



April 11, 2001

## Project Proposal:

DCR proposes to use an existing user footpath along the Charles River between Routes 9 and Routes 16 and improve such path to make it an official connector trail between Hemlock Gorge and Leo J Martin Golfcourse. The connector trail would provide a safe and natural corridor for individuals to hike from Route 9 to Route 16. In efforts to improve the user foot path that has been established by neighboring residents and, in parts, by a Newton sewer line easement, DCR proposes the installation of the following structures. None of the structures will be established on the portions of the sewer line easement.

In addition, DCR proposes to remove vegetation along the 3 mile, 3.5 foot wide foot path between both Routes. Vegetation removed includes, tree and shrub branches, storm damages such as blown down trees as well as multiflora rose, Rubus and greenbrier. All vegetation removal will be limited to the 3ft wide trail corridor in order to preserve species' habitat. Trail tread will consist of the natural material of the area. No additional fill will be introduced to the area unless state below (see box steps). Finally, DCR proposes to install Wood Duck nesting boxes along the edge of the Charles River.

In efforts to preserve the width of the trail, maintenance in the form of corridor pruning shall occur once or twice a year, if needed, during the Spring and Summer. Maintenance shall be completed by either DCR staff or trained volunteers such as the local Boy Scout troops. In efforts to maintain safe access over the existing bridges, DCR shall monitor the bridge decking and manually replace such decking as needed.

This project will not only provide safe access between Route 9 and 16 but will also help enhance habitat in the area. By encouraging people to walk on the path, they will be protecting the riverfront area from further erosion and allowing vegetation to create a buffer between the road and the river. In addition, the trail and active use of it will, in the future, deter individuals from dumping at the location. Dumping has become a major issue along Quinobequin Road and the land between the road and the Charles River.



# **Proposed Structure installation:**

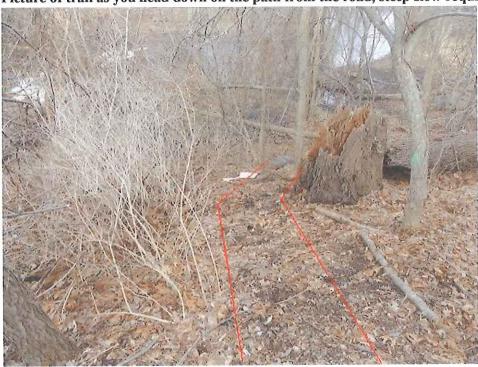
A. <u>Improve entrance to the path by installing a mapboard</u> and <u>improving landscape</u> at the corner of route 9 and Quinobequin Rd.

Entrance path improvement will involve the installation of four to six 4"x6" PT wooden box steps approximately 3' in length and 4' in width filled with a combination of soil and crush that will allow safe entry on the step downhill trail. In order to prevent erosion, a PT 4"x6" and 6"x6" retaining wall will skirt these steps. Pieces shall be connected using timberlocks and affixed to the ground with rebar.





Picture of trail as you head down on the path from the road, steep slow requiring steps and retaining wall:



Pictures of similar structure- Combination of retaining wall and box step:





B. <u>Installation of simple bridge/boardwalk</u> over storm water drainage site: (See B in map below for location; 42 19' 04", -71 13' 37.3")

DCR proposes to install a simple bridge structure to allow safe passage over storm water drainage area. Structure shall be constructed on site using hand power tools and consist of two 4"x6" PT footings at either end of the stormwater drainage flow with two 2"x4" or 4"x4" stringers and 2"x10" decking at a span of approximately 4-6 feet and 3-4 feet in width. All sections will be affixed together using timberlocks except for the decking where we shall utilizing screws to ease future decking replacement.

## Locust Picture and Drainage Structure, Approximate Location:





## C. Box Steps

On both sides of the hill approximately located at 42 19'8.6", -71 13' 40.1', DCR proposes to install a series of small box steps that would allow safe passage to either side of the Quinobequin connector trail. Each box step will be constructed using 4"x4" pressure treated wood at a dimension of approximately 3'x3', connected by timberlocks and affixed to the ground using rebar. The box steps will be filled using a combination of soil and crushed stone. A total of 10-12 boxes are expected to be needed in this section due to the steepness of the access point.

Approximate location of box steps on the south side, same as northern side of path





# D and E. Access Bridges over storm water drainage

Another storm water drainage area is found at approximately 42 19' 18.6", -71 14' 13.4" and 4219'17.5", -71 14' 36.4" extending at a widths of approximately 8 feet and 10 feet respectively. DCR propose to install a small boardwalk/bridge to allow for safe and dry passage over this storm water drainage area. Bridge will be elevated at a height of 2-3 feet to allow to water passage. This bridge will have the same design as B above.









