TOWN OF NORWICH



DEVELOPMENT REVIEW BOARD AGENDA

Thursday, September 15, 2022 7:00 PM

On Thursday September 15 SITE VISITS will be conducted for following hearings:

Time	Parcel #	Location	Convene
4:00PM	41BCU22	Baseball Field at Dresden School District 223 US	Take driveway adjacent to Colton Center
		Route 5 South, Tax Map 15-072.000	to the end (south) adjacent to ball field
4:30PM	42 BCU22	Norwich School District, Tax Map 20-242.000	Top of Girard Way, parking lot
		Girard Way to improve approximately 1,400 feet	
		of existing Milton Frye Nature Area trails	

ZOOM Access Information:

Topic: Development Review Board

Time: September 15, 2022, 07:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

https://us02web.zoom.us/j/89900487709

888 475 4499 US Toll-free 877 853 5257 US Toll-free

- 1. Call to Order, Roll Call
- 2. Approve Agenda
- 3. Approve Minutes July 21, 2022
- 4. Public Comments
- 5. Announcements and Correspondence
 - Correspondence from Historic Preservation Commission, dated 09-07-2022

6. Boundary Line Adjustment

a. #48BLA22: Transfer 2.3 Acres from 06-022.000, 467 Campbell Flat Road, owned by Anne Sargent Walker to 06-021.000, 397 Campbell Flat Road, owned by David R. and Ann Shriver Sargent. Both lots developed.

7. Public Hearing at 7:15 PM:

- a. #41BCU22: Conditional Use Review for an application by the Dresden School District for 223 US Route 5 South, Tax Map 15-072.000, to replace existing underdrains with grading modifications to provide proper drainage and move existing fencing/dugouts to reduce size of field. Application to be reviewed under the Norwich Zoning Regulations.
- b. **#42BUC22**: Conditional Use Review for an application by the Norwich School District, (Town of Norwich, Landowner), Tax Map 20-242.000 to improve approximately 1,400 feet of existing Milton Frye Nature Area trails to meet ABA standards. Application to be reviewed under the Norwich Zoning Regulations.
- c. #43BCU22: Conditional Use Review for an application by the Town of Norwich for 111 Turnpike RD (Huntley Meadow), Tax Map 20-148.000, for development in the floodway for a proposed trail bridge across Bloody Brook. Application to be reviewed under the Norwich Zoning Regulations.

- 8. Other Business
- 9. Adjournment

Future Meeting: TBD

DRB Minutes available at: http://norwich.vt.us/development-review-board/

To receive copies of Town agendas and minutes, please send an email request to be added to the town email list to the Town Manager's Assistant at: manager-assistant@norwich.vt.us



TOWN OF NORWICH DEVELOPMENT REVIEW BOARD DRAFT MINUTES Thursday, July 21, 2022

This meeting was warned for on-line participation via Zoom using the link below:

Join Zoom Meeting

https://us02web.zoom.us/j/89900487709

Members Present:

Arline Rotman (Chair), Richard Stucker, Don McCabe, Linda Gray, Patrick Bradley,

Sue Pitiger, Matt Stuart

Alternates Present:

None

Members Absent:

none

Staff:

Rod Francis (Clerk), Zoning Administrator

Public:

Norman Miller, Skip Nalette

- 1) Call to Order: 7:02pm.
- 2) Approve Agenda: McCabe moved, and Bradley seconded a motion to approve the agenda. Motion carried 7 0. For: Rotman, Stucker, McCabe, Gray, Bradley, Pitiger, Stuart.
- 3) Approve Minutes May 19, 2022: McCabe moved, and Stucker seconded to approve the May 19, 2022, Minutes. Motion carried 7 0. For: Rotman, Stucker, McCabe, Gray, Bradley, Pitiger, Stuart.
- 4) Public Comments: None.
- 5) Announcements and Correspondence: none.
- 6) Public Hearing at 7:15 PM:
- 7) Preliminary Plan Review of a Subdivision Application by Norman Miller, Applicant, Judith Von D. Miller, Landowner, to divide Tax Map Parcel #10-113.000 into 2 lots of ±3.91 acres developed with a dwelling and ±29.82 acres developed with a dwelling at 177 New Boston RD. Application to be reviewed under the Norwich Subdivision Regulations.

Pitiger Moved and McCabe seconded a motion to accept into evidence the exhibits submitted by the Zoning Administrator and the applicant. **Motion carried 7 - 0.** For: Rotman, Stucker, McCabe, Gray, Bradley, Pitiger, Stuart.

Nalette representing the applicants, presented the application which proposes a new parcel being created of ± 3.91 acres (developed) and ± 29.82 acres parcel remaining (developed). Mr. Nalette made a verbal request for a waiver of Norwich Town Highway Standards, to be followed by a formal written request after the meeting concludes. Nalette referenced a sketch made available at the site visit and described how despite sections of driveway exceeding the current standards (twelve percent grade) the driveway had proved serviceable for many years.

Bradley moved and Pitiger seconded a motion to accept into evidence an additional sketch depicting the grade of the driveway by segment. **Motion carried 7 - 0.** For: Rotman, Stucker, McCabe, Gray, Bradley, Pitiger, Stuart.

McCabe moved and Pitiger seconded a motion to close the hearing and enter into deliberative session at 7:13 PM. **Motion carried 7 - 0.** For: Rotman, Stucker, McCabe, Gray, Bradley, Pitiger, Stuart.

8) Other Business: none

9) Meeting Adjourned: 7:24PM

Respectfully submitted,

Rod Francis

Future Meetings:

TBD

DRB Minutes available at:

http://Norwich.vt.us/development-review-board-minutes/

To receive copies of Town agendas and minutes, please send an email request to be added to the town email list to the Town Manager's Assistant at: managers-assistant@norwich.vt.us

TOWN OF NORWICH PLANNING AND ZONING RECEIVED

Norwich Historic Preservation Commission

September 6, 2022

Jaci Allen, Chair Planning Commission Town of Norwich PO Box 376 Norwich, Vermont 05055

Cc: Selectboard, Development Review Board, Rod Francis

Dear Jaci,

The work of the Planning Commission holds the future of Norwich, its viability, assets, and appearance and embraces some of the goals of the Historic Preservation Commission (HPC): a viable local economy and quality of life, cultural tourism, and education—for us more specifically through the preservation of the built landscape and archeological resources. In so doing, the HPC believes that stagnation is unproductive and unrealistic and that 'change is good' with appropriate checks and balances to channel personal objectives in a parallel plane with the common good.

Lately, the HPC has watched the perplexing erosion in the beauty and historical significance of Norwich's built environment. While the HPC focuses on its root causes through public programming and state-funded grant projects like the recent historic barns survey, Norwich is nevertheless losing the character and cultural value that makes this great place different and desirable. The HPC is not fully meeting its mandate to preserve and to promote Norwich's historic character and authenticity. We want to contribute more fully to your work for all our Norwich neighbors.

Two current regulations compromise our advocacy for the historic structures that add so much to our quality of life in Norwich. The first is the exemption of owners of one and two-family dwellings from the Development Review process (or any review). Currently, any homeowner of a property on the National Register of Historic Places can raze their home or change its architectural integrity without review. The second pertains to the HPC's Ordinance, which prohibits our participation in the review of a project before the Development Review Board. We could offer valuable guidance to projects before the DRB based on the professional experience and knowledge of historic architecture and landscapes represented on the HPC. Our proposal does not entail more 'rules and regs.' We only propose a slot in the Building Permit process to make non-binding, bulleted recommendations to private householders about the design features and conditions that support the value of their real estate and the overall character of Norwich.

As you know, the HPC ordinance allows us to advise and to assist the Selectboard and Planning Commission on matters pertaining to historic preservation. As you revise the Zoning Regulations, please consider discussing with us opportunities to allow relevant contributions by the HPC to defining the future appearance and cultural significance of our town. We very much hope you will invite us to come to a Planning Commission meeting to discuss this proposal.

With thanks,

Nancy Osgood, Chair

Norwich Historic Preservation Commission



TO: Development Review Board FROM: Rod Francis, Planning Director RE: #48BLA22, Sargent/Sargent

DATE: 09-01-2022

Lots: 06-022.000 Anne S. Walker, 467 Campbell Flat RD

06-021.000 David R. and Ann S. Sargent, 397 Campbell Flat RD

The Boundary Line Adjustment proposes to:

1. Transfer — 2.3+/- acres from 06-022.000 to 06-021.000. Both properties are developed

	06-022.000	06-021.000	Total Acres
Existing	31.30+/-	3.11+/- acres	34.41+/- acres
Transfer	2.3+/-acres	+2.3+/-acres	
Proposed	29.0+/-acres	5.41+/-acres	34.41+/- acres

Criteria for Boundary Line Adjustment NSR §2.1 (D)

1. Boundary line adjustments shall be reviewed under the same criteria and process as a subdivision unless, after review of the boundary line adjustment plan, the Development Review Board determines that the proposed boundary line adjustment:

#	Criterion	×/√
a.	is a minor realignment in that	
	area of the land to be transferred is less than the half of the area of the original parcel to be reduced in size, or	1
	2) both parcels are already developed	✓
b,	does not change substantially the nature of any previously approved subdivision	V
C.	does not result in the creation of any new lots	√
d.	will not impair access to any parcel	√
e.	will not impact adversely any valuable natural resource or result in fragmentation of agricultural or conservation lands	✓
f	will not create a nonconforming lot or nonconforming structure, or increase the degree of nonconformity of a preexisting nonconforming lot or structure	✓

TOWN OF NORWICH, VERMONT APPLICATION FOR ZONING PERMIT

Owner(s): DAUIP/AHH GAR	CEMP	
Mail Address: 397 CAMPBELL	- FLAT FP. Town reczwii	ST YT Zip 05055
Day Phone: 802 649.3230 Ev	ve Phone: 402.649.3127 Email:	davidaszrgentdesigned
Applicant (If Different):		
Mail Address:		STZip
Day Phone:Ev		
Description of Proposed Developme		
NAUKER, 467 CAMPBEN	FLAT RA, TO DAVIDE	OMMSAROENS, 397
Street Address: 397 CAMPRE WALKER 467 CAMPRE WALKER 467 CAMPRE Building Setbacks-Road Right-of-w	Zoning District: (I	RR VR I VR II VB C/I AQ
Size of Building(s)/Additions: Struc		
Structure B: WidthLength		
Additional Footprint of Structure B (i		
Estimated Date of Completion:		

The undersigned hereby agrees foregoing statements, attached plans, a Town of Norwich, and certifies that the of the real estate that is the subject of the Signature of Landowner (or Authorized ************************************	that the proposed development shall I nd in accordance with the zoning and above is true, correct, and complete. application by the Zoning Administrator	be built in accordance with the subdivision regulations of the The owner consents to inspections at reasonable times.
*********	*********	******
Wetlands Septic Location	Additional Permits Required:SubdivisionConditional UseSite Plan Review	Variance PRD Driveway Access Wastewater
Water Supply Parking	Fees:	Action Dates
Shoreline	Base Fee \$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Received 8-29-22
Aquifer Protection	Sq. Ft. x \$	Complete
Permit Conditions	# of Lots \$	Granted
Agricultural Exemption Comments:	Recording \$ 150	Refused
Comments.	Other\$	Posted at Site
	Total \$ 115-03	Appeal By
	Date Paid 16 (8-34-3)	Effective
	To Finance $9-1-32$	Expires
Signature of Zoning Administrator		Date
8/11	Application/Permit	

SARGENT DESIGN COMPANY

397 CAMPBELL FLAT RE

NORWICH, VERMONT

05055-9484

July 28, 2022



David R and Ann Shriver Sargent, of 397 Campbell Flat Road, and Anne Sargent Walker, of 467 Campbell Flat Road, both in Norwich, VT, agree to the boundry line adjustment as surveyed, drawn and recorded by Joe Dibernardo of DiBernardo Associates, of Bellows Falls, Vermont, stamped plan of 1/20/ 2021.

Ann Shriver Sargent

date

8.25.2022

David R. Sargent, Jr

data

Anne Sargent Walker

Thanks!

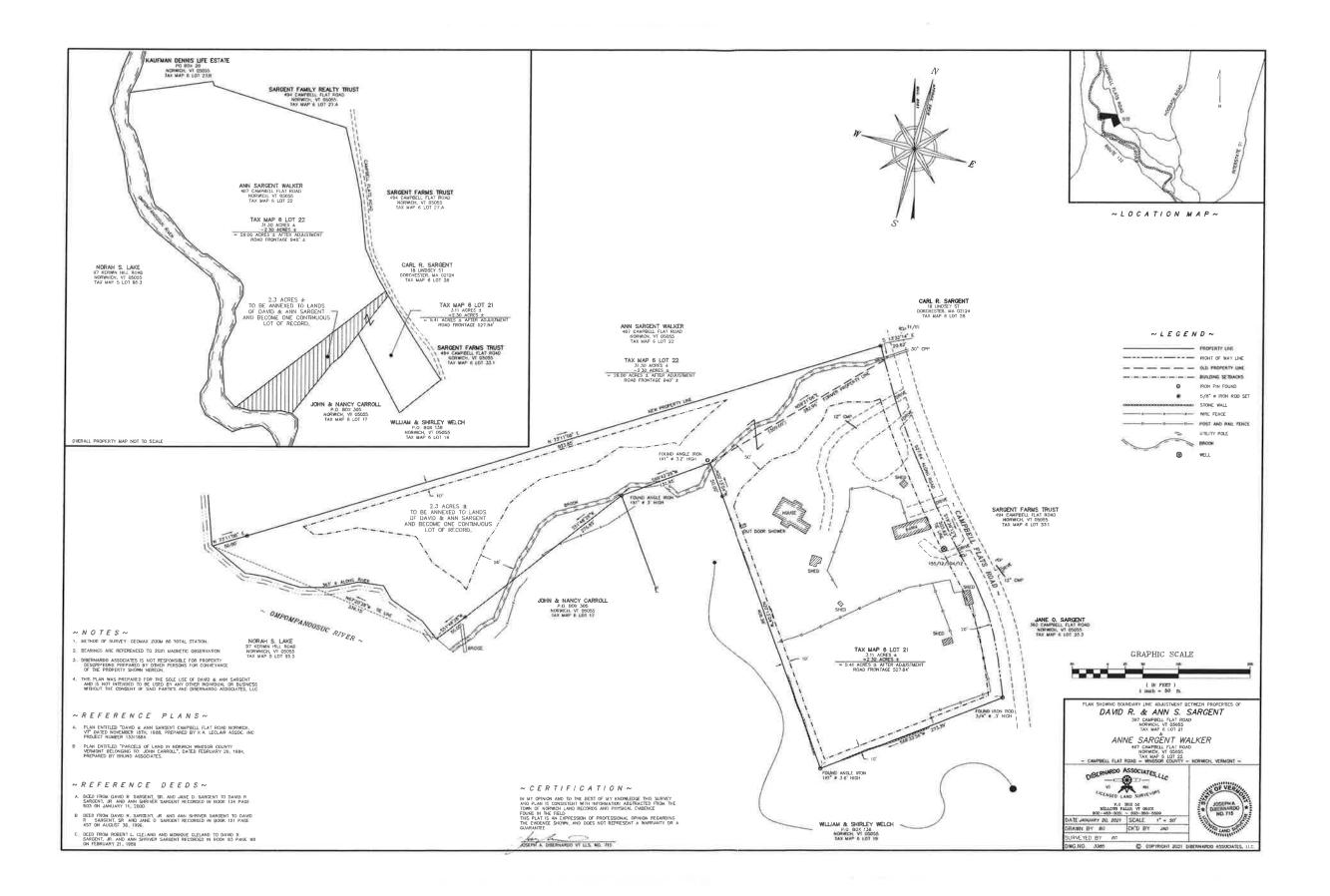
David Sargent

david@sargentdesigncompany.com Sargent Design Company 397 Campbell Flat Road Norwich, VT, 05055 (802) 649-3230 O (603) 236-6941 M

802.649.3230 office

cells: 603.236.6941 David, 802.779.4763 Ann

WWW.SARGENTDESIGNCOMPANY.COM





TOWN OF NORWICH DEVELOPMENT REVIEW BOARD

DOCUMENTS AND INTERESTED PARTIES

Application Number: #41BCU22

Lot: #15-072.000

223 US Route 5 S

Public Hearing Date: September 15, 2022

Site Visit: September 15, 2022

Applicant/ Landowner:

Dresden School District

c/o Jamie Teague 41 Lebanon Street Hanover, NH 03755

Interested Parties:

NATURE OF APPLICATION - **#41BCU22:** Conditional Use Review for an application by the Dresden School District for 223 US Route 5 South, Tax Map 15-072.000, to replace existing underdrains with grading modifications to provide proper drainage and move existing fencing/dugouts to reduce size of field. Application to be reviewed under the Norwich Zoning Regulations.

The record in this case includes the following documents:

Submitted by Applicant

- A-1 Application #41BCU22 (06-30-22)
- A-2 Narrative, Site Plan & Conditional Use Review, by Pathways Consulting, LLC (07-01-2022)
- A-3 Plans by Pathways Consulting, LLC (06-29-2022)
 - a. Existing Conditions, Sheet 1 of 2
 - b. Proposed Layout Changes, Sheet 2 of 2

Submitted by Zoning Administrator

ZA-1 Documents and Interested Parties list (08-31-22)

Submitted by Interested Party

Exhibit A-1 #41BCUZZ

TOWN OF NORWICH, VERMONT APPLICATION FOR ZONING PERMIT

Owner(s): <u>Dresden Sch</u>	1001 District & Dresde	en Baseball Field>
	treet Town Hanov	
	Eve Phone: 603-313-7098 Email	
Applicant (If Different):		3-3
Mail Address:	Town	ST Zip
Day Phone: B	ve Phone: Email	: <u></u>
Description of Proposed Developm	ve Phone:Email ent: Replace existing	underdrains with
avading modification	s to provide proper draw	nage and move existing
fancing/limouts to reduce th	L Size of field. Zoning District:	RR VR I VR II VB (C/I) AO
Street Address: 223 US ROU	te 5 South Tax Map Lot#	15 - 072 Lot Size: 70.78 acres
Building Setbacks- Road Right-of-v		
Size of Building(s)/Additions: Struc		
Structure B: WidthLength _		
Additional Footprint of Structure B (
Estimated Date of Completion:		

footprint of new construction and outline The undersigned hereby agree foregoing statements, attached plans, a Town of Norwich, and certifies that th of the real estate that is the subject of the Signature of Landowner (or Authorized ************************************	s that the proposed development shall and in accordance with the zoning and e above is true, correct, and complete. Application by the Zoning Administrator	be built in accordance with the subdivision regulations of the The owner consents to inspections at reasonable times
*****************************	1 Agent)	M Date 6/30/32
Zoning Office Checknist.	Additional Permits Required:	variance
_ Flood Hazard Area	Subdivision	PRD
Wetlands Septic Location	Conditional Use Site Plan Review	Driveway Access Wastewater
Water Supply	Site Flan Review	wasiewater
Parking	Fees:	Action Dates
Shoreline	Base Fee \$	Received 07-67-2002
Aquifer Protection	Sq. Ft. x \$	Complete
Permit Conditions	# of I of	Granted
Agricultural Exemption	Recording \$	Refused
Comments:	Other	Posted at Site 8-31-22 Apr
	Total \$	Appeal By
	Date Paid	Effective
-	To Finance	Expires
Signature of Zoning Administrator		Data
8/11	Application/Permit	Date # リトレシン
O. I. I.	Application/Fer illit	" I DC V O d

PATHWAYS CONSULTING, LLC

41BCU 22 Exhibit A-2

Planning • Civil & Environmental Engineering • Surveying • Construction Assistance
240 Mechanic Street • Suite 100
Lebanon, New Hampshire 03766
(603) 448-2200 • Fax: (603) 448-1221

July 1, 2022

Norwich Development Review Board c/o Rod Francis, Town Manager 300 Main Street Norwich, Vermont 05055

RE: SITE PLAN AND CONDITIONAL USE REVIEW FOR HANOVER HIGH SCHOOL BASEBALL FIELD, ROUTE 5, NORWICH, VERMONT (Project No. 10021)

Dear Members of the DRB:

Steven Bauer provided guidance about application materials for Hanover High School (HHS) Baseball Field drainage improvements and a reduction in field dimensions that will move existing fencing, dugouts, and other amenities. In short, although the intent of the proposed project is to address drainage, Steven indicated that moving existing fencing and dugouts would facilitate a change requiring Development Review Board (DRB) approval in the context of Site Plan Review and Conditional Use approval because the existing baseball field is listed as a Conditional Use in Table 2.5, Commercial Indutrial (CI) District. From my discussion with Steven, I understand that submission information may be limited to showing existing and proposed conditions, which we have attempted to do with the following plan sheets (attached):

Plan Sheet 1 of 2

This plan shows LiDAR and site information from the Vermont Center for Geographic Information (VCGI) to identify existing conditions including contours at 2-foot intervals. We have labeled the existing field components, dugouts, batting cage, and portable bleachers for clarity. The boundary information on this plan is also from VCGI. The field is currently surrounded by a combination of chain link and portable fencing (including a backstop).

Plan Sheet 2 of 2

This plan shows existing conditions from field surveying including topography, field components, dugouts, portable bleachers, and batting cage. Boundary information is from VCGI. Since the entire field needs to be excavated to address drainage needs, the plan includes shifting the infield, fencing, dugouts, and other amenities to create a field with smaller dimensions. The proposed field dimensions will be smaller by moving the infield approximately 35-feet to the north (toward the left field fence) and 28-feet east (toward the right field fence). The backstop and chain link fence along both left field and right field sides of the field will be shifted accordingly and the two areas of temporary fencing in the outfield will be replaced with chain link fencing.

Norwich Development Review Board c/o Rod Francis, Town Manager
300 Main Street, Norwich, Vermont 05055
RE: SITE PLAN AND CONDITIONAL USE REVIEW FOR HANOVER HIGH SCHOOL BASEBALL FIELD,
ROUTE 5, NORWICH, VERMONT (Project No. 10021)
July 1, 2022
Page 2

Drainage repairs will include the removal of soil, some regrading, and installation of appropriate underdrains, which will replace the existing underdrain system and "crowned" grading with radial contours suitable for baseball. Drainage improvements will tie into existing ditches and facilities that currently exist around the field. Reducing the size of the field with new underdrains will also necessitate modifications to the existing irrigation system that is served by a drilled well. Excavation of field surface areas will exceed the one acre threshold that triggers the need for a General Permit 3-9020 Stormwater permit from the Vermont Agency of Natural Resources (VANR). The project will also require an amendment to the Act 250 permit for this work that was granted on August 21, 2006 for the baseball field and other recreational facilities on-site.

As discussed with Steven, we are trying to limit application materials to show existing and proposed field changes in concert with field-wide drainage improvements. We look forward to discussing this project with the DRB.

Sincerely,

PATHWAYS CONSULTING, LLC

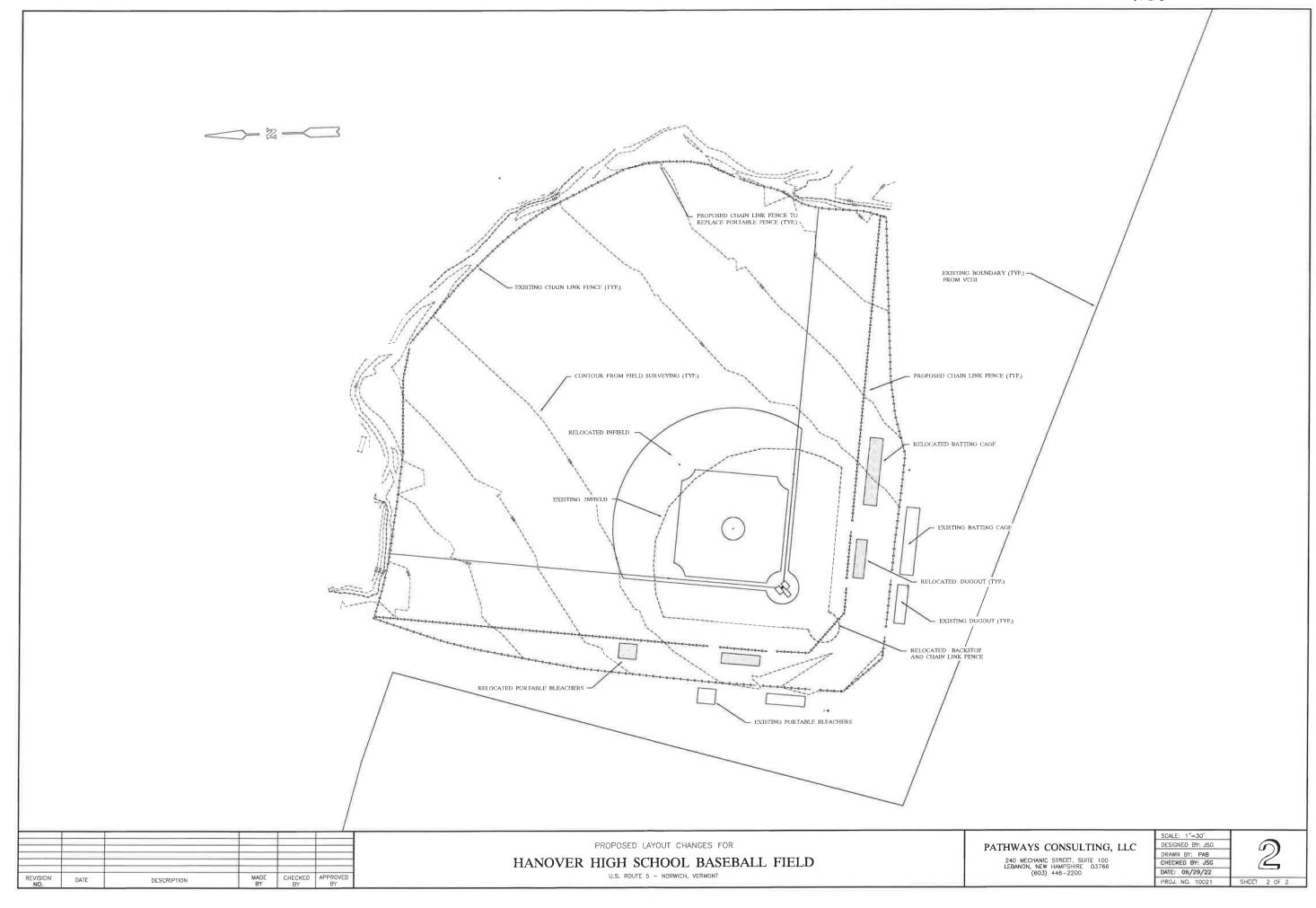
Jeffrey S. Goodrich, P.E.

J. Hay & Gardeni

President

cc: Jamie Teague with attachments
Tony Daigle with attachments







TOWN OF NORWICH DEVELOPMENT REVIEW BOARD

DOCUMENTS AND INTERESTED PARTIES

Application Number: #42BCU22

Lot:

#20-242.000

Milton Frye Nature Area, (Girard Way) Main ST

Public Hearing Date: September 15, 2022

Site Visit: September 15, 2022

Applicant:

Norwich School District

c/o Jamie Teague 22 Church ST

Norwich, VT 05055

Landowner:

Town of Norwich c/o Rod Francis

PO Box 376

Norwich, VT 05055

Interested Parties:

NATURE OF APPLICATION - **#42BUC22** Conditional Use Review for an application by the Norwich School District, (Town of Norwich, Landowner), Tax Map 20-242.000 to improve approximately 1,400 feet of existing Milton Frye Nature Area trails to meet ABA standards. Application to be reviewed under the Norwich Zoning Regulations.

The record in this case includes the following documents:

Submitted by Applicant

- A-1 Application #42BCU22 (08-24-22)
- A-2 Narrative from Norwich and Dresden School District (accompanying documents) (6-29-22)
 - a. Location of Trail on Trails Map (09-2007)
 - b. Descriptive Proposal, by Russell Hirschler, Upper Valley Trails Alliance (6-2021)
 - c. Milt Frye Trail Study from Trailhead to Vernal Pool, Science Lab, Pathways Consulting, LLC (05-2022)
 - d. Milt Frye Trail Study from Lower Access, Pathways Consulting, LLC (5-24-2022)

Submitted by Zoning Administrator

ZA-1 Documents and Interested Parties list (08-31-22)

Submitted by Interested Party

42 BCUZZ Extibit A-1

TOWN OF NORWICH, VERMONT APPLICATION FOR ZONING PERMIT

Owner(s): Journ of A	larwich	
Mail Address: 300 Main 3	Street Town Norw	sieh ST VI Zip 05055
Day Phone: 802-649-1419	Eve Phone: Emai	1:
Applicant (If Different): 10W	of Norwich School	District
Mail Address: 22 Church	Street Town Noru	lich STVT Zin 05055
Day Phone: 603-643-3810	Eve Phone: 602-398-4393Emai	I steague @ san 70, org or
Description of Proposed Developm	Eve Phone: 603-398-4293 Emails to	tary daigle @ sauto.org
in the Wilton true	Vitara Kran for police	trunal and -117-lie
a proces appropriately	HAM' SEE PROPOSAL	TIMIN WILD PUBLIC
Street Address: Givard Wa	400' See proposal 400' attached. Zoning District: Y. Norwich Tax Map Lot #	RR (VR I) VI II VB C/I AQ 20 - 242 Lot Size: 37.09 4
Building Setbacks- Road Right-of-	way: _ Right Boundary:	Left Rear
Size of Building(s)/Additions: Stru	way: Right Boundary: cture A: Width <u>48"</u> Length <u>1401</u>)' Height
Structure B: WidthLength _	Height Area: Foo	otorint of Structure A
Additional Footprint of Structure B (if any) Total (1600)	# of Parking Spaces
Estimated Date of Completion:		

Please Attach: Site Plan with building 1	ocations, well & septic locations, roads, o	riveways, and streams. Drawing of
footprint of new construction and outline	es of additional floors. Elevation Drawing	g of multi-story buildings.
The undersigned hereby agree	s that the proposed development shall	be built in accordance with the
foregoing statements, attached plans,	and in accordance with the zoning and	subdivision regulations of the
Town of Norwich, and certifies that the of the real estate that is the subject of the	e above is true, correct, and complete.	The owner consents to inspections
Signature of Landowner (or Authorized	d Agent)	Date 6/29/3122
Zoning Office Checklist:	Additional Permits Required:	
Flood Hazard Area	Subdivision	PRD
Wetlands	Conditional Use	Driveway Access
Septic Location	Site Plan Review	Wastewater
Water Supply		
Parking	Fees:	Action Dates
Shoreline	Base Fee \$	Received 8-1-22
Aquifer Protection	Sq. Ft. x \$	Complete
Permit Conditions Agricultural Exemption	# of Lots \$	Granted
	Recording \$	Refused
Comments:	Other\$	Posted at Site 8-34-22 Age
	Total \$	Appeal By
	Date Paid	Effective
	To Finance	Expires
Signature of Zoning Administrator		Date
8/11	Application/Permit	

Exhibit A-2 #42BCU22



School Administrative Unit 70

41 Lebanon Street, Suite 2 Hanover, NH 03755-2147 www.sau70.org Jay Badams, ED.D., Superintendent Robin Steiners, MAT, Assistant Superintendent Jamie Teague, MBA, Business Administrator Rhett Darak, Director of Student Services Josh Mulloy, Director of Educational Technology

June 29, 2022

Roderick Francis, Town Manager Town of Norwich Development Review Board 300 Main Street Norwich, VT 05055

Dear Mr. Francis & the Norwich Development Review Board,

We do hope this communication finds you all well. Similar to our request on September 16, 2021 for Application #49BCU21 which allowed the District to upgrade our entry trail into the Milton Frye Nature Area, we are writing to you with an additional request. We are hoping to gain approval for upgrading the current trail system existing within the forest on town owned property.

As an abutting neighbor with which a public access is shared, we have executed a formal agreement with the Town of Norwich for the educational use of the property. As you know, students as well as residents have differing physical abilities and we want to make access to areas of the forest used for educational and other purposes as mentioned in the Vision Statement portion of the Milton Fry Nature Area's Management Plan as close to handicap accessible (ABA) as possible. This will help to make the enjoyment of the property more inclusive.

Due to time constraints, we are proposing to complete this project in two phases. Phase 1 would include upgrading approximately 1,100' +/- from the upper parking lot access at Marion Cross School to the Peisch field/vernal pool location. Phase 2 will encompass approximately 400' and will run from the lower parking lot at Marion Cross School to the Phase 1 trail.

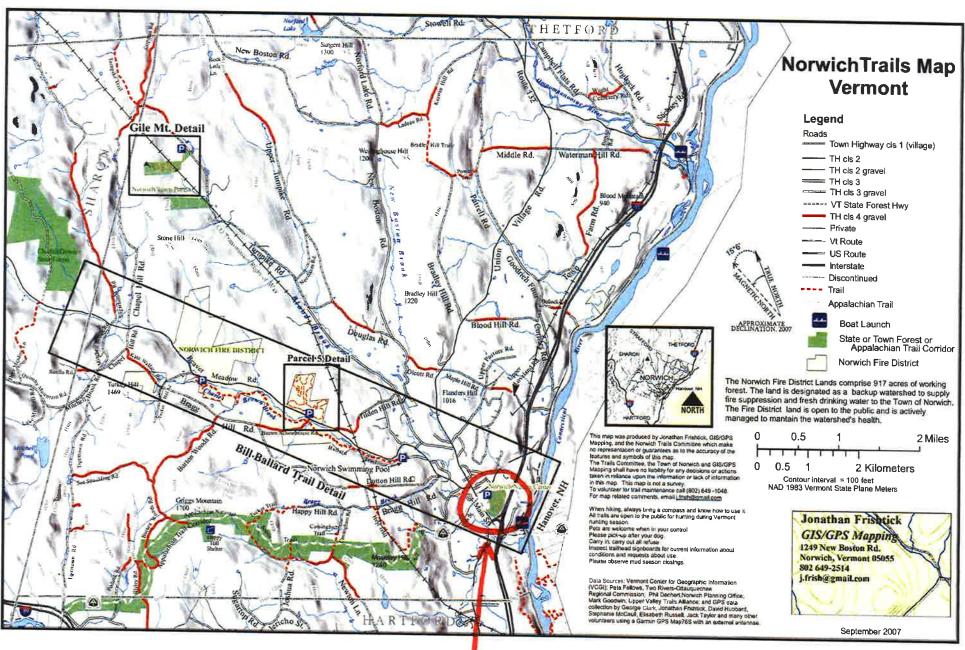
In order to follow established upgrading practices in the area, we have had multiple discussions with Russell Hirschler, Executive Director, of the Upper Valley Trails Alliance regarding the proposed project. We are including his descriptive proposal for the project as discussed in June of 2021 as well as elevation maps provided by Pathways Consulting.

We look forward to hearing from you and appreciate your consideration in this matter.

Jamie Teague

Business Administrator - Hanover, Norwich & Dresden School Districts

Cc: Tony Daigle, Facilities Director; Jay Badams, Superintendent; Tom Candon, Board Chair





Upper Valley Trails Alliance Milton Frye ABA Trail Cost Estimate June 2021



UVTA proposes to build an accessible trail within the Milton Frye Nature Area creating a loop for users of the trail.

The trail is approximately 1,400 feet long beginning at the eastern end of Girard Way, looping through Milton Frye Nature Area and reconnecting with Girard Way about 150' west of the entrance. Running slopes would be primarily 5% or less except where the topography requires a steeper trail, and in those cases will be built to ABA standards. We will strive to keep the trail approximately 4 feet in width with a 2-3% outslope.

The general build concept includes using large crib stones to hold trail materials in place. In locations where the trail follows generally flat ground, the stones will be embedded into the ground on both sides of the trail. In locations where the trail is not on flat ground, we will embed crib stones on the lower portion of the trail to the appropriate depth and fill in with smaller materials.

Construction will be managed by the Upper Valley Trails Alliance and will be composed of a 4-person crew at a rate of \$140/hour for full crew. Additional volunteers, staff or other subcontractors may be present during the project.

Maintenance for the trail after completion is minimal and can be estimated about 10 hours per year unless major repairs are needed due to unforeseen circumstances such as flood events, fallen trees, vandalism of trail, etc.

Appendix

The estimate above brings the entire trail to ABA Trail standards outlined here - https://www.access-board.gov/files/aba/guides/outdoor-guide.pdf

However, costs may be reduced from estimate above in a few ways:

- 1. Assistance of a machine operator to reduce labor needed to transport materials.
- 2. Minimize crib stones and stone material in flatter areas of the trail.

Alternative 1 will not alter the final design of the trail at all, it is only a matter of whether machinery is permitted in Milton Frye. A small skid steer can be used to transport materials from where they will be staged on Girard Way to the trail itself. This will significantly reduce the labor required to transport the materials, but will add some cost for hiring a machine operator, overall reducing the cost by \$5,000+. The machinery used will mostly travel on what will eventually be the trail anyway, so the impact is relatively minimal.

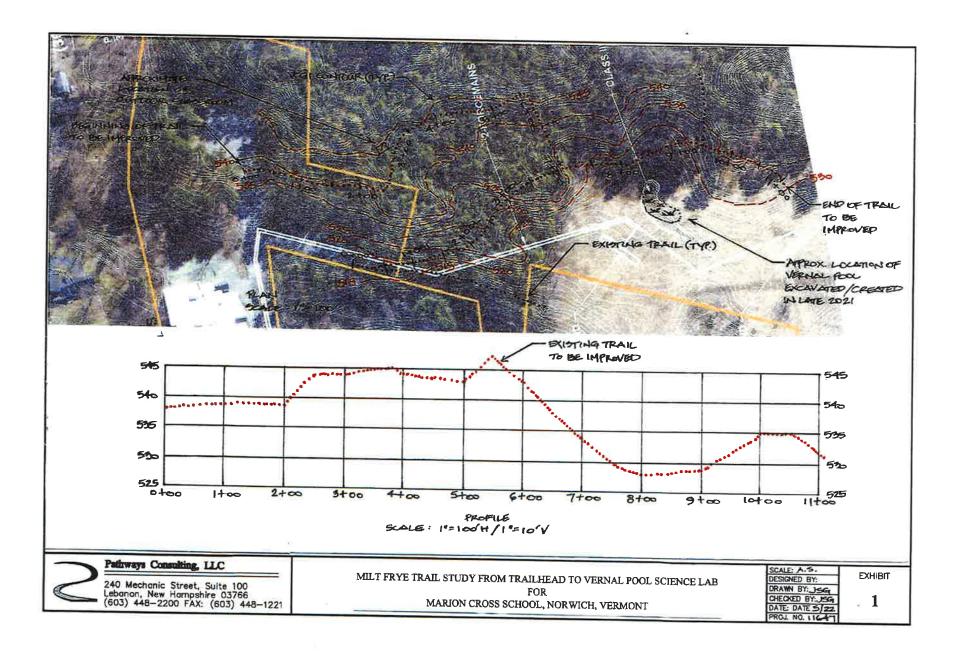
Materials and Equipment

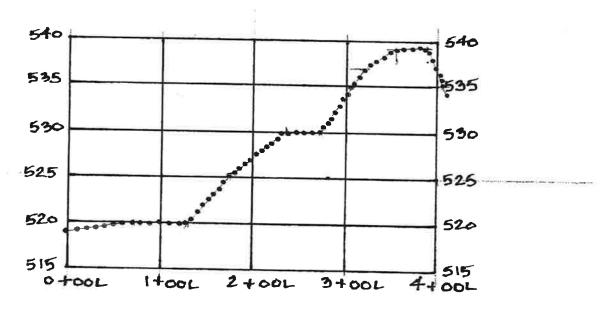
100 Cubic Yards of Crib Stone including trucking and delivery - \$10,000
70 Cubic Yards of 3/4 inch ledgestone including trucking and delivery - \$2,000
70 Cubic Yards of 3/8 inch hardpack including trucking and delivery - \$2,000
4 rolls geotextile cloth - \$1,000
Tracked Hauler Rental (Monthly rate from UVTA) - \$1,200
Vibrating Plate Compactor Rental - \$200
Subtotal Materials and Equipment - \$16,400

Labor and Other Sub-Contractors

Labor for crib stone installation (125 hours, 4 person crew) - \$17,500 Labor for spreading ledgestone/hardpack and finish work (60 hours, 2 person crew) - \$4,200 Labor for subcontracted heavy equipment and operator for trail rough in and materials staging (60 hours) - \$4,800 Subtotal Labor - \$26.500

Total Materials, Equipment, Labor - \$42,900 Standard 20% contingency - \$8,580 (only incurred if necessary) Total including contingency - \$51,480





PROFILE : 1"=100' H/1"=10'V

PATHWAYS CONSULTING, U.C. DATE: 5/24/22 PROJ. NO. 11647

MILT FRYE TRAIL STUDY FROM LOWER ACCESS
FOR
MARION CROSS SCHOOL, NORWICH, VERMONT



TOWN OF NORWICH DEVELOPMENT REVIEW BOARD

DOCUMENTS AND INTERESTED PARTIES

Application Number: #43BCU22

Lot: #20-148.000

111 Turnpike RD, Huntley Meadow

Public Hearing Date: September 15, 2022

Site Visit: N/A

Applicant/Landowner:

Town of Norwich

c/o Rod Francis PO Box 376

Norwich, VT 05055

Interested Parties:

NATURE OF APPLICATION - #43BUC22: Conditional Use Review for an application by the Town of Norwich for 111 Turnpike RD (Huntley Meadow), Tax Map 20-148.000, for development in the floodway for a proposed trail bridge across Bloody Brook. Application to be reviewed under the Norwich Zoning Regulations.

The record in this case includes the following documents:

Submitted by Applicant

- A-1 Application #43BCU22 (08-29-22)
- A-2 Narrative from Rod Francis, Town Manager (8-26-22)
- A-3 Parcel #20-148.000, site map, SFHA
- A-4 Memorandum, Proposed Pedestrian Bridge at Huntley Meadow Hydraulic Analysis by Fitzgerald Environmental Associates, LLC (08-05-2022)

Submitted by Zoning Administrator

ZA-1 Documents and Interested Parties list (08-31-22)

Exhibit A-1 #43BCU22

TOWN OF NORWICH, VERMONT APPLICATION FOR ZONING PERMIT

Mail Address: 300 Main St	Owner(s): Town of Norwich				
Day Phone: Eve Phone: Email: francis@norwich.vt.us Applicant (If Different): Mail Address: Town ST Zip Day Phone: Email: Description of Proposed Development: Conditional Use for Development in the floodway for a proposed trail bridge across Bloody Brook att111 Turnpike RD (Huntley Meadows). Zoning District: RR VR I VR II VB C/I AQ Street Address: If Turnpike RD (Huntley Meadows). Zoning District: RR VR I VR II VB C/I AQ Street Address: If Turnpike RD (Huntley Meadows). Zoning District: RR VR I VR II VB C/I AQ Street Address: If Turnpike RD (Huntley Meadows). Zoning District: RR VR I VR II VB C/I AQ Street Address: If Turnpike RD (Huntley Meadows). Zoning District: RR VR I VR II VB C/I AQ Street Address: If Turnpike RD (Huntley Meadows). Zoning District: RR VR I VR II VB C/I AQ Street Address: If Turnpike RD (Huntley Meadows). Zoning District: RR VR I VR II VB C/I AQ Tax Map Lot # 20148.000 Lot Size: 27acres Building Sctbacks- Road Right-of-way: N/A Right Boundary: N/A Left N/A Rear N/A Rear N/A Height Area: Footprint of Structure A Additional Footprint of Structure A: Width Length Height Area: Footprint of Structure A Additional Footprint of Structure B (if any) Total # of Parking Spaces Estimated Date of Completion: Aug 2023 Estimated Value \$ 40.000 # of Bedrooms Please Attach: Site Plan with building locations, well & septic locations, roads, driveways, and streams. Drawing of cooprint of new construction and outlines of additional floors. Elevation Drawing of multi-story buildings. The undersigned hereby agrees that the proposed development shall be built in accordance with the foregoing statements, attached plans, and in accordance with the zoning and subdivision regulations of the foregoing statements, attached plans, and in accordance with the zoning and subdivision regulations of the real estate that is the subject of the application by the Zoning Administrator at reasonable times. Signature of Landowner (or Authorized Agent) Date 98/26/2022 Zoning Office Checklist: Addit	Mail Address: 300 Main St	To	own Norwich	ST VT	_Zip <u>05089</u>
Applicant (If Different): Mail Address:	Day Phone:	Eve Phone:	Email:	rfrancis@norwich.vt.	us
Mail Address:					
Day Phone: Eve Phone: Email:				ST	Zip
Description of Proposed Development: Conditional Use for Development in the floodway for a proposed trail bridge across Bloody Brook at111 Tumpike RD (Huntley Meadows). Zoning District: RR VR I VR II VB C/I AQ					
Bloody Brook at 1111 Turnpike RD (Huntley Meadows). Zoning District: RR VR I VR II VB C/I AQ					
Street Address:					
Street Address: III Turne, Re Ro Tax Map Lot # 20 -148.000 Lot Size: 27acres Building Setbacks- Road Right-of-way: NA Right Boundary: NA Left NA Rear NA Size of Building(s)/Additions: Structure A: Width Length Height Structure B: Width Length Height Area: Footprint of Structure A Additional Footprint of Structure B (if any) Total # of Parking Spaces Estimated Date of Completion: Aug 2023 Estimated Value \$ 40,000 # of Bedrooms Please Attach: Site Plan with building locations, well & septic locations, roads, driveways, and streams. Drawing of footprint of new construction and outlines of additional floors. Elevation Drawing of multi-story buildings. The undersigned hereby agrees that the proposed development shall be built in accordance with the Town of Norwich, and certifies that the above is true, correct, and complete. The owner consents to inspections of the real estate that is the subject of the application by the Zoning Administrator at reasonable times. Signature of Landowner (or Authorized Agent) Zoning Office Checklist: K flood Hazard Area Subdivision Wetlands Conditional Use Site Plan Review Water Supply Parking Fees: Action Dates Shoreline Base Fee \$ Received O8 - 26 - 26 Aquifer Protection Sq. Ft. x \$ Complete Received O8 - 26 - 26 Aquifer Protection Recording Refused Posted at Site Appeal By Effective Expires Special Flood Hazard Area Conditional Use Expires Total \$ Appeal By Effective Expires		7	Zoning District: R	R VR I VR II	VR C/I AO
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Estimated Date of Completion: Aug 2023					
**************************************	Additional Footprint of Structure B	3 (if any)	Total	$_{-}$ # of Parking S	paces
Please Attach: Site Plan with building locations, well & septic locations, roads, driveways, and streams. Drawing of footprint of new construction and outlines of additional floors. Elevation Drawing of multi-story buildings. The undersigned hereby agrees that the proposed development shall be built in accordance with the foregoing statements, attached plans, and in accordance with the zoning and subdivision regulations of the foregoing statements, attached plans, and in accordance with the zoning and subdivision regulations of the foregoing statements, and certifies that the above is true, correct, and complete. The owner consents to inspections of the real estate that is the subject of the application by the Zoning Administrator at reasonable times. Signature of Landowner (or Authorized Agent) Date 08/26/2022 Date 08/26/2022 Additional Permits Required: Wariance Wariance Wariance Water Supply Parking Shoreline Aquifer Protection Permit Conditions Agricultural Exemption Recording Agricultural Exemption Recording Refused Other Special Flood Hazard Area Conditional USe Date Paid Total Appeal By Area Conditional USe Date Paid Effective Expires	Estimated Date of Completion: Aug	Estimated Va	alue \$ 40,000	# of Bedroo	oms
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To Finance Expires	Special Flood Hazard	Total \$_/		Appeal By _	
D. Harrie	Area Conditional USe	Date Paid		Effective _	
	*	To Finance		Expires	
Signature of Zoning Administrator Date 08/29/2022	<u> </u>				
Application/Permit #43BCU22	8	or			29/2022

Town of Norwich

TO: Development Review Board FROM: Rod Francis, Town Manager

RE: 43BCU22: Conditional Use Review for Trail Bridge at 111 Turnpike RD — Huntley Meadow

DATE: August 26, 2022

Background

For some years there has been a community led initiative to construct a trail bridge for pedestrians and cyclists across the Bloody Brook connecting Huntley Meadows with the Beaver Meadow RD neighborhood adjacent to the American Legion at 228 Beaver Meadow RD. The town has explored informal arrangements for access to the Beaver Meadow Rd side of the bridge from the American Legion parking lot (see attached map). The town has also been working with engineers and staff of the Vermont Department of Environmental Conservation (VT DEC) to review and approve any proposed structure because i) the proposed project will alter the stream bank and ii) the parcel is subject to the Special Flood Hazard Area (SFHA) requirements of the Norwich Zoning Regulations (NZR).

Section 5.05(B.1.a) of the NZR states that any development within the regulated floodway must demonstrate that the proposed development result in no increase in flood level during a so-called base flood event. This application demonstrates that there will be an insignificant increase in the flood level assuming a conceptual design for a bridge abutment and a ramp on the western (Beaver Meadow RD) side of the bridge.

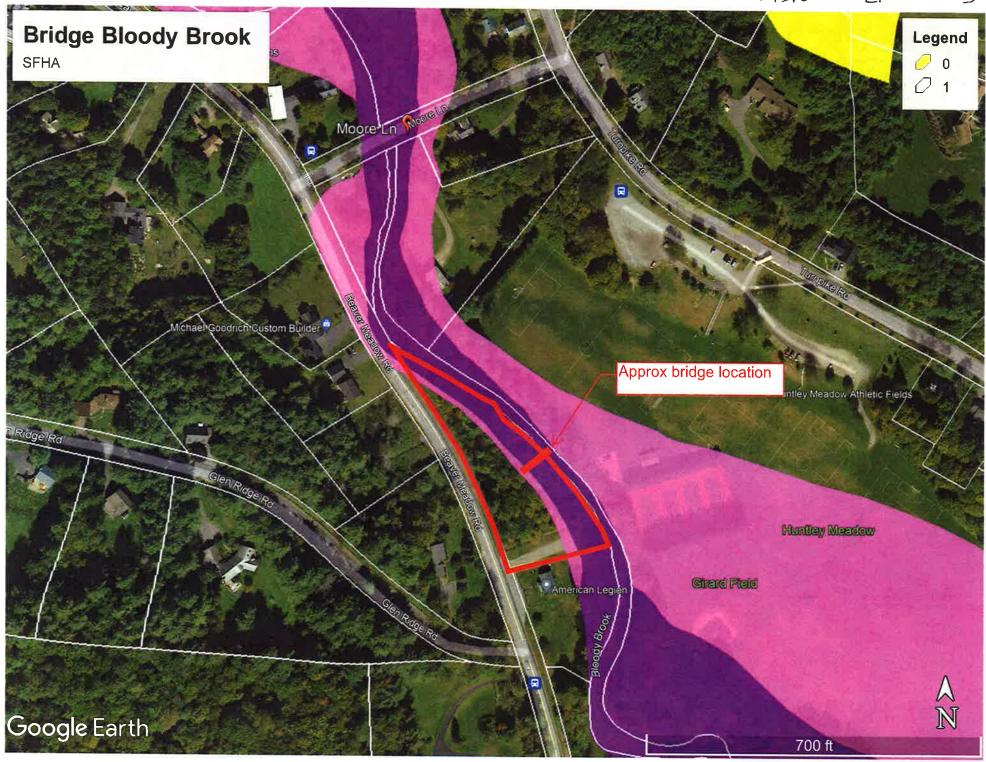
In addition to this Conditional Use Review the proposed project will require a stream alteration permit from VT DEC and a detailed structural design conducted in the bridge and its abutments that would demonstrate that the design has adequate structural stability, adequate anchoring, and minimal additional contribution to flood damage in a large flood event. The scenario envisioned here which the design needs to avoid is flood waters breaking the bridge up and/or detaching it from its abutments creating a potential hazard to the public and property downstream.

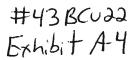
Application

This application (see attached) has been sent for comment to the Regional Flood Plain Manager at VT DEC.

The attached analysis and drawings confirm that the design of the abutments and the ramp will have a "negligible impact on flood levels on Bloody Brook in the vicinity of Huntley Meadows". The proposed total amount of "floodway fill" is 77.4 cubic feet The ramp is designed to be immediately downstream of the abutment thus minimizing the effect of flood waters being directed around or over a structure in the floodway.

The town is asking for conditional use approval under Section 5.05(B.1.a) of the NZR so we can then move forward with additional engineering work and a stream alteration permit application.







Fitzgerald Environmental Associates, LLC.

Applied Watershed Science & Ecology

MEMORANDUM

To:

Rod Francis, Norwich Town Manager

From:

Jordan Duffy, PE, CPESC

Re:

Proposed Pedestrian Bridge at Huntley Meadows Park - Hydraulic Analysis

Date:

August 5, 2022

Background

On behalf of the Town of Norwich, Fitzgerald Environmental Associates (FEA) conducted a hydraulic analysis of a proposed pedestrian bridge over Bloody Brook at Huntley Meadows Park in Norwich, VT. The conceptual proposed bridge design would include the installation of the bridge and associated abutments within the Federal Emergency Management Agency (FEMA) mapped floodway.

Based on the Norwich Zoning Regulations (amended in 2009), Section 5.05(B.1.a) states that any development within the regulated floodway must demonstrate through hydrologic and hydraulic analyses that the proposed development will results in no increase in flood levels during the occurrence of the base flood (i.e., 100-year flood). Demonstration of the no increase in flood levels will be reviewed by the review board, and a conditional use approval will be granted prior to permitting.

FEA has conducted a hydrologic and hydraulic analysis of Bloody Brook through Huntley Meadows Park, and the details of the analysis are explained below. FEA has not conducted a full-scale engineering design of the proposed bridge. The analysis conducted consists of a conceptual bridge design and bank stabilization plan to inform the proposed conditions hydraulic model. The conceptual design was able to prove that an insignificant rise in the flood level would occur during the 100-year flood event. If the Town chooses to move forward with the project, a detailed structural design and analysis must be conducted on the bridge and associated abutments to confirm structural stability, adequate anchoring, and minimization to flood damages during large flood events. The conceptual plans, including model cross section locations, proposed bridge location, and a detailed cross section of the river and conceptual level bridge layout are included in Attachment 1.

Hydrology

A hydrologic analysis was conducted to determine the 100-year flood flows at Bloody Brook in Huntley Meadows Park. The FEMA Flood Insurance Study (50027CV001A) for Windsor County was reviewed to determine that the 100-year flood flows at the confluence of the Connecticut River and Bloody Brook are 5,538 cubic feet per second (cfs). The Proportional Area Method was then used based on the contributing drainage areas of the confluence location and the Huntley Meadows Park location (18 and 15 square miles, respectively), to calculate the flow rate at the park to be 4,615 cfs. This was the flow rate used for the hydraulic analysis described below.

Hydraulics

A hydraulic analysis was conducted using the Hydrologic Engineering Center River Analysis System (HEC-RAS) Version 6.2 program, developed by the US Army Corps of Engineers. Ground surface elevation and stream geometry data were obtained using a combination of available LiDAR data, and a stream surveyed cross section at the bridge location. A model was developed utilizing seven (7) cross sections, including bounding cross section locations that correspond to established cross sections in the FEMA Flood Insurance Rate Map (50027C0377E) for the area. Attachment 2 includes a FEMA FIRMette, showing the established FEMA cross section locations (Cross section F and G) and their associated water surface elevations (WSE) resulting from the 100-year flood flows. The existing conditions model was built to accurately recreate the WSE for the established cross section locations. The existing model was able to reproduce resulting WSE at the known cross section locations to within 0.3 feet. See Table 1 below for further details.

The proposed conditions model was then created by altering the geometry of the existing conditions model at the bridge cross section (XS ID - 1022) to account for proposed bank armoring in a section of steep eroding bank, slight regrading of the floodplain on the eastern bridge approach, and the addition of the bridge structure and abutments within the floodplain. The proposed bridge geometry exceeds the average measured bankfull width of Bloody Brook. Attachment 3 contains excerpts from HEC-RAS showing the existing cross section at the bridge and proposed cross section including the bridge and abutments. Table 1 below summarizes the modeling results, including the cross-section IDs, the corresponding FEMA cross sections, resulting WSE from both the existing and proposed models, and the differences in WSE between the FEMA model and the FEA existing model, and the FEA proposed and existing model. All WSE and WSE differences are shown in NAVD88 feet.

FEA XS	FEMA XS	FEMA FIRM WSE	WSE Difference (FEMA FIRM – FEA EX)	FEA Existing Conditions WSE	FEA Proposed Conditions WSE	WSE Difference (FEA PR – FEA EX)
1658	G	553.8	0.29	553.51	553.51	0
1393	0 = :	•	(; +)	550.11	550.11	0
1202	Ne:	*	2#1	546.78	546.78	0
1022	27	13		545.18	545.21	0.03
848				543.35	543.35	0
571	(8)	E	<u> </u>	539.82	539.82	0
397	F	537.8	0.09	537.71	537.71	0



Conclusion

Based on the hydraulic analysis discussed above, FEA concludes that the conceptual level bridge layout and design would have a negligible impact on flood levels on Bloody Brook in the vicinity of the Huntley Meadows Park. Changes in WSE are localized to the immediate area around the bridge, and only have an increase of 0.03 feet. As FEMA flood elevations are reported in tenths of feet, any rise less than 0.05 feet is considered negligible. FEA supports the request for a conditional use approval for the development of a pedestrian bridge within the floodway of Bloody Brook.

If the conditional use approval is granted, FEA recommends that a detailed bridge design and structural analysis be conducted to verify that the design meets the geometric configuration set forth in this conceptual design, adequate anchoring system is in place, and the bridge is designed in a manner that minimizes flood damage to the structure. In addition, a Vermont Department of Environmental Conservation (DEC) Stream Alteration permit must be sought for the proposed work. FEA initiated conversations with the DEC River Engineer for this district based off the concept plans. Further coordination and permitting effort will be required.

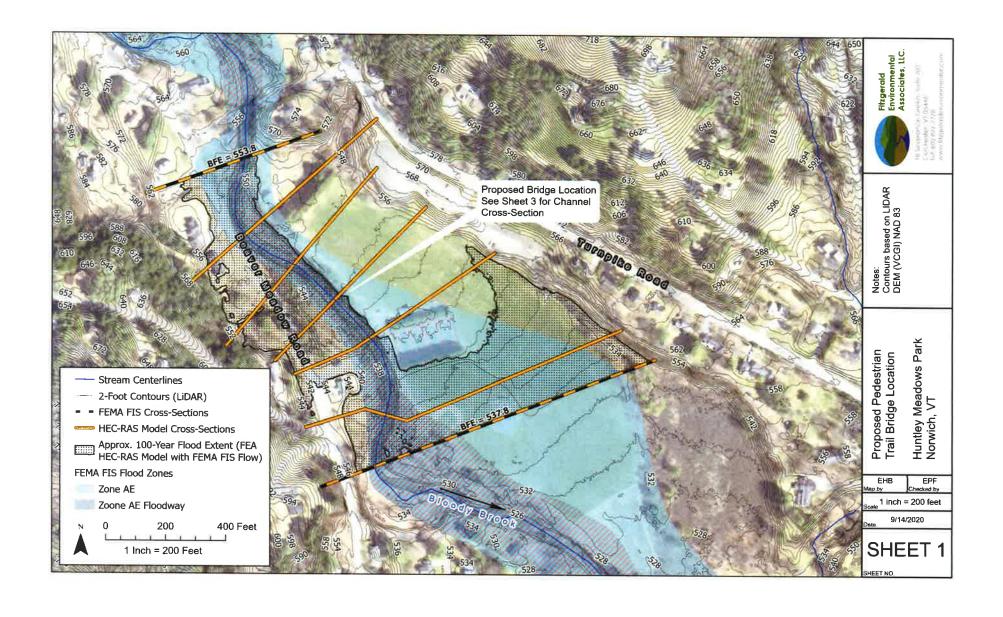
Attachments

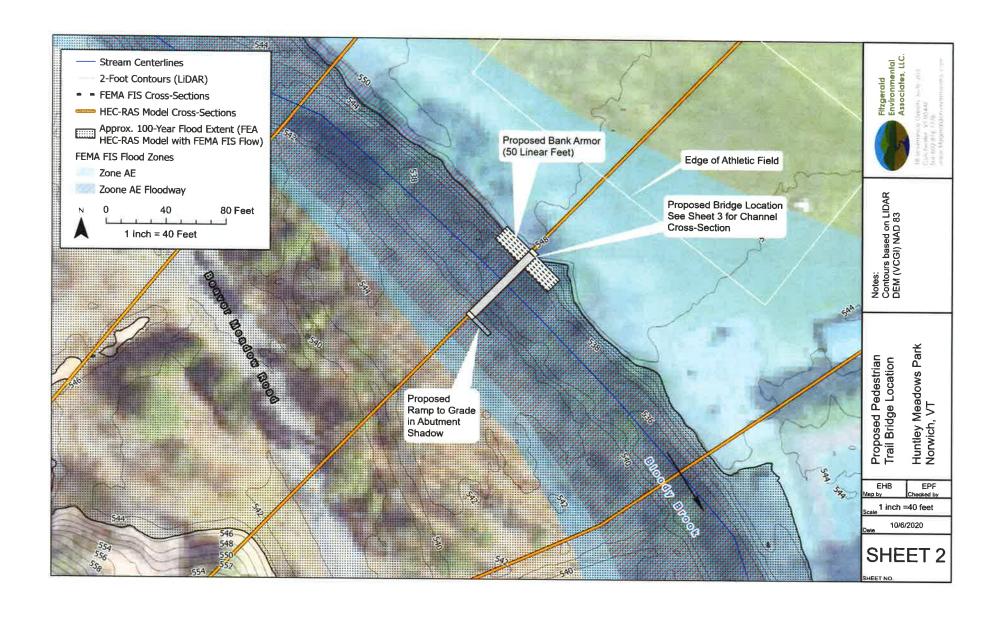
- Attachment 1 Conceptual Plans (FEA)
- Attachment 2 FEMA FIRMette
- Attachment 3 HEC-RAS Cross Sections

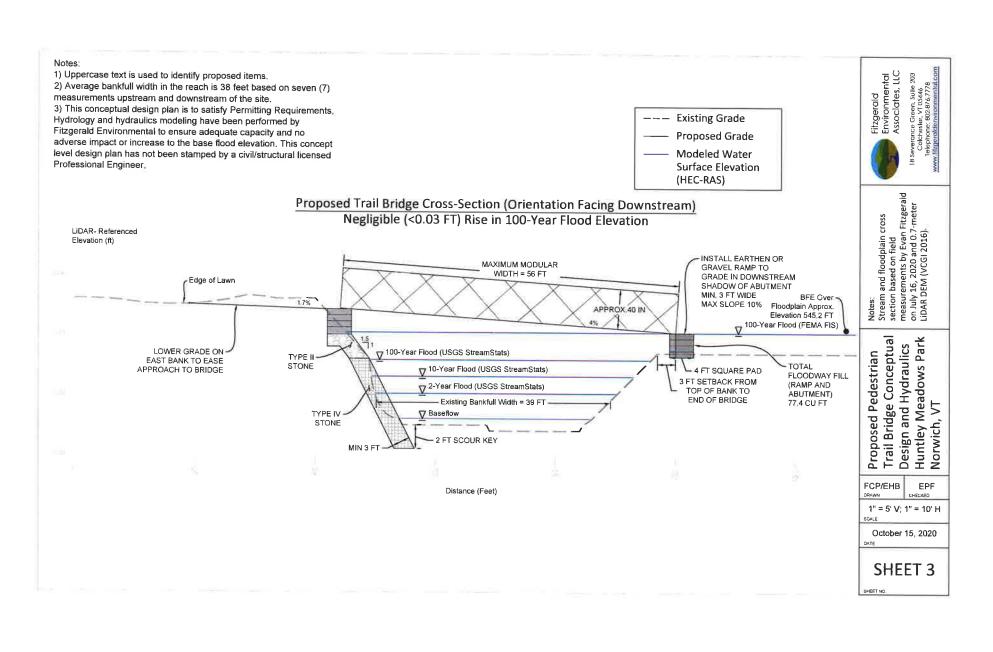


Attachment 1 Conceptual Plans (FEA)









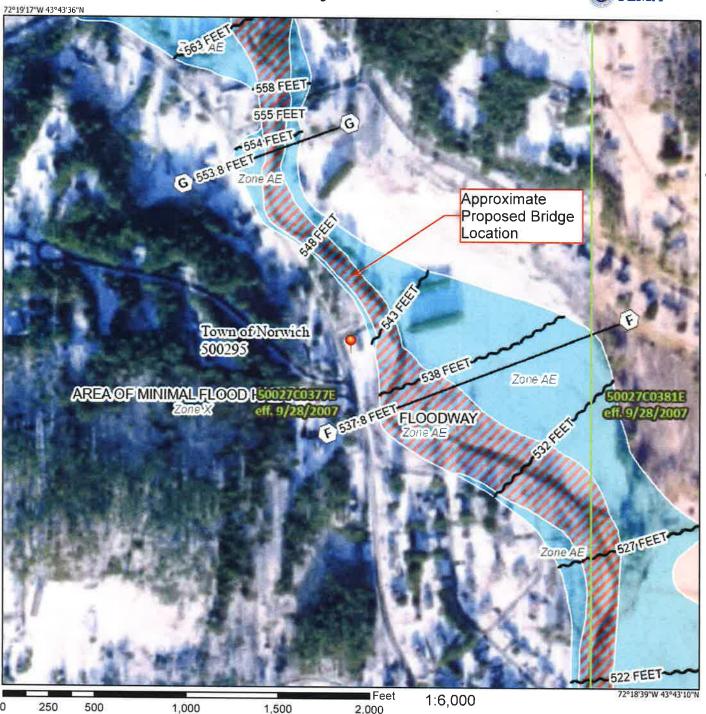
Attachment 2 FEMA FIRMette



National Flood Hazard Layer FIRMette

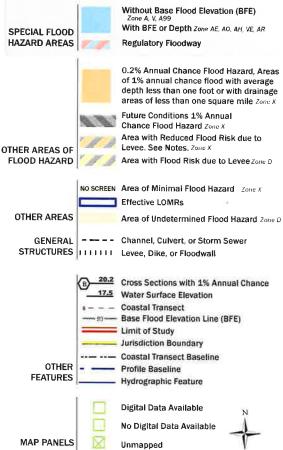


Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



Legend

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



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

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

an authoritative property location.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/3/2022 at 3:31 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Attachment 3 HEC-RAS Cross Sections



