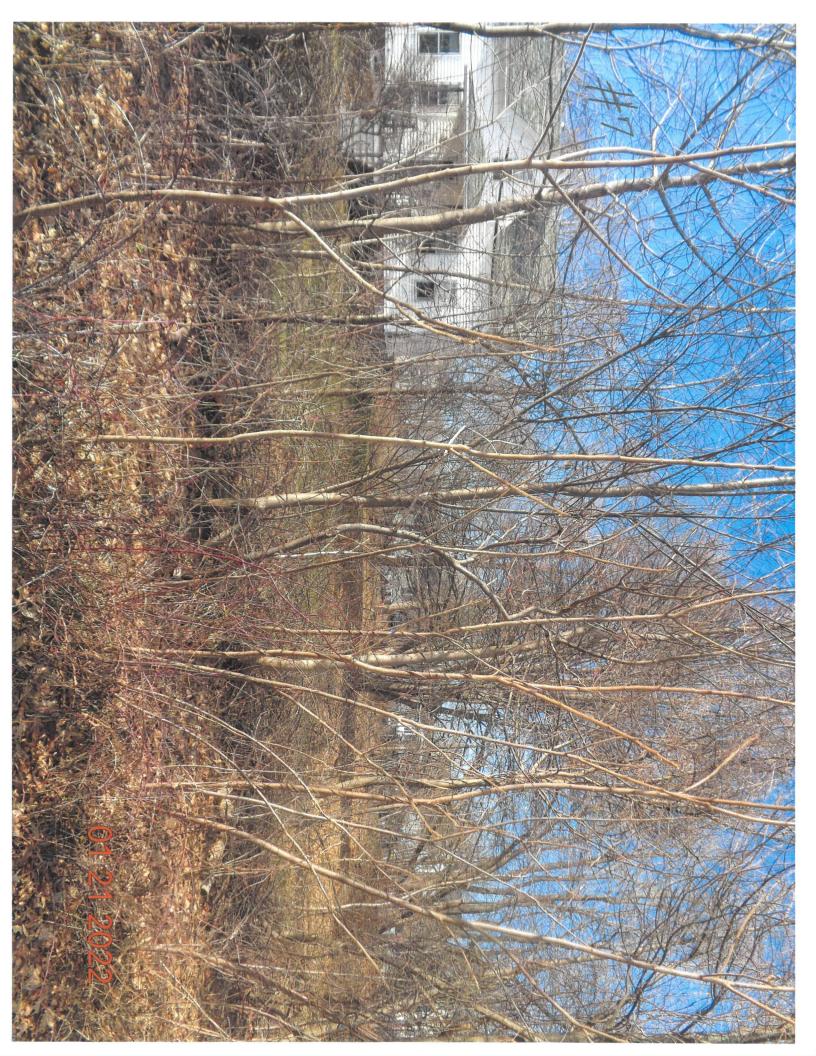


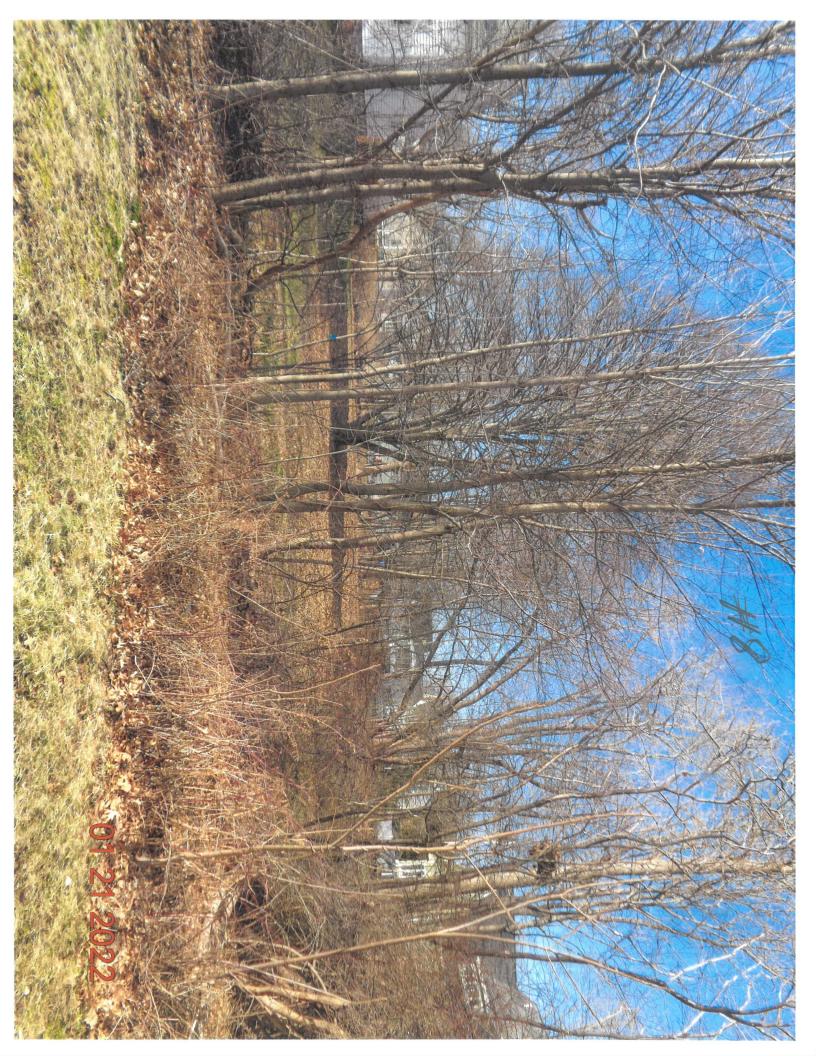














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CITY OF PORTSMOUTH

Assessors Office

Municipal Complex
1 Junkins Avenue
Portsmouth, New Hampshire 03801
Tel: (603) 610-7249 – Fax: (603) 427-1579

To: Dexter Legg, Chair Planning Board

Cc: Karen S. Conard, City Manager

From: Rosann Lentz, City Assessor Rosann Lentz

Date: January 3, 2022

RE: City Council Referral- Request of Restoration of Involuntarily Merged Lots to pre-merger status

at 77 Meredith Way

At its meeting on November 15, 2021, the City Council considered a request from R. Timothy Phoenix and Monic F. Keiser, on behalf of their client property owners Jeff and Rand Collins, requesting the restoration of involuntarily merged lots at 77 Meredith Way Map 162 Lot 16 to their pre-merger status pursuant to NH RSA 674:39-aa. The Council voted to refer to the Planning Board and Assessor for report back.

Description

Current assessment records identify the parcel as having .52 acres with a 2 bedroom 1 bath single family dwelling built around 1870 located on the parcel. Older assessment records dating back to the 50's identified the parcels as Tax Map 89 Lot 45.

History

<u>Deeds:</u> According to the deeds researched back to 1853 in the chain of title, this above property was described as one parcel of land. Deeds in the chain of title dated between June 14, 1919 through October 25, 1878 describe one parcel of land with metes and bounds not referencing a plan or identify separate lots in any meaning or intending to convey statement.

Property Assessment Records:

1950's assessment records indicate 15,000 sqft lot identified as Map 89 Lot 45. Later assessment records identify one lot with 22,500 sqft.

Court Decisions

Upon review of various New Hampshire court decisions concerning the denial of restorations of lots, the courts have held that the conveyance of multiple lots in a single deed does not, standing alone, support a voluntary merger Roberts v. Town of Windham, 165 N.H. 186,192 (2013).

Summary

The description of the parcel of land within the chain of title does not refer to the conveyance of multiple lots as discussed in the above court decision. These deeds describe a single parcel of land with a metes and bounds description and no reference to other lots or a subdivision within the conveyance. Taking the above into consideration the request for restoration does not meet the requirements of RSA 674:39-aa.



CITY OF PORTSMOUTH

Assessors Office

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1 Junkins Avenue
Portsmouth, New Hampshire 03801
Tel: (603) 610-7249 – Fax: (603) 427-1579

To: Dexter Legg, Chair Planning Board

Cc: Karen S. Conard, City Manager

From: Rosann Lentz, City Assessor Rosann Lentz

Date: January 19, 2022

RE: City Council Referral- Request of Restoration of Involuntarily Merged Lots to Pre-Merger Status

at 77 Meredith Way - Additional Review

Please accept this memo as additional information and further explanation of my prior review on the request for the Restoration of Involuntarily Merged Lots on the above referenced property.

- 1. The original conveyance of the subject property going back to 1878 does not describe 3 lots within the "meaning and intending to convey" area of the deed nor does it reference a plan. In the Roberts v. Town of Windham appeal, lots within the current deed or prior deeds were identified individually or referred back to in a prior conveyance.
- 2. The location of the dwelling depicted on Exhibit C of the taxpayer's request shows the dwelling falling at the end of Meredith Way. The two remaining lots do not front the paved/developed part of Meredith Way. Thus the redevelopment of West Park Street (Depicted in Exhibit D submitted by the Collins's) to Meredith Way reasonably supports that 77 Meredith Way is as a single lot.
- 3. A meeting held with Attorney Sullivan supports my findings that 77 Meredith Way does not meet the requirements RSA 674:39-aa.

HOEFLE, PHOENIX, GORMLEY & ROBERTS, PLLC

127 Parrott Avenue, P.O. Box 4480 | Portsmouth, NH, 03802-4480 Telephone: 603.436.0666 | Facsimile: 603.431.0879 | www.hpgrlaw.com January 20, 2022

Peter Britz and Portsmouth Planning Board City of Portsmouth One Junkins Avenue Portsmouth, NH 03801

RE: Restoration of Involuntary Merged Lots RIML-21-5

Jeff & Randi Collins 77 Meredith Way, Map 162, Lot 16

Dear Mr. Britz and Planning Board Members:

On behalf of Jeff and Randi Collins, ("Collins"), we submit the following response to City Assessor Lentz's Memorandum with respect to Collins' Application for Un-Merger of 3 lots located at 77 Meredith Way (the "Property") which were involuntarily merged by the City of Portsmouth. Ms. Lentz's sections are reproduced below followed by our response in **bold** text.

Description

Current Assessment Records identify the parcel as having .52 acres with a 2 bedroom 1 bath single family dwelling built around 1870 located on the parcel. Older assessment records dating back to the 50's identified the parcels as Tax Map 89, Lot 45.

RESPONSE: Respectfully, the Assessor's description is incomplete. These combined lots measure 150 ft. by 150 ft. We also obtained a tax card from the 1950s demonstrating the Property was identified as Map 89/Lot 45, but it contained an incomplete description. (Exhibit E to original submission). The 1950s tax card describes a lot that has 100 ft. of frontage and 150 ft. depth and omits another lot with frontage of 50 ft. and a depth of 150 ft. which would have been assigned a separate lot number. Tax Maps from 1927, 1935, and 1956 also depict the Property as two lots: one that is 100 ft. by 150 ft. and another that is 50 ft. by 150 ft. The 1935 Tax Map assigns lot number 45 to the larger lot and lot number 46 to the smaller lot. Later tax cards (1972 and 1983-86) describe a primary site and a secondary site on the same card associated with Map 89, Lot 45. Based on this information, it is clear that the City treated the Property as two separate lots, even when consolidated on one tax card.

DANIEL C. HOEFLE
R. TIMOTHY PHOENIX
LAWRENCE B. GORMLEY
STEPHEN H. ROBERTS

R. PETER TAYLOR
KIMBERLY J.H. MEMMESHEIMER
KEVIN M. BAUM
GREGORY D. ROBBINS

MONICA F. KIESER
SAMUEL HARKINSON
JACOB J.B. MARVELLEY
DUNCAN A. EDGAR

AMANDA M. FREDERICK
OF COUNSEL:
SAMUEL R. REID
JOHN AHLGREN

History

Deeds: According to the deeds researched back to 1853 in the chain of title, this above property was described as one parcel of land. Deeds in the chain of title dated between June 14, 1919 through October 25, 1878 describe one parcel of land with metes and bounds not referencing a plan or identify separate lots in any meaning and intending to convey statement.

RESPONSE: We have confirmed that the Assessor did not independently research the chain of title and relies solely on the Deed Chain provided as Exhibit G to our original submission dates, which dates back to 1878¹, not 1853. The Plan of Elm Place created in 1856 created the original three lots identified as Lots 55, 56, and 57. We agree that all deeds since 1878 describe the perimeter measuring 150 ft. by 150 ft. without reference to lots on a plan, but as discussed in our initial submission, the mere description of the Property as one parcel alone is not enough for a municipality to meet its burden of demonstrating an overt act of merger. Roberts v. Windham, 165 N.H. 236 (2013). Rather, the perimeter description was a matter of simplicity. This is underscored by the subsequent building constructed on the lot at one end of the combined lots, rather than a central location.

Property Assessment Records

1950's assessment records indicate [a] 15,000 s.f. lot identified as Map 89, Lot 45. Later assessment records identify one lot with 22, 500 s.f.

RESPONSE: As discussed *supra*, the 1950s assessment records identifying a 15,000 s.f. as Map 89, Lot 45 clearly missed another lot, identified on the 1935 Tax Map as Map 89, Lot 46, which contained 7,500 s.f. It is not accurate that later assessment records identify one lot with 22,500 s.f. The 1972 tax card describes an H-Lot (.23 acres) and a rear lot (.29 acres), while the 1983-86 cards describe a primary site (15,287 s.f.) and a secondary site (7,500 s.f.) on the same card associated with Map 89, Lot 45. Based on this information, it is clear that the City treated the Property as two separate lots, even if consolidated on one tax card.

Court Decisions

Upon review of various New Hampshire court decisions concerning the denial of restoration of lots, the courts have held that conveyance of multiple lots in a single deed does not, standing alone, support a voluntary merger Roberts v. Town of Windham, 165 N.H. 186, 192 (2013).

RESPONSE: The Assessor's statement that conveyances of multiple lots in a single deed is not the sole issue presented by these facts, nor the end of the inquiry under New

¹ Our letter misstates 1878 as 1898.

Hampshire law. The facts here involve an 1856 subdivision creating three lots, construction of a home centered on one of those lots, a subsequent conveyance of the three combined lots via a single metes and bounds description of the perimeter, and municipal records demonstrating the existence of two lots from 1927 to the early 1990s. New Hampshire Courts have determined that a deed description containing a metes and bounds description of a single parcel is not enough to for a municipality to meet its burden of demonstrating voluntary lot merger under RSA 674:39-aa, II. Roberts v. Town of Windham, 165 N.H. 186, 192 (2013). Instead, the courts consider several factors, including the legal description of the land and the "meaning and intending to convey" clause of the deed, but also the physical characteristics of the lot, including building placement, and the conduct of the owners. Id. Here the small home is sited on approximately one-third of the combined parcel leaving two-thirds of it vacant and the municipality treated the parcel as two lots - one with approximately 7500 s.f. (approximately 1/3) and the other with approximately 15,287 s.f. (approximately 2/3). The municipality has not produced any evidence that previous owners requested merger of the two lots shown on tax maps since 1927, nor has it demonstrated that any previous owner occupied the lot in a manner demonstrating an intent to merge the two lots shown in municipal records from 1927 until the early 1990s.

Summary

The description of the parcel of land within the chain of title does not refer to the conveyance of multiple lots as discussed in the above court decision. These deeds describe a single parcel of land with a metes and bounds description and no reference to other lots or a subdivision within the conveyance. Taking the above into consideration the request for restoration does not meet the requirements of RSA 674:39-aa.

RESPONSE: The court decisions section of Ms. Lentz's memorandum sets forth the accurate holding of Roberts v. Windham, 165 N.H. 186 (2013) and its progeny: that the deed description is but one of several factors considered by a court in evaluating whether a previous owner merged lots. Despite correctly summarizing the holding of the case, the recommendation against unmerger is erroneously based solely on the previous deed descriptions of the Property, and no consideration of other factors, thus contravenes the holding of Roberts v. Windham. It is the municipality's burden to demonstrate a previous owner merged these lots. RSA 674:39-aa, II(b). If the municipality cannot demonstrate

that the current or prior owners of the Property merged the lots, then the Council is required to restore the lots to their pre-merger status. <u>Id</u>. Based upon the foregoing information and evidence, the Property is originally shown as three lots in 1856 and as two lots on the 1927, 1935, and 1956. At a subsequent point, these lots were involuntarily merged into the single lot depicted on the current tax map and tax card. Accordingly, Collins has met the requirements for unmerger.

We respectfully request that the Council grant the Unmerger Application and restore the Property to its pre-merger status as two lots (approximately +/-7,500 s.f. lot with the home and a +/-15,287 s.f. vacant lot according to premerger tax cards; +/-7500 s.f. and +/-14,900 s.f. per current survey) as required by RSA 674:39aa (II).

Respectfully submitted, Jeff & Randi Collins

By:

R. Timothy Phoenix Monica F. Kieser

cc:

Jeff & Randi Collins

Karen Conard, City Manager

Rosann Maurice-Lentz

Robert P. Sullivan, City Attorney



CITY OF PORTSMOUTH

Assessors Office

Municipal Complex
1 Junkins Avenue
Portsmouth, New Hampshire 03801
Tel: (603) 610-7249 – Fax: (603) 427-1579

To: City of Portsmouth Planning Board

Cc: Karen S. Conard, City Manager

From: Rosann Lentz, City Assessor, Rosann Lentz

Date: January 20, 2022

RE: City Council Referral- Request of Restoration of Involuntarily Merged Lots to pre-merger status

at 135 Thaxter Road - RIML-21-2

In response to Monica F. Keiser letter dated January 20, 2022. RSA 674:39-aa II states "Lots or parcels that were involuntarily merged prior to September 18, 2010 by a city, town, county, village district, or any other municipality, shall at the request of the owner, be restored to their premerger status and all zoning and tax maps shall be updated to identify the premerger boundaries of said lots or parcels as recorded at the appropriate registry of deeds,". Ms. Keiser is requesting to unmerge based on tax billing and tax maps. This request differs from the subdivision provided to show the property's pre-merger status.

Tax bills and tax maps are not legal representations of a property. Deeds, mortgages, and other land documents that are typically recorded at the registry of deeds identify the legal description of the boundaries of lots or parcels. If the City of Portsmouth Planning Board chooses to recommend the unmerging of 77 Meredith Way, it would be three lots not two.

London Bridge South INC

12-27-21

Sender: Joel Asadoorian Construction supervisor Property Address : 00 Falkland Way *Portsmouth NH*

Dear Recipient:

London Bridge south inc. is formally requesting a 1 year extension for the approval granted on 00 Falkland Way for a 4 unit townhouse building. The current expiration conditions of the approval is January 20,2022 and we are requesting that the new deadline for conditions to be met would be January 20,2023.

Reason for request: The original owners Raleigh Way Holding Group, LLC did the lot mergers and recording for the subdivision and transfer ownership to us in mid to late November of this year. At that time, we immediately submitted the drawing to our architect and applied for a building permit in early December after some delay and difficulty with the town of Portsmouth permitting portal. Within a couple days Myself and my team got covid and were unable to correspond with the appropriate departments in a reasonable manor to progress things forward fast enough to meet the new deadline. After conversation with the town engineer and building inspector they feel they may not be able to do the appropriate reviews and issue a building permit in such a short time from now and suggested we should be getting an extension.

Sincerely, Joel Asadoorian Construction supervisor London Bridge South

Your Name



CITY OF PORTSMOUTH

Planning Department 1 Junkins Avenue Portsmouth, New Hampshire 03801 (603) 610-7216

PLANNING BOARD

January 26, 2021

James McSharry Raleigh Way Holding Group, LLC 1 Middle Street, Suite 1 Portsmouth, NH 03801

RE: Site Plan Review Approval for properties located at 0 Falkland Way (at Saratoga Way and Albacore Way)

Dear Mr. McSharry:

The Planning Board, at its regularly scheduled meeting of **Thursday, January 21, 2021**, considered your application for Site Plan Review approval for the demolition of an existing garage and shed and the construction of a new 4-unit residential building on merged lots with associated parking, stormwater management, lighting, utilities and landscaping. Said property is shown on Assessor Map 212 Lots 112 & 113 and lies within the General Residence B (GRB) District. As a result of said consideration, the Board voted to **grant** Site Plan Review approval as presented.

The owner shall submit a request for voluntary lot merger to the Planning Department for approval prior to the execution of the site plan review agreement. The lot merger, site plan, and any easement plans and deeds shall be recorded at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.

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

This site plan approval shall not be effective until a site plan agreement has been signed satisfying the requirements of Section 2.12 of the City's Site Review Approval Regulations.

Unless otherwise indicated above, applicant is responsible for applying for and securing a building permit from the Inspection Department prior to starting any project work.

The Planning Director must certify that all stipulations of approval have been completed prior to issuance of a building permit unless otherwise indicated above.

This site plan approval shall expire unless a building permit is issued within a period of one (1) year from the date granted by the Planning Board unless an extension is granted by the Planning Board in accordance with Section 2.14 of the Site Review Regulations.

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

Very truly yours,

Dexter R. Legg, Chairman of the Planning Board

cc: Robert Marsilia, Chief Building Inspector Rosann Maurice-Lentz, City Assessor

Peter H. Rice, Director of Public Works

Alex Ross, PE

Site Plan Review Saratoga Way, Lots 112 & 113 Portsmouth, New Hampshire

PREPARED FOR:

Raleigh Way Holding Group, LLC

PREPARED BY:

ROSS ENGINEERING, LLC

Civil/Structural Engineering & Surveying

909 Islington St.
Portsmouth, NH 03801
(603) 433-7560

January 7, 2021

LIST OF PROJECT PLANS:

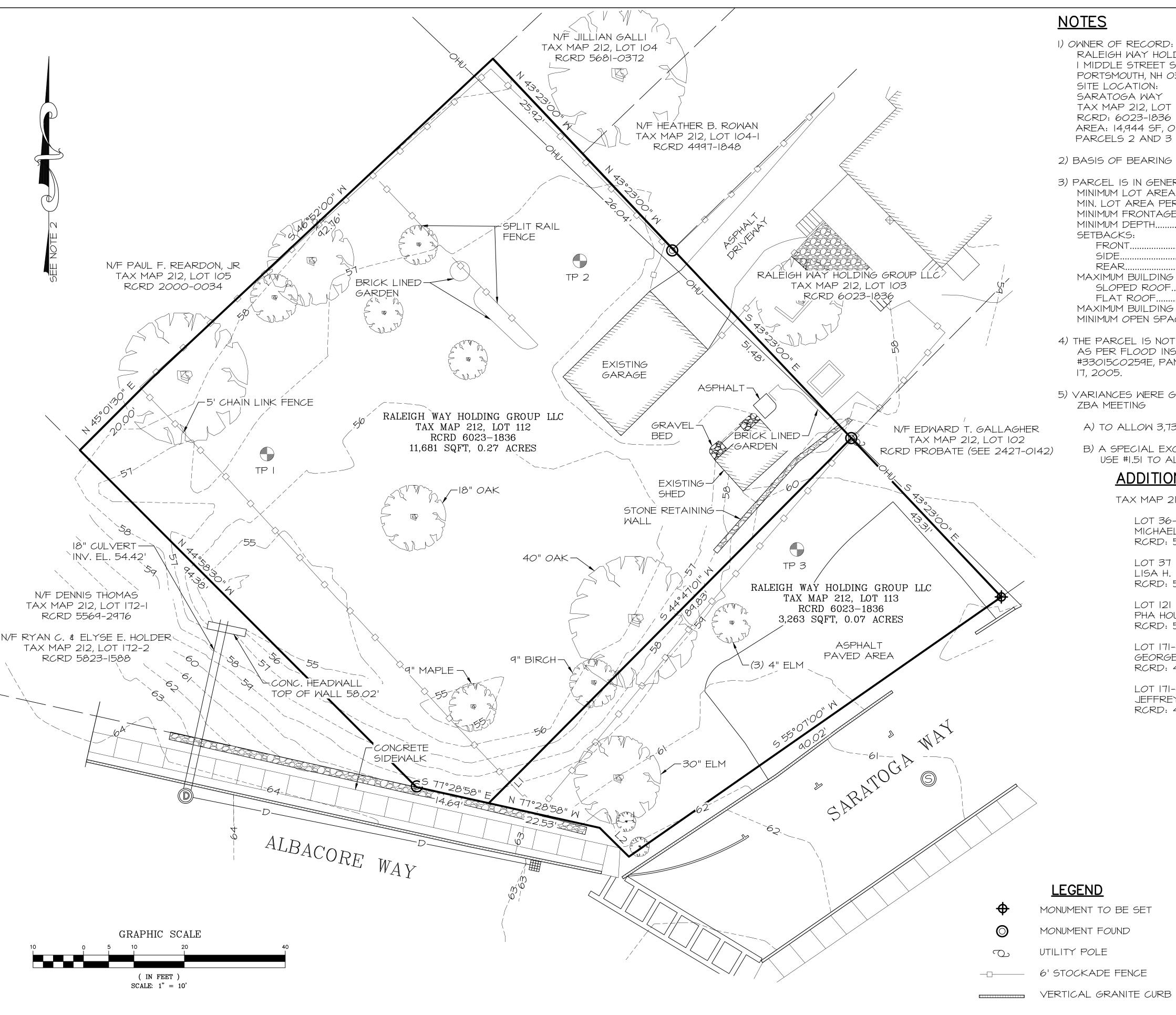
SITE PLAN SET

- 1 Existing Conditions
- 2 Site Plan
- 3 Utility Plan
- 4 Grading & Drainage
- 5 Landscape Plan6 Roadway Plan
- 6 Roadway Plan7 Erosion Control Plan
- 8 Details
- 9 Pavement Details
- 10 Notes

ARCHITECTURAL PLAN SET

Color Rendering

- A1 Proposed West & East Elev.
- A2 Proposed South & North Elev.
- A3 First Floor Plan
- A4 Second Floor Plan
- A5 Third Floor (Attic) Plan
- A6 First Floor Plan, Únit #1



- I) OWNER OF RECORD: RALEIGH WAY HOLDING GROUP LLC I MIDDLE STREET SUITE I PORTSMOUTH, NH 03801 SITE LOCATION: SARATOGA WAY TAX MAP 212, LOT 103 RCRD: 6023-1836 AREA: 14,944 SF, 0.34 ACRES
- 2) BASIS OF BEARING AS PER REF. PLAN #2.
- 3) PARCEL IS IN GENERAL RESIDENCE B ZONE (GRB) ..5,000 SF MINIMUM LOT AREA. MIN. LOT AREA PER DWELLING UNIT 5,000 SF MINIMUM FRONTAGE. ..80 FT MINIMUM DEPTH. ..60 FT SETBACKS: FRONT. ..5 FT SIDE. ..IO FT REAR.. ..25 FT MAXIMUM BUILDING HEIGHT: ..35 FT SLOPED ROOF. FLAT ROOF. .30 FT MAXIMUM BUILDING COVERAGE. ..30% MINIMUM OPEN SPACE
- 4) THE PARCEL IS NOT WITHIN A FEMA FLOOD ZONE, AS PER FLOOD INSURANCE RATE MAP #33015C0259E, PANEL 259 OF 681. DATED MAY
- 5) VARIANCES WERE GRANTED ON THE JUNE 16, 20203) ZBA MEETING
 - A) TO ALLOW 3,736 SF PER DWELLING UNIT
 - B) A SPECIAL EXCEPTION FROM SECTION 10.440 USE #1.51 TO ALLOW 4 DWELLING UNITS.

ADDITIONAL ABUTTERS

TAX MAP 212

LOT 36-1 MICHAEL B. & LEANNE L. POWER RCRD: 5692-0310

LOT 37 LISA H. & THOMAS M. CONRAD RCRD: 5435-1874

LOT 121 PHA HOUSING DEVELOPMENT, LTD. RCRD: 5452-0868

LOT 171-01 GEORGE COURTOVICH RCRD: 4847-0230

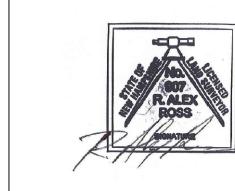
LOT 171-02 JEFFREY T. VEINO RCRD: 4828-0417

- I ALEX ROSS, HEREBY CERTIFY:
- A) THAT THIS SURVEY PLAT WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION.
- THIS PLAN IS A RESULT OF FIELD SURVETTIES OF 2019 AND JULY 2020.

 DDD, MGP & AR DURING NOVEMBER OF 2019 AND JULY 2020.

 CHECKED: A.ROSS B) THIS PLAN IS A RESULT OF FIELD SURVEY PERFORMED BY SURVEY PER NHLSA STANDARDS; CATEGORY 1, CONDITION 1.
- C) "I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUB-DIVISION 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.

R. ALEX ROSS DATE



6	12/3/2020	PB SUBMITTAL				
5	10/28/2020	PB SUBMITTAL				
4	10/10/2020	REVISIONS				
3	9/21/2020	TAC SUBMITTAL				
2	8/17/2020	TAC SUBMITTAL				
1	8/4/2020	TAC SUBMITTAL				
SS.	DATE	DESCRIPTION OF ISSUE				
SCA	SCALE: 1" = 10'					
CHECKED: A.ROSS						
DRA	AWN: DDD					

7 | 1/7/2021 | PB SUBMITTAL

ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560

EXISTING CONDITIONS

SARATOGA WAY Tax Map 212, Lots 112 & 113 Portsmouth, NH

OWNER OF RECORD Raleigh Way Holding Group, LLC 1 Middle Street, Suite 1 Portsmouth, NH 03801

JOB NUMBER DWG. NO. 19-097 | 1 OF 10 7

COMPANY FOR ATLANTIC HEIGHTS DEVELOPERS", BY LOCKWOOD, GREENE & CO. ENGINEERS, JULY, 1919. RCRD 0247.

REFERENCE PLANS

LOT 212

I) "PROPERTY MAP OF ATLANTIC HEIGHTS

LOT 171

2) "ATLANTIC HEIGHTS CO., PORTSMOUTH, N.H., PLAN SHOWING ADDITIONS TO AND REVISION OF LAYOUT PLAN OF 1919", BY JOHN W. DURGIN, C.E., DATED MAY, 1925. RCRD 0273 "SUBDIVISION PLAN MAP 212 - LOT 104 FOR JAMES A. MULEY LIVING TRUST & PETER BROWN", BY AMBIT ENGINEERING, DATED SEPTEMBER, 2004. RCRD D-32010. 4) "SUBDIVISION PLAN MEADOW VIEW HEIGHTS

LOCUS PLAN

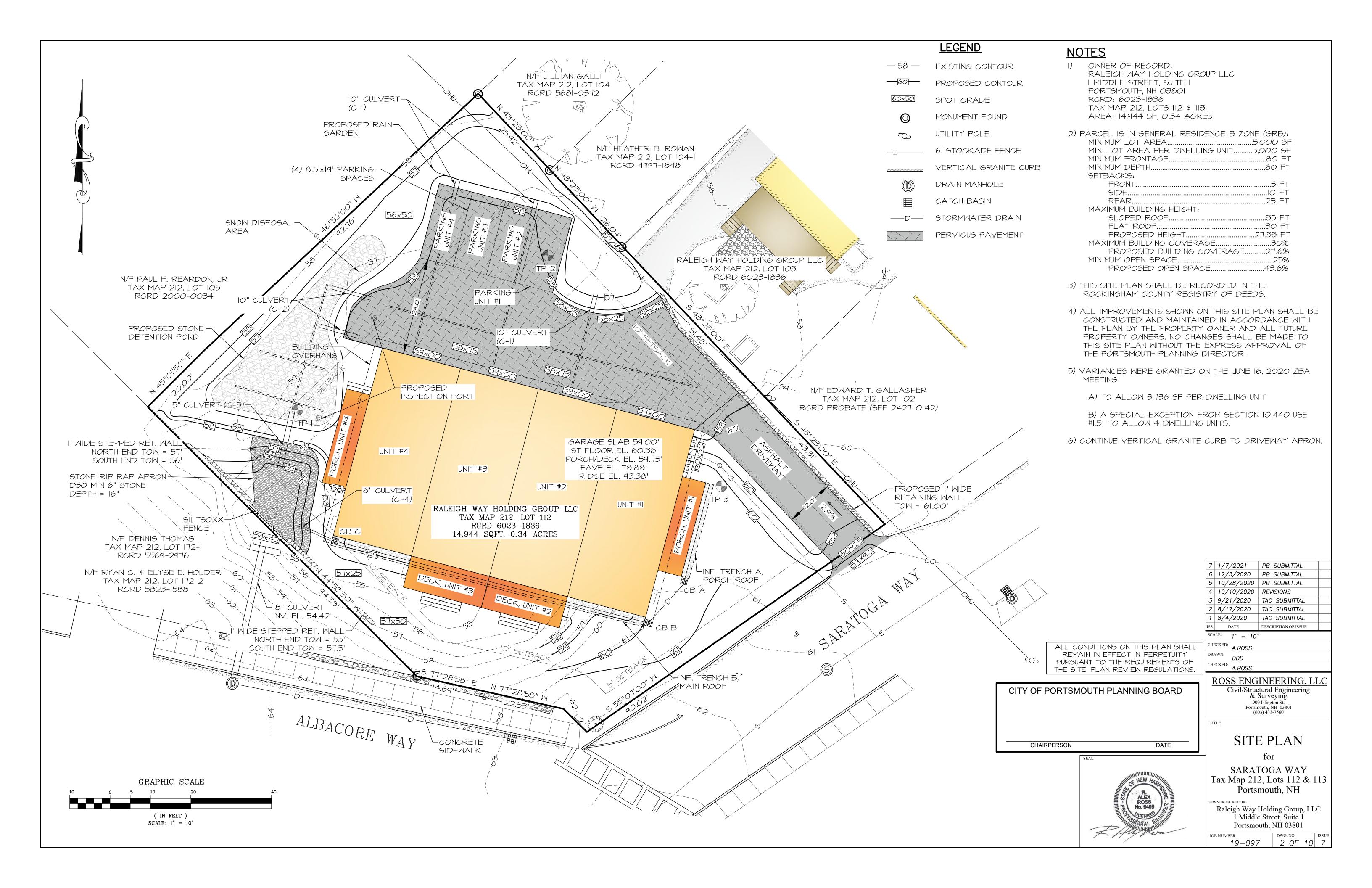
LOT 36-

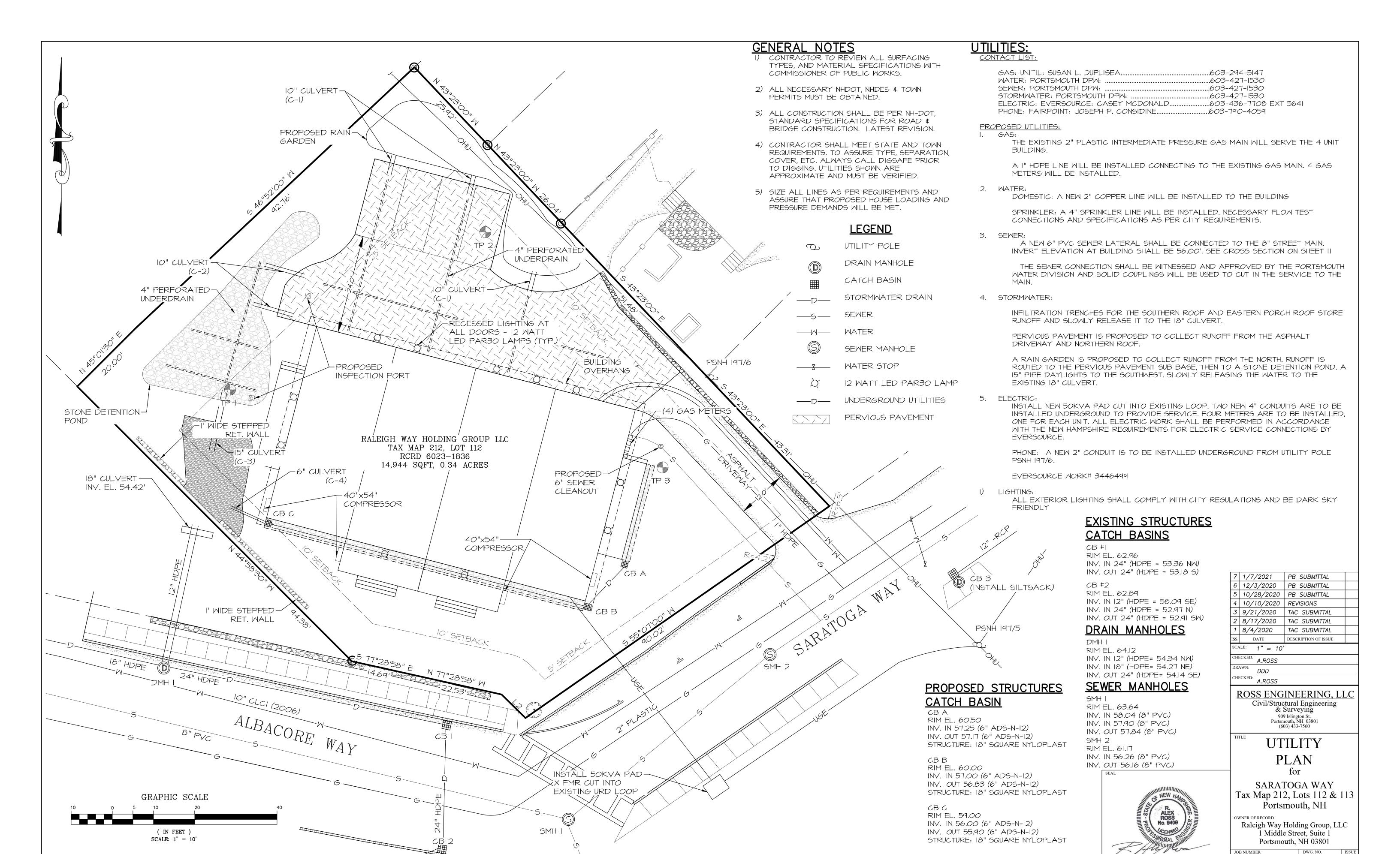
LOT 37

CHANGING PLACES, LLC", BY AMES MSC ARCHITECTS & ENGINEERS, DATED MAY 2 2006. RCRD D-33771 5) "CONDOMINIUM SITE PLAN "ATLANTIC POINTE" A

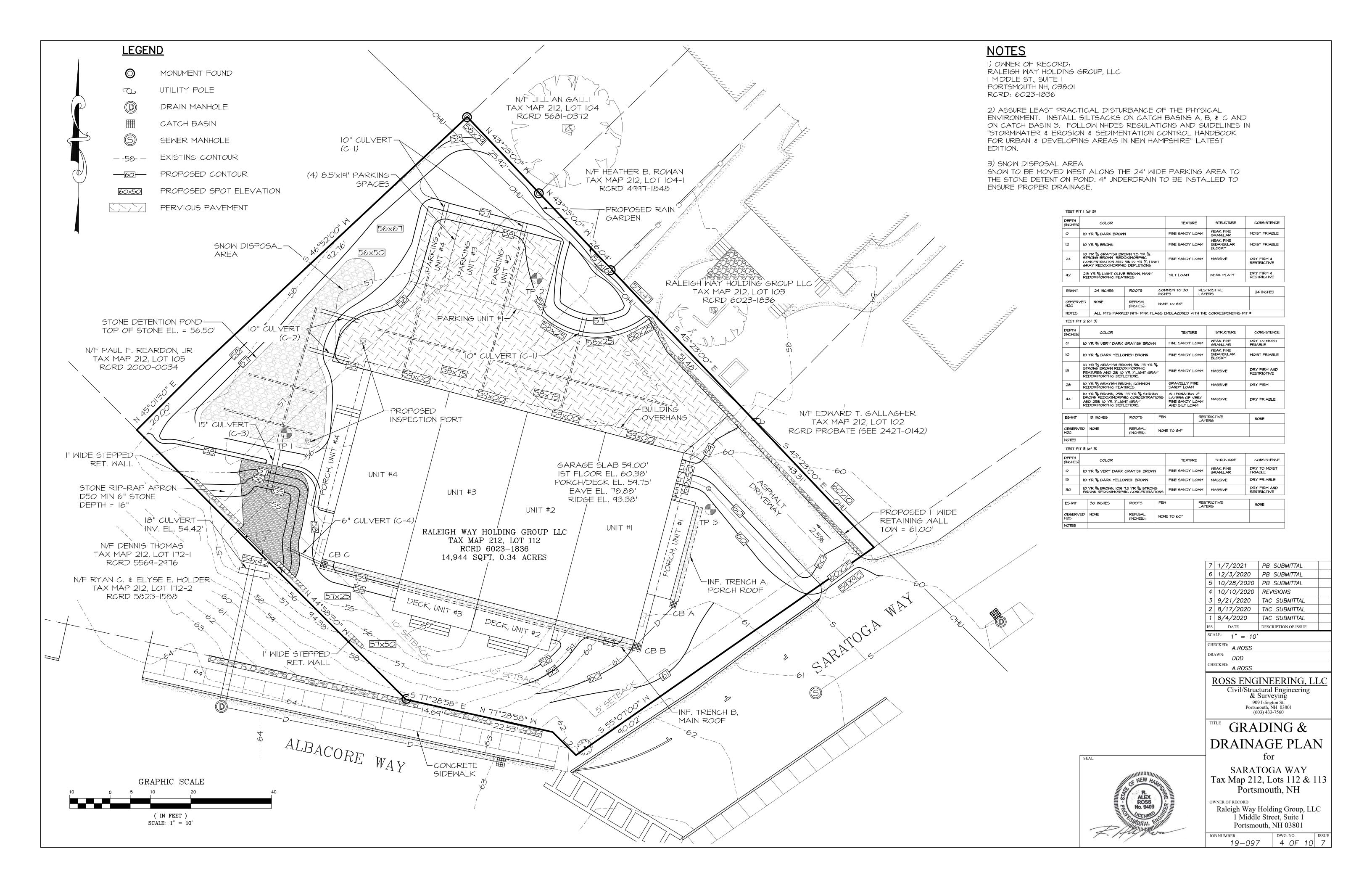
CONDOMINIUM UNIT OWNERS ASSOCIATION", BY AMES MSC ARCHITECTS & ENGINEERS, DATED JULY 19, 2007. RCRD D-34872

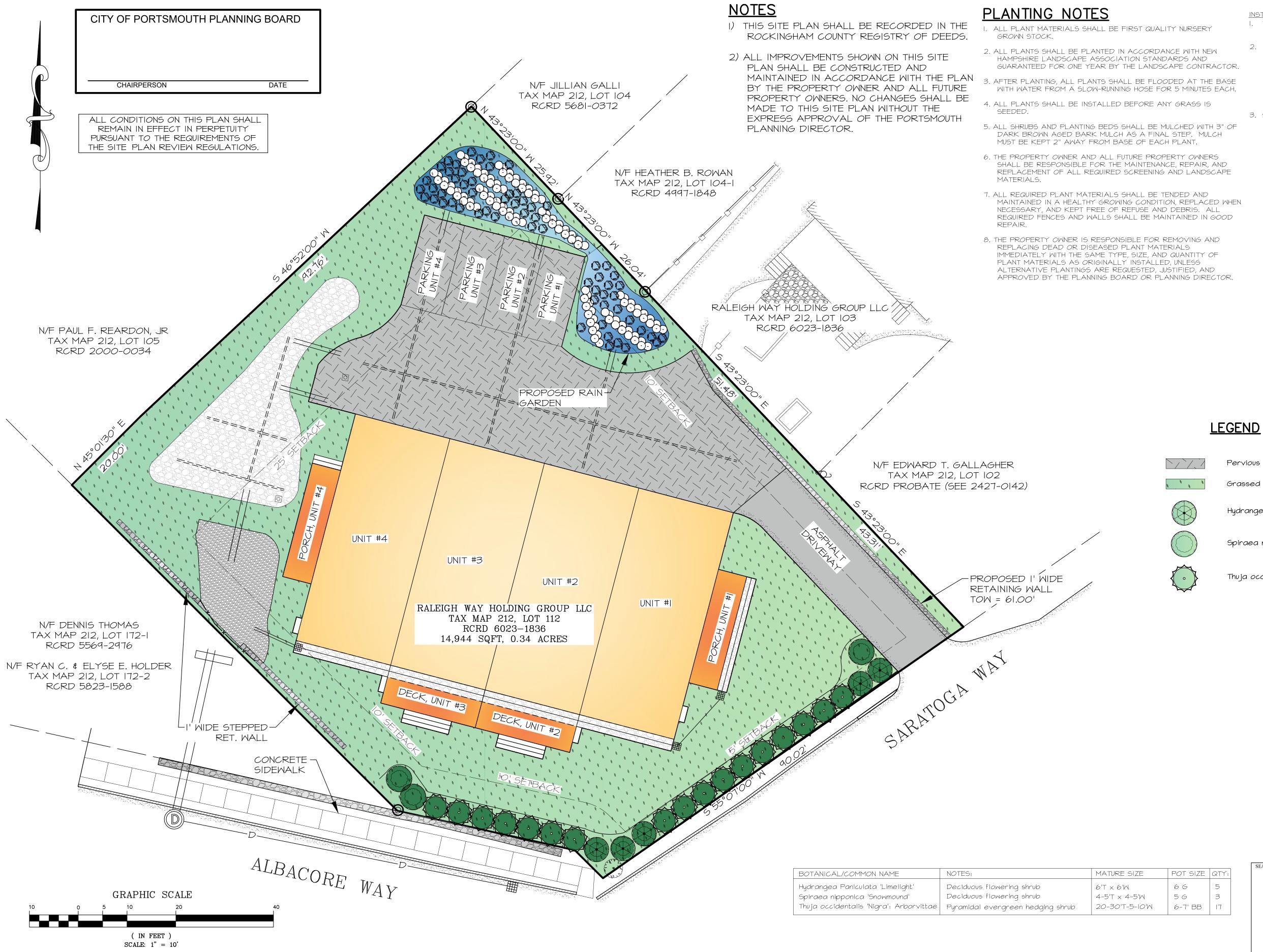
6) "AS BUILT ROADWAY PLAN FOR ATLANTIC POINTE BUILDERS, LLC" BY MSC CIVIL ENGINEERS & LAND SURVEYORS, INC. DATED NOV. 17, 2010. NOT RECORDED.





19-097 | 3 OF 10 7

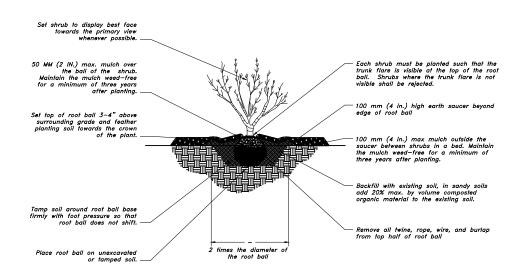




INSTALLATION REQUIREMENTS:

- I. THE INSTALLATION OF A DRIP IRRIGATION SYSTEM IS RECOMMENDED TO ASSURE WELL GROWN PLANTS.
- 2. IN CASE OF DROUGHT (DEFINED AS TWO WEEK PERIOD WITHOUT RAIN) ALL NEW PLANTS SHALL BE WATERED THROUGH NOVEMBER IST DURING THE FIRST SEASON IN WHICH THE ARE INSTALLED. THEY SHALL BE WATERED ONE TIME PER DAY FOR THE FIRST WEEK AFTER INSTALLATION AND THREE TIMES PER WEEK FOR THE REMAINDER OF THE SEASON. AFTER THE FIRST SEASON WHEN THE ROOTS OF THE PLANTS ARE ESTABLISHED THEY WILL NOT REQUIRE WATERING.
- 3. SOAKER HOSES WOUND THROUGH THE BED NEAR THE BASE OF EACH PLANT ARE THE RECOMMENDED METHOD OF WATERING DURING THE FIRST SEASON. THESE CA BE REMOVED AFTER NOVEMBER 30TH WHEN THE PLANTS ARE ESTABLISHED.

Shrub Detail



Pervious Pavement

Grassed Area

Hydrangea paniculata 'Limeliaht'

Spiraea nipponica 'Snowmound'

Thuja occidentalis 'Nigra'

6	12/3/2020	PB SUBMITTAL		
5	10/28/2020	PB SUBMITTAL		
4	10/10/2020	REVISIONS		
3	9/21/2020	TAC SUBMITTAL		
2	8/17/2020	TAC SUBMITTAL		
1	8/4/2020	TAC SUBMITTAL		
ISS.	DATE	DESCRIPTION OF ISSUE		
SCA	1" = 10'			
CHECKED: A.ROSS				
DRA	AWN:			

7 1/7/2021 PB SUBMITTAL

CHECKED: A.ROSS

ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560

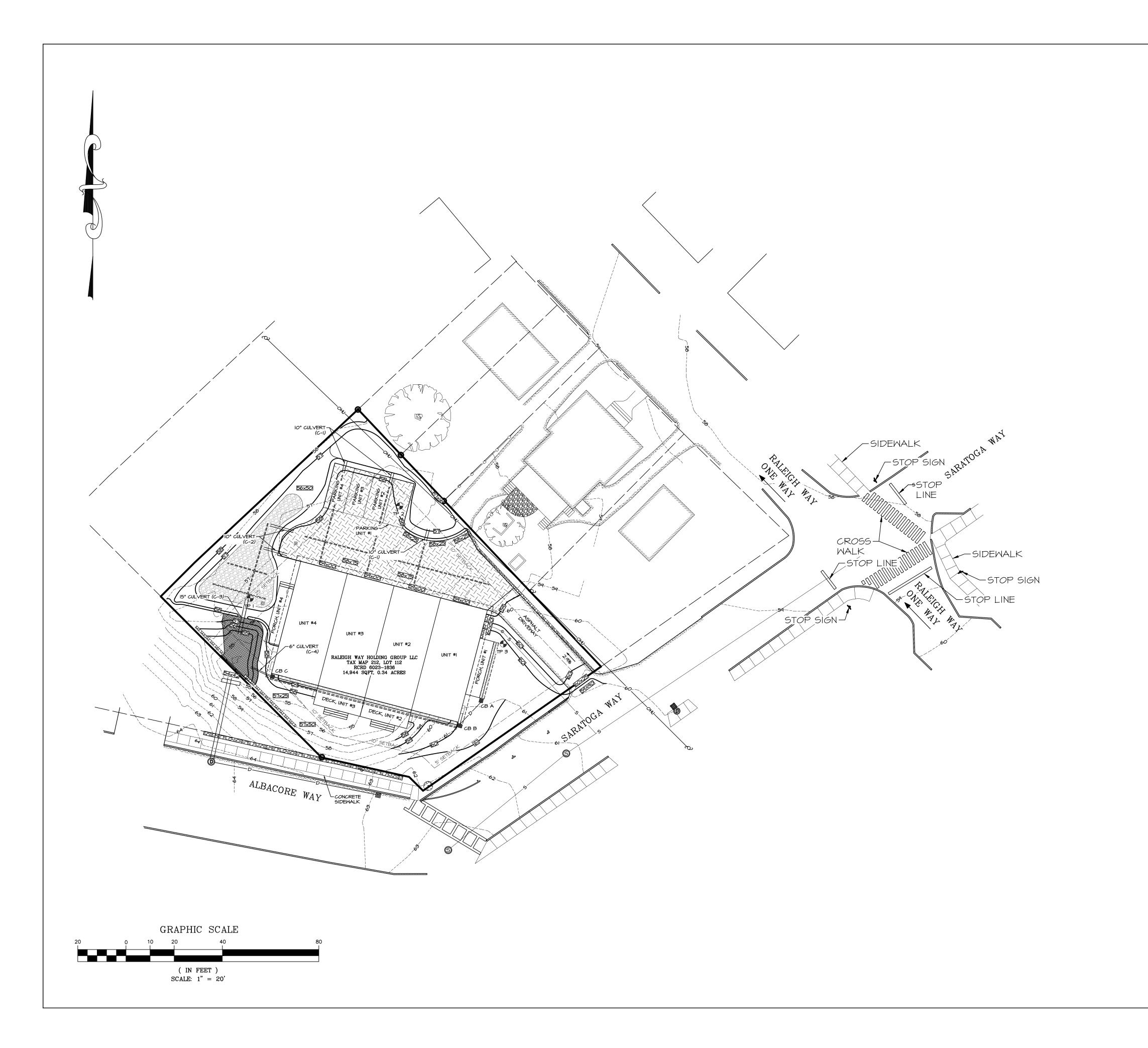
LANDSCAPE

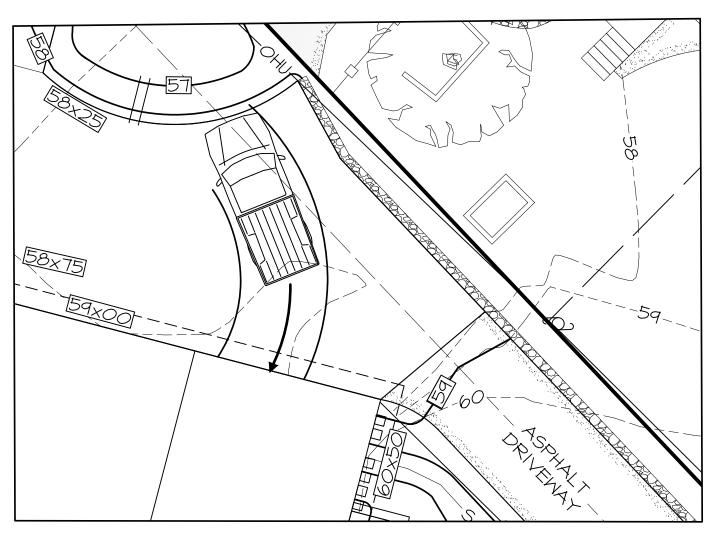
PLAN

SARATOGA WAY Tax Map 212, Lots 112 & 113 Portsmouth, NH

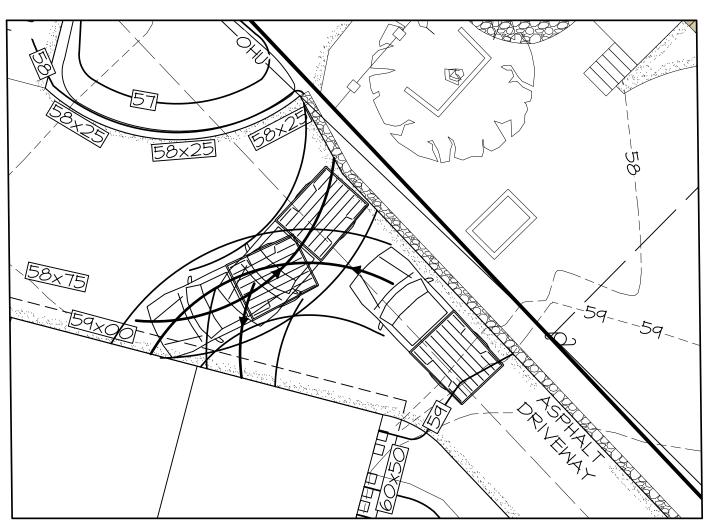
OWNER OF RECORD Raleigh Way Holding Group, LLC 1 Middle Street, Suite 1 Portsmouth, NH 03801

JOB NUMBER 19-097 | 5 OF 10 7





BACK IN



PULL IN

7	1/7/2021	PB SUBMITTAL			
6	12/3/2020	PB SUBMITTAL			
5	10/28/2020	PB SUBMITTAL			
4	10/10/2020	REVISIONS			
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ISS.	DATE	DESCRIPTION OF ISSUE			
SCA	1" = 20'	,			
CHECKED: A.ROSS					
DRAWN: DDD					
CHECKED: A ROSS					

ROSS ENGINEERING, LLC

Civil/Structural Engineering
& Surveying
909 Islington St.
Portsmouth, NH 03801
(603) 433-7560

ROADWAY PLAN

SARATOGA WAY Tax Map 212, Lots 112 & 113 Portsmouth, NH

OWNER OF RECORD
Raleigh Way Holding Group, LLC
1 Middle Street, Suite 1
Portsmouth, NH 03801

MBER DWG. NO. ISSUE 6 OF 10 7

EROSION AND SEDIMENTATION CONTROL CONSTRICTION PHASING AND SEQUENCING

SEE "EROSION AND SEDIMENTATION CONTROL GENERAL NOTES" WHICH ARE TO BE AN INTEGRAL PART OF THIS PROCESS.

2. INSTALL SILTSOXX FENCING AS PER DETAILS AND AT SEDIMENT MIGRATION. CONSTRUCT TREATMENT SWALES , LEVEL SPREADERS AND DETENTION STRUCTURES AS DEPICTED ON DRAWINGS.

4. STRIP AND STOCKPILE TOPSOIL. STABILIZE PILES OF SOIL CONSTRUCTION MATERIAL & COVER WHERE PRACTICABLE. 5. MINIMIZE DUST THROUGH APPROPRIATE APPLICATION OF WATER OR OTHER

DUST SUPPRESSION TECHNIQUES ON SITE. 6. ROUGH GRADE SITE. INSTALL CULVERTS AND ROAD DITCHES.

FINISH GRADE AND COMPACT SITE.

RE-SPREAD AND ADD TOPSOIL TO ALL ROADSIDE SLOPES. TOTAL TOPSOIL THICKNESS TO BE A MINIMUM OF FOUR TO SIX INCHES.

9. STABILIZE ALL AREAS OF BARE SOIL WITH MULCH AND SEEDING. IO. RE-SEED PER EROSION AND SEDIMENTATION CONTROL GENERAL NOTES. II. SILT SOXX FENCING TO REMAIN AND BE MAINTAINED FOR TWENTY FOUR MONTHS AFTER CONSTRUCTION TO ENSURE ESTABLISHMENT OF ADEQUATE SOIL STABILIZATION AND VEGETATIVE COVER. ALL SILT SOXX FENCING ARE THEN TO BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.

12. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING

13. ALL TEMPORARY WATER DIVERSION (SWALES, BASINS, ETC. MUST BE USED AS NECESSARY UNTIL AREAS ARE STABILIZED.

14. PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE - BEFORE ROUGH GRADING THE SITE.

15. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM

I6. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. 17. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF

ACHIEVING FINISH GRADE. 18. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY

HALF-INCH OF RAINFALL. 19. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME

BEFORE DISTURBED AREAS ARE STABILIZED. 20. LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

PLANTING NOTES:

ALL PLANT MATERIALS SHALL BE FIRST QUALITY NURSERY GROWN STOCK. 2. ALL PLANTS SHALL BE PLANTED IN ACCORDANCE WITH NEW HAMPSHIRE LANDSCAPE ASSOCIATION STANDARDS AND GUARANTEED FOR ONE YEAR BY THE LANDSCAPE CONTRACTOR.

3. ALL TREES AND SHRUBS SHALL HAVE WATER SAUCERS BUILT AROUND THEIR BASES AND THESE SHALL BE MULCHED WITH 4" OF DARK BROWN AGED BARK MULCH. MULCH MUST BE KEPT 2" AWAY FROM THEIR TRUNKS. 4. ALL TREES AND SHRUBS SHALL BE PLANTED AND MULCHED BEFORE LAWN IS SEEDED.

MAINTENANCE REQUIREMENTS:

ALL TREES, SHRUBS, AND PERENNIALS WILL NEED TO BE WATERED THROUGH THANKSGIVING DURING THE FIRST SEASON IN WHICH THEY ARE INSTALLED. 2. AN UNDERGROUND DRIP IRRIGATION SYSTEM IS RECOMMENDED. IF AN UNDERGROUND DRIP IRRIGATION SYSTEM IS NOT INSTALLED, SOAKER HOSES WOUND THROUGHOUT PLANTING BEDS ARE ACCEPTABLE. ALTHOUGH OVERHEAD SPRINKLERS ARE RECOMMENDED FOR LAWN AREAS, THEY ARE NOT ACCEPTABLE FOR IRRIGATING TREES AND SHRUBS.

SEEDING AND STABILIZATION FOR LOAMED SITE: FOR TEMPORARY & LONG TERM SEEDINGS USE AGWAY'S SOIL CONSERVATION GRASS SEED OR EQUAL

COMPONENTS: ANNUAL RYE GRASS, PERENNIAL RYE GRASS, WHITE CLOVER, 2 FESCUES, SEED AT A RATE OF 100 POUNDS PER ACRE. FERTILIZER & LIME:

NITROGEN (N) 50 LBS/ACRE, PHOSPHATE (P205) 100 LBS/ACRE, POTASH (K20) 100 LBS/ACRE, LIME 2000 LBS/ACRE MULCH:

HAY OR STRAW 1.5-2 TONS/ACRE

A) GRADING AND SHAPING

I) SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

B) SEED BED PREPARATION

I) SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS 2) STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

EROSION AND SEDIMENTATION CONTROL GENERAL

CONDUCT ALL CONSTRUCTION IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE PHYSICAL ENVIRONMENT, <u>BUT IN NO</u> CASE SHALL EXCEED 2 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS

2. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

3. ALL DITCHES, SWALES AND PONDS MUST BE STABILIZED PRIOR TO DIRECTING FLOW TO THEM.

4. ALL GROUND AREAS OPENED UP FOR CONSTRUCTION WILL BE STABILIZED WITHIN 24 HOURS OF EARTH-DISTURBING ACTIVITIES BEING CEASED, AND WILL BE FULLY STABILIZED NO LONGER THAN 14 DAYS AFTER INITIATION, (SEE NOTE II FOR DEFINITION OF STABLE). ALL SOILS FINISH GRADED MUST BE STABILIZED WITHIN SEVENTY TWO HOURS OF DISTURBANCE. ALL TEMPORARY OR LONG TERM SEEDING MUST BE APPLIED TO COMPLY WITH "WINTER CONSTRUCTION NOTES" (SEE WINTER CONSTRUCTION NOTES). EMPLOY TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES AS DETAILED ON THIS PLAN AS NECESSARY UNTIL ADEQUATE STABILIZATION HAS BEEN ASSURED (SEE NOTE II FOR DEFINITION

5. TEMPORARY & LONG TERM SEEDING: USE SEED MIXTURES, FERTILIZER, LIME AND MULCHING AS RECOMMENDED (SEE SEEDING AND STABILIZATION NOTES). 6. SILTSOXX FENCING TO BE SECURELY EMBEDDED AND STAKED AS DETAILED. WHEREVER POSSIBLE A VEGETATED STRIP OF AT LEAST TWENTY FIVE FEET IS TO BE KEPT BETWEEN SILTSOXX AND ANY EDGE OF WET AREA.

7. SEEDED AREAS WILL BE FERTILIZED AND RE-SEEDED AS NECESSARY TO ENSURE VEGETATIVE ESTABLISHMENT.

8. SEDIMENT BASIN(S), IF REQUIRED, TO BE CHECKED AFTER EACH SIGNIFICANT RAINFALL AND CLEANED AS NEEDED TO RETAIN DESIGN CAPACITY. 9. SILTSOXX FENCING WILL BE CHECKED REGULARLY AND AFTER EACH SIGNIFICANT RAINFALL. NECESSARY REPAIRS WILL BE MADE TO CORRECT UNDERMINING OR DETERIORATION OF THE BARRIER AS WELL AS CLEANING, REMOVAL AND PROPER DISPOSAL OF TRAPPED SEDIMENT.

10. TREATMENT SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATIVE COVER HAS BEEN ESTABLISHED. II. AN AREA SHALL BE CONSIDERED FULLY STABLE IF ONE OF THE FOLLOWING

HAS OCCURRED: BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED

A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

II. ALL EROSION AND SEDIMENTATION CONTROL MEASURES IN THE PLAN SHALL MEET THE DESIGN BASED ON STANDARDS AND SPECIFICATIONS SET FORTH IN THE STORM WATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE (DECEMBER 2008 OR LATEST) PREPARED BY ROCKINGHAM COUNTY CONSERVATION DISTRICT, N.H. DES AND NRCS.

WINTER CONSTRUCTION NOTES

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 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 COMPETED IN ADVANCE OF THAW OR SPRING MELT EVENT.; 2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS; 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.

LONG TERM SEEDING

*WELL TO MODERATELY WELL DRAINED SOILS

FOR CUT AND FILL AREA AND FOR WATERWAYS AND CHANNELS

SEEDING MIXTURE C

	<u>Ib/ACRE</u>	<u>lb/10005F</u>
ALL FESCUE	20	0.45
REEPING RED FESCUE	20	0.45
RED CLOVER (ALSIKE)	<u>20</u>	<u>0.45</u>
OTAL	48	1.35

LIME: AT 2 TONS PER ACRE OR 100 LBS PER 1,000 S.F. FERTILIZER: 10 20 20 (NITROGEN, PHOSPHATE, POTASH AT 500# PER ACRE. MULCH: HAY OR CLEAN STRAW; 2 TONS/ACRE OR 2 BALES/1000 S.F.

GRADING AND SHAPING:

SLOPES SHALL NOT BE STEEPER THAN 2 TO I. 3 TO I OR FLATTER SLOPES ARE PREFERRED.

SEEDBED PREPARATION:

SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS. STONES LARGER THAN FOUR INCHES AND TRASH SHOULD BE REMOVED SOD SHOULD BE TILLED TO A DEPTH OF FOUR INCHES TO PREPARE SEEDBED. FERTILIZER & LIME SHOULD BE MIXED INTO THE SOIL.

THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

* FROM: STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, DECEMBER 2008.

SHORT TERM SEEDING

*WELL TO MODERATELY WELL DRAINED SOILS

FOR CUT AND FILL AREA AND FOR WATERWAYS AND CHANNELS

SEEDING MIXTURE C

	#/ACRE	#/1000SF
FOR APRIL I - AUGUST 15		
ANNUAL RYE GRASS	40	1
FOR FALL SEEDING		
WINTER RYE	112	2.5

LIME: AT I TON PER ACRE OR 100 LBS PER 1,000 S.F.

FERTILIZER: 10 10 (NITROGEN, PHOSPHATE, POTASH AT 500# PER ACRE. MULCH: HAY OR CLEAN STRAW; 2 TONS/ACRE OR 2 BALES/1000 S.F.

GRADING AND SHAPING:

SLOPES SHALL NOT BE STEEPER THAN 2 TO I. 3 TO I OR FLATTER SLOPES ARE PREFERRED.

SEEDBED PREPARATION:

SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS. STONES LARGER THAN FOUR INCHES AND TRASH SHOULD BE REMOVED. SOD SHOULD BE TILLED TO A DEPTH OF FOUR INCHES TO PREPARE SEEDBED. FERTILIZER & LIME SHOULD BE MIXED INTO THE SOIL.

THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED SLOPE WHEREVER PRACTICAL.

* FROM: STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, DECEMBER 2008.

ACROSS THE

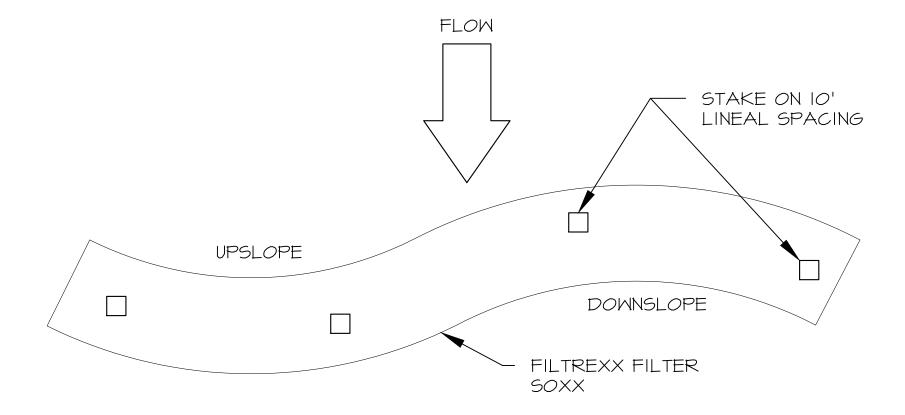
Scale: N.T.S.

WHEN PROPOSED FOR ALTERATION DURING CONSTRUCTION AS BEING INFESTED WITH INVASIVE SPECIES SHALL BE MANAGED APPROPRIATELY USING THE DISPOSAL PRACTICES IDENTIFIED IN "NHDOT - BEST MANAGEMENT PRACTICES FOR ROADSIDE INVASIVE PLANTS -2008" AND "METHODS FOR DISPOSING NON-NATIVE INVASIVE PLANTS - UNH COOPERATIVE EXTENSION - 2010"

SEED MIXES SHALL NOT CONTAIN ANY SPECIES IDENTIFIED BY THE NEW HAMPSHIRE PROHIBITED INVASIVE PLANT SPECIES LIST.

2" x 2" WOODEN STAKE FILTREXX SILTSOXX NOTES I) ALL MAERTIAL TO MEET FILTREXX _ FILTREXX SILTSOXX SPECIFICATIONS (12"-18" TYP.) 2) SILTSOXX COMPOST, SOIL, ROCK, SEED FILL TO MEET APPLICATION AREA TO BE REQUIREMENTS PROTECTED WORK AREA

Filtrexx SiltSoxx Section



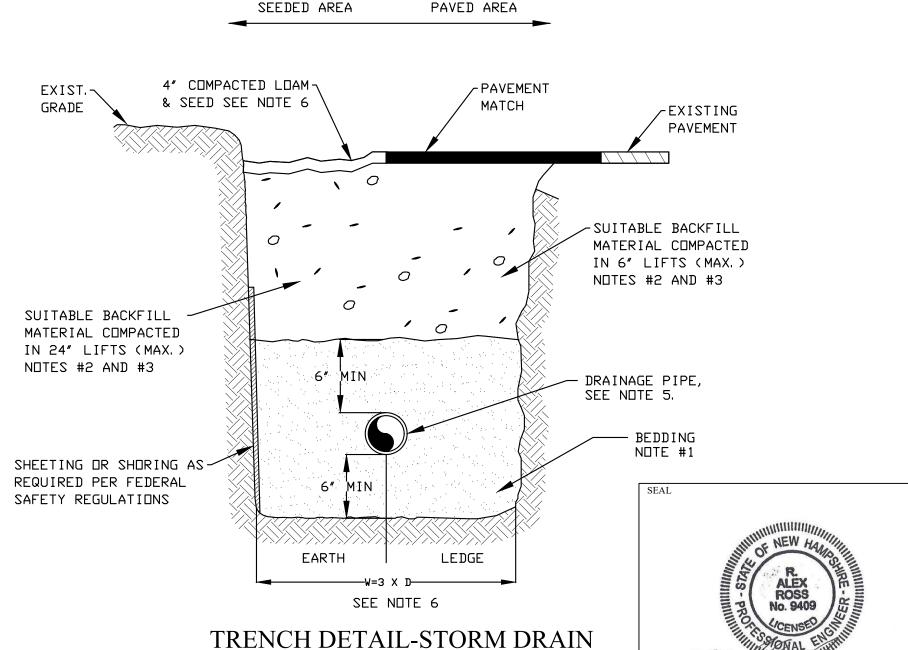
Filtrexx SiltSoxx Plan View

TRENCH NOTES - STORM DRAIN:

- 1) BEDDING: BEDDING FOR PIPES SHALL CONSIST OF PREPARING THE BOTTOM OF THE TRENCH TO SUPPORT THE ENTIRE LENGTH OF THE PIPE AT A UNIFORM SLOPE AND ALIGNMENT. CRUSHED STONE SHALL BE USED TO BED THE PIPE TO THE ELEVATION SHOWN ON THE DRAWINGS. NORMAL PIPE BEDDING IS CRUSHED STONE TO THE HAUNCH OF THE PIPE AND SAND BEDDING 6" ABOVE THE CROWN. IF THE TOP OF THE PIPE IS LESS THAN 30" FROM FINISH GRADE, BED PIPE COMPLETELY IN STONE UP TO 6" ABOVE PIPE CROWN. UNDERDRAIN TO HAVE 4" MIN' OF STONE OVER PIPE OR AS NECESSARY TO BE IN CONTACT WITH GRAVEL LAYER OF SELECTS ABOVE, FILTER FABRIC TO BE PLACED IN BETWEEN ALL STONE BEDDING MATERIAL AND SUBSEQUENT LAYERS OF FILL MATERIAL.
- 2) COMPACTION: ALL BACKFILL SHALL BE COMPACTED AT OR NEAR OPTIMUM MOISTURE CONTENT BY PNEUMATIC TAMPERS, VIBRATORY COMPACTORS OR OTHER APPROVED MEANS. BACKFILL BENEATH PAVED SURFACES SHALL BE COZMPACTED TO NOT LESS THAN 95 PERCENT OF AASHTO T99, METHOD C.
- 3) <u>SUITABLE MATERIAL</u>: 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; ROCKS OVER 6 INCHES IN LARGEST DIMENSION; FROZEN EARTH AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.

IN SEEDED AREAS, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAD, ROCKS UNDER 12", FROZEN EARTH OR CLAY, IF HE/SHE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EAST ACCESS TO THE PIPE WILL BE PRESERVED.

- 4) 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.
- 5) DRAINAGE PIPE: PIPE MATERIALS SHALL BE POLYETHYLENE (SEE SPECIFICATIONS).
- 6) W=MAXIMUM ALLOWABLE TRENCH WIDTH: W SHALL BE THE MAXIMUM PAYMENT WIDTH



7 | 1/7/2021 | PB SUBMITTAL 6 | 12/3/2020 | PB SUBMITTAL 5 | 10/28/2020 | PB SUBMITTAL 4 | 10/10/2020 | REVISIONS 3 9/21/2020 | TAC SUBMITTAL 2 8/17/2020 | TAC SUBMITTAL TAC SUBMITTAL 1 8/4/2020 DATE DESCRIPTION OF ISSUE SCALE: 1" = 10'CHECKED: A.ROSS DDD A.ROSS ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying

> **EROSION CONTROL PLAN**

909 Islington St. Portsmouth, NH 03801

(603) 433-7560

SARATOGA WAY Tax Map 212, Lots 112 & 113 Portsmouth, NH

OWNER OF RECORD Raleigh Way Holding Group, LLC 1 Middle Street, Suite 1

Portsmouth, NH 03801 JOB NUMBER DWG. NO. 19-097 | 7 OF 10 7

FOR ROCK EXCAVATION (TRENCH) AND FOR ORDERED EXCAVATION BELOW GRADE.

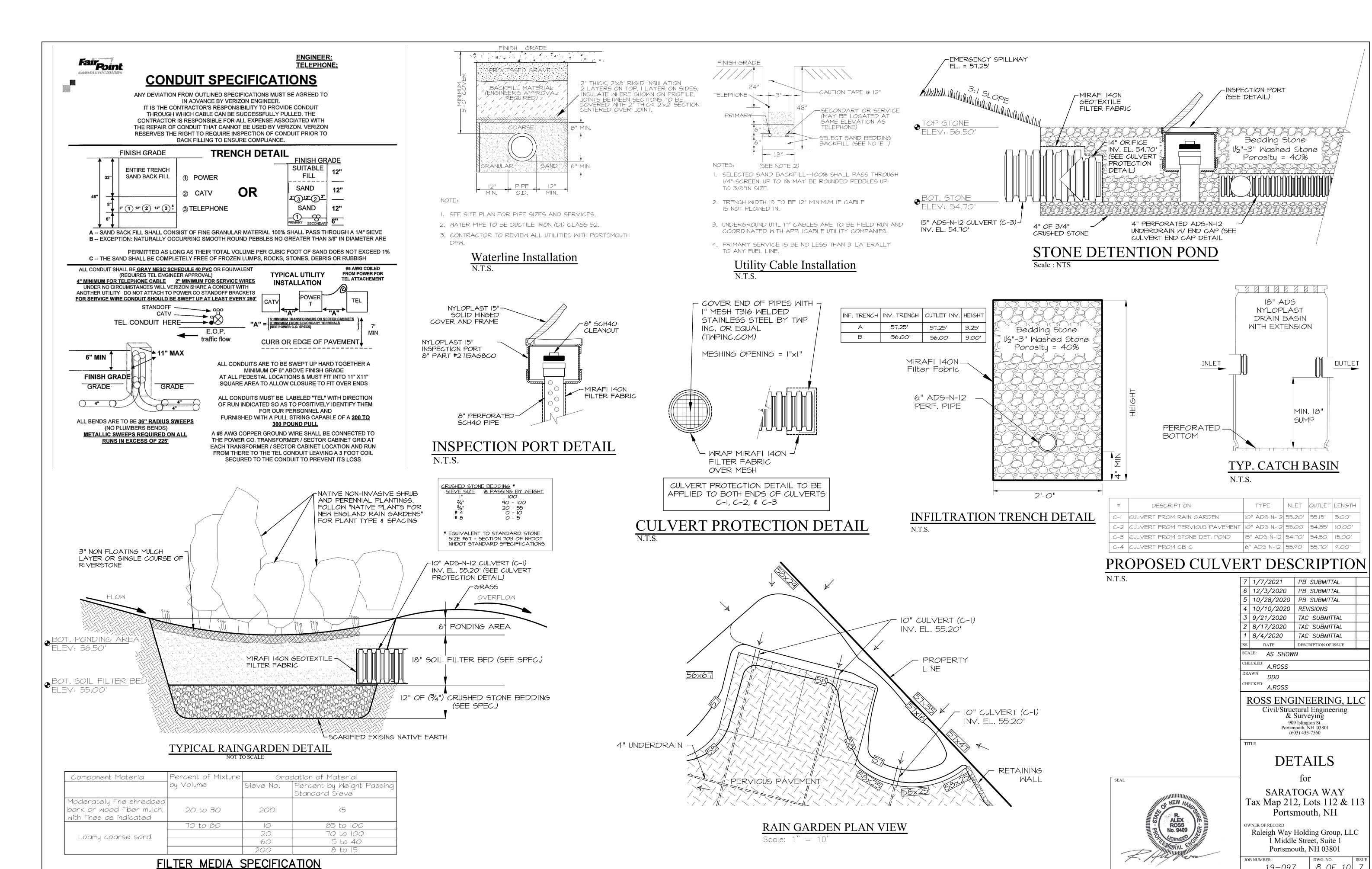
INSERT REBAR TO REMOVE AND DUMP SILTSACK BASIN

SILTSACK IS TO BE SECURED BY WEIGHT OF BASIN GRATE TO PREVENT SEDIMENT FROM ENTERING THE DRAIN LINE

INSTALL SILTSACK TO CATCH

BASIN 3 (SEE SHEET 3)

Siltsack N.T.S.



19-097 | 8 OF 10 7

CONSTRUCTION SPECIFICATIONS FOR POROUS ASPHALT

REFERENCE DOCUMENT: UNHSC DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS, UNH STORMWATER CENTER, FEBRUARY, 2014.

INSTALLATION RECOMMENDATIONS

THE FOLLOWING RECOMMENDATIONS WILL HELP ASSURE THAT THE POROUS ASPHALT PAVEMENT IS PROPERLY INSTALLED.

. THE FULL PAVEMENT SPECIFICATION MUST BE FOLLOWED CONSCIENTIOUSLY DURING CONSTRUCTION. IT IS BASED ON UNHSC DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS. THE UNH SPECIFICATION INCLUDE NUMEROUS VITAL PROVISIONS FOR AGGREGATE AND BITUMINOUS MATERIALS, THEIR PLACEMENT, AND QUALITY CONTROL. AMONG ITS

NOTABLE PROVISIONS ARE THE FOLLOWING EXAMPLES: - OPEN-GRADED AGGREGATE TO MAKE ALL PAVEMENT LAYERS POROUS AND PERMEABLE: - STIFF ASPHALT BINDER TO ADHERE TO THE AGGREGATE PARTICLES AND RESIST "DRAINDOWN" THROUGH THE PAVEMENT'S PORES, ENHANCING THE MATERIAL'S PERFORMANCE AND DURABILITY; - A SPECIFIC LIMIT ON ALLOWABLE DRAINDOWN, AND ADDITION OF A

STYRENE-BUTADIENE-STYRENE (SBS) POLYMER ADDITIVE TO HELP MEET THAT REQUIREMENT; - THE POROUS PAVEMENT IS TO BE INSTALLED ONLY AFTER MAJOR CONSTRUCTION IS COMPLETED, SO THAT CONSTRUCTION TRAFFIC WILL NOT TRACK POTENTIALLY CLOGGING SEDIMENT ONTO THE PAVEMENT SURFACE. FOR CONSTRUCTION ACCESS, A TEMPORARY SURFACE WILL BE INSTALLED, SIMILAR IN CONSTRUCTION TO A STANDARD STABILIZED CONSTRUCTION ENTRANCE. THIS TYPE OF SURFACE CAN BEAR CONSTRUCTION TRAFFIC WITHOUT ERODING. - PROMINENT AND REPEATED STATEMENTS OF THE SPECIAL NATURE AND PURPOSE OF POROUS PAVEMENT, AND THE NECESSITY OF COMPLYING STRICTLY WITH THESE DISTINCTIVE SPECIFICATIONS.

- PROTECTION OF THE FINISHED POROUS ASPHALT SURFACE FROM TRACKING OF CONSTRUCTION SEDIMENT.

2. THOROUGH COMMUNICATION WITH THE POROUS ASPHALT SUPPLIER AND PAVEMENT INSTALLER IS ESSENTIAL. THEY MUST UNDERSTAND THE POROUS PAVEMENT'S SPECIAL OBJECTIVES, THE SPECIAL MATERIALS AND PROCEDURES NECESSARY TO MAKE IT EFFECTIVE, AND WHY COMPLIANCE WITH SPECIFICATIONS IS ESSENTIAL. TO THIS END, THE SPECIFICATIONS STATE PROMINENTLY AND REPEATEDLY THE SPECIAL NATURE AND PURPOSE OF THE POROUS MATERIALS. IN ADDITION, THE PROJECT ENGINEER SHOULD MEET WITH THE CONTRACTORS IN PERSON TO REVIEW THE SPECIFICATIONS AND MAKE SURE THE CONTRACTORS UNDERSTAND THE OBJECTIVES. HE SHOULD OBSERVE THE CONTRACTORS ON-SITE FREQUENTLY, TO MAKE SURE THE OBJECTIVES ARE CARRIED OUT. HE SHOULD MAINTAIN A WRITTEN RECORD DOCUMENTING REVIEW AND APPROVAL AT CRITICAL PROJECT STAGES SUCH AS EXCAVATION OF THE SUB GRADE AND QUALITY CHECKS OF BASE AND SURFACE MATERIALS. HE SHOULD INSPECT THE SITE TO MAKE SURE CONSTRUCTION VEHICLES ARE NOT ALLOWED TO TRAVERSE EXCAVATED SUB GRADE OR THE PAVEMENT STRUCTURE AT ANY INAPPROPRIATE STAGE. HE SHOULD FORBID CONSTRUCTION TRAFFIC FROM TRACKING SOIL ONTO THE FINISHED PAVEMENT SURFACE.

INSTALLATION

A. PERCOLATION BEDS I. OWNER SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO ALL PERCOLATION BED AND POROUS PAVING WORK.

2. SUB GRADE PREPARATION a. EXISTING SUB GRADE UNDER BED AREAS SHALL NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO STONE BED PLACEMENT. b. WHERE EROSION OF SUB GRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHALL BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE OR EQUIVALENT AND LIGHT TRACTOR.

c. BRING SUB GRADE OF STONE PERCOLATION BED TO LINE, GRADE, AND ELEVATIONS INDICATED. FILL AND LIGHTLY REGRADE ANY AREAS DAMAGED BY EROSIONS, PONDING, OR TRAFFIC COMPACTION BEFORE THE PLACING OF STONE. ALL BED BOTTOMS ARE LEVEL

GRADE. 3. RECHARGE BED INSTALLATION

a. UPON COMPLETION OF SUB GRADE WORK, THE ENGINEER SHALL BE NOTIFIED AND SHALL INSPECT AT HIS DISCRETION BEFORE PROCEEDING WITH PERCOLATION BED INSTALLATION. b. PERCOLATION BED AGGREGATE SHALL BE PLACED IMMEDIATELY AFTER APPROVAL OF SUB GRADE PREPARATION. ANY ACCUMULATION OF DEBRIS OR SEDIMENT WHICH HAS TAKEN PLACE AFTER APPROVAL OF SUB GRADE SHALL BE REMOVED PRIOR TO INSTALLATION OF AGGREGATE AT NO EXTRA COST TO THE OWNER.

c. INSTALL COARSE AGGREGATE (CRUSHED STONE) IN 8-INCH MAXIMUM LIFTS, TO A MAXIMUM OF 95% STANDARD PROCTOR COMPACTION, KEEPING EQUIPMENT MOVEMENT OVER STORAGE BED SUBGRADES TO A MINIMUM. INSTALL AGGREGATE TO GRADES INDICATED ON THE DRAWINGS.

d. INSTALL FILTER COARSE (BANK RUN GRAVEL) IN 8-INCH MAXIMUM LIFTS, TO A MAXIMUM OF 95% STANDARD PROCTOR COMPACTION, KEEPING EQUIPMENT MOVEMENT OVER STORAGE BED SUBGRADES TO A MINIMUM. INSTALL AGGREGATE TO GRADES INDICATED ON THE DRAWINGS. e. INSTALL CHOKER BASE COURSE (SEE MATERIALS SECTION) AGGREGATE EVENLY OVER SURFACE OF STONE BED, SUFFICIENT TO ALLOW PLACEMENT OF PAVEMENT, AND NOTIFY ENGINEER FOR APPROVAL. CHOKER BASE COURSE SHALL BE SUFFICIENT TO ALLOW FOR EVEN PLACEMENT OF ASPHALT BUT NO LESS THAN 4-INCH IN DEPTH.

4. SURROUNDING AREAS

a. BEFORE THE POROUS PAVEMENT IS INSTALLED, ADJACENT SOIL AREAS SHOULD BE SLOPED AWAY FROM ALL PAVEMENT EDGES, TO PREVENT POTENTIAL SEDIMENT FROM WASHING ON THE

b. TO ACCOMPLISH THIS, A SEQUENCE OF TEMPORARY SWALES SHOULD BE EXCAVATED INTO ALL EARTHEN (UNPAVED) AREAS AT LEAST ON THE UPHILL SIDES OF THE PAVEMENT, AND WHERE NECESSARY, TO BELOW THE CURB OR PAVEMENT ELEVATION. ITS SHAPE AND PLANTINGS CAN BE INTEGRATED WITH THE PROJECT'S ARCHITECTURE AND LANDSCAPE, AND DESIGNED TO MAXIMIZE INFILTRATION. SWALE OVERFLOW, WHEN IT OCCURS, CAN BE DISCHARGED FROM ONE SWALE TO ANOTHER BY CONNECTING PIPES UNDER DRIVEWAYS.

c. BUILDING BASEMENTS AND FOUNDATIONS SHOULD BE WATERPROOFED AS NECESSARY, WHERE THE POROUS PAVEMENT ABUTS BUILDINGS.

INSTALLATION (CONT...)

B. POROUS ASPHALT

SHADE AWAY FROM ARTIFICIAL HEAT:

I. TRANSPORTING MATERIAL a. TRANSPORTING OF MIX TO THE SITE SHALL BE IN VEHICLES WITH SMOOTH, CLEAN DUMP BEDS THAT HAVE BEEN SPRAYED WITH A

NON-PETROLEUM RELEASE AGENT. b. THE MIX SHALL BE COVERED DURING TRANSPORT TO CONTROL COOLING.

2. POROUS BITUMINOUS ASPHALT SHALL NOT BE STORED IN EXCESS OF 90 MINUTES BEFORE PLACEMENT 3. ASPHALT PLACEMENT

a. THE POROUS BITUMINOUS SURFACE COURSE SHALL BE LAID IN ONE OR TWO LIFTS DIRECTLY OVER THE CHOKER COARSE, FILTER COARSE, AND CRUSHED STONE BASE COURSE TO DEPTH INDICATED. IF LAID IN TWO LIFTS THE PAVEMENT SHALL BE CLEANED AND INSPECTED BY THE ENGINEER BEFORE PLACEMENT OF THE SECOND LIFT.

b. THE LAYING TEMPERATURE OF THE BITUMINOUS MIX SHALL BE BETWEEN 275 DEGREES FAHRENHEIT AND 325 DEGREES FAHRENHEIT (BASED ON RECOMMENDATIONS OF THE ASPHALT SUPPLIER). c. INSTALLATION SHALL TAKE PLACE WHEN AMBIENT TEMPERATURES ARE 55 DEGREES FAHRENHEIT OR ABOVE, WHEN MEASURED IN THE

d. THE USE OF A REMIXING MATERIAL TRANSFER DEVICE BETWEEN THE TRUCKS AND THE PAVER IS HIGHLY RECOMMENDED TO ELIMINATE COLD LUMPS IN THE MIX. e. THE POLYMER-MODIFIED ASPHALT IS VERY DIFFICULT TO RAKE, A WELL-HEATED SCREED SHOULD BE USED TO MINIMIZE THE NEED

FOR RAKING. F. COMPACTION OF THE SURFACE COURSE SHALL TAKE PLACE WHEN THE SURFACE IS COOL ENOUGH TO RESIST AN 8-12-TON ROLLER. BREAKDOWN ROLLING SHALL OCCUR WHEN THE MIX TEMPERATURE IS BETWEEN 275 DEGREES FAHRENHEIT AND 325 DEGREES FAHRENHEIT. INTERMEDIATE ROLLING SHALL OCCUR WHEN THE MIX TEMPERATURE IS BETWEEN 150 DEGREES FAHRENHEIT AND 200 DEGREES FAHRENHEIT. THE CESSATION TEMPERATURE OCCURS AT APPROXIMATELY 175 DEGREES FAHRENHEIT, AT WHICH POINT THE MIX BECOMES RESISTANT TO COMPACTION. IF COMPACTION HAS NOT BEEN DONE AT TEMPERATURE GREATER THAN THE CESSATION

TEMPERATURE, THE PAVEMENT WILL NOT ACHIEVE ADEQUATE DURABILITY. 4. IN THE EVENT CONSTRUCTION SEDIMENT IS INADVERTENTLY DEPOSITED ON THE FINISHED POROUS SURFACE, IT MUST BE IMMEDIATELY

5. AFTER FINAL ROLLING, NO VEHICULAR TRAFFIC OF ANY KIND SHALL BE PERMITTED ON THE SURFACE UNTIL COOLING AND HARDENING HAS TAKEN PLACE, AND IN NO CASE WITHIN THE FIRST 48 HOURS. PROVIDE BARRIERS AS NECESSARY AT NO EXTRA COST TO THE OWNER TO PREVENT VEHICULAR USE; REMOVE AT THE DISCRETION OF THE ENGINEER.

6. STRIPING PAINT FOR TRAFFIC LANES AND PARKING BAYS SHALL BE CHLORINATED RUBBER BASE, FACTORY MIXED, NON-BLEEDING, FAST DRYING, BEST QUALITY, WHITE TRAFFIC PAINT WITH A LIFE EXPECTANCY OF TWO YEARS UNDER NORMAL TRAFFIC USE. a. PAVEMENT-MARKING PAINT; LATEX, WATER-BASE EMULSION, READY-MIXED, COMPLYING WITH PS TT-P-1952.

b. SWEEP AND CLEAN SURFACE TO ELIMINATE LOOSE MATERIAL AND DUST. c. PAINT 4 INCH WIDE PARKING STRIPING AND TRAFFIC LANE STRIPING IN ACCORDANCE WITH LAYOUTS OF PLAN. APPLY PAINT WITH MECHANICAL EQUIPMENT TO PRODUCE UNIFORM STRAIGHT EDGES. APPLY IN TWO COATS AT MANUFACTURER'S RECOMMENDED RATES. PROVIDE CLEAR, SHARP LINES USING WHITE TRAFFIC PAINT, INSTALLED IN ACCORDANCE WITH NHDOT SPECIFICATIONS. 7. MORK SHALL BE DONE EXPERTLY THROUGHOUT, WITHOUT STAINING OR INJURY TO OTHER MORK. TRANSITION TO ADJACENT IMPERVIOUS BITUMINOUS PAVING SHALL BE MERGED NEATLY WITH FLUSH, CLEAN LINE. FINISHED PAVING SHALL BE EVEN, WITHOUT POCKETS, AND GRADED TO ELEVATIONS SHOWN ON DRAWING.

8. POROUS PAVEMENT BEDS SHALL NOT BE USED FOR EQUIPMENT OR MATERIALS STORAGE DURING CONSTRUCTION, AND UNDER NO CIRCUMSTANCES SHALL VEHICLES BE ALLOWED TO DEPOSIT SOIL ON PAVED POROUS SURFACES.

9. REPAIR OF DAMAGED PAVING a. ANY EXISTING PAVING ON OR ADJACENT TO THE SITE THAT HAS BEEN DAMAGED AS A RESULT OF CONSTRUCTION WORK SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER WITHOUT ADDITIONAL COST TO THE OWNER

10. FULL QUALITY CONTROL a. THE FULL PERMEABILITY OF THE PAVEMENT SURFACE SHALL BE TESTED BY APPLICATION OF CLEAN WATER AT THE RATE OF AT LEAST 5 GPM OVER THE SURFACE, USING A HOSE OR OTHER DISTRIBUTION DEVISE, WATER USED FOR THE TEST SHALL BE CLEAN, FREE OF SUSPENDED SOLIDS AND DELETERIOUS LIQUIDS AND WILL BE PROVIDED AT NO EXTRA COST TO THE OWNER. ALL APPLIED WATER SHALL INFILTRATE DIRECTLY WITHOUT PUDDLE FORMATION OR SURFACE RUNOFF, AND SHALL BE OBSERVED BY THE ENGINEER AND

b. TEST IN-PLACE BASE AND SURFACE COURSE FOR COMPLIANCE WITH REQUIREMENTS FOR THICKNESS AND SURFACE SMOOTHNESS REPAIR OR REMOVE AND REPLACE UNACCEPTABLE WORK AS DIRECTED BY THE OWNER.

c. SURFACE SMOOTHNESS: TEST FINISHED SURFACE FOR SMOOTHNESS AND EVEN DRAINAGE, USING A TEN-FOOT TO CENTERLINE OF PAVED AREA. SURFACE WILL NOT BE ACCEPTED IF GAPS OR RIDGES EXCEED 3/16 OF AN INCH.

MAINTENANCE SPECIFICATIONS FOR POROUS ASPHALT

THE FOLLOWING RECOMMENDATIONS WILL HELP ASSURE THAT THE PAVEMENT IS MAINTAINED TO PRESERVE ITS HYDROLOGIC EFFECTIVENESS.

WINTER MAINTENANCE:

I. SANDING FOR WINTER TRACTION IS PROHIBITED. DEICING IS PERMITTED (NaCI, MQCI2, OR EQUIVALENT). REDUCED SALT APPLICATION OF 50% OVER TRADITIONAL PAVEMENT APPLICATION RATES, NONTOXIC, ORGANIC DEICERS, APPLIED EITHER AS BLENDED, MAGNESIUM CHLORIDE-BASED LIQUID PRODUCTS OR AS PRETREATED SALT, ARE PREFERABLE.

2. PLOWING IS ALLOWED, BLADE SHOULD BE SLIGHTLY RAISED (ALTHOUGH NOT NECESSARY, THIS WILL PREVENT PAVEMENT SCARING). ICE AND LIGHT SNOW ACCUMULATION ARE GENERALLY NOT AS PROBLEMATIC AS FOR STANDARD ASPHALT. SNOW WILL ACCUMULATE DURING HEAVIER STORMS AND SHOULD BE PLOWED AFTER 2 TO 4 INCHES OF SNOW ACCUMULATION.

ROUTINE MAINTENANCE:

I. ASPHALT SEAL COATING MUST BE ABSOLUTELY FORBIDDEN. SURFACE SEAL COATING IS NOT REVERSIBLE. 2. THE PAVEMENT SURFACE SHOULD BE VACUUMED 2 TO 4 TIMES PER YEAR, ESPECIALLY AFTER WINTER AND FALL SEASONS, AND AT ANY ADDITIONAL TIMES SEDIMENT IS SPILLED, ERODED, OR TRACKED ONTO THE SURFACE.

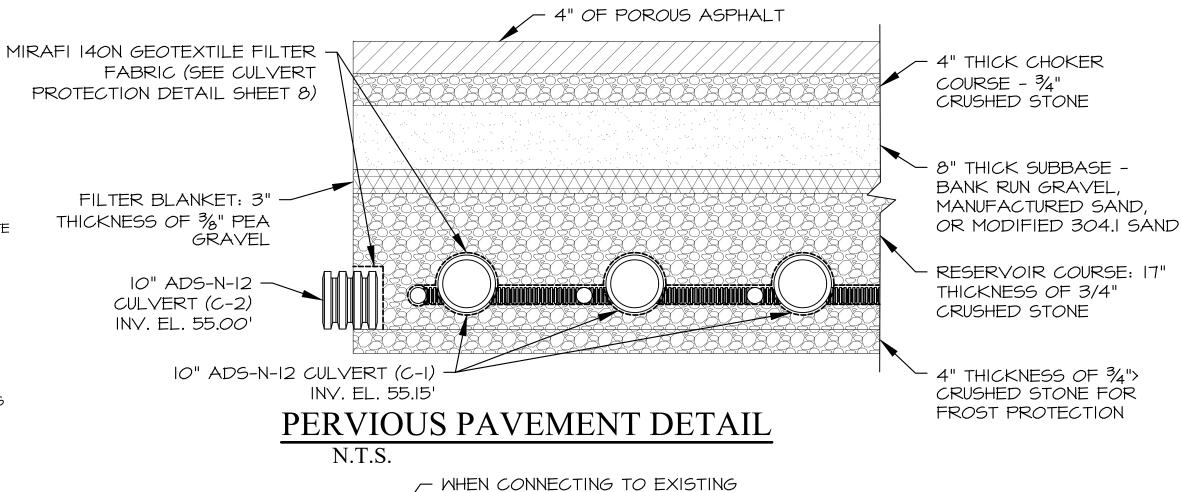
3. PLANTED AREAS ADJACENT TO PERVIOUS PAVEMENT SHOULD BE WELL MAINTAINED TO PREVENT SOIL WASHOUT ONTO THE PAVEMENT. IF ANY BARE SPOTS OR ERODED AREAS ARE OBSERVED WITHIN THE PLANTED AREAS, THEY SHOULD BE REPLANTED AND/OR STABILIZED AT ONCE 4. IMMEDIATELY CLEAN ANY SOIL DEPOSITED ON PAVEMENT. SUPERFICIAL DIRT DOES NOT NECESSARILY CLOG THE PAVEMENT VOIDS. HOWEVER, DIRT THAT IS GROUND IN REPEATEDLY BY TIRES CAN LEAD TO CLOGGING. THEREFORE, TRUCKS OR OTHER HEAVY VEHICLES SHOULD BE PREVENTED FROM

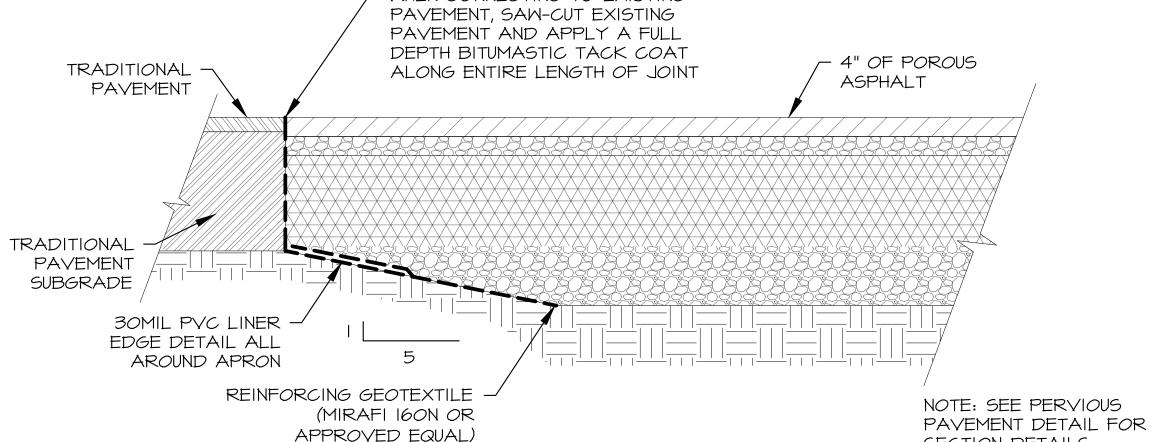
TRACKING OR SPILLING DIRT ONTO THE PAVEMENT. 5. DO NOT ALLOW CONSTRUCTION STAGING, SOIL/MULCH STORAGE, ETC. ON UNPROTECTED PAVEMENT SURFACE.

6. REPAIRS: FOR THE POROUS ASPHALT PARKING LOT, POTHOLES OF LESS THAN 50 SQUARE FEET CAN BE PATCHED BY ANY MEANS SUITABLE WITH STANDARD PAVEMENT OR A PERVIOUS MIX IS PREFERRED. FOR AREAS GREATER THAN 50 SQ. FT. IS IN NEED OF REPAIR, APPROVAL OF PATCH TYPE SHOULD BE SOUGHT FROM A QUALIFIED ENGINEER. ANY REQUIRED REPAIR OF DRAINAGE STRUCTURES SHOULD BE DONE PROMPTLY TO ENSURE CONTINUED PROPER FUNCTIONING OF THE SYSTEM. REPAIRS TO THE POROUS ASPHALT SIDEWALK SHALL BE MADE WITH A PERVIOUS MIX.

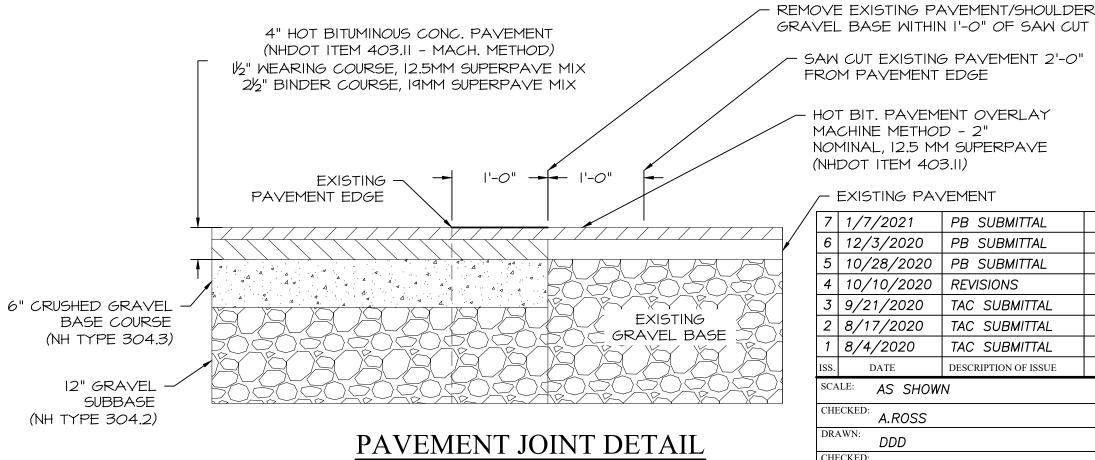
7. WRITTEN AND VERBAL COMMUNICATION TO THE POROUS PAVEMENT'S FUTURE OWNER SHOULD MAKE CLEAR THE PAVEMENT'S SPECIAL PURPOSE AND SPECIAL MAINTENANCE REQUIREMENTS SUCH AS THOSE LISTED HERE.

INSPECTION PORT





PERVIOUS PAVEMENT TRANSITION DETAIL



MIX SUMMARY

I. POROUS ASPHALT PAVEMENT MIX PER THE CURRENT UNH STORM WATER CENTER DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS MANUAL.

2. NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR HAS SUBMITTED AND THE ENGINEER HAS APPROVED A MIX DESIGN INCLUDING THE PERCENTAGE OF EACH INGREDIENT INCLUDING BINDER, POLYMER, AND THE JOB-MIX FORMULA FROM SUCH A COMBINATION. THE JOB-MIX FORMULA SHALL ESTABLISH A SINGLE PERCENTAGE OF AGGREGATE PASSING SIEVE AND A SINGLE PERCENTAGE OF BITUMINOUS MATERIAL TO BE ADDED TO THE AGGREGATE. NO CHANGE IN THE JOB-MIX FORMULA MAY BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER. THE JOB-MIX FORMULA MUST FALL WITH THE MASTER RANGE SPECIFIED IN COMPOSITION OF MIXTURE TABLE.

TRANSPORTING MATERIAL: SEE CONSTRUCTION AND INSTALL SPECIFICATIONS

GRAVEL BASE WITHIN I'-O" OF SAW CUT - SAW CUT EXISTING PAVEMENT 2'-O" FROM PAVEMENT EDGE HOT BIT. PAVEMENT OVERLAY MACHINE METHOD - 2" NOMINAL, 12.5 MM SUPERPAVE (NHDOT ITEM 403.II) - EXISTING PAVEMENT

SECTION DETAILS

/			
, /	7	1/7/2021	PB SUBMITTAL
	6	12/3/2020	PB SUBMITTAL
	5	10/28/2020	PB SUBMITTAL
	4	10/10/2020	REVISIONS
	3	9/21/2020	TAC SUBMITTAL
	2	8/17/2020	TAC SUBMITTAL
1	1	8/4/2020	TAC SUBMITTAL
	ISS.	DATE	DESCRIPTION OF ISSUE
•	SCA	LE: AS SHOW	N

CHECKED: A.ROSS DDD A.ROSS

> ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801

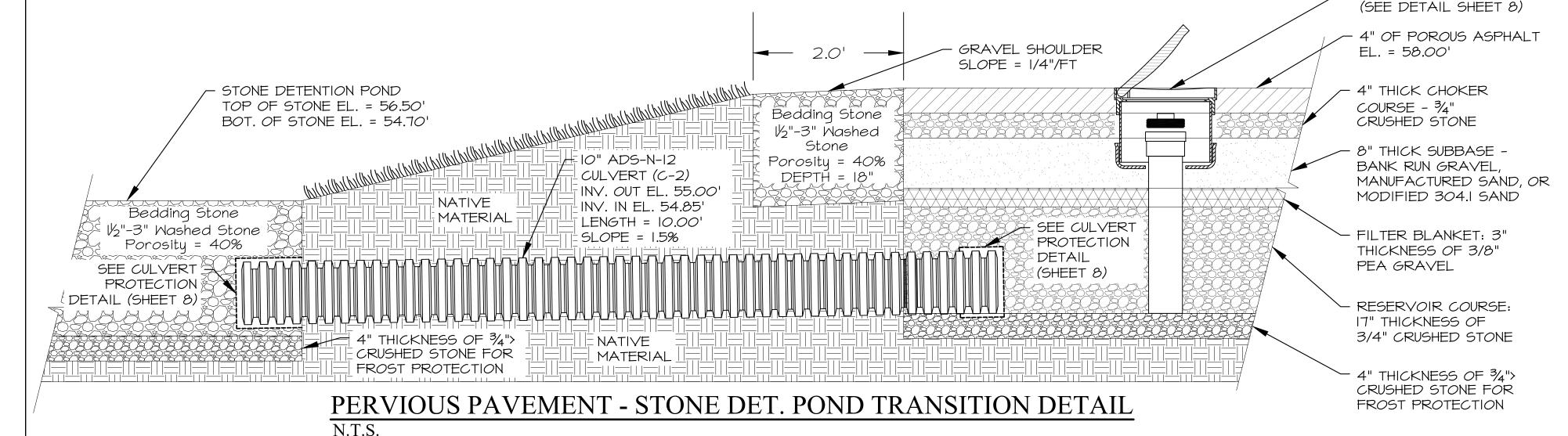
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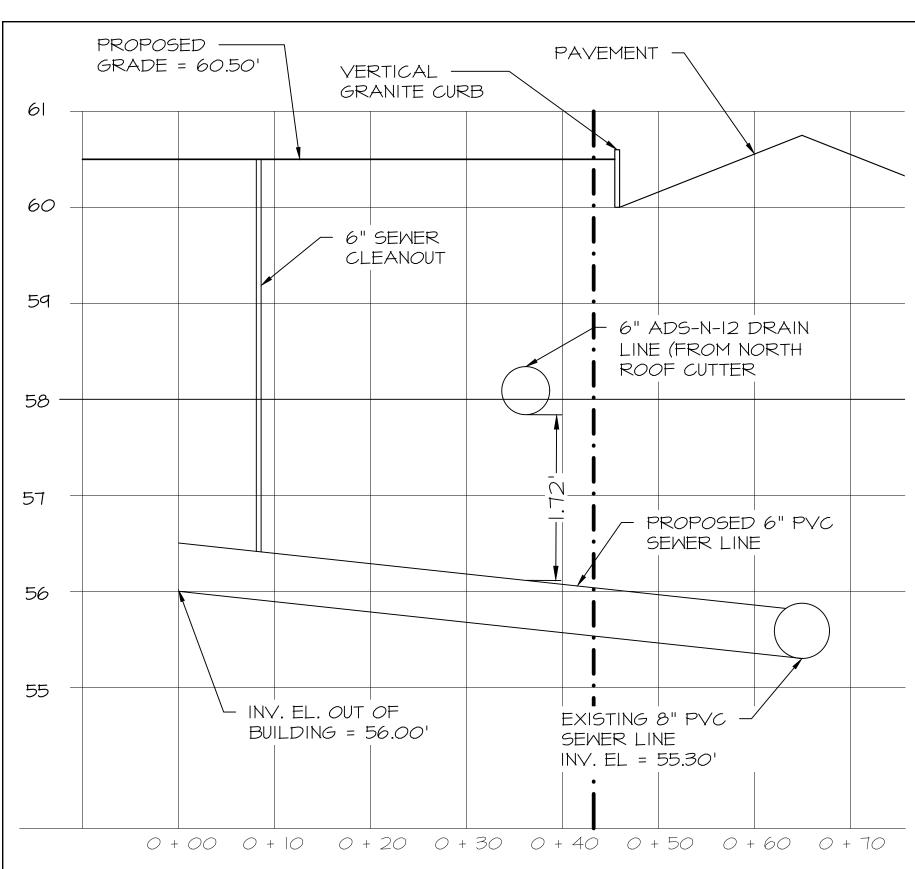
PAVEMENT DETAILS

SARATOGA WAY Tax Map 212, Lots 112 & 113 Portsmouth, NH

OWNER OF RECORD Raleigh Way Holding Group, LLC 1 Middle Street, Suite 1

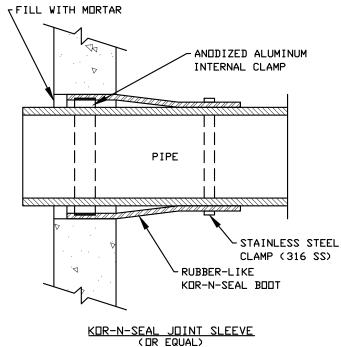
Portsmouth, NH 03801 JOB NUMBER DWG. NO. 9 OF 10 7 19-097





SEWER PROFILE

SCALE: HORIZONTAL: I" = 10 VERTICAL: I" = I'



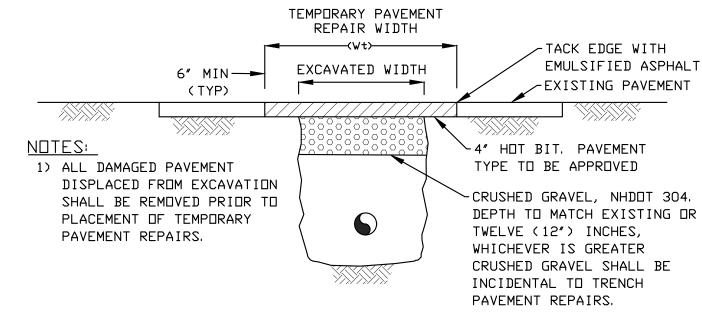
MANHOLE PENETRATIONS Scale: N.T.S.

PAVEMENT REPAIR NOTE: THE DIMENSIONS SHOWN SHALL BE CONSIDERED MINIMUM PAVEMENT PAYMENT WIDTHS FOR O-10' DEEP CONSTRUCTION. Wt AND Wp SHALL BE INCREASED BY 4'-0" FOR TRENCHES 10' TO 15' AND BY 8'-0"

MINIMUM TRENCH PAVEMENT WIDTHS

FOR TRENCHES 15' TO 20' IN DEPTH.

PIPE I.D.	Wt (INCHES).	Wp (INCHES)
1-21 INCHES	72	108
24-30 INCHES	84	120
> 30 INCHES	96	132



TEMPORARY TRENCH PAVEMENT REPAIR

WATER SYSTEM NOTES:

- 1) ALL WATER SERVICES SHALL BE AT LEAST 1" COPPER UNLESS THE EXISTING SERVICE IS LARGER.
- 2) NO WORK SHALL BE PERFORMED ON PRIVATE PROPERTY UNTIL THE OWNER HAS SIGNED A MEMORANDUM OF UNDERSTANDING WITH THE CITY.
- 3) THE CONTRACTOR SHALL PHASE THE CONSTRUCTION OF THE WATER TO MINIMIZE DISRUPTION TO THE EXISTING SYSTEM. THE SYSTEM SHALL NOT BE IMPACTED OR SHUT DOWN WITHOUT PROPER NOTICE AND ANY DAMAGE CAUSED BY A SHUTDOWN WILL BE PAID FOR BY THE CONTRACTOR. MAINTENANCE OF THE WATER FLOW IS SUBSIDIARY TO THE WORK.
- 4) WATER SHUT DOWN NOTICES SHALL BE 3 WEEK DAYS IN ADVANCE OF THE SHUTDOWN.
- 5) THE WATER MAINS SHALL BE CONSTRUCTED OF 8" CEMENT LINED DUCTILE IRON EXCEPT FOR TIE LINES AND HYDRANT STUBS.
- 6) WATER SERVICE CURB STOPS SHALL BE SET 1/4" OF AN INCH BELOW GRADE IN THE SIDEWALK SURFACE IF POSSIBLE.
- 7) ALL EXISTING PIPES ABANDONED IN PLACE SHALL BE PLUGGED AT ALL OPEN
- 8) THE SYSTEM WILL BE TESTED FOR LEAKS, CONTAMINANTS.
- 9) NATION AND FLAWS PRIOR TO ACCEPTANCE BY THE CITY.
- 10) ALL EXISTING WATER GATE BOXES SHALL BE SET TO FINAL GRADE DURING THE ROAD WORK OPERATION.
- 11) ALL GATE VALVES SHALL BE RESTRAINED WITH MECHANICAL RESTRAINT JOINTS AND REINFORCED WITH THRUST BLOCKING.
- 12) ALL TEES, BENDS GATES AND CAPS SHALL BE USED WITH MECHANICAL RESTRAINT JOINTS AND REINFORCED WITH THRUST BLOCKING.
- 13) ALL TEES, BENDS GATES AND CAPS SHALL BE USED WITH MECHANICAL RESTRAINT JOINTS AND REINFORCED WITH THRUST BLOCKING.
- 14) MAINTAIN A MINIMUM DISTANCE OF 10' BETWEEN THE SEWER AND THE WATER SYSTEM EXCEPT FOR CROSSINGS WHICH SHALL BE CONSTRUCTED PER THE CURRENT
- 15) ALL PORTIONS OF THE NEW DUCTILE IRON WATER MAIN SYSTEM SHALL BE PROTECTED USING PLASTIC WRAPPINGS AND BRASS CONDUCTIVITY WEDGES. SEE SPECIFICATIONS.

ADD FITTINGS AS NECESSARY TO ENSURE THAT VALVES ARE INSTALLED NEARLY LEVEL.

GENERAL NOTES:

STATE APPROVED RULES.

- 1) THIS PLAN IS BASED ON A FIELD SURVEY PERFORMED BY ROSS ENGINEERING. EXISTING UTILITIES THAT ARE SHOWN ON THE PLANS WERE GATHERED FROM AVAILABLE STRUCTURES THAT WERE VIABLE, RECORD DRAWINGS OF THE VARIOUS UTILITY COMPANIES CAMERA INSPECTIONS AND OBSERVATIONS MADE. THERE IS NO GUARANTEE THAT THE UTILITIES SHOWN ARE EXACTLY AS PORTRAYED OF THAT OTHER UTILITIES THAT ARE NOT SHOWN DON'T EXIST. ALL THE STRUCTURES SHOWN HAVE MULTIPLE SERVICES AND MAY HAVE OLD CONNECTIONS THAT MAY HAVE NOT BEEN PROPERLY ABANDONED. THE BIDDER SHOULD ASSUME THAT EXTREME CAUTION AND HAND EXCAVATION MAY BE REQUIRED IN THESE OLDER PORTIONS OF THE CITY. NO EXTRA PAYMENTS WILL BE MADE FOR EXPLORATION OF DEFUNCT UTILITIES LEFT IN THE GROUND.
- 2) THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION, PROTECTION AND REPAIR (IF DAMAGED) OF THE EXISTING UTILITY INFRASTRUCTURE WITHIN THE BOUNDS OF THE PROJECT ONCE CONSTRUCTION HAS BEGUN. NOTIFY DIG SAFE AT LEAST 72 HOURS PRIOR TO THE BEGINNING OF EXCAVATION WORK, CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF CONFLICTS BETWEEN THE EXISTING AND
- 3) ALL CONFLICTS WITH GAS LINES SHALL BE COORDINATED WITH UNITIL, THE GAS COMPANY, AND SHALL BE SUBSIDIARY, THE GAS COMPANY WAS NOTIFIED OF DBVIOUS CONFLICTS PREVIOUSLY AND WAS TO LOCATE TEHIR MAINS AND SERVICES IN ACCORDANCE TO THE PROPOSED LAYOUT ON THIS PLAN. THE CITY MAKES NO GUARANTEES THAT THE ACTUAL AS BUILT LOCATIONS OF THE GAS LINES ARE AS SHOWN ON THESE PLANS.
- 4) THE CONTRACTOR SHALL MAINTAIN ONE PASSABLE LANE AND SAFE PASSAGE FOR RESIDENTS TO AND FROM THEIR BUSINESS AND DWELLINGS IN THE NEIGHBORHOOD. WORK THAT REQUIRES THE COMPLETE SHUT DOWN OF THE STREET HAS TO BE APPROVED BY THE ENGINEER PRIOR TO THE WORK COMMENCING.
- 5) THE STREETS IN THE PROJECT AREA WILL BE PASSABLE AND SAFE IN THE OPINION OF THE ENGINEER PRIOR TO WORK TERMINATING AT THE END OF THE
- 6) THE USE OF STEEL PLATES IN LIEU OF BACKFILLING WILL NOT BE ALLOWED UNLESS APPROVED BY THE DIRECTOR OF PUBLIC WORKS AHEAD OF TIME.
- 7) THESE PLANS HAVE BEEN CREATED TO BE USED TOGETHER WITH THE CONTRACT AND SPECIFICATIONS TO CREATE ONE COMPLETE BID AND CONSTRUCTION DOCUMENT.
- 8) THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL MATERIALS TO BE USED ON THIS PROJECT. THE CONTRACTOR SHALL NOT PURCHASE ANY MATERIALS UNTIL THEY HAVE BEEN APPROVED FOR USE BY THE DEPARTMENT.
- 9) THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL SURPLUS EARTHEN MATERIALS, PIPE, UNUSED CURBING, LEDGE, OLD OR UNUSED SEWER AND DRAINAGE STRUCTURES ETC.
- 10) THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL PROPERTY RESTORATION BOTH PUBLIC AND PRIVATE FOR DAMAGE DONE BY THE CONTRACTOR, RESTORATION WILL BE COMPLETED WITH NOT COST TO THE CITY.
- 11) TEMPORARY OR PERMANENT PAVING WILL BE RESTORED TO EXISTING LINE AND GRADE UNLESS DIRECTED BY THE ENGINEER.
- 12>DVERHEAD WIRES ARE SHOWN ON THE DRAWINGS BUT THE CITY MAKES NO WARRANTY TO THEIR COMPLETENESS OR THAT THEIR HEIGHT IS SUFFICIENT TO COMPLETE THE WORK, POLES THAT NEED TO BE HELD UP BY THE UTILITY COMPANY WILL BE PAID FOR BY THE CONTRACTOR WITH NO ADDITIONAL COST PASSED ON TO THE CITY.
- 13) THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REINSTALLATION OF TRAFFIC AND CONSTRUCTION SIGNS AS NEEDED TO ACCOMPLISH THE WORK. CITY SIGNS (STOP, NO PARKING, ONE WAY, ETC) NEED TO BE REINSTALLED AT THE END OF EACH WORKDAY.
- 14) ALL WORK BEING DONE IN THE CITY RIGHT-OF-WAY SHALL BE REVIEWED BY THE CITY AND INSPECTED BY THE CITY AS IT IS BEING DONE.

GRAVITY SEWER TRENCH NOTES:

- 1) DRDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN ON THE DRAWINGS.
- 2) BEDDING: SEE NOTE 7 OF STANDARD MANHOLE NOTES. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED.
- 3) <u>SAND BLANKET:</u> CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 90-100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE. NO STONE LARGER THAN 2" SHOULD BE 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. IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SDIL, LDAM, MUCK, DR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WILL BE PRESERVED.
- 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 AND LOCAL REGULATION.
- 6) WOOD SHEATHING, 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, NUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.
- 7) <u>W = MAXIMUM ALLOWABLE TRENCH PAYMENT WIDTH</u> FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE, FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 12 INCHES IN NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE DUTSIDE DIAMETER (D. D.) ALSO, W SHALL BE THE PAYMENT WIDTH.
- 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 REQUIREMENTS OF SECTION 520, (NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- 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) GRAVEL DRIVEWAY AND SHOULDER RESTORATION: CRUSHED GRAVEL IN DRIVEWAYS AND RDAD SHOULDERS SHALL MATCH EXISTING WITH A MINIMUM OF 12". GRAVEL REPLACEMENT SHALL BE SUBSIDIARY TO SEWER CONSTRUCTION AND WILL NOT BE MEASURED FOR PAYMENT.

NOTES:

- 1) ALL SEWER SERVICE EXTENSIONS SHALL BE 6", CONTRACTOR SHALL VERIFY EXISTING SEWER SERVICE LOCATION AND ELEVATION BY EXCAVATION OF TEST PITS OR OTHER MEANS PRIOR TO THE CONSTRUCTION OF SEWER MAIN.
- 2) SERVICE CONNECTION SHALL BE INSTALLED BELOW WATER MAIN WHERE POSSIBLE.
- 3) VARIOUS SIZE TRANSITION COUPLINGS SHALL BE STORED ON SITE FOR CONNECTION TO EXITING SERVICES.
- 4) CLEANDUTS SHALL BE INSTALLED AT EACH LIVE SEWER SERVICE CONNECTION, AS SHOWN ON THIS PLAN. REBAR SHALL BE PLACED AT SIDE OF CLEANOUT.
- 5) CLEANOUT SHALL BE USED TO PLUG AND TEST ALL NEW LATERALS WITH MINIMAL INTERRUPTION TO OPERATION OF HOMEOWNER SANITARY SYSTEM. CLEANDUTS SHALL BE INCIDENTAL TO SERVICE CONNECTIONS AND SHALL NOT BE CONSIDERED FOR PAYMENT.

24" MIN ---

1 1/2" WEARING COURSE-

1) ALL PAVEMENT REMOVAL SHALL BE

2) ALL TEMPORARY, DAMAGED OR

PRECEDED BY MACHINE CUTTING.

DEFECTIVE PAVEMENT SHALL BE

REMOVED PRIOR TO PLACEMENT TRENCH

FOR ALL TRENCHES CROSSING ROADWAY.

DIAMOND PATCHES SHALL MEET NHDOT

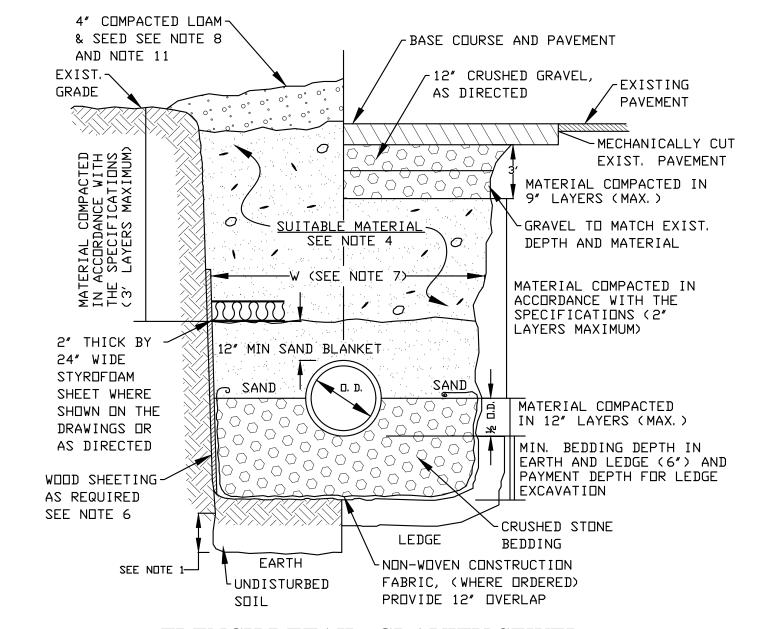
3) DIAMOND PATCHES, SHALL BE REQUIRED

NHDOT SECTION 401, TYPE E

NOTES:

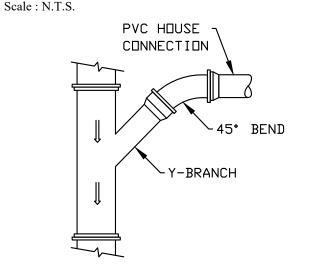
REPAIRS.

REQUIREMENTS.

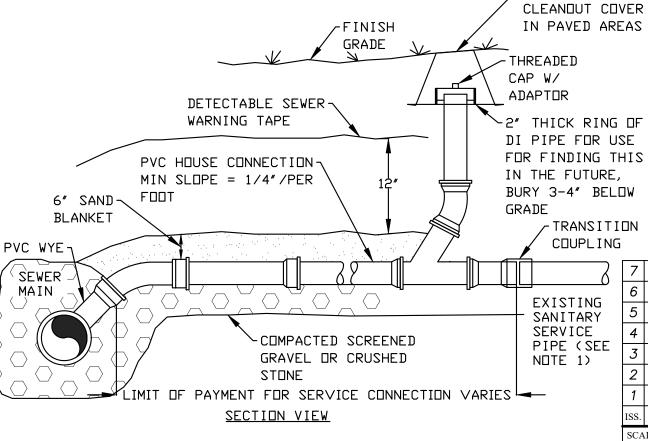


TRENCH DETAIL- GRAVITY SEWER

∠USE CI SERVICE



<u>PLAN</u>



SEWER

MAIN

ASPHALT

SASPHALT DEPTH TO

MIN, TYPE TO BE

TWELVE (12") INCHES,

WHICHEVER IS GREATER

INCIDENTAL TO TRENCH

PAVEMENT REPAIRS.

CRUSHED GRAVEL SHALL BE

APPROVED

MATCH EXISTING 4"

CRUSHED GRAVEL, NHDOT 304.

DEPTH TO MATCH EXISTING OR

/ EXISTING PAVEMENT

Scale: N.T.S.

·MECHANICALLY CUT JOINT (TYP)

TACK EDGE WITH EMULSIFIED

1/7/2021 PB SUBMITTAL 6 | 12/3/2020 | PB SUBMITTAL 5 | 10/28/2020 | PB SUBMITTAL 4 | 10/10/2020 | REVISIONS 3 | 9/21/2020 TAC SUBMITTAL 2 | 8/17/2020 | TAC SUBMITTAL 1 8/4/2020 TAC SUBMITTAL DATE DESCRIPTION OF ISSUE SCALE: 1'' = 10'

TYPICAL SERVICE CONNECTION

ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560

CHECKED: A.ROSS

DDD

A.ROSS

NOTES

SARATOGA WAY Tax Map 212, Lots 112 & 113 Portsmouth, NH

OWNER OF RECORD Raleigh Way Holding Group, LLC 1 Middle Street, Suite 1 Portsmouth, NH 03801

JOB NUMBER DWG. NO. 19-097 | 10 OF 10 | 7



PERMANENT PAVEMENT

REPAIR WIDTH

EXCAVATED WIDTH



4995 VT Route 14, PO Box 247, Sharon, VT 05065 • Ph 802-457-3151 • Fax 603-444-1343 • www.horizonsengineering.com

Project No. 16074

TO: Dexter R. Legg, Chairman of the Planning Board

Planning Board Members

FROM: Ryan Libbey, P.E.

Horizons Engineering, Inc.

<u>CC:</u> Peter Stith, Principal Planner, Planning Department

Elise D. Annunziata, Community Development Coordinator

DATE: December 29, 2021

SUBJECT: Woodbury Avenue Cooperative Inc., Site Plan Approval Extension

In accordance with the Site Plan Approval for 1338 Woodbury Avenue, dated March 18, 2021 (see Letter of Decision 3/23/21), Woodbury Avenue Cooperative, Inc. respectfully requests a one-year extension until March 18, 2023. We understand that this site plan approval shall expire unless a building permit is issued within a period of one (1) year from the date granted by the Planning Board unless an extension is granted by the Planning Board in accordance with Section 2.14 of the Site Review Regulations.

A demolition permit has been requested of Inspections and the construction bid for the above reference project has been advertised.

T:\16074 Woodbury Coop Subdivision\DOCS\Corresp



CITY OF PORTSMOUTH

Planning Department 1 Junkins Avenue Portsmouth, New Hampshire 03801 (603) 610-7216

PLANNING BOARD

March 23, 2021

Woodbury Avenue Cooperative, Inc. 1 Wakefield Street, Suite 5 Rochester, NH 03867

RE: Site Plan Review for property located at 1338 Woodbury Avenue (LU 20-198)

Dear Property Owner:

The Planning Board, at its regularly scheduled meeting of **Thursday, March 18, 2021**, considered your application for Site Plan Review approval for the demolition of two existing structures and replacement and reconfiguration of existing mobile home units with associated grading, pavement, lighting, utilities, landscaping and other site improvements. Said property is shown on Assessor Map 237 Lot 70 and lies within the Mixed Residential Business (MRB) District. As a result of said consideration, the Board voted grant your request with the following stipulations:

- 1) Property owners shall provide an access easement to the City for water valve access and leak detection. The easement shall be reviewed and approved by the Planning and Legal Departments prior to acceptance by the City Council.
- 2) The services in Echo Ave shall be terminated to the satisfaction of Portsmouth Water and Sewer Divisions.
- 3) Sewer connections to the City sewer system need to be witnessed by the Portsmouth Sewer Division. The entire system must be tested to ensure the system is tight with no groundwater leaks to the satisfaction of the City.
- 4) Work in the City of Portsmouth right-of-way shall require excavation permits.
- 5) Contractor shall meet with Portsmouth Water Division before starting project.

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

This site plan approval shall not be effective until a site plan agreement has been signed satisfying the requirements of Section 2.12 of the City's Site Review Approval Regulations.

Unless otherwise indicated above, applicant is responsible for applying for and securing a building permit from the Inspection Department prior to starting any project work.

The Planning Director must certify that all stipulations of approval have been completed prior to issuance of a building permit unless otherwise indicated above.

This site plan approval shall expire unless a building permit is issued within a period of one

(1) year from the date granted by the Planning Board unless an extension is granted by the Planning Board in accordance with Section 2.14 of the Site Review Regulations.

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

Very truly yours,

Dexter R. Legg, Chairman of the Planning Board

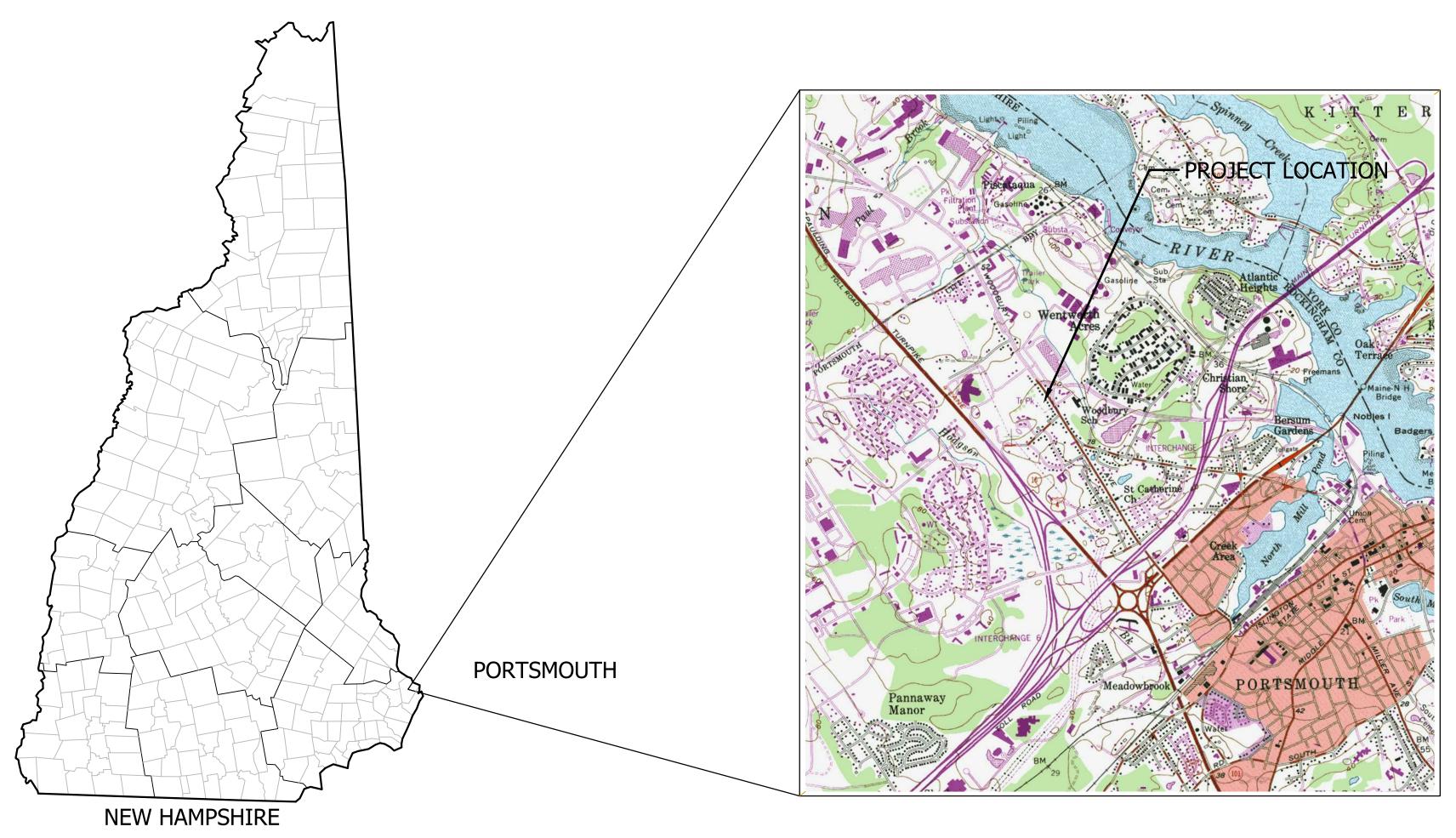
cc: Robert Marsilia, Chief Building Inspector Rosann Maurice-Lentz, City Assessor

Peter H. Rice, Director of Public Works

Stephen Boutin, Horizons Engineering, Inc.

WOODBURY COOPERATIVE SITE IMPROVEMENTS

PORTSMOUTH, NEW HAMPSHIRE FEBRUARY 2021



SCALE: 1" = 2000'

OWNER:

WOODBURY COOPERATIVE ROC-NH 7 WALL STREET CONCORD, NH 03301 (603) 224-6669 ENGINEER & SURVEYOR:



34 SCHOOL STREET LITTLETON, NH 03561 (603) 444-4111

INDEX OF SHEETS:

SHEET 1 : COVER

SHEET 2 : EXISTING CONDITIONS & DEMOLITION PLAN

SHEET 3 : SITE AND GRADING PLAN

SHEET 4 : UTILITY PLAN

SHEET 5 : POTABLE WATER DETAILS

SHEET 6 : SEWER DETAILS

SHEET 7 : ELECTRICAL DETAILS

SHEET 8 : MISCELLANEOUS DETAILS

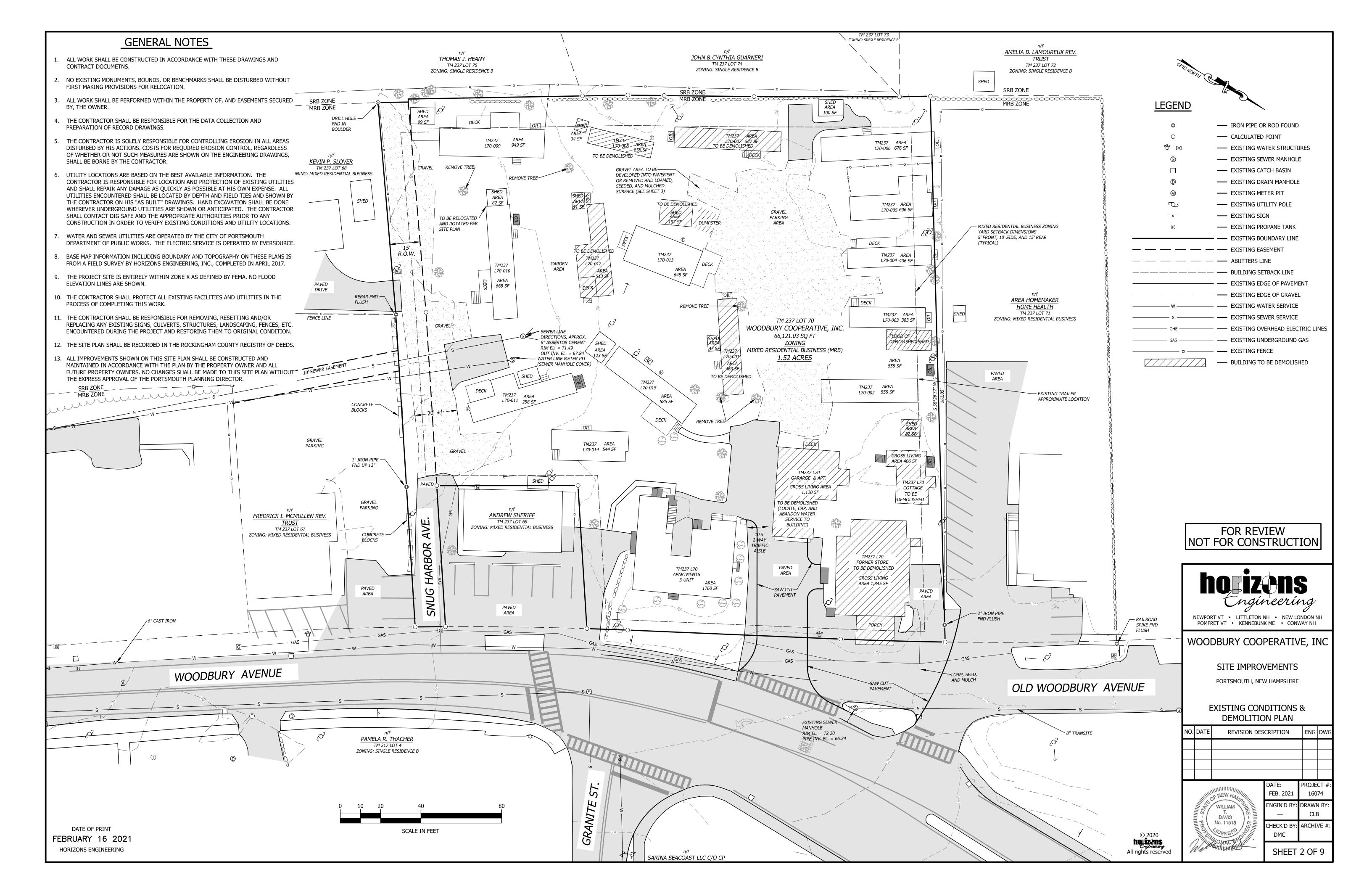
SHEET 9 : EROSION DETAILS

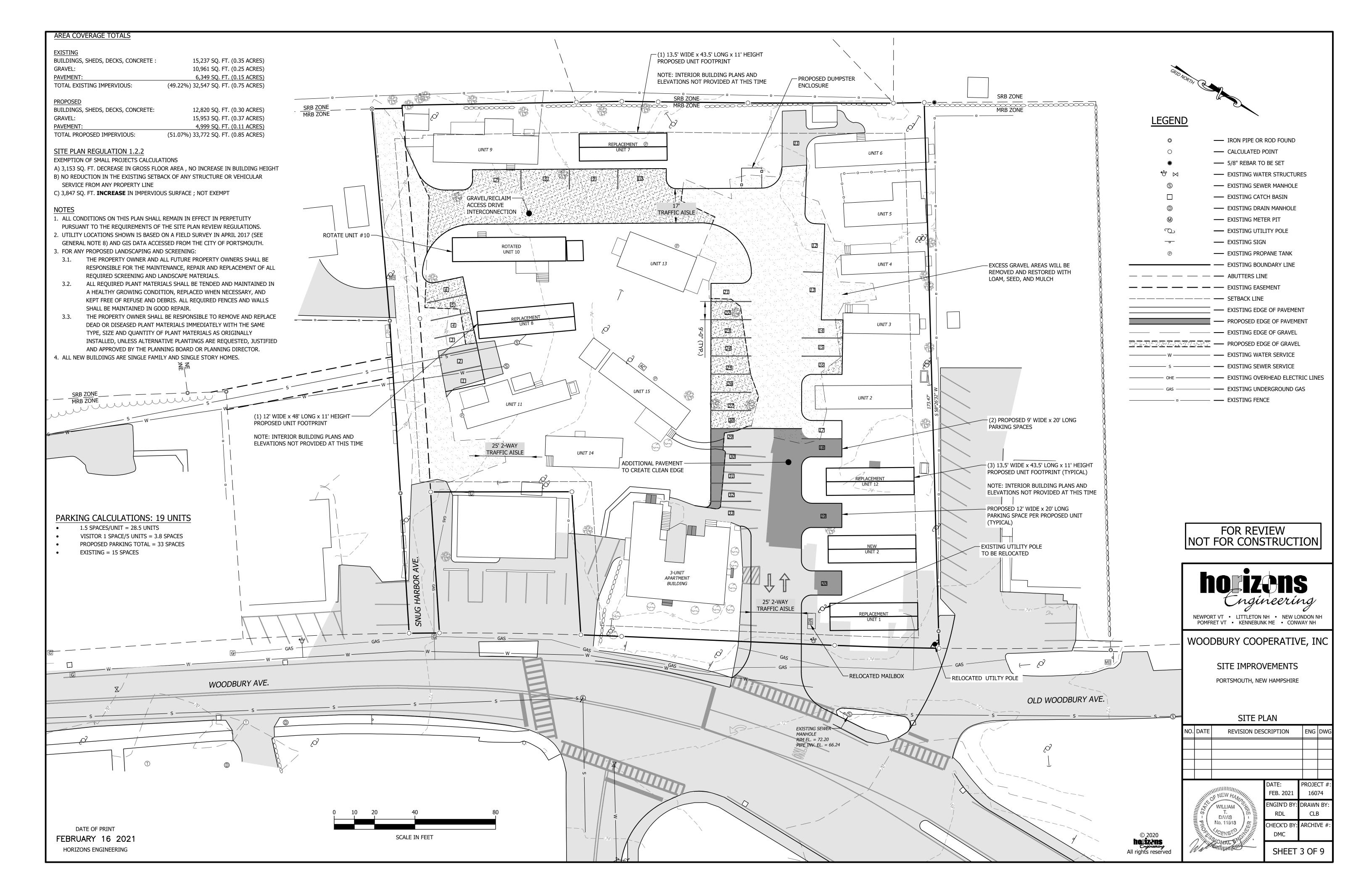
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NOT FOR CONSTRUCTION

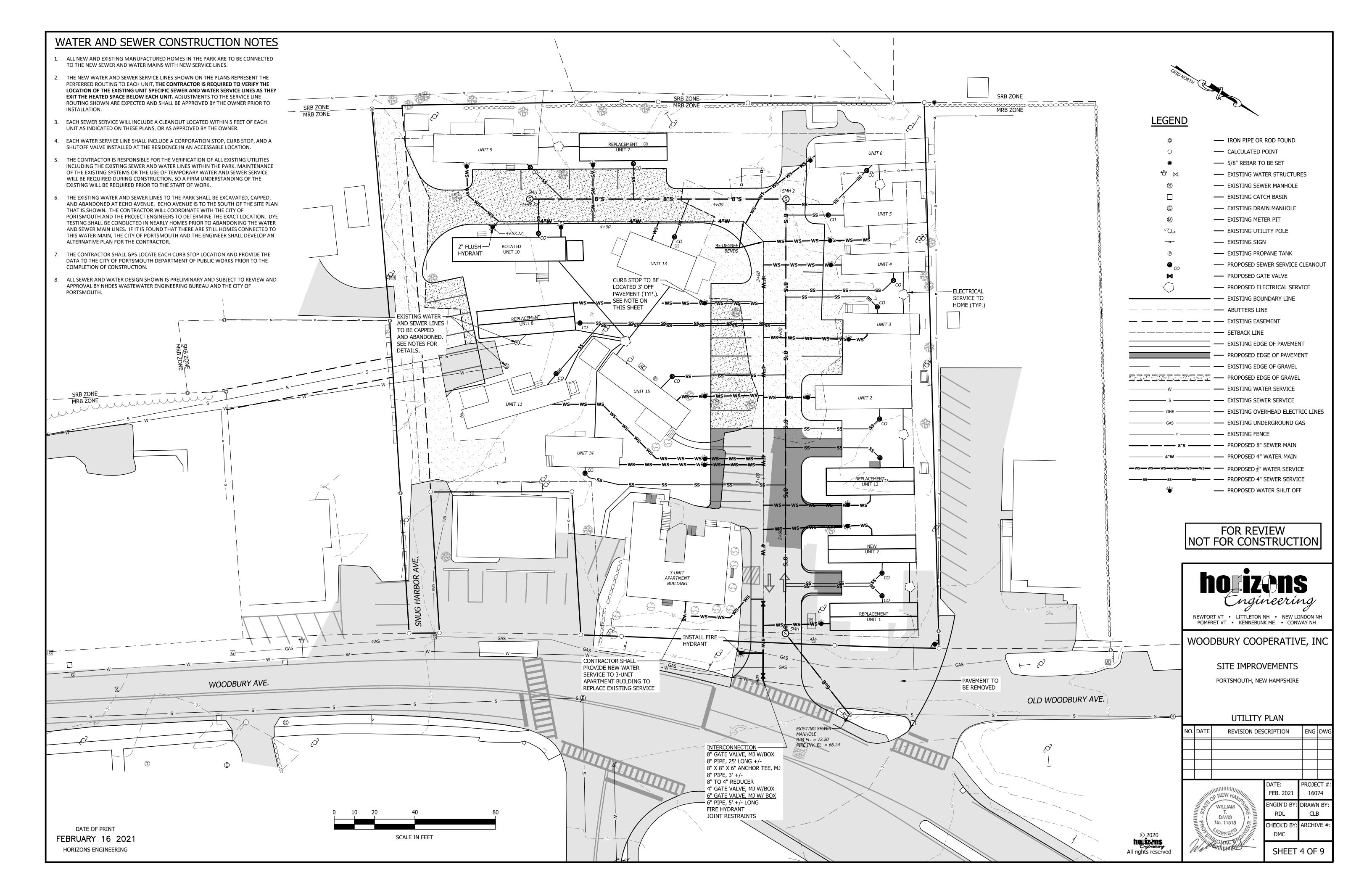
DATE OF PRINT

FEBRUARY 16 2021

HORIZONS ENGINEERING







STANDARD TRENCH NOTES - WATER

- 1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE SHALL BE REPLACED WITH BEDDING MATERIAL. SEE ALSO NOTE 4.
- 2. <u>BEDDING & SAND BLANKET</u>: CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 100% PASSES A ½ INCH SIEVE AND NOT MORE THAN 15% PASSES A #200 SIEVE.
- 3. <u>SUITABLE MATERIAL</u>: IN ROADS, ROAD SHOULDERS, WALKWAYS, AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED FROM THE TRENCH DURING THE COURSE OF CONSTRUCTION, AFTER EXCLUDING DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL NOT APPROVED BY THE ENGINEER.

TRENCH BACKFILL IN CROSS-COUNTRY LOCATIONS SHALL BE SUITABLE MATERIAL AS DESCRIBED ABOVE, EXCEPT THAT TOP SOIL, LOAM, MUCK, OR PEAT MAY BE USED PROVIDED THAT THE COMPLETED CONSTRUCTION WILL BE STABLE AND ACCESS TO THE PIPE FOR MAINTENANCE AND RECONSTRUCTION IS PRESERVED. BACKFILL SHALL BE MOUNDED TO A HEIGHT OF SIX INCHES ABOVE THE ORIGINAL GROUND SURFACE

- 4. BASE COURSE FOR TRENCH REPAIR SHALL MEET THE REQUIREMENTS OF SECTION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.
- 5. SHEETING: ALL TRENCH SUPPORTS SHALL CONFORM TO OSHA STANDARDS. CONTRACTOR IS RESPONSIBLE FOR OSHA COMPLIANCE AND WORKER SAFETY THROUGHOUT CONSTRUCTION.
- 6. TRENCH DIMENSIONS: W = MAXIMUM ALLOWABLE TRENCH WIDTH MEASURED 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER (D) OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS THE PIPE OUTSIDE DIAMETER. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE. THE MAXIMUM ALLOWABLE TRENCH PAVEMENT PAYMENT WIDTH SHALL BE 8 FEET CENTERED OVER PIPE.
- 7. WATER/SEWER SEPARATION: WATER MAINS SHALL BE SEPARATED FROM SANITARY SEWER BY A MINIMUM OF 10 FEET HORIZONTALLY AND A MINIMUM OF 18 INCHES VERTICALLY, WITH THE WATER MAIN ABOVE THE SEWER.

6" GATE VALVE

FIRE HYDRANT DETAIL

NOT TO SCALE

HYDRANT TEE

COVER OVER WATER SHALL BE 6 FEET MINIMUM IN ALL LOCATIONS.

FIRE HYDRANT

½ CU. YD. ¾" CRUSHED —

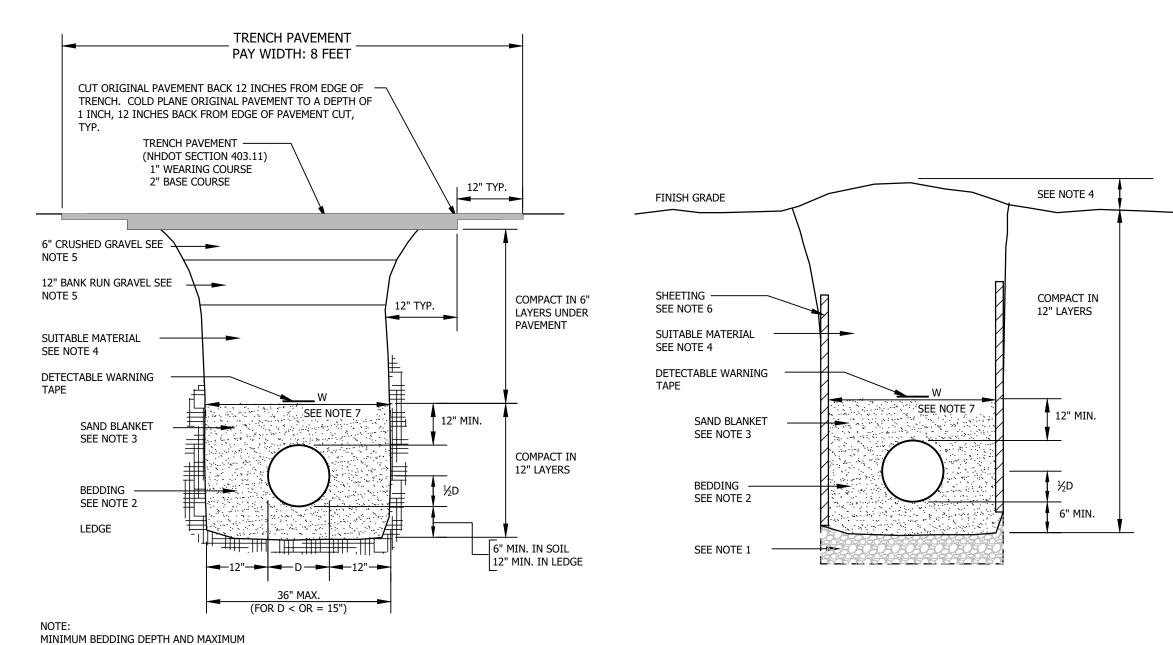
CLASS C CONCRETE AGAINST-

UNDISTURBED EARTH

(TYPICAL)

STONE AROUND

HYDRANT DRAIN

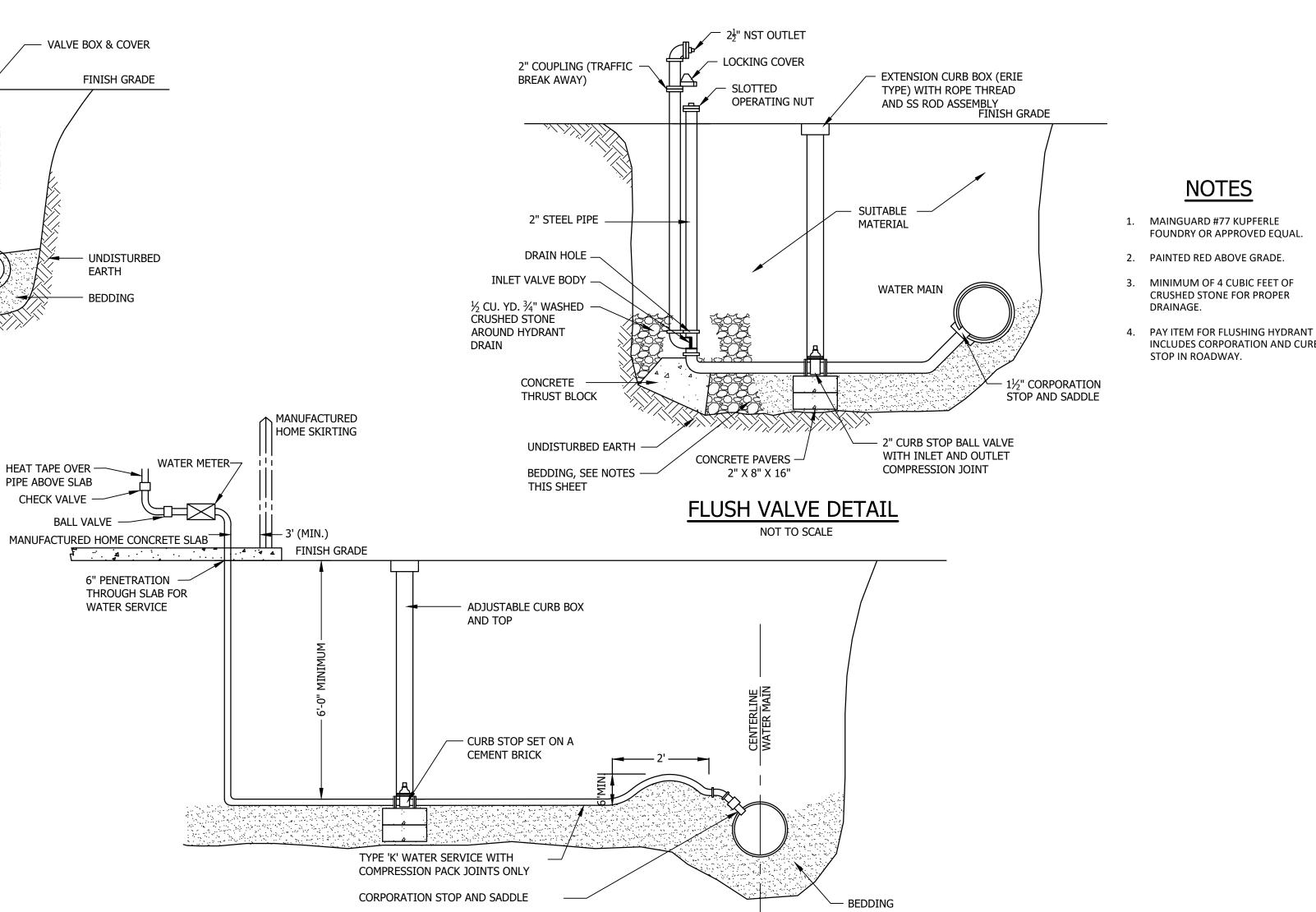


PAYMENT LIMIT FOR LEDGE EXCAVATION = $\frac{1}{4}$ D LEDGE/SUB PAVEMENT CONSTRUCTION

EARTH CONSTRUCTION WITH OR WITHOUT SHEETING

STANDARD TRENCH SECTIONS

NOT TO SCALE



WATER SERVICE CONNECTION

NOT TO SCALE

BLOCKS MUST BE POURED AGAINST UNDISTURBED SOIL

- THE PIPE JOINT AND BOLTS MUST BE ACCESSIBLE. - CONCRETE SHOULD BE CURED FOR AT LEAST 5 DAYS AND SHOULD

HAVE A COMPRESSION STRENGTH OF 3,000 LBS. AT 28 DAYS. - BLOCKS MUST BE POSITIONED TO COUNTERACT THE DIRECTION OF

THE RESULTANT THRUST FORCE.

RESTRAINED JOINTS MAY BE USED FOR RESISTING THRUST FORCES WHERE THERE IS A SHORTAGE OF SPACE OR WHERE THE SOIL BEHIND A FITTING WILL NOT PROVIDE ADEQUATE SUPPORT. THIS RESTRAINING METHOD INVOLVES PLACEMENT OF THESE SPECIAL JOINTS AT APPROPRIATE FITTINGS AND FOR A PREDETERMINED NUMBER OF PIPE LENGTHS ON EACH SIDE, (MINIMUM 15 FEET).

RESULTANT THRUST AT FITTINGS AT 100 PSI WATER PRESSURE						
IOMINAL TOTAL THRUST (POUNDS)						
PIPE DIA. DEAD						

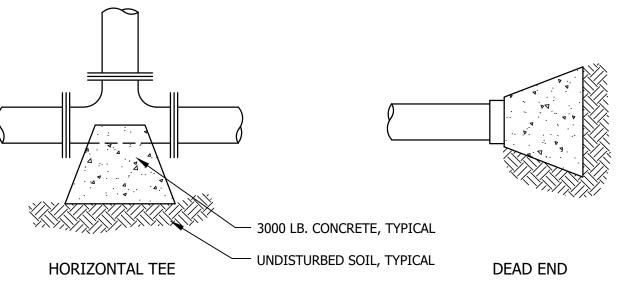
NOMINAL	TOTAL THRUST (POUNDS)						
PIPE DIA.	DEAD						
(INCHES)	END	90° BEND	45° BEND	22 ¹ ₂ ° BEND	11 ¹ / ₄ ° BEND		
4	1,810	2,559	1,385	706	355		
6	3,739	5,288	2,862	1,459	733		
8	6,433	9,097	4,923	2,510	1,261		
10	9,677	13,685	7,406	3,776	1,897		
12	13,685	19,353	10,474	5,340	2,683		
14	18,385	26,001	14,072	7,174	3,604		
16	23,779	33,628	18,199	9,278	4,661		
18	29,865	42,235	22,858	11,653	5,855		
20	36,644	51,822	28,046	14,298	7,183		
24	52,279	73,934	40,013	20,398	10,249		

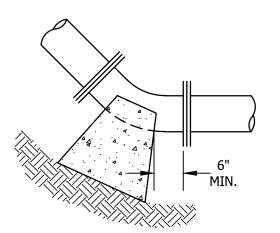
TO DETERMINE THRUST AT PRESSURES OTHER THAN 100 PSI, MULTIPLY THE THRUST OBTAINED IN THE TABLE BY THE RATIO OF THE PRESSURE TO 100. FOR EXAMPLE, THE THRUST ON A 12 INCH, 90° BEND AT 125 PSI IS:

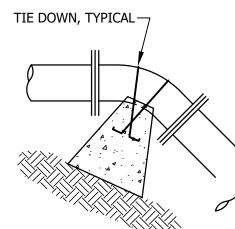
 $19,353 \times 125 = 24,191 \text{ POUNDS}$

TO DETERMINE THE SIZE OF A CONCRETE THRUST BLOCK, DIVIDE THE TOTAL FORCE BY THE BEARING VALUE OF THE SOIL. THE QUOTIENT WILL BE THE SIZE OF THE BEARING AREA OF THE THRUST BLOCK IN SQUARE FEET. APPROXIMATE VALUES FOR VARIOUS TYPES OF SOIL ARE LISTED BELOW.

SOIL	BEARING LOAD
	(LBS./SQ. FT.)
MUCK	0
SOFT CLAY	1,000
SILT	1,500
SANDY SILT	3,000
SAND	4,000
SANDY CLAY	6,000







HORIZONTAL BEND

NOTES

FOUNDRY OR APPROVED EQUAL

CRUSHED STONE FOR PROPER

INCLUDES CORPORATION AND CURB

DRAINAGE.

STOP IN ROADWAY.

VERTICAL BEND

THRUST BLOCK NOTES & DETAILS

NOT TO SCALE

FOR REVIEW NOT FOR CONSTRUCTION



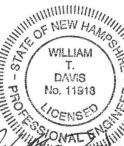
WOODBURY COOPERATIVE, INC

SITE IMPROVEMENTS

PORTSMOUTH, NEW HAMPSHIRE

POTABLE WATER DETAILS

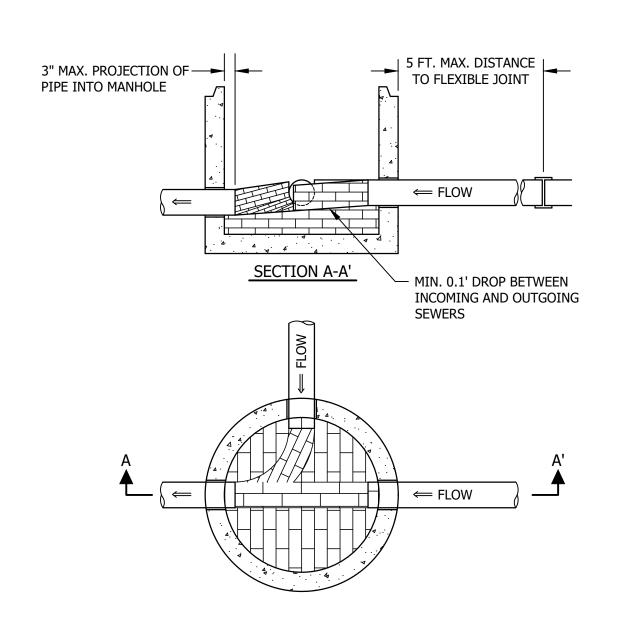
NO.	DATE	REVISION DESCRIPTION		ENG	DWG
		DATE	Т		CT #

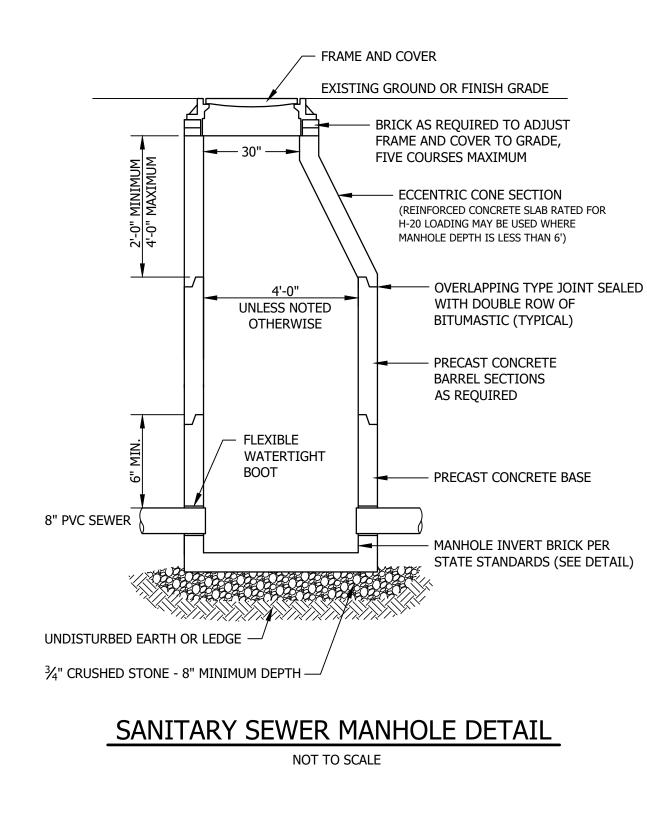


FEB. 2021 16074 ENGIN'D BY: DRAWN BY CLB RDL CHECK'D BY: ARCHIVE # SHEET 5 OF 9

DATE OF PRINT FEBRUARY 16 2021 HORIZONS ENGINEERING

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MANUFACTURED HOME SKIRTING LOCK-JOINT FLEXIBLE MANHOLE SLEEVE - 4" SCH 40 CONVERT 4" PIPE TO 6" PIPE, USE GASKETED FITTING - CLEAN OUT MANUFACTURED HOME CONCRETE SLAB FINISH GRADE —— 45° BEND ONLY **CONNECTION TO** BEDDED WITH CRUSHED STONE 6" SDR 35 PVC SEWER SERVICE MIN. SLOPE 1/4" PER FOOT SANITARY SEWER

SEWER SERVICE DETAIL

NOT TO SCALE

SEWER NOTES

<u>GENERAL</u>

CONSTRUCTION OF ALL COMPONENTS OF THE SANITARY SEWER SYSTEM SHALL CONFORM TO THE MOST CURRENT VERSION OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES ENV-WQ 700 AND TECHNICAL SPECIFICATIONS.

MANHOLE INVERT DETAILS

NOT TO SCALE

2. TYPES OF SEWERS

A. THERE SHALL BE NO CONNECTION BETWEEN SANITARY SEWERS AND STORM SEWERS. B. RUNOFF FROM ROOFS, STREETS, AND OTHER AREAS AND GROUNDWATER FROM FOUNDATION DRAINS, SUMP PUMPS, OR OTHER SUBSURFACE DRAINS SHALL BE EXCLUDED FROM SANITARY SEWERS.

SEWER SIZE AND COVER

A. MINIMUM PIPE SIZE FOR GRAVITY SEWER MAINS SHALL BE 8 INCHES. B. MINIMUM PIPE SIZE FOR GRAVITY SEWER SERVICES SHALL BE 4 INCHES. C. MINIMUM PIPE SIZE FOR FORCE MAIN SEWER SERVICES SHALL BE 2 INCHES. D. SANITARY SEWERS SHALL HAVE 6 FEET MINIMUM COVER IN ALL ROADWAY LOCATIONS AND 4 FEET MINIMUM COVER IN ALL CROSS-COUNTRY LOCATIONS.

PIPE AND FITTING MATERIALS:

A. DUCTILE IRON PIPE

DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION:

- (1) AWWA C151 FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL OR SAND LINED MOLDS, FOR WATER OR OTHER LIQUIDS;
- (2) AWWA C150 FOR THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A 536 IRON
- CASTINGS; AND (3) JOINTS SHALL BE MECHANICAL TYPE, PUSH-ON TYPE, OR BALL-AND-SOCKET TYPE;

B. PVC (POLY VINYL CHLORIDE) PIPE

PVC PIPE AND FITTINGS SHALL BE APPROVED FOR SEWAGE SERVICE AND CONFORM TO THE FOLLOWING:

- (1) PVC PIPE USED FOR GRAVITY SEWERS SHALL BE TYPE SDR 35 CONFORMING TO ASTM D3034; (2) PVC PIPE USED FOR FORCE MAINS SHALL BE TYPE SDR 26 CONFORMING TO ASTM D2241 OR ASTM D1785;
- (3) JOINTS SHALL BE PUSH-ON, BELL-AND-SPIGOT TYPE HAVING OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212.

<u>BEDDING</u>

PIPE BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67. BEDDING SHALL EXTEND FROM THE SPRING LINE OF THE PIPE TO A MINIMUM DEPTH OF 6" BELOW THE BOTTOM OF THE PIPE OUTSIDE SURFACE.

1 INCH SCREEN 100% PASSING 4 INCH SCREEN 90-100% PASSING % INCH SCREEN 20-55% PASSING #4 SIEVE 0-10% PASSING 0-5% PASSING #8 SIEVE

6. MANHOLES

A. PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL CONFORM TO ASTM C478.

B. MANHOLES SHALL BE DESIGNED FOR H-20 LOADING.

C. HORIZONTAL JOINTS BETWEEN BARREL SECTIONS SHALL BE OF AN OVERLAPPING TYPE WHICH SHALL DEPEND UPON A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT FOR WATER TIGHTNESS. D. PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:

- (1) ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND
- PIPE SURFACES; (2) CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS;
- (3) ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH SEAL FORMED ON THE
- SURFACE OF THE PIPE BY COMPRESSION OF THE RING; AND
- (4) NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
- E. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST

OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.

7. PROTECTION OF WATER SUPPLIES

- A. THERE SHALL BE NO PHYSICAL CONNECTION BETWEEN A PUBLIC OR PRIVATE WATER SUPPLY SYSTEM AND A SEWER OR SEWER APPURTENANCE WHICH WOULD PERMIT THE PASSAGE OF SEWAGE OR POLLUTED WATER INTO THE POTABLE SUPPLY. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SEWER OR SEWER MANHOLE.
- B. NO SEWER SHALL BE LOCATED WITHIN THE WELL PROTECTIVE RADII ESTABLISHED IN ENV-WS 300 FOR ANY PUBLIC WATER SUPPLY WELLS OR WITHIN 100 FEET OF ANY PRIVATE WATER SUPPLY WELL.
- C. SEWERS SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN.
- D. A DEVIATION FROM THE SEPARATION REQUIREMENTS OF (B) OR (C) ABOVE SHALL BE ALLOWED WHERE NECESSARY TO AVOID CONFLICT WITH SUBSURFACE STRUCTURES, UTILITY CHAMBERS, AND BUILDING FOUNDATIONS, PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENTS SPECIFIED IN ENV-WQ 704.06.
- E. WHENEVER SEWERS MUST CROSS WATER MAINS, THE SEWER SHALL BE CONSTRUCTED AS FOLLOWS: (1) VERTICAL SEPARATION OF THE SEWER AND WATER MAIN SHALL BE NOT LESS THAN 18 INCHES, WITH WATER ABOVE SEWER; AND
- (2) SEWER PIPE JOINTS SHALL BE LOCATED AT LEASE 6 FEET HORIZONTALLY FROM THE WATER MAIN.

TRENCH PAVEMENT PAY WIDTH: 8 FEET CUT ORIGINAL PAVEMENT BACK 12 INCHES FROM EDGE OF TRENCH. COLD PLANE ORIGINAL PAVEMENT TO A DEPTH OF 1 INCH, 12 INCHES BACK FROM EDGE OF PAVEMENT CUT, TRENCH PAVEMENT — (NHDOT SECTION 403.11) 1" WEARING COURSE 2" BASE COURSE 6" CRUSHED GRAVEL SEE \ 12" BANK RUN GRAVEL SEE NOTE 5 COMPACT IN 6" 12" TYP. LAYERS UNDER SUITABLE MATERIAL SEE NOTE 4 DETECTABLE WARNING SEE NOTE 7 12" MIN. SAND BLANKET SEE NOTE 3 COMPACT IN 12" LAYERS BEDDING SEE NOTE 2 LEDGE 6" MIN. IN SOIL 12" MIN. IN LEDGE (FOR D < OR = 15")

MINIMUM BEDDING DEPTH AND MAXIMUM PAYMENT LIMIT FOR LEDGE EXCAVATION = \(\frac{1}{4} \text{D} \) (12" MINIMUM)

LEDGE/SUB PAVEMENT CONSTRUCTION

STANDARD TRENCH SECTIONS

OF MANHOLE FILL WITH NON-SHRINK GROUT -STAINLESS STEEL STRAP INSIDE FACE ANODIZED -**ALUMINUM** INTERNAL CLAMP KOR-N-SEAL BOOT KOR-N-SEAL JOINT SLEEVE

JOINTING DETAILS

STANDARD TRENCH NOTES - SEWER

- STAINLESS

STEEL STRAP

1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE SHALL BE REPLACED WITH BEDDING MATERIAL. SEE ALSO NOTE 4.

LASTOMERIC

RUBBER SLEEVE

2. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67.

100% PASSING I INCH SCREEN ¼ INCH SCREEN 90-100% PASSING 20-55% PASSING % INCH SCREEN 0-10% PASSING #4 SIEVE 0-5% PASSING #8 SIEVE

INSIDE FACE -OF MANHOLE

FILL WITH NON-

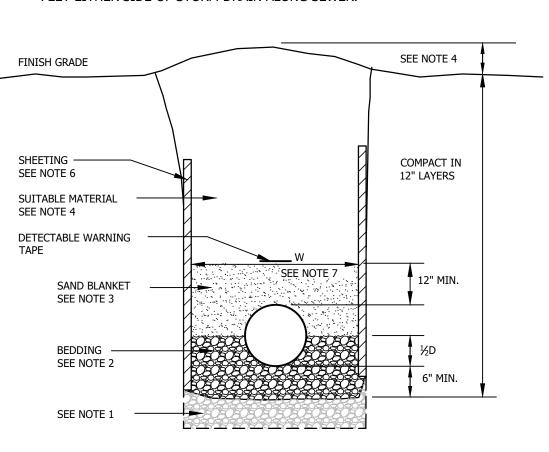
SHRINK GROUT

PIPE

- 3. SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT $\overline{100\%}$ passes a $rac{1}{2}$ inch sieve and not more than 15% passes a #200 sieve.
- 4. SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS, AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED FROM THE TRENCH DURING THE COURSE OF CONSTRUCTION, AFTER EXCLUDING DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL NOT APPROVED BY THE ENGINEER.

TRENCH BACKFILL IN CROSS-COUNTRY LOCATIONS SHALL BE SUITABLE MATERIAL AS DESCRIBED ABOVE, EXCEPT THAT TOP SOIL, LOAM, MUCK, OR PEAT MAY BE USED PROVIDED THAT THE COMPLETED CONSTRUCTION WILL BE STABLE AND ACCESS TO THE PIPE FOR MAINTENANCE AND RECONSTRUCTION IS PRESERVED. BACKFILL SHALL BE MOUNDED TO A HEIGHT OF SIX INCHES ABOVE THE ORIGINAL GROUND

- 5. BASE COURSE FOR TRENCH REPAIR SHALL MEET THE REQUIREMENTS OF SECTION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.
- 6. SHEETING: ALL TRENCH SUPPORTS SHALL CONFORM TO OSHA STANDARDS CONTRACTOR IS RESPONSIBLE FOR OSHA COMPLIANCE AND WORKER SAFETY THROUGHOUT CONSTRUCTION.
- 7. TRENCH DIMENSIONS: W = MAXIMUM ALLOWABLE TRENCH WIDTH MEASURED 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER (D) OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS THE PIPE OUTSIDE DIAMETER. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE. THE MAXIMUM ALLOWABLE TRENCH PAVEMENT PAYMENT WIDTH SHALL BE 8 FEET CENTERED OVER PIPE.
- 8. PIPE INSULATION AT STORM DRAIN CROSSING: INSTALL 2" THICK RIGID FOAM INSULATION OVER SEWER AT STORM DRAIN CROSSINGS, EXTEND INSULATION 4 FEET EITHER SIDE OF STORM DRAIN ALONG SEWER.



EARTH CONSTRUCTION WITH OR WITHOUT SHEETING

NOT TO SCALE

FOR REVIEW NOT FOR CONSTRUCTION

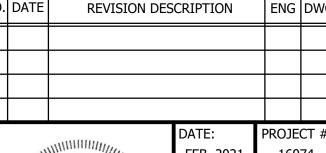


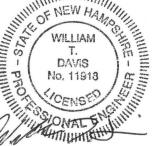
WOODBURY COOPERATIVE, INC

SITE IMPROVEMENTS

PORTSMOUTH, NEW HAMPSHIRE

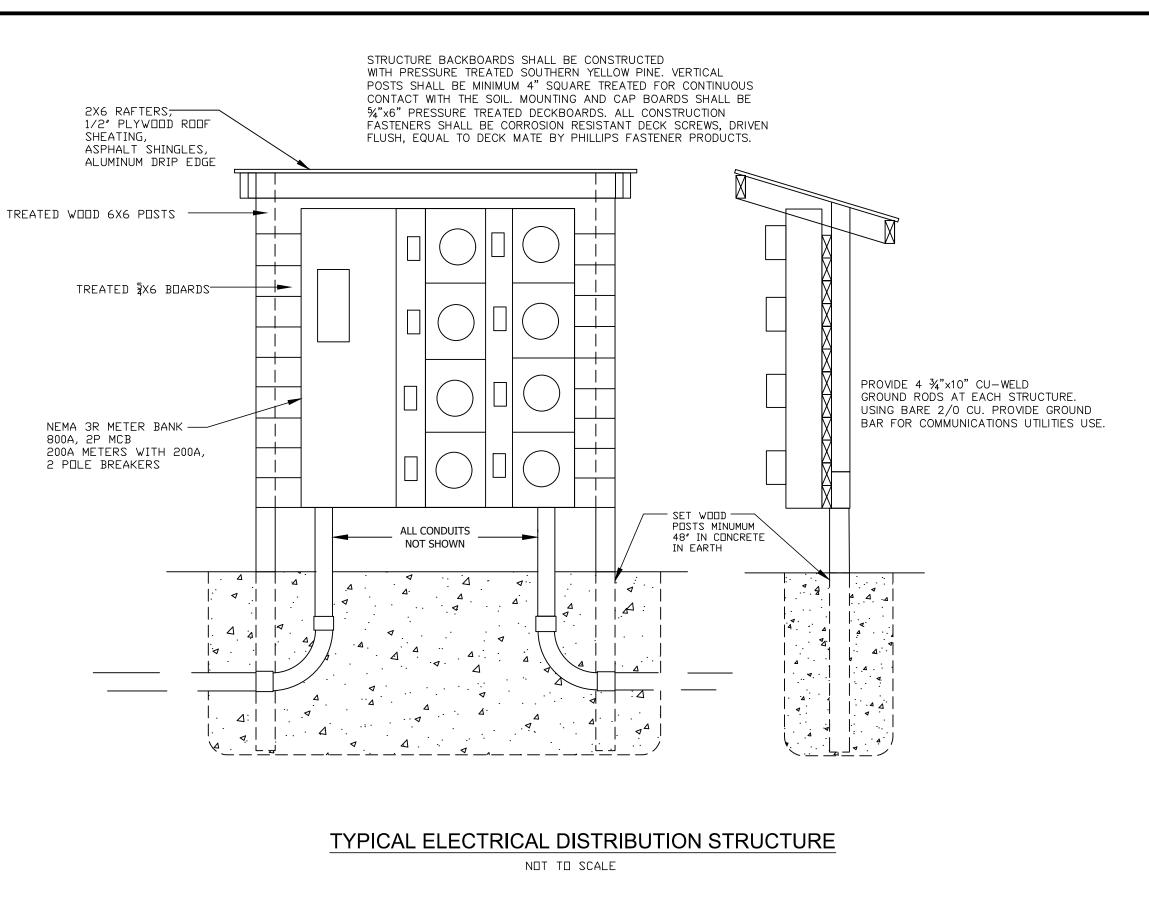
SEWER DETAILS

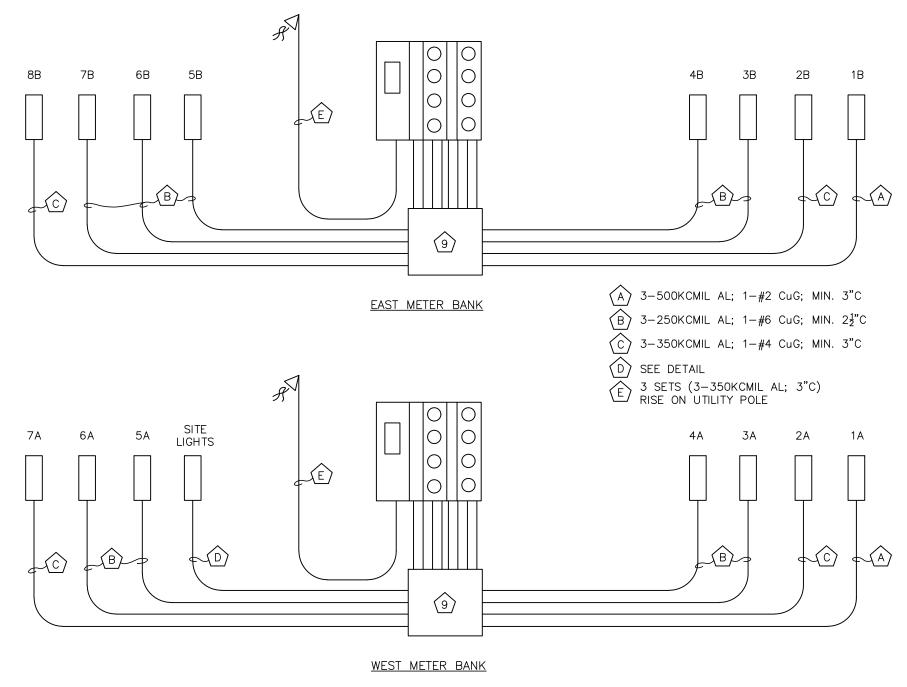


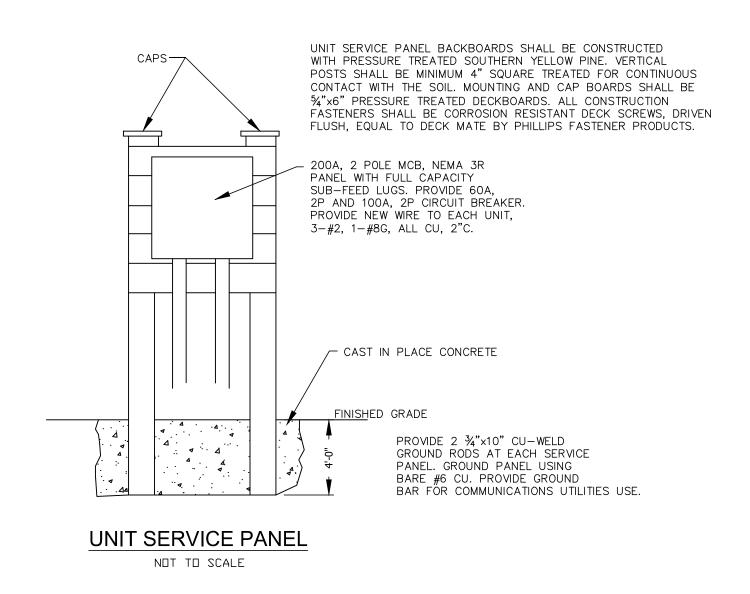


FEB. 2021 16074 ENGIN'D BY: DRAWN BY: CLB RDL CHECK'D B' : ARCHIVE #

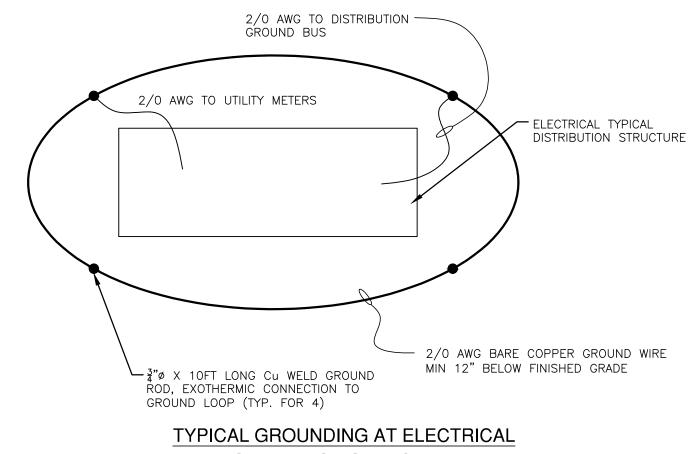
SHEET 6 OF 9



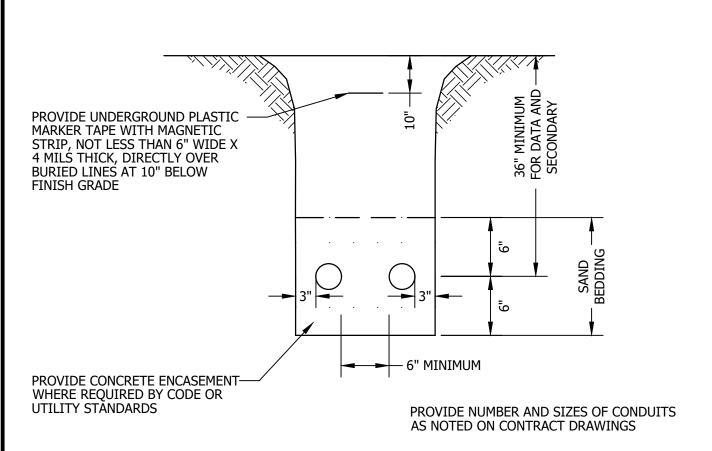




ELECTRICAL DISTRIBUTION STRUCTURE



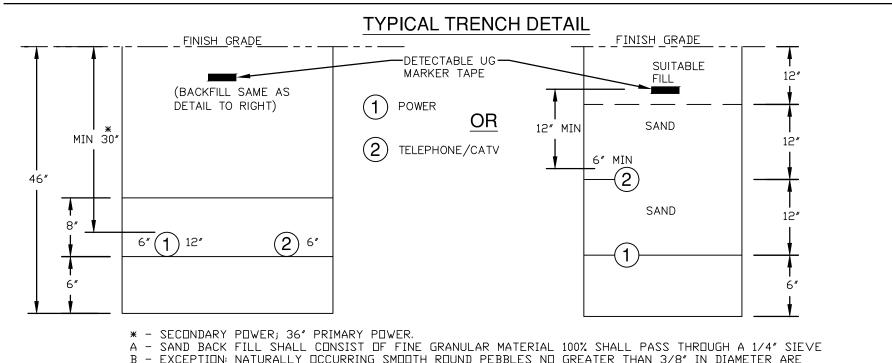
DISTRIBUTION STRUCTURE



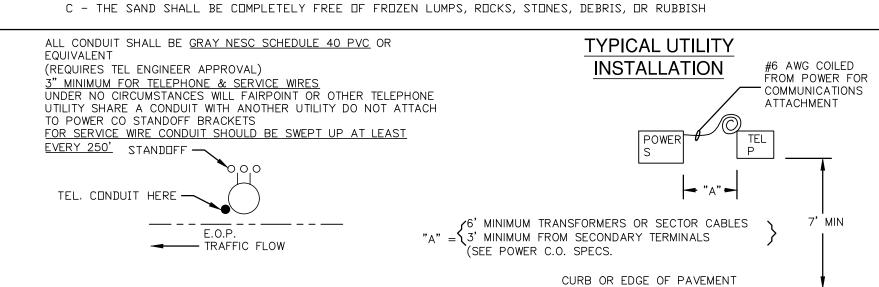
TYPICAL ELECTRIC CONDUIT DITCH DETAIL

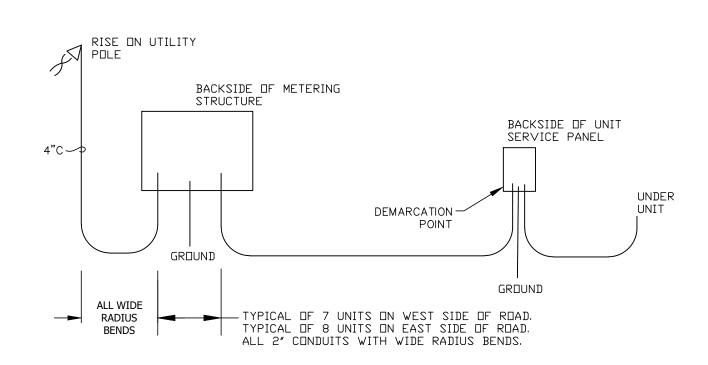
CONDUIT SPECIFICATIONS

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE CONDUIT THROUGH WHICH CABLE CAN BE SUCCESSFULLY PULLED. THE CONTRACTOR IS RESPONSIBLE FOR ALL EXPENSE ASSOCIATED WITH THE REPAIR OF CONDUIT THAT CANNOT BE USED. OWNER RESERVES THE RIGHT TO REQUIRE INSPECTION OF CONDUIT PRIOR TO BACK FILLING TO ENSURE COMPLIANCE. NOTE: WHERE LEDGE DOES NOT PERMIT DEPTHS NOTED, CONCRETE ENCASEMENT WILL BE REQUIRED TO CONFORM TO NEC AND/OR UTILITY REQUIREMENT TO, WHICHEVER IS MORE STRINGENT.



B - EXCEPTION: NATURALLY OCCURRING SMOOTH ROUND PEBBLES NO GREATER THAN 3/8" IN DIAMETER ARE PERMITTED AS LONG AS THE TOTAL VOLUME PER CUBIC FOOT OF SAND DOES NOT EXCEED 1%





COMMUNICATIONS RISER - PHONE

NTS

RISE ON UTILITY / POLE BACKSIDE OF METERING STRUCTURE BACKSIDE OF UNIT SERVICE PANEL 3"C~ UNDER UNIT DEMARCATION -POINT GROUND GROUND ALL WIDE - TYPICAL OF 7 UNITS ON WEST SIDE OF ROAD. RADIUS TYPICAL OF 8 UNITS ON EAST SIDE OF ROAD. BENDS ALL 2" CONDUITS WITH WIDE RADIUS BENDS.

COMMUNICATIONS RISER - CATV

NTS DATE OF PRINT

FEBRUARY 16 2021 HORIZONS ENGINEERING



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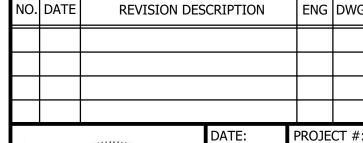
Engineering NEWPORT VT • LITTLETON NH • NEW LONDON NH POMFRET VT • KENNEBUNK ME • CONWAY NH

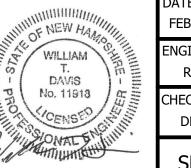
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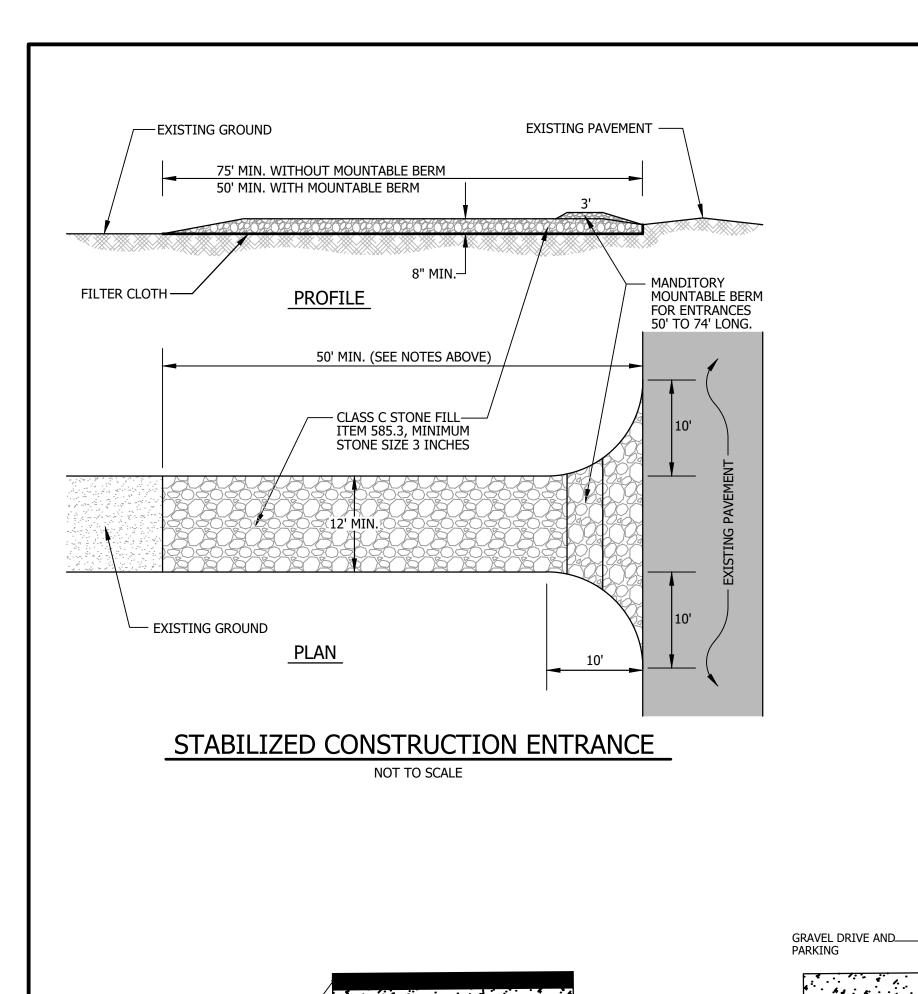
ELECTRICAL DETAILS





FEB. 2021 16074 ENGIN'D BY: DRAWN BY CLB RDL : ARCHIVE # CHECK'D BY SHEET 7 OF 9

NOT TO SCALE



6" CRUSHED GRAVEL-(NHDOT ITEM 304.3)

12" BANK RUN GRAVEL -

(NHDOT ITEM 304.2)

TYPICAL SECTIONS

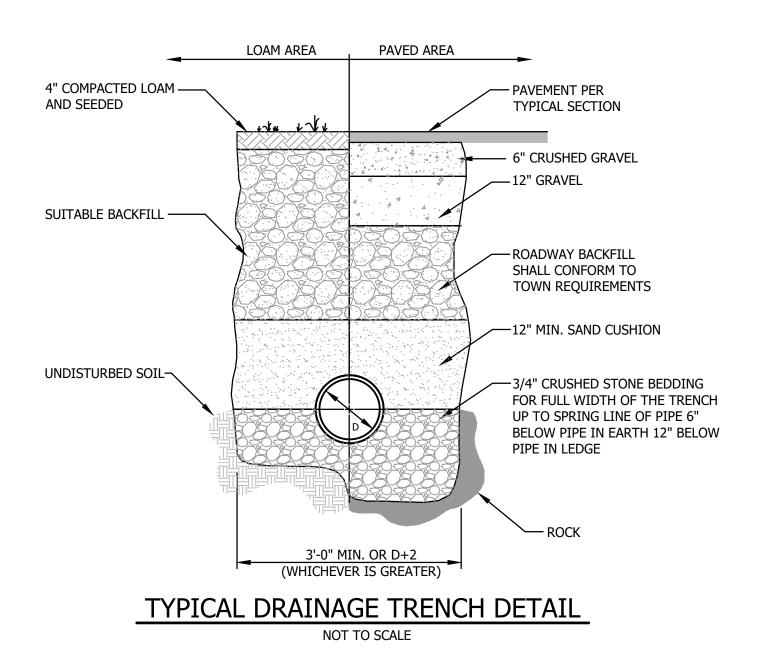
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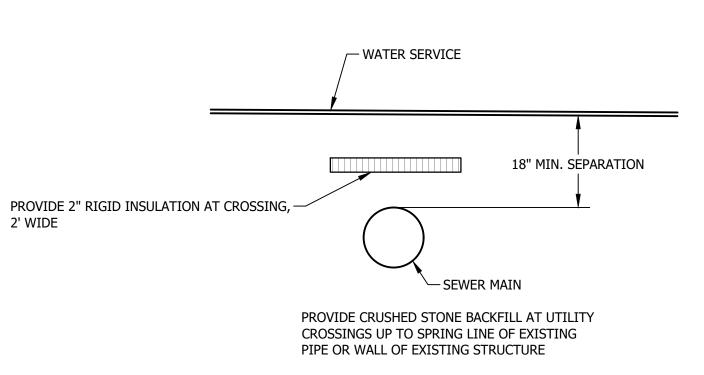
2.5" BITUMINOUS

PAVEMENT

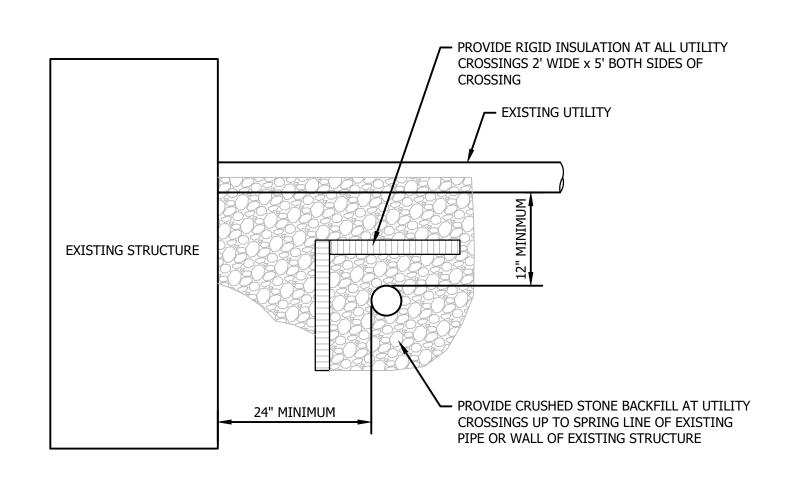
6" CRUSHED GRAVEL-(NHDOT ITEM 304.3)

12" BANK RUN GRAVEL ----





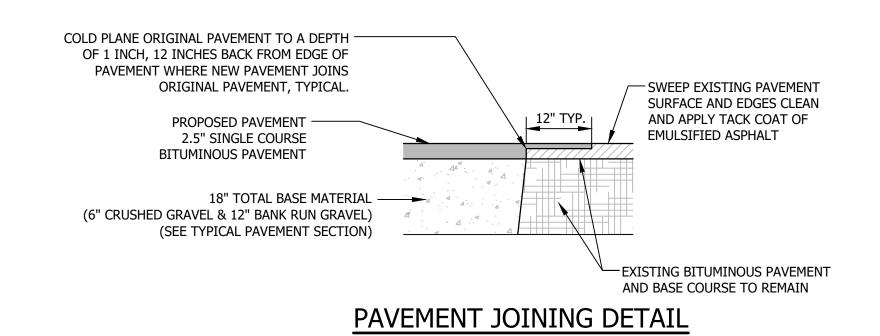
UTILITY CROSSING DETAIL NOT TO SCALE



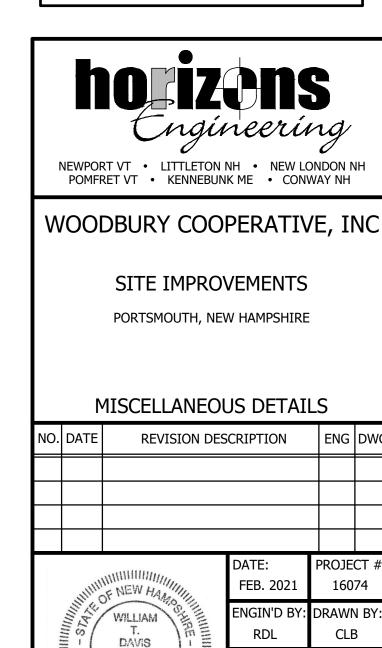
UTILITY / DRAINAGE CROSSING DETAIL

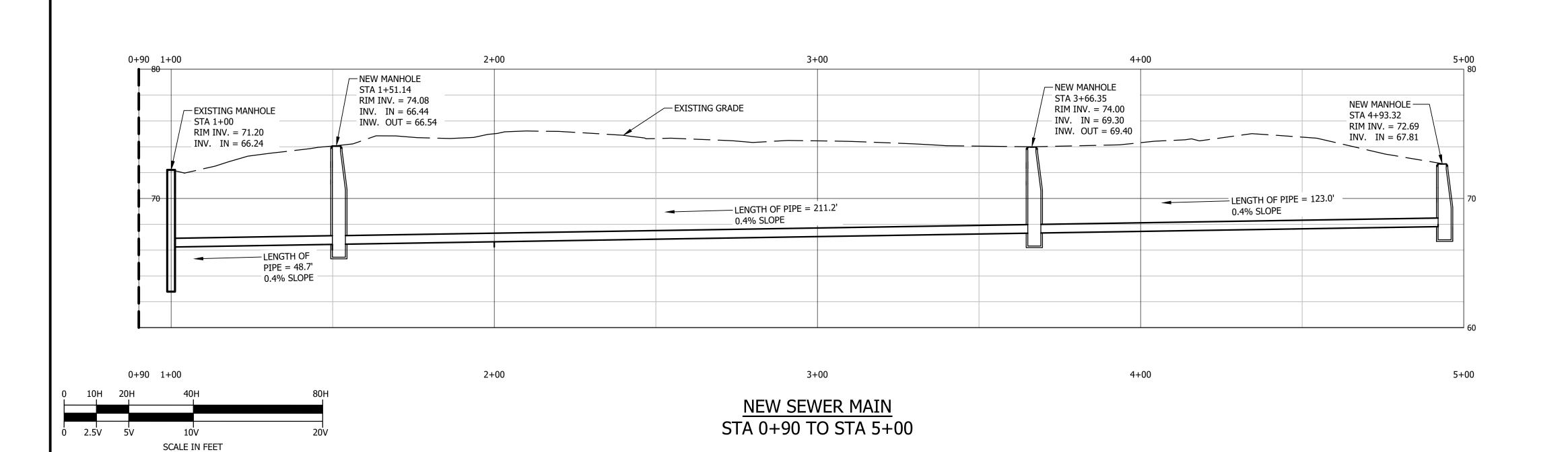
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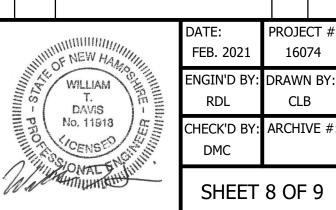
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SEEDING RECOMMENDATIONS

GRADING AND SHAPING

A. SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

2. SEEDBED PREPARATION

- A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
- B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE AMENDED WITH ORGANIC MATTER AND TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME THOROUGHLY INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

. ESTABLISHING VEGETATION

5-10-10).

A. LIME AND FERTILIZER SHOULD BE APPLIED 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, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ. FT. -NITROGEN (N), 50 LBS., PER ACRE OR 1.1 LBS. PER 1,000 SQ. FT. -PHOSPHATE (P2O5), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT.

-POTASH (K₂0), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT.

(NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF

B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.

C. SEEDING GUIDE:		1			ı
	SEEDING		SOIL TYPE		
USE	MIXTURE (SEE 3D)	DROUGHTY	WELL DRAINED	MOD. WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR POOR	GOOD GOOD	GOOD FAIR	FAIR FAIR
DOMESTING DISTOSPIE TIME IS	С	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILL- WAYS, AND OTHER CHANNELS WITH FLOWING WATER	А	GOOD	GOOD	GOOD	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW	A	GOOD GOOD	GOOD	GOOD	FAIR
INTENSITY USE RECREATION SITES		GOOD	GOOD	FAIR	POOR

POUNDS POUNDS PER

D. SEEDING RATES:

	MIXTURE	PER ACRE	1,000 SQ. FT
Α	TALL FESCUE	20	0.45
	CREEPING RED FESCUE	20	0.45
	REDTOP	2	0.05
	TOTAL:	42	0.95
В	TALL FESCUE	15	0.35
	CREEPING RED FESCUE	10	0.25
	CROWN VETCH OR	15 OR	0.35 OR
	FLATPEA	30	0.75
	TOTAL:	40 OR 55	0.95 OR 1.3
	TALL FESCUE	20	0.45
	FLATPEA	30	0.75
	TOTAL:	50	1.20

- E. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO SEPTEMBER 15. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.
- F. TEMPORARY SEEDING RATES:

SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.	REMARKS
WINTER RYE	112	2.5	BEST FOR FALL SEEDING. SEED FROM AUGUST TO SEPTEMBER 5TH FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	80	2.0	BEST FOR SPRING SEEDING. SEED NO LATER THAN MAY 15TH FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYEGRASS	40	1.0	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE NOT IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. COVER SEED WITH NO MORE THAN 0.25 INCH OF SOIL.
PERENNIAL RYEGRASS	30	0.7	GOOD COVER WHICH IS LONGER LASTING THAN ANNUAL RYEGRASS. SEED BETWEEN APRIL 1ST AND JUNE 1ST AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON. SEED TO A DEPTH OF APPROXIMATELY 0.5 INCH.

A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.

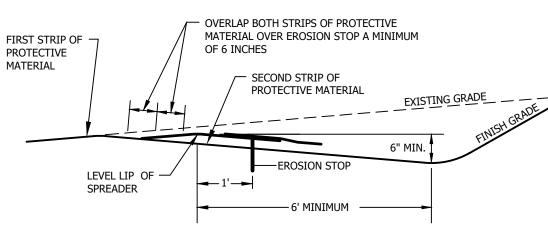
B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING.

MAINTENANCE TO ESTABLISH A STAND

- A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
- B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ON SITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
- C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

LEVEL LIP SPREADER INSTALLATION

- 1. CONSTRUCT THE LEVEL SPREADER LIP ON A ZERO PERCENT GRADE TO INSURE UNIFORM SPREADING OF RUNOFF.
- 2. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON
- 3. AN EROSION STOP SHALL BE PLACED VERTICALLY A MINIMUM OF SIX INCHES DEEP IN A SLIT TRENCH ONE FOOT BACK OF THE LEVEL LIP AND PARALLEL TO THE LIP. THE EROSION STOP SHALL EXTEND THE ENTIRE LENGTH OF THE LEVEL LIP.
- 4. THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING TWO STRIPS OF JUTE OR EXCELSIOR MATTING ALONG THE LIP. EACH STRIP SHALL OVERLAP THE EROSION STOP BY AT LEAST SIX INCHES.
- 5. THE ENTRANCE CHANNEL TO THE LEVEL SPREADER SHALL NOT EXCEED A 1 PERCENT GRADE FOR AT LEAST 50 FEET BEFORE ENTERING INTO THE SPREADER.
- 6. THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT RE-CONCENTRATE IMMEDIATELY BELOW THE SPREADER.
- 7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED.
- 8. PROTECTIVE MATERIAL AND EROSION STOP SHALL BE NORTH AMERICAN GREEN C125 EROSION CONTROL BLANKET OR APPROVED EQUAL



LEVEL SPREADER DETAIL

NO SCALE SOURCE: ROCKINGHAM COUNTY CONSERVATION SERVICE

SEDIMENT FENCE POCKET

WOVEN WIRE FENCE -

MAX. 6" MESH SPACING)

WITH FILTER CLOTH OVER

FLOW+

(14-1/2 GA. MIN.,

-SEDIMENT FENCE

3'-0" MIN.

OVERLAP

CONSTRUCTION NOTES

. WOVEN WIRE FENCE, IF REQUIRED,

TO BE FASTENED SECURELY TO FENCE

POSTS WITH WIRE TIES OR STAPLES.

SECURELY TO WOVEN WIRE FENCE

TOP, MID SECTION, AND BOTTOM.

3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6

4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE

SEDIMENT FENCE, OR 50% OF CAPACITY IS USED.

SHALL BE CONSIDERED AN ACCEPTABLE EQUAL TO

SEDIMENT FENCE IF INSTALLED PER MANUFACTURER'S

WITH TIES SPACED EVERY 24" AT

INCHES, FOLDED AND STAPLED.

5. 12" DIAMETER FILTREXX SILTSOXX

RECOMMENDATIONS.

FOR SEDIMENT FENCE

2. FILTER CLOTH TO BE FASTENED

EROSION CONTROL GENERAL NOTES

A. KEEP SITE MODIFICATION TO A MINIMUM

- 1. CONSIDER FITTING THE BUILDINGS AND STREETS TO THE NATURAL TOPOGRAPHY. THIS REDUCES THE NEED FOR CUTS AND FILLS. AVOID EXTENSIVE GRADING THAT WOULD ALTER DRAINAGE PATTERNS OR CREATE VERY STEEP SLOPES.
- 2. EXPOSE AREAS OF BARE SOIL TO EROSIVE ELEMENTS FOR THE SHORTEST TIME POSSIBLE.
- 3. SAVE AND PROTECT DESIRABLE EXISTING VEGETATION WHERE POSSIBLE. ERECT BARRIERS TO PREVENT DAMAGE FROM CONSTRUCTION EQUIPMENT.
- 4. LIMIT THE GRADES OF SLOPES SO VEGETATION CAN BE EASILY ESTABLISHED AND MAINTAINED.
- 5. AVOID SUBSTANTIAL INCREASE IN RUNOFF LEAVING THE SITE.

B. MINIMIZE POLLUTION OF WATER DURING CONSTRUCTION ACTIVITIES

- 1. STOCKPILE TOPSOIL REMOVED FROM CONSTRUCTION AREA AND SPREAD OVER ANY DISTURBED AREAS PRIOR TO REVEGETATION. TOPSOIL STOCKPILES MUST BE PROTECTED FROM EROSION.
- 2. PROTECT BARE SOIL AREAS EXPOSED BY GRADING ACTIVITIES WITH TEMPORARY VEGETATION OR MULCHES.
- 3. USE SEDIMENT BASINS TO TRAP DEBRIS AND SEDIMENT WHICH WILL PREVENT THESE MATERIALS FROM MOVING OFF SITE.
- 4. USE DIVERSIONS TO DIRECT WATER AROUND THE CONSTRUCTION AREA AND AWAY FROM EROSION PRONE AREAS TO POINTS OF SAFE DISPOSAL.
- 5. USE TEMPORARY CULVERTS OR BRIDGES WHEN CROSSING STREAMS WITH EQUIPMENT.
- 6. PLACE CONSTRUCTION FACILITIES, MATERIALS, AND EQUIPMENT STORAGE AND MAINTENANCE AREAS AWAY FROM DRAINAGE WAYS.

C. PROTECT AREA AFTER CONSTRUCTION.

- 1. ESTABLISH GRASS OR OTHER SUITABLE VEGETATION ON ALL DISTURBED AREAS. SELECT SPECIES ADAPTED TO THE SITE CONDITIONS AND THE FUTURE USE OF THE AREA. FINAL GRADES SHALL BE SEEDED WITHIN 72 HOURS. STABILIZATION SHALL BE DEFINED AS 85% VEGETATIVE COVER.
- 2. MAINTAIN VEGETATED AREAS USING PROPER VEGETATIVE 'BEST MANAGEMENT PRACTICES' DURING THE CONSTRUCTION PERIOD.
- 3. MAINTAIN NEEDED STRUCTURAL 'BEST MANAGEMENT PRACTICES' AND REMOVE SEDIMENT FROM DETENTION PONDS AND SEDIMENT BASINS AS NEEDED
- 4. DETERMINE RESPONSIBILITY FOR LONG TERM MAINTENANCE OF PERMANENT 'BEST MANAGEMENT PRACTICES'.
- 5. IF CONSTRUCTION IS ANTICIPATED DURING WINTER MONTHS, REFER TO 'COLD WEATHER SITE STABILIZATION REQUIREMENTS'.

D. INVASIVE SPECIES AND FUGITIVE DUST

- 36" MIN. FENCE POSTS, DRIVEN

MIN. 16" INTO GROUND

__FLQW__ + __

EMBED FILTER CLOTH

MIN. 8" INTO GROUND

HAYBALES

1. THE PROJECT SHALL NOT CONTRIBUTE TO THE SPREAD OF INVASIVE SPECIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EVALUATE WORK AREAS FOR THE PRESENCE OF INVASIVE SPECIES, AND IF FOUND SHALL TAKE NECESSARY MEASURES TO PREVENT THEIR SPREAD IN ACCORDANCE WITH RSA 430:51-57 AND AGR 3800. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PREVENT THE INTRODUCTION OF INVASIVE SPECIES BY INSPECTING AND CLEANING ALL EQUIPMENT ARRIVING ON SITE.

2. FUGITIVE DUST SHALL BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000.

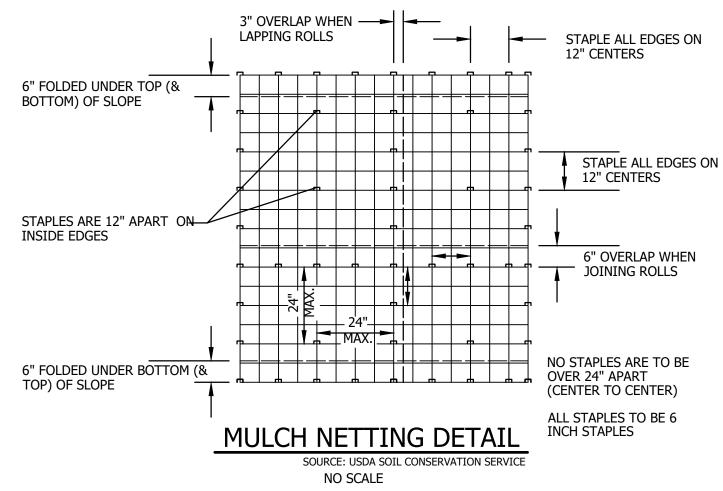
SECTION VIEW

COLD WEATHER SITE STABILIZATION

- TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE FOLLOWING ADDITIONAL STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1:
- 1. THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO 1 ACRE AND SHALL BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, IS REVIEWED AND APPROVED BY NHDES.
- 2. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE, SECURED WITH ANCHORED NETTING OR TACKIFIER, OR 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
- 3. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH PROPERLY INSTALLED AND ANCHORED EROSION CONTROL MATTING OR WITH A MINIMUM 4 INCH THICKNESS OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
- 4. INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX. MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H), SHALL NOT OCCUR OVER SNOW OF GREATER THAN 1 INCH IN DEPTH.
- 5. INSTALLATION OF EROSION CONTROL MATTING SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
- 6. ALL PROPOSED STABILIZATION IN ACCORDANCE WITH NOTES 2 OR 3 ABOVE, SHALL BE COMPLETED WITHIN 1 DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
- 7. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY THE OWNER'S ENGINEERING CONSULTANT.
- 8. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM NO. 304.1 OR 304.2.

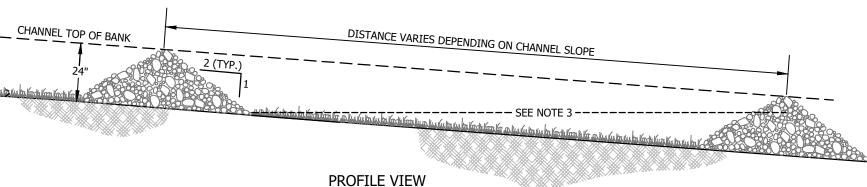
CONSTRUCTION SEQUENCE

- 1. PREPARE AN EROSION CONTROL PLAN OR A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- 2. INSTALL CONSTRUCTION ENTRANCE, SEE DETAIL.
- 3. CUT AND CLEAR TREES WITHIN THE CLEARING LIMITS.
- 4. INSTALL SEDIMENT FENCES, ROCK CHECK DAMS, AND OTHER APPROPRIATE EROSION CONTROL MEASURES AT LOCATIONS SHOWN ON THE PLANS AND AS NEEDED.
- 5. GRUB SITE WITHIN GRADING LIMITS.
- 6. STRIP AND STOCKPILE TOPSOIL AND INSTALL EROSION CONTROL MEASURES.
- 7. INSTALL/ADJUST SEDIMENT FENCE, CHECK DAMS, AND HAYBALES, AS REQUIRED.
- 8. CONSTRUCT PERMANENT STORMWATER CONTROLS AS SOON AS PRACTICAL. DO NOT DIRECT STORMWATER TOWARD TREATMENT BASINS, PONDS, SWALES, DITCHES AND LEVEL SPREADERS UNTIL THEY HAVE BEEN STABILIZED.
- 9. PROCEED WITH WORK, LIMITING THE DURATION OF DISTURBANCE. THE MAXIMUM OF UNCOVERED DISTURBED EARTH AT ANY ONE TIME IS FIVE ACRES. THE MAXIMUM LENGTH OF TIME THAT DISTURBED EARTH MAY BE LEFT UNSTABILIZED IS 45 DAYS.
- 10. BEGIN SEEDING AND MULCHING IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED WITH APPROVED METHODS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
- A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED; B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED; C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
- D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- 11. INSPECT ALL EROSION CONTROL MEASURES ON A DAILY BASIS AND AFTER EVERY 0.5 INCHES OF PRECIPITATION. MAINTAIN SEDIMENT FENCE, SEDIMENT TRAPS, HAY BALES, ETC., AS NECESSARY.
- 12. PAVE ROADWAYS AND/OR PARKING AREAS.
- 13. PLACE TOPSOIL, SEED AND MULCH
- 14. COMPLETE ALL REMAINING PERMANENT EROSION CONTROL STRUCTURES.
- 15. MONITOR THE SITE AND MAINTAIN STRUCTURES AS NEEDED UNTIL FULL VEGETATION IS ESTABLISHED.



- 2"-3" STONE, TYP.

- 1. CONSTRUCT ROCK CHECK DAMS WHERE INDICATED ON THE PLANS OR AS NECESSARY.
- 2. CONSTRUCT SPILLWAY IN CENTER OF ROCK CHECK DAM 6" BELOW TOP OF CHANNEL
- 3. THE MAXIMUM SPACING BETWEEN THE CHECK DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM CHECK DAM IS AT THE SAME ELEVATION AS THE SPILLWAY ELEVATION OF THE DOWNSTREAM CHECK DAM, THIS WILL VARY DEPENDING ON THE SLOPE OF THE CHANNEL.
- 4. ROCK CHECK DAMS SHALL CONSIST OF A WELL GRADED MIXTURE OF 2" 3" STONE 5. REMOVE ROCK CHECK DAMS AND ANY ACCUMULATED SILT IN CHANNEL ONCE
- PERMANENT CHANNEL LININGS HAVE BEEN ESTABLISHED AND STABILIZED.



ROCK CHECK DAM DETAIL

NO SCALE

DATE OF PRINT FEBRUARY 16 2021 **horizens** Engineering
All rights reserved HORIZONS ENGINEERING

FOR REVIEW NOT FOR CONSTRUCTION

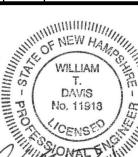


WOODBURY COOPERATIVE, INC

SITE IMPROVEMENTS

PORTSMOUTH, NEW HAMPSHIRE

EROSION PREVENTION & SEDIMENT CONTROL DETAILS REVISION DESCRIPTION



DATE: PROJECT FEB. 2021 16074 ENGIN'D BY: DRAWN BY : ARCHIVE # CHECK'D B

SHEET 9 OF 9

SEDIMENT FENCE NO SCALE

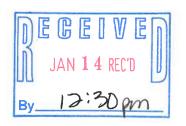
UNDISTURBED GROUND

DUNCAN J. MACCALLUM

ATTORNEY AT LAW

536 STATE STREET
PORTSMOUTH, NEW HAMPSHIRE 03801-4327
(603) 431-1230
TELECOPIER: (603) 431-1308

ALSO ADMITTED IN NY, PA, OHIO & MA



August 13, 2021

Beverly Mesa Zendt, Planning Director City of Portsmouth One Junkins Avenue Portsmouth, New Hampshire 03801

Re: Raynes Avenue Project

Dear Ms. Zendt:

Enclosed for filing are the original and fifteen copies of our Motion for Rehearing/Reconsideration in the above-referenced matter.

Very truly yours

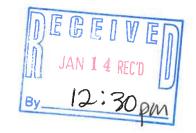
Duncan . MacCallum

DJM/eap Enclosures

cc. Michael D. Ramsdell, Esquire Brian J. Bouchard, Esquire Robert A. Previti, Esquire

HAND DELIVERED TO ADDRESSEE ONLY

THE STATE OF NEW HAMPSHIRE



PLANNING BOARD OF THE CITY OF PORTSMOUTH

In re Application of North Mill Pond Holdings, LLC, One Raynes Ave, LLC, 31 Raynes Ave, LLC, and 203 Maplewood Ave, LLC, regarding the properties located at 1 Raynes Avenue, 203 Maplewood Avenue, and 31 Raynes Avenue, and known familiarly as

The Raynes Avenue Project

MOTION FOR REHEARING/RECONSIDERATION

James A. Beal, Fintan ("Finn") Connell, Joseph R. Famularo, Jr., Philippe Favet,
Charlotte Gindele, Julia Gindele, Linda Griebsch, Catherine L. ("Kate") Harris, Roy W. Helsel,
Elizabeth Jefferson, and Donna Pantelakos, all of whom are citizens, residents and/or property
owners in the City of Portsmouth, respectfully move this Planning Board to reconsider its decision of December 16, 2021, in which it granted site plan approval to the applicants' project,
granted a wetlands conditional use permit, and granted various other approvals to the project.

The movants ask that the Planning Board reconsider its decision, vacate and reverse its grant of
site plan approval and its grant of the wetlands conditional use permit, rehear the developers'
application anew, and ultimately disapprove the applicants' site plan. As grounds in support of
their motion, the movants state the following:

1. An ineligible member of the Planning Board, who was improperly appointed to that Board, participated in consideration of the applicants' site plan review and joined in the vote to

grant site plan approval. Therefore, under the teachings of the New Hampshire Supreme Court's decision in Winslow v. Town of Holderness Planning Bd., 125 N.H. 262, 480 A.2d 114 (1984), the Planning Board's decision granting site plan approval, issuing a wetlands conditional use permit, and granting other approvals is absolutely void. In the Winslow case, the court ruled that the participation of a single ineligible member in a land use board's decision invalidates the entire decision because "it [is] impossible to estimate the influence one member might have on his associates". 125 N.H. at 268, 480 A.2d at 117.

- 2. Planning Board member Raymond Pezzullo was and is ineligible to sit on the Planning Board because he was improperly appointed pursuant to a provision in Portsmouth's local Administrative Code which directly conflicts with a New Hampshire state statute. Therefore, the local Administrative Code provision is void.
- 3. More specifically, RSA 673: 2 provides that in cities having a city manager form of local government, the planning board is to consist of nine members, two of whom are to be ex officio members and the other seven of whom are to be appointed by the mayor and confirmed by the city council. Of the two ex officio members, one is to be the city manager or someone whom he or she appoints to serve in his or her place, and the other is to be a member of the city council, selected by the city council itself. By contrast, section 1.303 of Portsmouth's local Administrative Code, pursuant to which Mr. Pezzullo was ostensibly appointed, conflicts with this statutory scheme, in that it purports to authorize the city manager to appoint a third Planning Board member, selected from the City administrative staff, as an ex officio member, increasing the number of ex officio members from two to three and decreasing the number of Planning Board members appointed by the mayor and confirmed by the City Council from seven to six. RSA 673:2 neither provides for nor permits the appointment of a third ex officio member. Therefore, section 1.303

of the City's Administrative Code is in direct conflict with state law, and therefore void, and Mr. Pezzullo's appointment to the Planning Board was unlawful. (The conflict between state law and the local Administrative Code is explained more fully in a letter dated December 1, 2021 from Planning Board member Rick Chellman to City Attorney Robert P. Sullivan, a copy of which is appended hereto as Attachment A, and in a subsequent letter dated December 29, 2021 from the movants' undersigned counsel to former Planning Board Chairman Dexter Legg, a copy of which is appended hereto as Attachment B.)

- 4. Mr. Pezzullo's participation in the December 16, 2021 decision was especially egregious, for his lack of eligibility to sit on this Board was timely called to the Board's attention by another member of the Planning Board itself, Rick Chellman, at the start of the meeting. Mr. Chellman had previously written a letter to City Attorney Bob Sullivan on December 1, 2021, raising the issue and explaining why Mr. Pezzullo's appointment violated the state's statutory scheme (see Attachment A hereto), and he re-raised it verbally with the chairman and the other Planning Board members at the start of the December 16, 2021 meeting.
- 5. In addition to violating state law, Portsmouth's method of selecting a third ex officio member also creates an obvious conflict of interest on the part of the appointee. As noted above, section 1.303 of Portsmouth's Administrative Code provides that the third ex officio member is appointed by the city manager and selected from the City's administrative staff. As a member of the city administration, the appointee is a city employee and thus is beholden to the city manager for his job; she has the power of hiring and firing over the former. Under such circumstances, the appointee will be loath to publicly express an opinion that is contrary to the opinion, stance, or wishes of the city manager, and he is not likely to vote against an application or measure that she supports. Almost invariably, he will vote in favor of whatever she votes for, and he will vote

against whatever she votes against. In this situation, there is no chance that the appointee in question will ever exercise independent judgment. The practical effect of section 1.303 is that the city manager gets two votes on the Planning Board--her own, and the vote of the <u>ex officio</u> member whom she has appointed from the City's administrative staff--whereas the regular members appointed by the mayor and confirmed by the City Council get only one.

- 6. Finally, Mr. Pezzullo's purported membership on the Planning Board did not even comply with the Administrative Code itself, for as an <u>ex officio</u> member his term of office was to have expired at the time of the retirement of the appointing authority who had placed him in that office, which was former City Manager John Bohenko. Following City Manager Bohenko's retirement two years ago, Mr. Pezzullo was never reappointed by the current city manager nor confirmed by the City Council. (For further discussion, see Attachments A and B hereto.) Under any scenario, therefore, he has been sitting on the Planning Board unlawfully.
- 7. For all of the foregoing reasons, Mr. Pezzullo was ineligible to sit on the Planning Board; he was appointed to that Board unlawfully; and under the teachings of Winslow v. Town of Holderness Planning Bd., 125 N.H. 262, 480 A.2d 114 (1984), the Planning Board's decision of December 16, 2021 was absolutely void. For that reason, this Board should reconsider its decision and conduct a full rehearing on the developers' application.
- 8. Several of the members of the Planning Board who voted to grant site plan approval and, in particular, who voted to grant a wetlands conditional use permit employed palpably erroneous legal reasoning and committed clear legal error in applying section 10.1017.50 of the Zoning Ordinance, which sets forth the six criteria for the granting of wetlands conditional use permits. These six criteria are mandatory, yet four of the members of this Board, including its then-chairman, openly expressed the view that these six criteria were merely "factors" to be

weighed against one another and that the criteria were "negotiable" and subject to broad interpretation. The vice-chairwoman flatly--and totally erroneously--stated that an applicant does not necessarily have to meet all of the six criteria in order to qualify for a wetlands conditional use permit. The chairman at one point opined that the six criteria are "open to interpretation". Two other members of the Board made similar comments, evincing a very cavalier attitude toward the six criteria.

- 9. All of this constituted clear and obvious legal error. The criteria for granting a conditional use permit--allowing a developer to erect a building or install a paved roadway within the 100' wetlands buffer--are indeed mandatory, and the applicants' proposal did not satisfy at least two of these criteria. Section 10.1017.50 of the Zoning Ordinance sets forth the six criteria which must be met in order for a wetlands conditional use permit to be issued. They are:
 - (1) The land is reasonably suited to the **use**, activity or **alteration**.
 - (2) There is no alternative location outside the **wetland buffer** that is feasible and reasonable for the proposed **use**, activity or **alteration**.
 - (3) There will be no adverse impact on the **wetland** functional values of the site or surrounding properties;
 - (4) **Alteration** of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals; and
 - (5) The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Section.
 - (6) Any area within the **vegetated buffer strip** will be returned to a natural state to the extent feasible.

(Boldfacing in original.) Section 10.1017.41 of the Zoning Ordinance makes clear that these criteria are mandatory and that <u>all six</u> must be satisfied in order for a wetlands conditional use permit to be issued. That section states:

The Planning Board shall grant a conditional use permit provided that it finds that all other restrictions of this Ordinance are met and that proposed **development** meets all the criteria set forth in section 10.1017.50 or 10.1017.60, as applicable.

(Boldfacing in original; other emphasis added.)

10. The above-quoted sections of the Zoning Ordinance make clear that these criteria are not merely "factors" to be taken into consideration and to be weighed against one another in deciding whether to issue a permit, nor that an exceptionally strong showing of compliance with one of these criteria may be used to offset or excuse compliance with another. Four members of this Planning Board erred in so regarding them. There is no question but that the applicants' proposal fails to meet subsections (2) and (5) of section 10.1017.50: It would be "feasible and reasonable" for the developers to erect a building and paved driveway within the site yet outside the 100' wetlands buffer, simply by reducing the size of the proposed building, § 10.1017.50(2), and therefore the developers' proposal is not the alternative with "the least adverse impact to" the wetlands buffer, the North Mill Pond, and its surroundings. § 10.1017.50(5). Four members of this Board committed clear and obvious error by averring that these six criteria were "open to interpretation" and using like observations as the basis for voting to grant site plan approval and issue a wetlands conditional use permit.

^{1.} Section 10.1017.60, mentioned in the quoted section above, is inapplicable here, inasmuch as it pertains to public and private utilities and rights-of-way in wetlands and wetlands buffers. There are no public or private utilities at issue here.

- 11. In addition to misinterpreting the criteria for the wetlands conditional use permit, this Board also made other, unrelated errors during the course of ultimately granting site plan approval. For one thing, the Board acted prematurely and committed error in refusing to wait until after the Historic District Commission had acted on the application that was before it, relating to the same project. The Planning Board should have waited to see what the developers' plan was going to look like after having been vetted by the HDC. More generally, there were many other unanswered questions which came to light during the December 16, 2021 hearing, and this Board should have waited until they were resolved. For example, it was never settled who was going to be responsible for paying for valet parking in perpetuity and who was going to be responsible for enforcing the stipulation that such valet parking be provided, as the existing on-site parking provided-for by the developers' plan was and is admittedly inadequate.
- 12. As part of his remarks in support of the project during the Board's deliberations, the chairman totally misquoted a member of the Conservation Law Foundation who had spoken before the Planning Board previously at its April 15, 2021 meeting, and he claimed that she had said that "this project [is] going to improve the quality of North Mill Pond water." In reality, she had said just the opposite. Attached hereto as Attachment C is a copy of a letter issued by the Conservation Law Foundation and dated December 23, 2021, in which the CLF, in reaction to the events which transpired at this Board's December 16, 2021 meeting, took issue with the chairman's misuse of its representative's words. While praising the developers' stormwater run-off treatment program, the CLF representative had condemned the project in general because of the intrusion into the wetlands buffer zone. (See Attachment C.)

13. Finally, the Planning Board erred in failing to adopt the recommendation of the Conservation Commission, which had disapproved the project in question. At the proceedings before the Planning Board, the developers boasted that they had worked closely with the Conservation Commission and that they had had five meetings with the latter in which they had modified their project in order to respond to the comments, criticisms, and feedback which the Commission had given. Yet, after five meetings the Conservation Commission was still dissatisfied with the applicants' project and issued a negative recommendation concerning same. The Planning Board should have heeded the Conservation Commission's recommendation and denied site plan approval.

For all of the foregoing reasons, the Planning Board should reconsider, vacate, and reverse its decision of December 16, 2021 granting site plan approval, a wetlands conditional use permit, and other approvals to the above-referenced project, and the Board should conduct a denovo rehearing of the developers' application without the participation of ineligible Planning Board member Raymond Pezzullo.

Duncan J.MacCallum

NHBA #1576

536 State Street

Portsmouth, New Hampshire 03801

(603) 431-1230

madbarrister@aol.com

Attorney for Moving Parties

CERTIFICATE OF SERVICE

The undersigned, Duncan J. MacCallum, Attorney for Movants in the within proceeding, hereby certifies that on this 14th day of January, 2022, true and correct copies of the foregoing Motion for Rehearing/Reconsideration were served upon the applicants both via e-mail and by first class mail, postage prepaid, to each of the following counsel of record:

Michael D. Ramsdell, Esquire Brian J. Bouchard, Esquire Sheehan Phinney Bass & Green, P.A. 1000 Elm Street, 17th Floor Manchester, New Hampshire 03101

Robert A. Previti, Esquire Stebbins, Lazos & Van Der Beken, LLC 889 Elm Street, 6th Floor Manchester, New Hampshire 03101

Duncan J. MacCallum

ATTACHMENT A



TND ENGINEERING

TRAFFIC, TND, TRANSPORTATION AND CONSULTING

224 State Street
PORTSMOUTH, NH 03801
p. 603.479-7195
Email: Cheilman@INDEngineering.com

Mr. Robert P. Sullivan, Esq. City Attorney, City of Portsmouth 1 Junkins Avenue Portsmouth, NH 03801 **December 1, 2021**

Re: Planning Board Members

Dear Bob:

As we discussed recently in your office, and I briefly reviewed with Trevor by telephone last week, it has recently come to my attention that the current makeup of the Planning Board, which includes an ex-officio member appointed by the City Manager, is apparently not in conformance with the enabling statutes.

You asked that I reduce some of my thoughts about, and research into, this matter to writing and in compliance with that request, I offer this letter.

Beginning with the City's Code, Section 1.303 A contains the relevant City guidance:1

Section 1.303: PLANNING BOARD

- Membership: The Planning Board of the City shall consist of nine (9) members and two
 (2) alternate members, specifically; (Adopted 1/23/95)
 - The City Manager, or the designee of the City Manager with the approval of the City Council, who shall be an ex-officio member;
 - An administrative official of the City selected by the City Manager who shall be an ex-officio member;
 - A member of the City Council selected by the Mayor with the approval of the Council, who shall be an ex-officio member;
 - Six residents of the City appointed by the Mayor with the approval of the City Council.
 - Two (2) alternates who shall be residents of the City appointed by the Mayor with the approval of the City Council. (Adopted 1/23/95)

Figure 1: Section 1.303 of City Code

Rather than retyping reference materials, I will use image-copy inserts in this letter to reduce the likelihood of typographical errors.

Based on a review of City Minutes, the previous City Manager appointed a City employee to an ex-officio position on the Planning Board in September, 2018. While not cited in the Council minutes, since it was an informational item only, I assume this appointment was in accordance with 1.303 A: 2, above.

While you obviously have all of the statutes readily at hand, to make this letter stand-alone in case you find yourself reviewing it away from your desk, the relevant statute is 673:2 (I grayed out the section not used in Portsmouth):

Appointment and Terms of Local Land Use Board Members

Section 673:2

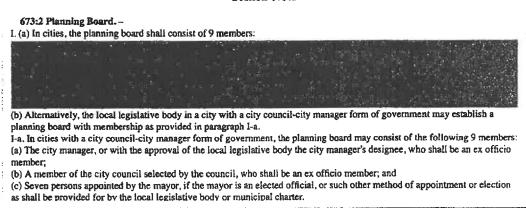


Figure 2: NH RSA 673:2

It is immediately apparent that while the current statute provides for only two exofficio members on the Planning Board, the Manager and a Councilor, the City's Code adds another appointed by the Manager.

I have not researched the origin of 1.303 of the City's Code as I think that is not particularly relevant to our current discussion. In fact, I think it likely that 1.303 was in conformance with earlier statutes or at least accepted practices in or about 1980. My reason for this thinking is gleaned in part from the City of Concord's past history with this specific topic, and its Ordinance #1396, bearing a date of 7/14/80 that contains almost the same language as Portsmouth's Code's Section 1.303. Concord's Ordinance #1396, superseded more than once since 1980 follows on the next page.

-70 7/14/20

CITY OF CONCORD

In the year of our Lord one thousand nine hundred and
AN ORDINANCE Amending Section 52.6 of the Administrative Code, relative to Planning Boards.

Section One: Amend Section 18.4 of the Sunicipal Code of Ordinances.

Administrative Code, Planning Board by striking the whole thereof

and substituting in its place the following new section:

52.6 Planning Board. The Planning Board shall consist
of nine members, namely, the City Manager, one of the
administrative officials of the city who shall be selected by the manager, and a member of the council who shall
be selected by it, as members ex officio, and six (6)
oersons to be appointed by the Mayor, subject to confirmation by the City Council. The Mayor shall also
appoint, subject to confirmation by the City Council,
three (3) alternate members. Whenever a regular member
shall be absent the chairman shall designate an alternate
if an alternate is present to uct in the absent member's
place.

The Planning Board shall perform all functions provided
for hy Chapter 36 of the New Managaire Revised Statutes
as amended and be subject to all provisions of said
chapter.

Section Two: This ordinance shall take effect moon its passare.

Figure 3 City of Concord Ordinance #1396 from 1980

Concord revised its Ordnance #1396 in 1986, 2001 and again most recently earlier this year with its current version being Ordinance No. 3084, that is attached for reference.

Concord's current Ordnance tracks the current statutory provisions of RSA 673:2 by providing for two ex-officio members, and seven members appointed by the Mayor and confirmed by the Council.

Like you, I am more focused on the statutory provisions than what other cities may or may not have enacted, but I found Concord's example to be informative.²

I am of course more focused on the provisions of land use regulations themselves than I am with enabling legislation, so when you were away on vacation last week, I took the opportunity to review this topic with two private

² The Cities of Manchester and Rochester have provisions similar to Concord's but neither provides for a Manager appointment of an ex-officio member.

attorneys I work with and also with the NH Municipal Association Counsel.3

In each instance, it was quickly apparent to these attorneys that Portsmouth's current Code is out of date and not in conformance with the current statutory scheme.

I would like to note with specific emphasis that my concerns are not in any way personal or related to the specific individuals currently or recently involved with this matter. My concerns are that this topic relates to the basic makeup of a Planning Board on which I serve myself and I strive to ensure compliance with pertinent requirements- I feel the City and the applicants before the Board deserve no less.

That thinking led me to consider the possible ramifications of not correcting what I believe was originally common practice but has now been revealed to be an outdated mistake that has only very recently been discovered by these discussions with you and others.

The Planning Board has many functions, but for this discussion we need to focus on its quasi-judicial functions, where interested parties are furnished notice, public hearings are held, and evidence is considered before a decision is reached. These quasi-judicial functions at least include the Board's review of subdivisions, site plans, and conditional use permits. These sorts of reviews occur very regularly, sometimes many times each month.

From my own review of this, it appears that at about the time of the enactment of Concord's Ordinance #1396, above, and possibly of Portsmouth's 1.303 (which may very well pre-date the Concord Ordinance), even the NH Supreme Court had a different opinion on the possible effects of one member's participation in a Board decision where that member may later be found to be disqualified.

In *Totty V. Grantham Planning Board*, 120 NH 390 (1980), the Court reviewed a case where two of the five voting members on a subdivision application were abutters, and the Court held that those two members where therefore disqualified. However, the Court also held that since the other three members voting in the unanimous Board decision were "concededly qualified" and that since there "was no indication" the disqualified members participation determined the outcome of the vote, the vote was held to be valid.

Just four years later the Court demonstrated that we all can make mistakes, in **Winslow v. Holderness Planning Board** 125 NH 262 (1984), the Court stated that with respect to **Totty** that "[w]e now believe this to be a misstatement of the

³ Mr. Natch Greyes, Esq.

law".4

In the *Winslow* case, the matter of a member's disqualification and the implications of a Planning Board member are discussed at some length. Noting that when Boards act in a quasi-judicial manner, the Court cited as relevant the NH Constitution which "demands" that all judges be "as impartial as the law of humanity will admit".

Under the current makeup of the Portsmouth Planning Board, one member (the "extra ex-officio member discussed above) is appointed by, and reports to another member who is that member's employer or supervisor (the Manager).

I think it impossible to contemplate and satisfactorily reconcile all of the possible problems such a situation can present under the current regulatory frameworks.

The pressure on the employee to agree with their employer/supervisor is one obvious possibility. However, what if -for example- the employee happens to speak first during deliberations, could that result in an undue influence on the Manager simply because of the employer/employee relationship that exists outside the Board?

The Court in **Winslow** also noted it would "reach the same result" in applying the test for members of zoning boards of adjustment to meet the standards required of jurors.

Here, and as you agreed in your office earlier this week, we have a situation where the City's Code does not conform with the current statute. I submit it also does not conform with current policy and best practices as enumerated in case law and followed by other cities. There can be no valid argument for allowing the manager or anyone else to appoint an "extra" ex-officio member without that falling int the realm of an ultra vires action.

I now turn to a sense of urgency in this matter as we have a Planning Board meeting scheduled for later this month. If I, the NH Municipal Association's counsel and others I have reviewed this matter with are all correct, then this "extra" member is not qualified as a Board member.

Finally, and again in the Winslow case, the NH Court stated (citing the Rollins Court) that "mere participation by one disqualified member was sufficient to invalidate the tribunal's decision because it was impossible to estimate the influence one member might have on his associates (emphasis added)".

⁴ This case also cites a much earlier case, Rollins v. Connor 74 NH 456 (1908) which also held that the participation in a "judicial action by a tribunal" by a disqualified member is voidable.

Again, please understand that this is not a matter focused on any individual person, but in a framework that has created a Planning Board membership scheme that does not conform to current Statutes.

If I am correct, then every quasi-judicial decision the Board reaches with such a member's participation runs the risk of being declared invalid. If I am incorrect, then the only risk is one less administrative official on the Board and the City's administrative officials have ample other opportunities to provide input to the planning processes in the City.

If you would care to discuss this further, I am at your service in that regard.

Respectfully Submitted,

Chester "Rick" C helman, P.E., L.L.S.

Email only copies to: Synthia Ravell (to print for Bob) Trevoir McCourt, Esq.

ATTACHMENT B

DUNCAN J. MACCALLUM

ATTORNEY AT LAW

536 STATE STREET
PORTSMOUTH, NEW HAMPSHIRE 03801-4327
(603) 431-1230
TELECOPIER: (603) 431-1308

ALSO ADMITTED IN NY, PA, OHIO & MA

December 29, 2021

Dexter Legg, Chairman
Portsmouth Planning Board
City of Portsmouth
One Junkins Avenue
Portsmouth, New Hampshire 03801

Re: Ineligibility of Raymond Pezzullo

Dear Mr. Legg:

This will constitute my formal request that Raymond Pezzullo be disqualified from sitting on the Planning Board at its upcoming December 30, 2021 meeting and that he in any event refrain from participating in the consideration of, or voting on, any of the applications that are to be entertained at that meeting.

The basis for my request is that Mr. Pezzullo is ineligible to sit on the Planning Board and was unlawfully appointed thereto, for in a city manager form of local government New Hampshire state law allows for the appointment of only two ex officio members to a planning board: the city manger (or his or her designee) and a member of the City Council. RSA 673:2. All other members of the planning board are to be appointed by the mayor and confirmed by the City Council. Id.

Mr. Pezzullo was neither designated by the city manager to sit on the Planning Board in her place nor chosen by the City Council to be its delegate to that Board (inasmuch as he is not a member of the City Council in the first place). Rather, he was purportedly appointed to the Planning Board as an additional ex officio member by the city manger, acting under color of section 1.303 of the City's Administrative Code. Section 1.303, however, clashes with the above-cited New Hampshire state statute and is therefore invalid. Ergo, Mr. Pezzullo is ineligible to sit on the Planning Board (or, at least, he is ineligible to sit as an ex officio member; he theoretically could still be appointed by the mayor and confirmed by the City Council), and he is presently holding his seat unlawfully.

You, of course, already have quite a bit of familiarity with this issue, inasmuch as it was publicly raised by Planning Board member Rick Chellman at the Planning Board's December 16,

Dexter Legg, Planning Board Chairman December 29, 2021 Page 2

2021 meeting and was the subject of some discussion between Mr. Chellman and yourself at that time. Further, at that meeting you also indicated that you were already aware of Mr. Chellman's letter of December 1, 2021 to City Attorney Bob Sullivan and that in fact you had already discussed it with the latter, even if you had not yet been provided with a copy. (In case you still have not received one, I enclose a copy of the letter herewith, as well as copies of its attachments.) To my knowledge, the December 16, 2021 meeting marked the first public disclosure of the fact that Mr. Pezzullo's eligibility to serve on the Planning Board was in question. But in any event, it seems clear that you yourself were already well aware of the issue.

As I'm also quite sure you're aware, the root of the reason why that issue has arisen is that there is a conflict between the relevant New Hampshire state statute, RSA 673:2, and one of the provisions of the City's Administrative Code, § 1.303. I deem it to be a proposition so obvious as to require no citation to legal authority, that if there is a conflict between a state statute and a local ordinance, the state statute prevails and the conflicting provisions of the local ordinance must yield.

RSA 673:2 establishes the framework for the planning board and prescribes the composition of its membership. In cities with a city manager form of government, there are to be nine regular members and, as already noted above, two of those members are to be <u>ex officio</u> members, consisting of (a) the city manager or his/her designee, and (b) a member of the City Council, chosen by the latter body. (There may also be alternates. See RSA 673:6.) The remaining seven regular members are to be appointed by the mayor and confirmed by the City Council. There is no provision in the statute for a third <u>ex officio</u> member.

RSA 673:2 states in pertinent part:

- I. (a) In cities, the planning board shall consist of 9 members:
- (1) The mayor of the city, or with the approval of the local legislative body the mayor's designee, who shall be an ex officio member:
- (2) An administrative official of the city selected by the mayor, who shall be an ex officio member;
- (3) A member of the city council selected by the council, who shall be an ex officio member; and

Dexter Legg, Planning Board Chairman December 29, 2021 Page 3

- (4) Six persons appointed by the mayor, if the mayor is an elected official, or such other method of appointment or election as shall be provided for by the local legislative body or municipal charter.
- (b) Alternatively, the local legislative body in a city with a city council-city manager form of government may establish a planning board with membership as provided in paragraph I-a.
- I-a. In cities with a city council-city manager form of government, the planning board may consist of the following 9 members:
- (a) The city manager, or with the approval of the local legislative body the city manager's designee, who shall be an ex officio member;
- (b) A member of the city council selected by the council, who shall be an ex officio member; and
- (c) Seven persons appointed by the mayor, if the mayor is an elected official, or such other method of appointment or election as shall be provided for by the local legislative body or municipal charter.

In neither RSA 673:2, I nor I-a is there any provision for a third <u>ex officio</u> member on the planning board. The portion of the statute providing for the number of planning board members is expressed in the mandatory term "shall": "In cities, the planning board <u>shall</u> consist of 9 members[.]" RSA 673:2, I(a) (quoted above) (emphasis added). Subsection I-a(c) of the statute provides that by charter or by local legislative action, the municipality may alter the method of appointment of the non-<u>ex officio</u> members, but the subsection does not augment the total number of members who may be appointed, either regular or <u>ex officio</u>.

Section 1.303 of the Portsmouth Administrative Code is both internally inconsistent and in conflict with this statutory scheme, and therefore that section is void to the extent of the conflict. Section 1.303 provides:

A. Membership: The Planning Board of the City shall consist of nine (9) members and two (2) alternate members, specifically;

- 1. The City Manager, or the designee of the City Manager with the approval of the City Council, who shall be an ex-officio member;
- 2. An administrative official of the City selected by the City Manager who shall be an ex-officio member;
- 3. A member of the City Council selected by the Mayor with the approval of the Council, who shall be an ex-officio member;
- 4. Six residents of the City appointed by the Mayor with the approval of the City Council.
- 5. Two (2) alternates who shall be residents of the City appointed by the Mayor with the approval of the City Council.

B. Term: All Planning Board members shall serve as such without compensation and the appointed members shall hold no other municipal office except ward official, election official and checklist supervisors. The term of each appointed member shall be three (3) years. The Mayor shall apportion appointments so that no more than three appointments occur annually.

Section 1.303 unlawfully provides for a planning board which includes three <u>ex officio</u> members, rather than two, contrary to the statutory scheme laid out in RSA 673:2. It also reduces the number of citizen board members appointed by the mayor to six members, rather than seven. Conversely, it increases the number of members who may be appointed by the city manager (including herself) from one to two. It also purports to authorize the city manager to appoint a member who holds another municipal office other than ward official, election official, or checklist supervisor, contrary to Section 1.303's own provisions.

Finally, it throws the terms of office of <u>ex officio</u> members into a state of confusion. According to what Mr. Chellman says in his letter to City Attorney Sullivan--and I have no reason to doubt it--Mr. Pezzullo was appointed to the Planning Board as an <u>ex officio</u> member by then-City Manager John Bohenko, acting under color of the above-quoted section 1.303 of the Administrative Code. Was Mr. Pezzullo appointed to a three-year term? As an <u>ex officio</u>

Dexter Legg, Planning Board Chairman December 29, 2021 Page 5

member, one would have expected his term of office to have expired with the expiration of the term of the official or other authority that appointed him, and former City Manager Bohenko retired two years ago. Was Mr. Pezzullo reappointed by our current city manager, Karen Conard, within these past two years since the time that she took office? If so, I doubt very much that he was confirmed by our current City Council, headed by Mayor Rick Becksted.

Absent some evidence that Mr. Pezzullo, an <u>ex officio</u> member, was reappointed by City Manager Conard and his reappointment confirmed by the City Council, it is clear that he is presently sitting on the Planning Board unlawfully, even under the terms of the City's own Administrative Code.

Finally, as Planning Board member Rick Chellman has ably pointed out in his letter of December 1, 2021 to City Attorney Bob Sullivan, the system laid out in section 1.303 of the Administrative Code, wherein the city manager appoints a Planning Board member selected from the City administrative staff, creates a situation of obvious conflict of interest on the part of the appointee (in this case Mr. Pezzullo). As a member of the city administration, the appointee is a city employee and thus is beholden to the city manager for his job; she has the power of hiring and firing over the former. The appointee is going to be loath to publicly express an opinion that is contrary to the opinion, stance, or wishes of the city manager, and he is not likely to vote against an application or measure that she supports. Almost invariably, he will vote in favor of whatever she votes for, and he will vote against whatever she votes against.

In practical effect, under this arrangement the city manager gets two votes: her own, and the vote of the <u>ex officio</u> member whom she has separately appointed from City administrative staff pursuant to section 1.303(A)(2). Any notion of independence of thought or action on the part of the appointee is a pipe dream, and in any event the arrangement does violence to the statutory scheme established by RSA 673:2, I and I-a.

Dexter Legg, Planning Board Chairman December 29, 2021 Page 6

For all of the foregoing reasons, I ask that Mr. Pezzullo be disqualified from sitting as a Planning Board member at the upcoming December 30, 2021 meeting and at all future meetings.

Very truly yours

Duncan J. MacCallum

DJM/eap Enclosures

cc. Robert P. Sullivan, Esquire (w/o enclosures)
Karen Conard, City Manager
Rick Becksted, Mayor
Rick Chellman (w/o enclosures)

HAND DELIVERED

ATTACHMENT C



For a thriving New England

CLF New Hampshire

27 North Main Street Concord, NH 03301 P: 603.225.3060 F: 603.225.3059 www.clf.org

December 23, 2021

Chairman Dexter Legg and Planning Board Members City of Portsmouth Planning Board 1 Junkins Avenue Portsmouth NH 03801

Re: 1&31 Raynes Avenue Project, Conditional Use Permit Hearing

Dear Chairman Legg and Planning Board Members,

We write to you with concerns about comments made at the Planning Board meeting on December 16, 2021 in which the Board considered a conditional use permit (CUP) to allow the proposed 1&31 Raynes Avenue project to build within the 100 foot wetlands buffer. At that meeting, Chairman Legg referred to comments made by CLF's Great Bay-Piscataqua Waterkeeper, Melissa Paly, at an April 15, 2021 hearing on a different project as justification to support and approve a CUP.

At the April 15 hearing referenced by Chairman Legg, Ms. Paly provided comments regarding a project at 105 Bartlett Street, which was also seeking a variance from the 100-foot buffer. The first part of those comments commended elements of the project related to stormwater management that would enhance water quality in North Mill Pond. However, the second part of Ms. Paly's comments addressed the importance of buffers and concerns about reducing the 100-foot wetlands buffer. During deliberations, several Planning Board members focused solely on the first part of Ms. Paly's comments related to stormwater management yet overlooked her concerns about encroachment on the wetland buffer.

One of the recommendations to really reduce runoff and stabilize banks is a minimum of 164 feet recommended in this report.... I'd like you to consider that a 100-foot buffer is a *minimum* to protect habitat, water quality and other things, so certainly granting a waiver will compromise the benefits that it's intended to produce.... There will be impacts as you chip away at that buffer.

¹ In her April 15 comments, Ms. Paly brought to the Board's attention a recent report called *Buffer Options on the Bay*, released by a consortium including the NH Department of Environmental Services, The Nature Conservancy, the Great Bay National Estuarine Research Reserve and others, that includes recommendations on buffer width to meet different objectives. Ms Paly stated:



At the December 16 hearing on the 1&31 Raynes Avenue project, Chairman Legg referred to Ms. Paly's April 15 comments, again focusing on her statements about stormwater management while ignoring those related to the importance of wetland buffers. We want to clarify that (1) we have provided no public comment on the Raynes Avenue project, (2) any comments we provide on one project — which will always be based on site-specific characteristics — cannot fairly be invoked for, and applied to, *other* projects, and (3) the Chairman's comments ignored a critical element of the Waterkeeper's April 15 testimony about the dual importance of both stormwater management *and* buffers to improving water quality.

We respectfully request that any comments provided by CLF and/or its Waterkeeper program in one context not be applied to other projects for which they were not intended. Furthermore, we request that the Waterkeeper's comments be viewed fully rather than parsed to justify encroachments into critically important wetland buffers. Finally, we request that this letter be shared with both current and incoming members of the Planning Board who will, no doubt, continue deliberations on the Raynes Avenue project.

Sincerely,

<u>/s Melissa Paly</u>
Melissa Paly
Great Bay-Piscataqua Waterkeeper

/s Tom Irwin
Tom Irwin
CLF Vice President for New Hampshire

² https://www.cityofportsmouth.com/planportsmouth/planning-board December 16, 2021 at 4:17

S SHERMAN LAW

January 20, 2022

FOR BOARD MEMBERS AND PUBLIC

Planning Board Chairperson City of Portsmouth Planning Board 1 Junkins Avenue Portsmouth, New Hampshire 03801

RE: MOTION FOR REHEARING

Application for Site Plan Approval Tax Map 106, Lot 54, 99 Bow Street

Dear Planning Board Members:

BowPorts EV, LLC ("BowPorts"), which is the record owner of 111 Bow Street, Unit 2, Portsmouth New Hampshire, and a direct abutter to Martingale LLC, Moves for Rehearing Regarding the Application for Site Plan Approval for Martingale LLC approved at the December 30, 2021 Planning Board meeting for the following reasons:

I. NEW Plan Submitted Only DAYS Before the Meeting Constitutes Denial of Due Process

There was a gross lack of adequate notice to (a) the Board, (b) the abutters, and (c) the public about the proposal that was actually considered and approved. The Applicant amended its plan and submitted it to the Board on December 22, 2021. It did not even have for consideration the final version of this **NEW** proposal.

This NEW proposal amended the deck size such that the Applicant's representative could not even identify the total square footage of the deck as identified in this "new" plan. The same representative also could *not* answer direct questions from the Board about important issues that Board members themselves identified.

II. Board Rushed This Application and Potentially Was Out of Compliance with Law

A. One Meeting On Last Day of the Year

To our knowledge, the December 30, 2021 Planning Board meeting was the *first time* in City history that the Board met the night before New Year's Eve to vote on an Application for Approval.

Portsmouth Planning Board Motion for Rehearing January 20, 2022 Page 2 of 5

This application – with a new version submitted on December 22, 2021, was approved after one (1) meeting, with nine (9) conditions, on the last day of the year.

One or more Board members asked for a site visit indicating that he would "like to see the area" in question. Yet, there was **no** follow-up regarding this. No communication about continuing the application until a site visit could occur.

B. Issue of Board Being Out of Compliance

At the immediately prior Planning Board meeting of December 16, 2021, an issue was raised about whether the Planning Board was out of compliance with the law because it had a legally unauthorized additional participating member. The Board did not deliberate publicly about this issue. To the contrary, it glossed over it and moved ahead.

We now understand that the Board was aware of this issue prior to and at the time of the December 30, 2021 meeting *and* did not (a) identify it or (b) address it. Instead, it just rushed this Application through.

If this representation about the Board's non-compliance is accurate, the deliberation and approval is flawed.

Because it was raised, it is at least an issue that should be addressed publicly in the interest of the Board's acting transparently and as an open form of government.

III. Board Relied Upon A Direct Factual Error

Trash disposal has been a huge problem at this location since the building was built. This Applicant has had their large trash barrels slammed up against 111 Bow Street -- the oldest historic building on Bow Street. More frequently than not, it has left this trash uncovered and overflowing. These barrels have damaged our wooden siding – something that the Historic District Commission requires us to maintain. This situation also has caused odor, seepage, noise, and rodent problems.

111 Bow Street has raised this issue with the City *multiple* times over the last eleven years. We specifically raised it during this Applicant's last proposal to expand the deck in 2015. We used pictures and asked Historic District Commission members to do a site visit.

We have also raised it with the Building Department and the Health Department.

During the most recent Planning Board meeting we again included pictures of the trash problem. We explained that these pictures *were from 2015* and used during the 2015 objections to this deck expansion *and* explained that the problem has persisted since that time.

Portsmouth Planning Board Motion for Rehearing January 20, 2022 Page 3 of 5

When the Applicant challenged the legitimacy of this trash problem, one Board member referenced that he personally observed it.

Yet, during deliberation the Chair of the Planning Board stated that the "trash issue" was not something that 111 Bow Street had previously raised with the City. This was directly and abjectly false. The vote to approve the Application, with its nine (9) conditions, followed. It is apparent, therefore, that this factual error directly impacted the result.

IV. Applicant Was Unable to Answer Numerous Questions From the Board

A. Pilings Hammered Into????

As an abutter, we are concerned about the direct impact on our property from the construction process proposed. This Applicant identified that it plans to drive pilings deep into the ground to support the expanded deck. For this, they plan to use a barge with a large crane that has a huge "vibratory hammer" to drive the pilings into the ground under the water.

We are only a few feet away from where this is supposed to happen. We asked whether they have done a study to determine what the ground is like in this location. Specifically, is it ledge? If so, this could fracture and affect our building, impact the ecosystem which we know from the DES application includes endangered species, and weaken the ground all along Bow Street.

The developer's representative responded that it does *not* know what the ground is where it proposes driving these pilings. It has not done anything to assess this.

Obviously, an issue of concern, a Board member asked if the Applicant could screw the pilings into the ground. The Applicant responded, "I don't know."

The Board ignored this when it approved this project.

B. Signage for "Public Deck"

The Board then asked about signage for what is supposed to be a "public deck." As one Board member explained, if a portion of this proposal is supposed to be a "public deck" there needs to be signage explaining this. Asked about this, the Applicant again said he "did not know" if there would be signage or where it would be.

Members then followed up with questions about whether the portion of the deck will actually be "public". The responses made it clear that it will be accessed by a stairwell open and closed at the business' discretion and the "public" deck area will have a gate that the business will be able to open and close when they want. They also will control how many people use it. This is clearly *not* a "public" deck.

Portsmouth Planning Board Motion for Rehearing January 20, 2022 Page 4 of 5

C. Access for Disabled

Martingale LLC claimed that it would provide access for the disabled who park on Bow Street to the waterfront by allowing use of its elevator. FEDERAL LAW requires this because the Martingale is a place of public accommodation. This is *not* a concession or even anything additional that Martingale is offering. Yet, the Board cited it as an additional benefit the City is receiving.

It then ignored a great question from a Board member who asked if there is a safety issue created regarding evacuation if the elevator fails. About this, the Applicant's representative again responded that he "did not know."

V. Direct RESIDENTIAL Abutters Object

The seven units at 111 Bow Street Object to this application. Five of these seven units are residential. All will be adversely affected by the sound, noise, odor and light this deck will create.

It is undisputed that this proposal will increase the impact each of elements will have on abutting properties. This proposal means *more* customers which will generate *more* trash, noise, sound, light, and odor.

Indeed, for this reason the proposal includes "screening" for the neighboring properties. At the meeting, the Applicant mentioned something about *eliminating* the screening on one side. This *elimination* was not shown *anywhere* on the new version of its proposal!

Moreover, this proposed screening is woefully insufficient to mitigate the increased harm this project will cause. It is short. It is decorative. It is only directed toward making the dining experience for customers better. But will do nothing for abutting residential property owners who will be subjected to much greater adverse impact.

VI. NH DES Application Still Pending

The Portsmouth Conservation Commission has denied this proposed deck expansion twice.

The Applicant has repeatedly acknowledged that whether this proposal goes forward depends upon the NH DES consideration of its Dredge and Fill permit. It is agreed — and undisputed — that the NH DES is the agency with the expertise to address the issues this proposal raises. It also is undisputed that there are many unanswered questions, especially since the Applicant just amended its proposal *again*.

Portsmouth Planning Board Motion for Rehearing January 20, 2022 Page 5 of 5

Before the Planning Board proceeds further, it should receive the determination from NH DES so the Board can address any issues raised therein. Proceeding otherwise, and approving this application without even knowing the concerns that NH DES identifies, is a dereliction of the responsibility that the Planning Board owes to Portsmouth residents.

Please reconsider this Application.

Sincerely,

John P. Sherman

cc: Client

Planning Board members - via email planning@cityofportsmouth.com

Nick Cracknell, City of Portsmouth (via email)

Peter Britz, City of Portsmouth (via email)

Marjan Frank and George Glidden (via email)

John Samonas (via email)

David Price, NH DES (via email)

Stefanie Giallongo, NH DES (via email)

Juliet Walker, City of Portsmouth (via email)