



FY17 Vermont Better Roads Grant Application

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

Town/Organization: Town of Bethel, VT Contact Person(s): Keith O. Arlund

Address: 134 South Main Street

Email: betheltownmgr@comcast.net Phone: (^{Street Address} 802) ^{Town} 234 - ^{Zip} 9340

DUNS #: 42450890 Fiscal Year End Month (MM): 6

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, VTTrans 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: Bethel, VT

Project Name: Steep Slope Roadway Erosion Control

Road Name: Macintosh Hill Road TH #: 20 Structure # (if applicable): _____

Road Type: Unpaved Please Select
Please Select

Watershed: _____

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

Roadway has steep slope greater than 5% with inadequate ditches that continue to cause erosion on roadway shoulders.

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):

Excavate and stone line approximately 1300' of ditch for stone lining and fabric in accordance with VTTrans standards (copy attached) working from top to bottom.

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

Eliminate/reduce erosion by constructing stone lined ditch and check dams if necessary.



Distance from end of project to nearest water (stream, lake, or stormwater system that outlets directly to water). 250'+

Progress to Date:

None to date-existing ditches too narrow or non-existent

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

This is not an emergency situation.

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.):
VTRans Technical Staff and Local Roads Staff.

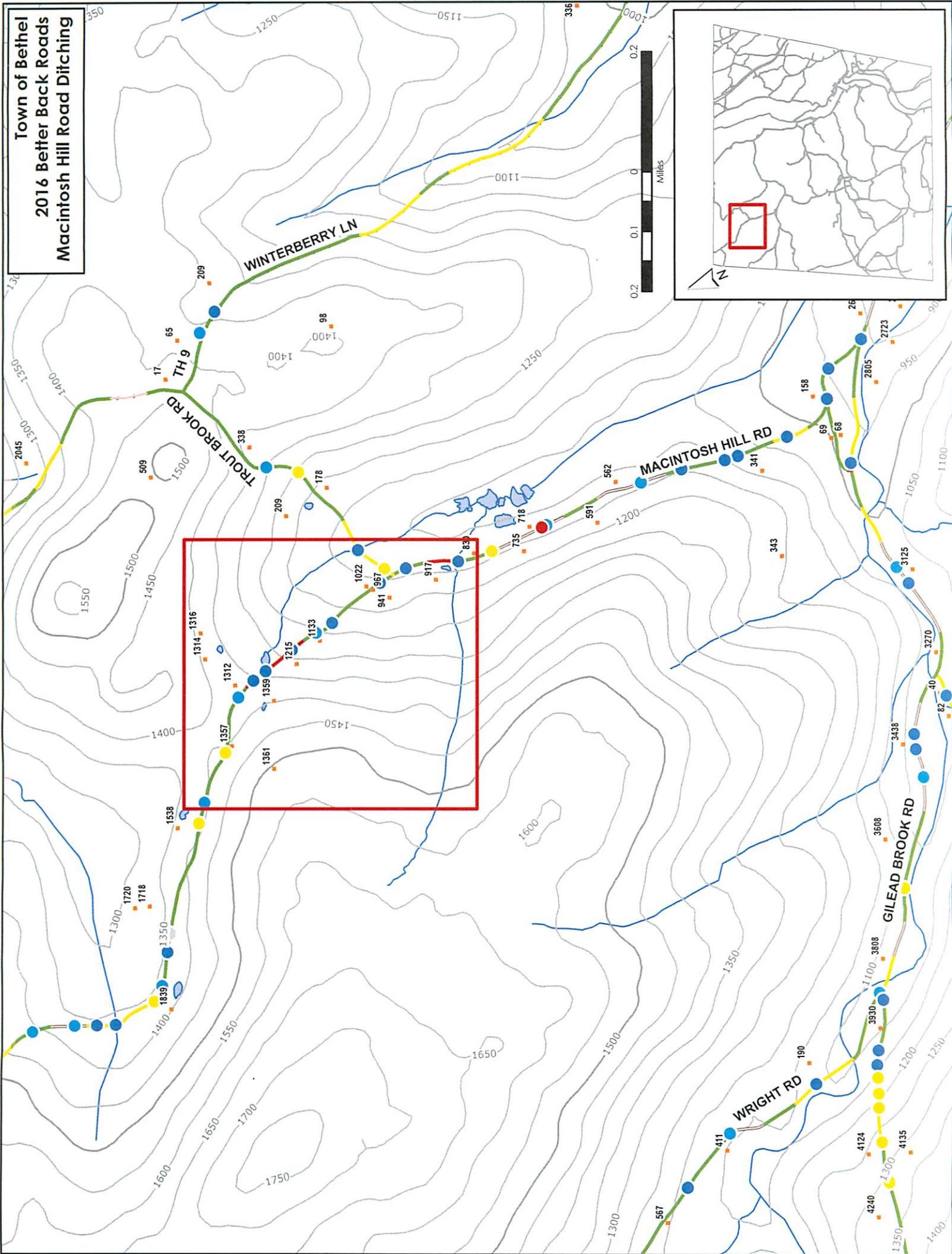
Is the project located in the town "Right of Way?" Yes, No, Both (if "Both" please explain further).

Yes-all work will be within the town's right-of-way. Town has 3 rod right-of-way along entire roadway.

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

Town forces and equipment will supplement contract labor and equipment

**Town of Bethel
2016 Better Back Roads
Macintosh Hill Road Ditching**



April 8, 2016

Mr. Keith Arlund
Town of Bethel
134 South Main Street
Bethel, VT 05032

Dear Keith,

I am pleased to provide a letter of support for the Town of Bethel's application submission for a Category B Better Back Roads grant to address improved ditching and drainage on Macintosh Hill Road. Our 2014 culvert inventory and the Road Erosion Risk Rating identified Macintosh Hill Road as a high priority town road for erosion issues. This grant will help alleviate many of the drainage issues on this very steep road.

Please contact me if you have any questions.

Sincerely,



Rita Seto, AICP
Senior Planner

128 King Farm Rd.
Woodstock, VT 05091
802-457-3188
trorc.org

William B. Emmons, III, Chair
Peter G. Gregory, AICP, Executive Director

Cost Estimate Worksheet

Town and Road Name: Town of Bethel

Project Name: Gravel Road Erosion/Stormwater

Labor	Rate	# Hours	Total (Rate x Hours)
R Hyde Highway Foreman	\$42.76/hr	40	1,710.40
M Drury Labor/Operator	32.63	40	1,305.20
Labor Total			3,015.60

Equipment	Rate	# Hours	Total (Rate x Hours)
Excavator w/ Operator	115.00/hr	40	4,600.00
Town Truck (Int'l Tandems)	60.00/hr	40	2,400.00
Equipment Total			7,000.00

Materials	Rate	Amount	Total (Rate x Amount)
1 1/2 Sone fill	22.00/yd	260	5,720.00
Type 1 Stone fill	25.00/yd	490	12,250.00
Filter Fabric	1.00/ sq yd	1735	1,735.00
Materials Total			19,705.00

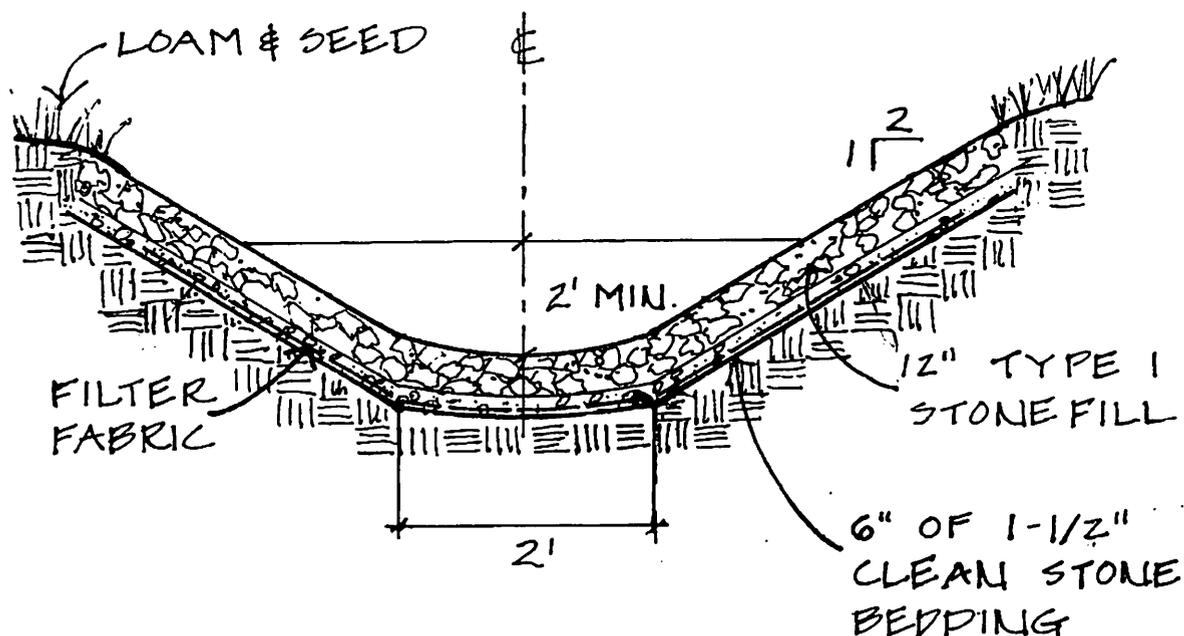
Miscellaneous	Rate	Amount	Total (Rate x Hours)
Miscellaneous Total			

Grand Total \$29,720.60

Match \$ 9,720.60

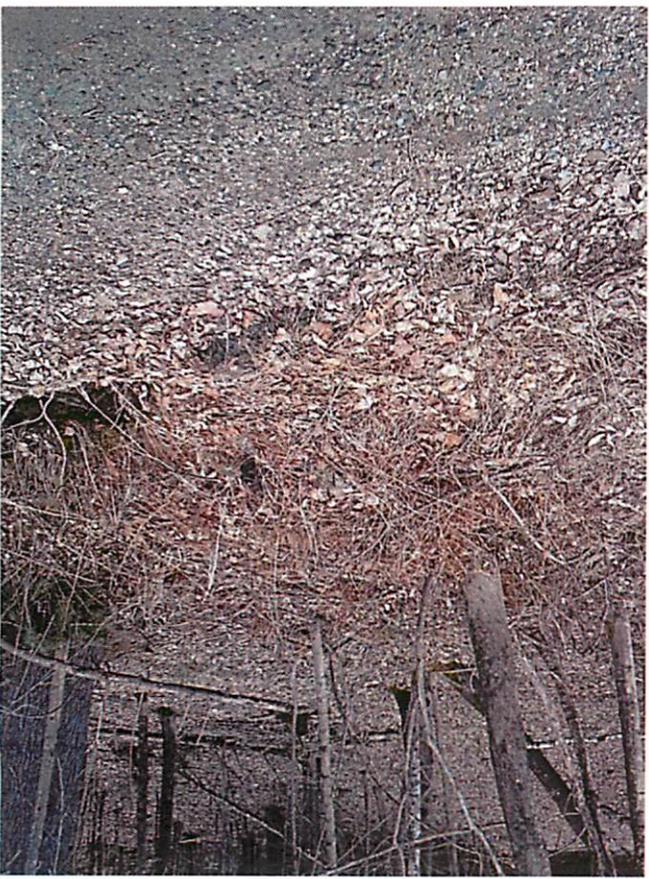
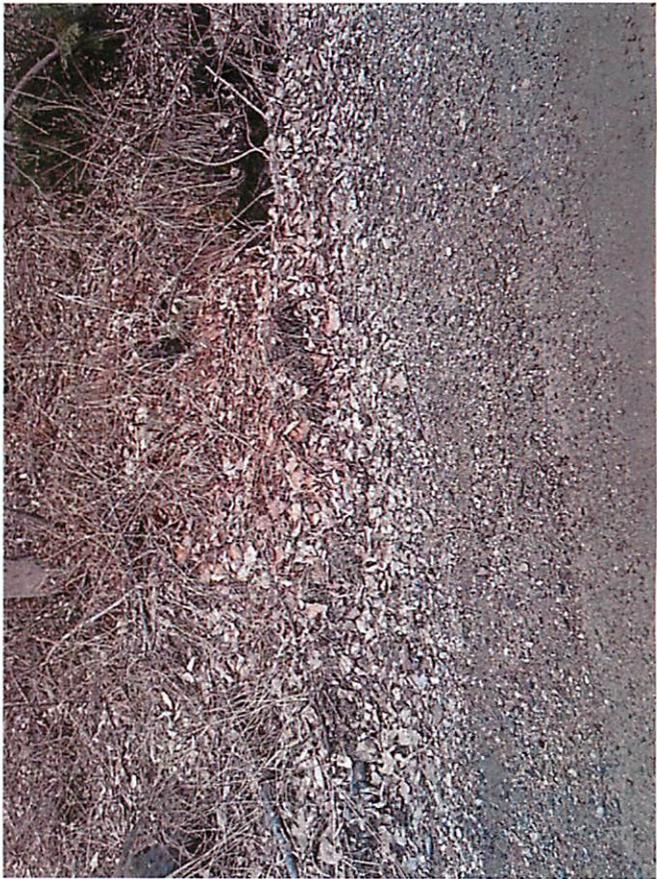


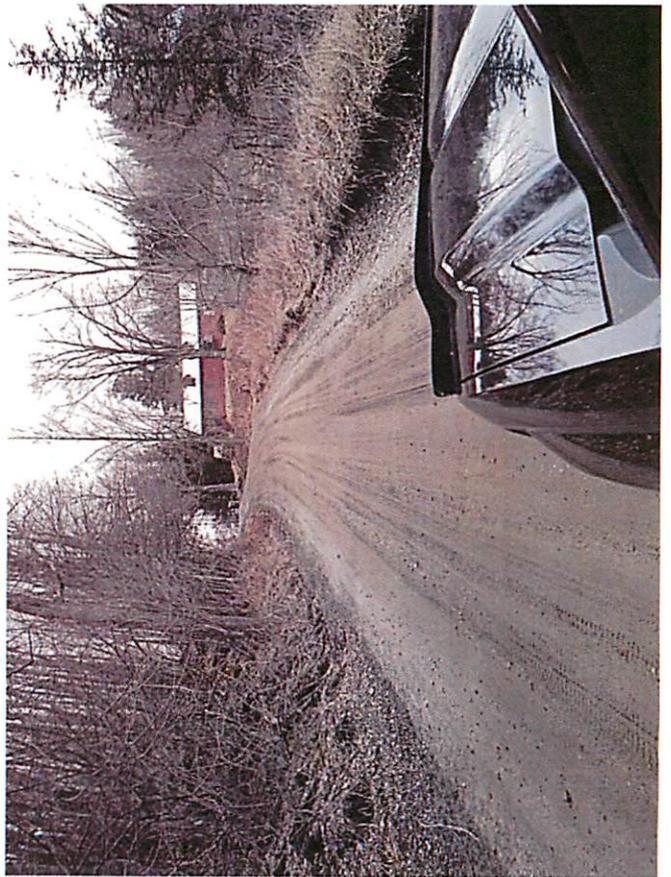
- Size ditches so they are large enough to handle runoff from the drainage area.
- The preferred equipment for creating ditches is a rubber-tired excavator with an articulated bucket.
- Line ditches which have a less than 5% slope with grass in order to filter sediments. Use mulch or erosion control blankets to hold seed in place and allow it to become established.
- Line ditches which have a greater than 5% slope with riprap.
- Line ditches as soon as possible to prevent erosion and to maintain the ditch profile.
- Ditches should deposit water away from the road and prevent standing water, which can weaken the road.
- Outlet ditches into vegetated areas, where possible.
- Vegetated ditches installed after September 15th should be stabilized with either erosion control blankets or hydroseeding to provide adequate protection for winter.



STONE LINED DITCH

McIntosh





April 8, 2016

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Town of Bethel
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Bethel, VT 05032

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