

**A Proposal to  
The Town of Bethlehem And Albany County  
For the Development and Management of a  
Recreational Multiple-Use Trail  
Along the County-Owned Rail Right-of-Way  
in the Town of Bethlehem**

Prepared by the  
**Friends of the Rail Trail**  
A Committee of the Mohawk Hudson Land Conservancy  
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### **Background**

In 2009, Albany County, with the assistance of a grant provided by Scenic Hudson, acquired a section of the abandoned Delaware and Hudson Rail Line from the Village of Voorheesville to the City of Albany in the vicinity of South Pearl Street from CP Rail. Albany County was also successful in obtaining approximately 2.85 million dollars of federal funding through the Capital District Transportation Committee to develop the abandoned rail right-of-way into a fully paved shared-use path. The County retained a consultant to prepare engineering documents and acquire approvals for the construction of the shared-use path. Unfortunately, during the completion of the preliminary engineering phase, the County discovered the cost of full development of the ROW would amount to over 7 million dollars. The additional cost was a result of unforeseen conditions such as the reconstruction of deteriorating bridges and the relocation of a fiber optic line. The County continued to seek funding from other sources to make up the shortfall, but has been unsuccessful so far.

Because of the concerns over liability issues, the County has denied access to the undeveloped trail and has posted no trespassing signs at various access points. The trail continues to be used illegally and is beginning to suffer from encroaching vegetation and erosion in some locations.

### **Introduction**

This document describes a proposal to the Town of Bethlehem and Albany County to enter into a partnership with the Mohawk Hudson Land Conservancy for the development, maintenance and management of a multiple-use recreational trail for use by the public along a section of the abandoned railroad right-of-way. The intent of this proposal is to create safe access to an easily managed section of the trail until the ultimate goal of a paved shared-use path can be accomplished by the County.

The proposal suggests a two phase implementation and development plan. The first phase would be the opening of the trail with minimal improvements for pedestrian use only.

After MHLC has had an opportunity for fundraising and upon approval of the County, the trail would be improved to a standard necessary to allow mountain bicycle use.

Included in this proposal are suggested tasks, roles and responsibilities for the improvement, maintenance and management of the multiple-use recreational trail. It is our hope that the suggestions herein will lead to a dialogue among the three parties that will result in an agreement that will allow public access to this section of the right-of-way for the purpose of outdoor recreation and exercise.

We would also like to make it clear that that this proposal in no way should be a substitute for the complete development of the right-of-way in the future and as funds become available as a fully shared use path for the use by all of Albany County residents and visitors. It is our opinion that sections of the right-of-way can be opened immediately to the public and managed for safe use with minimal improvements and cost.

### **Project Objectives**

1. Allow pedestrian access to some sections of the old railroad right-of-way for recreational use.
2. Improve the railroad embankment so that it can be safely used as a multi-use recreational pathway that will accommodate pedestrians, joggers and bicyclists with “fat” tire bicycles (the existing surface of the rail bed is not sufficient for normal use by road bicyclists with high pressure thin bicycle tires).
3. Minimize the use of structures or barriers that need high levels of maintenance
4. Minimize the development of the trail near steep slopes

### **Trail Description**

Termini – The trail will begin at the its westerly terminus at Fireman’s Park in the vicinity of New Scotland Road, Slingerlands, NY and end at its easterly terminus at Veteran’s Park on Delaware Avenue, Delmar, NY. The connection between the two parks is consistent with the Town’s Master Plan to develop trails that will connect parks, preserves and open spaces.

Length – 9,800 linear feet or 1.85 miles. At an average walking speed of 3.5 mph, a one way walking trip would be about 30 minutes long.

Access Points – There would be a total of five access points evenly distributed at about ½ mile distances along the trail. The access points are listed in Table 1.

Linkages – Major destinations that this section of trail would link together include:

- Fireman’s Park
- Slingerlands Elementary School via Union Avenue
- County Park (presently undeveloped)
- Kenwood Avenue Municipal Parking Lot

- Four Corners retail area
- Delmar Post office
- Delaware Avenue retail area
- Veterans Memorial Park

**Table 1 – Access Points**

<b>Access Point</b>	<b>Access Type</b>	<b>Location</b>	<b>Distance from last access points</b>	<b>Comments</b>
Fireman’s Park	Vehicular Pedestrian Parking	STA 204+00	N/A	Access from Kenwood Avenue and possibly New Scotland Avenue
Vic. Cherry Avenue (S.R. Rt. 140)	Pedestrian	STA 230+00	2,600 ft. (.50 miles)	Albany County owned tax parcel 85.10-2-1
Gardner Terrace	Pedestrian	STA 255+00	2,500 ft (.47 miles)	
Adams Street	Pedestrian Vehicular	STA 280+50	2,550 ft (.48 miles)	Easy access to parking at municipal lot
Veterans Park	Pedestrian Vehicular Parking	STA 302+00	2,150 ft. (.40 miles)	

### **Existing Conditions**

Surface – The railroad ties and ballast was removed by the railroad in the fall of 2004 or spring of 2005. The existing surface of the old rail bed consists of a mixture of stone, gravel and organic material with ballast remaining in some areas. Perennial weeds and grass has taken over much of the rail bed except for an approximately 60 inch wide bare tread that has been worn by users. The section of trail between the westerly terminus near Fireman’s Park and the Cherry Avenue Bridge has been maintained and mowed to a width of about 12 feet wide.



**Photo 1 - Looking West Near Veteran's Park Showing the Typical Tread and Surface Condition**

Effective Width – In most areas, the effective width of the rail bed between the slope break on each side is approximately 12 to 13 feet wide. In embankment areas, the approximate width of the embankment is about 30 feet between the top of the steep side slopes. The exception is relatively short section in the vicinity of Curtis Lumber (Sta. 286+00 to 292+00) where the width is reduced to approximately 12 feet wide. In cut areas, ditches have been partially filled from sedimentation on the sides of the rail bed.



**Photo 2 – Looking East Vic. Cherry Avenue Where the Trail Has Been Mowed to its Full Width**

Vegetation – The rail bed itself consists primarily of herbaceous plant material and is generally clear of woody vegetation. Side slopes are covered with shrubs and small trees with some branches encroaching into the rail bed area. Approximately 8 to 10 trees have fallen across the old rail bed in various locations. Most of the trees and branches have been cut and cleared from the existing worn tread. In one location the tread itself was realigned to avoid one of the fallen trees.

Adjacent Slopes – In embankment areas, slopes are generally 2:1. However, there are some locations where the slope is steeper at approximately 3:2. The greatest area of concern is between Grove Street and Becker Street (Sta. 286+00 to 292+00) where the trail is located on an embankment that ranges between 8 and 15 feet high and the width of the embankment at the top is only about 12 feet wide. The slopes in this area are covered with shrubs. Another large embankment exists between Sta. 243+00 and Sta. 252+00. However, this embankment was likely constructed in anticipation of a double track as the top of the embankment is approximately 30 feet wide with sufficient buffer between the worn tread and the adjoining slopes.



**Photo 3 – Area of Steep Slopes Between Grove Street and Becker Street (Sta. 286+00 to 292+00)**

Drainage – Existing drainage is sufficient for the removal of stormwater from the top of the railroad embankment. There are two locations where some drainage improvements should be made to prevent some flooding of the tread during heavy precipitation events. The first area is immediately north of the Rt. 85 Bridge where a ditch on the east side has filled in preventing drainage to the east where a culvert exits beneath the embankment. It appears that the existing tread becomes flooded when the ditch overflows.

The second location is at Gardner Terrace where stormwater runoff from Gardner Terrace on the east side flows over the existing ditch onto the rail embankment. Some erosion has occurred.

### **Proposed Improvement Plan**

A two phased improvement plan is proposed for the recreational trail:

Phase 1 – The existing condition of the trail is sufficient for use as a walking path. Only some minor improvements will need to be made to the trail before it is officially opened to the public. The improvements will generally include signing, some mowing and traffic improvements to street crossing.

Phase 2 – The second phase of improvements are simply clearing some of the brush and tree branches and removing brush in order to widen the pathway to an adequate width to accommodate mountain bicyclists. Barrier railing will also be needed at the narrow section in the vicinity of Grove Street and Becker Street. These improvements will not involve heavy equipment and the trail can remain open as the improvements are made.

### Design Criteria

The improvements will be necessary to meet minimum dimensions and criteria defined in the proposed design criteria and guidelines.

The following guidelines proposed for this section of multiple use trail has been compiled from the Final Report of the Regulatory Negotiation Committee on Accessibility Guidelines for Outdoor Developed Areas, September 30, 1999, and the AASHTO Guidelines for the Planning and Development of Bicycle Facilities, 1999.

	Multiple Use Trail for Pedestrian Use Only	Multiple Use Trail for Pedestrian and Mountain Bicycle Use
Surface	Stable, firm, and slip resistant	Same
Maximum Running Slope	1: 20 [5%] (for any distance) 1: 12 [8.33] (for max. 50 ft) 1:10 [10%] (for max. 30 ft) 1: 8 [12.5%] (for max. 10 ft)	Same
Maximum Cross Slope	1:50 [2%]	Same
Minimum Clear Tread Width	36 inches	8 feet minimum 10 feet preferred
Tread Obstacles	2 inch maximum (Exception: 3 inches high maximum where beveled with a slope no greater than 1: 2)	Same
Edge Protection	3 inches at the edge of tread	42 inch high barrier or heavy vegetation when hazard is <5 feet from tread
Overhead Clearance	80 inches (6'-8")	96 inches (8'-0")
Horizontal Clearance to Obstacles	None	2 feet minimum 3 feet preferred

### Phase 1 Improvement

Vegetation Clearing – Mowing and some light brush cutting will be necessary on the edges of the existing tread in order to widen the tread to approximately 10 feet to allow vehicle access for emergency and maintenance purposes.

Signing – Informational signing and regulatory signing shall be placed at entrances to the trail and at each end to discourage trespassing on sections of the trail that are not open.

Entrance Barriers – Entrance barriers shall consist of bollards and signs advising “No Motorized Vehicles Allowed on Trail” at the crossing of Adams Street and at each terminus of the trail. No gates are proposed which will allow easy access for emergency and maintenance vehicles. A barrier shall be located at the west end of the bridge over Delaware Avenue by the County.

Adams Street – The trail crosses Adams Street near the intersection with Hudson Avenue. The intersection is currently controlled with three stop signs with the westbound Adams Street leg uncontrolled. A crosswalk should be marked across the east side Adams Street parallel with Hudson Avenue and a fourth stop sign and stop bar to accommodate trail crossings.

The following is a table with suggested roles and responsibilities for the Phase 1 improvement tasks:

Task	MHLC	Town	County	Comments
Vegetation Clearing	X	X		
Signing		X	X	
Entrance Barriers			X	
Adams Street Improvements		X		

**Phase 2 Improvement**

Vegetation Clearing – This section of rail bed is relatively clear of woody material. Some overhanging branches that encroach into the tread area will need to be removed. Light brush cutting will be necessary on the edges of the rail embankment in order to widen the tread and clear area to approximately 16 feet (preferred) for mountain bicyclists. Only vegetation that presents an obstruction to bicyclists will need to be removed from the 3 feet wide clear area on each side of the 8 feet wide (10 feet preferred) tread. The proposed tread should be similar to the condition of the existing section between Fireman’s Park and the Rt. 85 Bridge.

Surface Repairs – Very few surface repairs will be necessary. Some holes may need to be filled after mowing the existing herbaceous growth within the tread.

Drainage Improvements – Ditches will need to be cleaned at two locations; 1) east of the Rt. 85 Bridge and at 2) Gardner Terrace.

Railings – If the trail is improved for mountain bicycle use, wood barriers shall be installed between Sta. 286+00 and Sta. 292+00. The large embankment between Sta. 243+00 and Sta. 252+00 would need to be reviewed for the proper clearance from the top of the slope. Barrier railing may have to be installed or the tread may have to be moved towards the center of the embankment to allow sufficient clearance in order to avoid the installation of barriers.

Access Improvements – A more formal access trail will be constructed at Gardener Terrace.

Signing – Regulatory and informational signing shall be placed at all access points to the trail.

The following is a table with suggested roles and responsibilities for the Phase 2 improvement tasks:

Task	MHLC	Town	County	Comments
Vegetation Clearing	X	X		
Surface Repairs	X	X		The exact scope of surface repairs cannot be determined at this time until vegetation is removed. However, surface repairs appear to be minimal.
Drainage Improvements			X	The County will use highway equipment at two locations to clean ditches and possibly install a small culvert
Railings	X	X		MHLC shall raise funds for purchasing materials. The Town will assist with equipment for excavating post holes.
Access Improvements	X	X		Access improvements will include the installation of bollards where necessary to prevent accidental vehicular access.
Signing			X	Additional signing will be located as necessary as need develops.

### Proposed Maintenance Plan

A minimal maintenance plan will be necessary for the operation of the trail. The following is a description of maintenance tasks and suggested frequency of maintenance items:

Vegetation Management – Shrubs and branches that encroach into the tread zone shall be removed in late spring of each year. The trail will be policed for fallen trees and other vegetation and removed immediately.

Mowing - Mowing to a height of 3 inches will be necessary when the herbaceous vegetation reaches a height of 6 inches. It is estimated that mowing will be necessary as frequently as every two weeks during the height of the growing season.

Surface Repairs – Surface repairs will require the filling and tamping of holes in the surface as they develop.

Drainage – Drainage culverts will be inspected and kept clear of debris

The following table provides suggested roles and responsibilities for the maintenance plan:

Task	Equipment	Materials	Labor	Comments
Vegetation Management	MHLC		MHLC	Hand tools only - Waste to be spread evenly along the slopes of the ROW
Mowing	Town		Town	
Surface Repair		Town	MHLC Town	Gravel for filling holes shall be provide by the Town and placed by MHLC volunteers
Drainage			MHLC	

### Proposed Management Plan

Agreements – It is suggested that the County enter into a revocable Inter-Municipal Agreement that recognizes the role of the Mohawk Hudson Land Conservancy in the development and management of the trail. The County shall enter into a Memorandum of Understanding, lease agreement or other type of agreement instrument that will define the role and responsibilities of the MHLC.

Policing – Routine policing shall be accomplished by the volunteers of MHLC as part of their steward program. The Town of Bethlehem Police Department shall respond as necessary to calls.

Risk Reduction – The MHLC shall police and observe the conditions of the trail to assure that the conditions conform to the Trail Guidelines and a written maintenance plan. A reporting procedure shall be established as part of the agreement with the County.

Risk Transfer – The County shall be held harmless from liability by a rider to the MHLC insurance policy or by the Town’s Municipal Liability Policy.

Stewardship – The MHLC shall assign a volunteer steward to oversee the management of the trail and shall coordinate all policing, maintenance and improvements with the County and Town.

Fundraising – Upon execution of an agreement with the Town and County, MHLC shall implement a fundraising program specifically for the improvement and upgrading of the trail.

Protocol for Future Improvements – Any proposed improvements or upgrades to the trail including the construction or installation of amenities shall be approved by the Town and County. Amenities may include kiosks, benches, interpretive signing, etc.

EXAMPLE