



Vermont Department of Environmental Conservation

Agency of Natural Resources

Watershed Management Division
1 National Life Drive, Main 2
Montpelier VT 05620-3522
www.watershedmanagement.vt.gov

[phone] 802-828-1535
[fax] 802-828-1544

AUTHORIZATION TO CONDUCT STREAM ALTERATION ACTIVITIES

Pursuant to Section C.2.2 of the VT Stream Alteration General Permit (Reporting activities not requiring an application)

Project Number: SA-06- 08 -2015

Applicant Name: Bristol Fire Department

Mailing Address: P.O. Box 249, Bristol, VT 05660 Phone: (802) 989-4330

Project Location Upper Notch Rd, Bristol 44,0735, -73.0605 Email: Kevin.larose@gmail.com

The Secretary of the Vermont Agency of Natural Resources (VT ANR) has determined that:

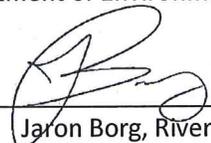
1. This project authorizes Removal & Replacement of existing Dry Hydrant Structure & associated Rip Rap Stabilization
2. The proposed activity is eligible for coverage under the VT ANR Stream Alteration General Permit.
3. The proposed activity will meet the terms and conditions of the General Permit provided:
 - a) The project will be completed and approved as shown on the plan dated 10/23/2014, prepared by Troy Duce, and approved by the Vermont Agency of Natural Resources.
 - b) The project will not adversely affect the public safety by increasing flood hazards.
 - c) The project will not significantly damage fish life or wildlife.
 - d) The project will not significantly damage the rights of riparian owners.
 - e) The project will not obstruct the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction.
 - f) The project is conducted in a manner which minimizes or avoids any discharge of sediment or other pollutants to surface waters in violation of the VT Water Quality Standards.
 - g) The ANR River Management Engineer is notified by phone or email when construction begins and when the project is complete.
 - h) In-stream working dates for all GP activities are from June 1st through October 1st; any in-stream work outside these dates will require an Individual Stream Alteration Permit authorization by the River Management Engineer.
 - i) This authorization has been posted for three days public comment. This authorization constitutes final approval.

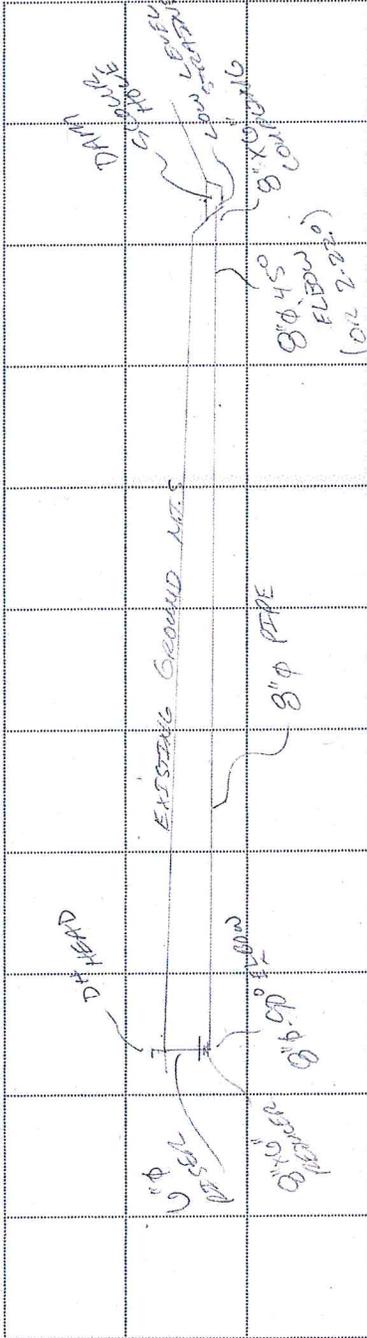
If there are any changes in the project plan or deviation in construction from the plan, the Permittee must notify the River Management Engineer immediately.

If the project is constructed as you have described, as shown on the above referenced approved plans and according to the above conditions, there is no reason to expect any violation of Vermont Water Quality Standards.

Signed this 29th day of April, 2015
David K. Mears, Commissioner
Department of Environmental Conservation

This permit expires October 1, 2015.

by: 
Jaron Borg, River Management Engineer



SEE MAP
GOS

Site Map
Not To Scale

Scale: 1" = 20'

Dry hydrant installations on a river or stream should ALWAYS: 1) Make sure the construction work is clean & neat. 2) If needed only use clean stone fill. 3) All exposed soil shall be seeded and mulched immediately upon project completion. 4) While working in shallow streams use a hay bale or sand bag cofferdam system. 5) In-stream construction is generally limited to June 1st to October 1st (and maybe more restrictive in specific streams). 6) Permitting is required for any in-stream work. Municipalities shall apply for the appropriate permit by contacting the Vermont ANR River Management Stream Alteration Engineer in your area.

Design Flow (GPM): 1250

Approx. Water Volume:

Summer: —

Winter: —

See Attached Location/GIS Map

Notes

- This design does NOT certify your rural water supply site for a 2% (50 year return period) drought condition. For the Insurance Services Office to give credit for this water supply it must meet the Suction Supply requirements of the Fire Suppression Rating Schedule as to accessibility, availability, needed fire flow, duration, pumper capacity and distances. The 2% drought volume must be determined by a Vermont registered /licensed professional engineer, hydrologist, or similarly qualified person.

Bill Of Materials					
#	Description	No.	Unit	Unit Cost	Total
	SEE ATTACHED				
	Miscellaneous Excavation				\$517.00

APPROVAL
WATERSHED MANAGEMENT DIVISION

DATE 8/24/2015

BY [Signature]

THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT # SA06-08.2015 ISSUED HERewith

BURSTOL 2014 RFP RELOCATE
A. JOHNSON
VERMONT RURAL FIRE PROTECTION TASK FORCE
Vermont Association of Conservation Districts (VACD)
Rural Fire Protection Program - Randolph, VT 05060
Drawn by: TROY DANCE
Reviewed by:
Date: 10/23/14 Sheet 15

Rural Fire Protection (RFP) Water Supply Site Assessment Form

(Revised 9/23/14)

Date: 7/8/14 Town: BRISTOL County: ADD Fire Department: BRISTOL
Site Name: A. JOHNSON Site ID Number: BRISTOL 2014 RFP RELOCATE
Approx. Access/Standpipe Location: UPPER NOTCH Long: 73° 3' 37" W Lat: 44° 4' 25" N
Property Owner/Address: 800 UPPER NOTCH
Largest Fire Load/Flow within 1000ft: RES HOMES 1.5mi radius: RES HOMES
Site Assessment Completed by: TROY DARE Project: 2014 RFP GRANT
Needed Fire Flow (if known): 1000 gpm Existing RWS Repair Out of service Date: _____
Agreements (circle applicable - check when complete): Landowner Grant Other

Water Source: _____ Lake Pond Wetland River Stream Brook
Recommended System: Dry Hydrant Basin Pressure (Wet) Drafting
Type of Recharge: stream seep spring groundwater river
Rate of Recharge: Poor Fair Good Excellent
Site Accessibility: Asphalt Dirt Parking Area Driveway Other: _____
Depth of water where system intake will be located: 3 ft DAM SCOUR HOLE
State Fish & Wildlife Access NOTES: RFP systems in F&W facilities require a MOU; and a RFP-Engineering Technician must be present for all installations.

Lift @ NWL: 8 ft Horizontal Distance: 140 ft Elevation (approx.): 1050 ft
Connection Information: Hose: 4.5" 5" 6" Thread Size: 4.5" 5" 6" » Male Female Storz
Estimated Flow Rate of System (from New Hydrant Flow Spreadsheet): 1250 gpm

Water Source Information & Calculations for fire purposes (estimate):

Volume (static water bodies) = Surface Area x intake depth x 7.48gal/cf x (2/3)

Surface Area: _____ ft x _____ ft = _____ sf (From GIS Software)
Volume: Area _____ sf x (Intake depth _____ ft - 2ft) x 7.5gcf x (0.67) ≈ _____ gal
Volume in Winter months ≈ _____ gal

Note: Thickness of ice must be deducted from the intake depth value for winter months volume. If not known at time of survey use 2ft.

Flow (flowing water bodies at time of survey) = Q = Area x Velocity (attach any survey or calc sheets)

Cross sectional Area (1.5' x 6') sf x Velocity 12.0 f/s x (60sec/min) x (7.5gal/cf) = 4050 gpm

Permitting/Signoff Needed: Permitting Applications and Contact Information: www.vtwaterquality.org

Stream Alteration/ Water Quality (State) Lakes and Ponds (State) Wetlands (State) Army Corps (Federal)

Cultural Resources (Federal) F&W Access (State)

Integrity: Dist Intact Unknown Landform Slope: ≈ 0%

Date Cultural Resources Review Completed (if applicable): _____

Notes: _____

Field Notes: _____

Field Sketch: _____

SEE GIS MAP

APPROVAL

WATERSHED MANAGEMENT DIVISION

DATE 04/29/2015

BY [Signature]
THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT # SA-06-08-2015 ISSUED HERewith



Bristol Fire Department

PO Box 249 • 32 North Street • Bristol, VT 05443

Phone: 802.453.3201 • Fax 802.453.7142 • Website: www.bristolfiredepartment.org



October 7, 2014

Brett LaRose, Chief
Bristol Fire Department
P.O. Box 249
Bristol, VT 05443

APPROVAL
WATERSHED MANAGEMENT DIVISION

DATE 04/29/2015

BY [Signature]
THIS APPROVAL IS SUBJECT TO THE TERMS
AND CONDITIONS OF STREAM ALTERATION
PERMIT # 51-06-08-2015 ISSUED HERewith

Vermont Rural Fire Protection Task Force
C/O Vermont Association of Conservation Districts
14 Crab Apple Ridge
Randolph, VT 05060

Troy Dare,

Enclosed please find a signed Land Owner Agreement from the A. Johnson Lumber Company authorizing installation of a Dry-Hydrant on their property. The mile marker in which the dry-hydrant will be located is 860 Upper Notch Road, Bristol, VT. As stated in the letter dated May 2, 2014 that accompanied the grant application, this project involves the re-location of an existing dry-hydrant currently located at 850 Upper Notch Road, Bristol, VT. Following site visit summer 2014 by the VT Rural Fire Protection Task Force, you determined the appropriate water source further upstream in the Notch Brook for the relocation of this dry-hydrant.

Following a site visit to this location October 6, 2014 by Assistant Fire Chief Kevin LaRose who I designated at the Local Project Coordinator, Site Coordinator Joel Bouvier and Excavating Contractor John "Pecker" Heffernan, it was determined that this project will be completed by the October 2014 deadline.

Kevin LaRose will remain your primary point of contact for these projects to ensure information and requests received by your office are addressed in a timely manner and we can all maintain a common operating picture.

Kevin LaRose
kevinrlarose@gmail.com
(802) 989-4330

- Attachment 1: Land Owner Agreement - A. Johnson Lumber Company
- Attachment 2: Updated site map showing current dry-hydrant location and new dry hydrant location.

Regards,

Brett LaRose, Chief

APPROVAL
WATERSHED MANAGEMENT DIVISION

DATE 04/29/2015
BY [Signature]
THIS APPROVAL IS SUBJECT TO THE TERMS
AND CONDITIONS OF STREAM ALTERATION
PERMIT # SA-06-08-2015 ISSUED HEREWITH

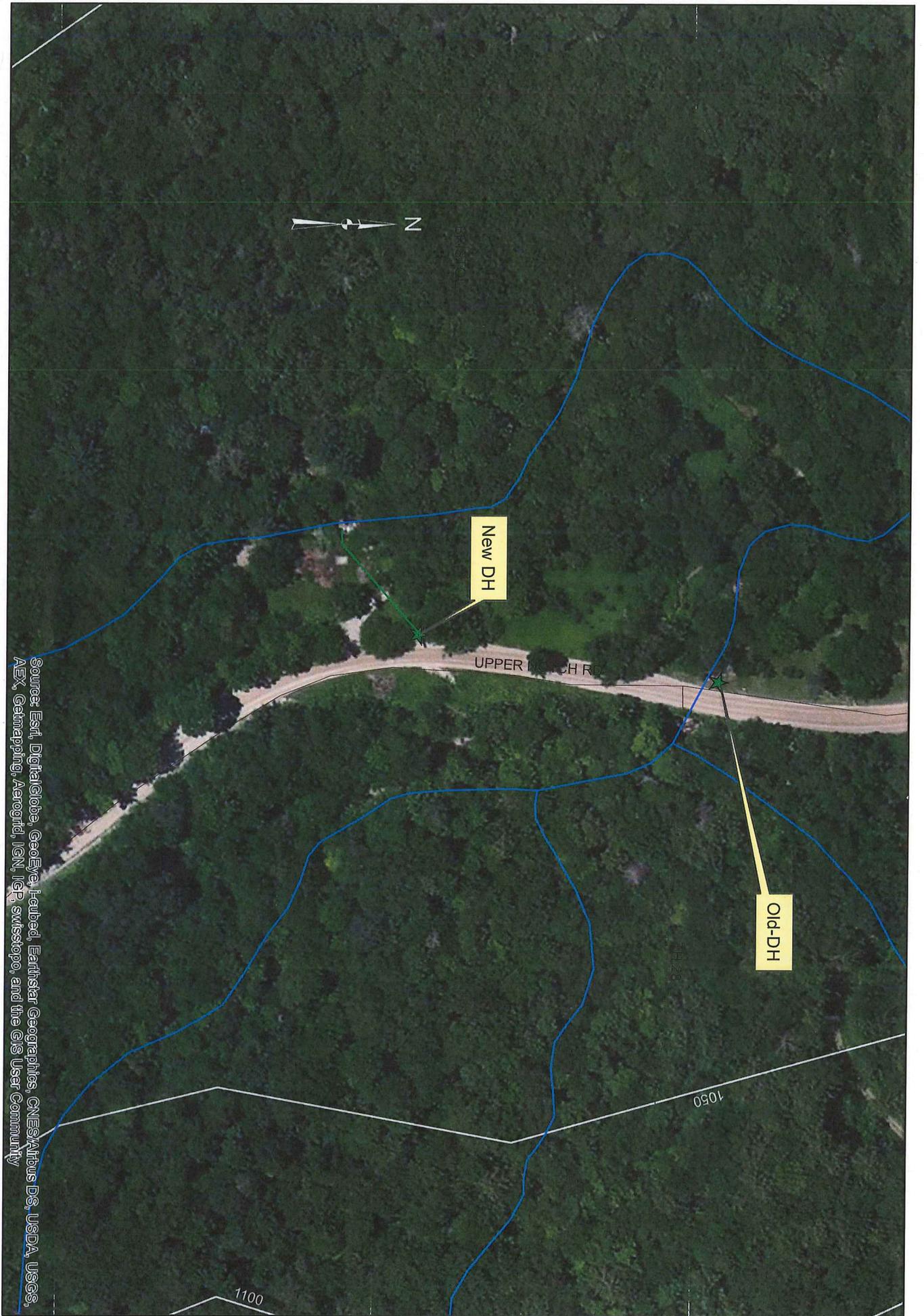


Current Dry-Hydrant Location
Approximately 850 Upper Notch Road
Bristol, VT 05443

Image shows current location of dry-hydrant (in red)
and current water source (in blue).

Proposed Dry-Hydrant Location
Approximately 860 Upper Notch Road
Bristol, VT 05443

Image shows proposed location of new dry-hydrant
(in red) and proposed water source (in blue).



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Bristol 2014 RFP Relocate
73°4'30.052"W 44°6'15.016"N
A. Johnson