

Town of Woodstock
31 The Green, Woodstock, VT 05091
802-457-3456
www.townofwoodstock.org

REQUEST FOR BIDS:

DATE: March 6, 2025

PROJECT TITLE: **Design-Build Architectural/Engineering Professional Services for House Elevation Project at 1023 East Woodstock Road, Woodstock, VT 05091**

PROPOSAL DUE DATES: Bid proposals are due by Monday, March 24, 2025, no later than 1:00 PM EST to the Woodstock Municipal Manager's Office. See Section 5 for specific directions on bid submission.

PROPOSED TIME PERIOD FOR CONTRACT: Initial product delivery must be completed by October 31, 2025.

BIDDER ELIGIBILITY: This procurement is open to those bidders who satisfy the minimum qualifications stated herein and are available for work in the State of Vermont.

CONTENTS OF THE REQUEST FOR BIDS (RFB):

1. Introduction
2. Scope of Work
3. General Information for Bidders
4. Pricing
5. Submission of Proposals
6. General Provisions
7. Evaluation and Contract Award
8. Bid Proposal Form

1. INTRODUCTION

A. Purpose Proposals are requested providing architectural and/or engineering services to perform floodproofing and construction work for a residence built originally in 1950 to a new elevation approximately 8' vertically in its current location. The house rests within the fringe of the Ottauquechee River Special Flood Hazard Area (SFHA) limits.

2. SCOPE OF WORK

A. The Town is requesting bids for architectural/engineering services to perform a floodproofing design for an existing two-story house with an approximate footprint area of 1,644 square feet. The building is proposed to be elevated as a singular unit approximately 8' vertically in its present location, in addition to two (2) existing chimneys. Improvements to the existing accessory building (barn/garage building) will not be a component of the bid proposal.

The work includes designing a floodproof basement/crawlspace level for the existing home to be located upon, where preliminary due diligence contemplates automated flood gates designed to allow inundation-level flood waters to pass through this basement/crawlspace structure area during a given severe weather event.

Detailed concept designs have been provided by the property owners for elevating the residence, utilizing the services of a professional house moving business and necessary subcontractor activities. The overall effort contemplates elevating the existing dwelling temporarily, while constructing a new crawlspace foundation section. Modern-day compliant floodproofing design elements are requested for this house at 1023 East Woodstock Road.

In addition to providing a stamped architectural and/or civil engineering plan, the awarded Contractor will be required to hire the professional labor forces necessary to perform the house elevation work, including all related subcontractor activities outlined in the line-item project cost breakdown provided in the bid package.

The awarded Contractor will also serve as the Project Manager during the construction phase and oversee decision-making for these site activities and provide periodic site visits as deemed necessary for project delivery.

It will be the discretion of the awarded Contractor to provide a final design that will meet the requirements established in the sub-recipient grant agreement overseen by Vermont Emergency Management - Swift Current Program.

Understanding the work necessary to floodproof the dwelling requires professional floodproofing measures to be designed site-specific, the Town is requesting technical

expertise that may include but not limited to disciplines specific to architects, civil engineers, structural engineers, or a combination thereof to design a plan based on hydrologic and hydraulic impacts necessary to protect this historic building along VT Route 4, in Woodstock.

The awarded Contractor will be tasked with employing a team of qualified construction contractors and trade professionals with expertise in house elevations, excavation/grading, foundation construction, house framing, material distribution, landscaping, electrical/plumbing, flooring, and erosion control disciplines necessary to complete the approved Contractor design. Federal Davis-Bacon wage requirements will need to be met for the sub-contractor activities called upon throughout the construction phase.

The Town of Woodstock will coordinate with the awarded Contractor on any related permits that would be required for the project, ensuring all applicable permits are in place prior to construction scheduling.

Awarded Contractor will provide an approved flood elevation determination for the completed work, to be recorded by the Town of Woodstock Clerk's Office.

The Town of Woodstock serving as the sub-recipient of the grant funds from the state's "Swift Current Grant Program" seeks a contractor that will ideally complete the design work by early summer (or sooner) to provide time for area contractors to complete the project by the end of the 2025 construction season. The Town does not require this deadline as a requirement of this bid proposal submission, though would encourage this occupational performance request, if possible.

The Scope of Work provided is based on the property owner's due diligence efforts, which includes a cross-sectional concept design(s) for the proposed basement/crawlspace area. The concept also considers automated flood gates as part of the new proposed foundation section, allowing potential floodwaters to effectively pass through the crawlspace level of the dwelling during a severe weather event.

The awarded Contractor will adhere to the requirements set by the State of Vermont for the "Federal Program Title – FY23 Flood Mitigation Assistance (FMA) Swift Current Program" under Project Agreement #02140-32004-007 in coordination with the Town of Woodstock serving as the grant Sub-Recipient. The grant award for the total project cost is estimated at \$288,717.07 with a federal award amount of \$216,537.80 awarded for the project and the remaining \$72,179.27 will be paid for by Vermont Emergency Management.

The Request for Bids does not require the bid submission to include a conceptual drawing; only a cost proposal on company letterhead seeking to entertain the design-build work accompanied by a detailed work/cost proposal and lump sum final quote amount provided.

Separate attachments will include:

- Vermont Standard Subrecipient Agreement
- Attachment A – Scope of Work to be Performed
- Attachment B – Payment Provisions
- Attachment C – Standard State Provisions for Grants and Contracts,
- Attachment D – Other Grant Agreement Provisions
- Attachment E – Funding Source Special Conditions
- Attachment F – Concept Drawings, Proposed Site Plan, Cross-Section Details, GIS Map, Parcel Map.
- Attachment G – Hydras Engineering, PLLC - H&H Modeling Report (May 8, 2024)

B. Design as Requested by the Property Owners, proposes to do the following:

- Removal of the existing 4' of exterior siding and sheathing and disposal of construction debris per FEMA requirements.
- The existing structure will be raised to the engineer's determined height of BFE 671' by a qualified house moving company with experience elevating residential structures for the addition of new foundations. The project also necessitates elevating and properly connecting the two (2) existing chimneys and one fireplace for the primary residence as part of the work.
- The old foundation will be filled in and compacted in lifts of 6" by a qualified contractor/subcontractor.
- Project contemplates approximately 40" foundation pad of clean crushed ledge extending 3' beyond the footprint of the house, which will be built up on the old foundation area.
- The existing grade around the foundation pad will be partially raised and compacted in lifts of 6" by an excavator using trucked in material.
- Construct a 5' tall frost wall with a 1' footer section to be poured on top of the foundation pad, with crawl space 5' tall vertically (including flood venting or flood gates) starting at BFE elevation 666' (3 feet above BFE) will be poured by a concrete contractor. While the house is elevated, the new crawlspace area will include a new pressure treated sill plate installed around the perimeter of the structure, a carrying

beam with two (2) vertical posts installed, a new floor system built, and a wall/sill connection around perimeter of elevated building structure.

- Once the primary residence is lowered onto the new the new crawlspace foundation, a 4" perforated perimeter drain will be installed around the entire foundation structure to daylight towards the west, with backflow baffles installed by the contractor/subcontractor.
- Two stone retaining walls will be built to hold the remaining fill.
- One wall is 26' from the front of the house and runs approximately 100' with each end tapering into the existing grade.
- A second wall 60' from house starting at 4' in height near the existing barn foundation running east and tapering to 1' tall for a total linear distance of 80' by the contractor/subcontractor.
- Remaining fill material will be added and compacted in separate 6" lifts and graded up to house to adjacent grade of BFE 669' around entire foundation, and gravel compacted on the existing parking area.

Interior and exterior finishing, including:

- Install new electrical service panel in new first floor utility room, including hookup to exterior line. The service will be compliant with a total conditioned space area of approximately 4,500 square feet.
- Installation of new boiler, water heater, pressure tank and accompanying plumbing lines and venting in new first floor utility closet.
- Exterior siding and sheathing 4' from ground level will be removed, windows and door casings will be removed to allow access for lifting beams. Framing of new sill plates, new support beam with two vertical posts, and new floor system will be installed and connected around perimeter of building. Disposal of demolition materials removed from the site for the project must follow FEMA guidelines.
- Existing windows and doors will be re-installed in their existing openings once the house has been lowered.
- Exterior clapboards will be replaced to match by the contractor/subcontractor.
- The awarded Contractor will work closely with the Town of Woodstock staff serving as the grant sub-recipient responsible for documenting the project selection and construction management process. The Municipal Manager, Eric Duffy will manage the day-to-day activities, and grant coordination/documentation. Technical assistance and project coordination will be provided by property owners Darren McCullough/ Kirsten Connor.

- Prospective Contractors are invited to visit the property with the acknowledgement and permission of the property owners, prior to the proposed meeting date. The Town is willing to meet on site at the request of the property owners.

No Rise certification with addition of fill material provided by Hydras Engineer · Assistance with LOMR-F application provided by Hydras Engineer.

D. Terms and conditions may be further defined in a formal contract.

E. Awarded Contractor(s) will submit an all-inclusive, fixed price bid, including and related sub-contractor costs, if applicable.

3. GENERAL INFORMATION FOR BIDDERS

A. Right to Accept or Reject Proposals - The Town of Woodstock reserves the right to accept or reject any proposal, at their sole discretion, and to award a contract based solely on their determination of the best proposal considering all circumstances and conditions applicable to this project.

B. Right to Cancel or Postpone the Project

The Town reserves the right at its sole discretion to reject any and all proposals received without penalty and not to issue a contract as a result of this RFB.

C. Right to Retain and/or Utilize Information Contained in Submitted Proposals.

The Town reserves the right to retain all the proposals and to use any ideas in a proposal regardless of whether the proposal is selected.

Submission of a proposal indicates acceptance by the firm of the conditions contained in this RFB unless clearly stated to the contrary and specifically noted in the proposal submitted and confirmed in the contract between the Town and the selected firm.

4. PRICING

A. Proposals will clearly state and explain all costs associated with the services to be provided as defined in Section 2, Scope of Work and Section 2(B) – the Design-Build as Requested by the Property Owners.

The Town will not make advance, incremental or partial payments. All work/deliveries must be satisfactorily completed before being invoiced.

B. There is no expressed or implied obligation on the part of the Town to reimburse bidders for any expenses incurred in preparing or presenting proposals in response to this request.

Town of Woodstock, VT Request for Bids (RFB) –

5. SUBMISSION OF PROPOSALS

A. Bids should be submitted electronically to the following email address: eduffy@townofwoodstock.org. Bids will also be accepted by mail or in person by the proposal submittal deadline of Monday, March 24, 2025, 1:00 PM EST.

B. Respondents are required to provide a separate Bid Proposal Form on company letterhead to submit as part of the RFB proposal. The Bid Proposal Form should include all the work outlined in the RFB, as submitted. The total contract amount should be submitted as a lump sum amount, with a line-item cost breakdown.

Any deviations from the RFB Scope of Work presented must be outlined by the contractor in detail as part of the bid submission, where it will be the Town of Woodstock's discretion whether to consider the merits of the amendment proposed.

The completed form and any attachments should be scanned to PDF format and sent as a single attachment to the email address provided. Failure to use include a separate Bid Proposal Form on company letterhead as part of the bid proposal shall be deemed non-responsive and shall invalidate any submittal. Additional materials which clarify and/or supplement the response form may be attached to the Bid Proposal Form.

C. All proposals must be submitted to the Town of Woodstock in care of the Municipal Manager with reference to "Design-Build Architectural/Engineering Services for the House Elevation Project at 1023 East Woodstock Road, Woodstock, VT 05091" in the email subject line, or on the envelope if submitted by mail or in-person.

Any bid may be withdrawn in writing prior to the scheduled time for the opening of bids. Any bids received after the time and date specified shall not be considered. Bidders shall bid to specifications and any exceptions must be noted. A bidder submitting a bid thereby certifies that the bid is made in good faith without fraud, collusion, or connection of any kind with any other bidder for the same work, and that the bidder is competing solely on his/her behalf without connection with or obligation to any undisclosed person or firm.

D. There will be a public opening of the bids received by the Town, and they will be reviewed by the Woodstock Selectboard during their scheduled meeting March 31, 2025.

6. GENERAL PROVISIONS

A.

1) The Municipal Manager will serve as the single point of contact for this solicitation:
Eric Duffy, Municipal Manager at 31 The Green, Woodstock, VT 05091 Phone: 802-457-3456
Email: eduffy@townofwoodstock.org

2) Except as noted below, all communication between the bidder and the Town upon release of this RFB shall be with the Municipal Manager. Any other communication will be considered unofficial and non-binding on the Town. Bidders are to rely on written statements issued by the Municipal Manager.

3) Should potential bidders wish to view the site with a town representative prior to bidding, please contact Municipal Manager, Eric Duffy at 802-457-3456 before March 24, 2025 to coordinate a site visit with concurrence from the property owners.

Town of Woodstock, VT Request for Bids – Design-Build Architectural/Engineering Professional Services for the House Elevation Project at 1023 East Woodstock Road, Woodstock, VT 05091.

Any amendments or changes to the Request for Bids that occur subsequent to the issuance date will be posted on the Town of Woodstock website and the Vermont League of Cities and Towns Classified section.

No Obligation to Contract:

This RFB does not obligate the Town to contract for services specified herein. The Town reserves the right to reject all bids and to either withdraw from the RFB or reissue a revised RFB later.

B. Commitment of Funds

- The Town of Woodstock Selectboard is the only entity that may legally commit the Town to the expenditure of funds for a contract resulting from this RFB. No costs chargeable to the proposed contract may be incurred before receipt of a fully and properly executed contract.

C. Right to Extend Contracts

- The Town reserves the right to extend a contract for ongoing services without reissuing a RFB.

D. Insurance Requirements

1) The Contractor will furnish the Town with a certificate(s) of insurance executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth below.

2) The Contractor shall, at its own expense, obtain and keep in force insurance coverage during the full term of the contract. Upon the Town's acceptance of the Contractor proposal, a Certificate of Insurance shall be provided to the Town by the Contractor or the Contractor insurance company before any work is performed. The Contractor policies shall name the "Town of Woodstock" as an additional insured.

3) By submitting a bid, Bidder warrants and promises that it will comply with all State of Vermont and Federal requirements.

The awarded Contractor shall indemnify the Town and its representatives against any claim, loss, damage, or liability arising from any such law or regulation related to any activity of Contractor, subcontractor, or its agents or employees.

The awarded Contractor(s) shall be responsible for all damage to property, or injury to persons, arising out of any act or failure to act on the part of its agents or employees. They shall indemnify and hold harmless the Town from any and all demands, suits, or judgments arising in conjunction with or as a result of the Contractor's performance of this contract.

4) Liability Insurance -- Contractor shall maintain Commercial General Liability Insurance with a limit of not less than \$1,000,000 per each occurrence and General Aggregate coverage of at least \$2,000,000.

The Contractor will, at all times during its service to the Town, comply with all applicable workers' compensation, occupational disease, and occupational health and safety laws, statutes, and regulations to the full extent applicable.

The Town will not be held responsible in any way for claims filed by the Contractor or their employees for services performed under the terms of this contract. Additionally, the Contractor is responsible for ensuring that any subcontractor(s) provide adequate insurance coverage for the activities arising out of subcontracts.

5. EVALUATION AND CONTRACT AWARD

A. Evaluation Procedure

1) Proposals will be evaluated in accordance with the requirements stated in this request and the Town of Woodstock Procurement Policy.

2) The Municipal Manager may contact the bidder for clarification of any portion of the bidder's proposal.

B. Evaluation and Selection Criteria

The Town will consider the following criteria when evaluating and selecting proposals:

- Price.
- Clarity and completeness of the submitted proposal.
- Bidder's ability to perform within the specified time limits.
- Bidder's experience and reputation, including past performance for the Town of Woodstock.
- Quality of the materials and services specified in the bid.
- Bidder's ability to meet other terms and conditions, including insurance and bond requirements, if any.
- Bidder's availability to provide future service, maintenance, and support.
- Bidder's financial stability.
- Any other factors that the Town determines are relevant and appropriate in connection with a given project or service.

C. Notification to Bidders

The Municipal Manager or designee will notify the successful Contractor of the Town's selection as soon as possible following the Selectboard's acceptance of the bid and awarding of a contract.

D. Start of Work

Work will commence on a date and at a time mutually agreed to by the Town and the Contractor, following the execution of an approved and signed contract. A separate Bid Proposal Form will be included on company letterhead acknowledging the Scope of Work presented and corresponding lump sum amount including all contractor and subcontractor work involved for the project to the Town of Woodstock, VT Request for Bids – Design-Build Architectural/Engineering Professional Services for the House Elevation Project at 1023 East Woodstock Road, Woodstock, VT 05091.

1. BID PROPOSAL: Check here [] if supplementary documentation is attached.
2. Bid Scope of Work as a Lump Sum:
3. Work will include all related exterior and interior improvements as outlined in the detailed scope of work. Any additions, omissions, related changes to the work must receive written approval by the Town of Woodstock, serving as the sub-recipient in the grant proposal.
4. All prices above shall be valid for 30 days and for the duration of the contract period. All prices shall include all labor and material costs, and any discounts offered. All fuel surcharges, delivery charges and miscellaneous charges that are not part of the terms and conditions of this solicitation or contract will not be paid and only hold up payment if they are added to a submitted invoice.

Company: _____

Authorized Representative: _____

Address: _____

Phone: _____

Email: _____

Signature: _____ Date: _____



**STATE OF VERMONT
STANDARD SUBRECIPIENT AGREEMENT
(Federal Fund Source to Non-State Subrecipient)**

VERMONT DEPARTMENT OF PUBLIC SAFETY

**FEDERAL PROGRAM TITLE
FY 2023 Flood Mitigation Assistance (FMA) Swift Current Grant Program**

**AGREEMENT WITH
Town of Woodstock
Agreement #02140-32004-007**

Award Amount: \$216,537.80

DPS Financial Office Use Only

- ☒ Unique Entity ID# Checked on SAM.gov Date: 12/3/24 Initials: ZP
 - ☒ Suspension and Debarment Exclusions Checked on SAM.gov Date: 12/3/24 Initials: ZP
 - ☒ DPS Restricted Parties List Checked Date: 6/17/24 Initials: ZP
 - ☒ Risk Assessment Completed Date: 12/3/24 Initials: ZP
 - ☒ Subrecipient vs. Contractor Determination Form Completed Date: 12/3/24 Initials: ZP
 - ☒ Single Audit Check & Delinquent SAR (VT Bulletin 5_Eligibility Query in VISION) Date: 12/3/24 Initials: ZP
 - ☒ BGS Office of Purchasing & Contracting Debarment List Checked <https://bgs.vermont.gov/purchasing-contracting/debarment> Date: 12/3/24 Initials: ZP
 - ☒ Certificate of Insurance Date: 12/3/24 Initials: ZP
 - ☐ Executive Compensation Data Collected (if subaward \$30K or over) Date: _____ Initials: _____
- Entered In: ☐ VT Grant Tracking (VISION) Date: _____ Initials: _____
- ☐ FFATA (if \$30K or over) Date: _____ Initials: _____
- ☐ FFATA Executive Compensation Amount (if required) Date: _____ Initials: _____

Federal Fund Standard Format to Non-State Subrecipients Only

VERMONT DEPARTMENT OF PUBLIC SAFETY

STATE OF VERMONT GRANT AGREEMENT

Part 1-Grant Award Detail

SECTION I - GENERAL GRANT INFORMATION

¹ Grant #: 02140-32004-007		² Original <input checked="" type="checkbox"/> Amendment # _____	
³ Grant Title: FY 2023 Flood Mitigation Assistance (FMA) Swift Current Grant Program			
⁴ Amount Previously Awarded: \$ 0.00		⁵ Amount Awarded This Action: \$ 216,537.80	
⁶ Total Award Amount: \$ 216,537.80			
⁷ Award Start Date: 9/27/2024		⁸ Award End Date: 9/27/2027	
⁹ Subrecipient Award: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>			
¹⁰ Vendor #: 0000040770		¹¹ Grantee Name: Town of Woodstock	
¹² Grantee Address: 31 The Green			
¹³ City: Woodstock		¹⁴ State: VT	
		¹⁵ Zip Code: 05091	
¹⁶ State Granting Agency: Department of Public Safety			
¹⁷ Business Unit: 02140			
¹⁸ Performance Measures: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		¹⁹ Match/In-Kind: \$72,179.27	
²⁰ Description: _____			
²⁰ If this action is an amendment, the following is amended:			
Amount: <input type="checkbox"/>		Funding Allocation: <input type="checkbox"/>	Performance Period: <input type="checkbox"/> Scope of Work: <input type="checkbox"/> Other: <input type="checkbox"/>

SECTION II - SUBRECIPIENT AWARD INFORMATION

²¹ Grantee UEI #: K12NLAJRIVK7		²² Indirect Rate: _____ % <small>(Approved rate or de minimis 10%)</small>		²³ FFATA: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
²⁴ Grantee Fiscal Year End Month (MM format): 06				²⁵ R&D: <input type="checkbox"/>	
²⁶ DUNS Registered Name (if different than VISION Vendor Name in Box 11):					

SECTION III - FUNDING ALLOCATION

STATE FUNDS

Fund Type	²⁷ Awarded Previously	²⁸ Award This Action	²⁹ Cumulative Award	³⁰ Special & Other Fund Descriptions
General Fund	\$0.00	\$0.00	\$0.00	
Special Fund	\$0.00	\$0.00	\$0.00	
Global Commitment (non-subrecipient funds)	\$0.00	\$0.00	\$0.00	
Other State Funds	\$0.00	\$0.00	\$0.00	

FEDERAL FUNDS

(includes subrecipient Global Commitment funds)

Required Federal Award Information

³¹ AL#	³² Program Title	³³ Awarded Previously	³⁴ Award This Action	³⁵ Cumulative Award	³⁶ FAIN	³⁷ Federal Award Date	³⁸ Total Federal Award
97.029	FY 2023 Flood Mitigation Assistance (FMA) Swift Current Grant Program	\$0.00	\$216,537.80	\$216,537.80	EMB-2024-FMA-ED01	9/27/2024	\$4,350,472.58
³⁹ Federal Awarding Agency: Department of Homeland Security: FEMA		⁴⁰ Federal Award Project Descr: FMA23 Swift Current					
		\$0.00	\$0.00	\$0.00			\$0.00
Federal Awarding Agency:		Federal Award Project Descr:					
		\$0.00	\$0.00	\$0.00			\$0.00
Federal Awarding Agency:		Federal Award Project Descr:					
		\$0.00	\$0.00	\$0.00			\$0.00

STATE OF VERMONT GRANT AGREEMENT			Part 1-Grant Award Detail			
Federal Awarding Agency:			Federal Award Project Descr:			
		\$0.00	\$0.00	\$0.00		\$0.00
Federal Awarding Agency:			Federal Award Project Descr:			
Total Awarded - All Funds		\$0.00	\$216,537.80	\$216,537.80		
SECTION IV - CONTACT INFORMATION						
STATE GRANTING AGENCY NAME: Zoey Parker TITLE: Financial Administrator PHONE: (802) 585-5814 EMAIL: zoey.parker@vermont.gov			GRANTEE NAME: Eric Duffy TITLE: Muncipal Manager PHONE: (802) 457-3456 EMAIL: eduffy@townofwoodstock.org			

Part 2- Grant Agreement

Parties: This is an Agreement between the State of Vermont, **Department of Public Safety (DPS)** (hereinafter called "State"), and the **Town of Woodstock** (hereinafter called "Subrecipient").

The Subrecipient must be in compliance with the Vermont statutory requirements relating to taxation of business entities operating within the State. If Subrecipient does not have a Business Account Number, it is the Subrecipient's responsibility to contact the Vermont Department of Taxes to determine if, by law, the Subrecipient is required to have a Vermont Department of Taxes Business Account Number.

Subrecipient Federal Tax Identification Number: 03-6003791

Subject Matter: The subject matter of this Agreement is **as outlined in Attachment A: Scope of work to be performed.**

Award Details: Amounts, dates and other award details are as shown in the above Agreement Part 1-Grant Award Detail. Detailed services to be provided by the Subrecipient are described in Attachment A.

Agreement Term: State will not reimburse any expenses incurred prior to the execution date of this agreement unless an Advance Notice to Proceed has been issued (*DPS Form ADM-105*). The execution date is defined as the date the Department of Public Safety representative(s) signs this agreement. *The only exception to this rule is for FEMA Public Assistance awards under the Stafford Act (see Attachment E for execution date details).*

Amendment: No changes, modifications, or amendments in the terms and conditions of this Agreement shall be effective unless reduced to writing, numbered, and signed by the duly authorized representative of the State and Subrecipient. An amendment is a request to make a programmatic, administrative, or substantial financial change to this Agreement (refer to Attachment B, Payment Provisions). Examples include changes in scope of work, budget modification, and change in Subgrant term (period of performance).

Cancellation: This Agreement may be suspended or cancelled by either party by giving written notice at least **30** days in advance.

Attachments: This Agreement consists of **17** pages including the following attachments that are incorporated herein:

Please initial that you have read and understand each Attachment

- _____ Grant Agreement-Part 1 – Grant Award Detail
- _____ Grant Agreement-Part 2
- _____ Attachment A - Scope of Work to be Performed
- _____ Attachment B - Payment Provisions
- _____ Attachment C - Customary State Agreement Provisions
- _____ Attachment D - Other Provisions
- _____ Attachment E - Funding Source Special Conditions

We, the undersigned parties, agree to be bound by this agreement, its provisions, attachments and conditions contained herein.

STATE OF VERMONT
Department of Public Safety

By:

Signature
Commissioner/Deputy Commissioner

Date: _____

SUBRECIPIENT
Authorized Representative

By:

Signature

Printed Name: _____

Title: _____

Date: _____

Your signature on this agreement attests to the acceptance of all provisions, attachments and conditions contained herein.

ATTACHMENT A SCOPE OF WORK TO BE PERFORMED

Objective: 1023 East Woodstock Road Elevation.

Activity to be performed:

The Town of Woodstock is seeking Flood Mitigation Assistance (FMA) Swift Current funding for the elevation of one (1) residential structure located at 1023 Woodstock Road (ca. 1950) in Woodstock, Vermont. The existing structure would be raised approximately eight (8) feet, to the engineer's determined height of 671 feet, including elevating the chimney and fireplace. The old foundation would be filled in and compacted in lifts of six (6) inches. An approximately 40-inch-deep pad of clean crushed ledge extending three (3) feet beyond the footprint of the house would be built up on the old foundation. The grade around the pad would be raised and compacted in lifts of six (6) inches using an excavator and trucked in materials. Additionally, an approximate five (5)-foot frost wall and one (1) foot footer would be poured on top of the pad with a crawl space of five (5) feet including flood venting starting at an elevation of 666 feet (three feet above BFE). A four-inch perforated perimeter drain to daylight to the west with backflow baffles would also be installed. Two (2) stone retaining walls would be built to hold the remaining fill. One (1) wall would be 26 feet from the front of house and would run approximately 100 feet with each end tapering into the grade. A second wall would be 60 feet from the house starting at four (4) feet tall at barn foundation running east and tapering to one (1) foot tall for a total run of 80 feet. Remaining fill would be added and compacted in six (6) inch lifts and graded up to the house to adjacent grade of 669 elevation around entire foundation, and gravel would be compacted on parking area.

Performance Measures: The project will be completed during the period of performance.

**ATTACHMENT B
PAYMENT PROVISIONS**

The State agrees to compensate the Subrecipient for services performed, up to the Federal share amount stated below, provided such services are within the scope of the Agreement and are authorized as provided for under the terms and conditions of this Agreement.

Budget Detail:

Pre-Award Costs:	
Topo Survey and House Survey	\$ 5,600.00
Engineering	\$ 10,200.00
Post-Award Costs:	
Exterior Design	\$ 5,300.00
Final Design/Architectural Drawing	\$ 10,000.00
Permitting	\$ 2,191.54
House Lift/Chimney	\$ 52,500.00
Excavation/Concrete Pre/Site Work	\$ 38,610.00
Concrete for Foundation	\$ 36,700.00
Reconstruction of Interior and Exterior	\$ 49,421.00
Electrical Installation	\$ 4,704.90
Plumbing and Heating Installation	\$ 14,137.20
Stone Retaining Wall	\$ 43,204.00
Final Elevation Certificate	\$ 2,400.00
Contingency 5% of Project Cost	\$ 13,748.43
Equipment *	\$ 0.00
Supplies	\$ 0.00
Travel & Mileage	\$ 0.00
Other Costs	\$ 0.00
Indirect Cost **	\$ 0.00
 Total Project Cost	 \$ 288,717.07
 Total Federal Share	 \$ 216,537.80
Total Non-Federal Share (Match)	\$ 72,179.27

Budget detail based on Final Budget Narrative – Woodstock.

Subrecipient agrees that grant funds awarded will be used to supplement existing funds for program activities and will not supplant (replace) non-Federal funds. Subrecipients must be able to document local funds were not supplanted with funds from this award (for example: personnel expenses must be supported with actual budget allocations which include this funding source).

* Federal equipment threshold is \$5,000.00¹. Please reference Federal equipment compliance requirements.² Subrecipients must follow their own procurement policy unless the Federal and State requirements are more restrictive.

** Current Rate Approval Letter (under 2 CFR 200.332(a)(4)) must be on file with DPS. It is also important to note that indirect rates may be subject to statutory caps of the Federal program which supersede the requirements of the Uniform Guidance. Refer to Bulletin 5 for further guidance.

During the performance of this Agreement, any of the cost categories may be increased or decreased by up to 10% of the total award with prior written approval from the DPS Finance Office. Approval will be given provided:

1. It is within the Total Award Amount in effect at the time of the adjustment.
2. It does not change the Scope of Work in Attachment A.

Modifications outside of what is outlined above will require an official amendment.

PROGRAMMATIC REPORTING REQUIREMENTS:

- Under 2 CFR 200.329 (e) *Significant Developments*: Events may occur between the scheduled performance reporting dates that have significant impact upon the supported activity. In such cases, the subrecipient **must** inform DPS *as soon as* the following types of conditions become known:
 1. Problems, delays, or adverse conditions which will *materially impair* the ability to meet the objective of the award. This disclosure **must** include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.
 2. Favorable developments which enable meeting time schedules and objectives *sooner or at less cost* than anticipated or producing *more or different beneficial results* than originally planned.
- The subrecipient **must** certify in writing to DPS at the end of the award that the project or activity was completed, or the level of effort was expended. If the required level of activity or effort was not carried out, the amount of the Federal award must be adjusted.
- Changes in principal personnel or scope of effort **must** receive the prior written approval of DPS.

The subrecipient must submit programmatic reports using either the DPS Subgrant Progress Report Form or another format that includes all information required on the DPS form. The reporting periods are October 1 – December 31 (due January 30), January 1 – March 31 (due April 30), April 1 – June 30 (due July 30), and July 1 – September 30 (due October 30).

FINANCIAL REPORTING REQUIREMENTS /PAYMENT REQUESTS:

The State, at its discretion, will reimburse the Subrecipient by one of the following options depending on the needs of the Subrecipient and their standing with the State at the time they request Agreement funds:

- Reimbursement in arrears of expenditures with attached documentation. Subrecipient must submit the DPS Financial Report Form (**DPS Form ADM-116a**) with attached detailed documentation of incurred expenses paid to receive payment.
- Limited cash advance with prior approval. Subrecipient must submit the DPS Financial Report Form with detailed documentation of incurred expenses marked "Goods/Services received, not paid." DPS will process and make payment to Subrecipient. Next, the Subrecipient **MUST** make payment to the vendor and provide DPS proof of such (i.e. copy of cancelled check) within ten (10) days of receipt of the State of Vermont payment. Subrecipients may receive cash advance however they may be required to deposit funds in an interest-bearing account and possibly return interest earned more than \$500 per year (see 2 CFR §200.305(b)(8)). Any interest earned must be reported to the Department of Health and Human Services, Payment Management System.

Requests for reimbursement, or payment, must be made using the DPS Financial Report Form (DPS Form ADM-116a), and must be supported by detailed supporting documentation. Examples of detailed supporting

¹ 2 CFR § 200.313 (d)(1)

² 2 CFR § 200.313 (d)(2)

documentation may include payroll reports, timesheets, general ledger reports, paid vendor invoices, and cancelled checks.

These requests must be submitted to the Vermont Department of Public Safety, Financial Office, no later than the end of the month following the month in which the expenses were incurred. Please send to:

Name: Zoey Parker

Via mail: Vermont Department of Public Safety/Financial Office
45 State Drive
Waterbury, VT 05671-1300

Via fax: 802-241-5553

Via email: zoey.parker@vermont.gov

DPS will not make any payments on this Agreement unless the Subrecipient meets all provisions contained herein.

CLOSEOUT:

When a performance period is nearing its end, the subrecipient should ensure all work is complete and file their reports by the deadline noted in Attachment B of the subrecipient agreement. If they have determined a need for an extension, it must be requested with sufficient time to allow DPS to review and approve prior to the end of the current award term. If the performance period and date for the final report ends and the subrecipient does not contact DPS for an extension, the Financial Office will close out the award. Upon final payment and verification that all reporting obligations have been met, a closeout letter will be issued to the Subrecipient.

ATTACHMENT C: STANDARD STATE PROVISIONS FOR CONTRACTS AND GRANTS
REVISED DECEMBER 7, 2023

1. Definitions: For purposes of this Attachment, “Party” shall mean the Contractor, Grantee, or Subrecipient, with whom the State of Vermont is executing this Agreement and consistent with the form of the Agreement. “Agreement” shall mean the specific contract or grant to which this form is attached.

2. Entire Agreement: This Agreement, whether in the form of a contract, State-funded grant, or Federally-funded grant, represents the entire agreement between the parties on the subject matter. All prior agreements, representations, statements, negotiations, and understandings shall have no effect. Where an authorized individual is either required to click-through or otherwise accept, or made subject to, any electronic terms and conditions to use or access any product or service provided hereunder, such terms and conditions are not binding and shall have no force or effect. Further, any terms and conditions of Party’s invoice, acknowledgment, confirmation, or similar document, shall not apply, and any such terms and conditions on any such document are objected to without need of further notice or objection.

3. Governing Law, Jurisdiction and Venue; No Waiver of Jury Trial: This Agreement will be governed by the laws of the State of Vermont without resort to conflict of laws principles. Any action or proceeding brought by either the State or the Party in connection with this Agreement shall be brought and enforced in the Superior Court of the State of Vermont, Civil Division, Washington Unit. The Party irrevocably submits to the jurisdiction of this court for any action or proceeding regarding this Agreement. The Party agrees that it must first exhaust any applicable administrative remedies with respect to any cause of action that it may have against the State regarding its performance under this Agreement. Party agrees that the State shall not be required to submit to binding arbitration or waive its right to a jury trial.

4. Sovereign Immunity: The State reserves all immunities, defenses, rights, or actions arising out of the State’s sovereign status or under the Eleventh Amendment to the United States Constitution. No waiver of the State’s immunities, defenses, rights, or actions shall be implied or otherwise deemed to exist by reason of the State’s entry into this Agreement.

5. No Employee Benefits For Party: The Party understands that the State will not provide any individual retirement benefits, group life insurance, group health and dental insurance, vacation or sick leave, workers compensation or other benefits or services available to State employees, nor will the State withhold any state or Federal taxes except as required under applicable tax laws, which shall be determined in advance of execution of the Agreement. The Party understands that all tax returns required by the Internal Revenue Code and the State of Vermont, including but not limited to income, withholding, sales and use, and rooms and meals, must be filed by the Party, and information as to Agreement income will be provided by the State of Vermont to the Internal Revenue Service and the Vermont Department of Taxes.

6. Independence: The Party will act in an independent capacity and not as officers or employees of the State.

7. Defense and Indemnity:

- A.** The Party shall defend the State and its officers and employees against all third-party claims or suits arising in whole or in part from any act or omission of the Party or of any agent of the Party in connection with the performance of this Agreement. The State shall notify the Party in the event of any such claim or suit, and the Party shall immediately retain counsel and otherwise provide a complete defense against the entire claim or suit. The State retains the right to participate at its own expense in the defense of any claim. The State shall have the right to approve all proposed settlements of such claims or suits.
- B.** After a final judgment or settlement, the Party may request recoupment of specific defense costs and may file suit in Washington Superior Court requesting recoupment. The Party shall be entitled to recoup costs only upon a showing that such costs were entirely unrelated to the defense of any claim arising from an act or omission of the Party in connection with the performance of this Agreement.
- C.** The Party shall indemnify the State and its officers and employees if the State, its officers, or employees become legally obligated to pay any damages or losses arising from any act or omission of the Party or an agent of the Party in connection with the performance of this Agreement.
- D.** Notwithstanding any contrary language anywhere, in no event shall the terms of this Agreement or any document furnished by the Party in connection with its performance under this Agreement obligate the State to (1) defend or indemnify the

Party or any third party, or (2) otherwise be liable for the expenses or reimbursement, including attorneys' fees, collection costs or other costs of the Party or any third party.

8. Insurance: During the term of this Agreement, Party, at its expense, shall maintain in full force and effect the insurance coverages set forth in the Vermont State Insurance Specification in effect at the time of incorporation of this Attachment C into this Agreement. The terms of the Vermont State Insurance Specification are hereby incorporated by reference into this Attachment C as if fully set forth herein. A copy of the Vermont State Insurance Specification is available at: <https://aoa.vermont.gov/Risk-Claims-COI>.

9. Reliance by the State on Representations: All payments by the State under this Agreement will be made in reliance upon the accuracy of all representations made by the Party in accordance with this Agreement, including but not limited to bills, invoices, progress reports, and other proofs of work.

10. False Claims Act: Any liability to the State under the Vermont False Claims Act (32 V.S.A. § 630 et seq.) shall not be limited notwithstanding any agreement of the State to otherwise limit Party's liability.

11. Whistleblower Protections: The Party shall not discriminate or retaliate against one of its employees or agents for disclosing information concerning a violation of law, fraud, waste, abuse of authority, or acts threatening health or safety, including but not limited to allegations concerning the False Claims Act. Further, the Party shall not require such employees or agents to forego monetary awards as a result of such disclosures, nor should they be required to report misconduct to the Party or its agents prior to reporting to any governmental entity and/or the public.

12. Use and Protection of State Information:

- A. As between the State and Party, "State Data" includes all data received, obtained, or generated by the Party in connection with performance under this Agreement. Party acknowledges that certain State Data to which the Party may have access may contain information that is deemed confidential by the State, or which is otherwise confidential by law, rule, or practice, or otherwise exempt from disclosure under the State of Vermont Access to Public Records Act, 1 V.S.A. § 315 et seq. ("Confidential State Data").
- B. With respect to State Data, Party shall:
 - i. take reasonable precautions for its protection;
 - ii. not rent, sell, publish, share, or otherwise appropriate it; and
 - iii. upon termination of this Agreement for any reason, Party shall dispose of or retain State Data if and to the extent required by this Agreement, law, or regulation, or otherwise requested in writing by the State.
- C. With respect to Confidential State Data, Party shall:
 - i. strictly maintain its confidentiality;
 - ii. not collect, access, use, or disclose it except as necessary to provide services to the State under this Agreement;
 - iii. provide at a minimum the same care to avoid disclosure or unauthorized use as it provides to protect its own similar confidential and proprietary information;
 - iv. implement and maintain administrative, technical, and physical safeguards and controls to protect against any anticipated threats or hazards or unauthorized access or use;
 - v. promptly notify the State of any request or demand by any court, governmental agency or other person asserting a demand or request for Confidential State Data so that the State may seek an appropriate protective order; and
 - vi. upon termination of this Agreement for any reason, and except as necessary to comply with subsection B.iii above in this section, return or destroy all Confidential State Data remaining in its possession or control.
- D. If Party is provided or accesses, creates, collects, processes, receives, stores, or transmits Confidential State Data in any electronic form or media, Party shall utilize:
 - i. industry-standard firewall protection;
 - ii. multi-factor authentication controls;
 - iii. encryption of electronic Confidential State Data while in transit and at rest;
 - iv. measures to ensure that the State Data shall not be altered without the prior written consent of the State;

- v. measures to protect against destruction, loss, or damage of State Data due to potential environmental hazards, such as fire and water damage;
 - vi. training to implement the information security measures; and
 - vii. monitoring of the security of any portions of the Party's systems that are used in the provision of the services against intrusion.
- E. No Confidential State Data received, obtained, or generated by the Party in connection with performance under this Agreement shall be processed, transmitted, stored, or transferred by any means outside the United States, except with the express written permission of the State.
- F. Party shall notify the State within twenty-four hours after becoming aware of any unauthorized destruction, loss, alteration, disclosure of, or access to, any State Data.
- G. State of Vermont Cybersecurity Standard Update: Party confirms that all products and services provided to or for the use of the State under this Agreement shall be in compliance with State of Vermont Cybersecurity Standard Update in effect at the time of incorporation of this Attachment C into this Agreement. The State of Vermont Cybersecurity Standard Update prohibits the use of certain branded products in State information systems or any vendor system, and a copy is available at: <https://digitalservices.vermont.gov/cybersecurity/cybersecurity-standards-and-directives>
- H. In addition to the requirements of this Section 12, Party shall comply with any additional requirements regarding the protection of data that may be included in this Agreement or required by law or regulation.

13. Records Available for Audit: The Party shall maintain all records pertaining to performance under this Agreement. "Records" means any written or recorded information, regardless of physical form or characteristics, which is produced or acquired by the Party in the performance of this Agreement. Records produced or acquired in a machine-readable electronic format shall be maintained in that format. The records described shall be made available at reasonable times during the period of this Agreement and for three years thereafter or for any period required by law for inspection by any authorized representatives of the State or Federal Government. If any litigation, claim, or audit is started before the expiration of the three-year period, the records shall be retained until all litigation, claims, or audit findings involving the records have been resolved.

14. Fair Employment Practices and Americans with Disabilities Act: Party agrees to comply with the requirement of 21 V.S.A. Chapter 5, Subchapter 6, relating to fair employment practices, to the full extent applicable, and shall include this provision in all subcontracts for work performed in Vermont. Party shall also ensure, to the full extent required by the Americans with Disabilities Act of 1990, as amended, that qualified individuals with disabilities receive equitable access to the services, programs, and activities provided by the Party under this Agreement.

15. Offset: The State may offset any sums which the Party owes the State against any sums due the Party under this Agreement; provided, however, that any offset of amounts due the State of Vermont as taxes shall be in accordance with the procedures more specifically provided in 32 V.S.A. § 3113.

16. Taxes Due to the State: Party certifies under the pains and penalties of perjury that, as of the date this Agreement is signed, the Party is in good standing with respect to, or in full compliance with, a plan to pay any and all taxes due the State of Vermont.

17. Taxation of Purchases: All State purchases must be invoiced tax free. An exemption certificate will be furnished upon request with respect to otherwise taxable items.

18. Child Support: (Only applicable if the Party is a natural person, not a corporation or partnership.) Party states that, as of the date this Agreement is signed, Party is not under an obligation to pay child support or is in good standing with respect to or in full compliance with a plan to pay any and all child support payable under a support order. Party makes this statement with regard to support owed to any and all children residing in Vermont. In addition, if the Party is a resident of Vermont, Party makes this statement with regard to support owed to any and all children residing in any other state or territory of the United States.

19. Sub-Agreements: Party shall not assign, subcontract, or subgrant the performance of this Agreement or any portion thereof to any other Party without the prior written approval of the State. Party shall be responsible and liable to the State for all acts or omissions of subcontractors and any other person performing work under this Agreement pursuant to an agreement with Party or any subcontractor.

In the case this Agreement is a contract with a total cost in excess of \$250,000, the Party shall provide to the State a list of all proposed subcontractors and subcontractors' subcontractors, together with the identity of those subcontractors' workers compensation insurance providers, and additional required or requested information, as applicable, in accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54), as amended by Section 17 of Act No. 142 (2010) and by Section 6 of Act No. 50 (2011).

Party shall include the following provisions of this Attachment C in all subcontracts for work performed solely for the State of Vermont and subcontracts for work performed in the State of Vermont: Section 10 ("False Claims Act"); Section 11 ("Whistleblower Protections"); Section 12 ("Confidentiality and Protection of State Information"); Section 14 ("Fair Employment Practices and Americans with Disabilities Act"); Section 16 ("Taxes Due the State"); Section 18 ("Child Support"); Section 20 ("No Gifts or Gratuities"); Section 22 ("Certification Regarding Debarment"); Section 30 ("State Facilities"); and Section 32.A ("Certification Regarding Use of State Funds").

20. No Gifts or Gratuities: Party shall not give title or possession of anything of substantial value (including property, currency, travel, and/or education programs) to any officer or employee of the State during the term of this Agreement.

21. Regulation of Hydrofluorocarbons: Party confirms that all products provided to or for the use of the State under this Agreement shall not contain hydrofluorocarbons, as prohibited under 10 V.S.A. § 586.

22. Certification Regarding Debarment: Party certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, neither Party nor Party's principals (officers, directors, owners, or partners) are presently debarred, suspended, proposed for debarment, declared ineligible, or excluded from participation in Federal programs, or programs supported in whole or in part by Federal funds. Party further certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, Party is not presently debarred, suspended, nor named on the State's debarment list at: <https://bgs.vermont.gov/purchasing-contracting/debarment>.

23. Conflict of Interest: Party shall fully disclose, in writing, any conflicts of interest or potential conflicts of interest.

24. Vermont Public Records Act: Party acknowledges and agrees that this Agreement, any and all information obtained by the State from the Party in connection with this Agreement, and any obligations of the State to maintain the confidentiality of information are subject to the State of Vermont Access to Public Records Act, 1 V.S.A. § 315 *et seq.*

25. Force Majeure: Neither the State nor the Party shall be liable to the other for any failure or delay of performance of any obligations under this Agreement to the extent such failure or delay shall have been wholly or principally caused by acts or events beyond its reasonable control rendering performance illegal or impossible (excluding strikes or lockouts) ("Force Majeure"). Where Force Majeure is asserted, the nonperforming party must prove that it made all reasonable efforts to remove, eliminate or minimize such cause of delay or damages, diligently pursued performance of its obligations under this Agreement, substantially fulfilled all non-excused obligations, and timely notified the other party of the likelihood or actual occurrence of an event described in this paragraph.

26. Marketing: Party shall not use the State's logo or otherwise refer to the State in any publicity materials, information pamphlets, press releases, research reports, advertising, sales promotions, trade shows, or marketing materials or similar communications to third parties except with the prior written consent of the State.

27. Termination:

A. Non-Appropriation: If this Agreement extends into more than one fiscal year of the State (July 1 to June 30), and if appropriations are insufficient to support this Agreement, the State may cancel this Agreement at the end of the fiscal year, or otherwise upon the expiration of existing appropriation authority. In the case that this Agreement is funded in whole or in part by Federal funds, and in the event Federal funds become unavailable or reduced, the State may suspend or cancel this Agreement immediately, and the State shall have no obligation to pay Party from State revenues.

B. Termination for Cause: Either party may terminate this Agreement if a party materially breaches its obligations under this Agreement, and such breach is not cured within thirty (30) days after delivery of the non-breaching party's notice or such longer time as the non-breaching party may specify in the notice.

C. Termination Assistance: Upon nearing the end of the final term or termination of this Agreement, without respect to

cause, the Party shall take all reasonable and prudent measures to facilitate any transition required by the State. All State property, tangible and intangible, shall be returned to the State upon demand at no additional cost to the State in a format acceptable to the State.

28. Continuity of Performance: In the event of a dispute between the Party and the State, each party will continue to perform its obligations under this Agreement during the resolution of the dispute until this Agreement is terminated in accordance with its terms.

29. No Implied Waiver of Remedies: Either party's delay or failure to exercise any right, power, or remedy under this Agreement shall not impair any such right, power, or remedy, or be construed as a waiver of any such right, power, or remedy. All waivers must be in writing.

30. State Facilities: If the State makes space available to the Party in any State facility during the term of this Agreement for purposes of the Party's performance under this Agreement, the Party shall only use the space in accordance with all policies and procedures governing access to, and use of, State facilities, which shall be made available upon request. State facilities will be made available to Party on an "AS IS, WHERE IS" basis, with no warranties whatsoever.

31. Requirements Pertaining Only to Federal Grants and Subrecipient Agreements: If this Agreement is a grant that is funded in whole or in part by Federal funds:

- A. Requirement to Have a Single Audit:** The Subrecipient will complete the Subrecipient Annual Report annually within 45 days after its fiscal year end, informing the State of Vermont whether or not a Single Audit is required for the prior fiscal year. If a Single Audit is required, the Subrecipient will submit a copy of the audit report to the Federal Audit Clearinghouse within nine months. If a single audit is not required, only the Subrecipient Annual Report is required. A Single Audit is required if the subrecipient expends \$750,000 or more in Federal assistance during its fiscal year and must be conducted in accordance with 2 CFR Chapter I, Chapter II, Part 200, Subpart F. The Subrecipient Annual Report is required to be submitted within 45 days, whether or not a Single Audit is required.
- B. Internal Controls:** In accordance with 2 CFR Part II, §200.303, the Party must establish and maintain effective internal control over the Federal award to provide reasonable assurance that the Party is managing the Federal award in compliance with Federal statutes, regulations, and the terms and conditions of the award. These internal controls should be in compliance with guidance in "Standards for Internal Control in the Federal Government" issued by the Comptroller General of the United States and the "Internal Control Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission.
- C. Mandatory Disclosures:** In accordance with 2 CFR Part II, §200.113, Party must disclose, in a timely manner, in writing to the State, all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award. Failure to make required disclosures may result in the imposition of sanctions which may include disallowance of costs incurred, withholding of payments, termination of the Agreement, suspension/debarment, etc.

32. Requirements Pertaining Only to State-Funded Grants:

- A. Certification Regarding Use of State Funds:** If Party is an employer and this Agreement is a State-funded grant in excess of \$1,000, Party certifies that none of these State funds will be used to interfere with or restrain the exercise of Party's employee's rights with respect to unionization.
- B. Good Standing Certification (Act 154 of 2016):** If this Agreement is a State-funded grant, Party hereby represents: (i) that it has signed and provided to the State the form prescribed by the Secretary of Administration for purposes of certifying that it is in good standing (as provided in Section 13(a)(2) of Act 154) with the Agency of Natural Resources and the Agency of Agriculture, Food and Markets, or otherwise explaining the circumstances surrounding the inability to so certify; and (ii) that it will comply with the requirements stated therein.

(End of Standard Provisions)

**ATTACHMENT D
OTHER GRANT AGREEMENT PROVISIONS**

**CERTIFICATIONS REGARDING LOBBYING; DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS;
DRUG-FREE WORKPLACE REQUIREMENTS; PROCUREMENT; ORGANIZATIONAL AND FINANCIAL REQUIREMENT;
FOLLOWING SUBRECIPIENT PROCEDURES: DISCLOSURE OF INFORMATION AND CONFLICT OF INTEREST:**

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this agreement provides for compliance with certification requirements under 10 CFR Part 601 "New Restrictions on Lobbying," and 10 CFR Part 1036 "Government wide Debarment and Suspension (Nonprocurement) and Government wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Public Safety determines to award the covered transaction, grant, or other agreement.

1. LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including subcontracts, Agreements, and contracts under grants, loans, and cooperative agreements) and that all Subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

2. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - d. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.
3. Applicable CFR's and Federal Executive Orders 12549 and 12689 prohibit non-federal entities from contracting with or making sub-awards under covered transactions to parties that are suspended or debarred or whose principals are suspended or debarred. Covered transactions include procurement contracts for goods or services equal to or in excess of \$25,000 and non-procurement transactions such as grants or cooperative agreements. By signing this Agreement, the Subgrantee agrees it will verify the status of potential vendors prior to any federal funds being obligated to prevent any debarred or suspended agencies or vendors from receiving federal funds. The Subrecipient can confirm the status of potential vendors by conducting a search on the System for Award Management (SAM) website (<https://www.sam.gov/portal/public/SAM/>). At this time, DPS does not require Subrecipients to submit proof of verification

with any reimbursement request; however, the Subrecipient must maintain this information, in the form of a screen print, with other grant documentation. This documentation shall be available for review per Attachment C.

3. DRUG-FREE WORKPLACE

This certification is required by the Drug-Free Workplace Act of 1988 (Pub.L. 100-690, Title V, Subtitle D) and is implemented through additions to the Debarment and Suspension regulations, published in the Federal Register on January 31, 1989, and May 25, 1990.

The Subrecipient will or will continue to provide a drug-free workplace by:³

1. Maintaining a Zero Tolerance Drug Policy;
2. Posting in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Subrecipient's workplace and specifying the actions that will be taken against employees for violations of such prohibition;
3. Stating in all solicitations or advertisements for employees or subcontractors placed by or on behalf of the Subrecipient that the Subrecipient maintains a drug-free workplace;
4. Establishing an ongoing drug-free awareness program to inform employees about:
 - a. The dangers of drug abuse in the workplace;
 - b. The Subrecipient's policy of maintaining a drug-free workplace;
 - c. Any available drug counseling, rehabilitation, and employee assistance programs; and
 - d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - e. Including the provisions of the foregoing clauses in all third party contracts, subcontracts, and purchase orders that exceed ten thousand dollars (\$10,000.00), so that the provisions will be binding upon each subcontractor or vendor.

4. PROCUREMENT:

The Subrecipient agrees to abide by their respective procurement rules, policies, and/or procedures as outlined in 2 CFR §§ 200.317 to 200.327.

1. Subrecipient must comply with proper competitive bidding procedures as required by the applicable federal and state rules.
2. The subrecipient entity must maintain written standards of conduct covering conflict of interest and governing the actions of its employees and engaged in selection, award, and administration of contracts.⁴
3. The subrecipient must take all necessary affirmative steps to assure that minority business, women's business enterprises, and labor surplus area firms re used when possible. Please see 2 CFR § 200.321 for the affirmative steps that must be taken.

5. ORGANIZATIONAL AND FINANCIAL REQUIREMENTS

1. All Subrecipients are required to establish and maintain accounting systems and financial records to accurately account for funds awarded to them. Determining allowability of costs claimed will be consistent with the requirements of the grant award and its applicable regulations.
 - a. Subrecipients have the responsibility to employ the organizational and management techniques necessary to assure proper administration and cost allocation, including accounting, budgeting, reporting, auditing and other review controls.
 - b. All Subrecipients will accept responsibility for expending and accounting for funds in a manner consistent with an approved project, plan and or program as evidenced by their acceptance of an Agreement award by the Department of Public Safety; Policies, procedures, reporting requirements or other special conditions established by the appropriate Federal agency, if applicable, and the Department of Public Safety.
2. Subrecipients must have an adequate system of internal controls which:
 - a. Presents, classifies and retains all detailed financial records related to the Agreement award. Financial records must be retained by the Subrecipient and be available for review for a period of three (3) years after the expiration of the grant period except that records must be retained until completion or resolution of all issues arising from audit, litigation or claims started before the expiration of the three year period, whichever is later.
 - b. Provides reasonable assurance that Federal awards are managed in compliance with Federal statutes, regulations, and the terms and conditions. These internal controls should be in compliance with the guidance in "Standards for Internal Control in the Federal Government" issued by the Comptroller General of the United States and the "Internal Control Integrated Framework," issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).
 - c. Provides information for planning, control and evaluation of direct and indirect costs;

³ 2 CFR § 182

⁴ 2 CFR § 200.318(c)(1)

- d. Provides cost and property control to ensure optimal use of the grant funds;
 - e. Controls funds and other resources to ensure that the expenditure of grant funds and use of any property acquired under the grant are in conformance with established guidelines and policies.
3. Notification of Organizational Changes Required:
- a. The recipient shall provide DPS written notification within 30 days should any of the following events occur:
 - i. having new or substantially changed systems
 - ii. having new compliance personnel
 - iii. loss of license or accreditation to operate program
 - iv. organizational restructuring.

6. FOLLOWING SUBRECIPIENT PROCEDURES:

The undersigned certifies that the Subrecipient organization has in place standard policies and procedures that govern the Subrecipient's payroll, purchasing, contracting and inventory control in accordance with 2 CFR 200 Subpart E, Appendix A, Section C 1.e or 2 CFR 200.302. The undersigned further certifies that the Subrecipient organization will use those policies and procedures for any approved expenditure under this Agreement and for any equipment purchased with Agreement funds. The undersigned also agrees to make the policies and procedures available for examination by any authorized representatives of the State or Federal Government. This does not relieve the Subrecipient from requirements of federal financial management, requirements in: 2 CFR 200 § 302 Financial Management

7. DISCLOSURE OF INFORMATION:

Any confidential or personally identifiable information (PII) acquired by subrecipient during the course of the subgrant shall not be disclosed by subrecipient to any person, firm, corporation, association, or other entity for any reason or purpose whatsoever without the prior written consent of the Department of Public Safety either during the term of the Agreement or in the event of termination of the Agreement for any reason whatsoever. Subrecipient agrees to abide by applicable federal regulations regarding confidential information and research standards, as appropriate, for federally supported projects.

8. CONFLICT OF INTEREST

Subgrantee/Contractor covenants that, to the best of its knowledge, no person under its employ, including subcontractors, who presently exercises any functions or responsibilities in connection with Board, Department, or projects or programs funded by Board or Department, has any personal financial interest, direct or indirect, in this Subgrant Agreement /Contract.

- 1. Subgrantee/Contractor further covenants that in the performance of Subgrant Agreement/Contract, no person having such conflicting interest shall knowingly be employed by Subgrantee/Contractor.
- 2. Any such interest, on the part of Subgrantee /Contractor or its employees, when known, must be disclosed in writing to Department.

ATTACHMENT E
FUNDING SOURCE SPECIAL CONDITIONS

This Agreement is subject to the requirements of all federal laws, policies and bulletins. Most notably:

By accepting this award, you acknowledge that the terms of the following documents are incorporated into the terms of this award:

- Grant Agreement Articles (attached to this award letter)
- Obligor document, FEMA Form 76-10A (attached to this award letter)
- Records of Environmental Consideration (attached to this award letter)
- FY 2023 Flood Mitigation Assistance (FMA) Swift Current Grant Program Notice of Funding Opportunity

2023 U.S. Department of Homeland Security Standard Terms and Conditions, which are hereby incorporated by reference.

Federal Guidance must be followed, 2 CFR 200 Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards.

PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

- a) Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:
 - 1.) Procure or obtain;
 - 2.) Extend or renew a contract to procure or obtain; or
 - 3.) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
 - i.) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
 - ii.) Telecommunications or video surveillance services provided by such entities or using such equipment.
 - iii.) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.
- b) In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.
- c) See Public Law 115-232, section 889 for additional information.
- d) See also §200.471.

This Agreement is also subject to the requirements of the State of Vermont grant and audit policies. The most pertinent bulletins and addendums are:

- Bulletin 5 - Single Audit Policy for Agreements
- Bulletin 5 - Procedure #1
- Bulletin 5 - Procedure #2



LEGEND

DFIRM Flood Hazard Areas (C FEMA-digitized data)

- AE (1-percent annual chance flood)
- A (1-percent annual chance floodpl)
- AO (1-percent annual chance zone feet)
- 0.2-percent annual chance flood ha

Parcels (standardized)

Roads

- Interstate
- US Highway; 1
- State Highway
- Town Highway (Class 1)
- Town Highway (Class 2,3)
- Town Highway (Class 4)
- State Forest Trail
- National Forest Trail
- Legal Trail
- Private Road/Driveway
- Proposed Roads

- Town Boundary

*1023 East
Woodstock Rd.*

1: 2,418

January 17, 2025



123.0 0 62.00 123.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere
© Vermont Agency of Natural Resources

1" = 202 Ft. 1cm = 24 Meters
THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.


NOTES

Map created using ANR's Natural Resources Atlas

Woodstock, VT - Property Database - Detail Result

Last Updated: August 02, 2024 | Official copies of data must be obtained at the Woodstock Town Office.

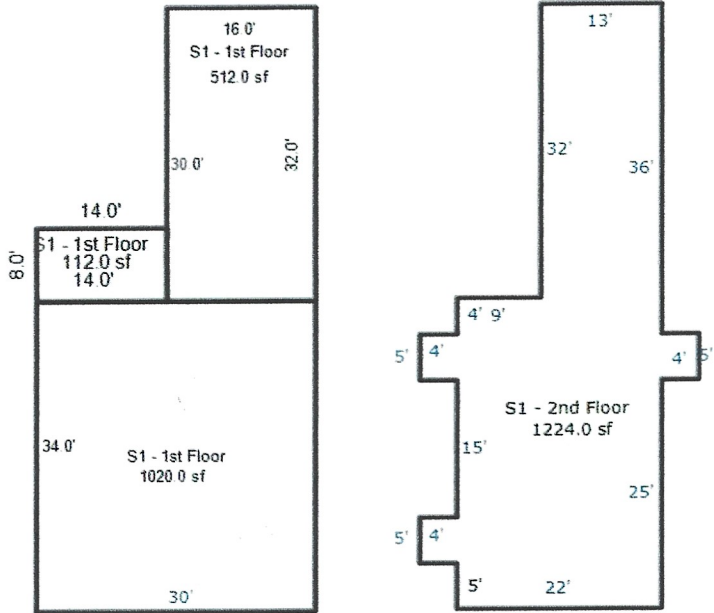
Powered by
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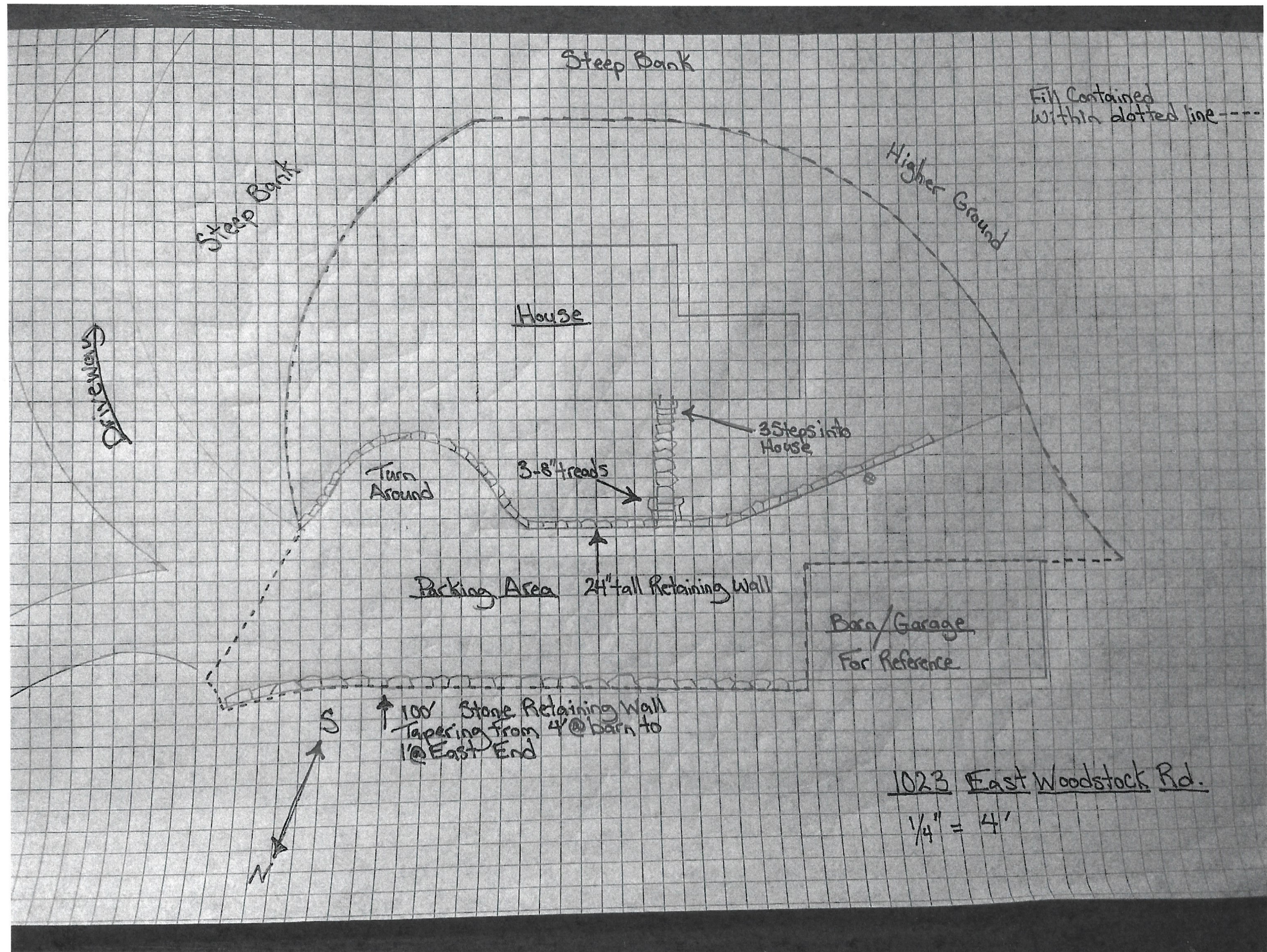
Owner Information		Parcel Value Information	
Parcel	05.01.16	Land Value	149,800
Owner	CONNOR KIRSTEN & MCCULLOUGH DARREN B	Dwelling Value	150,400
	1023 E WOODSTOCK RD	Site Imprvmt	20,000
	WOODSTOCK, VT 05091	Outbuildings	15,400
Location	1023 EAST WOODSTOCK RD	Total	201,400
Sec/TWP/Range			
Descr	5.12 AC & 2 UNIT DWL:		
Parcel Information			
NBHD	11	SPAN	786-250-10044
Acres	5.12	Status	A - Active
Sales Information			
Book	231	Sale Date	2011-10-26
Page	42-44	Sale Price	168,200

BUILDING		Total Rooms	9	Year Built	1950	Building SF	2868.00	Energy Adj	Average	Roughins	1
		Bedrooms	5	Effect Age	66	Quality	3.00	Bsmt Wall	Conc 8in	Plumb Fixt	5
		Full Baths	1	Condition	Average	Style	2 Story	Bsmt SF	560	Fireplaces	1
		Half Baths		Phys Depr	38	Design	Two Story	Bsmt Fin	1	Porch	
		Kitchens	1	Funct Depr	5	Bldg Type	Single	Bsmt Fin SF		Gar/Shed	
		Econ Depr									
Notes											
LAND	Land	1	Area	2.00	Grade	1.00	Frontage		Depth		
LAND	Land	5	Area	3.12	Grade	0.80	Frontage		Depth		

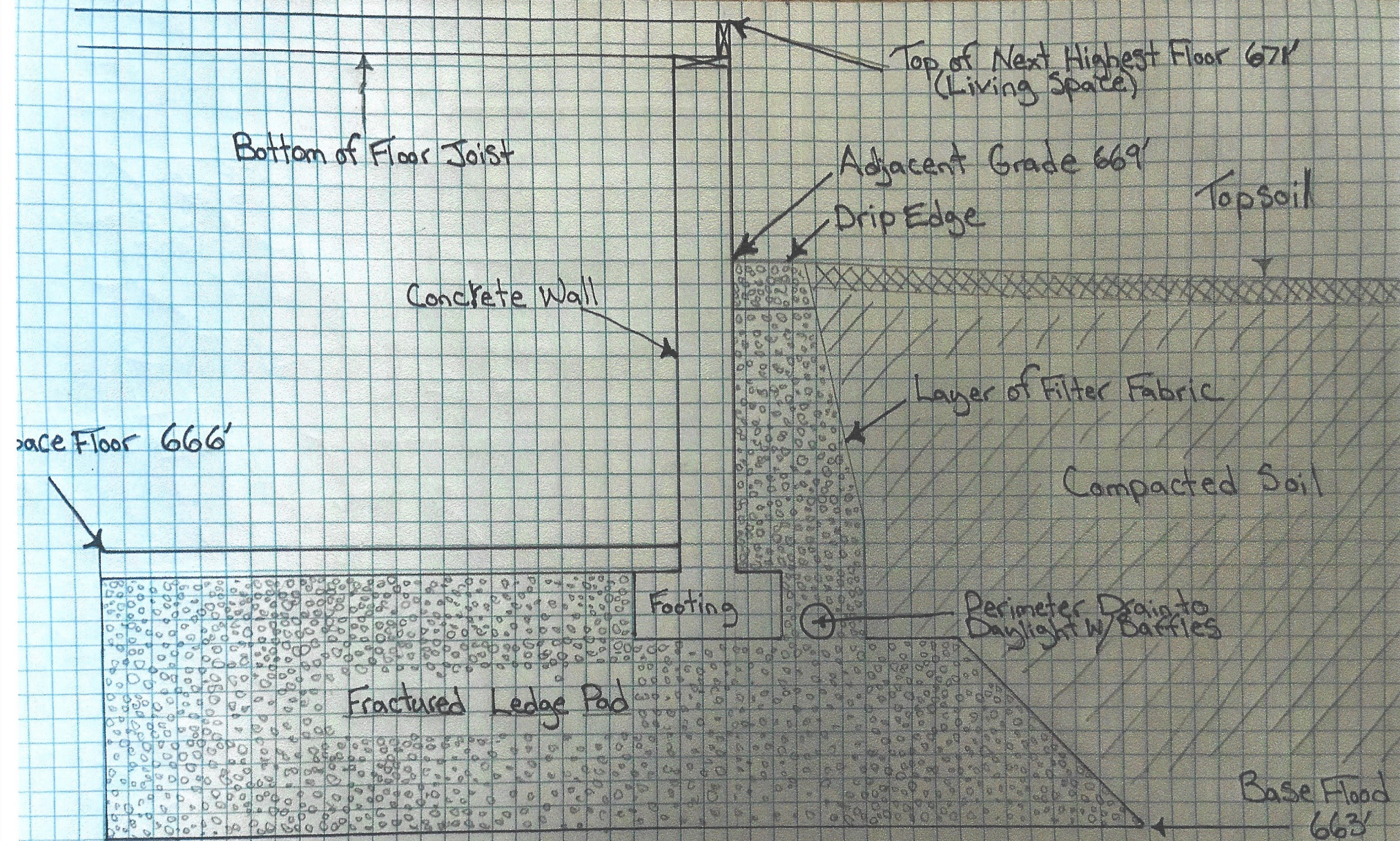
Sketch

05.01.16

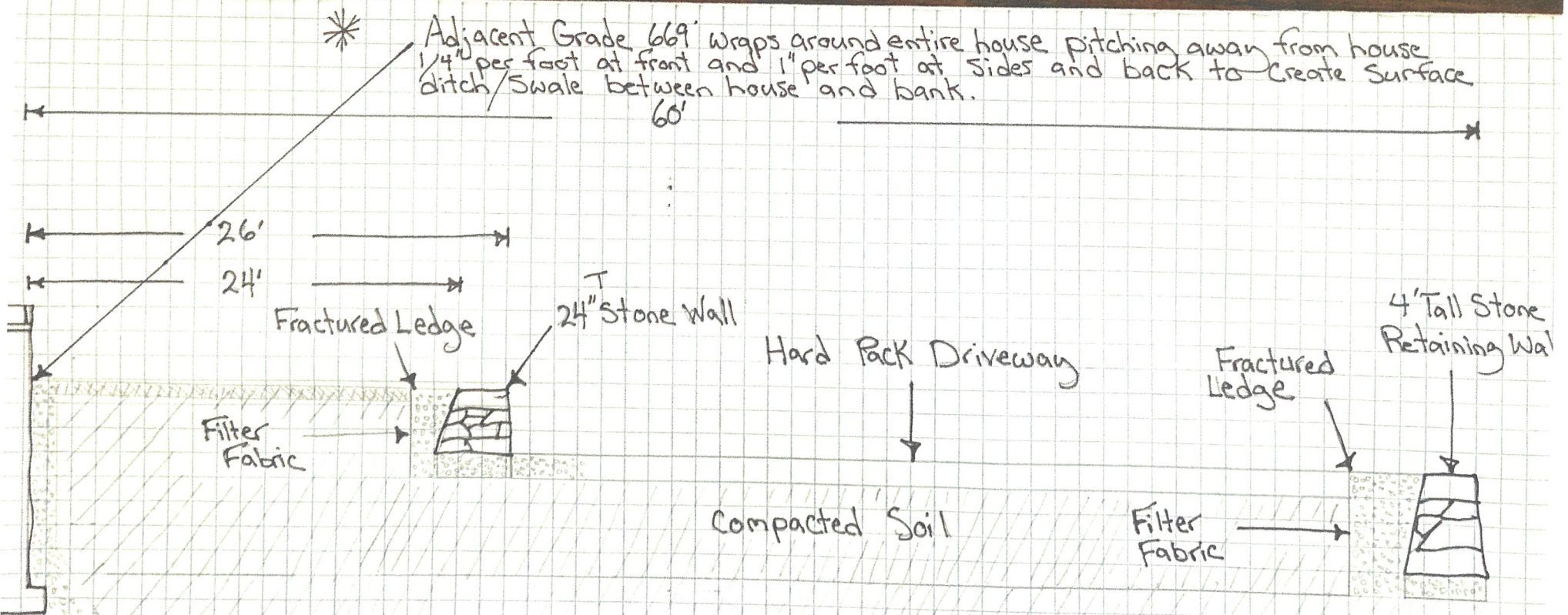


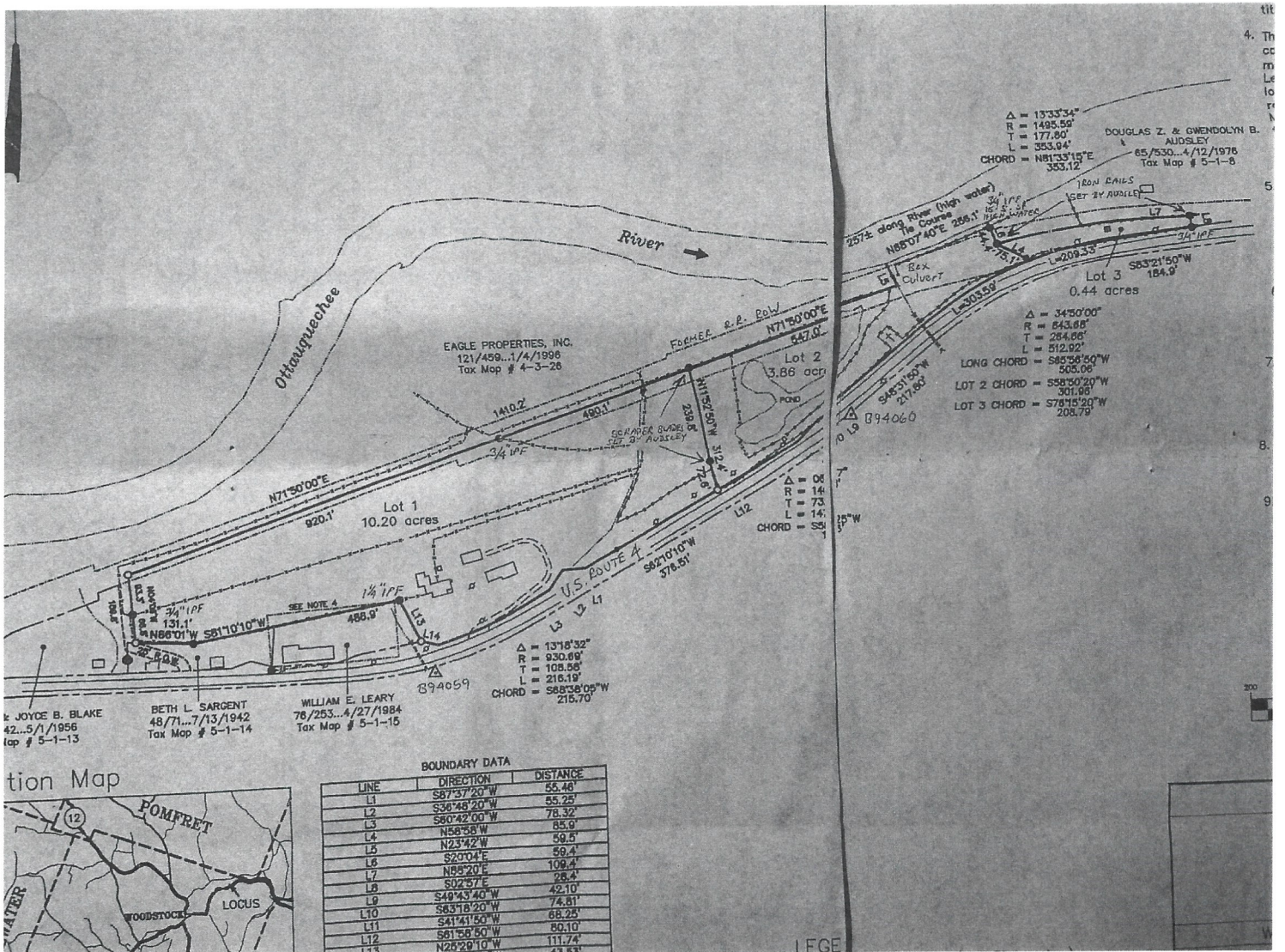


1023 East Woodstock Rd.
 $\frac{1}{4}" = 4'$



1023 East Woodstock Rd. Foundation Cutaway





DEPARTMENT OF HOMELAND SECURITY - FEDERAL EMERGENCY MANAGEMENT AGENCY
ELEVATION FORM

O.M.B. NO. 1660-0015
Expires February 28, 2014

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this data collection is estimated to average 1.25 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and submitting the form. This collection is required to obtain or retain benefits. You are not required to respond to this collection of information unless a valid OMB control number is displayed on this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 1800 South Bell Street, Arlington, VA 20598-3005, Paperwork Reduction Project (1660-0015). **NOTE: Do not send your completed form to this address.**

This form must be completed for requests and must be completed and signed by a registered professional engineer or licensed land surveyor. A DHS - FEMA National Flood Insurance Program (NFIP) Elevation Certificate may be submitted in lieu of this form for single structure requests.

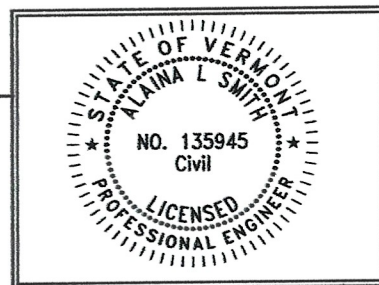
For requests to remove a structure on natural grade OR on engineered fill from the Special Flood Hazard Area (SFHA), submit the lowest adjacent grade (the lowest ground touching the structure), **including an attached deck or garage**. For requests to remove an entire parcel of land from the SFHA, provide the lowest lot elevation; or, if the request involves an area described by metes and bounds, provide the lowest elevation within the metes and bounds description. All measurements are to be rounded to nearest tenth of a foot. In order to process your request, all information on this form must be completed **in its entirety**. **Incomplete submissions will result in processing delays.**

- NFIP Community Number: 500160 Property Name or Address: 1023 E Woodstock Rd, Woodstock, VT 05091
- Are the elevations listed below based on ☐ existing or ☒ proposed conditions? (Check one)
- For the existing or proposed structures listed below, what are the types of construction? (check all that apply)
☒ crawl space ☐ slab on grade ☐ basement/enclosure ☐ other (explain)
- Has DHS - FEMA identified this area as subject to land subsidence or uplift? (see instructions) ☐ Yes ☒ No
If yes, what is the date of the current re-leveling? / (month/year)
- What is the elevation datum? ☐ NGVD 29 ☒ NAVD 88 ☐ Other (explain)
If any of the elevations listed below were computed using a datum different than the datum used for the effective Flood Insurance Rate Map (FIRM) (e.g., NGVD 29 or NAVD 88), what was the conversion factor?
Local Elevation +/- ft. = FIRM Datum
- Please provide the Latitude and Longitude of the most upstream edge of the **structure** (in decimal degrees to the nearest fifth decimal place):
Indicate Datum: ☐ WGS84 ☒ NAD83 ☐ NAD27 Lat. 43.63674 Long. -72.49448
Please provide the Latitude and Longitude of the most upstream edge of the **property** (in decimal degrees to the nearest fifth decimal place):
Indicate Datum: ☐ WGS84 ☒ NAD83 ☐ NAD27 Lat. 43.63660 Long. -72.49646

Address	Lot Number	Block Number	Lowest Lot Elevation*	Lowest Adjacent Grade To Structure	Base Flood Elevation	BFE Source
1023 E Woodstock Ave	05.01.16		662.5	669.8	663.0	NFIP Map 50027C0363E

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information. All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: Alaina L. Smith	License No.: 135945	Expiration Date: August 1, 2024
Company Name: Hydras Engineering, PLLC	Telephone No.: (970) 205-1585	
Email: alaina@hydrasengineering.com	Fax No.	
Signature: <i>Alaina L. Smith</i>	Date: April 25, 2024	



* For requests involving a portion of property, include the lowest ground elevation within the metes and bounds description.
Please note: If the Lowest Adjacent Grade to Structure is the only elevation provided, a determination will be issued for the structure only.

Hydrologic and Hydraulic Modeling Report for the Elevation of 1023 E Woodstock Road



Prepared for:

Kirsten Connor & Darren McCullough
1023 E Woodstock Rd, Woodstock, VT 05091

Prepared by:



**HYDRAS
ENGINEERING**

54 Hamlin Ave, East Aurora, NY 14052

May 8, 2024

Table of Contents

Introduction2

Background2

Hydrologic Analysis5

Hydraulic Analysis9

Floodplain Mapping Results..... 10

Recommendations 14

References 15

APPENDIX A.....A-1

APPENDIX B.....B-1



Introduction

On July 9-10, 2023, heavy rains fell during a severe storm that resulted in 6 to 9 inches of rainfall throughout Vermont. Widespread flooding occurred across the state resulting in a Presidential declaration of a major disaster for the State of Vermont on July 14, 2023 (FEMA-4720-DR-VT). In the town and village of Woodstock, many buildings and homes were damaged when the Ottauquechee River overtopped the banks and spilled into the floodplain.

During this storm, the home located at 1023 East Woodstock Road was flooded, filling the crawl space and the first floor with water, mud and debris. This property was previously flooded to a more severe extent during Tropical Storm Irene in late August 2011.

Currently the owners of the property wish to remove the home from the threat of future floods by raising the structure approximately 8 ft. This report presents the hydrologic and hydraulic analysis to support that effort.

Background

The house at 1023 East Woodstock Road (Route 4) is located on the north side of the road, approximately 1 mile east of the Village of Woodstock. (Latitude: 43.63674° , Longitude - 72.49448°). The structure is lower in elevation than the road and is situated in the fringe of the right floodplain of the Ottauquechee River on a 5-acre tract of land. Ground cover between the home and the river consists of open fields with areas of mature trees and dense vegetation along the bank of the river. See **Figure 1**. The current first floor threshold elevation is 663.03 ft, and the crawl space floor elevation is 655.34 ft. See photos in **APPENDIX A**.

The river has been studied in detail by the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP). The resulting Flood Insurance Rate Map (FIRM) shows the flood hazard zones along the Ottauquechee River. A part of the map is shown on the firmette in **Figure 2**. The base flood elevation (BFE) at the house is 663 ft. This is the estimated water surface elevation that would result from a discharge value that has a 1% chance of being met or exceeded in any year (1% AEP) also referred to as the 100-year storm.



Figure 1. Location of home and parcel at 1023 E Woodstock Rd

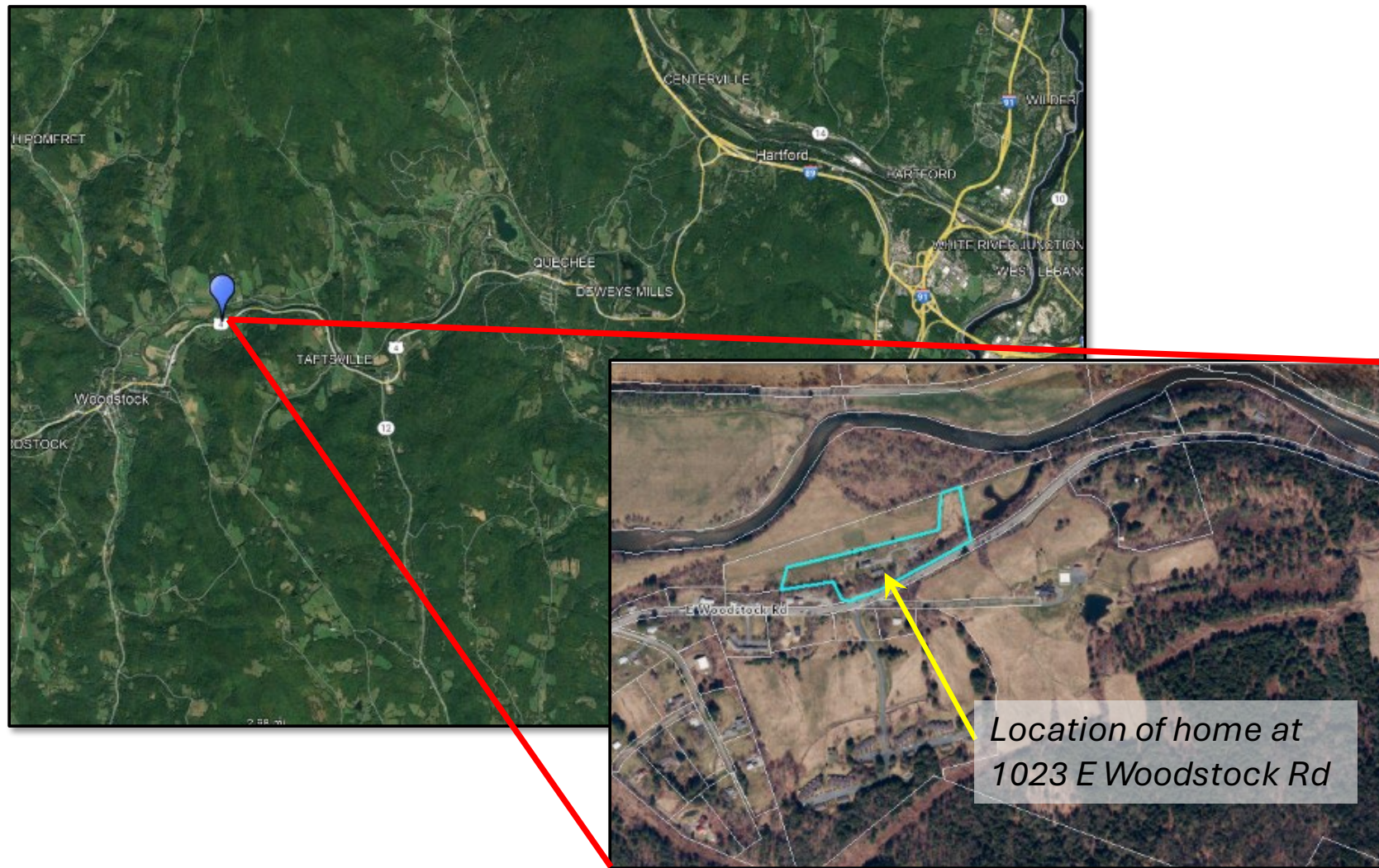
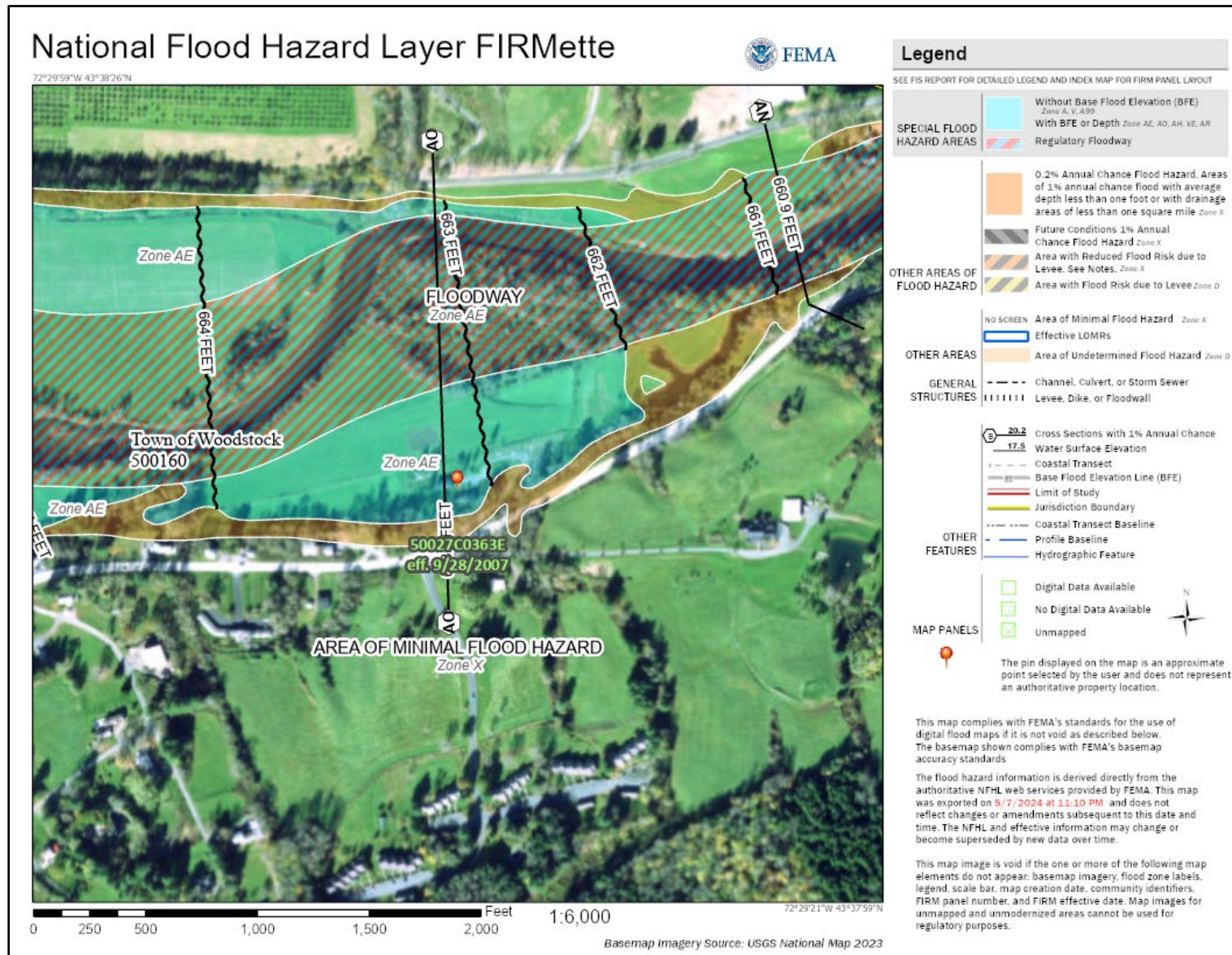


Figure 2 FIRM at 1023 E Woodstock Rd, Ottaquechee River



The FEMA NFIP hydrologic and hydraulic analyses for the Ottauquechee River was completed in August 2000 and incorporated into the Flood Insurance Study (FIS) and map on May 2, 2002.

To protect the structure from any future flooding events, the homeowners plan to raise the home approximately 8 ft by placing fill around the home and physically raising the structure. The conceptual sketches of the design are included in **APPENDIX B**. The overall design is to raise the driveway approximately 2 ft, raise the front yard an additional 2 ft and slope up towards the house gaining another 2 ft along the perimeter of the home. This will allow for the elevation of the home a total of 8 ft as the first floor will be set 2 ft above the lowest adjacent final grade.

Hydrologic Analysis

The Ottauquechee River flows from the west towards the east, originating in the Coolidge Range of the Green Mountains. Killington Peak is the highest elevation in the watershed at 4,229 ft. At the study location, the contributing drainage area is 186 square miles (**Figure 3**) and the average elevation is just over 660 ft. The river continues to flow east, eventually reaching the confluence with the Connecticut River in North Hartland, Vermont.

Figure 3 Drainage area of the Ottauquechee River at 1023 E Woodstock Rd



Estimating the peak design flows is the goal of the hydrologic analysis. There are several ways to estimate the discharge for a given stream including the following.

- **Gaging Stations:** USGS or state & local gaging stations that record flows on the study stream provide the most representative data set for statistical analysis.
- **Regional regression equations:** Developed from gaging station data sets in a representative region.
- **Previously reported values** (FEMA, State, Local)

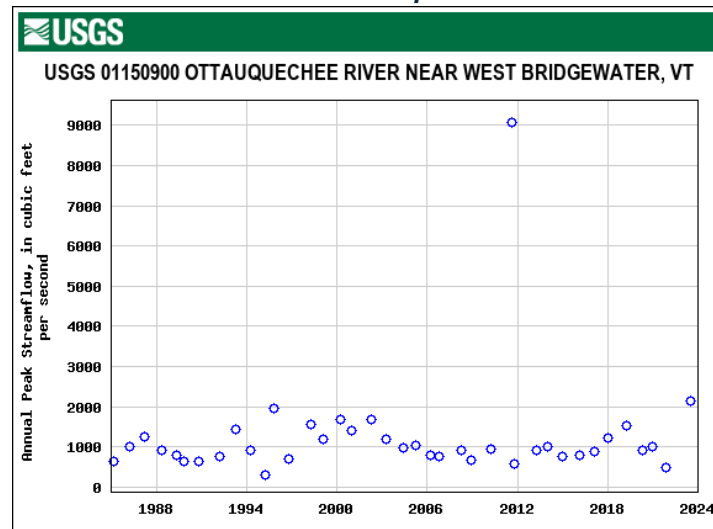
There is inherent uncertainty in each approach and often best engineering judgment is needed in selecting the appropriate design values.

USGS Gaging Stations

There are three USGS gaging stations found in the watershed (**Figure 3**); two on the Ottauquechee River and one on Kent Brook. The gage closest to Woodstock is inactive with limited historical data. The *USGS gage 01550900 Ottauquechee River near West Bridgewater* has been recording annual peak flow data continuously since 1985. It can be seen in **Figure 4** that the highest flows recorded at that gage occurred in August 2011 (Tropical Storm Irene) and July 2023.

The drainage area of the West Bridgewater gage is 23.4 square miles (only 13% of the drainage area at the study location) and therefore not appropriate for estimating flow near Woodstock. However, this data set does provide an indication of the severity of those two flooding events compared to the peak flows from the other recorded years of data.

Figure 4 Annual Peak Streamflow - Ottauquechee River at West Bridgewater

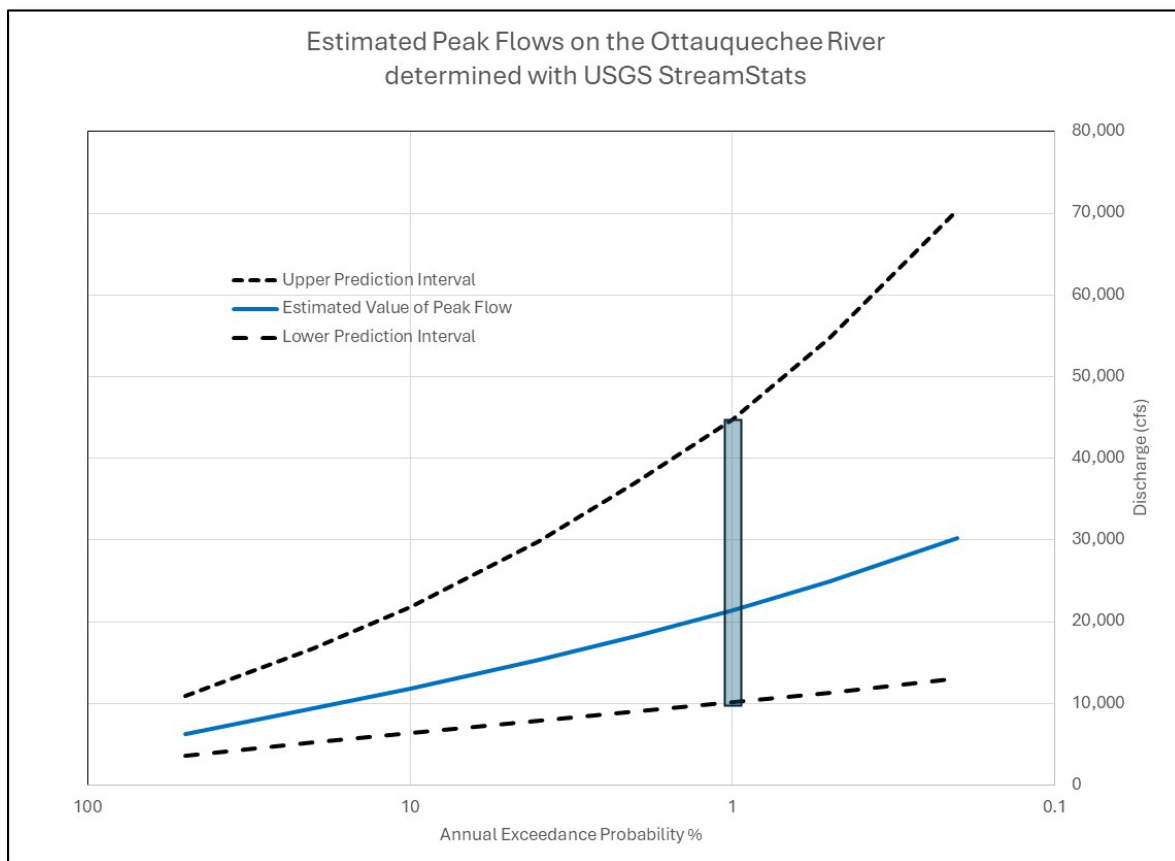


Regional Regression Equations

Regional regression equations (RRE) are used to estimate discharge on ungaged streams. The USGS provides guidance on the development and application of the RREs for each state. For Vermont, the information is presented in Scientific Investigations Report 2014-507 “*Estimation of Flood Discharges at Selected Annual Exceedance Probabilities for Unregulated, Rural Streams in Vermont*”. (Olsen, 2014)

The USGS web application StreamStats delineates contributing drainage area and applied the appropriate RREs to estimate peak flow for a range of AEPs. The results for the estimates of the Ottauquechee River RRE application are shown in **Figure 5**. The inherent uncertainty in the regression equations is depicted with the upper and lower prediction intervals. For the 1% AEP (100-yr storm), the reported value is 21,400 cfs, however, it could range from 10,200 cfs to 44,800 cfs.

Figure 5 Peak Flow Estimate using RREs.



Previously Reported Values

The current Flood Insurance Study for Windsor County lists a summary of discharge values for the streams studied in detail. Included in the list is Ottauquechee River as shown in **Figure 6**. The reported value for the 1% AEP at Taftsville Dam is 32,200 cfs. This value is higher than that determined with the RREs, however, it does fall within the range of the prediction intervals. This is value used to perform the hydraulic analysis by FEMA and create the FIRM in the project area.

Figure 6 A portion of the “Summary of Discharges” table from the Windsor County FIS

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs)			
		10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
NORTH BRANCH OTTAUQUECHEE RIVER At mouth	27.4	4,650	8,800	11,000	18,000
OMPOMPANOOSUC RIVER At confluence with Connecticut River	136.0	*	*	2,599	*
OTTAUQUECHEE RIVER At Quechee Dam	207.0	15,384	28,191	35,751	60,129
Upstream of Whitman Brook	197.0	14,115	25,860	32,800	55,160
At Taftsville Dam	192.0	13,855	25,390	32,200	54,150
At downstream Woodstock corporate limits	182.7	13,235	24,290	30,790	50,375
Below confluence of Barnard Brook	173.9	12,755	23,405	29,670	48,545
Above confluence of Barnard Brook	136.7	10,645	19,540	24,770	40,525
Below confluence of Kedron Brook	135.4	10,570	19,400	24,590	40,250
Above confluence of Kedron Brook	119.3	9,615	17,645	22,365	36,595

As with all hydrologic estimates, there is uncertainty in the FEMA reported values also. Due to the increased severity and more frequent occurrence of flooding events, it is recommended to use a value higher than 32,200 cfs to determine the level of safety that will be provided by elevating the structure.

For hydraulic analysis, the FEMA report values for the 1% and 0.2% peak discharges are used in the HEC-RAS model.



Hydraulic Analysis

The current effective mapping shown in the NFIP was developed based on the Hydraulic Engineering Center – River Analysis System (HEC-RAS) 1D model, finalized in August of 2000. The floodplain limits were delineated using USGS 1:24,000 scale topographic maps with 20 ft contour intervals.

HEC-RAS is now capable of modeling river flows in two dimensions, using a variable size mesh. This approach allows for more refined calculations. The evaluation of the impacts of raising the home was performed using HEC-RAS v6.4.1 2D.

Digital Elevation Model (DEM) data was obtained from the Vermont Center for Geographic Information database and used to develop the topography in the project area. The DEM was derived from a LiDAR collection effort (flown between 10/31 and 11/3/2016). Modeled existing conditions are based on this topography. A topographic survey was performed in the vicinity of the house by Holt Gilmore Survey Associates (HGSA) on 4/17/24. Data from that survey is incorporated into the DEM to adjust the topography in the study area.

Overland roughness values, Manning “n”, were assigned using the National Land Cover Database, augmented with classification polygons created to represent the land use more accurately in the modeled area. Values per land cover type are shown in **Table 1**.

Table 1 Manning "n" Roughness Values per Land Cover Type

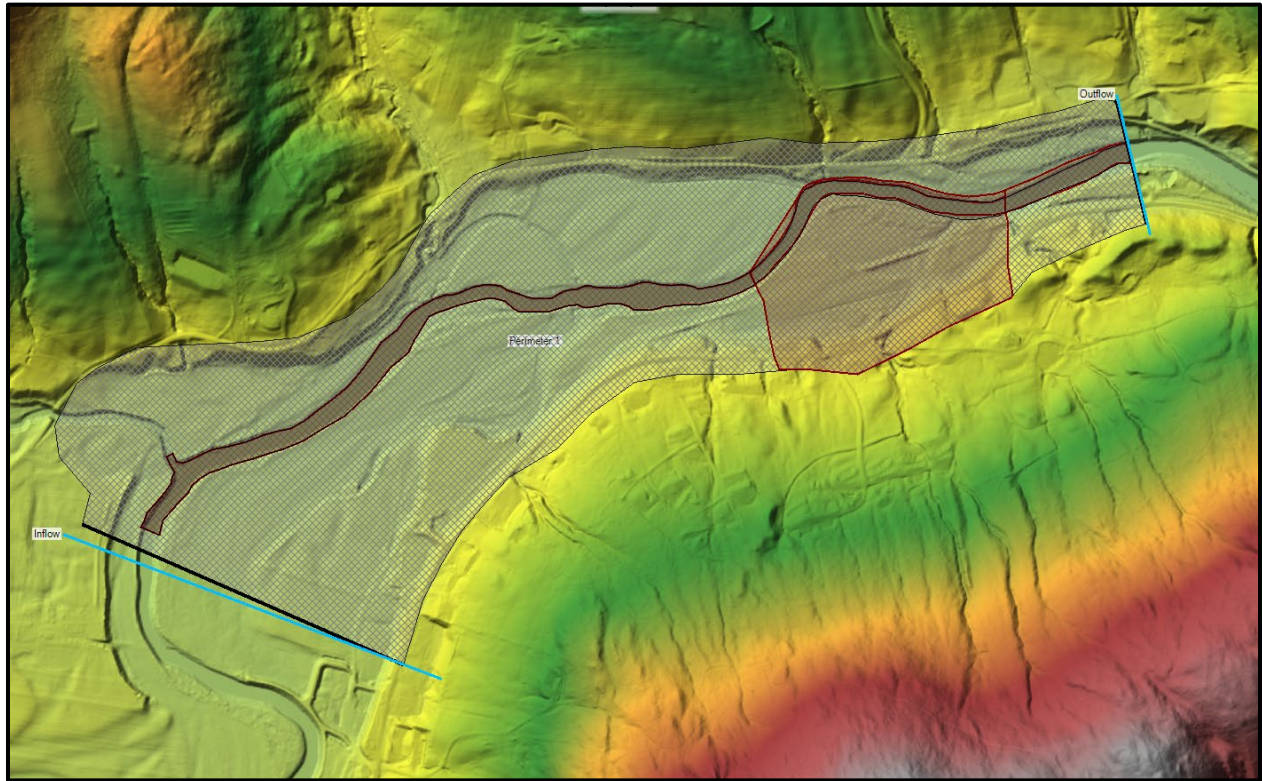
Land Cover Type	Manning Roughness Value "n"	Land Cover Type	Manning Roughness Value "n"
Barren Land Rock-Sand-Clay	0.030	Developed, Low Intensity	0.080
Pavement	0.030	Shrub-Scrub	0.080
Developed, Open Space	0.035	Woody Wetlands	0.080
Open Water	0.035	Open Field Garden	0.080
Pasture-Hay	0.040	Deciduous Forest	0.100
Grassland-Herbaceous	0.040	Mixed Forest	0.110
River	0.040	Developed, Medium Intensity	0.120
Cultivated Crops	0.050	Evergreen Forest	0.150
Emergent Herbaceous Wetlands	0.060	Developed, High Intensity	0.150

The 2D mesh perimeter covers a river length of over 7,400 ft and spans the width of the Ottauquechee River valley (**Figure 7**). The mesh in the vicinity of the house is comprised of cells sized 10 ft x 10 ft, the river portion cells are 20 ft x 20 ft, and the remainder of the



modeled area are 50 ft x 50 ft cells. In total, there are over 21,000 computational points in the model.

Figure 7 HEC-RAS 2D Computational Mesh



Proposed conditions are represented with increased elevations in the topography as discussed in the Background section of this report. The house raising effort will ultimately increase the threshold elevation of the house by 8 ft.

Unsteady flow files represent the 1% and 0.2% AEP storms with a gradual increase to the design value of 32,200 cfs and 54,150 cfs respectively. Downstream boundary conditions are set by rating curve using the FIS flood profile elevations.

Models were executed using a 5 second computation interval. Overall volume accounting error was 0.01% for the inflow volume of 168,026 acre-feet.

Note, as consistent with FEMA mapping guidance, the flow is assumed to be open water, void of debris and other obstructions. During large floods, this is rarely the case, and the estimated WSEs may be impacted by large woody material, ice and ice jams, and other debris.



Floodplain Mapping Results

The existing conditions model showed consistent agreement with the current effective FEMA map. Discrepancies in extents are primarily due to the topographic map used in 2000 (a 1:24000 scale, 20 ft contour USGS quad map) compared to the 2016 LiDAR generated DEM used for this analysis. **Figure 8** depicts the HEC-RAS 2D model results with the FEMA FIRM map shapefile superimposed. In the figure, the outermost blue line is the FEMA 0.2% floodplain, the inner most is the FEMA floodway, and the intermediate is the FEMA 1% floodplain. The filled area represents the results of the model. The BFE of 663 at the study area is in very good agreement with the existing FEMA mapping.

Figure 8 Existing Conditions HEC-RAS 2D 1% AEP Floodplain Results

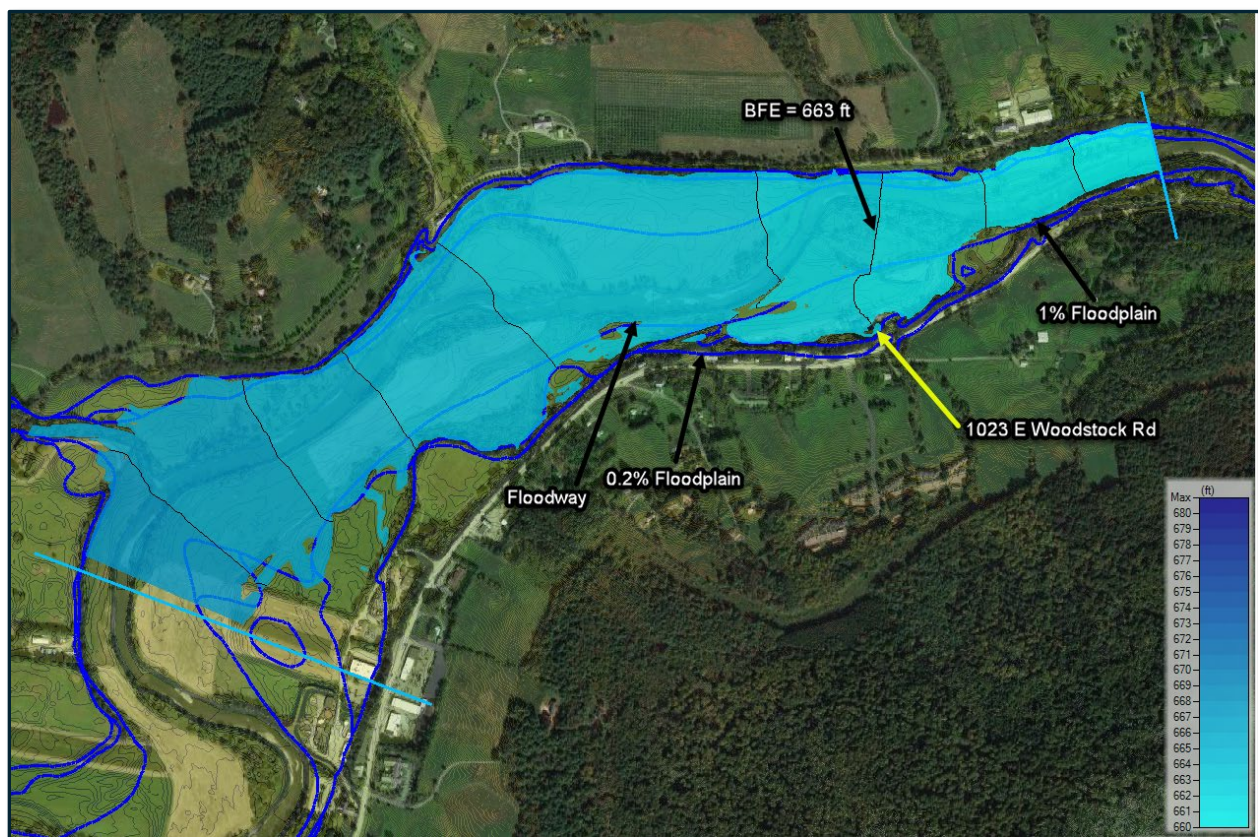


Figure 9 shows a calculated surface which depicts the difference in the water surface elevations between proposed and existing conditions. The largest difference observed is 0.028 ft in one isolated location. The rest of the model shows 0.00 ft in change.



Figure 9 Water Surface Elevation Differences Proposed – Existing Conditions

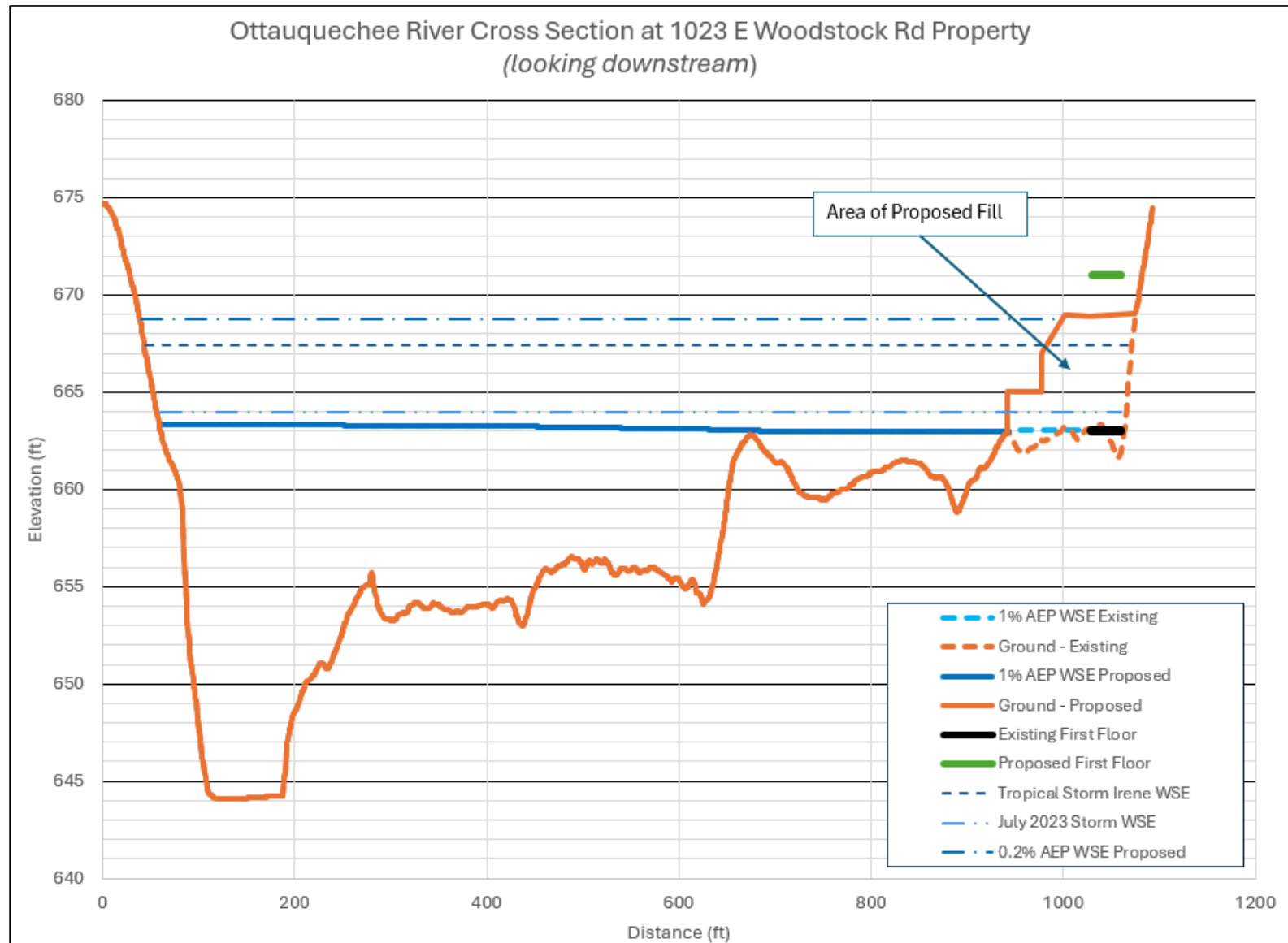
Figure 10 shows a cross section of the river and floodplain at the house location. Included in the figure are the existing ground and proposed ground, and the 1% AEP (100-yr storm) and 0.2% AEP (500-yr storm) water surface elevations (WSE). The results of the hydraulic analysis indicate that the proposed fill has a negligible impact on the WSE relative to existing conditions. The largest difference is 0.02 ft.

Also shown in **Figure 10** are the WSEs for the previous flood events. The elevations are based on high water marks noted by the owner and surveyed by Holt Gilmore Survey Associates. The WSEs during the July 2023 flood and Tropical Storm Irene in August 2011 were 664 ft and 667.42 ft, respectively.

The 0.2% AEP is also modeled to provide a comparison of WSE to proposed structure height. As shown on **Figure 10**, the 0.2% WSE is 668.8 ft, roughly 1.4 ft higher than the maximum height of the Tropical Storm Irene flood. This elevation is also below the proposed grade at the house, 669.0 ft.

The results of the HEC-RAS 2D model indicate the proposed fill will have a negligible impact on the water surface elevation and provide a height well above predicted flood levels.



Figure 10 Cross Section Indicating Negligible Impacts

Recommendations

The increase in the severity and duration of storms has been seen worldwide in the recent past. As changes in climatic conditions continue, the traditional methods of design need to be adapted for a more resilient future.

As such, with expected increases in the hydrologic events comes expected increases in the base flood elevations. The American Society of Civil Engineers (ASCE) in conjunction with the Structural Engineering Institute published standard ASCE/SEI 24-14 titled “Flood Resistant Design and Construction” (ASCE, 2015) has recommendations for minimum first floor elevations as shown in **Figure 11**. Note that residential buildings are categorized as Flood Design Class 2.

Figure 11 Table excerpt from ASCE 24

Flood Design Class ^b	Minimum Elevation, Relative to Base Flood Elevation (BFE) or Design Flood Elevation (DFE)
1 ^c	DFE
2 ^d	BFE + 1 ft or DFE, whichever is higher
3 ^d	BFE + 1 ft or DFE, whichever is higher
4 ^d	BFE + 2 ft or DFE, or 500-year flood elevation, whichever is higher

Following the ASCE 24 guidance, the elevation of the crawl space floor should be located a minimum of 1 ft above the BFE, which for the study area is 664 ft. The proposed plan for the raised home has the elevation of the crawl space floor at 666 ft, a full 2 ft above the minimum requirement. The proposed first floor elevation of 671 ft.

The proposed elevations are recommended based on the results of this analysis and the exceedance of the current design criteria.



References

American Society of Civil Engineers (ASCE), 2015. Flood Resistant Design and Construction, ASCE Standard 24-14. Reston, VA.

Federal Emergency Management Agency (FEMA), Flood Insurance Study, Volume 1 of 4, Windsor County, Vermont. FIS Study Number 50027CV001A. September 28, 2007.

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APPENDIX A

Site Photos





Photo 1 Looking west towards barn, arrow shows elevation of WSE during Tropical Storm Irene Flood (4/16/24)



Photo 2 Looking west towards front of house, driveway and barn (4/16/24)





Photo 3 Looking west at the eastern side of house, Woodstock Road is above to the left of the photo (4/16/24)



Photo 4 Looking southwest toward the front of the house, arrow shows an approximate WSE of July 2023 flood.





(4/16/24)

Photo 5 Looking north across open floodplain towards the Ottawaquechee River (4/16/24)



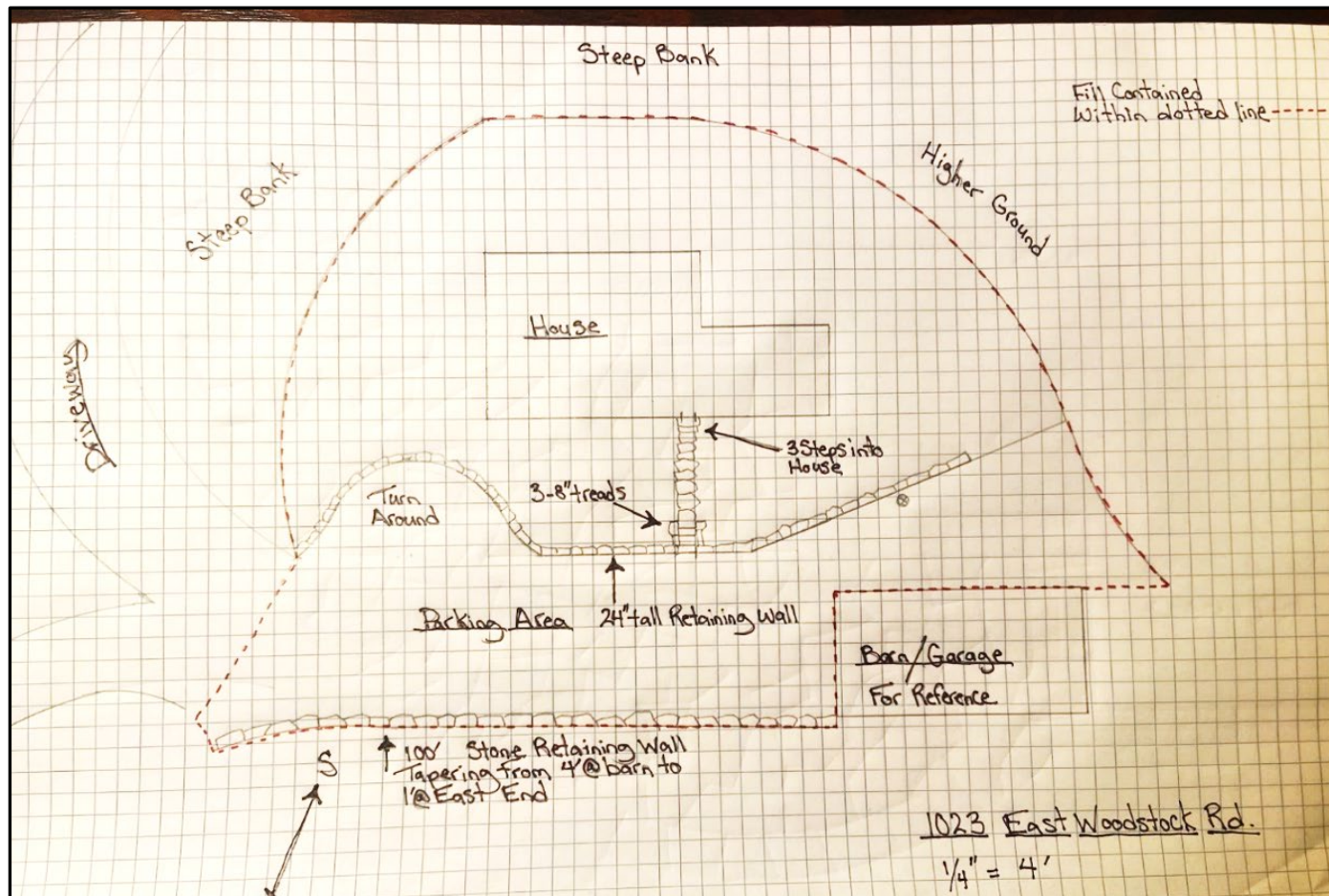
Photo 6 Looking west across the elevated driveway towards the house (4/16/24)



APPENDIX B

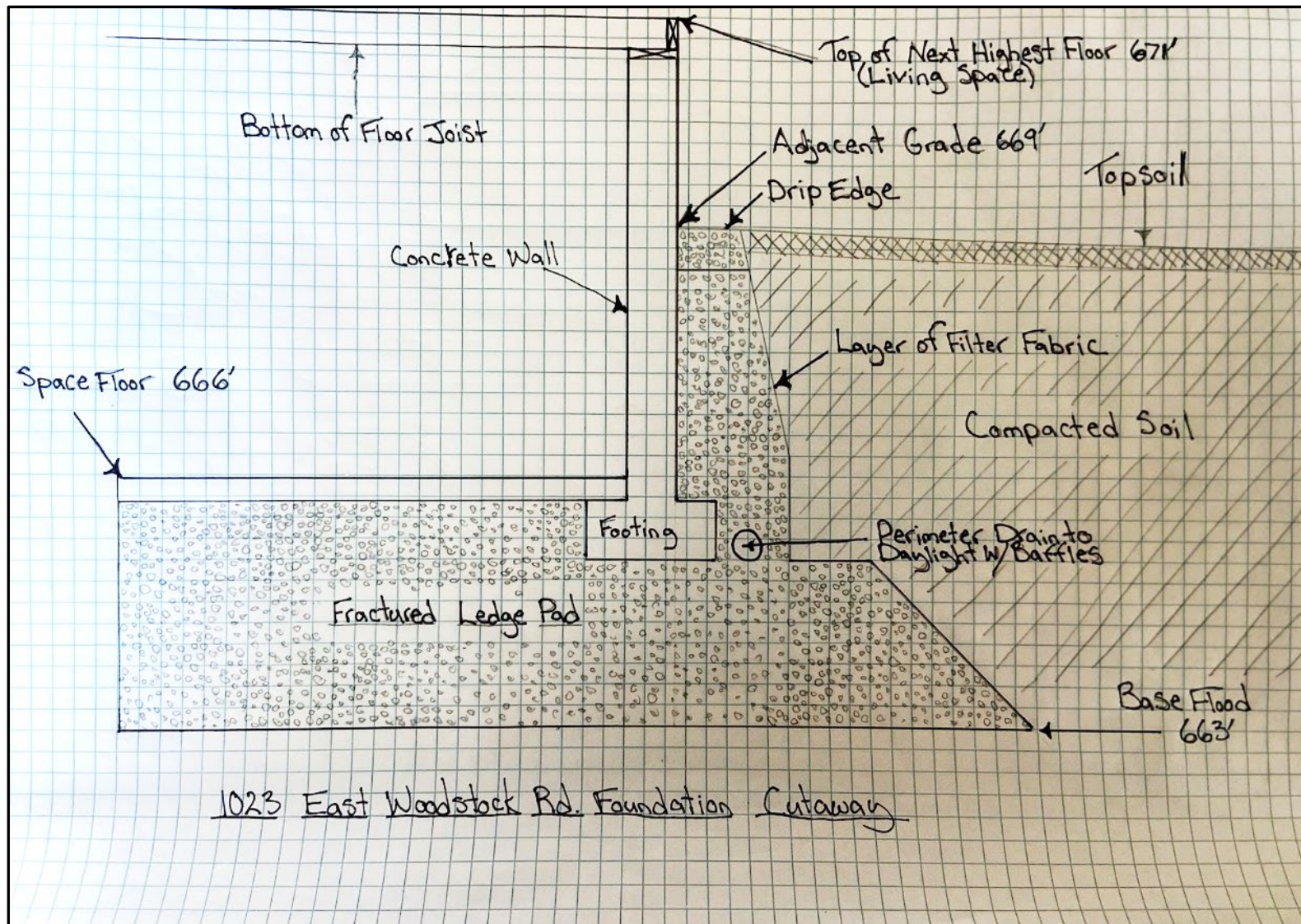
Conceptual Design Sketches





Sketch 1 Conceptual Grading Plan View (by homeowner)





Sketch 2 Conceptual Grading Cross Section View (by homeowner)

