

# **ERIE-ATTICA RAILROAD BRIDGE AND TRAIL FEASIBILITY STUDY**



**Prepared for:**

**Village of Avon  
74 Genesee Street  
Avon, New York 14414**

**Prepared by:**



**2165 Brighton-Henrietta Townline Road  
Rochester, New York 14623**

**March 2007**

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**EXECUTIVE SUMMARY**

This study evaluated the feasibility of converting a 1.5-mile segment of the abandoned Erie-Attica Railroad right-of-way and a privately-owned railroad bridge that crosses the Genesee River into a multi-use trail. This prospective trail would provide a link between the Village of Avon and the Genesee Valley Greenway.

Preliminary studies were conducted to 1) determine the presence of environmental constraints or existing features/conditions that would limit the feasibility of re-using the abandoned rail corridor as a multi-use trail, 2) determine the general condition and adequacy of the existing historic truss railroad bridge over the Genesee River to be re-used for a multi-use trail, and 3) develop concept-level planning and design of the prospective trail including cost estimates for construction of the trail and retrofitting of the historic truss bridge over the Genesee River.

This study was guided by a Steering Committee consisting of representatives from the Village of Avon, the New York State Department of Transportation, the Livingston County Planning Department, the Genesee Valley Conservancy, the NYS Office of Parks, Recreation and Historic Preservation, Friends of the Genesee Valley Greenway and the Genesee Transportation Council. Two public information meetings were also held to solicit input from the public.

The study found no existing conditions and/or features, nor any environmental constraints that would preclude the conversion and/or re-use of the railroad corridor, including the historic truss railroad bridge, as a multi-use trail. Three alternative alignments were considered for linking the prospective trail from the Erie-Attica Railroad bridge (at Farmers Road) to the Village.

Based upon comments and feedback resulting from the public informational meetings, input from the Steering Committee and the evaluation of existing conditions and environmental considerations, a preferred trail alternative is recommended for implementation. This preferred trail alignment would begin at River Road in the Town of Caledonia, and run east to the Village of Avon following the abandoned Erie-Attica railroad corridor, intersecting with the Genesee Valley Greenway and crossing over the Genesee River and into the village on the historic truss railroad bridge, which would be retrofitted with a new deck and railing system. A new bridge span would be constructed over Farmers Road allowing the trail to continue over Farmers Road and subsequently ramp down to Farmers Road utilizing existing railroad embankment. The trail would continue southward along Farmers Road to Main Street. New sidewalk segments would be constructed on Main Street between Farmers Road and the new access road to the Livingston Industrial Complex (opposite River Street) which would connect to the sidewalk extensions proposed as part of the NYSDOT's Reconstruction of Main Street Project. The proposed trail would be 12 feet wide with a crushed stone surface treatment. Trailhead parking lots would also be included as part of the project at the River Road terminus and at the Farmers Road junction with the abandoned railroad corridor.

To allow for variability in funding and resources for the construction of the preferred alternative, the proposed project's construction has been separated into two phases. The description of the phases and estimated construction costs are as follows:

<b>Phase 1:</b> Greenway Trail to Farmers Road .....	\$650,000.00
<b>Phase 2:</b> River Road to Greenway and Connection to .....	\$260,400.00 (w/gravel lots) or
Sidewalks on Main Street.....	\$307,800.00 (w/asphalt lots)
<b>Total Project Cost:</b>	\$910,400.00 (w/gravel lots) or \$957,800.00 (w/asphalt lots)

In addition, it is further recommended that the Village pursue funding for the trail through partnerships with other interested agencies / municipalities including New York State Parks and the Town of Caledonia.

## **I. INTRODUCTION**

The Village of Avon contracted Erdman, Anthony and Associates, Inc. to study the feasibility of converting a 1.5-mile segment of the abandoned Erie-Attica Railroad right-of-way and a privately-owned railroad bridge that crosses the Genesee River into a multi-use trail. The project is a recommendation of the Genesee Transportation Council (GTC) *Regional Trails Initiative – Phase 1* completed in August 2002. The prospective trail would provide a link between the Village of Avon and the Genesee Valley Greenway and would continue west terminating at River Road in the Town of Caledonia. Refer to Figure 1 – Project Location Map on the following page.

Erdman Anthony completed preliminary studies to determine the presence of environmental constraints or existing features that would limit the feasibility of constructing a multi-use trail along this abandoned railroad corridor, and subsequently completed concept-level planning and design of the prospective trail including cost estimates for construction of the trail and retrofitting of the historic truss bridge over the Genesee River.

## **II. STUDY PARTICIPANTS**

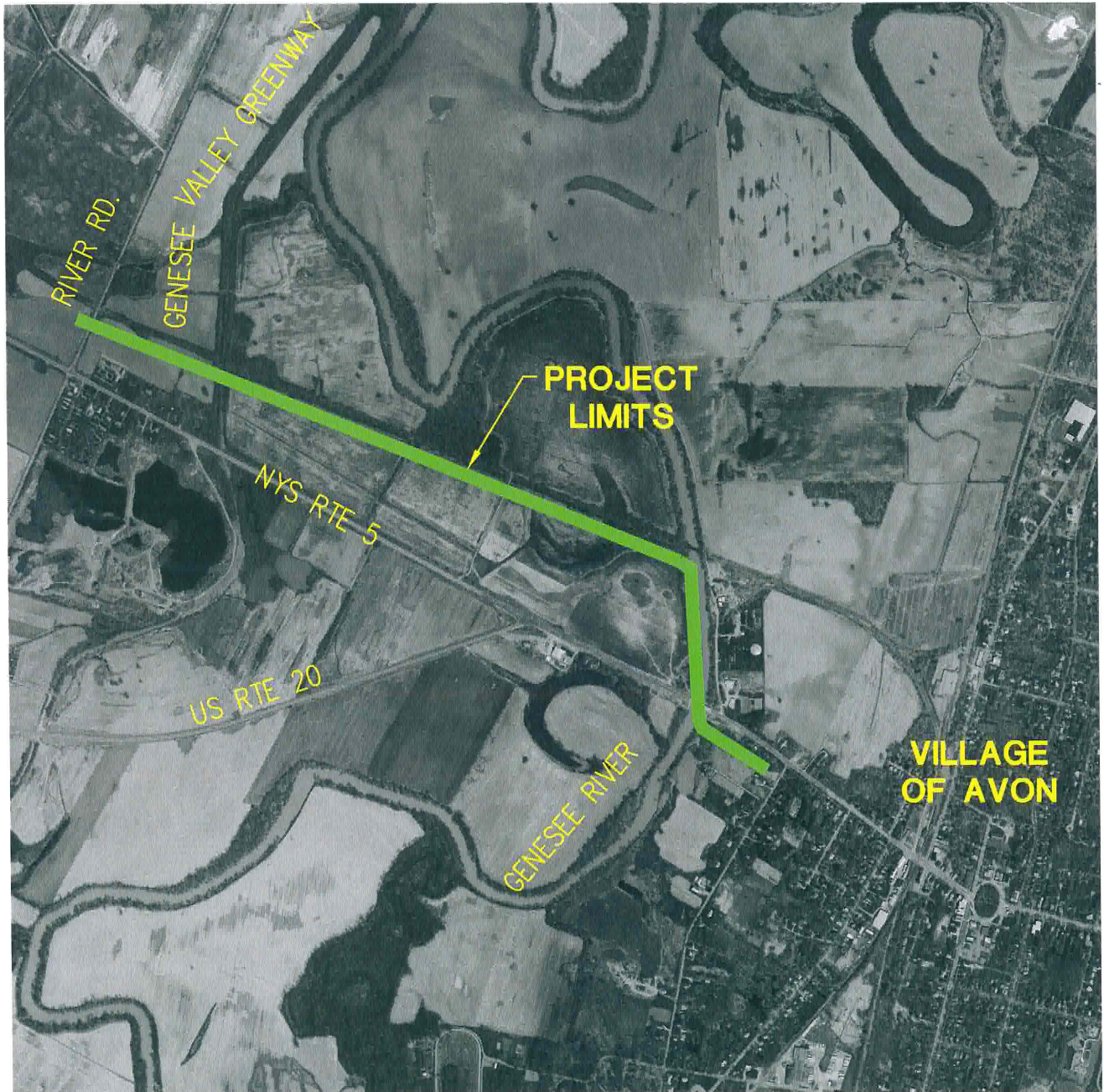
A project Steering Committee was assembled at the beginning of the project consisting of representatives from the following agencies and organizations:

- Village of Avon
- New York State Department of Transportation
- Livingston County Planning Department
- Genesee Valley Conservancy
- NYS Office of Parks, Recreation and Historic Preservation
- Friends of the Genesee Valley Greenway
- Genesee Transportation Council

Throughout the project duration, close communication was maintained with the Village of Avon and the NYS Office of Parks, Recreation and Historic Preservation, as the owners of the prospective trail. In addition, two Steering Committee meetings were held at appropriate decision-making points to ensure all members of the committee remained informed and involved, and had the opportunity to provide comments and guidance on various aspects of the project.

In addition to the Steering Committee, the public was an active participant in the project. The abandoned railroad corridor and the railroad bridge over the Genesee River were both privately-owned by area residents. Close communication among the Village of Avon, NYS Office of Parks Recreation and Historic Preservation, and the residents that owned the railroad property was necessary for smooth ownership transfer of this privately-owned property that would be utilized for the prospective trail.





## LOCATION MAP

FIGURE 1



Two Public Informational Meetings were also held throughout the duration of the project. The meetings were held at the Village of Avon offices located at 74 Genesee Street. The purpose of the meetings was to provide information regarding the proposed trail and the project status to the public, and solicit input from the public on various aspects of the potential trail.

### **III. EXISTING PHYSICAL AND ENVIRONMENTAL CONDITIONS**

An extensive site walkover was conducted to inventory existing physical and environmental conditions along the prospective trail corridor, and to identify potential constraints or existing features of the corridor that may preclude the corridor's feasibility of accommodating a multi-use trail. Based on the results of the field inspections conducted, no physical or environmental conditions were identified that would preclude trail construction. The following sections provide details regarding the assessment of the project corridor. Figure 2 on the following page is a map of the corridor highlighting some of the key existing physical and environmental conditions discussed below.

#### **A. Condition of Rail Corridor**

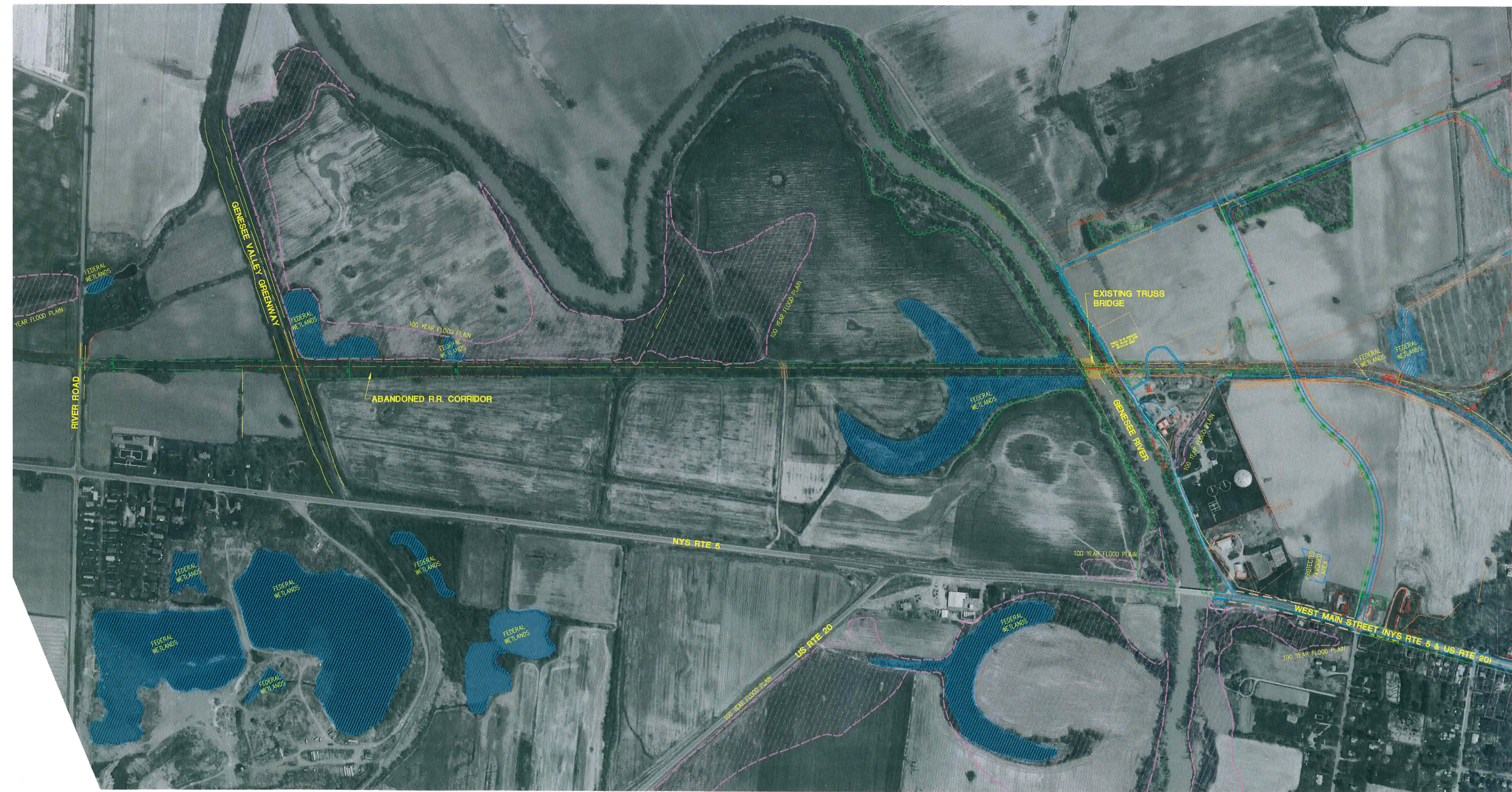
The rail corridor was walked from the Genesee Valley Greenway east to the truss bridge over the Genesee River. The corridor was overgrown with weeds and brush, but was traversable. Minor clearing of the corridor was completed to facilitate collecting survey data making the condition of the corridor much more visible. All railroad ties appeared to have been removed as none were visible along this section of the prospective trail corridor. The ballast of the former railroad bed appears to be intact and in good condition to serve as a sound base for the prospective trail.

During this study, attempts were made to walk the section of the railroad corridor from the Genesee Valley Greenway west to River Road. However, significant overgrowth of this section of the corridor made it impassible. Steering Committee members advised that they had walked this section in years prior to this study and found conditions for this section of the corridor similar to that of the adjacent section described above.

#### **B. Right-of-Way Encroachments**

Existing property boundaries for the prospective trail corridor and adjacent properties were established based on the results of a records search and field survey. Records indicated that the railroad corridor from River Road to the Genesee River was privately owned, including the truss bridge over the Genesee River. The right-of-way width varies along the length of the corridor measuring 60 feet-wide from River Road to just west of the Genesee Valley Greenway where it narrows to 36 feet-wide. East of the Greenway, the right-of-way width is quite wide measuring 144 feet for a short distance then narrowing to 105 feet-wide. The right-of-way width continues at 105 feet until just west of the Genesee River where it widens back to 144 feet. Adjacent privately-owned properties abut the abandoned railroad corridor to the north and south.





**ERIE-ATTICA RAILROAD BRIDGE & MULTI-USE TRAIL  
EXISTING CONDITIONS**

FIGURE 2



In April of 2006, the local landowners of the railroad corridor and the railroad bridge indicated their willingness to gift the property to the NYS Office of Parks, Recreation and Historic Preservation so they would have legal ownership of the property to develop it as a multi-use trail in conjunction with the Village of Avon. The property transfer process has begun during the course of this study and is expected to be completed by June of 2007. The available right-of-way for the abandoned railroad corridor (including the truss bridge over the Genesee River) is adequate to accommodate the prospective multi-use trail. No property acquisitions from landowners adjacent to the railroad corridor would be required.

In addition to the railroad corridor and bridge that is being gifted to the NYS Office of Parks, Recreation & Historic Preservation, an approximate 2.3-acre parcel was obtained by the Village of Avon just east of Farmers Road. This parcel includes the eastern abutment of the former bridge span over Farmers Road as well as a small section of the railroad embankment east of the abutment. The parcel was obtained via a land swap between the Village of Avon and the Livingston Industrial Complex, LLC, as a small amount of Village property north of the sewage treatment plant was needed by the Livingston Industrial Complex to accommodate the stormwater pond proposed as part of Phase 1 of the proposed industrial complex.

### C. Drainage Issues

The majority of the railroad corridor is constructed on embankment that is significantly higher than the adjacent farm fields located to the north and south of the corridor. There are two locations where the railroad corridor comes down to meet existing grade of the surrounding farm fields. The first location is approximately 3,400 feet east of the Genesee Valley Greenway where an existing farm access road is located providing access from the farm field on the south side of the railroad corridor to those on the north side. The second location is just east of River Road. Since the majority of the abandoned railroad corridor is elevated, drainage of the corridor itself is not an issue.

However, based on observations made during the site walkover and review of aerial GIS mapping of the project corridor, three drainage courses were identified that would need to be considered during development of the multi-use trail; two ditch crossings and one “blue-line” stream crossing. Single span railroad bridges previously spanned these three locations as evidenced by the bridge abutment that still exist at each of these three locations. In addition to these three locations, the former Canal crossing adjacent to the Greenway Trail would also need to be considered.

The two ditch crossings are located approximately 1,100 feet and 2,960 feet east of the Genesee Valley Greenway, respectively. These ditches appear to be drainage ditches that drain the farm fields located adjacent to the railroad corridor. It is anticipated that the trail alignment would descend from the elevated railroad corridor to the bottom of the embankment, where properly sized pipe culverts could be installed to maintain the existing drainage courses.



*Abutment for former RR span  
over existing stream*



The stream crossing is located approximately 2,360 feet east of the Genesee Valley Greenway. At this location it appears that the bridge span was quite long. Due to the high cost associated with spanning the stream crossing with a new bridge structures, it is anticipated that the trail alignment would descend from the elevated railroad corridor to the bottom of the embankment, where it would proceed around the existing abutment and over a box culvert that would be constructed to span the stream. Utilizing a box culvert in this location would provide a cost effective solution to maintaining the existing waterway, and allow the existing bridge abutment to be an interesting historic feature along the prospective trail corridor. The abutment is stamped with the date 1929.

#### D. Structures

##### Truss Railroad Bridge over the Genesee River

A site visit was conducted by Erdman Anthony to observe the existing condition of the truss bridge over the Genesee River. In addition to the site visit, available documentation pertaining to the condition of the bridge was reviewed. Such documentation consisted of a Condition Report dated June 12, 2003 prepared by the NYS Department of Transportation – Region 4 documenting the results of a condition survey completed for the truss bridge. This condition survey was a brief survey of the type and condition of the structure, and did not include a rigorous inspection of the structural components, as would be done for a biennial bridge inspection.



According to information contained in the June 2003 Condition Report, the Erie-Attica Railroad opened in the mid-1800s. The cut-stone substructure for the truss bridge appears to have been constructed sometime in the 1880s or 1890s based on the stone size and the style of stone used. The stones are fairly large, about 18" thick, and are rough cut except at fitting faces and corners. This style of cut stone was commonly used from the Civil War era to about 1900 when concrete came into common use. All cut-stone piers and abutments have been capped with gravel-aggregate concrete that was commonly used between 1900 and the 1920s. These concrete additions serve as the support for the present superstructure. It seems likely that an earlier superstructure consisting of a wrought-iron truss span over the river and timber approach spans at both ends of the bridge were replaced about 1910 by the present superstructure. This rail line remained in service until about the 1960s when it was abandoned and the track structure was removed. The ties on the bridge, however, were left in place after running rails and guard rails were removed.

Further information in the 2003 Condition Report indicates that the main span of the truss bridge is a through Pratt truss with a length of 174'-6" from center-to-center of bearings. The width of the structure is 17'-6" from center-to-center of trusses, and therefore, accommodated a single track. The trusses are of all-riveted construction except for the pin and eyebar members at interior bays of the lower chords.



Floorbeams, which are hung below the lower chord by means of riveted hangers, carry two stringers, one under each rail of the track. Wood ties are placed 13" center-to-center directly on the upper flanges of the strings and held in place by dapped lower surfaces and their own weight. Ties measure 9"x 9" x 9'-0" long and are tied together at their ends by 4" tall x 6" wide timbers.



The west approach span consists of a two-girder deck girder superstructure with ties placed directly on the upper flanges of the main girders. The span length of the west approach span measures 24'-0" from center-to-center of bearings.



The truss bridge carried railroad traffic as recently as the 1960's. It appears to have deteriorated little from that time with the exception of the wood railroad ties and some isolated areas of minor steel section loss on the steel floor framing. Based on the condition of the steel, it can be assumed that the steel superstructure is still capable of supporting loads very close to the original railroad live load. The railroad live load would have been around 7,000 pounds per linear foot (PLF) of track with additional load added for impact. The proposed walkway structure would only have a live load of 1,020 PLF, which is far less than the previous railroad live load. The only structural work required to open the bridge to pedestrian traffic would be the removal of the existing railroad ties and construction of a timber walkway with pedestrian railing supported on the existing steel superstructure.



An east approach span was once present but was removed after abandonment of the railroad. It measured 38'-0" from center-to-center of bearings. It appears from the arrangement of the pedestals that this span probably was a through plate girder superstructure, providing a 12 foot clearance over what is now Farmers Road. All that remains are the abutments.



Abutments for Former Bridge over the Genesee Valley Greenway Corridor

In addition to the bridge abutments for the truss bridge over the Genesee River and its approaches, two bridge abutments remain on the east and west sides of the Genesee Valley Greenway, which was also a former railroad corridor. A bridge structure for the Erie-Attica Railroad previously spanned this former railroad as well as the adjacent Canal. The bridge structure has been removed but both abutments remain.



A goal of the project is to provide a connection between the prospective Erie-Attica Railroad Trail and the Genesee Valley Greenway. A worn pathway around the abutment adjacent to the east side of the Greenway currently exists. The alignment of the future Erie-Attica Trail would follow this existing pathway, but would be graded appropriately to comply with Americans with Disabilities Act (ADA) standards. The trail would then cross the Greenway allowing trail users to either continue on the Erie-Attica Trail or divert to the Greenway Trail. West of the Greenway, the Erie-Attica Trail would cross the former Canal adjacent to the Greenway via a culvert structure as previously discussed, and subsequently ramp back up around the western abutment to the top of the railroad embankment.



#### E. Environmental Issues

A site walkover was conducted to visually observe sensitive environmental features within and adjacent to the project corridor, and to identify any environmental concerns associated with future construction of a trail along the abandoned railroad corridor. The following is a summary of the environmental considerations associated with the prospective multi-use trail.

1. Hazardous materials – No visible evidence of hazardous waste issues were observed along the proposed trail alignment between River Road and Farmers Road. If the trail alignment were to continue following the railroad corridor east of Farmers Road, a Phase I Hazardous Waste/Contaminated Materials Investigation would need to be conducted. Field observations noted a culverted ditch channel and banks located approximately 3,000 feet east of Farmers Road (near the turn in the railroad corridor alignment) appeared gray in color with a strong odor present.
2. Historic Resources – The Village of Avon contacted the NYS Department of Parks, Recreation and Historic Preservation (SHPO) to request a determination as to whether the existing truss bridge over the Genesee River is eligible for listing in the National Register of Historic Places. Correspondence was received from SHPO indicating that based on their review the bridge is eligible for listing in the National Register. Additional coordination with SHPO will be required when funding for the project is secured and the project proceeds

to detailed and final design. At that time, the SHPO would also review the project for potential impacts on archaeological resources. A copy of the letter received from SHPO is included in Appendix A.

3. Stream Crossing - Coordination with NYS Department of Environmental Conservation (NYSDEC) is recommended to determine requirements for stream crossings that exist along the prospective trail alignment. It is assumed that the Joint Application for Permit form submittal will be required.
4. Wetlands - Coordination with US Army Corps of Engineers is required to address federal wetland issues. Federal wetlands do exist along the railroad embankment alignment, per US Department of the Interior, National Wetlands Inventory maps for Caledonia and Avon, NY (See Figure 2 for locations). The railroad embankment is at a significantly higher elevation than the mapped wetlands, and therefore the prospective trail project may not require a US Army Corps of Engineers permit, due to the grade separation which would isolate the trail construction work from the wetlands. This will require verification when preliminary trail design has been completed. New York State regulated wetlands are not present along the corridor, per NYSDEC wetland inventory maps for Caledonia and Avon, NY.
5. Critical Environmental Areas – No Critical Environmental Areas have been identified along the existing railroad bed alignment, per NYSDEC, NYSDOT and Livingston County records.
6. Agricultural Districts – Although the railroad corridor area is located within the Livingston County Agricultural Districts No. 1 and 2, the corridor itself is not within an agricultural parcel boundary according to the Livingston County Planning Department’s Agricultural District Maps. If the final trail alignment varies significantly from the existing railroad bed alignment, the proposed location should be re-evaluated with respect to agricultural district boundaries.
7. Floodplain – The Federal Emergency Management Agency (FEMA), National Flood Insurance Program, flood boundary and floodway maps were reviewed for the project corridor. The 100-year flood boundary is located adjacent to the north side of the project corridor for a majority of its length, from the Genesee River west to the Greenway Trail (see Figure 2 for locations). Because of the higher elevation of the railroad corridor, a direct impact on the 100-year floodplain is not anticipated. If the final design of the trail includes components at an elevation significantly lower than the existing railroad bed elevation, these components should be evaluated with respect to the floodplain boundaries.
8. Threatened or Endangered Species - The NYS Department of Environmental Conservation (NYSDEC) and US Fish and Wildlife Service (USFWS) were contacted to determine possible existence of threatened or endangered species in project area. The NYSDEC responded that there are no known occurrences of rare or state-listed animals, plants, communities or other significant habitats within the project area. The USFWS responded that except for transient individuals, there are no federally listed or proposed endangered or threatened species under their jurisdiction in the project impact



area. Additionally, there are no areas considered as critical habitat within the project area. Copies of each agency's response letter are included in the attached Appendix A. If there is a significant lapse of time between the date this determination was made and the date that the project will be constructed, the NYSDEC and USFWS should be re-contacted to verify that this determination remains valid.

9. Environmental Assessment – It is anticipated that the project will require preparation of the NYSDEC Long Form EAF. A NEPA checklist may be required if federal funding is involved.

#### IV. TRAIL ALIGNMENT ALTERNATIVES

Three alternative trail alignments were considered for linking the prospective trail from the east end of the Erie-Attica Railroad bridge (at Farmers Road) to the Village. The three alternative alignments are shown on Figure 3 on the following page, and are further described below:

***Alternative 1*** routes the trail along Farmers Road southward to West Main Street (NY Route 5 & US Route 20). New sidewalk segments would be constructed on both sides of West Main Street between Farmers Road and the new access road to the Livingston Industrial Complex (opposite River Street), which would connect to sidewalk extensions proposed as part of the NYSDOT's planned project to reconstruct West Main Street.

Initially, a mechanically stabilized retained earth embankment ramp structure was considered to transition the trail from the railroad grade down to Farmers Road immediately adjacent to the Genesee River. However, the land swap between the Village of Avon and Livingston Industrial Complex, LLC (see Section III.B above) provides the opportunity for a new bridge span over Farmers Road, allowing the trail to ramp down to Farmers Road utilizing existing railroad embankment rather than a more costly mechanically stabilized ramp structure.

***Alternative 2*** would extend the trail across Farmers Road and into the Livingston Industrial Complex, where it would jog northward around stormwater management ponds to be constructed for the complex and intersect with the main access road for the industrial complex. The trail would then follow alongside the industrial road northward and then eastward to Rochester Street, linking to existing sidewalks.

***Alternative 3*** (similar to Alternative 2) would extend the trail across Farmers Road and into the Livingston Industrial Complex, where it would jog northward around stormwater management ponds and intersect with the main access road for the industrial complex. The trail would then follow alongside the industrial complex's access road southward to West Main Street (opposite River Street), where it would link to sidewalk extensions proposed as part of the NYSDOT's planned project to reconstruct West Main Street



**ERIE-ATTICA RAILROAD BRIDGE & MULTI-USE TRAIL  
ALTERNATIVE ALIGNMENTS**

FIGURE 3



**V. PREFERRED TRAIL ALTERNATIVE**

Based upon comments and feedback resulting from the public informational meetings, input from the Steering Committee, right-of-way and environmental considerations; Alternative 1 is recommended as the preferred trail alternative.

The preferred trail alignment would begin at River Road and continue east crossing the Genesee Valley Greenway as well as the bridge over the Genesee River, which would be retrofitted with a new deck and railing system. A new bridge span would be constructed over Farmers Road allowing the trail to continue over Farmers Road and subsequently ramp down to Farmers Road utilizing existing railroad embankment. The trail would continue down Farmers Road to Main Street. New sidewalk segments would be constructed on Main Street between Farmers Road and the new access road to the industrial complex, which would connect to the sidewalk extensions proposed as part of the NYSDOT Reconstruction of Main Street Project. The proposed trail would be 12 feet wide with a crushed stone surface treatment. See Figure 4 (large scale plan) and Figures 4a thru 4c (small scale plans) on the following pages for location and details.

Trailhead parking lots would also be included as part of the project. Approximately 12 parking spaces would be provided at the River Road terminus, and approximately 30 spaces at the Farmers Road junction with the abandoned railroad corridor. The Farmers Road parking area would be located on an approximate 2-acre Village-owned parcel. The opportunity exists to expand this lot to provide additional spaces and/or various types of spaces, such as car/horse trailer spaces if identified as a need.

**VI. ESTIMATED TRAIL COSTS**

To allow for variability in funding and resources for the construction of the preferred alternative, the proposed project's construction has been separated into two phases.

**Phase 1: Greenway Trail to Farmers Road**

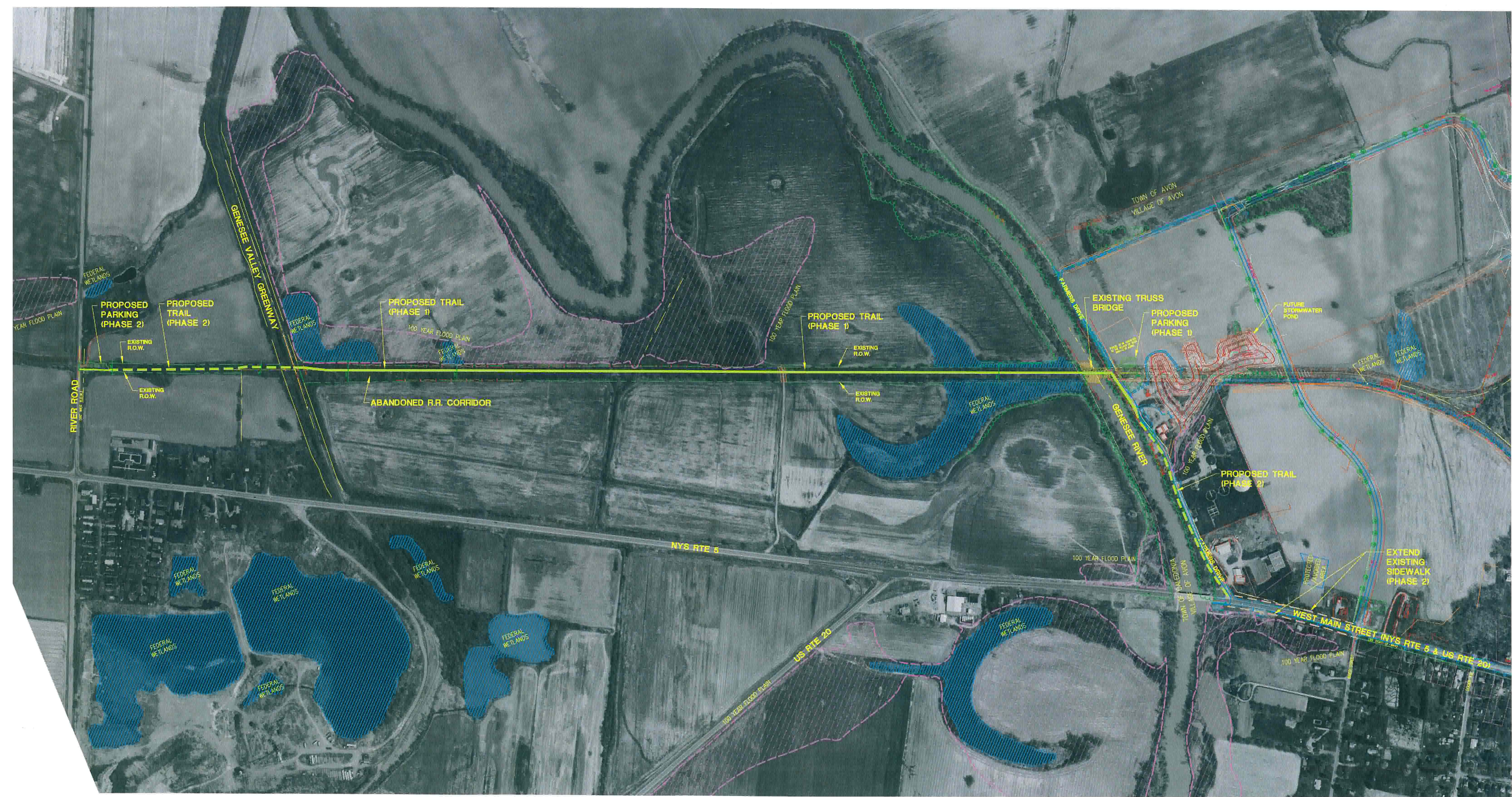
Trail Cost (includes 3 culverts):	\$326,371.00
Retrofit Bridge over Genesee River:	130,005.00
New Span over Farmers Road:	40,140.00
Ramp on existing embankment:	153,383.00
<b>Subtotal</b>	<b>\$649,899.00</b>
<b>SAY</b>	<b>\$ 650,000</b>

<b>Phase 2: River Road to Greenway and Connection to Sidewalks on Main Street</b>	\$260,400.00 (w/gravel lots) or
	\$307,800.00 (w/asphalt lots)

**Total Project Cost: \$910,400.00 (w/gravel lots) or \$957,800.00 (w/asphalt lots)**

Detailed estimates of probable construction costs for both phases are include in Appendix B.

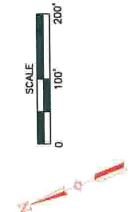
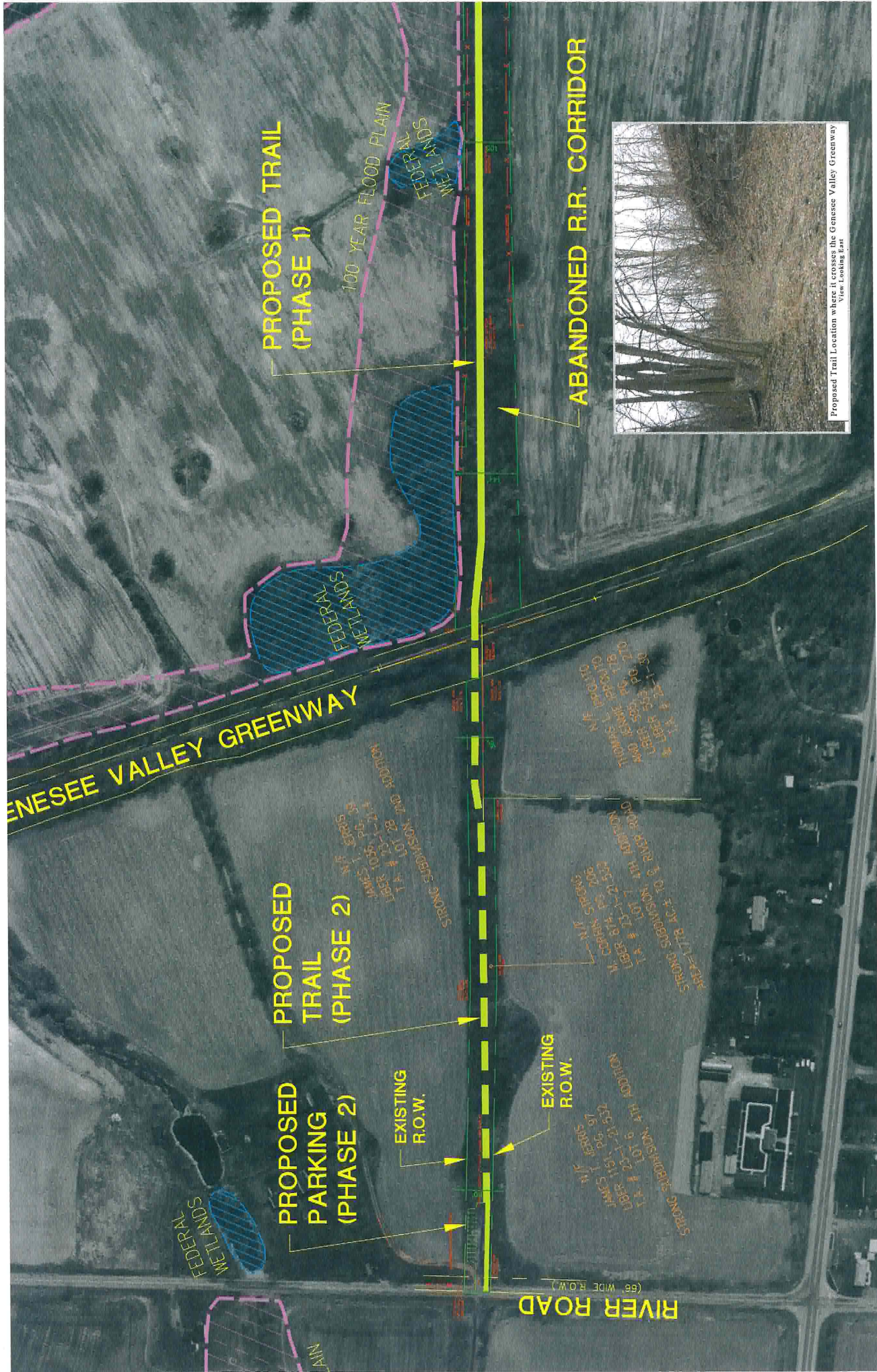




**ERIE-ATTICA RAILROAD BRIDGE & MULTI-USE TRAIL  
PREFERRED TRAIL ALIGNMENT**

FIGURE 4





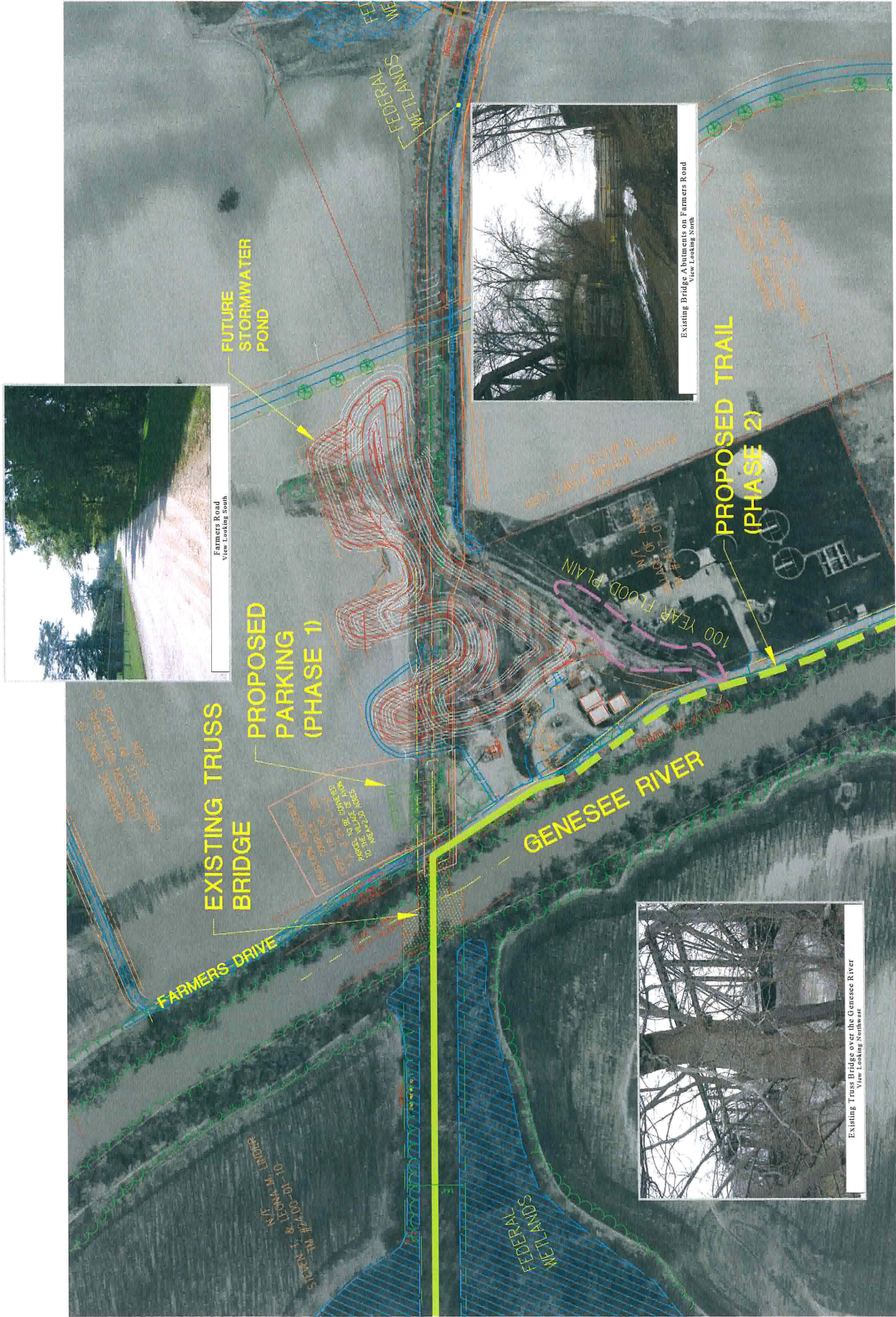
# ERIE-ATTICA RAILROAD BRIDGE & MULTI-USE TRAIL PREFERRED TRAIL ALIGNMENT

FIGURE 4a









**ERIE-ATTICA RAILROAD BRIDGE & MULTI-USE TRAIL  
PREFERRED TRAIL ALIGNMENT**

FIGURE 4c





**ERIE-ATTICA RAILROAD BRIDGE & MULTI-USE TRAIL  
PREFERRED TRAIL ALIGNMENT**

FIGURE 4d

## **VII. CONCLUSION / NEXT STEPS**

The results of the study indicate that the preferred trail alignment, which will primarily utilize and/or follow along publicly held lands and right-of-way is feasible with respect to existing environmental and cost considerations. Therefore, it is recommended that funding be pursued for the design and construction of the trail. Such funding sources include but are not limited to:

**Transportation Enhancement Program (TEP)** which is a State-administered federal transportation program that provides federal funding for non-traditional projects that add value to the transportation system. This program includes twelve categories of eligible projects including preservation of abandoned railroad corridors, preservation of historic transportation structures, and facilities for bicyclists and pedestrians.

**Transportation Improvement Program (TIP)** which is administered by the Genesee Transportation Council (GTC), the designated metropolitan planning organization (MPO) for the Rochester area, including the project area. This program administers the timing and funding of all transportation improvements in the Rochester area involving federal funds over the next five years. Projects on the TIP must be consistent with the overall objectives and strategies identified in the GTC's Long Range Transportation Plan.

**Recreational Trails Program (RTP)** is a program of the NYS Department of Transportation administered by the Office of Parks, Recreation and Historic Preservation (OPRHP). This State-administered, Federal assistance program is intended to provide and maintain recreational trails for both motorized and non-motorized recreational trail use.

Since a large portion of the abandoned railroad corridor will soon be owned by the NYS Office of Parks, Recreation and Historic Preservation, including the bridge over the Genesee River, it is recommended that the Village consider joint funding applications with the Genesee Region of the NYS Office of Parks, Recreation and Historic Preservation for the Phase 1 portion of the project (Greenway Trail to Farmers Road).

For the Phase 2 portion of the project, it is further recommend that the Village consider joint applications and/or partnering with the Town of Caledonia as well as with State Parks. This is recommended since a portion of the Phase 2 project is located in the Town of Caledonia and the Phase 2 trailhead parking provides improved access to the State Parks owned and maintained Greenway Trail.

Applications for funding may also require matching percentages by the applicants, sponsors and/or project partners. The Village should consider and determine to what extent they could commit funding and other resources such as materials, labor and equipment for completing portions of the work, particularly those portions of the project areas that lie within the Village limits. The Village may also want to solicit other businesses, organizations, service clubs or municipalities for donations of materials, volunteer labor, non-traditional labor and other certified donations such as materials and equipment.



# **APPENDIX A**

## **Agency Coordination Correspondence**



New York State Office of Parks, Recreation and Historic Preservation  
Historic Preservation Field Services Bureau  
Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

August 23, 2006

Christine Quinlan  
Village of Avon  
74 Genesee St  
Avon, New York 14414

Re: FHWA  
Erie-Attica RR Bridge Rehab over Genesee River  
Avon, Livingston County  
06PR04340

Dear Quinlan:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966.

Raymond Smith of our National Register unit has reviewed the project and has determined that the bridge is eligible for listing in the National Register of Historic Places. I have enclosed a copy of the resource evaluation for your review and use.

Because the bridge is eligible for listing in the National Register, we will need to review the proposal for its potential impact on the bridge. We also will need to review the project for its potential impact on archeological resources. Please send us information about the proposed project when it becomes available.

Please be sure to refer to the OPRHP Project Review (PR) number noted above when you consult with us regarding the details of the project. Please call me at 518-237-8643, ext. 3252 if you have any questions.

Sincerely,

Sloane Bullough  
Historic Sites Restoration Coordinator

Enclosure



**New York State Department of Environmental Conservation****Division of Fish, Wildlife & Marine Resources****New York Natural Heritage Program**625 Broadway, 5<sup>th</sup> floor, Albany, New York 12233-4757**Phone:** (518) 402-8935 • **FAX:** (518) 402-8925Denise M. Sheehan  
Commissioner

August 4, 2006

Nancy Gillette  
Ravi Engineering  
Blackwatch Office Park, Suite E 5  
6605 Pittsford Palmyra Rd  
Fairport, NY 14450

Dear Ms. Gillette:

In response to your recent request, we have reviewed the New York Natural Heritage Program databases with respect to an Environmental Assessment for the proposed Rail to Trail Communications Project located on an abandoned Railroad bed, area as indicated on the map you provided, located in the Village of Avon, Livingston County.


We have no records of known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain any information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. For these reasons, we cannot provide a definitive statement on the presence or absence of rare or state-listed species, or of significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Data bases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

Sincerely,

  
Jean Pietrusiak, Information Services  
New York Natural Heritage Program

Enc.

cc: Reg. 8, Wildlife Mgr.



**FAX TRANSMITTAL RE: LISTED SPECIES REQUEST**  
U.S. FISH AND WILDLIFE SERVICE  
New York Field Office  
3817 Luker Road, Cortland, NY 13045  
Phone: (607) 753-9334 Fax: (607) 753-9699



September 22, 2006

To: Nancy S. Gillette

This responds to your July 17, 2006, request for listed species information in the vicinity of the proposed Erie and Attica Railroad Bridge and Trail Project in the Village of Avon, Livingston County, New York.

Except for occasional transient individuals, no Federally-listed or proposed endangered or threatened species under our jurisdiction are known to exist within the project impact area. In addition, no habitat in the project impact area is currently designated or proposed "critical habitat" in accordance with provisions of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). Therefore, no further ESA coordination or consultation with the U.S. Fish and Wildlife Service (Service) is required. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of Federally-listed and proposed endangered and threatened species in New York is available for your information.\* Until the proposed project is complete, we recommend that you check our website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project is current.\* Should our determination change and any part of the proposed project be authorized, funded, or carried out, in whole or in part, by a Federal agency, further consultation between the Service and that Federal agency pursuant to the ESA may be necessary.

The above comments pertaining to endangered species under our jurisdiction are provided as technical assistance pursuant to the ESA. This response does not preclude additional Service comments under other legislation.

For additional information on fish and wildlife resources or State-listed species, we suggest you contact the appropriate New York State Department of Environmental Conservation regional office(s) and New York Natural Heritage Program Information Services.\*

Thank you for your time. If you require additional information please contact me at (607) 753-9334. Future correspondence with us on this project should reference project file 61454.

Sincerely,

Robyn A. Niver  
Endangered Species Biologist

\*Additional information referred to above may be found on our website at:  
<http://www.fws.gov/northeast/nyfo/es/section7.htm>

**RECEIVED**

SEP 25 2006

RAVI ENGINEERING, P.C.



## **APPENDIX B**

### **Detailed Estimate of Probable Construction Costs**

**NYS Parks - Genesee Region  
Erie Attica RR Multi-Trail Project  
Preliminary Cost Estimate**

**Phase 1: Greenway Trail to Farmers Road**

By: MDK  
Date: 6/14/2006  
Checked: RSB  
Date: 6/15/2006  
Revised: RBS  
Date: 9/30/2006

Description	Quantity	Unit	Unit Cost	Cost
Clearing & Grubbing	0.53	Ac	\$ 7,500.00	\$ 3,975.00
Mowing	2	Ac	1,500.00	2,250.00
Unclassified Excavation & Embankment	2,438	c.y.	12.00	29,253.33
Select Granular Fill	911	c.y.	40.00	36,444.44
Silt Fence (60%of project length - 2 sides)	6,582	ft.	2.75	18,100.50
Stabilized Construction Entrances	2	each	750.00	1,500.00
5/8" Crusher-Run Stone (surface course)	813	c.y.	30.00	24,375.34
36" RCP Drainage Culverts	80	ft.	95.00	7,600.00
36" RCP End Sections	6	each	2,400.00	14,400.00
3-Sided Box Culvert (4ft. X 6 ft.)	44	ft.	600.00	26,400.00
Permanent Barricades	109	ft.	95.00	10,319.72
Establishing Turf	2,438	s.y.	1.00	2,437.78
Survey & Stakeout	1	LS	5,000.00	5,000.00
Bridge Walkway Structure *	1	LS	170,145.00	170,145.00
Ramp Structure *	1	LS	153,383.33	153,383.33
* See Attached estimate back-up for details breakdown of work elements				

	Sub-total	\$ 505,584.45
Contingency 20%		\$ 101,116.89
	Sub-total	\$ 606,701.34
Mobilization 4%		\$ 24,268.05
	Sub-total	\$ 630,969.39
Maintenance & Protection of Traffic 3%		\$ 18,929.08
	Total	\$ 649,898.47

Total Estimated Construction Cost \$ 649,900.00

**SAY \$ 650,000.00**

1. Estimate assumes construction access at River Road and at existing farm lane
2. MPoT is assumed at Farmers Road, Greenway Trail and at construction entrances.
3. Trail signing and gates by others



**Erie Railroad Bridge 367.14 over the Genesee River**

Rev.: MRL

Date: 9/30/06

**Conversion to trail structure****Bridge Walkway Structure:**

Clear Brush and Remove Old RR Ties	nec	\$7,500.00	Assume 2 crew days @ \$3,250/ day
West Approach Span	24.00 ft		
West Pier	15.00 ft		
Truss Span over River	174.50 ft		
East Pier	15.00 ft		
East Approach Span	38.00 ft		
Total Length	266.50 ft		
Walkway Width	14.00 ft		
Walkway Length	266.50 ft		
Walkway Area	3731.00 sf	x	\$20.00 /sf = \$74,620.00 2" treated timber decking w/ timber framing
Walkway Railing Length	533.00 ft	x	\$125.00 /ft = \$66,625.00 Galv Steel Pipe Railing w/ Chain link fabric
Walkway Expansion Joint	14.00 ft	x	\$100.00 /ft = \$1,400.00 Sliding plate expansion joint
New East Span Steel	10000.00 lb	x	\$2.00 /lb = \$20,000.00 Shop painted steel girders and floorbeams
<hr/>			
<b>\$170,145.00 Total Walkway Structure</b>			

**Ramp Structure:**

Clear Brush and Strip Topsoil	nec	\$3,250.00	Assume 1 crew days @ \$3,250/ day
Ramp Width	12.00 ft		
Ramp Height	15.00 ft		
Ramp Slope	0.05		
Ramp Length	300.00 ft		
Ramp Area	3600.00 sf	x	\$0.50 /sf = \$1,800.00 4" of 5/8" crusher run - surfacing
Ramp Railing Length	600.00 ft	x	\$125.00 /ft = \$75,000.00 Galv Steel Pipe Railing w/ Chain link fabric
Ramp x-section area (max)	660.00 sf		
Ramp Fill Volume	3666.67 cy	x	\$20.00 /cy = \$73,333.33 Embankment
<hr/>			
<b>\$153,383.33 Total Ramp Structure</b>			

**\$323,528.33 Total Walkway Structure and Ramp****\$571.10 Cost per Linear Foot of Walkway & Ramp****\$47.59 Cost per Square Foot of Walkway & Ramp**

**Village of Avon**  
**Erie Attica RR Multi-Trail Project**  
**Preliminary Construction Cost Estimate**

By: RBS  
Date: 11/9/2006  
Checked: MDK  
Date: 11/14/2006

**Phase 2: River Road to Greenway & Connection to Sidewalks on Main St.**

Description	Quantity	Unit	Unit Cost	Cost
Clearing & Grubbing	0.48	AC	\$ 7,500.00	\$ 3,600.00
Mowing	0.73	AC	1,500.00	1,095.00
Unclassified Excavation	2,043	CY	23.00	46,989.00
Embankment	530	CY	20.00	10,600.00
Select Granular Fill	278	CY	25.00	6,950.00
Silt Fence (75%of project length - 2 sides)	2,228	FT	2.25	5,013.00
Stabilized Construction Entrances	1	EA	750.00	750.00
5/8" Crusher-Run Stone (surface course)	459	CY	30.00	13,770.00
36" RCP Drainage Culvert	40	FT	95.00	3,800.00
36" RCP End Sections	2	EA	2,400.00	4,800.00
Subbase, Type 2	912	CY	50.00	45,600.00
Concrete Sidewalks	100	CY	345.00	34,500.00
Separation Fabric	4,574	SY	2.00	9,148.00
Topsoil	185	CY	50.00	9,250.00
Seeding	1,660	SY	1.00	1,660.00
Survey & Stakeout	1	LS	5,000.00	5,000.00
<b>For Asphalt Parking Lots:</b>				
Binder	289	T	75.00	21,675.00
Top	186	T	75.00	13,950.00
Additional 4 inches of Excavation	245	CY	23.00	5,635.00
Eliminate separation fabric	2,200	SY	2.00	-4,400.00
<b>Total additional cost for asphalt lots</b>				<b>36,860.00</b>

		Gravel Lots	Asphalt Lots
	Sub-total	\$ 202,525.00	\$ 239,385.00
Contingency	20%	\$ 40,505.00	\$ 47,877.00
	Sub-total	\$ 243,030.00	\$ 287,262.00
Mobilization	4%	\$ 9,721.20	\$ 11,490.48
	Sub-total	\$ 252,751.20	\$ 298,752.48
Maintenance & Protection of Traffic	3%	\$ 7,582.54	\$ 8,962.57
	Total	\$ 260,333.74	\$ 307,715.05
<b>Total Estimated Construction Cost</b>		<b>\$ 260,400.00</b>	<b>\$ 307,800.00</b>