



FY17 Vermont Better Roads Grant Application

Please complete this page ONCE and return with your Grant Category Application(s)

Town/Organization: Arlington Contact Person(s): Keith Squires

Address: PO Bo 268 Arlington Vermont 05250

Street Address *Town* *Zip*
Email: arlmanage@comcast.net Phone: (802) 375 - 6474

DUNS #: 26817973 Fiscal Year End Month (MM): 12

Accounting System: Automated Manual Combination

Please use the suggested documentation checklist below to ensure that all of the relevant items regarding your application have been included.

- Grant application cover sheet (Only submit one)
- Grant application form (One per category/project)
- Itemized Cost estimate for labor, equipment, and materials (see enclosed Cost Estimate Worksheet). If applicable, please break down funding by source (i.e. different grant sources)
- Project Location Map (please show location of affected water)
- Sketch of proposed erosion control measures or other management practices, including distances in feet
Also show approximate location of town/other right-of-way and/or property lines
- Photo(s) of the project area
- Letters of Support (RPC, VTrans District Technical Staff, ANR Rivers and Streams Engineers, etc.)
- If Category C River/Road Conflict or Category D River/Stream Structure or Culvert, you must attach ANR/ACOE consultation



Vermont Better Roads Grant Program Application

Please complete one application per category and/or project you are applying for. You may make copies of the application for multiple applications per category and/or multiple categories.

Please check the Category you are applying for:

- B. Correction of a Road Related Erosion Problem and/or Stormwater Mitigation Retrofit for both gravel and paved roads
- C. Correction of a Stream Bank or Slope Related Problem
- D. Structure/culvert upgrades

Town/Organization: Town Of Arlington

Project Name: Berwal Road Culvert 4901

Road Name: Berwal Road TH #: 49 Structure # (if applicable): 4901

Road Type: Unpaved Uncurbed
Class 3

Watershed: Unnamed

Please provide a thorough description of the problem (ex. Roadway has steep slope with no ditch which is causing roadway erosion):

Culvert undersized & will not allow spring flows to pass. Small amount of brush and sticks slow flow & plug culvert. Water flow washes out edge of roadway.

Description of Project and how you plan to complete the work (ex. Stone line 500' of ditch by reshaping ditch and stone lining, working from the top of the project down to the bottom):

**Replace existing 18in culvert with 60in arch pipe and bury inlet 12in under streambed to allow for aquatic passage. Stabilize inlet area slopes with 12 / 18 in rip rap. Cover bottom of pipe with native sized material.
Rebuild roadway to allow for increase pipe height.**

Expected Effects (+ & -) on water quality (ex. Erosion will be eliminated by placing the stone ditch):

By reducing the need for annual maintenance the amount of material that moves into the streamflow will be eliminated.



Distance from end of project to nearest water (stream, lake, or stormwater system that outlets directly to water). 0-50'

Progress to Date:

N/A

Is there an emergency reason this project must be completed quickly? If yes, please explain:

No

Has this project been identified through a municipal road inventory, capital budget plan, tactical basin plan, culvert inventory, or other management plan? If yes, please list which.

Yes: Culvert Inventory

No

Please list any professionals you may have contacted for assistance with this project (ANR River Management Engineer, Army Corps of Engineers, VTrans District Technical staff, Basin Planner etc.):

ANR BCRC rep.

Is the project located in the town "Right of Way?" Yes, No, Both (if "Both" please explain further).

YES

Will the town road crew complete this work? Yes, No, Some (if "some" please explain further).

YES



Describe how the grant funds will be spent and/or attach a project budget:

Culvert-2 ends- Band- ship	\$6,625.00	
Labor 3 Days	\$2,100.00	
Equipment 3 Days	\$3,450.00	
Material Stone- Gravel	\$1,875.00	TOTAL \$14,050.00



How do you plan to meet the required 20% match on this grant?:

Town Highway Labor & Equipment

Requested Grant Amount (\$20,000 max Category B, \$40,000 max Categories C & D): \$ 11,240.00

Estimated Total Project Cost (including 20% local match): \$ 14,050.00

Estimated Completion Date: 09/30/2016

REQUIRED ATTACHMENTS:

- Itemized Cost Estimate (labor, equipment, materials)
(For assistance, call Better Backroads at 802-828-4585)
- Project Location Map
(Please show location of affected water; 1:12,000 USGS map, if possible)
- Sketch of proposed erosion control measures, including:
 - Distances (ft.)
 - Estimate of waste & borrow quantities
 - Approx. location of town/other right-of-way and/or property lines
- Photo(s) of the project area.
- Agreement for Entry and/or Deed of Easement (if project is outside Town ROW).
- If project involves stream or river/road conflict, include documentation of consultation with a River Management Engineer.
- Other appropriate supporting documents.

By signing this application I certify that all the information provided is accurate to the best of my knowledge. We will comply with all the requirements of the grant including making our books available for audit if required.

SIGNATURE OF APPLICANT: (Must be Town Administrator/Manager or Select Board Chair)

Name: Keith Squires

Title: SELECT BOARD CHAIR

Arlington Manager

From: Carvajal, Joshua <Joshua.Carvajal@vermont.gov>
Sent: Wednesday, April 06, 2016 1:31 PM
To: Arlington Manager
Subject: Re: Better Roads Culvert Projects Town of Arlington
Attachments: Arlington_Berwal Road Atlas Map.pdf

Hi Keith,

Thank you for taking the time to show me this stream crossing structure on Berwal Road that the Town plans to replace with funding from the Better Roads grant program.

The existing structure is undersized and has a scour hole at the outlet. A new structure will need to satisfy the Vtrans Hydraulics Manual design criteria and the ANR bankfull width requirements.

Based on the bankfull measurements I took in the field, the replacement structure will need to be approximately 5 ft span and 4 ft rise. An arch pipe structure would be ideal at this location due to the height of the road and the need to embed the structure 12-18" and infill with native boulders/gravel to allow for aquatic organism passage. The nearest arch pipe size is 64" x 43", a 5 ft diameter HDPE pipe is also an option.

Please note that these above sizes are for bankfull width requirements and not Vtrans hydraulics requirements of sizing for the Q25 event. After the Town obtains a hydraulics report from Vtrans, we can continue discussion on the sizing and material type of the final structure.

The replacement structure will be required to obtain coverage under the Stream Alteration General Permit (SAGP). There will be a \$200 fee for permit coverage and the fee form will need to be completed prior to commencing construction -

http://www.anr.state.vt.us/dec/waterq/rivers/docs/SA/Stream%20Alt%20Application_11052015.pdf

Please let me know if you have any questions

Josh Carvajal, P.E. CFM
Rivers Program
Agency of Natural Resources
Department of Environmental Conservation

cell: (802) 490-6163

www.watershedmanagement.vt.gov/rivers.htm
floodready.vermont.gov

Our email addresses have changed! (@vermont.gov)

NW: joshua.carvajal@vermont.gov

Please update your address book!



Bennington County Conservation District

Promoting rural livelihoods and protecting natural resources in southwestern Vermont

April 11, 2016

Board of Supervisors

Ken Leach
Chair
(Rupert)
325-2514

Jim Henderson
Vice-Chair
(Sandgate)
375-9461

Josh Carvajal
(Bennington)
490-6163

Debbie Johnson
(Shaftsbury)
442-5945

Joe Nolan
(Arlington)
733-2143

Partners/Staff

Philip Rivara
Natural Resources
Conservation
Service Soil
Conservationist

Shelly Stiles
District Manager

Mr. Alan May
Municipal Assistance Bureau
Vermont Agency of Transportation
1 National Life Drive
Montpelier, VT 05633

RE: Town of Arlington Better Roads application

Dear Alan,

The Bennington County Conservation District is pleased to support an application for a Vermont Better Roads program grant by and for the Town of Arlington, which hopes to upgrade a culvert and install a check dam on a crossing on Berwal Road. We understand this is a priority of the Town and look forward to working on the project with the Town and the Batten Kill corridor planning team.

Sincerely,

Shelly Stiles, district manager



Bennington County Regional Commission

111 SOUTH STREET • SUITE 203 • BENNINGTON, VERMONT 05201 • (802) 442-0713 OR 442-0682 • FAX
(802) 442-0439

Alan May
Agency of Transportation
Municipal Assistance Bureau
1 National Life Drive
Montpelier, Vermont 05633

April 8, 2016

Dear Alan,

Please accept this letter expressing BCRC's support of The Town of Arlington's proposal for funding through the Vermont Better Roads Grant Program to replace an undersized, deteriorated culvert on Berwal Road. Check dams will also be installed above the culvert intake. BCRC staff have visited the sites with Keith Squires, Arlington Select Board Chair.

Thank you for your consideration of these important projects.

Sincerely,

A handwritten signature in cursive script that reads "Jim Henderson".

Jim Henderson
Environmental Program Manager



BERWAL ROAD
TH @ 49

3 ROD
R.O.W. @

ROW

ROW

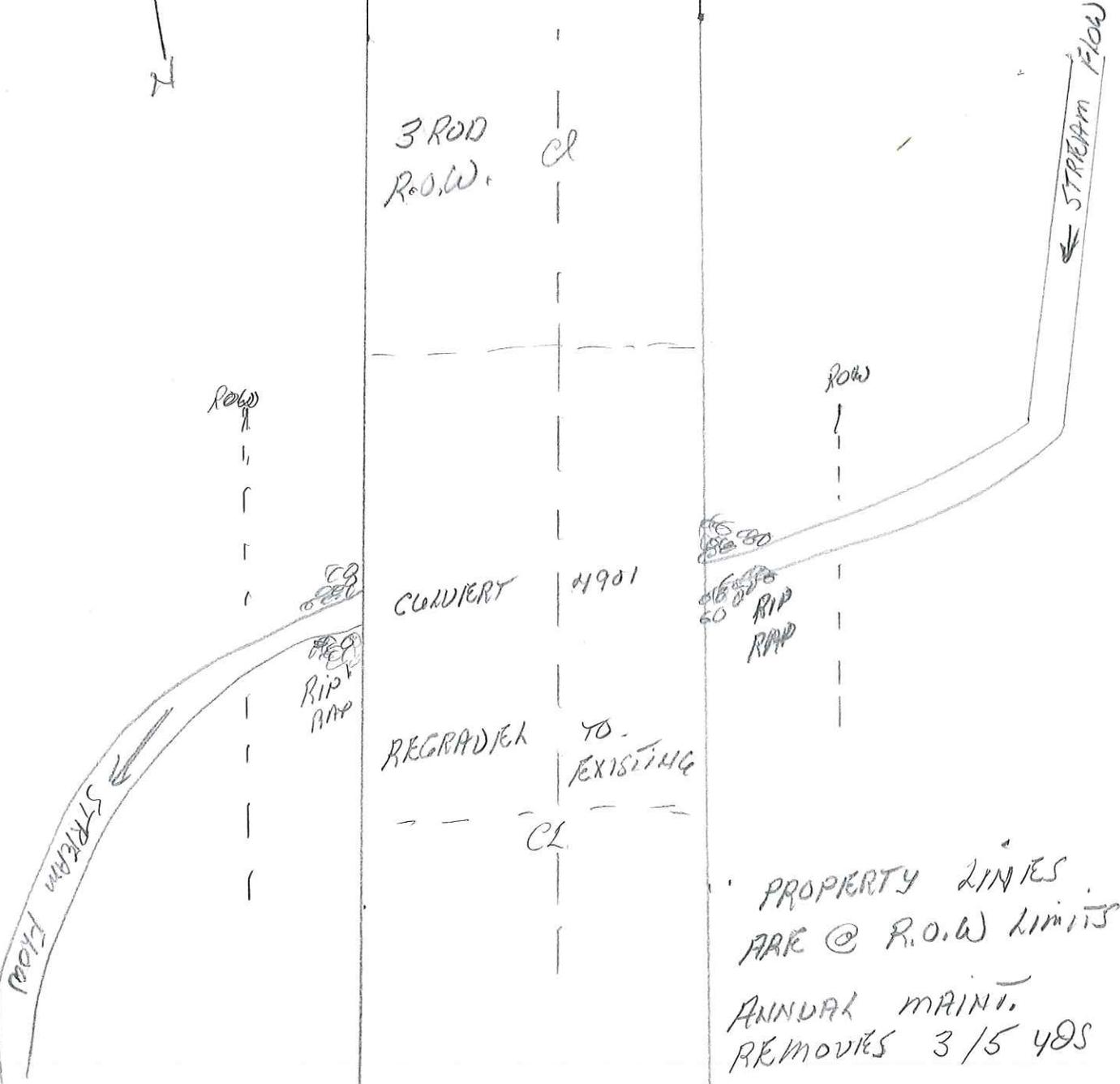
CONDUIT 4901

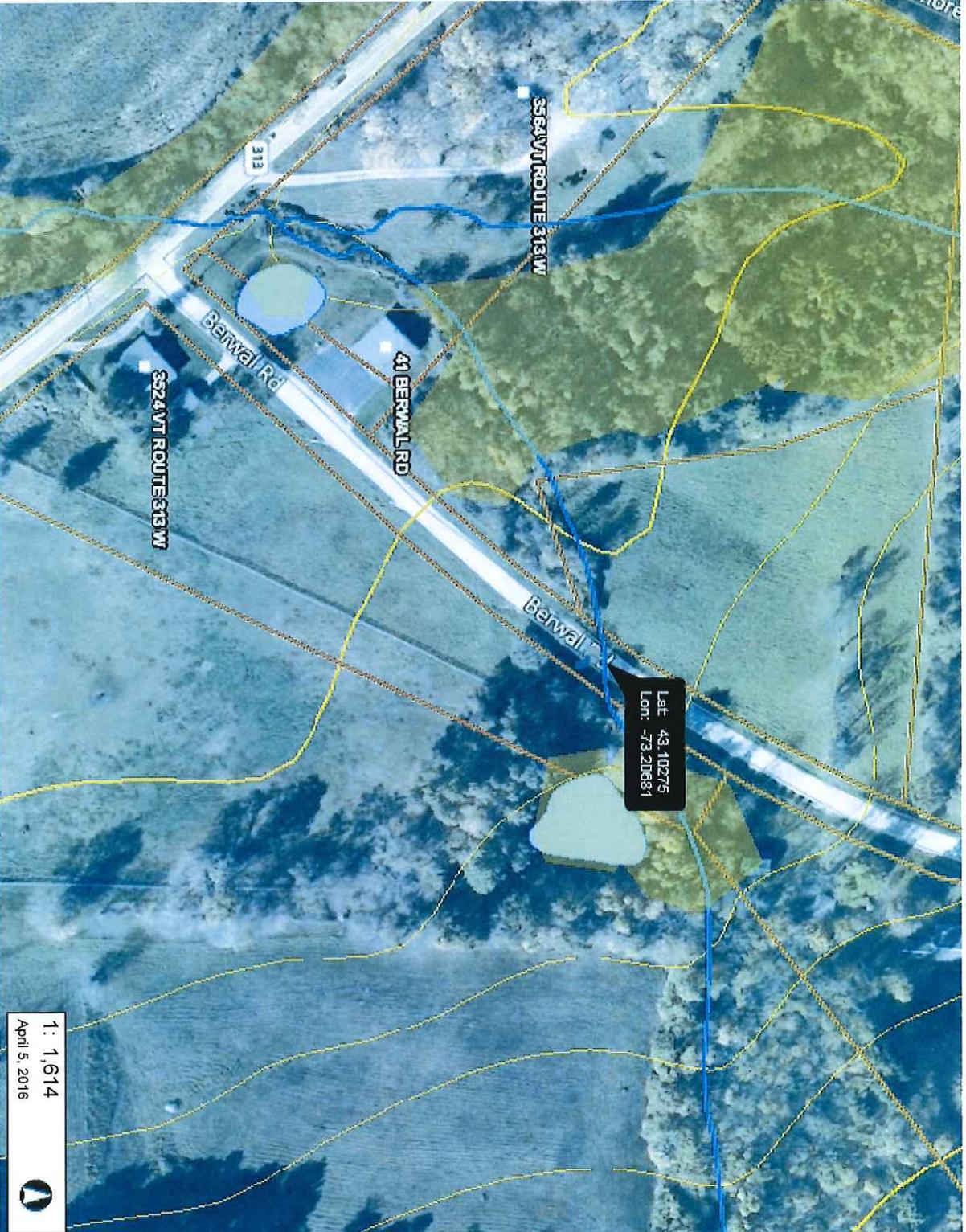
REGRADIENT TO
EXISTING

CL

PROPERTY LINES
ARE @ R.O.W LIMITS

ANNUAL MAINT.
REMOVES 3/5 YRS

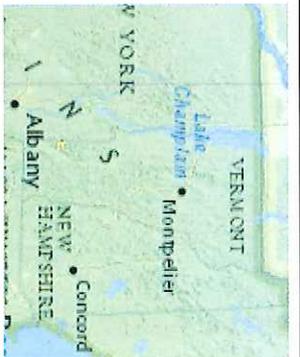




1 : 1,614
April 5, 2016

82.0 0 41.00 82.0 Meters
WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 134 Ft 1cm = 16 Meters
© Vermont Agency of Natural Resources 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.



LEGEND

- Wetlands - VSWM
 - Class 1 Wetland
 - Class 2 Wetland
- Wetlands Advisory Layer
- River Corridor Easement
- DFIRM Floodways
- DFIRM Preliminary Floodways
- Special Flood Hazard Areas (FDM)
 - AE (1-percent annual chance flood)
 - A (1-percent annual chance flood)
 - AO (1-percent annual chance zone (feet))
 - 0.2-percent annual chance flood ha
- Special Flood Hazard Areas (FDFIRM)
 - AE (1-percent annual chance flood)
 - A (1-percent annual chance flood)
 - AO (1-percent annual chance zone (feet))
 - 0.2-percent annual chance flood ha
- Buildings (E911)
- VTRANS State and Town Long
- VTRANS State Short Structure
- Town Bridge
- Town Culvert
- Waterbody
- Stream
- Parcels (where available)

NOTES

Map created using ANR's Natural Resources Atlas

Town of
Arlington



02-2-01.000
41 Benwal Road
Arlington Fire Company 1
Po Box 264
East Arlington, VT 05252-
0.68 acres Grand List
0.21 acres GIS

Map Features:
Parcel Lines
Building Locations
Road Centerlines
Streams & Ponds
Ortho Imagery 2015

The Town of Arlington and CTI assume no liability as to the sufficiency, accuracy, or the user's interpretation of the data delineated herein. Current to April 1, 2016
This map is for assessment purposes only. It is not to be used for description, conveyance, or determination of legal title.



Map Scale 1:11,500
1 inch = 970 feet



Map Printed on
March 24, 2016





24 10 1981



24 10:13AM

