

Champlain Valley Co-Housing Trail

Sitework Photopages

The Co-Housing trail is a vital link to the Town Link Trail that will eventually connect Mount Philo State Park and the Charlotte Town Beach. In order to construct this year's section of the trail, Timber & Stone, LLC suggests a series of drainage structures and elevated tread to ensure sustainable drainage of water from the adjacent farm fields. The following photopages outline specific points along the trail where drainage is a concern and the prescribed structure that will sustainably manage the runoff. This document works in unison with the attached Trail Log.



Photo Number: 1

Work Description:

The field to the left of the trail is draining water towards the boardwalk and gullying across the alignment. By installing a culvert, the water will be able to flow below the trail and not erode the surfacing.



Photo Number: 2

To ensure proper drainage under the trail by water flowing off the farm field, large cobbles can be aligned to function as a culvert would. The tread should be elevated with crushed stone and wrapped in Geotextile Fabric.



Photo Number: 3

Work Description:

This section needs to be elevated with crushed stone to maintain water drainage beneath the trail tread. Geotextile Fabric will work to separate the surfacing from the crushed stone.



Photo Number: 4

Water is gullying and causing erosion as it travels from left to right across the trail. A culvert needs to be installed to ensure proper drainage.



Photo Number: 5

Work Description:

The water is funneled into this small gully and is traveling from left to right across the trail tread. A culvert should be installed to ensure proper drainage. As with all prescribed culverts, this culvert should have rip rap installed at either end to prevent channeling of the water as it enters or is discharged.



Photo Number: 6

Work Description:

The water is funneled into this small gully and is traveling from left to right across the trail tread. A culvert should be installed to ensure proper drainage. As with all prescribed culverts, this culvert should have rip rap installed at either end to prevent channeling of the water as it enters or is discharged.



Photo Number: 7

Work Description:

This section of trail requires the installation of crushed stone below the trail tread to ensure that the tread is elevated out of standing water.



Photo Number: 8

Work Description:

The water is funneled into this small gully and is traveling from left to right across the trail tread. A culvert should be installed to ensure proper drainage. As with all prescribed culverts, this culvert should have rip rap installed at either end to prevent channeling of the water as it enters or is discharged.



Photo Number: 9

Work Description:

This long flat section has evidence of standing water and seepage across the trail. A Drainage Lense should be installed to allow water to flow beneath the tread as needed during high flow times of the year.



Photo Number: 10

Work Description:

This long flat section has evidence of standing water and seepage across the trail. A Drainage Lense should be installed to allow water to flow beneath the tread as needed during high flow times of the year.



Photo Number: 11

Work Description:

To ensure proper drainage under the trail by water flowing off the farm field, large cobbles can be aligned to function as a culvert would. The tread should be elevated with crushed stone and wrapped in Geotextile Fabric.



Photo Number: 12

Work Description:

As this section continues, it will require crush to be installed below the trail tread. This will help ensure proper drainage of water from the surrounding topography.



Photo Number: 13

Work Description:

This stretch of trail will require elevated tread with 2-4" cobble wrapped in Geotextile Fabric. By elevating the trail tread, water is able to drain below the surface through the cobble stone.



Photo Number: 14

Work Description:

This section of trail receives water drainage from the field on the left. By installing a culvert, the trail will not endure periodic heavy



Photo Number: 15

Work Description:

As the current trail alignment joins the access trail to the Berry Farm, there is an abrupt drop of 15-20%. This is unsustainable. By curving the trail to the left, it is possible to maintain gentle grades while making a safe connection to the access trail.



Photo Number: 16

Work Description:

While crossing this earthen dam, it will be critical to maintain an appropriate crown for drainage.



Photo Number: 17

Work Description:

The current trail alignment brings the trail directly down the hillside with grades 12-15%. This will not be sustainable for a naturally surfaced trail. By incorporating this broad turn and making full use of an existing trail path, the trail can be relocated to have a running grade of 5-8%.



Photo Number: 18

Work Description:

Once past the broad turn, the trail should be located across the gentle cross slope of this hillside. The trail will enable the drainage to sheetflow across the trail which will eliminate channeling. Also, the running grade will be maintained at 5-8%.



Photo Number: 19

Work Description:

This will be the alignment of the final section of trail reroute. The trail will reconnect with the existing alignment and head towards the terminus.



Photo Number: 20

Work Description:

There is a large gully on the lefthand side of the trail. This could pose a safety issue as well as a drainage issue. The trail should be moved uphill to make the most use of the crosslope. Water is also draining from right to left. A culvert should be installed to manage the water under the trail towards the gully.



Photo Number: 21

Work Description:

This section of trail will require uphill ditching and to capture water draining from right to left. The water should be directed towards a drainage structure lined with large cobble stone and covered with Geotextile Fabric.