

TO: Windham Town Council
FROM: Rosie Hartzler, President of the Highland Lake Association and Co-Chair of the Watershed Protection Grant Committee
DATE: December 18, 2018
RE: Implementation of the Watershed Protection Grant in the Highland Lake Watershed

Introduction:

In April, 2018, the Town of Windham awarded a grant of \$10,000 to the Highland Lake Association (HLA) for the purpose of remediating roads and/or boat ramps that had been identified as high impact sites in the May, 2018 Watershed Survey. These sites were determined based on evidence of non-point source pollution discharging into Highland Lake.

In order to maximize the grant funds, participating road associations were expected to provide a 100% match, thus creating the potential of a total of \$20,000 to be utilized for the remediation of these sites. A Watershed Protection Grant Committee (WPG) was established in June, 2018, consisting of HLA board members, Windham residents and a Town employee, to oversee the process of site selection.

Site Determination

In mid-July, The results of the Watershed Survey determined "the worst of the worst" high impact road and boat launch sites as follows:

Swan Road ROW
Vista Road Culvert Outlet
South branch of Overlook Road
End of Johnson Road
Hill on Highland Shore Road
Stream Crossing under Town's Haven Road
Pride Farm Road Boat Launch
Cottage Road Boat Launch

The committee developed a set of criteria to prioritize potential sites:

1. Check to see if the site was previously a 319 site (from 2004 remediation by Cumberland County Soil and Water Conservation District (CCSWCD). If so, the site would be a potential site for implementing WPG funding. If the site was NOT a focus of 319 funding in 2004, then potentially it could become a site for 319 funding in 2020.

2. Project impact to the water quality in Highland Lake.

3. Technical Level and design complexity.

4. Cost of implementation.

5. Complexity of road associations

6. Match ability of road associations.

Four sites rose to the top as potential sites to implement the grant funding:

1. The Hill on Highland Shore Road
2. Swan Road ROW
3. Cottage Road ROW
4. South Branch of Overlook Road

Sites 3 and 4 were not in a position to utilize the funding during 2018 because of various complications. The Cottage Road ROW required several months for the submission and review of a Natural Resources Protection Act permit, due to the redirection of a stream. This project is slated for remediation in the spring, 2019.

The South Branch of the Overlook Road, was considered by the committee to be one of the most serious sources for NPS pollution into the lake. However, due to unresolved boundary disputes, the committee was prevented from pursuing any type of remedial action on this section of this road. The committee is very concerned about the ongoing impact of this site, and has solicited advice and support from the Town of Windham Code Enforcement in hopes of finding a resolution to the boundary disputes.

The final two sites, Swan Road ROW and the Hill on Highland Shore Road, met all criteria as listed above, hence were selected for this grant.

Implementation of the Grant Funding

The residents of Swan Road AKA as the North Highland Lake Association (NHLA) demonstrated an ability to provide matching funds, and also demonstrated a commitment to doing prep work on Swan Road (as recommended by DEP). The situation at the Swan Road ROW was heavily impacted by conditions on Swan Road. Runoff from Swan Road was exacerbating erosion issues at the ROW. Prior to any plan being finalized for the remediation of the ROW, the NHLA initiated two workdays wherein volunteers broke down berms that were preventing water from getting off the road. They completely rehabilitated a settling basin that had become grossly overgrown and was inhibiting the effectiveness of the basin to filter runoff from the road.

In the case of Highland Shore Road, known as the Duck Pond West Road Association (DPWRA), several of the residents committed to donating \$7,000 toward the remediation of the project. In addition, two residents also assisted in building a required rip rap level spreader.

John MacKinnon engineered plans for each of the sites, and each road association requested two quotes from area contractors. The Swan Road site required a Permit by Rule from the DEP, plus a Shoreland Zoning permit. Highland Shore Road remediation plans required a Shoreland Zoning permit.

(See attached plans for both sites)

The NHLA elected to go with the quote from John Ricci for the Swan Road ROW and DPWRA elected to go with the quote from Jeff Wyman for the project at Highland Shore Road.

(See Attached quotes)

Cost of projects

The HLA hit a temporary snag upon the realization that the cost of the two projects was going to exceed the \$20,000 that was available through the combined WPG funds and the cash match from the NHLRA and the DPWRA.

This chart shows the cost and estimated funding gap:

Highland Shore Road - repair of "the Hill"

Rehabilitating ditches, road underlay, paving 500 + ft.	\$22,021.62
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Swan Road ROW

Installing turnouts, new trench, paving entrance,

Installing Stone surface on ROW.	\$7,950.00
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TOTAL COST OF REHABILITATING THESE TWO SITES	\$ 29,971.62
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Total \$\$ from WPG plus cash match	\$20,000.00
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Projected unmet need	\$9,000 +
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How the HLA accessed the additional funding for these projects

Through a negotiation with DEP and CCSWCD, the HLA was able to access \$6,667 from Stormwater Compensation Funds, and an additional \$3,000 from the Town of Windham (granted by Windham Town Council on October 9, 2018)

Completion of projects:

The project at the Swan Road ROW was completed on October 15, 2018. John MacLaine, was on site as the DEP certified contractor, to verify that effective erosion control measures were implemented by the contractor, John Ricci.

The Highland Shore Road Hill project was completed on October 19. Jeff Wyman, the contractor, is DEP certified and implemented the erosion control design for this project. It should be noted that the hill design was reviewed numerous times by DEP, residents of DPWRA and the WPG committee.

Once all the work was completed, a surplus of \$388.11 was returned to the Town of Windham as the projects did not require all of the \$3,000 that the town had granted for these projects.

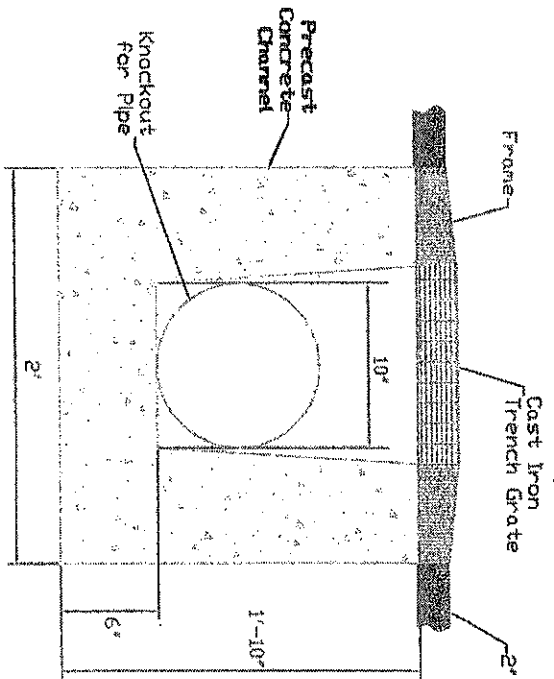
(See attached accounting for remediation completed at Highland Lake with the WPG funding.)

Unfinished business:

Negotiations are occurring with the NHLRA and the DPWRA regarding agreements between the HLA and each road association regarding recommended scheduled maintenance for each of these remediated sites.

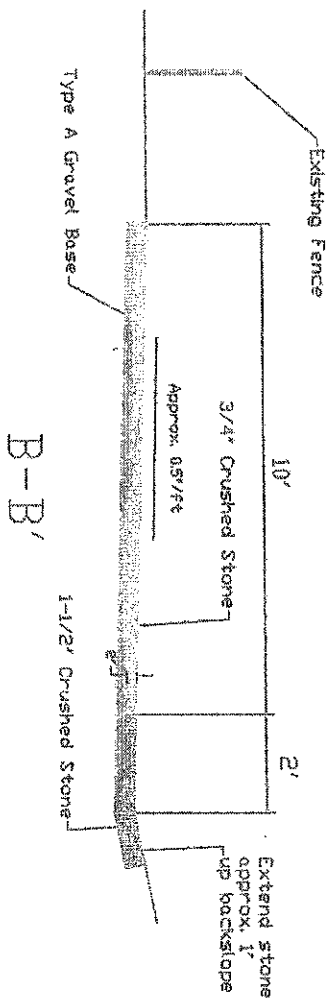
Special thanks to the following individuals for their contributions:

John MacKinnon – Engineering and Design
North Highland Lake Road Association – Mike Reid, Pres.
Duck Pond West Road Association – Kim White
CCSWCD- Heather Hunt
DEP - John MacLaine, Wendy Garland
Windham Town Council
Dennis Brown, Treasurer HLA
John Ricci, Jeff and Carol Wyman – contractors
WPG Committee: Gretchen Anderson, Joe Bickard , Rosie Hartzler,
Mark Lilley, Peter Simonson

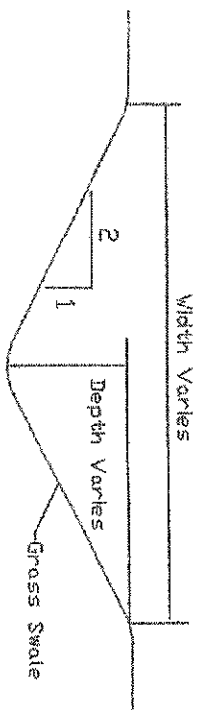


A-A'

- A-A' NOTES:
1. Trench drain shall be Phoenix Precast Products Heavy Duty 2' Trench Drain or similar.
 2. Trench drain sections typically available in 4' and 8' lengths.
 3. Sections connected together with threaded rod.
 4. Equipped with knockout at outlet end for 10' dia. pipe.



B-B'

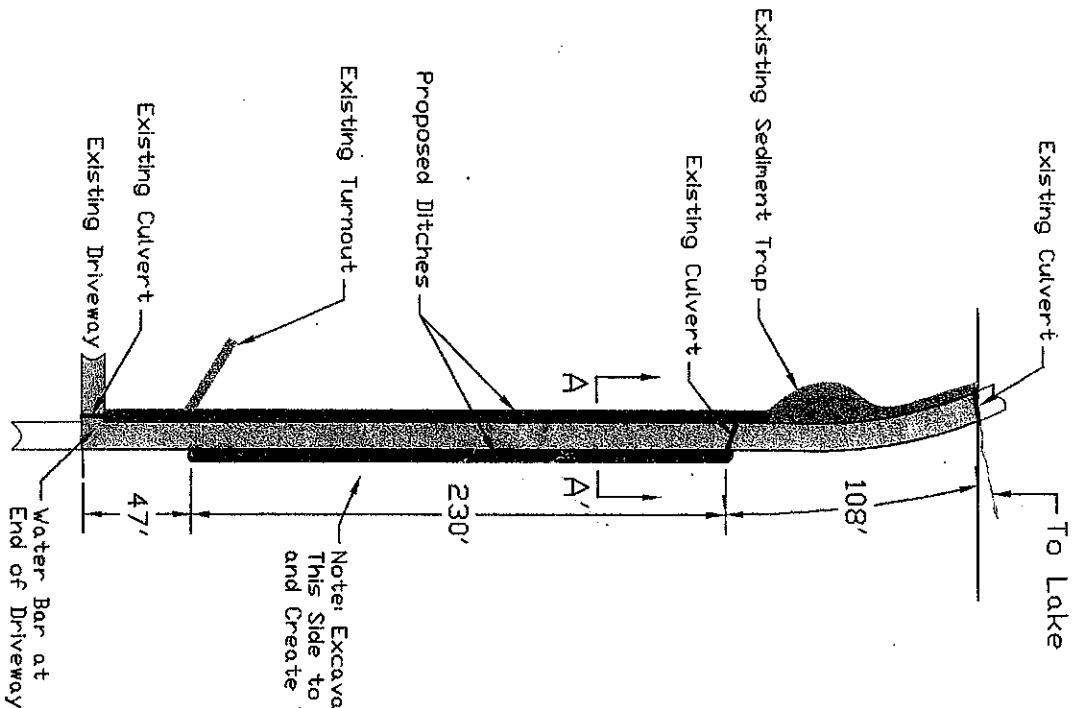


C-C'

SWAN-VISTA ROW

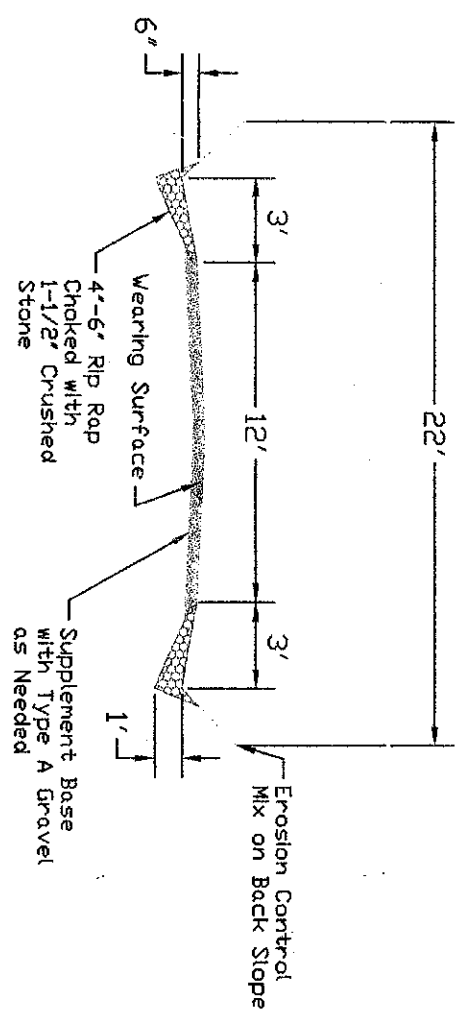
Project: Windham Watershed Grant Project
Subject: ROW Improvement Plan X-Sections

Page No. 2 of 2
Date: 9/16/18
Scale: NTS
By: JM



Note: Excavate Back Slope This Side to Straighten Road and Create Width for Ditches

A-A'



Highland Shore Road

Project: Windham Watershed Grant Project	Page No. 1 of 1	Scale: NTS
Subject: Road Improvements	Date: 9/19/18	By: JM

Jeff & Carol Wyman
11 GOTHAM LANE
GORHAM, ME 04038
HOME - (207)839-4436

Date: 9/23/2018

To: Highland Shore Rd.

Address: Windham, Me. 04062

[illegible]

J.A. Ricci & Sons

315 Methodist Road
Westbrook, Maine 04092
(207) 856-6656

Date 10-16-18

	AMOUNT
NHL RA.	
Per contract ROW. Drain and road work, paving	\$7950-
10-15-18 additional charges	
Double erosion control bought 4yds erosion control material	\$88.62
Changed turnouts to have straw Blanket Roll w/ staples	156.25
No charge for pickup and Installation,	
TOTAL	8194.87

TERMS Payment due upon receipt of bill. Service charge of 1.5% per month (annual percentage of 18%) on all accounts over 30 days.

Accounting for two Highland Lake Road Repairs in October of 2018

Revenue For Projects		Highland Shore Road Hill	Swan Road ROW	Difference		HLA Payments		Highland Rd
Windham Watershed Protection Grant	\$ 10,000.00	\$ 5,986.00	\$ 4,014.00	\$ -		\$ 9,380.00	Ted Stone	\$ 15,021.00
Windham Professional Services Fund	\$ 3,000.00	\$ 2,367.02	\$ 244.87	\$ 388.11		\$ 5,641.00	Wyman	
Stormwater Compensation Fund	\$ 6,667.98	\$ 6,667.98		\$ -		\$ 39.00	Permit	Swans ROW
Duck Pond West Road Association	\$ 7,000.00	\$ 7,000.00		\$ -		\$ 4,219.87	Ricci & Son	\$ 4,258.87
North Highland Lake Road Association	\$ 4,014.00		\$ 4,014.00	\$ -		\$ 19,279.87	Total	
Total Revenue	\$ 30,681.98	\$ 22,021.00	\$ 8,272.87	\$ 388.11				
Total Project Costs	\$ 30,293.87							
Net Revenue not used	\$ 388.11							
						Road Associations Paid		Total
						\$ 4,014.00	NHLRA	\$ 8,272.87
						\$ 7,000.00	DPWRA	\$ 22,021.00
						\$ 30,293.87	Total Paid	