

TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709 <u>www.exeternh.gov</u>

LEGAL NOTICE EXETER PLANNING BOARD AGENDA

The Exeter Planning Board will meet virtually via ZOOM (see connection info below*) on Thursday, October 8th, 2020 at 7:00 P.M.to consider the following:

APPROVAL OF MINUTES: September 24, 2020

NEW BUSINESS: PUBLIC HEARINGS

The application of Phillips Exeter Academy for a Wetlands Conditional Use Permit and site plan review for the proposed construction of a new 60-bed dormitory on the school campus. The subject property is located on Front Street and Tan Lane in the R-2, Single Family Residential zoning district. Tax Map Parcel #72-209. Case #20-12.

The application of Cabernet Builders for the subdivision of an existing 13.3-acre parcel located at 120 Kingston Road into four (4) single-family residential lots. The subject property is located in the R-1, Low Density Residential zoning district. Tax Map Parcel #101-8-1. Case #20-13

OTHER BUSINESS

EXETER PLANNING BOARD

Langdon J. Plumer, Chairman

Posted 09/25/20 Exeter Town Office and Town of Exeter website

*ZOOM MEETING INFORMATION:

Virtual Meetings can be watched on Channel 22 and on Exeter TV's Facebook and YouTube pages.

To participate in public comment, click this link: https://exeternh.zoom.us/j/84110666702

To participate via telephone, call: +1 646 558 8656 and enter the Webinar ID: 841 1066 6702

Please join the meeting with your full name if you want to speak.

Use the "Raise Hand" button to alert the chair you wish to speak. On the phone, press *9.

More instructions for how to participate can be found here: https://www.exeternh.gov/townmanager/virtual-town-meetings

Contact us at extvg@exeternh.gov or 603-418-6425 with any technical issues.

1	TOWN OF EXETER
2	PLANNING BOARD
3	September 24, 2020
4	VIRTUAL MEETING
5	DRAFT MINUTES
6	Zoom ID: 873 1370 3834
7	Phone: 1 646 558 8656
8	I. PRELIMINARIES:
9	
10	BOARD MEMBERS PRESENT BY ROLL CALL: Chair Langdon Plumer, Vice-Chair Aaron Brown, Gwen
11	English, John Grueter, Jennifer Martel, Molly Cowan, Select Board Representative, Robin Tyner,
12	Alternate, Pete Steckler, Alternate and Nancy Belanger, Alternate.
13	in the state of th
14	STAFF PRESENT: Town Planner Dave Sharples
15	
16	II. CALL TO ORDER: Chair Plumer called the meeting to order at 7:03 PM, indicated Alternate Nancy
17	Belanger would be active, and read out loud the meeting preamble which indicated that an emergency
18	exists and the provisions of RSA 91-A:2 III (b) are being invoked. As federal, state and local officials have
19	determined gatherings of ten or more people pose a substantial risk to the community and the meeting
20	imperative to the continued operation of Town and government and services which are vital to public,
21	health, safety and confidence. This meeting will be conducted without a quorum physically present in
22	the same location and welcome members of the public accessing the meeting remotely.
23	III. OLD BUSINESS
24	III. OLD BOSINESS
25	ADDDOVAL OF MINUTES
26	APPROVAL OF MINUTES
27	Il., 22, 2020
28	July 23, 2020
29	Edito was a second and and annexed
30	Edits were recommended and approved.
31	NATION OF THE PROPERTY OF THE
32	Ms. Belanger motioned to approve the July 23, 2020 meeting minutes, as amended. Vice-
33	Chair Brown seconded the motion. A roll call vote was taken Plumer – aye, Brown – aye,
34	Belanger – aye, Grueter – aye, English – aye, Martel – aye and Cowan – aye. With all in favor,
35	the motion passed unanimously.
36	
37	Mr. Cameron arrived at 7:14 PM.
38	
39	August 13, 2020
40	
41	Edits were recommended and approved.

42	
43	Mr. Grueter motioned to approve the August 13, 2020 meeting minutes, as amended. Ms.
44	English seconded the motion. A roll call vote was taken Plumer – aye, Brown – aye, Cameron
45	– nay, Grueter – aye, English – aye, Martel – aye and Cowan – aye. The motion passed 6-1-0.
46	
47	August 20, 2020
48	
49	Edits were recommended and approved.
50	
51	Mr. Cameron motioned to approve the August 20, 2020 meeting minutes, as amended. Ms.
52	English seconded the motion. A roll call vote was taken Plumer – aye, Brown – aye, Cameron
53	– aye, Grueter – aye, English – aye, Martel – aye and Cowan – aye. With all in favor, the
54	motion passed unanimously.
55	
56	August 27, 2020
57	
58	Edits were recommended and approved.
59	Mar Constant meeting and the annual state Assessed 27, 2020 we estimate the annual state of the Assessed State
60	Mr. Grueter motioned to approve the August 27, 2020 meeting minutes, as amended. Ms.
61	English seconded the motion. A roll call vote was taken Plumer – aye, Brown – aye, Cameron
62	– aye, Grueter – aye, English – aye, Martel – aye and Cowan – aye. With all in favor, the
63 64	motion passed unanimously.
65	September 10, 2020
66	September 10, 2020
67	Edits were recommended and approved.
68	Latts were recommended and approved.
69	Mr. Grueter motioned to approve the September 10, 2020 meeting minutes, as amended. Mr.
70	Cameron seconded the motion. A roll call vote was taken Plumer – aye, Brown – aye,
71	Cameron – aye, Grueter – aye, English – aye, Martel – aye and Cowan – aye. With all in favor,
72	the motion passed unanimously.
73	,
74	IV. NEW BUSINESS
75	
76	PUBLIC HEARINGS
77	1. A request by Wakefield Investment, Inc. (2 Hampton Road LLC) for modifications to a previously
78	approved multi-family site plan for the "Windsor Crossing" development. The subject property is
79	located on Acadia Lane
80	CT-Corporate Technology Park zoning district
81	Tax Map Parcel #69-3

82	Case #21404
83	
84	Chair Plumer indicated a continuance was requested to October 22, 2020 at 7:00 PM.
85	
86	2. The application of People's United Bank for the proposed construction of a drive-thru canopy and
87	reconstruction of the existing parking lot at 1 Center Street
88	C-1, Central Area Commercial zoning district
89	Tax Map Parcel #72-205 and #72-216
90	Case #20-3
91	
92	Chair Plumer indicated a continuance was requested to October 22, 2020 at 7:00 PM.
93	
94	Vice-Chair Brown motioned to continue Case #21404 and Case #20-3 to October 22, 2020 at 7:00 PM.
95	Ms. Belanger seconded the motion. A roll call vote was taken Plumer – aye, Brown – aye, Cowan –
96	aye, Grueter – aye, English – aye, Belanger – aye and Martel – aye. With all in favor, the motion
97	passed unanimously 7-0-0.
98	
99	3. The application of Justin Lyons for a Shoreland Conditional Use Permit and a minor subdivision of a
100	4.03-acre parcel located at 10 John West Road into two (2) single-family residential lots
101	R-1, Low Density Residential zoning district
102	Tax Map Parcel #114-1
103	Case #20-9
104	
105	Chair Plumer read out loud the Public Hearing Notice. Ms. Martel recused herself and Alternate Nancy
106	Belanger was activated for this hearing.
107	
108	Mr. Cameron motioned to open Planning Board Case #20-9. Ms. English seconded the motion. A roll
109	call vote was taken Plumer – aye, Brown – aye, Cowan – aye, Grueter – aye, English – aye, Cameron -
110	aye and Belanger - aye. With all in favor, the motion passed unanimously 7-0-0
111	
112	Mr. Sharples indicated the project is an addition of a lot to the property, reviewed by the Code
113	Enforcement Officer and found to be in compliance with zoning. The applicant is requesting a waiver.
114	Plans have been revised to locate septic systems on each individual parcel. The need for CUP was
115	triggered. The applicant appeared before the Conservation Commission who offered no objection. The
116	standard Conditions of Approval are attached.
117	
118	Dennis Quintal indicated he was here representing the applicant for this case. Mr. Quintal presented
119	the Site Plan to the Board showing the contour and grading lines. An easement continues through the
120	existing access. Asked for a waiver with regard to seasonal water table. Mr. Quintal outlined the septic
121	system layout in order to not require another easement. The subdivision plan was presented with
122	proposed lots and driveways.
123	
124	Ms. English expressed concerns with the septic tank distance from leach field. Mr. Quintal responded
125	that topography is a factor and maintenance is still possible.

126 Mr. Quintal clarified the intent is to use the existing well but there is a possibility for relocation if 127 necessary. Vice Chair Brown asked if any acknowledgment is needed for still using that well for any 128 future landowners? Mr. Quintal will add a note to label protective zone easement for the existing well 129 on Lot 1. Vice-Chair Brown noted he is satisfied with that change and stated that only setbacks with 130 wells are between wells and septic. 131 132 Chair Plumer opened the hearing to the public for comments and questions at 8:01 PM and being none 133 closed the hearing to the public for deliberations. 134 135 Discussion of waiver for relief from seasonal water table: 136 137 Mr. Quintal stated is the best thing they could do for the soils. The test pit system will be state 138 approved. The seasonal water table is 26." 139 140 Mr. Steckler raised concerns with the combination of this particular waiver request in conjunction with 141 the CUP request. Mr. Quintal responded that this was discussed with the Conservation Commission and 142 the main discussion point was limiting nitrate levels with nitrate setbacks. Requirements were met and 143 Conservation Commission did not see any contaminant issues. Mr. Steckler rebutted that phosphate 144 levels are concerning as well to freshwater quality. 145 146 Justin Lyon added that the leach field for the existing lot is not in failure however the owner wanted to 147 start a new system to plan for a possible failure in the future. 148 149 Vice-Chair Brown read the waiver criteria. Mr. Quintal responded that the test pits had been done in 150 the surrounding area and designed to State requirements. This is the only place the septic system can 151 be located. The best pit locations for the soils on the lot. If waiver is not approved then would not 152 continue with new lot. 153 154 Vice-Chair Brown motioned to grant the waiver request of Justin Lyons (PB Case #20-9) from Section 155 9.21.3.2.a of the Site Plan Review and Subdivision Regulations to permit less than 2-feet (2') of 156 permeable soil above the seasonal high water table, after reviewing the criteria for granting waivers. 157 Ms. Belanger seconded the motion. A roll call vote was taken Grueter – nay, English – nay, Plumer – 158 aye, Cameron – aye, Brown – aye, Cowan – aye, Belanger – aye. The motion passed 5-2-0. 159 160 The Board discussed the request for the CUP. Vice-Chair Brown reminded the board that Conservation 161 Commission had no objection to issuance of CUP. 162 163 Mr. Cameron motioned to grant the request of Justin Lyons (PB Case #20-9) for a Shoreland 164 Conditional Use permit, after reviewing the criteria for a Shoreland Conditional Use permit. Ms. 165 Belanger seconded the motion. A roll call vote was taken English – nay, Plumer – aye, Brown – aye, 166 Grueter – aye, Cowan – aye, Belanger – aye, Cameron - aye. The motion passed 6-1-0. 167 168

Mr. Sharples read the subdivision Conditions of Approval.

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- 17. An electronic As-Built Plan of the entire property with details acceptable to the Town shall be provided 172 prior to the issuance of a Certificate of Occupancy (C/O). This plan must be in a dwg or dxf file format 173 and in NAD 1983 State Plane New Hampshire FIPS 2800 Feet coordinates;
- 2. All monumentation shall be set in accordance with Section 9.25 of the Site Plan Review and Subdivision Regulations prior to the issuance of a Certificate of Occupancy;
- 3. A preconstruction meeting shall be arranged by the applicant and his contractor with the Town engineer prior to any site work commencing. The following must be submitted for review and approval prior to the preconstruction meeting:
 - i. The SWPPP (storm water pollution prevention plan), if applicable, be submitted to and reviewed for approval by DPW prior to preconstruction meeting.
 - ii. A project schedule and construction cost estimate.
- 4. All comments in the Underwood Engineers Inc. letter dated August 7, 2020 shall be addressed to the satisfaction of the Town Planner prior to signing the final plans;
- 184 5. Third party construction inspections fees shall be paid prior to scheduling the preconstruction meeting;
- 186 6. The Stormwater Management Operation and Maintenance Manual not dated but stamped Received 187 on June 24, 2020 shall be signed by the property owner and submitted to the town prior to signing 188 the final plans;
- 7. The Annul Operations and Maintenance Report in the Stormwater Management Operation and Maintenance Manual not dated but stamped Received on June 24, 2020 shall be completed and submitted to the Town Engineer annually on or before January 31st. This requirement shall be an ongoing condition of approval;
- 8. All applicable State permit approval numbers shall be noted on the final plans; All appropriate fees to be paid including but not limited to: sewer/water connection fees, impact fees, and inspection fees(including third party inspections), prior to the issuance of a building permit or a Certificate of Occupancy whichever is applicable as determined by the Town;
- 9. All outdoor lighting (including security lights) shall be down lit and shielded so no direct light is visible
 from adjacent properties and/or roadways;
- 10. All landscaping shown on plans shall be maintained and any dead or dying vegetation shall be replaced, no later than the following growing season, as long as the site plan remains valid. This condition is not intended to circumvent the revocation procedures set forth in State statutes;
- 11. If determined applicable by the Exeter Department of Public Works, the applicant shall submit the land use and stormwater management information about the project using the PTAPP Online Municipal Tracking Tool (https://ptapp.unh.edu/). The PTAPP submittal must be accepted by DPW prior to the pre-construction meeting;
- The limit of cut/disturbance shall be flagged in the field prior to any site work and these flags shall be
 maintained until a Certificate of Occupancy has been issued for all units;
- 13. The applicant shall contact The Code Enforcement Officer (CEO) and Deputy Fire Chief (DFC) todetermine the address for the building;

14. A restoration and erosion control surety, in an amount and form reviewed and approved by the 210 Town Planner in accordance with Section 12 of the Site Plan Review and Subdivision Regulations, 211 212 shall be provided prior to any site work; Vice-Chair Brown motioned to approve the request of Justin Lyons (PB Case #20-9) for Minor Site Plan 213 approval subject to the conditions as read. Mr. Cameron seconded the motion. A roll call vote was 214 taken Grueter – nay, English – nay, Plumer – aye, Brown – aye, Cameron – aye, Belanger – aye, Cowan 215 - aye. The motion passed 5-2-0. 216 217 **V. OTHER BUSINESS** 218 219 220 1. Non-Public Session pursuant to 91-A:3(II)(e) pending litigation. 221 Vice-Chair Brown motioned to go into non-public session pursuant to 91-A:3(II)(e) pending litigation. 222 Mr. Cameron seconded the motion. A roll call vote was taken Plumer – aye, Brown – aye, Cameron – 223 aye, Grueter – aye, English – aye, Martel – aye and Cowan – aye. With all in favor, the motion passed 224 225 unanimously. 226 227 The meeting was closed to the public at 8:34 PM. 228 Vice-Chair Brown motioned to come out of non-public session and seal the minutes indefinitely. Ms. 229 English seconded the motion. A roll call vote was taken Plumer – aye, Brown – aye, Cameron – aye, 230 Grueter – aye, English – aye, Martel – aye and Cowan – aye. With all in favor, motion passed 231 232 unanimously. 233 234 The meeting was reopened to the public at 9:29 PM. 235 236 **VI. TOWN PLANNER'S ITEMS** Mr. Sharples forwarded an email about climate resource form for registration. Kristen Murphy 237 has been working on this. It is a forum for land use boards, on October 7th. Mr. Sharples 238 239 encouraged the Board to attend. VII. CHAIRPERSON'S ITEMS 240 Chair Plumer indicated the next meeting will be October 8, 2020 at 7:00 PM. 241 242 VIII. PB REPRESENTATIVE'S REPORT ON "OTHER COMMITTEE ACTIVITY" 243 244 IX. ADJOURN Vice-Chair Brown motioned to adjourn the meeting at 9:35 PM. Ms. English seconded the motion. A 245 roll call vote was taken, all were in favor, the motion passed unanimously. 246 247

- 248 Respectfully submitted,
- 249 Daniel Hoijer,
- 250 Recording Secretary

TOWN OF EXETER



Planning and Building Department

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709

www.exeternh.gov

Date: September 29, 2020

To: Planning Board

From: Dave Sharples, Town Planner

Re: Phillips Exeter Academy PB Case #20-12

The Applicant is seeking approval of a site plan review and Wetlands Conditional Use Permit application for the proposed construction of a new dormitory on the school campus in the approximate location of the existing Fisher Theater off of Front Street and Tan Lane. The subject property is located in the R-2, Single Family Residential zoning district and is identified as Tax Map Parcel #72-209.

The Applicant submitted the site plans, applications and supporting documents on August 4. 2020. These documents and plans are enclosed for your review. There was no Technical Review Committee review of the application, however, it was reviewed independently by the Town Departments and the TRC comment letter is also enclosed. Underwood Engineers, Inc. (UEI) has reviewed the plans and provided their comment letter dated September 1, 2020, which is also included for your review. The Applicant has provided revised plans and a response letter, dated September 29th, 2020 which are currently being reviewed. I will update the Board at the meeting with any additional Town and/or UEI comments.

The Applicant appeared before the Conservation Commission at their August 11th, 2020 meeting to discuss the Wetlands Conditional Use Permit. The Conservation Commission voted unanimously to recommend to the Planning Board that the Wetland CUP application be approved with the condition that the Applicant provide an invasive plant management plan for the stream, wetland and wetland buffer area -- see attached memo from CC Chair Andrew Koff, dated August 21, 2020.

The Applicant appeared before the Zoning Board of Adjustment at their August 18, 2020 meeting and obtained a special exception for the "private school" use and a variance to exceed the maximum height requirements in the R-2 zoning district. A copy of the Notice of Decision and meeting minutes are enclosed for your review.

The Applicant is requesting several waivers from the Board's Site Plan Review & Subdivision Regulations, including a waiver from Section 9.9.3 Wetlands Setback for which justification is outlined in their Wetland CUP application. Their waiver request letter, dated August 4, 2020, is enclosed for your review.

In the event the Board decides to take action on the application, I have provided motions below for your convenience. I will be prepared with conditions of approval should the Board decide to grant approval.

Waiver Motion:

Grading within 5 feet of property line waiver motion: After reviewing the criteria for granting waivers, I move that the request of Phillips Exeter Academy (PB Case #20-12) for a waiver from Section 9.3.6.4. of the Site Plan Review and Subdivision Regulations regarding grading within 5 feet of the property line be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Roadway Parameters motion: After reviewing the criteria for granting waivers, I move that the request of Phillips Exeter Academy (PB Case #20-12) for a waiver from Section 9.17.10 of the Site Plan Review and Subdivision Regulations to permit proposed access roadway less than required be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED. *Waiver request has been withdrawn*.

Parking space (number required) waiver motion: After reviewing the criteria for granting waivers, I move that the request of Phillips Exeter Academy (PB Case #20-12) for a waiver from Section 9.13.1. to permit less off-street parking than required in accordance with Section 5.6.6 of the Zoning Ordinance be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Wetlands Waiver Guidelines - in accordance with Wetland Conditional Use Permit (CUP) application - After reviewing the criteria for granting waivers, I move that the request of Phillips Exeter Academy (PB Case #20-12) for a waiver from Section 9.9.3 of the Site Plan Review and Subdivision Regulations be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Planning Board Motion:

Conditional Use Permit (Wetlands) Motion: After reviewing the criteria for a Wetlands Conditional Use permit, I move that the request of Phillips Exeter Academy (PB Case #20-12) for a Conditional Use Permit be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Site Plan Motion: I move that the request of Phillips Exeter Academy (PB Case #20-12) for Site Plan approval be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Thank You.

Enclosures

TOWN OF EXETER

Planning and Building Department

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709 www.exeternh.gov

Date:

September 8, 2020

To:

Heather Taylor, Campus Planner/Architect, Phillips Exeter Academy

Cory Belden, P. E., Altus Engineering, Inc.

From:

Dave Sharples, Town Planner

Re:

Phillips Exeter Academy, PB Case #20-12

New Dormitory - Front Street/Tan Lane/Main Street, Tax Map Parcel # 72-209

(former site of Fisher Theater)

The following comments are provided as a follow-up for technical review of the site plans and supporting documents submitted on 8/4/20 for the above-captioned project. (No TRC meeting was scheduled and materials were reviewed independently by Town departments).

TOWN PLANNER COMMENTS

- 1. UEI will review and comment under separate cover
- Suggest providing justification for waivers by listing each criteria and responding accordingly;
- 3. You do not need a waiver from Section 9.17.10 Roadway Parameters as this is not servicing two or more lots and is considered a driveway. The area where there are parking stalls are governed by Section 9.13.6 which the plan appears to satisfy.
- 4. The regulations do not allow light trespass on adjacent properties. The Light cannot spillover onto adjacent properties. Although the photometric plan does not extend onto the other properties, it appears likely that there will be light spillover from the A2 fixture (off the westerly corner of the Dow House) onto Map 72 Lot 196. Please expand photometric plan to determine if plan is in compliance.
- 5. Make it clearer which light fixtures are where.
- 6. Are there any known environmental hazards on the site?
- 7. There appears to be several significant trees (as defined in Section 7.4.7) that will be impacted by the proposed development. Please identify them on the plans as described in Section 7.4.7

8. The application states that students are "not allowed to keep vehicles at the dorms". Does this mean that students cannot have vehicles at all or it is that they cannot have them at the dorms and, if they do own a car, need to park it elsewhere?

PUBLIC WORKS DEPARTMENT COMMENTS

* (see attached e-mail dated 9/23/20)

FIRE DEPARTMENT COMMENTS

E-mail received from Lt. Jason Greene, dated 8/10/20, indicating the Fire Department has zoomed with the builder and made all their requests.

NATURAL RESOURCE PLANNER COMMENTS

- 1. Sheet C-3.01, Note 5 indicates snow will be untreated. Presentation to the Conservation Commission indicates that they will need to treat snow. This note should be updated to accurately reflect plans. I recommend the note be revised to reflect accurate plans and that snow removal vs. dumping toward wetland be implemented when feasible.
- Wetland Conditional Use Permit application reviewed at the 8/11/20 ConCom meeting see memo from Chair Andrew Koff, dated 8/21/20, attached.



Barbara Mcevoy bmcevoy@exeternh.gov>

RE: FW: 5030: PEA New Dorm Project - Technical Review

1 message

Wed, Sep 23, 2020 at 9:12 AM Cory Belden <cbelden@altusengineering2.onmicrosoft.com> To: Jennifer Mates <jmates@exeternh.gov>, David Sharples <dsharples@exeternh.gov>, Barbara Mcevoy <bmcevoy@exeternh.gov>

Thanks Jen.

I can easily move the MH or T-pad so the drain line isn't under the pad.

Cory

From: Jennifer Mates <imates@exeternh.gov> Sent: Wednesday, September 23, 2020 9:11 AM

To: Cory Belden <cbelden@altusengineering2.onmicrosoft.com>; David Sharples <dsharples@exeternh.gov>; Barbara

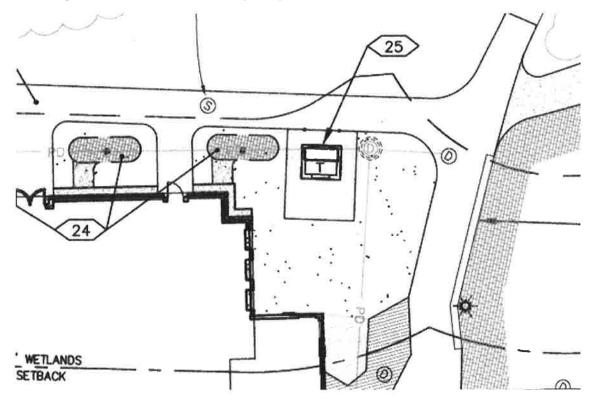
Mcevoy

cevoy@exeternh.gov>

Subject: Re: FW: 5030: PEA New Dorm Project - Technical Review

Hi Cory,

My only comment is that there may be a conflict between the transformer and the proposed drainage line. UEI covered everything else.



Thanks,

civil & environmental engineering



2592.00

September 1, 2020

David Sharples, Town Planner Town Planning Office, Town of Exeter 10 Front Street Exeter, NH 03833

Re:

Phillips Exeter Academy New Dormitory

Design Review Engineering Services

Exeter, New Hampshire

Site Information:

Tax Map/Lot#:

72/209

Review No. 1

Address:

69 Front Street

Lot Area:

8.0 ac

Proposed Use:

Dormitory – Institutional Residential Housing

Water:

Town (existing)

Sewer:

Town (existing)

Zoning District:

R-2

Applicant:

Phillips Exeter Academy, 20 Main Street, Exeter, NH 03833

Design Engineer:

Altus Engineering, Portsmouth, NH

Application Materials Received:

- Site plan set entitled "New Dormitory (Remove Fisher Theater)" dated August 4, 2020, prepared by Altus Engineering.
- Site plan application materials prepared by Altus Engineering.
- Drainage Assessment and Stormwater Management Inspection and Maintenance Manual, prepared by Altus Engineering.

Dear Mr. Sharples:

Based on our review of the above information, in addition to comments provided by the Town, we offer the following comments in accordance with the Town of Exeter Regulations and standard engineering practice.

General and Administrative Comments

1. **Historic District:** Part of the site is located within the historic district. The Dow Barn is being incorporated into the project. As appropriate, historical requirements should be coordinated with the appropriate department/agency/commission.

- 2. Building Address: The Site Plan indicates the address of the property is Tan Lane. As the entrance will be on Front Street, confirmation of the 911 address should be through the Exeter Fire/Police Department.
- 3. Driveway Width: The proposed driveway varies in width from 14' to 16' to service two-way traffic into and out of the facility. The Applicant has requested a waiver from required driveway widths. The 14' width at the entrance portion is particularly concerning, as the width does not allow accommodations for two-way traffic to pass each other. Exiting vehicles will have to yield to any incoming vehicles with no relief area provided. Alternatives include the following:
 - Widen the driveway starting at Front Street, then taper to 14' along the side of Dow House. This would allow an incoming vehicle to yield to an exiting vehicle if need be.
 - Move the driveway to the east side of Dow House, which would allow for adequate width to maintain a two-way driveway.

We acknowledge the proposed widths are wider than the existing widths. We defer further comments and approval of the waiver request to the Planning Board.

- 4. Drive Aisle: The drive aisles along the parking spaces are 22' wide in the back and less than 19' in the front parking area (that serves as the project's only ADA accessible space.) The drive aisle length and width are insufficient to accommodate the turning movements for an ADA van to enter and exit the space. The project's aerial rendering depicts a parking arrangement that appears could be more functional relative to these turning movements.
- 5. Parking Spaces: Will any of the proposed parking spaces be dedicated for use of the Dow House?
- 6. ADA Parking Space: The project calls for 16' wide ADA space with associated striping. The detail provided confirms the proposed dimensions. Exeter requires parking spaces to be 9' wide, even ADA ones otherwise meeting the ADA standard. The applicant must ask for a waiver from the 9' width requirement to construct the ADA space and striping as proposed.

Design Plans

- 7. **Driveway Entrance:** The proposed driveway/sidewalk interface requires better definition. For example,
 - The entrance flares should extend across the sidewalk.
 - If driveway flare radii are proposed, please label the radii.
 - The driveway flare on the west side will cross the extension of the property line and overlap the abutting driveway. We recognize this is an existing situation. Please clarify the limits and intent of work within the overlapping usage areas.



- The driveway crossing the sidewalk will need to be ADA compliant. Please confirm that compliance can be achieved and that the abutting driveway, if alterations are needed to facilitate required tie-in, can also be reconstructed compliant with ADA requirements.
- Please consult with the Exeter DPW regarding the potential need for detectable warning devices across the common drive as it will approach 32' or wider post construction.
- 8. Landing Pad: There is a leader labeled "Landing Pad (2% max, all directions), at the top of the stairs leading to Pad #4. Please clarify the limits of the landing pad.
- 9. Key Notes: Key Note 14 near the Front Street house should be removed, or the limit of work drawing layer should be thawed in the viewport.
- 10. Snow Storage: Snow storage is shown to the north side of the parking area. Depositing snow in this location will require a loader and some form of push wall to trap the snow for removal. It is unclear how and where this will happen on this site plan.

11. Water Service:

- Key Note 11 points to the water at the point where it enters the building, but appears to point to a grassed area to the east of the proposed project.
- Key Note 11 has a number of typographical errors in it.
- The project should confirm with the Mechanical Engineer and Fire Department if a 6" suppression feed will be sufficient to satisfy the project requirements. We note the proposed hydrant near the driveway entrance, however a loop incorporating the currently proposed water connection, through to the rear of the Dow House and out to Front Street, with an appropriately positioned hydrant may be prudent given the use and scale of the project. We defer this discussion to the Fire Department.
- The water main bends and fittings should be labeled.
- 12. Sewer Service: The existing and proposed inverts for the tie-in manhole should be listed, including notes, as appropriate, regarding the need to modify the brick invert(s).
- 13. Hydrant: The material of the existing water main should be added to Note 16 on the Utility Plan. A note should be added to direct the Contractor to coordinate traffic control/lane closure with the Police Department.
- 14. 3' CLF: The driveway of Map 72, Lot 196 to the west of the project has text "3' CLF" within it. UE isn't clear on the intent of the call-out, please confirm the intended meaning.

Stormwater Design and Modeling

- **15.** Control Structures: All pipes entering and exiting the control structures should be labeled for material and size.
- 16. Stormwater Management Gallery A has a number of invert call-outs on the details that do not agree with the drainage model. Please update as appropriate to convey the intent.

Detail Sheets



Page 4 of 4 David Sharples September 1, 2020

17. Fire Hydrant: The detail indicates the hydrant to be painted yellow. Comment 11 above notwithstanding, Exeter hydrants in this area are typically yellow body with silver bonnets and blue caps. The applicant should confirm the hydrant color with the Exeter Fire Department or the Exeter Water Department.

A written response is required to facilitate future reviews.

Please contact us if you have any questions.

Very truly yours,

UNDERWOOD ENGINEERS, INC.

Allison M. Res

Allison M. Rees, P.E.

Project Manager

Robert J. Saunders, P.E. Senior Project Engineer

Alsh



TOWN OF EXETER CONSERVATION COMMISSION MEMORANDUM

Date:

August 21, 2020

To:

Planning Board

From:

Andrew Koff, Chair of the Exeter Conservation Commission

Subject:

PEA New Dorm at Fisher Theater Site (Tax Map 72/209) Wetland CUP

Project Info:

Project Location:

Fisher Theater Location

Map/Lot:

Map 72, 209

NHDES File No:

N/A

CC Review Date:

Meeting 8/11/20

PB CASE:

20-12

Wetland Conditional Use Permit

The Exeter Conservation Commission reviewed the proposed project and associated application materials at their monthly meeting as noted above.

They were assured that this design would not exacerbate the ongoing flooding issues on Tan Lane, that the treatment methods selected are effective at nitrogen removal, and that the approval process with the Planning Board requires a stormwater maintenance agreement which will assure all stormwater infrastructure continues to function as designed.

There was discussion about the existing stand of invasive species along the stream and its associated buffer. Mark Leighton (PEA) informed the board that they would be willing to remove invasive plants from this area.

The Commission voted unanimously to notify the Planning Board that they have reviewed the application and recommend the wetland conditional use permit be approved with the condition the applicant provide an invasive plant management plan for the stream, wetland and wetland buffer area.

TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709

www.exeternh.gov

August 20, 2020

Heather H. Taylor, AIA, Campus Planner Phillips Exeter Academy 20 Main Street Exeter, New Hampshire 03833

Re:

Zoning Board of Adjustment Case #20-12 Special Exception and Variance Request

Tax Map Parcel #72-209 - Front Street, Tan Lane and Main Street (site of the former Fisher Theater)

Dear Ms. Taylor:

This letter will serve as official confirmation that the Zoning Board of Adjustment, at its August 18th, 2020 meeting, voted to grant the above-captioned application(s) for a special exception per Article 4, Section 4.2, Schedule I, Permitted Uses and Article 5, Section 5.2 to permit a private school use; and a variance from Article 4, Section 4.3, Schedule II, Density & Dimensional Regulations-Residential to permit the proposed construction of a new building which will exceed the maximum height requirement in the R-2, Single Family Residential zoning district, as presented.

Please be advised that in accordance with Article 12, Section 12.4 of the Town of Exeter Zoning Ordinance entitled "Limits of Approval" that all approvals granted by the Board of Adjustment shall only be valid for a period of three (3) years from the date such approval was granted; therefore, should substantial completion of the improvements, modifications, alterations or changes in the property not occur in this period of time, this approval will expire.

If you should have any questions, please do not hesitate to contact the Building Department office.

Sincerely,

Robert V. Prior Vice Chairman

Exeter Zoning Board of Adjustment

cc:

Mark Leighton, Director of Facilities Management, Phillips Exeter Academy

Neil Martin, AIA, Principal, SLAM Collaborative, Inc.

Geoffrey Gaunt, AIA, Associate Principal, SLAM Collaborative, Inc.

Jeff Clifford, P.E., Altus Engineering, Inc. Cory Belden, P.E., Altus Engineering, Inc.

Douglas Eastman, Building Inspector/Code Enforcement Officer

Dave Sharples, Town Planner Janet Whitten, Deputy Assessor

RVP:bsm

Town of Exeter
Zoning Board of Adjustment
August 18, 2020, 7 PM
Town Hall Great Room
Final Minutes

I. Preliminaries

Members Present: Acting Chair Robert Prior, Clerk Rick Thielbar, Kevin Baum, Laura Davies, Anne Surman - Alternate, Esther Olson-Murphy - Alternate

Members Absent: Chair Joanne Petito, Christopher Merrill - Alternate, Hank Ouimet - Alternate, Martha Pennell - Alternate

Others Present: Doug Eastman, Barbara McEvoy

Call to Order: Acting Chair Robert Prior called the meeting to order at 6:30 PM. Benjamin and Sarah Anderson requested a continuance for Case #20-2, so there will be three cases heard at this meeting. Of the alternates, Ms. Surman will vote on the first two cases and Ms. Olson-Murphy on the third.

II. New Business

A. The application of Patricia Duval for a variance from Article 4, Section 4.3 Schedule II: Density and Dimensional Regulations–Residential to permit the subdivision of an existing 3.2 acre parcel at 105 Brentwood Road into two (2) lots with less than the required minimum lot area. The subject property is located in the R-1, I ow Density Residential zoning district. Tax Map Parcel #60-24. Case #20-10.

Sharon Somers of the DTC Law Firm spoke on behalf of the owner, Patricia Duval. Henry Boyd of Millennium Engineering, the surveyor of the property, was also present.

Ms. Somers said this project is looking for subdivision approval from the ZBA and Planning Board. They are looking to form two lots, one of one acre, one of two acres. The lot has 720 feet of frontage, and has the capacity to have two dwellings. The test pit passed. Septic and well service is possible. The driveway will need DOT approval, but they believe there is adequate sight distance.

Ms. Somers went through the variance criteria: 1) Not contrary to the public interest and 2) Spirit of the ordinance is observed; yes, the creation of these two lots will not unduly violate the zoning. There are varying lot sizes in this area, at least one of which, at 0.5 of an acre, is smaller than the proposed lots. They are all single family homes. This does not alter the fundamental character of the neighborhood or threaten the public health, safety, or welfare. It has private water, septic, and driveway. Lots 25 and 25.1 enter onto Brentwood road, so there is no interference with those properties, they will continue to exit their property as now. 3) Substantial justice is done; yes. The applicant will benefit because it's a large lot and the applicant doesn't need that acreage.

C. The application of Benjamin and Sarah Anderson for a modification to a previously granted variance from Article 4, Section 4.2 which permitted the use of the existing accessory barn on their property for community gatherings. The Applicant is seeking relief to permit the operation of a nano-brewery and tasting room, with limited hours, in the basement/ground floor of the barn structure. The subject property is located at 66 Newfields Road, in the RU-Rural zoning district. Tax Map Parcel #24-29. Case #20-2.

This case was deferred because the applicant requested a continuance.



D. The application of Phillips Exeter Academy for a special exception per Article 4, Section 4.2, Schedule I, Permitted Uses and Article 5, Section 5.2 to permit a private school use; and a variance from Article 4, Section 4.3, Schedule II, Density & Dimensional Regulations-83 Residential to permit the proposed construction of a new building which will exceed the maximum height requirement in the R-2, Single Family Residential zoning district. The subject property is located on Front Street, Tax Map Parcel #72-209 (the site of the former Fisher Theater building). Case #20-12

Heather Taylor, Campus Planner and Architect at PEA, spoke about the application, along with Mark Leighton, Director of Facilities; SLAM collaborative Jeff Gaunt and Neil Martin; and Jeff Clifford and Corey Belden of Altus Engineering. This is a dormitory project at the intersection of Tan Lane and Front Street. They intend to convert a vacant theater building into a 60 bed dorm with five faculty apartments and academic space in lower level. It will be three stories, but look like a two story building on Front Street; access to the lower level will be from the back due to the grade. This structure will incorporate Dow Barn, an old barn that will be moved slightly and used as two faculty apartments. They're not planning on increasing enrollment or the boarding student population. In 2018, over-enrollment highlighted a shortage of beds; they have 836 beds, where 850 is the goal. When they renovate buildings, they lose dorms due to larger bathrooms and meeting ADA requirements. They're not looking to build immediately. This project is in design/development, and they want to ensure they have the permits to go forward in order to put funding in place.

Jeff Gaunt said adding 60 beds and 5 faculty apartments will improve the safety and accessibility of all dorms. They tried to maintain the face of the existing buildings on the north and west side. Ingress and egress is along an existing drive. There will be two parking spaces for each faculty apartment. Everything related to students will be on the east, away from abutters. The Fire Department approved the layout of the drive. Regarding the landscape, there will be some regrading and replanting along the south elevation.

Mr. Prior asked Mr. Gaunt to focus on the height of the building, which is the focus of the variance. Mr. Gaunt said on the third floor, they worked to get all dorm beds out of the South facade area, to reduce the scale and have the building fit within the context. Neil Martin of the architect team said the appearance is that of a two story

building with two equal gables. The building has a significant setback from the street. Max zoning height is 35 feet, but the project max is 45 feet. There's a sloped roof that goes back. Mr. Prior was concerned that if they give them the height variance, the massing of the design could change. Mr. Gaunt said they could restrict the approval to the plan proposed. The primary facades are hardy plank; on the barn itself, they will replace some of the existing siding to repair it.

Ms. Taylor said the existing peak is 44'6"; the perceived peak of the new building will come across the same. Ms. Davies asked about the area of the proposed building. Mr. Gaunt said 42,000 square feet total. The footprint of the building is 13,700 square feet; the existing Fisher Theater was 12,000. They've included the barn in the new building, which is 1,200 on each floor. The southern side of the footprint will extend over the existing footprint, but it's still 200 feet from the curb.

Mark Leighton said they are restricted on three sides by the footprint. The north side is the wetland setback. The west is the property line and driveway. The east is a utility yard. The south is the Historic District line boundary. This footprint maximizes what they have; if they can't get a variance, they will shift to a different style of architecture to get below the height, but this is a better fit with the surrounding buildings. Mr. Prior pointed out that they were only three inches out of the HDC line. Mr. Leighton said they're trying to stay out of it. They are going to the HDC anyway because of the Dow Barn proposal.

Mr. Prior opened the discussion to public comment, but there was none.

Mr. Prior asked the Board to discuss the special exception first, which is to permit a school use. Mr. Baum went through the criteria. A) The use is a permitted special exception; yes. B) Public health, safety, and welfare is preserved; yes, it's in an existing campus, and sited to fit with the campus. C) Compatible with the zoned district; yes, it's compatible with the underlying zoning, and consistent with the other buildings of the campus. Mr. Prior said mostly residential use anyway. D) Adequate landscaping and screening; this will go to Planning Board review, but the siting and landscaping seem appropriate. E) Adequate offstreet parking and loading; this is a private school use, but they've considered traffic flow and met with the Town Planner. They're not asking for a parking variance. They also discussed the fire access. F) The use conforms with regulations governing the district; yes. G) Yes, they're getting site plan review. H) There's no impact to surrounding property values, it's consistent with existing use

Mr. Baum moved to grant a special exception to permit private school use. Ms. Davies seconded. All were in favor.

Mr. Prior asked the Board to move on to the height variance. There were no questions from the Board members. Mr. Prior opened the discussion to the public, but there was no comment. Mr. Prior closed the public session and opened deliberations.

Mr. Prior said the specific height relief being sought is roughly 10 feet. Ms. Davies said she appreciates the way they oriented the side facing the town to scale it to appear more like a two story building. Mr. Baum said it's roughly in the same footprint and very close to the existing height. Mr. Prior said the peak of the existing building is about the same height as the variance. Mr. Baum said the Fisher Theater is unobtrusive, which speaks to the layout and topography of that area.

Ms. Davies went through the variance criteria: 1) Not contrary to public interest and 2) Spirit of the ordinance is observed; yes, this will not result in any harm to the general public. 3) Substantial justice is done; yes, there's no evidence of harm to the general public. They've attempted to stay within the existing footprint. 4) Values of surrounding properties are not diminished; no, they own most of the surrounding properties. There's only one abutter, who would probably benefit from this transition. 5) Literal enforcement would result in unnecessary hardship; yes, this is a unique property and a unique use. There are buildings that exceed the height restrictions already. Mr. Baum said the purpose of this criteria is to prevent issues with massing and shading with surrounding buildings, which is not an issue here. The elevation change affects the perceived height. 6) The proposed use is a reasonable one; yes, it's in keeping with existing uses on the property.

Ms. Davies moved to approve the variance for height as presented within the application. Mr. Baum seconded. Mr. Thielbar, Mr. Baum, Ms. Olson-Murphy, Ms. Davies and Mr. Prior voted yes. The motion passed unanimously.

III. Other Business

A. Approval of Minutes:

1. January 21, 2020

Mr. Baum moved to accept the minutes of January 21, 2020 as presented. Ms. Davies seconded. Mr. Prior, Mr. Thielbar, Ms. Davies, Mr. Baum, and Ms. Olson-Murphy voted yes. The motion passed unanimously.

2. February 18, 2020

Ms. Davies moved to accept the minutes of February 18, 2020 as presented. Mr. Prior seconded. Mr. Prior, Mr. Thielbar, Ms. Davies, and Ms. Olson-Murphy voted yes. The motion passed unanimously.

3. July 21, 2020

Ms. Davies moved to accept the minutes of July 21, 2020 as presented. Mr. Baum seconded. Mr. Thielbar, Ms. Davies, Mr. Baum, Ms. Olson-Murphy, and Ms. Surman voted yes. The motion passed unanimously.

B. Election of Officers

Mr. Prior said that typically at the May ZBA meeting they elect the Chair, Vice Chair, and Clerk for the coming year. Ms. Davies asked if anyone had heard about Ms. Petitio's capacity to continue as Chair or as another officer, as she doesn't want to elect her for anything she doesn't want. Mr. Prior suggested leaving the offices as-is for now, and if Ms. Petito is unable to serve they can fill in.



TOWN OF EXETER, NH APPLICATION FOR SITE PLAN REVIEW

	OFFICE USE ONLY			
THIS IS AN APPLICATION FOR: () COMMERCIAL SITE PLAN REVIEW () INDUSTRIAL SITE PLAN REVIEW () MULTI-FAMILY SITE PLAN REVIEW () MINOR SITE PLAN REVIEW () INSTITUTIONAL/NON-PROFIT SPR	APPLICATION # DATE RECEIVED APPLICATION FEE PLAN REVIEW FEE ABUTTERS FEE LEGAL NOTICE FEE TOTAL FEES			
	INSPECTION FEE INSPECTION COST REFUND (IF ANY)			
1. NAME OF LEGAL OWNER OF RECORD: Phil				
ADDRESS: 20 Main Street, Exeter, NH 0383	TELEPHONE: () 603 777-3292			
2. NAME OF APPLICANT: Same as above ADDRESS:				
	TELEPHONE: ()			
RELATIONSHIP OF APPLICANT TO PROPERTY IF OTHER THAN OWNER:				
(Written permission from Owner is required, please atta	ch.)			
4. DESCRIPTION OF PROPERTY: Private Institut	ion - Educational Facility			
ADDRESS: 69 Front Street, Exeter, NH 03833	}			
TAX MAP: PARCEL #: 209	ZONING DISTRICT: R-2			
AREA OF ENTIRE TRACT: 8.0 acres	RTION BEING DEVELOPED: 1.3 acres			



5.	ESTIMATED TOTAL SITE DEVELOPMENT COST \$\$499,300 (Site Only)
6.	EXPLANATION OF PROPOSAL: Remove Fisher Theater and construct a new 60-bed
	Dormitory with five faculty apartments and associated parking, walkways and utilites.
7.	ARE MUNICIPAL SERVICES AVAILABLE? (YES/NO) Yes. Existing water and sewer services on sit
	If yes, Water and Sewer Superintendent must grant written approval for connection. If no, septic system must comply with W.S.P.C.C. requirements.
8.	LIST ALL MAPS, PLANS AND OTHER ACCOMPANYING MATERIAL SUBMITTED WITH THIS APPLICATION:
	ITEM: NUMBER OF COPIES
	A. Site Review Plans 5 Full Size
	B. Abutters List 5 copies
	C. Site Cost Estimate 5 copies
	Drainage Report & Stormwater Maintenance Manual 2 Full, 3 Summaries
	E. Traffic Memorandum 5 copies
	F. Preliminary Application to Connect to Utilities 5 copies
	G. Waiver Reqests 5 copies
	ANY DEED RESTRICTIONS AND COVENANTS THAT APPLY OR ARE CONTEMPLATED (YES/NO) No IF YES, ATTACH COPY.
10.	NAME AND PROFESSION OF PERSON DESIGNING PLAN:
	NAME: Cory D. Belden, PE
4	ADDRESS: _133 Court Street, Portsmouth, NH 03801
]	PROFESSION: Civil Engineer TELEPHONE: (603)433-2335
Pr	LIST ALL IMPROVEMENTS AND UTILITIES TO BE INSTALLED: oposed 60-bed and 5-faculty apartment building, new driveways to parking to provide fire truck
ac	cess and parking spaces for faculty apartments; pedestrian pathways, patio areas and landscaping;

upgrades to site utilities; closed drainage system with three (3) stormwater management galleries

and three (3) raingardens to treat site runoff.



12. HAVE ANY SPECIAL EXCEPTIONS OR VARIANCES BEEN GRANTED BY THE ZONING BOARD OF ADJUSTMENT TO THIS PROPERTY PREVIOUSLY?

IF YES, DESCRIBE BELOW. (Please check with the Planning Department Office to verify)

Yes. The site is zoned R-2 and Phillips Exeter Academy has previously been granted a Special Exemption for a private institution on the property. This project will request an expansion of the non-conforming use and will request a variance to exceed the maximum allowed building height of 35 ft. The existing Fisher Theater exceeds 35 ft in height, but there is no record of the variance.

13. WILL THE PROPOSED PROJECT INVOLVE DEMOLITION OF ANY EXISTING BUILDINGS OR APPURTENANCES? IF YES, DESCRIBE BELOW.

(Please note that any proposed demolition may require review by the Exeter Heritage Commission in accordance with Article 5, Section 5.3.5 of the Exeter Zoning Ordinance).

The proposed project will demolish the existing Fisher Theater building to construct a new dormitory in the approximate location. The existing Dow Barn will have a new foundation constructed and will be moved approximately 4 ft east and 7 feet north. Site utilities will remain but be re-routed to serve the new building.

14. WILL THE PROPOSED PROJECT REQUIRE A "NOTICE OF INTENT TO EXCAVATE" (State of NH Form PA-38)? IF YES, DESCRIBE BELOW.

Phillips Exeter Academy will file a Notice of Intent to Excavate, Form PA-38, with the mur	nicipal
assessing officials as required.	

NOTICE: I CERTIFY THAT THIS APPLICATION AND THE ACCOMPANYING PLANS AND SUPPORTING INFORMATION HAVE BEEN PREPARED IN CONFORMANCE WITH ALL APPLICABLE REGULATIONS; INCLUDING BUT NOT LIMITED TO THE "SITE PLAN REVIEW AND SUBDIVISION REGULATIONS" AND THE ZONING ORDINANCE. FURTHERMORE, IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 15.2 OF THE "SITE PLAN REVIEW AND SUBDIVISION REGULATIONS", I AGREE TO PAY ALL COSTS ASSOCIATED WITH THE REVIEW OF THIS APPLICATION.

08/04/20		Health Taphor
DATE	OWNER'S SIGNATURE_	- 0

ACCORDING TO RSA 676.4.I (c), THE PLANNING BOARD MUST DETERMINE WHETHER THE APPLICATION IS COMPLETE WITHIN 30 DAYS OF SUBMISSION. THE PLANNING BOARD MUST ACT TO APPROVE, CONDITIONALLY APPROVE, OR DENY AN APPLICATION WITHIN SIXTY FIVE (65) DAYS OF ITS ACCEPTANCE BY THE BOARD AS A COMPLETE APPLICATION. A SEPARATE FORM ALLOWING AN EXTENSION OR WAIVER TO THIS REQUIREMENT MAY BE SUBMITTED BY THE APPLICANT.



SITE PLAN REQUIREMENTS

7.4 Existing Site Conditions Plan

Submission of this plan will not be applicable in all cases. The applicability of such a plan will be considered by the TRC during its review process as outlined in Section 6.5 Technical Review Committee (TRC) of these regulations. The purpose of this plan is to provide general information on the site, its existing conditions, and to provide the base data from which the site plan or subdivision will be designed. The plan shall show the following:

APPLICANT	TRC	REQUIRED EXHIBITS
X		7.4.1 Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the plan.
X	7.4.2 Location of the site under consideration, together	
X		7.4.3 Title, date, north arrow, scale, and Planning Board Case Number.
X		7.4.4 Tax map reference for the site under consideration, together with those of abutting properties.
X		7.4.5 Zoning (including overlay) district references.
X		7.4.6 A vicinity sketch or aerial photo showing the location of the land/site in relation to the surrounding public street system and other pertinent location features within a distance of 2,000-feet, or larger area if deemed necessary by the Town Planner.
X		7.4.7 Natural features including watercourses and water bodies, tree lines, significant trees (20-inches or greater in diameter at breast height) and other significant vegetative cover, topographic features, and any other environmental features that are important to the site design process.
X		7.4.8 Man-made features such as, but not limited to, existing roads, structures, and stonewalls. The plan shall also indicate which features are to be retained and which are to be removed or altered.
X	7.4.9 Existing contours at intervals not to exceed 2- elevations provided when the grade is less than 5 provided shall reference the latest applicable L Geodetic Survey datum and should be noted on the	
X		7.4.10 A High Intensity Soil Survey (HISS) of the entire site, or appropriate portion thereof. Such soil surveys shall be prepared by a certified soil scientist in accordance with the standards established by the Rockingham County Conservation District. Any cover letters or explanatory data provided by the certified soil scientist shall also be submitted.

^{*} See Existing Site Conditions Plan Notes, Page 10.



X	7.4.11 State and Federally designated wetlands, setback information, total wetlands proposed to be filled, other pertinent information and the following wetlands note: "The landowner is responsible for complying with all applicable local, state, and federal wetlands regulations, including any permitting and setback requirements required under these regulations."
X	7.4.12 Surveyed property lines including angles and bearings, distances, monument locations, and size of the entire parcel. A professional land surveyor licensed in New Hampshire must attest to said plan.
X	7.4.13 The lines of existing abutting streets and driveway locations within 200-feet of the site.
X	7.4.14 The location, elevation, and layout of existing catch basins and other surface drainage features.
X	7.4.15 The shape, size, height, location, and use of all existing structures on the site and approximate location of structures within 200-feet of the site.
X	7.4.16 The size and location of all existing public and private utilities, including off-site utilities to which connection is planned.
X	7.4.17 The location of all existing easements, rights-of-way, and other encumbrances.
X	7.4.18 All floodplain information, including the contours of the 100-year flood elevation, based upon the Flood Insurance Rate Map for Exeter, as prepared by the Federal Emergency Management Agency, dated May 17, 1982.
X	7.4.19 All other features which would fully explain the existing conditions of the site.
X	7.4.20 Name of the site plan or subdivision.

Existing Site Conditions Plan Notes

- 7.4.5 Zoning Summary provided on Site Plan, Sheet C3.01.
- 7.4.6 Area Plan provided, Sheet C0.01
- 7.4.10 High Intensity Soil Survey performed by Gove Environmetal Services in 2015 and verified in 2019. Site identified as Agawan soils (HSG B). Note on Drainage and Grading Plan.
- 7.4.18 Site is not located within a designated floodplain.



7.5 Proposed Site Conditions Plan (Pertains to Site Plans Only)

The purpose of this plan is to illustrate and fully explain the proposed changes taking place within the site. The proposed site conditions plan shall depict the following:

APPLICANT	TRC	REQUIRED EXHIBITS
X		7.5.1 Proposed grades and topographic contours at intervals not to exceed 2-feet with spot elevations where grade is less than 5%. All datum provided shall reference the latest applicable US Coast and Geodetic Survey datum and should be noted on the plan.
X		7.5.2 The location and layout of proposed drainage systems and structures including elevations for catch basins.
X		7.5.3 The shape, size, height, and location of all proposed structures, including expansion of existing structures on the site and first floor elevation(s). Building elevation(s) and a rendering of the proposed structure(s).
X		7.5.4 High Intensity Soil Survey (HISS) information for the site, including the total area of wetlands proposed to be filled.
X		7.5.5 State and Federally designated wetlands, setback information, total wetlands proposed to be filled, other pertinent information and the following wetlands note: "The landowner is responsible for complying with all applicable local, state, and federal wetlands regulations, including any permitting and setback requirements required under these regulations."
X		7.5.6 Location and timing patterns of proposed traffic control devices.
X		7.5.7 The location, width, curbing and paving of all existing and proposed streets, street rights-of-way, easements, alleys, driveways, sidewalks and other public ways. The plan shall indicate the direction of travel for one-way streets. See Section 9.14 – Roadways, Access Points, and Fire Lanes for further guidance.
X		7.5.8 The location, size and layout of off-street parking, including loading zones. The plan shall indicate the calculations used to determine the number of parking spaces required and provided. See Section 9.13 – Parking Areas for further guidance.
X		7.5.9 The size and location of all proposed public and private utilities, including but not limited to: water lines, sewage disposal facilities, gas lines, power lines, telephone lines, cable lines, fire alarm connection, and other utilities.
X		7.5.10 The location, type, and size of all proposed landscaping, screening, green space, and open space areas.
X		7.5.11 The location and type of all site lighting, including the cone(s) of illumination to a measurement of 0.5-foot-candle.
X		7.5.12 The location, size, and exterior design of all proposed signs to be located on the site.
X		7.5.13 The type and location of all solid waste disposal facilities and accompanying screening.



X	7.5.14 Location of proposed on-site snow storage.
N/A	7.5.15 Location and description of all existing and proposed easement(s) and/or right-of-way.
X	7.5.16 A note indicating that: "All water, sewer, road (including parking lot), and drainage work shall be constructed in accordance with Section 9.5 Grading, Drainage, and Erosion & Sediment Control and the Standard Specifications for Construction of Public Utilities in Exeter, New Hampshire". See Section 9.14 Roadways, Access Points, and Fire Lanes and Section 9.13 Parking Areas for exceptions.
X	7.5.17 Signature block for Board approval

OTHER PLAN REQUIREMENTS (See Section indicated)

☐ 7.7	Construction	plan
-------	--------------	------

- 7.8 Utilities plan
- 7.9 Grading, drainage and erosion & sediment control plan
- 7.10 Landscape plan
- 7.11 Drainage Improvements and Storm Water Management Plan
- 7.12 Natural Resources Plan
- 7.13 Yield Plan



SITE PLAN REVIEW APPLICATION CHECKLIST

A COMPLETED APPLICATION FOR SITE PLAN REVIEW MUST CONTAIN THE FOLLOWING

1.	1. Application for Hearing			
2. Abutter's List Keyed to Tax Map (including the name and business address of every engineer, architect, land surveyor, or soils scientist whose professional seal appears on any plan submitted to the Board)				
3.	Completed- "Checklist for Site Plan Review"	(X)		
4.	Letter of Explanation	(X)		
5,	Written Request for Waiver (s) from "Site Plan Review and Subdivision Regulations" (if applicable)			
6.	Completed "Preliminary Application to Connect and /or Discharge to Town of Exeter- Sewer, Water or Storm Water Drainage System(s)" (if applicable)	(X)		
7.	Planning Board Fees	(X)		
8.	Seven (7) full-sized copies of Site Plan (5 Sets for TRC)	(X)		
9.	Fifteen (15) 11"x17" copies of the final plan to be submitted <u>TEN DAYS</u> <u>PRIOR</u> to the public hearing date.	()		
10.	Three (3) pre-printed 1"x 2 5/8" labels for each abutter, the applicant and all consultants.	(X)		
NOT	ES: All required submittals must be presented to the Planning Department office			

for distribution to other Town departments. Any material submitted directly

to other departments will not be considered.

PHILLIPS EXETER ACADEMY

20 Main Street, Exeter, NH 03833

New Dormitory - Tax Map 72 Lot 209

Planning Board – Site Plan Review Abutter's List

Tax Map 72, Lot 187	Owner/Applicant:			
John F and Tatiana B Roth	Tax Map 72, Lots 169, 186, 189, 190,			
70 Front Street	208, 209, 211			
Exeter, NH 03833	Phillips Exeter Academy			
ZACICI) IIII 00000	20 Main Street			
	Exeter, NH 03833			
	Att: Mark Leighton			
	The trial it 20 give in			
Tax Map 72, Lot 188	Architect			
David C. Bohn Trust	SLAM Collaborative Inc.			
72 Front Street	250 Summer Street #402			
Exeter, NH 03833	Boston, MA 02210			
	Att: Neil Martin			
Tax Map 72, Lot 191	Civil Engineer			
Will H. and Camille M. Weete	Altus Engineering, Inc.			
78 Front Street	133 Court Street			
Exeter, NH 03833	Portsmouth, NH 03801			
	Att: Jeff Clifford			
Tax Map 72, Lot 196	Land Surveyor			
Mark J. Russ	Nitsch Engineering			
79 Front Street	360 Merrimack Street, Suite 49			
Exeter, NH 03833	Building #5, Second Floor			
Exeter, Will 03033	Lawrence, MA 01843			
	Att: Jamie Gayton			
	Att. Jainle Gayton			
Tax Map 73, Lot 293	Landscape Architect			
Exeter School District	Kyle Zick Landscape Inc.			
30 Linden Street	36 Broomfield Street, Suite 302			
Exeter, NH 03833	Boston, MA 02108			
,	Att: Kyle Zick			
	Environmental Engineer			
	Gove Environmental Services, Inc.			
	8 Continental Dr. Unit H			
	Exeter, NH 03833			
	Att: Luke Hurley			

PHILLIPS EXETER ACADEMY NEW DORMITORY

(Remove Fisher Theater)

FRONT STREET ASSESSORS' MAP 72, LOT 209

Application Fee Worksheet

Site Plan Review (Major) = \$250

Total New Building Floor Area

 Lower Level
 = 12,134

 1^{st} Floor
 = 10,079

 2^{nd} Floor
 = 9,834

 3^{rd} Floor
 = 5,330

 Total
 = 37,377

 $37,377 \text{ sf}/\ 1000 \text{ X } \$60.00 = \$2,242.62$

Abutter Notices - \$10 / ea

(11, Including Professionals) = \$110

Public Notice = to be billed separately

TOTAL DUE = \$2,602.62

New Student Dormitory

Front Street

Exeter, New Hampshire

Engineer's Opinion of Costs - Site Work

BASIS: Preliminary Site Plans dated August 4, 2020

DATE:

30-Jul-20

PROJECT:

Γ: 5030

		PROJECT: 5030				
ITEM			TOTAL			
DESCRIPTION	QUANTITY	UNIT	PRICE	COST		
SITE PREPARATION	1.00	LS	\$50,000.00	\$50,000		
TEMPORARY EROSION CONTROL						
SILT BARRIER	250	LF	\$2.50	\$625		
ALLOWANCE FOR E&SC INSPECTIONS	1	LS	\$2,000.00	\$2,000		
AGGREGATE BASE COURSES						
12" BANK RUN GRAVEL	320	CY	\$16.00	\$5,120		
6" CRUSHED GRAVEL	400	CY	\$22.00	\$8,800		
RETAINING WALLS						
SITE RETAINING WALLS	1	LS	\$50,000.00	\$50,000		
HOT BITUMINOUS PAVEMENT						
BINDER AND WEARING COURSE	285	TONS	\$80.00	\$22,800		
BITUMINOUS WALKWAYS	6,300	SF	\$6.00	\$37,800		
STORM DRAINAGE						
CATCH BASINS/DMH	11	LS	\$2,500.00	\$27,500		
AREA DRAINS	5	LS	\$200.00	\$1,000		
6' DIA. LEACHING CATCH BASIN	1	LS	\$4,000.00	\$4,000		
12" - 15" CPE PIPE	550	LF	\$50.00	\$27,500		
18" - 24" CPE PIPE	180	LF	\$70.00	\$12,600		
CRUSHED STONE	140	CY	\$25.00	\$3,500		
RAINGARDENS	3	EA	\$3,000.00	\$9,000		
WATER						
HYDRANT AND FITTINGS	1	LS	\$10,000.00	\$10,000		
4", 6" & 8" D.I. PIPE	150	LF	\$40.00	\$6,000		
CURBING						
VERTICAL GRANITE CURB	280	LF	\$35.00	\$9,800		
SLOPED GRANITE CURB	160	LF	\$25.00	\$4,000		
LANDSCAPING						
PLANTING ALLOWANCE	1	LS	\$20,000.00	\$20,000		
PERVIOUS PAVEMENT	2570	SF	\$30.00	\$77,100		
UNIT PAVERS	1,150	SF	\$20.00	\$23,000		
SITE LIGHTING	8	EA	\$2,500,00	\$20,000		
SIGNS/STRIPING	1	LS	\$2,000.00	\$2,000		

SUBTOTAL:

\$434,145

Contingency (15%):

\$65,155

USE:

\$499,300

Site Plan Review - Waiver Request

NEW DORMITORY (FORMER FISHER THEATER) Front Street

Phillips Exeter Academy

September 25, 2020

Waiver Request #1:

9.3.6.4 -Work within 5 feet of exterior property line

The proposed project site is an existing developed site. There is currently a driveway that extend along the west side of the site that serves the Dow House and existing Fisher Theater. The existing driveway is less than two feet from the property and less than eleven feet in width in locations. The proposed project will widen the driveway. The existing Dow Barn will be relocated approximately 5 feet to the east to allow a 16 foot wide driveway to serve the north parking lot. There will also be a new fence along the property line. Therefore, the applicant requests to grade within 5 feet of the to the property line as shown on the plans.

In compliance with the Site Plan Review and Subdivision Regulations, Section 13.7 for the granting of waiver, the following criteria are met;

- 1. The granting of the waiver will not be detrimental to the public safety, health, or welfare or injurious to other property.
- 2. Work within five feet of property line is unique to this site because the existing site was developed within close proximity to the property line. This is unique to this property and not applicable generally to other property.
- 3. Because of the physical improvements of the existing developed site, it would be a hardship to the owner if strict adherence to the regulations were enforced. The driveway would need to be relocated and parking moved to the south lawn area of the site.
- 4. The granting of the waiver will not be contrary to the spirit and intent of the regulations, as the existing driveway is within two feet of the property line.
- 5. The waiver will not, in any manner, vary the provisions of the Zoning Ordinance or Master Plan.

Waiver Request #2: Zoning 5.6.6 Off-Street Parking Requirements

Section 5.6.6 indicates that 1 parking stall shall be provided for every 4 beds for "Schools-Private Dormitory". The proposed project will consist of a sixty (60) bed dormitory. However, the students at Phillips Exeter Academy are not allowed to keep vehicles at the dorms. Therfore, we are requesting a waiver from Section 5.6.6 for the off-street parking requirements. The new dormitory will have five (5) faculty apartments and there is one faculty apartment in the existing Dow House for a total of six (6) faculty apartments. Twelve (12) off-street parking stalls are provided for these apartments. The Academy has the ability to manage the parking and typically has a number of single vehicle faculty members. There is also a surplus of on-campus parking available for the faculty if needed.

In compliance with the Site Plan Review and Subdivision Regulations, Section 13.7 for the granting of waiver, the following criteria are met;

- 1. The granting of the waiver will not be detrimental to the public safety, health, or welfare or injurious to other property. The reduction in parking does not impact the welfare of the public and emergency access is provided.
- 2. The proposed use of the site is for a student dormitory for a private educational institution is a unique use to the property. Students are not allowed to keep vehicles at the dormitory, so the need for parking is reduced. This is unique to this site and is not applicable generally to other property.
- 3. The proposed waiver is not based on the physical restrictions of the property. The proposed parking will adequately serve the intended use of the site. It would be a hardship to the owner if strict adherence to the regulations were enforced.
- 4. The granting of the waiver will not be contrary to the spirit and intent of the regulations, as adequate parking is provided for the site.
- 5. The waiver will not, in any manner, vary the provisions of the Zoning Ordinance or Master Plan.



TRAFFIC GENERATION MEMORANDUM

Phillips Exeter Academy NEW DORMITORY (FORMER FISHER THEATER) Assessor's Map 72, Lot 209

July 2020

Phillips Exeter Academy (PEA) proposes to construct a new dormitory in the location of the existing Fisher Theater on the campus. The new dormitory will replace the existing theater's metal Butler building that was completed in 1972. This new 60-bed dormitory is a part of a long-term housing plan to consolidate some of the Academy's "house dorms" and accommodate beds that are lost as the Academy renovates the larger brick dorms due to ADA upgrades. It is important to note there is no increase to the enrollment at the Academy associated with this dorm. The students do not have vehicles on site and will not generate traffic impacts. There are five (5) proposed faculty apartments with twelve (12) associated parking spaces, including one (1) ADA accessible stall. Utilizing the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition), the anticipated traffic generated from the proposed apartments (Section 220) is as follows:

<u>Trip Generation Table</u>
Five (5) Apartments (ITE, Section 220)

	Time	Rate	Vehicle Trips		

Total Trips*	Weekday	6.65	33.25		
	Saturday	6.39	31.95		
	Sunday	5.86	29.30		
*Total trips estimate 50% entering and 50% exiting site					
Peak Hr	Weekday AM Peak Hr	0.55	2.75		
	Weekday PM Peak Hr	0.67	3.35		
	Saturday Peak Hr	0.52	2.60		
	Sunday Peak Hr	0.51	2.55		

As shown, the projected traffic impacts from the proposed project will be negligible, with a high peak hour volume of 3.35 trips for the weekday PM condition. It is also anticipated that the actual vehicle traffic counts will be lower that the ITE projected trips, as faculty work on campus and will typically walk or bike to facilities.

Cory D. Belden, PE

Ecopy: Heather Taylor, Phillips Exeter Academy

Geoff Gaunt, SLAM



TOWN OF EXETER - DEPARTMENT OF PUBLIC WORKS

PRELIMINARY APPLICATION TO CONNECT AND/OR DISCHARGE TO TOWN OF EXETER SEWER, WATER, AND/OR STORMWATER DRAINAGE SYSTEM(S)

Project Name	New Dormitory			
Project Location	Front Street (Fisher Theater Location)			
Applicant/Owner Name	Phillips Exeter Academy			
Mailing Address	20 Main Street, Exeter, NH 03833			
Phone Number	603-777-3292 email htaylor@exeter.edu			
Project Engineer	Cory Belden, P.E., Altus Engineering, Inc.			
Mailing Address	133 Court Street, Portsmouth, NH 03801			
Phone Number	603-433-2335 email cbelden@altus-eng.com			
Type of Discharge/Connec	ction 🛮 Sewer 🔻 Water 🖾 Stormwater			
Application completed by	→			
Name Cory Belde	en, P.E.			
Signature _ GBl	Date August 4, 2020.			
Reviewed and verified by	Planning & Building Department			

DESIGN FLOWS

The water and sewer design flow shall be based upon the New Hampshire Code of Administrative Rules, Env-Wq 1000 Subdivisions; Individual Sewage Disposal Systems, Table 1008-1 Unit Design Flow Figures (current version) or other methodology which may be deemed acceptable by the Town of Exeter. The minimum fee for a single-family residential unit is based on the design flow for two (2) bedrooms. Existing water and sewer flows may be based on meter readings for the current use.

If the proposed discharge is non-residential or is residential but exceeds 5,000 gallons per day (gpd), Section C must be completed. Certain water and sewer discharges must be approved by the State of New Hampshire Department of Environmental Services by way of permit and plan submittals. It is the responsibility of the applicant to ensure submittals are made to the state through the town is necessary. Final town approval cannot be made without the state's approval if required.

Stormwater design flows are based on the drainage analysis prepared by the applicant using the most current published precipitation data available.

SECTION A: PROPOSED NEW CONNECTIONS OR MODIFICATION OF EXISTING CONNECTIONS

	SANITARY SEWER				
Description of work	Raze Fisher Theater, located west of Tan Lane and proposed new dormitory				
Title of plan	"New Dormitory' Sheet C5.01, Utility Plan				
Total design flow (gpd)	7,000 gpd (Net increase of 600 GPD for 3 faculty apartments)				
•	*For any non-residential discharge or residential discharge exceeding 5,000 GPS, or for a change of use, complete Section C of this form.				
Approved Date					
	Water & Sewer Managing Engineer Date				
	WATER				
Description of work	Raze Fisher Theater, located west of Tan Lane and proposed new dormitory				
Title of plan	"New Dormitory' Sheet C4.01, Grading and Drainage Plan & Sheet C5.01, Utility Plan				
Total design flow (gpd)	7,000 gpd (Net increase of 600 GPD for 3 faculty apartments)				
					
Approved	Water & Sewer Managing Engineer				
	water a sewer managing engineer				
	STORMWATER				
Description of work	Raze Fisher Theater, located west of Tan Lane and propose new dormitory				
Title of plan	"New Dormitory' Sheet C4.01, Grading and Drainage Plan & Watershed Plans				
Total design flow	DW				
(10-year storm, CFS)	No increase expected (All Post Development runoff rates o be decreased)				
Approved	Date				
Highway Superintendent					

SECTION B: IMPACT FEES

Provide the following information to determine if a water and/or sewer impact fee will be required for a new development or a change or increase in use.

Current/prior Use(s)	Fisher Theater (Fishe				
Describe current use(s)	and Dance building v	vas opened, the 675	GPD was	creditted to the	ne CTD project)
<u>Use</u>	Unit Flow (g	gpd) <u>Tota</u>	al Existing	g Flow	
225 Theater seats	3 gal/sea	at	0 gpd	(675 gpd)	
	Total exi	sting flow0 gpd			
			Center	for Theater 8	& Dance project)
Proposed Use(s)					
Describe proposed use(s) <u>New student do</u>	rmitory (60 beds) ar	nd facult	ty apartments	(5 total)
<u>Use</u>	Unit Design Flow	v (gpd) Tota	l Design	Flow	
60 beds Boarding sch	ool students . 100	gpd/bed	6,000	gpd	
5 faculty apartments	.200	gpd/apart	1,Q00 (gpd	
	Total propos	sed flow	60.0 gp	od*	
* There will not be an in Faculty apartments will <u>Impact Fees</u> (80% of the	increase by three (3)	count on campus as when future building	this dorr gs are rer	n will replace on will replace on will replace on which will replace on which will be seen to be se	existing dorms. onverted to apartments,
Change ir	flow rate (gpd) <u>60(</u>	x 0.8 = Imp	act Fee f	flow rate (gpd)	480
If there is a decrease in j in flow rates, a water ar	•	' '		•	
Sewer Impact Fee: Flow	w increase (gpd)48	x \$4.85 =	\$2,3	28	
Water Impact Fee: Flow	v increase (gpd)48	X \$2.00 =	. \$96	0	
Approved by Town of E	xeter				
	Town Planner			Date	
Water & Sewer Ma	naging Engineer			Date	

SECTION C: SANITARY SEWER CLASSIFICATION AND BASELINE MONITORING

(NON-RESIDENTIAL DISCHARGES OR RESIDENTIAL DISCHARGE OVER 5,000 GPD)

In accordance with Title 40 of the Code of Federal Regulations, Part 403 Section 403.14, information provided herein shall be available to the public without restriction except as specified in 40 CFR Part 2. A discharge permit will be issued on the basis of the information provided in this section.

In accordance with all terms and conditions of the Town of Exeter, New Hampshire Ordinances Chapter 15, all persons discharging wastewater into the town's facilities shall comply with all applicable federal, state, and local Industrial Pre-treatment rules.

Property Owner Name	Phillips Exeter Academy			
Owner's Representative	Heather Taylor			
Address	20 Front Street			
Phone	.603-777-4529 email htaylor@exeter.edu			
Tenant Name	n/a			
Address	i e e e e e e e e e e e e e e e e e e e			
Phone	email			
PART II - PRODUCT OR SE				
Products Manufactured	n/a			
Services Provided Student Housing /Educational Facility				
SIC Code(s)	Building Area (SF)			
Number of Employees	Days/week of operation Shifts per day			
PART III - CATEGORY OF S	SEWER DISCHARGE			
Type of Discharge	\square Septic \blacksquare Proposed \square Existing \square Change of Use			
Water Use (gpd)	000 gpd (from Section A)			
Check all that apply:				
⊠ Do	omestic waste only (toilets & sinks)			
	omestic waste plus some process wastewater			
□ Fe	deral pre-treatment standards (40 CFR) applies			

PART I - USER INFORMATION

PART IV - CLASSIFICATION	<u>I DETERMINATION</u>	(to be completed by Town staff)
CLASS 1 - SIGNIFICANT OR	CATEGORICAL INDUSTRIAL USER	
CLASS 2 - MINOR INDUSTR	RIAL OR COMMERCIAL USER	
CLASS 3 - INSIGNIFICANT I	NDUSTRIAL OR COMMERCIAL USER	
CLASS 4 - NON-SYSTEM US	SER, OR DISCONTINUED SERVICE	
See attached sheet for the	basis of the determination.	
Determined by	Title	Date
Approved		Date
	Water & Sewer Managing Engineer	
use. The information provipenalties from federal, staincluding the possibility of lacknowledge and agree to performed on the Town of determining the town's at accurately declare said flow Exeter sewer, water and/or	ded is true, accurate and complete. It and/or town regulatory agencies for fine and/or imprisonment. It is pay all charges incurred for monitor for stormwork to serve the project. Further, I are wrequirements shall be sufficient caster stormwater drainage system(s).	or submitting false information, oring, testing and subsequent analysis ater drainage system(s), in the course of cknowledge and agree that failure to use to deny access to the Town of
Signature of Applicant	Tearnal (a) us	_{Date} August 4, 2020.
Name of Property Owner_	Phillips Exeter Academy	

USER CLASSIFICATION SYSTEM FOR INDUSTRIAL DISCHARGE

CLASS 1: SIGNIFICANT INDUSTRIAL USER

Any industry and/or commercial establishment that:

- Is subject to National Pre-treatment standards as outlined in 40 CFR (Code of Federal Regulations) 403.5 (a) (b).
- Discharges a non-domestic waste stream of 5,000 GPD, or more.
- Contributes a non-domestic waste stream totaling 5% or more of the average dry weather hydraulic or organic (BOD<TSS< etc.) capacity of the Town of Exeter Sewer Treatment Facility.
- Has the reasonable potential, in the opinion of the POT Supervisor, to adversely affect the treatment plant, its workers, or the collection system by reason of inhibition, pass-through pollutants, or sludge contamination.

CLASS 2: MINOR INDUSTRIAL USERS

Small industries and commercial establishments (e.g. restaurants, auto repair shops, cleaners, etc.) whose individual discharges do not significantly impact the Town of Exeter Sewer Treatment Facility or systems, degrade receiving water quality or contaminate the sludge. Industries that have the potential to discharge a non-domestic or process waste stream, but at the present time discharge only sanitary waste, may also be included in this class. However, this class shall not include any categorical industries. Industries and commercial establishments in this classification will require a permit and be subject to all inspection, compliance monitoring, enforcement, and reporting requirements of the pretreatment program.

CLASS 3: INSIGNIFICANT INDUSTRIAL USERS

Users which will be eliminated from participation in Exeter's Pretreatment Program. These include industries and/or commercial establishments that discharge only domestic waste (toilets and sinks only) into the municipal sewer system or do not have any reasonable chance of discharging a non-domestic waste stream to the POTW. Class 3 users will be required to notify the Exeter Sewer Division of any change in discharge quantity or character.

CLASS 4: NON-SYSTEM USER

Any industry, business or commercial establishment identified in the Master List of Industrial Users that are not connected to the Exeter Sewer system or which has ceased to discharge to the system.

Industries and/or commercial establishments classified as Class 1 or Class 2 users will be regulated individually and have specific effluent limitations (including conventional pollutants, where necessary) in the discharge permit. All Class 1 and Class 2 users will require a State Discharge Permit, and be subject to all inspection, compliance monitoring, and enforcement and reporting requirements of the pretreatment program.

Cory Belden

From: Sent: To: Cc: Subject:	Justin Pizon <jpizon@exeternh.gov> Wednesday, July 8, 2020 1:34 PM Cory Belden Geoffrey Gaunt; Jeff Clifford; Eric Wilking Re: R5030: Phillips Exeter Academy New Student Dorm - Fire Engine vehicle turning template</jpizon@exeternh.gov>
Cory,	
Thank you for re-wo	orking the plan. This looks great. Please submit to the PB and you can let them know we approve of ags.
Thanks again,	
Justin	
	at 3:26 PM Cory Belden < cbelden@altusengineering2.onmicrosoft.com wrote:
Justin,	
Thank you for prov	iding the vehicle dimensions for the engine truck.
We have modelled	it into our vehicle modeling software (AutoTURN) and run the movement. (see attached)
As you can see in t way of the ladder t	he exhibit, we have rotated the parking to allow more room for the engine truck to get out of the ruck.
We have also made parking (orange are	e the sidewalk around the parking area flush to the parking so that it can be used for turning and ea).
This creates an are	a approximately 40.6 ft x 24 ft for the engine truck.
The turning moven	nent also shows that the engine truck can back out and then pull out within the area (3 Pt turn).
When submitting t movement.	he plans for Planning Board and Technical Review, we will include an exhibit showing this
We hope this will s	atisfy the Fire Departments concerns for access to the site.
Thank you and plea	ase let us know if you have any other concerns.
Sincerely,	
Cory	

PEA - NEW DORM (FISHER THEATER) Legend 3rookside Dr State - County ☐ City/Town isposa Phillips Exeter High Sch Map Scale 1: 10,000 ir High © NH GRANIT, www.granit.unh.edu Map Generated: 7/31/2020 Notes VERMONT Hospital MASSACHUSETTS Gary Ln CONN RHODE



National Flood Hazard Layer FIRMette



STRUCTURES 111111 Levee, Dike, or Floodwall OTHER AREAS OF FLOOD HAZARD OTHER AREAS MAP PANELS Data refreshed April 2020 Zone AE (EL 8 Feet) Zone AE 8 FEET TOWN OF EXETER

Legend

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

HAZARD AREAS SPECIAL FLOOD

With BFE or Depth Zone AE. AO, AH, VE, AR

Without Base Flood Elevation (BFE)

0,2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage Regulatory Floodway

areas of less than one square mile Zone X Future Conditions 1% Annual Chance Flood Hazard Zone

Area with Reduced Flood Risk due to Levee. See Notes, Zone x

Area with Flood Risk due to Levee Zone D

No SCREEN Area of Minimal Flood Hazard Zone X

Effective LOMRs

Area of Undetermined Flood Hazard Zone

Channel, Culvert, or Storm Sewer

Cross Sections with 1% Annual Chance Water Surface Elevation

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline Hydrographic Feature Profile Baseline

OTHER FEATURES

Digital Data Available

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

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

authoritative NFHL web services provided by FEMA. This map was exported on 8/1/2020 at 5:30 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or The flood hazard information is derived directly from the 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,

1:6,000

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GO PAIGINE PEROS AND TO SOLUTION OF THE PEROS AND THE PERO

July 31, 2020

Town of Exeter Planning Board / Conservation Commission 10 Front Street Exeter, NH 03833

RE: Application for Conditional Use Permit

Dear Board and Commission Members,

Phillips Exeter Academy is submitting the attached Conditional Use Permit — Wetlands Conservation Overlay District application. The Academy proposes to construct a new dormitory on parcel 72-209 in the approximate location of the existing Fisher Theater, which was vacated when the Academy completed the new Goel Center for Theater and Dance in 2018. The new dormitory will replace the existing metal Butler building that was completed in 1972. This new 60-bed dormitory is a part of a long-term housing plan to consolidate some of the Academy's "house dorms" and accommodate beds that are lost as the Academy renovates the larger brick dorms due to ADA upgrades. It is important to note there is no increase to the enrollment at the Academy associated with this dorm.

This application focuses on the proposed work within the wetlands buffer areas. There are two wetland types along the north portion of the site, an intermittent stream that flows from west to east to a poorly drained wetland just east of the pedestrian bridge. The existing site was previously been developed into the buffer. The new building will be constructed in the approximate location of the existing Fisher Theater, maintaining the existing building setback. There will be new parking within the 75 foot setback that will also provide a staging area for fire access. The project has been reviewed by the Fire Department and they support the proposed layout for access needs. All of the lower walkways and patio area within the buffer will be constructed using porous materials, which will reduce the total impervious area within the buffer by approximately 1,075 square feet. The existing site was also constructed in the early 1970's prior to stormwater regulations, so the proposed site will provide improved water quality discharge to the wetlands, by treating the surface runoff with infiltration galleries and bio-retention raingardens prior to discharge.

We feel that this project is a significant betterment to the site and to the adjacent wetlands and look forward to your review. If you have any questions please do not hesitate to contact us.

Fondly,

Heather H. Taylor

Campus Planner/Architect

Phillips Exeter Academy

Heart tym



Town of Exeter Planning Board Application

Conditional Use Permit: Wetland Conservation Overlay District In accordance with Zoning Ordinance Article: 9.1

SUBMITTAL REQUIREMENTS: (Note: See Application Deadlines and Submission Requirements for Conservation Commission Requirements)

- 1. Fifteen (15) copies of the Application
- 2. Fifteen (15) 11"x17" and three (3) full sized copies of the plan which must include:

Existing Conditions

- a. Property Boundaries
- b. Edge of Wetland and associated Buffer (Wetlands Conservation Overlay District WCOD)

--Prime wetland: 100'

--Very Poorly Drained: 50'

--Vernal Pool (>200 SF): 75'

--Poorly Drained: 40'

--Exemplary Wetland: 50'

--Inland Stream: 25'

c. Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements

Proposed Conditions

- a. Edge of Wetlands and Wetland Buffers and distances to the following:
 - i. Edge of Disturbance
 - ii. Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements
- b. Name and phone number of all individuals whose professional seal appears on the plan
- 3. If applicant and/or agent is not the owner, a letter of authorization must accompany this application
- 4. Supporting documents i.e. Letters from the Department of Environmental Services, Standard Dredge and Fill Application and Photos of the property
- 5. A Town of Exeter Assessors list of names and mailing addresses of all abutters

Required Fees:		
Planning Board Fee: \$50. 00	Abutter Fee: \$10.00	Recording Fee (if applicable): \$25.00

The Planning Office must receive the completed application, plans and fees on the day indicated on the Planning Board Schedule of Deadlines and Public Hearings.

APPLICANT	Name: Phillips Exeter Academy			
	Address: 20 Main Street Exeter NH 03833			
	Email Address: htaylor@exeter.edu			
	Phone: 603-777-3292			
PROPOSAL	Address: Front Street			
	Tax Map # 72 Lot# 209 Zoning District: R-2			
	Owner of Record: Phillips Exeter Academy			
Person/Business	Name: Cory D. Belden P.E., Altus Engineering, Inc.			
performing work	Address: 133 Court Street, Portsmouth, NH 03801			
outlined in proposal	Phone: 603-433-2335			
Professional that	Name: Luke Hurley, Gove Environmental Services, Inc.			
delineated wetlands Address: 4 Franklin Street A-2. Exeter. NH 03833				
	Phone: 603-778-0644			

Town of Exeter Planning Board Application Conditional Use Permit: Wetland Conservation Overlay District

Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)						
See Attachment - A						
Watland Consequentian	Organizat District Iron- at	<i>C</i>	()			
Temporary Impact	Overlay District Impact Wetland: Prime Wetlands Exemplary Wetlands	(SQ FT.)	Buffer: Prime Wetlands Exemplary Wetlands	(SQ FT.)		
	☐ Vernal Pools (>200SF) ☐ VPD ☐ PD		☐ Vernal Pools (>200SF) ☐ VPD	50 sf		
	☐ Inland Stream		X PD X Inland Stream	350 sf		
Permanent Impact	Wetland: Prime Wetlands Exemplary Wetlands Vernal Pools (>200SF) VPD PD Inland Stream		Buffer: Prime Wetlands Exemplary Wetlands Vernal Pools (>200SF) VPD PD Inland Stream	300 sf 10,250 sf		
List any variances/special exceptions granted by Zoning Board of Adjustment including dates: See Attachment - A						
Describe how the proposal meets conditions in Article 9.1.6.B of the Zoning Ordinance (attached for reference): See Attachment - A						

- 9.1.6. B: <u>Conditions</u>: Prior to issuance of a conditional use permit, the Planning Board shall conclude and make a part of the record, compliance with the following criteria:
 - 1. That the proposed use is permitted in the underlying zoning district;
 - 2. No alternative design which does not impact a wetland or wetland buffer or which has less detrimental impact on the wetland or wetland buffer is feasible;
 - 3. A wetland scientist has provided an impact evaluation that includes the "functions and values" of the wetland(s), an assessment of the potential project-related impacts and concluded to the extent feasible, the proposed impact is not detrimental to the value and function of the wetland(s) or the greater hydrologic system.
 - 4. That the design, construction and maintenance of the proposed use will, to the extent feasible, minimize detrimental impact on the wetland or wetland buffer;
 - 5. That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reasons;
 - 6. The applicant may propose an increase in wetland buffers elsewhere on the site that surround a wetland of equal or greater size, and of equal or greater functional value than the impacted wetland
 - 7. In cases where the proposed use is temporary or where construction activity disturbs areas adjacent to the immediate use, the applicant has included a restoration proposal revegetating any disturbed area within the buffer with the goal to restore the site as nearly as possible to its original grade and condition following construction.
 - 8. That all required permits shall be obtained from the New Hampshire Department of Environmental Services Water Supply and Pollution Control Division under NH RSA §485-A: 17, the New Hampshire Wetlands Board under NH RSA §483-A, and the United States Army Corps of Engineers under Section 404 of the Clean Water Act.;

PHILLIPS EXETER ACADEMY

20 Main Street, Exeter, NH 03833

New Dormitory - Tax Map 72 Lot 209

Planning Board - Conditional Use Permit Abutter's List

Tax Map 72, Lot 187	Owner/Applicant:		
John F and Tatiana B Roth	Tax Map 72, Lots 169, 186, 189, 190,		
70 Front Street	208, 209, 211		
Exeter, NH 03833	Phillips Exeter Academy		
	20 Main Street		
	Exeter, NH 03833		
	Att: Mark Leighton		
Tax Map 72, Lot 188	Architect		
David C. Bohn Trust	SLAM Collaborative Inc.		
72 Front Street	250 Summer Street #402		
Exeter, NH 03833	Boston, MA 02210		
	Att: Neil Martin		
Tax Map 72, Lot 191	Civil Engineer		
Will H. and Camille M. Weete	Altus Engineering, Inc.		
78 Front Street	133 Court Street		
Exeter, NH 03833	Portsmouth, NH 03801		
	Att: Jeff Clifford		
	, its series		
Tax Map 72, Lot 196	Land Surveyor		
Mark J. Russ	Nitsch Engineering		
79 Front Street	360 Merrimack Street, Suite 49		
Exeter, NH 03833	Building #5, Second Floor		
	Lawrence, MA 01843		
	Att: Jamie Gayton		
ax Map 73, Lot 293	Landscape Architect		
Exeter School District	Kyle Zick Landscape Inc.		
30 Linden Street	36 Broomfield Street, Suite 302		
Exeter, NH 03833	Boston, MA 02108		
	Att: Kyle Zick		
	Environmental Engineer		
	Gove Environmental Services, Inc.		
	8 Continental Dr. Unit H		
	Exeter, NH 03833		
	Att: Luke Hurley		

Abutters Verify Through VGSI.com Database 7/2020



Civil
Site Planning
Environmental
Engineering

Civil
133 Court Street
Portsmouth, NH
03801-4413

Attachment A

CONDITIONAL USE PERMIT APPLICATION

For

NEW DORMITORY (FORMER FISHER THEATER)

Detailed Proposal including intent, project description, and use of property:

The project consists of the construction of a new dormitory in the location of the existing Fisher Theater on the Phillips Exeter Academy (PEA) campus. The new dormitory will replace the existing theater's metal Butler building that was completed in 1972. This new 60-bed dormitory is a part of a long-term housing plan to consolidate some of the Academy's "house dorms" and accommodate beds that are lost as the Academy renovates the larger brick dorms due to ADA upgrades. It is important to note there is no increase to the enrollment at the Academy associated with this dorm.

Site improvements include driveway improvements for emergency vehicle access and faculty parking, stairs, walkway improvements, patios for outdoor gathering spaces, utilities, and stormwater improvements. The existing site was constructed in the early 1970's prior to stormwater regulations and was developed into the buffer. The new building will be constructed in the approximate location of the existing Fisher Theater, maintaining the existing building setback and the proposed project will not further encroach into the buffer area. There will be new parking in the 75 foot setback that will also provide a staging area for fire access. All of the lower walkways and patio area within the buffer will be constructed using porous materials, which will reduce the total impervious area within the buffer by approximately 1,075 square feet. The proposed stormwater management improvements include drain lines, deep sump catch basins, three (3) stormwater management galleries to treat, infiltrate, and control runoff from the site, as well as three (3) small raingardens to treat roof runoff prior to discharging to the wetlands. Therefore, the proposed site will provide improved water quality discharge to the wetlands.

List any variances/special exceptions granted by Zoning Board of Adjustment including dates:

A Variance request will be submitted for the building height and a Special Exemption request for the expansion of a non-conforming use on the property.

Describe how your proposal meets the conditions of Article 9.1.6.B of the Town of Exeter Zoning Ordinance:

1. That the proposed use is permitted in the underlying zoning district;

The project involves expansion of an existing non-conforming use within the R-2 zoning district. A Special Exemption exists for the non-conforming use on the property and an additional special exemption will be requested for the expansion of this use.

2. No alternative design which does not impact a wetland or wetland buffer or which has less detrimental impact on the wetland or wetland buffer is feasible;

The site is an existing developed site with an existing building, site improvements, and utilities servicing the existing Fisher Theater. The proposed dormitory will be in the location of the existing building and utilize many of the existing utility services. The proposed building will not encroach any closer to the wetlands. The proposed site will provide stormwater management and treatment with stormwater galleries and raingardens, to a site that does not have any current treatment, therefore improving the condition of the runoff to the wetlands.

3. A wetland scientist has provided an impact evaluation that includes the "functions and values" of the wetland(s), an assessment of the potential project-related impacts and concluded to the extent feasible, the proposed impact is not detrimental to the value and function of the wetland(s) or the greater hydrologic system.

Gove Environmental Services, Inc. (GES) completed a Functions and Values assessment for the proposed project and determined that "It is not anticipated that the existing wetland functional value will be impacted." See Attachment B - Wetlands Functions and Values by GES, dated July 13, 2020.

4. That the design, construction and maintenance of the proposed use will, to the extent feasible, minimize detrimental impact on the wetland or wetland buffer.

The proposed site will provide stormwater management and treatment to an existing site that does not current have any treatment. In addition to the providing stormwater treatment, the walkways and patio area in the buffer will be constructed of porous materials to reduce the impervious coverage. By using porous surfaces, the impervious cover in the buffer will be reduced. The combination of reducing impervious cover and providing stormwater treatment will minimize any detrimental impacts on the wetland or wetland buffer.

5. That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reasons;

There are no direct impacts to the wetlands. The site is an existing developed site that currently has no stormwater management. The wetland buffer will be maintained and treatment will be provided to the new impervious areas. The function and value of the wetland should not be impacted and the project will not create a hazard to individual or public health, safety or welfare.

6. The applicant may propose an increase in wetland buffers elsewhere on the site that surround a wetland of equal or greater size, and of equal or greater functional value than the impacted wetland;

Due to the existing development on the site and around the existing wetland, there is not an opportunity to increase the buffer. However, there will be additional trees and plantings within the buffer, the impervious area in the buffer will be reduced, and stormwater treatment will be provided.

7. In cases where the proposed use is temporary or where construction activity disturbs areas adjacent to the immediate use, that the landowner agrees to restore the site as nearly as possible to its original grade and condition following construction;

The vegetation will be reestablished at the temporary impact area and the reconstructed walkway will be restored to original grade.

8. That all required permits shall be obtained from the New Hampshire Department of Environmental Services Water Supply and Pollution Control Division under NH RSA §485-A: 17, the New Hampshire Wetlands Board under NH RSA §483-A, and the United States Army Corps of Engineers under Section 404 of the Clean Water Act.

There are no direct impacts to wetlands, therefore, does not require a New Hampshire Department of Environmental Services Permit required under RSA 482-A or a United States Army Corps of Engineers Permit as required under Section 404 of the Clean Water Act. The proposed project does not occur within the 250-foot protected shoreland, as regulated under the Comprehensive Shoreland Protection Act (RSA 483-B), and does not require a permit. NHDES Alteration of Terrain (AoT) Bureau also concurred on April 30, 2020 that the proposed project does not require an AOT permit.

Waiver Request (Conditional Use Permit Application)

NEW DORMITORY (FORMER FISHER THEATER) Front Street

Phillips Exeter Academy

July 2020

9.9.3 Wetland Setbacks – Parking and Structure Setback from Wetlands and Limited Use Buffer to wetlands:

Explanation:

The project consists of the construction of a new dormitory in the location of the existing Fisher Theater on the Phillips Exeter Academy (PEA) campus. The new dormitory will replace the existing theater's metal Butler building that was completed in 1972. This new 60-bed dormitory is a part of a long-term housing plan to consolidate some of the Academy's "house dorms" and accommodate beds that are lost as the Academy renovates the larger brick dorms due to ADA upgrades. It is important to note there is no increase to the enrollment at the Academy associated with this dorm.

The new building will be constructed in the approximate location of the existing Fisher Theater, maintaining the existing building setback and the proposed project will not further encroach into the buffer area. There will be new parking in the 75 foot setback that will also provide a staging area for fire access. All of the lower walkways and patio area within the buffer will be constructed using porous materials, which will reduce the total impervious area within the buffer by approximately 1,075 square feet. The proposed stormwater management improvements include drain lines, deep sump catch basins, three (3) stormwater management galleries to treat, infiltrate, and control runoff from the site, as well as three (3) small raingardens to treat roof runoff prior to discharging to the wetlands. Therefore, the proposed site will provide improved water quality discharge to the wetlands.

There is an intermittent stream along the north side of the site that drains to a poorly drained wetland area. The intermittent stream has a 25-foot limited use setback and the poorly drained soils has a 40-foot limited use setback.

A waiver is requested for the encroachment of the building and parking within the 75-foot parking and structural setback and for work withing the 25-foot and 40-foot limited use buffer for intermittent stream and poorly drained soils, respectively.

- Parking and Structure Setback The new dormitory will be constructed in approximately the same location as the existing Fisher theater. The northern limits of the building will not encroach any closer to the wetlands. The existing building is approximately 41.5 feet from the wetland. The proposed dormitory will be constructed using the same northern building line, which will maintain the same 41.5 foot offset to the wetlands. Additionally, a new parking area to provide faculty parking and fire access will be constructed on the west side of the building within the 75-foot buffer. The new parking area is 31.8 feet from the wetlands.
- Limited Use Buffer Setback There is an existing gravel drive and asphalt pavement walkway along the north side of the existing Fisher Theater that currently extends into the 25-foot setback area. The proposed project will remove the gravel drive and replace it with a porous walkway and a portion of the asphalt path will be repaved. Additionally, there will be a new drainage outlet within the buffer to outlet the proposed stormwater gallery that will provide treatment prior to discharging to the wetlands.

Justification:

The applicant and their architect performed extensive analysis of the Academy's needs and building code requirements to design the proposed building within the available space. The surrounding area is constrained by the Forester-Ball Music Theater and Dow Barn and the Front Street and Dow House dormitories. These constraints and the building's functional requirement dictated the building configuration and parking requirements. The existing Fisher Theater that will be demolished for the construction of the new dormitory is within the 75-foot setback. The new dormitory will be in the approximate same location and will not encroach closer to the wetlands.

Mitigation

The mitigation proposal seeks to provide improved stormwater quality runoff from the site and to the adjacent wetland by providing treatment to the new impervious areas, where no current treatment exists. The proposed project will construct three new subsurface stormwater galleries and three small raingardens to treat the proposed impervious areas prior to discharging to the wetlands. The proposed stormwater galleries and raingardens will provide improved water quality in the watershed by managing and treating runoff that currently leaves the site untreated.

In addition, the proposed walkway and patio within the buffer area will be constructed with porous materials. The result will be a decrease of approximately 1,075 square feet of impervious area within the 75-foot buffer, of which approximately 740 feet of impervious area within the limited use buffer will be removed and replaced with porous materials. A new drainage outfall is necessary to outlet the subsurface stormwater gallery and will be constructed with riprap outlet protection to prevent erosion.



GOVE ENVIRONMENTAL SERVICES, INC.

July 13, 2020

Corey Belden Altus Engineering, Inc. 133 Court Street Portsmouth, NH 03801

Subject:

PEA Science Center

Re:

Wetland Functions and Values

Dear Mr. Belden:

As requested, I have put together a functions and values assessment for the above-referenced project. Overall, due to the small size of the wetland, seasonal characteristics, and surrounding use of the environment, the intermittent stream/wetland has limited wildlife habitat and functional value and does not possess any unique or heritage value. The wetland does provide some sediment and nutrient removal for stormwater. Based on the proposed project, the existing buffer will be maintained and stormwater treatment will be provided. It is not anticipated that the existing wetland functional value will be impacted. Construction Best Management Practices (BMPs) should be used to limit impacts during construction

Please let me know if you have any questions

Sincerely,

Luke D. Hurley, CWS, CSS

Vice President

Gove Environmental Services, Inc.



GOVE ENVIRONMENTAL SERVICES, INC.

Functions and values assessment for the work proposed as part of the Phillips Exeter Academy, Fisher Theater project.

Flood flow Alteration

Flood flow attenuation of the wetland will not be impacted, as all work is proposed in the upland area and will maintain a vegetated buffer.

Fish and Shellfish Habitat

No such habitat exist within this wetland.

Sediment/Toxicant Retention

Sediment/toxicant retention will not change within the wetland. The surrounding area is developed with buildings and walkways, however a vegetated buffer is to remain between the project area and the wetlands.

Nutrient Removal

Nutrient removal, like sediment and toxicant retention will not change within the wetland or the buffer. A well vegetated area will remain after the project is complete as it currently does prior to any work being done.

Production Export

Production export is relatively low to almost non-existent within this wetland due to the size, location and limited fruit/nut producing vegetation.

Sediment/Shoreline Stabilization

This is will not be effected. Any drainage through this wetland is intermittent in the spring fall and after possible heavy rains.

Wildlife Habitat

Because of the location of the wetland and the open nature with surround buildings and walkways, little wildlife habitat exists.

Recreation

The wetland area does not offer the potential for recreation.

Educational/Scientific Value

Educational/scientific value will not change in the wetland or the buffer.

Uniqueness/Heritage

This wetland is not unique, nor does it possess any heritage value.

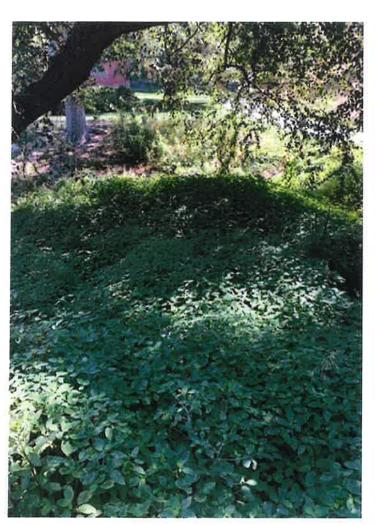


GOVE ENVIRONMENTAL SERVICES, INC.

Visual Quality/Aesthetics

The work proposed is entirely with an open and heavily travelled portion of the campus. The wetland is not to be impacted and will remain the same after construction as it currently does.

Endangered Species Habitat No endangered species are present within this area.



Wetland - looking east from footbridge



Wetland(Intermittent Stream)- looking west from footbridge

Exeter Conservation Commission August 11, 2020 Virtual Meeting Draft Minutes

Call to Order

1. Introduction of Members Present (by Roll Call)

Present at tonight's meeting were by roll call, Chair Andrew Koff, Vice-Chair Trevor Mattera Sally Ward, Clerk, Bill Campbell, Carlos Guindon, Ginny Raub, Julie Gilman (Select Board Liaison), Donald Clement, (Alternate) and Kristen Murphy, Natural Resource Planner.

Members present indicated there was no one else present in the room with them during this meeting.

Absent: Dave Short, Treasurer, Alyson Eberthardt, Lindsey White (Alternate), Nick Campion (Alternate), and Kristen Osterwood (Alternate), Daryl Browne, Select Board Alternate Liaison

Mr. Koff called the meeting to order at 7 PM.

Mr. Koff read the meeting preamble indicated that an emergency exists and the provisions of RSA 91-A:2 III (b) are being invoked. As federal, state and local officials have determined gatherings of ten or more people pose a substantial risk to the community and the meeting imperative to the continued operation of Town and government and services which are vital to public, health, safety and confidence. This meeting will be conducted without a quorum physically present in the same location and welcome members of the public accessing the meeting remotely.

2. Public Comment

None.

Action Items

1. Wetland Conditional Use Permit application from Phillips Exeter Academy to construct a new dormitory in the approximate location of the existing Fisher Theater (Tax Map 72/209).

Mark Leighton presented the proposal which includes demolishing the Fisher Theater which he indicated was being used for storage, to build a dormitory. PEA needs a new dormitory. PEA will keep the same number of students but as dorms are improved, code upgrades have caused a reduction in number of available beds. They also plan to convert the smaller dormitories to other uses. After looking at many locations on campus, a location adjacent to two other dormitories seems to make a good community. PEA is doing some fundraising.

Mr. Campbell asked what makes up a dormitory? Mr. Leighton indicated they are planning for doubles but have other options they are looking at.

Corey Belden noted Fisher Theater is currently setback into the wetland buffer area. Plan to follow a similar footprint, not encroaching into the wetland more. The proposed plan is slightly increasing the building area within the setback.

Mr. Belden indicated there will be three stormwater galleries for infiltration, collecting roof runoff and all stormwater for pretreatment and treatment for impervious areas. Using coarse materials for walkway. 1,075' of reduced impervious surface in buffer as result of this project.

Mr. Belden reviewed the criteria for the CUP application. The property is in the R-2 zoning district. They are going to the ZBA to confirm special exception for non-conforming use. Utilities service where the existing building is. Just replacing that building and will not encroach further. Wetland scientist did functional value assessment and determined it would not have its functional value changed. Improving current conditions. No direct impacts to wetlands on site. Treatment will be provided. Will be additional plantings in buffer. All required permits will be obtained. No permits required by DES. Only pollution prevention plan required. Had discussions on snow removal on parking lot. Will comply with snow disposal guidelines. Use salt and de-icing to manage parking areas. PEA typically uses environmentally sensitive de-icing agent. In large scale storms snow will be dropped over a retaining wall. Will not be completely untreated.

Jeff Clifford stated part of the guidelines is to do post melt cleanup. Going to talk to DES about expanding on their guidelines some more.

Mr. Belden noted a 2-3' separation from property line from the retaining wall. Don't anticipate anyone using that for walking.

Mr. Campbell asked if work was done in the wetland area when the science building was in? The area is overgrown and seeing some invasives. Mr. Leighton noted the area has been cleaned up quite a bit. Agreeable to doing more in that area.

Mr. Campbell asked about the three maples on the front side, whether they will be removed? Kyle Zick indicated an arborist looked at them. Two of three have rot and structural issues so we can't keep them.

Mr. Guidon noted he agreed the invasives should be removed. Like what was done around science building when it went in.

Mr. Clement indicated a study was done in this area on watershed and drainage. Don't want to accelerate drainage problems. Effective in eliminating nitrogen?

Mr. Clifford indicated infiltrating water is effective in removing nitrogen. Observations show its not a large watershed. Are much bigger watersheds that contribute to problem. Able to reduce peak runoff rate. Vast improvement of what's there now.

Mr. Campbell asked how the building would be heated? Mr. Leighton indicated it would be geothermal. Steam as a backup source. Air conditioning in academic space. Ms. Taylor noted it would go out front.

Mr. Koff asked for comments about the invasive species. Mr. Hurley indicated there are a lot of invasives along the stream area. Looked at some Bittersweet and Buckthorn. Think a lot of it can be removed. Management plan has to be in place after removal. Ms. Ward noted working on invasives was important. Is a big improvement on what's already there. Mr. Leighton noted they can include that process in the project.

Vice-Chair Mattera indicated he was pleased to see the reduction in impervious surface. Is a proponent of redevelopment sites.

Mr. Koff noted maintenance will be key in this with snow storage. Believe stream restoration is out of our purview here.

Mr. Leighton indicated there will probably be a requirement for Site Plan Review with the Planning Board. Mr. Clifford added the they recently submitted to the Planning Board and covers the management plans. Mr. Clement indicated he would like to reference invasive removal management plan as a condition.

MOTION: Mr. Campbell motioned to recommend approval of the Conditional Use Permit with the condition that the invasive removal management plan be referenced. Ms. Ward seconded the motion. A roll call vote was taken Koff – aye, Ward – aye, Campbell – aye, Guindon – aye, Raub – aye, Clement – aye, and Mattera - aye Motion passed 7-0-0.

2. Garrison Ln Gravel Pull Out on REDC Conservation Parcel

Ms. Murphy indicated Public Works is responsible for plowing Garrison Lane. In the past they would take advantage of the driveway at the end. Reached out about putting in a gravel drive. There are three living trees and one dying which would be removed. Area is in Conservation Land. Nothing prohibits gravel trail/lot. Did not appear to be wetlands there. Public Works would handle labor and funding.

Mr. Campbell noted it would be a great addition.

Ms. Ward noted tree removal is not a big problem. The only issue may be the one house down there.

Ms. Murphy indicated they have staked out how deep the gravel would go.

Mr. Koff noted there has been a lot of activity there lately. At some point the bridge will need work. There is a chain up but people try to drive through. The trailhead could use a bit more work.

DRAINAGE SUMMARY

Phillips Exeter Academy New Dormitory Drainage Report Assessor's Map 72, Lot 209 Altus Project P5030

PROJECT DESCRIPTION

Phillips Exeter Academy (Academy) is proposing to construct a new 60-Bed Dormitory in the approximate footprint of the existing Fisher Theater building located approximately two hundred feet (200') north of Front Street between Dow House (75 Front Street) and Front Street Dormitory, (69 Front Street). The dormitory will also provide five faculty apartments to provide both short and long term faculty housing needs on campus. existing Fisher Theater was vacated when the Academy completed the new Goel Center for Theater and Dance in 2018. The new dormitory will replace the existing metal Butler building that was completed in 1972. The new dormitory is a part of a long-term housing plan to consolidate some of the Academy's "house dorms" and accommodate beds that are lost as the Academy renovates the larger brick dorms due to ADA upgrades. It is important to note there is no increase to the enrollment or bed count at the Academy associated with the construction of this dorm. The new building will be more visible, landscaping appropriate to the residential structure will be included as a part of the project. Additionally, improvements will be made to the open green space between the existing Dow House and Front Street Dormitory. The existing Dow Barn, located behind Dow House will be moved and incorporated to the new building.

The existing site was constructed prior to stormwater regulations and does not have treatment on site for the impervious areas draining to the adjacent wetlands, that includes the Fisher Theater, Dow House, Dow Barn, and Front Street Dorm. The majority of the site drains to the wetlands to the north of the project that have been identified as intermittent stream and poorly drained wetlands. The proposed project will provide treatment through the use of sub-surface treatment systems, raingardens, and the use of porous paving surfaces to meet the intent of Low Impact Development (LID). The development area eventually drains to the Squamscott River as referenced by the attached USGS map. 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 wetlands and closed drainage system.

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 (3.69 inch)	10-Yr Storm (5.64 inch)	25-Yr Storm (7.18 inch)	50-Yr Storm (8.61 inch)
POA #1				
Pre	2.24	4.70	6.32	7.53
Post	1.57	3.36	5.18	7.21
Net Change	-0.67	-1.34	-1.14	-0.32
POA #2				
Pre	0.63	1.40	2.06	2.69
Post	0.47	1.32	1.96	2.55
Net Change	-0.15	-0.08	-0.20	-0.14

As the above table demonstrates, the proposed peak rates of runoff will not be increased from the existing conditions for any of the analyzed storm events.

Pre-Development (Existing Conditions)

The pre-development site conditions reflect the existing conditions of the site, which include the existing Fisher Theater, Dow Barn, Dow House, Front Street Dorm and a portion of the Forrestal-Bowld Music Building. The current site primarily discharges to the wetlands located to the north of the project site while the front (south) portion of the site drains to Front Street where there is a municipal drainage system. The two Points of Analysis (POA) are shown on Drainage Area Plans at the north and south points where surface waters discharge from the site and are consistent for both the Pre-Development and Post-Development analyses for comparison. The Pre-Development analysis models the existing site conditions, and is based on the Existing Conditions Survey plan prepared by Nitsch Engineering, dated July 29, 2020 and included in the plan set as sheets EX-1 and EX-2.

The study pre-development area was divided into six watersheds for the project site. The north portion of the site discharges to POA #1 and the south portion of the site discharges to POA #2, as identified on the Pre-Development Drainage Area Plan. 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.

Post-Development (Proposed Site Design)

Phillips Exeter Academy proposes to construct a new 60-bed dormitory on parcel 72-209 in the approximate location of the existing Fisher Theater, which was vacated when the Academy completed the new Goel Center for Theater and Dance in 2018. The new dormitory will replace the existing metal Butler building that was completed in 1972. The Academy also proposes to build a new foundation to move the existing Dow Barn to become a part of the new dormitory and be renovated/converted from a storage facility to two faculty apartments. The new dormitory is part of a long-term housing plan to consolidate some of the Academy's "house dorms" and accommodate beds that are lost as the Academy renovates the larger brick dorms due to ADA upgrades. It is important to note there is no increase to the enrollment at the Academy associated with this dorm.

Site improvements include driveway improvements for emergency vehicle access and faculty parking, stairs, walkway improvements, patios for outdoor gathering spaces, utilities, and stormwater improvements. The existing site was constructed in the early 1970's prior to stormwater regulations and was developed into the buffer. The proposed 13,690 sf (footprint) dorm will replace the 11,800 sf Fisher Theater and be constructed in the approximate location of the existing theater, maintaining the existing building setback to the wetlands. The proposed stormwater management improvements include drain lines, deep sump catch basins for pre-treatment, three (3) stormwater management galleries to treat, infiltrate, and control runoff from the site, as well as three (3) small raingardens to treat roof runoff prior to discharging to the wetlands. All of the lower walkways and patio area within the buffer will be constructed using porous materials, which will reduce the total impervious area within the buffer by approximately 1,075 square feet.

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 smaller watershed areas to depict the post-development conditions. The same point of analyses 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. The subcatchments from the Pre-Development conditions have been divided into smaller areas to emulate the proposed grading and stormwater management system proposed for construction. The post-development conditions were analyzed at the same primary discharge point examined in the pre-development modeling. Site topography, existing features, proposed site improvements, proposed grading, drainage and erosion control measures are shown on the accompanying plans. Recommended erosion control measures are based upon the December 2008 edition of the "New Hampshire Stormwater Manual Volumes 1 through 3" prepared by NHDES and Comprehensive Environmental, Inc. as amended.

Site Soils

A High Intensity Soil Survey/Site Specific Soils Survey was conducted by Luke Hurley, New Hampshire Certified Soil Scientist No. 017, in 2015 to delineate the soils on site. In December of 2019, he revisited the site to verify the soils for the expanded area of the site and confirmed site conditions to be Agawam soils, hydrologic soil group (HSG) B. The following soils were identified on site:

NUMERICAL SYMBOL SOIL MAP UNIT NAME

HSG

24 AGAWAM (WELL DRAINED)

В

For infiltration design rates, the NH Ksat soil characteristics were reviewed. Agawam souls are a loamy sand soil suitable for infiltration. The low C Kat infiltration rate is 20 in/hr. Standard design practices require using half the K sat rate for design, which would be 10 in/hr. As a conservative design approach, infiltration rates of 3.0 in/hr have been used in the stormwater design analysis.

Borings were conducted on to estimate the season high water table and soil conditions. Boring locations 1,2, and 4 were conducted in the approximate locations of the three proposed stormwater galleries. The borings confirm the sandy soil conditions consistent with the Agawan soil classification.

CONCLUSION

The proposed New Dormitory 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 and minimal detention areas. The proposed improvements will provide stormwater treatment and retention for the new impervious areas on site. The analysis of the site also utilizes a 15% increase to the rainfall intensities for seacoast communities, as is recommended by NHDES. The site was analyzed for the 2, 10, 25, and 50 year storm events and shows a reduction in offsite discharge for all storm events at each point of analysis.

Post-construction peak rates of runoff from the site will be lower than the existing conditions for all analyzed storm events. The construction of a stormwater drainage system consisting of three stormwater galleries, and three raingardens will provide the treatment to stormwater runoff to significantly improve the offsite runoff. Appropriate steps will be taken to properly mitigate erosion and sedimentation through the use of temporary and permanent Best Management Practices for sediment and erosion control.

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.

STORMWATER MANAGEMENT INSPECTION AND MAINTENANCE MANUAL

FOR

Phillips Exeter Academy New Dormitory (Remove Fisher Theater)

Exeter, NH Assessor's Map 72, Lot 209

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:	Phillips Exeter Academy		
	Name	Company	Phone
nspection	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
- Methods for Disposing of Invasive Species (UNH Cooperative Extension)
- Snow Disposal Guidelines (NHDES)
- Regular Inspection and Maintenance Guidance;
 - Permeable Pavements
 - Bioretention Systems
- Checklists for Inspection;
 - Permeable Pavements
 - Bioretention Systems
- Stormwater System Operations and Maintenance Report Form
- Drainage and Stormwater Management Plan

RAINGARDENS AND INFILTRATION BASINS (BIORETENTION SYSTEMS)

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

Detention ponds temporarily store runoff and allow for its controlled release during and after a storm event, decreasing peak rates of runoff and minimizing flooding.

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

Maintenance

- Reference attached "Regular Inspection and Maintenance Guidance for Bioretention Systems / Tree Filters
- Inspect annually and after significant rainfall event.
- If a raingarden does not completely drain within 72-hours following a rainfall event, then a qualified professional should assess the condition of the facility to determine measures required to restore its filtration and/or infiltration function(s), including but not limited to removal of accumulated sediments and/or replacement or reconstruction of the filter media.
- Replace any riprap dislodged from spillways, inlets and outlets.
- Remove any obstructions, litter and accumulated sediment or debris as warranted but no less than once a year.
- Mowing of any grassed area in or adjacent to a raingarden shall be performed on a monthly basis (when areas are not inundated) to keep the vegetation in vigorous condition. The cut grass shall be removed to prevent the decaying organic litter from clogging the filter media or choking other vegetation.
- Select vegetation should be maintained in healthy condition. This may include pruning, removal and replacement of dead or diseased vegetation.
- Remove any invasive species, Per AGR 3800 and RSA 430:53.

POROUS PAVERS

Function – Porous pavement (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.

DRIP EDGES

Function – Drip edges are to provide erosion control of surface where impervious surfaces meet non-impervious surfaces, such as building or roadway edges.

Maintenance

• Drip edges should be inspected annually for erosion, rutting, and migration of stone. Any areas experiencing erosion shall be properly maintained by replacing or adding additional stone to the area of concern.

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.

LANDSCAPED AREAS - LITTER CONTROL

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

Maintenance

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

SNOW STORAGE AND DISPOSAL

During winter snow management activities, it is anticipated that snow will be stored within the wetland buffer area for large snow events. This will be done with a loader and placing the snow on the north side of the retaining wall located on the west side of the building.

Snow disposal shall be consistent with the NHDES Snow Disposal Guidelines.

Maintenance

• **Organic Filter Berm.** An organic filter berm shall be constructed around the snow storage area adjacent to the wetlands. The berm shall be cleaned from erosion and debris at beginning and end of each winter season (October and May).

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.

INVASIVE PLANTS REMOVAL

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

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

Invasive plants have been identified in the area of the wetland/intermittent stream on the north side of the project. The Academy has agreed to remove the invasive species to improve the quality of the wetlands. The invasive plants will be removed in a safe manner as described in the attached "Methods for Disposing Non-Native Invasive Plant" prepared by the UNH Cooperative Extension.

The following steps will be performed in the removal of invasive species until complete:

- 1) Perform survey to determine invasive plant species types and document Start of project
- 2) Develop removal plan based on best management practices and guidelines
- 3) Remove invasive plants per guidelines typically in the late summer or fall.
 - Reference "Methods for Disposing Non-Native Invasive Plants" in appendix

(Note: Excavation of soils in the wetlands is not allowed without NHDES permit approval)

4) Perform annual inspections for new growth – Spring or early summer

APPENDIX

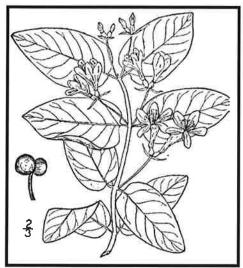
- A. GUIDELINES FOR CONTROL OF INVASIVE SPECIES
- **B. SNOW DISPOSAL GUIDELINES**
- C. PERMEABLE PAVEMENTS
 - a. REGULAR INSPECTION AND MAINTENANCE GUIDANCE
 - b. CHECKLIST FOR INSPECTION
- D. BIORETENTION SYSETMS
 - a. REGULAR INSPECTION AND MAINTENANCE GUIDANCE
 - b. CHECKLIST FOR INSPECTION
- E. STORMWATER SYSTEM OPERATIONS AND MAINTENANCE REPORT
- F. GRADING AND DRAINAGE PLAN



UNIVERSITY of NEW HAMPSHIRE Methods for Disposing COOPERATIVE EXTENSION

Non-Native Invasive Plants

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



Tatarian honeysuckle Lonicera tatarica

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

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

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

Knowing how a particular plant reproduces indicates its method of spread and helps determine

the appropriate disposal method. Most are spread by seed and are dispersed by wind, water, animals, or people. Some reproduce by vegetative means from pieces of stems or roots forming new plants. Others spread through both seed and vegetative means.

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

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

New Hampshire Regulations

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

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

How and When to Dispose of Invasives?

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

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

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



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

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

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

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

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

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

Suggested Disposal Methods for Non-Native Invasive Plants

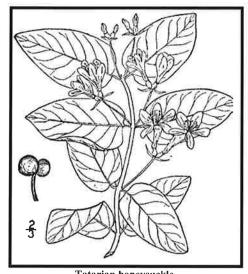
This table provides information concerning the disposal of removed invasive plant material. If the infestation is treated with herbicide and left in place, these guidelines don't apply. Don't bring invasives to a local transfer station, unless there is a designated area for their disposal, or they have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

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

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

UNIVERSITY of NEW HAMPSHIRE Methods for Disposing COOPERATIVE EXTENSION Non-Native Invasive Plants

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



Tatarian honeysuckle
Lonicera tatarica
USDA-NRCS PLANTS Database / Britton, N.L., and
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Knowing how a particular plant reproduces indicates its method of spread and helps determine

the appropriate disposal method. Most are spread by seed and are dispersed by wind, water, animals, or people. Some reproduce by vegetative means from pieces of stems or roots forming new plants. Others spread through both seed and vegetative means.

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

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How and When to Dispose of Invasives?

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

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

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

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

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

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

Suggested Disposal Methods for Non-Native Invasive Plants

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

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

ENVIRONMENTAL

Fact Sheet



29 Hazen Drive, Concord, New Hampshire 03301 • (603) 271-3503 • www.des.nh.gov

WMB-3 2020

Snow Disposal Guidelines

Each winter, the New Hampshire Department of Environmental Services (NHDES) receives numerous inquiries and complaints related to snow disposal into and/or near surface water. There are several different concerns regarding disposal of snow cleared from streets and parking lots ranging from aesthetic concerns, such as minimizing the visibility of debris and huge snow piles, to environmental concerns, such as protection of groundwater quality, drinking water supplies, surface water quality and aquatic life.

The environmental impacts of disposed snow result from high levels of salt, sand, debris and trash, along with contaminants from automobiles including oil and exhaust. The debris and contaminants that inevitably end up in plowed snow make it illegal to dump snow directly into waterbodies. RSA 485-A:13,I(a) prohibits discharging wastes to surface waters without a permit. In addition to water quality impacts, snow disposed in open water can cause dangerous ice jams.

Groundwater is sensitive to snow dumping due to the high levels of chloride and automotive waste in plowed snow. RSA 485-C:12 prohibits the siting or operation of snow dumps within classified wellhead protection areas.



Recommended Guidelines for Snow Disposal

These guidelines will assist in identifying snow disposal sites that minimize impact to the environment. Please note that plowed and dumped snow is kept out of waterbodies due to containing waste materials, such as litter and debris. Waste does not belong on the land surface either; after the snow melts, all waste must be collected and disposed of properly.

- Disposed snow should be stored near flowing surface waters, but at least 25 feet from the high water mark of the surface water and/or top of stream bank. If a site cannot be found near a flowing surface water, then upland sites further from surface waters are acceptable, provided they do not impact water supply sources as described below.
- A silt fence or equivalent barrier should be securely placed between the snow storage area and the high water mark and/or the top of stream bank with care taken not to exceed the barrier with overpiling.

This area should also be accessible for post-melt cleanup. Note: silt fence must be installed prior to the ground freezing.

- The snow storage area should be at least 75 feet from any private water supply wells, at least 200 feet from any community water supply wells, and at least 400 feet from any municipal wells. (Note: Snow storage areas are prohibited in wellhead protection areas.)
- All debris in the snow storage area should be cleared from the site prior to snow storage.
- By May 15 of each year, all debris from active snow storage areas should be cleared and properly disposed of.

Snow Disposal Site Selection Procedures

Municipal public works officials should consider consulting with the local health officer and conservation commission to identify sites. Securing sites prior to the winter season will help to alleviate capacity problems during winters with heavy snowfall. NHDES is available to help municipal officials identify appropriate snow disposal sites. The following are guidelines for site selection:

- Estimate how much snow disposal capacity is needed for the season so that an adequate number of sites can be selected and prepared.
- Sites lacking mature tree growth are preferred; trees make collection of debris more difficult after the winter season.
- Identify sites that could potentially be used for snow disposal such as municipal open space, parks, recreation fields and parking areas. If no additional municipal sites are available, consider securing permission from landowners of non-municipally owned sites.

For more information about snow storage, contact the NHDES Watershed Management Bureau at (603) 271-3398.

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.

water dramage, 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. 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.	1-2 times per year, more frequently for high-use sites or sites with higher potential for run-on
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		tory (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 times events)	s per year	, after large storm	
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	บ	
Corrective Action Needed			Due Date
1,			
2.			
3.			
Inspector's Signature			Date

CHECKLIST FOR INSPECTION OF PERMEABLE PAVEMENT

Regular Inspection and Maintenance Guidance for Bioretention Systems / Tree Filters

Maintenance of bioretention systems and tree filters can typically be performed as part of standard landscaping. Regular inspection and maintenance is critical to the effective operation of bioretention systems and tree filters to insure they remain clear of leaves and debris and free draining. 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 but not limited to: the occurrence of large storm events, overly wet or dry periods, regional hydrologic conditions, and the upstream land use.

ACTIVITIES

The most common maintenance activity is the removal of sediment and organic debris from the system and bypass structures. Visual inspections are routine for system maintenance. This includes looking for standing water, accumulated leaves, holes in the soil media, signs of plant distress, and debris and sediment accumulation in the system. Vegetation coverage is integral to the performance of the system, including infiltration rate and nutrient uptake. Vegetation care is important to system productivity and health.

ACTIVITY	FREQUENCY			
CLOGGING AND SYSTEM PERFORMANCE				
A record should be kept of the time to drain for the system completely after a storm event. The system should drain completely within 72 hours. Check to insure the filter surface remains well draining after storm events. Remedy: If filter bed is clogged, draining poorly, or standing water covers more than 50% of the surface 48 hours after a precipitation event, then remove top few inches of discolored material. Till, or rake remaining material as needed.	After every major storm in the first few months, then annually at minimum.			
Check inlets and outlets for leaves and debris. Remedy: Rake in and around the system to clear it of debris. Also, clear the inlet and overflow if obstructed. Check for animal burrows and short-circuiting in the system. Remedy: Soil erosion from short circuiting or animal boroughs should be repaired when they occur. The holes should be filled and lightly compacted Inspect inlets and outlets to ensure good condition and no evidence of deterioration. Check to see if high-flow bypass is functioning. Remedy: Repair or replace any damaged structural parts, inlets, outlets, sidewalls.	Quarterly initially, annually as a minimum thereafter.			
VEGETATION				
Check for robust vegetation coverage throughout the system and dead or dying plants. Remedy: Vegetation should cover > 75% of the system and should be cared for as needed.	Annually or as needed			

CHECKLIST FOR INSPECTION OF BIORETENTION SYSTEM / TREE FILTERS Location: Inspector: Date: Time: Site Conditions: Days Since Last Rain Event: Satisfactory (S) or **Comments/Corrective Action Inspection Items** Unsatisfactory (U) 1. Initial Inspection After Planting and Mulching U Plants are stable, roots not exposed S Surface is at design level, no evidence of S U preferential flow/shoving Inlet and outlet/bypass are functional U S 2. Debris Cleanup (1 time/year minimum, Spring/Fall) Litter, leaves, and dead vegetation removed from S U the system Prune/mow vegetation S U 3. Standing Water (1 time/year and/or after large storm events) No evidence of standing water after 24-48 hours U S since rainfall 4. Vegetation Condition and Coverage U Vegetation condition good with good coverage S (typically > 75%)5. Other Issues Note any additional issues not previously covered. U S **Corrective Action Needed Due Date** 1. 2. 3. Inspector Signature Date

Inspection & Maintenance Checklist

BMP / System	Minimum Inspection Frequency	Minimum Inspection Requirements	Maintenance/ Cleanout Threshold
Paved surfaces:			
Pavement Sweeping	Routinely	N/A	N/A
Litter & Trash Removal	Routinely	N/A	Parcel will be free of litter/trash.
Deicing Agents	N/A	Keep De-Icing Log	Low Salt
Closed Drainage System:			
Drainage Pipes	1 time per 2 years	Check for sediment accumulation & clogging.	Less than 2" sediment depth
Catch Basins	Annually	Check for sediment accumulation (Less than 24" sediment), blocked hood, and floating debris.	Clean Sumps. Remove all floating debris.
Drain Manhole	Annually	Check for sediment, debris, and obstructions.	Remove all Obstructions.

BMP / System	Minimum Inspection Frequency	Minimum Inspection Requirements	Maintenance / Cleanout Threshold
BMPs:			
Raingardens or Infiltration Pond	Annually	 Check infiltration rates and filter media. Check for trash & debris. Check for sediment buildup. Check for vegetation stability. Check for excess woody vegetation growth. Check for invasive species. 	Remove trash & debris, sediment, woody vegetation, and invasive species. Side slopes and berm are to be mowed. Replant vegetation if required.
Vegetated Swale	Annually	Check for sediment buildup, vegetation loss and invasive species, debris, and damage.	Remove sediment, debris and invasive species, repair damage, and mow grass monthly to a depth of 4 inches.
Riprap Outlet Protection	Annually	Check for sediment buildup and structure damage.	Remove excess sediment and repair damage.
Stone Berm Level Spreader	Annually	Check for sediment buildup, debris and signs of erosion.	Remove sediment and debris. Immediately repair.

STORM WATER SYSTEM OPERATION AND MAINTENANCE REPORT

			General Information
Pro	ject Name		
Ow	ner		
Ins	pector's Name(s)		
Ins	pector's Contact Information		
Dat	e of Inspection		Start Time: End Time:
	oe of Inspection: Annual Report Post-storr	n event 🔲 D	Oue to a discharge of significant amounts of sediment
Not	es:		
			Discharges of Significant Amounts of Sediment
	pject	Status	
	ischarge of significant amounts of e whether any are observed during		be indicated by (but is not limited to) observations of the following. n: Notes/ Action taken:
1	Do the current site conditions ref the attached site plan?	flect Yes	
2	Is the site permanently stabilized temporary erosion and sediment controls are removed, and storm discharges from construction act are eliminated?	water	
3	Is there evidence of the discharg significant amounts of sediment surface waters, or conveyance sy leading to surface waters?	to 🗆 No	
4	Is there evidence of concentrated of stormwater such as rills or chat that cause erosion when such flo not filtered, settled or otherwise to remove sediment?	nnnels ws are treated	
5	Is there evidence of deposits of sediment from the site on any adproperty or stormwater system.	jacent □Yes	
6	Is there evidence of discharges for the site to streams running through along the site where visual observations indicate significant amounts of sediment present in the site of the site	gh or No	
7	Is there evidence of invasive spe within the stormwater treatment	cies 🔲 Yes	I .

	Permit Coverage and Plans				
#	BMP/Facility	Inspected	Corrective Action Needed and Notes	Date Corrected	
		□Yes			
		□No			
		□Yes			
		□No □Yes			
		□No			
_		□Yes			
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133 Court Street Portsmouth, NH 03801-4413

September 25, 2020

Town of Exeter Planning Board 10 Front Street Exeter, NH 03833

RECEIVED

SEP 2 9 2020

RE:

Application for Site Plan Review

Phillips Exeter Academy New Dorm (Remove Fisher Theater)

Case #20-12

EXETER PLANNING OFFICE

Dear Board Members,

Phillips Exeter Academy (Academy) is submitting the attached revised Site Plan Review Application material for consideration at the October 8, 2020 Planning Board Meeting. As noted in the application, The Academy proposes to construct a new dormitory on parcel 72-209 in the approximate location of the existing Fisher Theater, which was vacated when the Academy completed the new Goel Center for Theater and Dance in 2018. This new 60-bed dormitory is a part of a long-term housing plan to consolidate some of the Academy's "house dorms" and accommodate beds that are lost as the Academy renovates the larger brick dorms due to ADA upgrades. It is important to note there is no increase to the enrollment or beds at the Academy associated with this dorm. There will also be five faculty apartments included in the building, which will allow faculty to move from the renovated buildings. The long term result will be an increase of three faculty apartments after the other facilities are renovated.

The Academy and design team met with the Zoning Board of Adjustment on August 18, 2020 and received approvals; 1) to exceed the 35 ft height restriction, and 2) to continue the non-conforming use of the private school in the residential (R-2) zoning district. The team also met with Conservation Commission on August 11 and Historic District Commission (HDC) on August 20 and received recommendations for approvals from both commissions. The revised plans and application material incorporate comments from these meetings and address comments received from the technical review committee. The comments received are included below with Altus Engineering's (AE) responses indicating how they were addressed in the revised submittal.

ZONING BOARD OF ADJUSTMENT

On August 18, 2020 the Zoning Board of Adjustment (ZBA) granted a Variance to allow a forty-five foot building height where thirty-five is allowed and a Special Exception for expansion of an existing non-conforming use in the Residential (R-2) zoning district.

AE: The plans have been updated to indicated the ZBA approvals on the cover sheet and the Site Plan, sheet C3.01.



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HISTORIC DISTRICT COMMISION

On August 20, 2020 the Historic District Commission voted unanimously to recommend approval of the project with four recommendations for the architectural team to consider:

- 1. Use a diamond window instead of the circular window.
- 2. Revisit the design of the entry columns.
- 3. Slope the entry canopy.
- 4. Use two over two windows.

AE: The architectural plans have been revised to address for recommendations 2-4. The circular window for recommendation no. 1 on the new dorm will remain.

TOWN PLANNER COMMENTS

1. UEI will review and comment under separate cover

AE: Altus received the Underwood Engineers Inc (UEI) comments, dated September 1, 2020 and has included the responses in this letter.

2. Suggest providing justification for waivers by listing each criteria and responding accordingly;

AE: Altus received the Underwood Engineers Inc (UEI) comments, dated September 1, 2020 and has included the responses in this letter.

3. You do not need a waiver from Section 9.17.10 Roadway Parameters as this is not servicing two or more lots and is considered a driveway. The area where there are parking stalls are governed by Section 9.13.6 which the plan appears to satisfy.

AE: The waiver request has been withdrawn.

4. The regulations do not allow light trespass on adjacent properties. The Light cannot spillover onto adjacent properties. Although the photometric plan does not extend onto the other properties, it appears likely that there will be light spillover from the A2 fixture (off the westerly corner of the Dow House) onto Map 72 Lot 196. Please expand photometric plan to determine if plan is in compliance.

AE: The light fixture at the corner of the Dow House has been revised to include a shield to the west to prevent light overflow to the adjacent lot.

5. Make it clearer which light fixtures are where.

AE: The fixtures are shown on the lighting schedule on sheet SL.02.

6. Are there any known environmental hazards on the site?

AE: PEA has no knowledge any environmental hazards on site. In addition, a GIS review of the NHDES environmental database was performed and no hazards were identified.

7. There appears to be several significant trees (as defined in Section 7.4.7) that will be impacted by the proposed development. Please identify them on the plans as described in Section 7.4.7.

AE: There are four significant trees (20" diameter or greater) that have been identified for removal. Two maple trees are within the proposed building footprint. There is a 32" Spruce approximately 20 feet from the Front Street dorm that will be removed. The cluster of three



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cedar trees (one is 20" diameter) in front of the Front Street dorm are in poor health and will be removed. These have labeled on the Site Preparation plan C1.01 and Planting Plan L1.02.

- 8. The application states that students are "not allowed to keep vehicles at the dorms". Does this mean that students cannot have vehicles at all or it is that they cannot have them at the dorms and, if they do own a car, need to park it elsewhere?
- AE: Boarding students are not allowed to have vehicles on campus. The only students allowed to have vehicles are day students that are eligible to drive, and they have designated parking spaces on campus but primarily park in the parking garage.

PUBLIC WORKS DEPARTMENT COMMENTS

1. There is a conflict between the transformer and the proposed drainage line.

AE: The storm drain line and manhole have been adjusted so that they do not cross under the transformer pad.

FIRE DEPARTMENT COMMENTS

E-mail received from Lt. Jason Greene, dated 8/10/20, indicating the Fire Department has zoomed with the builder and made all their requests.

AE: Fire Department comments have been addressed.

NATURAL RESOURCE PLANNER COMMENTS

- 1. Sheet C-3.01, Note 5 indicates snow will be untreated. Presentation to the Conservation Commission indicates that they will need to treat snow. This note should be updated to accurately reflect plans. I recommend the note be revised to reflect accurate plans and that snow removal vs. dumping toward wetland be implemented when feasible.
- AE: The note about untreated snow has been removed. The Academy has indicated that snow will only be placed over the wall for significant storm events. Altus consulted NHDES for their guidelines for snow removal and have revised the plans to include an organic filter berm to prevent sediment and sand from snow removal from discharge to the intermittent stream in the event snow is placed in the buffer area. The snow storage barrier has also been included in the Stormwater Inspection and Maintenance Manual for annual maintenance.
- 2. Wetland Conditional Use Permit application reviewed at the 8/11/20 ConCom meeting see memo from Chair Andrew Koff, dated 8/21/20, attached.
- AE: The plans have been updated to indicate removal of invasive species in the wetland buffer area. The note has been added to the Site Preparation Plan, sheet C2.01. An Invasive Species Removal section is included in the Stormwater Inspection and Maintenance Manual and references the UNH Guidelines for Disposal of Invasive Species. The owner will do an invasive species inventory, remove per UNH or acceptable guidelines, and monitor yearly as part of the Stormwater Inspection and Maintenance requirements.



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<u>UNDERWOOD ENGINEER INC (UEI) COMMENTS:</u>

General and Administrative Comments

- 1. **Historic District:** Part of the site is located within the historic district. The Dow Barn is being incorporated into the project. As appropriate, historical requirements should be coordinated with the appropriate department/agency/commission.
- AE: The project was presented to the Historic District Commission at the August 20, 2020 and recommended for approval with minor recommendations to architectural elements. (see above)
- 2. **Building Address:** The Site Plan indicates the address of the property is Tan Lane. As the entrance will be on Front Street, confirmation of the 911 address should be through the Exeter Fire/Police Department.
- AE: Altus has reached out to the Fire Department and they have confirmed that the new dorm will have a Front Street address (instead of Tan Lane for the Fisher Theater) but has not received a new address number. The address on the Site Plan has been revised to Front Street.
- 3. **Driveway Width:** The proposed driveway varies in width from 14' to 16' to service two-way traffic into and out of the facility. The Applicant has requested a waiver from required driveway widths. The 14' width at the entrance portion is particularly concerning, as the width does not allow accommodations for two-way traffic to pass each other. Exiting vehicles will have to yield to any incoming vehicles with no relief area provided. Alternatives include the following:
 - Widen the driveway starting at Front Street, then taper to 14' along the side of Dow House. This would allow an incoming vehicle to yield to an existing vehicle if need be.
 - Move the driveway to the east side of Dow House, which would allow for adequate width to maintain a two-way driveway.

We acknowledge the proposed widths are wider than the existing widths. We defer further comments and approval of the waiver request to the Planning Board.

- AE: The driveway at the entrance to Front Street in front of Dow House dorm has been widened to 16 ft wide for a distance of 32 feet from the Front Street edge of pavement to allow vehicles to pass at the entrance/exit and pull to the side if another vehicle is exiting.
- 4. **Drive Aisle:** The drive aisles along the parking spaces are 22' wide in the back and less than 19' in the front parking area (that serves as the project's only ADA accessible space.) The drive aisle length and width are insufficient to accommodate the turning movements for an ADA van to enter and exit the space. The project's aerial rendering depicts a parking arrangement that appears could be more functional relative to these turning movements.
- AE: The drive walkway surrounding the drive aisle has been designed as a flush walkway to allow the vehicles to utilize this area for turning. The walkway is only a striped line on the driveway from the rear Dow House exit to the new (flush) walkway to the east. The parking was originally easteast, but was revised to the current north-south configuration after discussions with the Fire Dept to allow an Engine truck to pull into this area and access the FDC while also allowing the ladder truck to pass by to the rear lot. This configuration also allows for potential emergency vehicles to drive onto the walkway/lawn and access the front entrance to the building.



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- 5. **Parking Spaces:** Will any of the proposed parking spaces be dedicated for use of the Dow House?
- AE: There is one faculty apartment in the Dow House that will also use this parking area. The parking waiver has been updated to include the six total apartments and the parking summary on sheet C3.01 has been revised. PEA has indicated that 12 total parking spaces will adequately serve the 6 faculty apartments as there are often single vehicle residents and there is additional parking on campus if needed.
- 6. **ADA Parking Space:** The project calls for 16' wide ADA space with associated striping. The detail provided confirms the proposed dimensions. Exeter requires parking spaces to be 9' wide, even ADA ones otherwise meeting the ADA standard. The applicant must ask for a waiver from the 9' width requirement to construct the ADA space and striping as proposed.
- AE: The ADA requirement is to provide 16 total feet for a van accessible space, so the configuration has been revised to a 9 ft parking stall and 7 foot wide access aisle. Site Plan and detail have been revised.

Design Plans

- 7. **Driveway Entrance:** The proposed driveway/sidewalk interface requires better definition. For example,
 - The entrance flares should extend across the sidewalk.
 - If driveway flare radii are proposed, please label the radii.
 - The driveway flare on the west side will cross the extension of the property line and overlap the abutting driveway. We recognize this is an existing situation. Please clarify the limits and intent of work within the overlapping usage areas.
 - The driveway crossing the sidewalk will need to be ADA compliant. Please confirm that
 compliance can be achieved and that the abutting driveway, if alterations are needed to
 facilitate required tie-in, can also be reconstructed compliant with ADA requirements.
 - Please consult with the Exeter DPW regarding the potential need for detectable warning devices across the common drive as it will approach 32' or wider post construction.

AE: Additional detail has been provided for the driveway entrance at Front Street.

- The existing asphalt sidewalk along Front Street is 11 ft wide at the driveway. A 20 foot radius entrance is shown, but much of the driveway flare is withing the paved sidewalk area. The bituminous curb on Front Street will be removed to the end of the flare, just after the new hydrant.
- The sidewalk to the west of the adjacent driveway is 7 ft wide with a 5 ft landscape strip, therefore the rear 7 feet of the driveway will maintain a 2% max cross slope for ADA.
- The driveway sawcut to the west will continue along the property to limit impact to the adjacent driveway. No additional widening is need for the radius flares.
- A driveway profile has been provided on sheet C7.06.
- Altus has consulted with DPW and detectable warning devise are not required for driveway cuts.



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- 8. **Landing Pad:** There is a leader labeled "Landing Pad (2% max, all directions), at the top of the stairs leading to Pad #4. Please clarify the limits of the landing pad.
- AE: The pad limits have been shown and labeled as 5' x 7' pad. The intent is to provide a flat (<2%) landing area at the base of the stair.
- 9. **Key Notes:** Key Note 14 near the Front Street house should be removed, or the limit of work drawing layer should be thawed in the viewport.
- AE: Key Note 14 regarding limits of work has been removed from the Site Plan as the limits of work are more accurately depicted shown on the Site Preparation Plan and Grading Plan. Note 14 has been replaced with a new note.
- 10. **Snow Storage:** Snow storage is shown to the north side of the parking area. Depositing snow in this location will require a loader and some form of push wall to trap the snow for removal. It is unclear how and where this will happen on this site plan.
- AE: For large storm events PEA will use a loader to place the snow over the wall. This was discussed with the Conservation Commission and approved. Per NHDES snow storage guidelines, we are providing a permanent erosion barrier (organic filter berm) around the snow storage area to collect any sand and sediment. This has been added to the Stormwater Inspection and Maintenance manual so that is monitored and cleaned annually.

11. Water Service:

- Key Note 11 points to the water at the point where it enters the building, but appears to point to a grassed area to the east of the proposed project.
- Key Note 11 has a number of typographical errors in it.
- The project should confirm with the Mechanical Engineer and Fire Department if a 6" suppression feed will be sufficient to satisfy the project requirements. We note the proposed hydrant near the driveway entrance, however a loop incorporating the currently proposed water connection, through to the rear of the Dow House and out to Front Street, with an appropriately positioned hydrant may be prudent given the use and scale of the project. We defer this discussion to the Fire Department.
- The water main bends and fittings should be labeled.

AE: Water Service

- The leader for Note 11 on the east side of the building has been moved to the water line.
- Note 11 has been revised to remove the typing error.
- The mechanical engineer has performed flow pressure tests to confirm there is adequate pressure for the existing water line.
- The water main bends/fittings have been labeled.



Civil
Site Planning
Environmental
Engineering

Civil
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- 12. **Sewer Service:** The existing and proposed inverts for the tie-in manhole should be listed, including notes, as appropriate, regarding the need to modify the brick invert(s).
- AE: Note 01-01B on the Utility Plan have been revised. The inverts of the existing sewer Manhole are provided and a note to reconstruct the brick inverts.
- 13. **Hydrant:** The material of the existing water main should be added to Note 16 on the Utility Plan. A note should be added to direct the Contractor to coordinate traffic control/lane closure with the Police Department.
- AE: Note 16 has been updated to include watermain material and Note 21 has been added to the plans indicating all work in Front St shall be coordinated with DPW and the Police Dept for potential lane closures.
- 14. **3' CLF:** The driveway of Map 72, Lot 196 to the west of the project has text "3' CLF" within it. UE isn't clear on the intent of the call-out, please confirm the intended meaning.
- AE: "3' CLF" is from the survey mapping indicates an existing 3 ft chain link fence.

Stormwater Design and Modeling

- 15. Control Structures: All pipes entering and exiting the control structures should be labeled for material and size.
- AE: A note has been added that all storm drain pipes shall be HDPE. The proposed raingarden control structures have the pipe sizes and inverts moved to the Practice notes. Additionally, the details on sheets C7.01 and C7.02 have been updated with pipe sizes and inverts.
- 16. Stormwater Management Gallery A has a number of invert call-outs on the details that do not agree with the drainage model. Please update as appropriate to convey the intent.
- AE: All inverts and pipe grades have been checked to verify the design model is consistent with the plans. Revised modeling results have been provided and the results continue to show a reduction in the post-development flow rates, compared to the pre-development conditions.

Details Sheets

- 17. **Fire Hydrant:** The detail indicates the hydrant to be painted yellow. Comment 11 above notwithstanding, Exeter hydrants in this area are typically yellow body with silver bonnets and blue caps. The applicant should confirm the hydrant color with the Exeter Fire Department or the Exeter Water Department.
- AE: We have confirmed through DPW and review of other hydrants in the area.

 The detail has been revised to indicate the hydrant is to be painted "color yellow, with blue caps, and silver bonnet" and to verify with Fire Department.



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Fifteen (15) copies of the following material are included in this application for the Planning Board.

- 1. Site Review Application, Checklists, and Application Fee
- 2. Site Cost Estimate
- 3. Waiver Requests
- 4. Conditional Use Permit Wetlands Conservation District
- 5. Traffic Memorandum
- 6. USGS, Aerial, and FEMA Site Maps
- 7. Fire Engine Turning Template & Fire Dept Correspondence
- 8. Preliminary Application to Connect to Sewer, Water, and Stormwater Drainage Systems
- 9. Drainage Report (2 full Reports, 13 summaries)
- 10. Stormwater Inspection and Maintenance Manual
- 11. Design Development Presentation (Building Renderings)
- 12. Project Plans (5- 24" x 36", 10-11"x17")

We look forward to meeting with the Planning Board on October 8th to discuss this project. If you have any questions please do not hesitate to contact us.

Sincerely,

Cory D. Belden, PE Project Manager

Enclosures

CDB/cdb/5030_TRC Response ltr_092520

E-copy (w/encl.):

Heather H. Taylor, Campus Planner/Architect, Phillips Exeter Academy Geoff Gaunt, SLAM Collaborative, Architect Jeff Clifford, PE, Altus Engineering Please see additional plan attachments under "Supporting Documents" posted for this meeting

TOWN OF EXETER



Planning and Building Department

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709

www.exeternh.gov

Date:

October 2, 2020

To:

Planning Board

From:

Dave Sharples, Town Planner

Re:

Cabernet Builders

PB Case #20-13

The Applicant is seeking approval for the proposed subdivision of an existing 13.3-acre parcel located at 120 Kingston Road into four (4) single-family residential lots. The lots will be served by private wells and septic. The subject property is located in the R-1, Low Density Residential zoning district and is identified as Tax Map Parcel #101-8-1.

The Applicant has submitted plans and supporting documents dated September 8, 2020 and are enclosed for your review. The application and plans were reviewed independently by the members of the Technical Review Committee. Kristen Murphy, our Natural Resource Planner, provided comments in the enclosed memo dated September 17, 2020. I forwarded on several comments to the applicant's engineer and will provide an update at the meeting.

The Applicant met with the Heritage Commission's Demolition Review Committee (DRC) on July 2, 2020 to discuss the proposed demolition of the buildings on the site. The Committee determined that the early 20th century dairy barn was no longer historically or culturally significant to the Town of Exeter. A copy of the letter from Chairman John Merkle, dated July 7, 2020 is enclosed for your review.

The applicant has not requested any waivers but some may be forthcoming dependent upon my discussions with the engineer. If I can resolve this prior to the meeting, I will be prepared with suggested conditions of approval at the meeting in the event the board decides to take action on the request.

Planning Board Motions

Subdivision Motion: I move that the request of Cabernet Builders (PB Case#20-13) for Subdivision approval be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Thank You...

Enclosures

TOWN OF EXETER PLANNING DEPARTMENT MEMORANDUM

Date:

September 17, 2020

To:

Technical Review Comments

From:

Kristen Murphy, Natural Resource Planner

Subject:

120 Kingston Road (Map/Lot 101-8-1), PB#20-13 Comments for TRC

Based on subdivision application and hardcopy plans dated 9/8/20, I have the following comments with regard to natural resources. Based on some of the requirements below, I recommend the applicant consider <u>submission of additional information and revised plans prior to Planning Board review</u>.

Wetlands and Potential Shoreland District:

- There is no wetland scientist stamp on the plans and no survey date for wetland delineations.
- Please clarify if there been any survey visits during appropriate time period to determine vernal pool potential.
- There is a brook visible on the property from the road that I believe is an extension of Perkins Brook. This brook needs to be included on plans. Perkins Brook is within the Exeter Shoreland Protection District and boundaries and setbacks need to be identified on the plans. Further, there will need to be a determination from the wetland scientist as to whether the wetlands shown are contiguous to Perkins Brook in order to determine placement of the Shoreland District boundaries and setbacks (9.3.1.B). Should it be determined this is not an extension of Perkins Brook, the application should include the wetland scientists observations of what field conditions were present to justify this determination.
- I recommend wetland buffer discs be placed in the field to indicate extent of wetland/wetland buffer.

Aquifer Protection District:

- ZO 9.2.3.B.2, onsite wastewater disposal systems shall be located outside of the Aquifer Protection District if feasible. Lot 1 and 2 within the APD have the septic located within the district boundary.
- ZO 9.2.3.B.3 requires drainage from impervious surfaces to be recharged on site or diverted to vegetated areas. Dry wells must be used only when other methods are not feasible and require sediment traps and oil/grease separators to intercept runoff before its discharged into the dry well.
- ZO 9.2.3.C.2.b requires a hydrogeological study be performed by a registered hydrogeologist. Study requirements are described in Site Plan Review and Subdivision regulations 9.21.4.
- ZO 9.2.3.C.3 requires compliance with 10% impervious cover limit for Lots 1, 2. Please add note showing compliance for existing impervious surfaces in Lot 1, and requirement for future development in Lot 2.
- ZO 9.2.3.C.4 add note that septic installation for Lot 1 and 2 must be conducted under the supervision of Sanitary Engineer licensed in NH and prior to covering the system, must be inspected by an agent of the town.

Exeter Heritage Commission Demolition Review Committee 10 Front Street Exeter, NH 03833

July 7, 2020

Doug Eastman, Building Inspector Town of Exeter 10 Front Street Exeter, NH 03833

RE: Demolition request, barn and house at 120-122 Kingston Road

Dear Doug:

On July 2, 2020 at 2:30pm the Demolition Review Committee, (DRC), met at the site to review the request to demolish the barn and house at 120-122 Kingston Road. Present at that meeting were Heritage Commission members Pam Gjettum, Julie Gilman, Jay Myers, John Grueter and myself. Tim Mason representing the property owner was also present.

It is the opinion of the DRC that the condition of the early 20th century dairy barn rendered it no longer historically or culturally significant to the town of Exeter. The house at 122 Kingston Road had been altered to the point that it too is no longer historically or culturally significant as well. Please advise the applicant that they are free to proceed with demolition pending securing other required town approvals and permits.

Sincerely,

John W. Merkle, Chairman Exeter Heritage Commission

RECEIVED



SEP - 8 2026

EXETER PLANNING OFFICE

TOWN OF EXETER, NH APPLICATION FOR SUBDIVISION

OFFICE USE ONLY

	THIS IS AN APPLICATION FOR: () OPEN SPACE DEVELOPMENT (x) STANDARD SUBDIVISION () NUMBER OF LOTS 4 APPLICATION 9 9 0 0 DATE RECEIVED 1 25.00 APPLICATION FEE 1 20.00 ABUTTER FEE 1 20.00 ABUTTER FEE 1 20.00 ABUTTER FEE 2 20.00 TOTAL FEES AMOUNT REFUNDED Pd. 9 8 20 1 4 8 9 9 4 5 6 8 5.00 LUMBER 1 25.00 APPLICATION 2 25.00 APPLICATION 4 25.00 APPLICATION 4 20.00 PLAN REVIEW FEE 1 20.00 ABUTTER FEE 2 20.00 ABUTTER FEE 2 20.00 ABUTTER FEE 2 20.00 ABUTTER FEE 2 3 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
1.	NAME OF LEGAL OWNER OF RECORD: Cabernet Builders (Tim Mason)
	ADDRESS: PO Box 291, Stratham, NH
2.	NAME OF APPLICANT: SAME ADDRESS:
3.	RELATIONSHIP OF APPLICANT TO PROPERTY IF OTHER THAN OWNER:
	(Written permission from Owner is required, please attach.)
4.	DESCRIPTION OF PROPERTY:
	ADDRESS:120 Kingston Road
	TAX MAP: PARCEL #: 8-1 ZONING DISTRICT:R1
	AREA OF ENTIRE TRACT:PORTION BEING DEVELOPED:100%



EXPLANATION OF PROPOSAL:
To subdivide the existing lot into 4 lots,
ARE MUNICIPAL SERVICES AVAILABLE? (YES/NO) NO IF YES, WATER AND SEWER SUPERINTENDENT MUST GRANT WRITTEN APPROVAL FOR CONNECTION. IF NO, SEPTIC SYSTEM MUST COMPLY WITH W.S.P.C.C. REQUIREMENTS.
LIST ALL MAPS, PLANS AND OTHER ACCOMPANYING MATERIAL SUBMITTED WITH THIS APPLICATION:
<u>ITEM:</u> <u>NUMBER OF COPIES</u>
A. DESIGN PLAN SET B. C. D. E. F.
ANY DEED RESTRICTIONS AND COVENANTS THAT APPLY OR ARE CONTEMPLATE (YES/NO) NO IF YES, ATTACH COPY. Home Oners Assoc.
NAME AND PROFESSION OF PERSON DESIGNING PLAN:
NAME: Beals Associates, PLLC
ADDRESS: 70 Portsmouth Ave, 3rd Flr, Stratham, NH 03885
PROFESSION: Civil Engineering TELEPHONE (603) 583-4860
LIST ALL IMPROVEMENTS AND UTILITIES TO BE INSTALLED:
SEPTICS AND WELLS



	SPECIAL EXCEPTIONS OR VARIANCES BEEN GRANTED BY THE DO OF ADJUSTMENT TO THIS PROPERTY PREVIOUSLY? In the Planning Department Office to verify) (YESNO)
	LOW AND NOTE ON PLAN.
BUILDINGS OR A (Please note that ar accordance with Ar	ROPOSED PROJECT INVOLVE DEMOLITION OF ANY EXISTING APPURTENANCES? IF YES, DESCRIBE BELOW. The proposed demolition may require review by the Exeter Heritage Commission in ticle 5, Section 5.3.5 of the Exeter Zoning Ordinance).
yes,	Existing STRUCTURES
	PROPOSED PROJECT REQUIRE A "NOTICE OF INTENT TO EXCAVA" n PA-38)? IF YES, DESCRIBE BELOW.
	No

NOTICE: I CERTIFY THAT THIS APPLICATION AND THE ACCOMPANYING PLANS AND SUPPORTING INFORMATION HAVE BEEN PREPARED IN CONFORMANCE WITH ALL APPLICABLE TOWN REGULATIONS, INCLUDING BUT NOT LIMITED TO THE "SITE PLAN REVIEW AND SUBDIVISION REGULATION" AND THE ZONING ORDINANCE. FURTHERMORE, IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 15 OF THE "SITE PLAN REVIEW AND SUBDIVISION REGULATIONS", I AGREE TO PAY ALL COSTS ASSOCIATED WITH THE REVIEW OF THIS APPLICATION.

DATE 9-4-2020 APPLICANT'S SIGNATURE

ACCORDING TO RSA 676.4.I (c), THE PLANNING BOARD MUST DETERMINE WHETHER THE APPLICATION IS COMPLETE WITHIN 30 DAYS OF SUBMISSION. THE PLANNING BOARD MUST ACT TO EITHER APPROVE, CONDITIONALLY APPROVE, OR DENY AN APPLICATION WITHIN SIXTY FIVE (65) DAYS OF ITS ACCEPTANCE BY THE BOARD AS A COMPLETE APPLICATION. A SEPARATE FORM ALLOWING AN EXTENSION OR WAIVER TO THIS REQUIREMENT MAY BE SUBMITTED BY THE APPLICANT.



SUBDIVISION PLAN REQUIREMENTS

7.4. Existing Site Conditions Plan

Submission of this plan will not be applicable in all cases. The applicability of such a plan will be considered by the TRC during its review process as outlined in Section 6.5 Technical Review Committee (TRC) of these regulations. The purpose of this plan is to provide general information on the site, its existing conditions, and to provide the base data from which the site plan or subdivision will be designed. The plan shall show the following:

APPLICANT	TRC	REQUIRED EXHIBITS
		7.4.1. Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the plan.
		7.4.2. Location of the site under consideration, together with the current names and addresses of owners of record, of abutting properties and their existing land use.
		7.4.3. Title, date, north arrow, scale, and Planning Board Case Number.
		7.4.4. Tax map reference for the site under consideration, together with those of abutting properties.
		7.4.5. Zoning (including overlay) district references.
		7.4.6. A vicinity sketch or aerial photo showing the location of the land/site in relation to the surrounding public street system and other pertinent location features within a distance of 2,000-feet, or larger area if deemed necessary by the Town Planner.
		7.4.7. Natural features including watercourses and water bodies, tree lines, significant trees (16-inches diameter (caliber) or greater measured 12-inches above ground), and other significant vegetative cover, topographic features, and any other environmental features that are important to the site design process.
		7.4.8. Man-made features such as, but not limited to, existing roads, structures, and stonewalls. The plan shall also indicate which features are to be retained and which are to be removed or altered.
Ø		7.4.9. Existing contours at intervals not to exceed 2-feet with spot elevations provided when the grade is less than 5%. All datum provided shall reference the latest applicable US Coast and Geodetic Survey datum and should be noted on the plan.



	7.4.10. A High Intensity Soil Survey (HISS) of the entire site, or appropriate portion thereof. Such soil surveys shall be prepared by a certified soil scientist in accordance with the standards established by the Rockingham County Conservation District. Any cover letters or explanatory data provided by the certified soil scientist shall also be submitted.
V	7.4.11. State and Federally designated wetlands, setback information, total wetlands proposed to be filled, other pertinent information and the following wetlands note: "The landowner is responsible for complying with all applicable local, state, and federal wetlands regulations, including any permitting and setback requirements required under these regulations."
	7.4.12. Surveyed property lines including angles and bearings, distances, monument locations, and size of the entire parcel. A professional land surveyor licensed in New Hampshire must attest to said plan.
	7.4.13. The lines of existing abutting streets and driveway locations within 200-feet of the site.
	7.4.14. The location, elevation, and layout of existing catch basins and other surface drainage features.
	7.4.15. The shape, size, height, location, and use of all existing structures on the site and approximate location of structures within 200-feet of the site.
	7.4.16. The size and location of all existing public and private utilities, including off-site utilities to which connection is planned.
	7.4.17. The location of all existing easements, rights-of-way, and other encumbrances.
	7.4.18. All floodplain information, including the contours of the 100-year flood elevation, based upon the Flood Insurance Rate Map for Exeter, as prepared by the Federal Emergency Management Agency, dated May 17, 1982.
V	7.4.19. All other features which would fully explain the existing conditions of the site.
\mathcal{I}	7.4.20. Name of the site plan or subdivision.



7.6. Subdivision Layout Plan (Pertains to Subdivisions Only)

The purpose of this plan is to illustrate the layout of the subdivision lots, rights-of-way, easements, and other uses of land within the subdivision. It shall be prepared on reproducible mylar and be suitable for filing with the Rockingham County Registry of Deeds. The plan shall depict the following:

APPLICANT	TRC	REQUIRED EXHIBITS		
Ø		7.6.1	Names, addresses, and telephone numbers of: the owner, applicant, and person(s) or firm(s) preparing the plan (including engineer, architect, or land surveyor).	
		7.6.2 Name of the subdivision.		
		7.6.3	Location of the land/site together with the names and address of all owners of record of abutting properties.	
		7.6.4	Title, date, north arrow, scale, and Planning Board Case Number.	
		7.6.5	Tax map reference for land/site under consideration with those of abutting properties.	
		7.6.6	Zoning (including overlay) district references.	
		7.6.7	The location and dimensions of all boundary lines of the property to be expressed in feet and decimals of a foot.	
		7.6.8	The location and width of all existing and proposed streets, street rights-of-way, sidewalks, easements, alleys, and other public ways.	
		7.6.9	The locations, dimensions, and areas of all proposed lots.	
		7.6.10	The location of all test pits and the 4,000-square-foot septic reserve areas for each newly created lot, if applicable.	
		7.6.11	High Intensity Soil Survey (HISS) information for the site, including the total area of wetlands proposed to be filled.	
		7.6.12	2 State and Federally designated wetlands, setback information, total wetlands proposed to be filled, other pertinent information and the following wetlands note: "The landowner is responsible for complying with all applicable local, state, and federal wetlands regulations, including any permitting and setback requirements required under these regulations."	
		7.6.13	All floodplain information, including contours of the 100-year flood elevation, based upon the Flood Insurance Rate Map for Exeter, as prepared by the Federal Emergency Management Agency, dated May 17, 1982.	
		7.6.14	Sufficient data acceptable to the Board to determine the location, bearing, and length of all lines; sufficient data to be	



	able to reproduce such lines upon the ground; and the location of all proposed monuments.
	7.6.15 The location and dimensions of all property proposed to be set aside for green space, parks, playgrounds, or other public or private reservations. The plan shall describe the purpose of the dedications or reservations, and the accompanying conditions thereof (if any).
	7.6.16 A notation shall be included which explains the intended purpose of the subdivision. Indication and location of all parcels of land proposed to be dedicated to public use and the conditions of such dedications, and a copy of such private deed restriction as are intended to cover part or all of the tract.
	7.6.17 Newly created lots shall be consecutively numbered or lettered in alphabetical order. Street address numbers shall be assigned in accordance with Section 9.17 Streets of these regulations. TSA
MA	 7.6.18 The following notations shall also be shown: Explanation of proposed drainage easements, Explanation of proposed utility easement, Explanation of proposed site easement, Explanation of proposed reservations Signature block for Board approval
MA	7.6.19 A note indicating that: "All water, sewer, road (including parking lot), and drainage work shall be constructed in accordance with Section 9.5 Grading, Drainage, and Erosion & Sediment Control and the Standard Specifications for Construction of Public Utilities in Exeter, New Hampshire". See Section 9.14 Roadways, Access Points and Fire Lanes and Section 9.13 Parking Areas for exceptions.

OTHER REQUIRED PLANS (See Section indicated)

7.7 Construction plan
7.8 Utilities plan
7.9 Grading, drainage and erosion & sediment control plan
7.10 Landscape plan
7.11 Drainage Improvements and Storm Water Management Plan
7.12 Natural Resources Plan
7.13 Yield Plan

70 Portsmouth Avenue 3RD FL. Unit 2 Stratham, NH, 03885 603 – 583 - 4860 Fax: 583 - 4863

September 8, 2020

Chairman Town of Exeter Planning Board 10 Front Street Exeter, NH 03833

RE:

Letter of Intent

Cabernet Builders

Proposed 4-Lot residential subdivision

Tax Map 0101 Lot #: 008-1

Dear Members of the Board:

The applicant is proposing to subdivide the referenced parcel into 4 residential lots. Lots will be served by underground or overhead utilities per utility company and private wells and septics.

Thank you for your consideration.

Very truly yours,

BEALS ASSOCIATES, PLLC

Scott D. Cole

SPM.

ABUTTERS LIST FOR

NH- 1312 CABERNET BUILDERS - EXETER, NH DATE SEPTEMBER 3, 2020

SUBJECT PARCEL

TAX MAP/LOT

101-8-1

OWNER OF RECORD

CABERNET BUILDERS

TIM MASON PO BOX 291

STRATHAM, NH 03885

ABUTTERS

TAX MAP/LOT

114-5

OWNER OF RECORD

SIMPLIFIED PROPERTY MNGMT LLC

23 PRESCOTT LN.

HAMPTON FALLS, NH 03844

114-2

HAGEN REV TRUST

ROBERT & JOAN HAGEN TRUSTEES

18 JOHN WEST RD. EXETER, NH 03833

114-1

J & J PROPERTIES LLC

52 WILLOW RD.

EAST KINGSTON, NH 03827

101-6

DEBRA FLAGG

240 ROUTE 125

BRENTWOOD, NH 03833

101-6-1

BERKE FAMILY TRUST

ANTHONY & MICHELLE TRUSTEES

108 KINGSTON RD. EXETER, NH 03833

101-7

BIG WOOD PROPERTIES LLC

3534 BIG WOODS RD. IJAMSVILLE, MD 21754

101-34

MATTHEW MALILA LAURA MARSHALL

109 KINGSTON RD, EXETER, NH 03833

ABUTTERS LIST

FOR

NH- 1312 CABERNET BUILDERS - EXETER, NH DATE SEPTEMBER 3, 2020

,	
101-33	AUDRA ANDERSON 117 KINGSTON RD. EXETER, NH 03833
101-8-2	CABERNET BUILDERS TIM MASON PO BOX 291 STRATHAM, NH 03885
101-9	CAMPBELL REVOCABLE TRUST KEITH CAMPBELL TRUSTEE 60 NORTH RD. EAST KINGSTON, NH 03827
101-12	AARON DIBBLE 5547 MOUNTAIN GARLAND DR. COLORADO SPRINGS, CO 80923
114-8	JOSEPH DIPRIMO 12 GREAT HILL COURT EXETER, NH 03833
114-9	PETER OLIVER 14 GREAT HILL COURT EXETER, NH 03833
PROFESSIONALS	

ENGINEERING FIRM BEALS ASSOCIATES, PLLC.

70 PORTSMOUTH AVE. 3RD FLOOR

STRATHAM, NH 03885

SOIL SCIENTIST GOVE ENVIRONMENTAL

8 CONTINENTAL DR. BLDG. 2 UNIT H

EXETER, NH 03833

SURVEYOR DAVID VINCENT LAND SURVEYING

PO Box 1622 DOVER, NH 03821

DEVELOPER CABERNET BUILDERS

TIM MASON PO BOX 291

STRATHAM, NH 03885



GOVE ENVIRONMENTAL SERVICES, INC.

Test Pit Log 7/29/2020

John West Road, Exeter

Logged by: James Gove & Brenden Walden Reviewed by: Mike Cuomo

Test Pit #A:

0-12 INCHES, 10YR 3/3, FINE SANDY LOAM, GRANULAR, FRIABLE

12-35 INCHES, 10YR 4/6, FINE SANDY LOAM, GRANULAR, FRIABLE

35-44 INCHES, 10YR 4/6, FINE SANDY LOAM, MASSIVE, FRIABLE, WITH 5% REDOX CONCENTRATIONS

44-73 INCHES, 2.5Y 5/3, SILT LOAM, PLATY, FIRM, WITH 30% REDOX CONCENTRATIONS

ESHWT: 35 INCHES

Observed Water: N/A

Refusal: N/A

Test Pit #B:

0-9 INCHES 10YR 3/3, FINE SANDY LOAM, GRANULAR, FRIABLE

9-30 INCHES, 10YR 4/6 FINE SANDY LOAM, GRANULAR, FRIABLE

30-71 INCHES, 2.5Y 5/4, LOAMY SAND, PLATY, FIRM, WITH 30% REDOX CONCENTRATIONS

ESHWT: 30 INCHES

Observed Water: N/A

Refusal: N/A

Test Pit #C:

0-13 INCHES, 10YR 3/3, FINE SANDY LOAM, GRANULAR, FRIABLE

13-30 INCHES, 10YR 4/6, FINE SANDY LOAM, GRANULAR, FRIABLE

30-47 INCHES, 10YR 4/6, FINE SANDY LOAM, MASSIVE, FRIABLE, WITH 5% REDOX CONCENTRATIONS

47-74 INCHES, 2.5Y 5/4, SAND, MASSIVE, FRIABLE, WITH 20% REDOX CONCENTRATIONS

ESHWT: 30 INCHES

Observed Water: N/A

Refusal: N/A

Test Pit #D:

0-10 INCHES, 10YR 3/3, FINE SANDY LOAM, GRANULAR, FRIABLE

10-25 INCHES, 10YR 4/6, LOAMY SAND, GRANULAR FRIABLE

25-62 INCHES, 10YR 4/6, SAND, MASSIVE, FRIABLE, WITH 30% REDOX CONCENTRATIONS

ESHWT: 25 INCHES

Observed Water: N/A

Refusal: N/A

Test Pit #E:

0-11 INCHES, 10YR 3/3, FINE SANDY LOAM, GRANULAR, FRIABLE

11-41 INCHES, 10YR 4/6, LOAMY SAND, MASSIVE, FRIABLE

41-66 INCHES, 10YR 4/6, LOAMY SAND, MASSIVE, FRIABLE, WITH 5% REDOX CONCENTRATIONS

ESHWT: 41 INCHES

Observed Water: N/A

Refusal: N/A

Test Pit #F:

0-13 INCHES, 10YR 3/3, FINE SANDY LOAM, GRANULAR, FRIABLE

13-32 INCHES, 10YR 4/6, FINE SANDY LOAM, GRANULAR, FRIABLE

32-39 INCHES, 10YR 4/6, FINE SANDY LOAM, GRANULAR, FRIABLE, WITH 5% REDOX CONCENTRATIONS

39-76 INCHES, 2.5Y 5/4, LOAMY SAND, MASSIVE, FRIABLE, WITH 30% REDOX CONCENTRATIONS

ESHWT: 32 INCHES

Observed Water: N/A

Refusal: N/A



GOVE ENVIRONMENTAL SERVICES, INC.

Test Pit #G:

0-14 INCHES, 10YR 3/3, FINE SANDY LOAM, GRANULAR, FRIABLE

14-32 INCHES, 10YR 4/6, FINE SANDY LOAM, GRANULAR, FRIABLE

32-45 INCHES, 10YR 4/6, FINE SANDY LOAM, MASSIVE, FRIABLE, WITH 10% REDOX CONCENTRATIONS

45-72 INCHES, 2.5Y, 5/4, SILT LOAM, PLATY, FIRM, WITH 30% REDOX CONCENTRATIONS

ESHWT: 32 INCHES

Observed Water: N/A

Refusal: N/A

Test Pit #H:

0-12 INCHES, 10YR 3/3, FINE SANDY LOAM, GRANULAR, FRIABLE

12-42 INCHES, 10YR 4/6, FINE SANDY LOAM, GRANULAR, FRIABLE

42-54 INCHES, 10YR 4/6, FINE SANDY LOAM, MASSIVE, FRIABLE, WITH 5% REDOX CONCENTRATIONS

54-65 INCHES, 2.5Y 5/4, LOAMY SAND, MASSIVE, FRIABLE, WITH 20% REDOX CONCENTRATIONS

ESHWT: 42 INCHES

Observed Water: N/A

Refusal: N/A

Test Pit #I:

0-12 INCHES, 10YR, 3/3, FINE SANDY LOAM, GRANULAR, FRIABLE

12-28 INCHES, 10YR 4/6, FINE SANDY LOAM, GRANULAR, FRIABLE

28-39 INCHES, 10YR 4/6, FINE SANDY LOAM, MASSIVE, FRIABLE, 5% REDOX CONCENTRATIONS

39-55 INCHES, 2.5Y 5/4, FINE SANDY LOAM, PLATY, FIRM, WITH 20% REDOX CONCENTRATIONS

55-73 INCHES, 2.5Y 5/4, SILT LOAM, PLATY, FIRM, WITH 30% REDOX CONCENTRATIONS

ESHWT: 28 INCHES

Observed Water: N/A

Refusal: N/A

Test Pit #J:

0-16 INCHES, 2.5Y 5/4, FINE SANDY LOAM, GRAVELY LOAMY SAND, PLATY, FIRM, FILL

16-30 INCHES, 10YR 3/3, FINE SANDY LOAM, GRANULAR, FRIABLE

30-42 INCHES, 10YR 5/6, FINE SANDY LOAM, GRANULAR, FRIABLE

42-63 INCHES, 2.5Y 5/4, FINE SANDY LOAM, PLATY, FIRM, WITH 20% REDOX CONCENTRATIONS

ESHWT: 42 INCHES

Observed Water: N/A

Refusal: N/A

Test Pit #K:

0-10 INCHES, 10YR 3/3, FINE SANDY LOAM, GRANULAR, FRIABLE

10-27 INCHES, 10YR 4/6, FINE SANDY LOAM, GRANULAR, FRIABLE

27-71 INCHES, 2.5Y 5/4, FINE SANDY LOAM, PLATY, FIRM, WITH 20% REDOX CONCENTRATIONS

ESHWT: 27 INCHES

Observed Water: N/A

Refusal: N/A

Please see additional plan attachments under "Supporting Documents" posted for this meeting