

# CANALWAY TRAIL RE-ALIGNMENT PITTSFORD, NEW YORK



FINAL REPORT



Prepared For:



New York State Canal Corporation

**GENESEE TRANSPORTATION COUNCIL**

Prepared By:



Environmental Design & Research, P.C.



**Behan Planning Associates**  
Planning Community Futures

## **A. Summary**

The purpose of this project was to study the existing Canalway Trail routing in the vicinity of Old Monroe Avenue and Brook Road in the Town of Pittsford and to develop realignment alternatives that can be implemented to improve the safety, operations, and aesthetics of the trail. The Study Advisory Committee developed the following goals to guide the study:

- Allow for trail user safety and enjoyment along the water's edge;
- Remove disruptions from the adjacent residential neighborhood; and
- Accommodate the continued use of the NYSDOT/Canal Corporation property

The study began in Spring 1999 and was completed in December 2000. Representatives of the New York State Canal Corporation, the Town of Pittsford, the New York State Department of Transportation, and GTC staff made up the Study Advisory Committee. GTC Staff managed a consultant team from Environmental Design & Research (EDR), Behan Planning Associates, and Clark Patterson Associates.

The Study Advisory Committee and the consultant team developed a recommended improvement plan by combining the most feasible alternatives. This plan includes both waterfront and street improvements, which are recommended to be advanced together. Recommended improvements include:

- Constructing a new section of the Canalway Trail along the waterfront
- Providing improved security for Canal Corporation and NYSDOT operations
- Moving the trail access at Brook Road, and
- Improving the Old Monroe Avenue and Brook Road trail/street intersection.

Presently, the Canalway Trail detours away from the water's edge to bypass an operating Canal Corporation/NYSDOT maintenance facility near Old Monroe Avenue and Brook Road in the Town of Pittsford. Current design and operational issues create problems for trail users and adjacent residential and commercial property owners, such as motor vehicle and trail user conflicts, hazardous trail access and egress, and neighborhood disruption by heavy trail traffic.

The Town of Pittsford, in response to concerned residents, requested the Canal Corporation improve the Canalway Trail's passage at this location. The Canal Corporation, in turn, requested planning assistance from the Genesee Transportation Council (GTC), resulting in this study.

## B. Project Location and Description

The project study area is located in the Town of Pittsford adjacent to the western border of the Village of Pittsford in Monroe County, New York (see Figure 1). The study area is bordered on the east by Monroe Avenue (NYS Route 31), on the south by the NYS Canal System, on the west by State-owned canal lands, and on the north by single-family residential properties located along Brook Road. In general, the land use in the study area is a mixture of light industrial, commercial, residential, and recreational/open space.

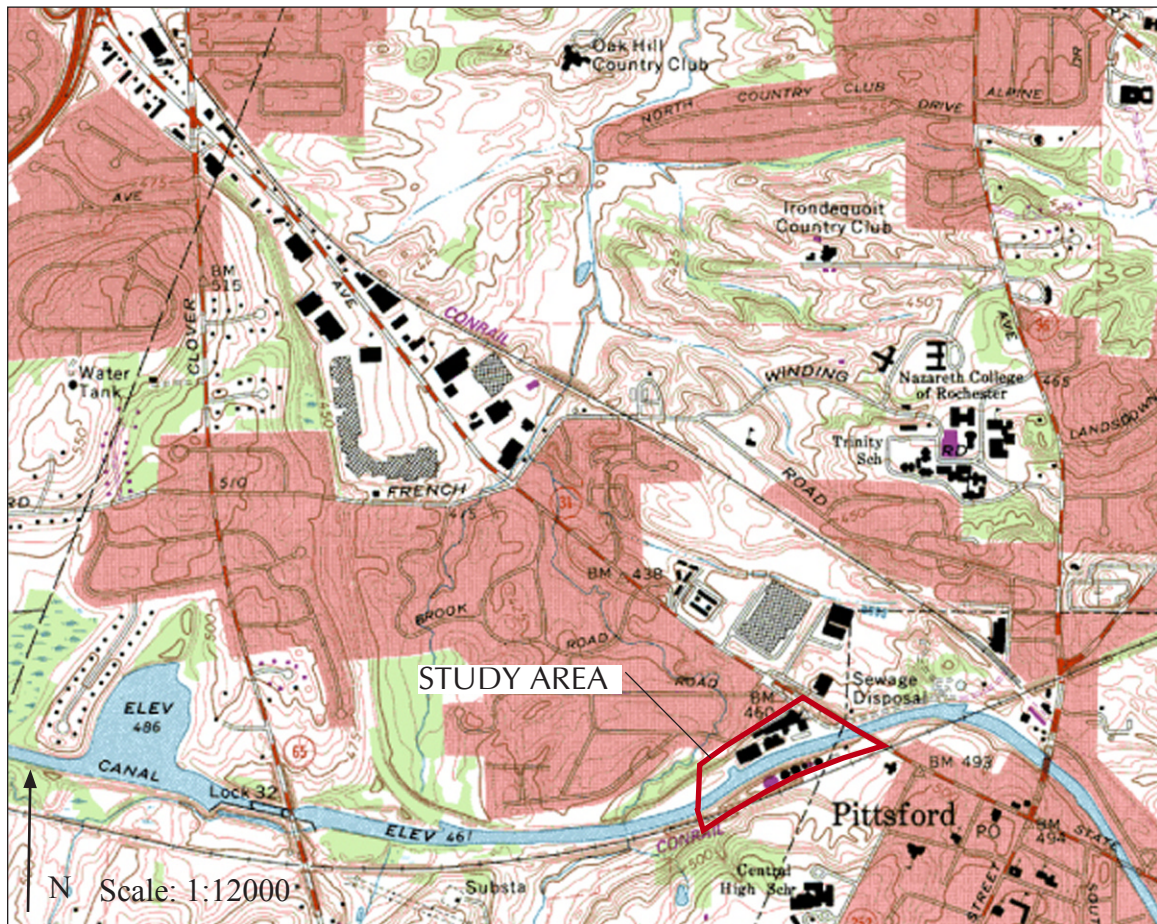


Figure 1. Location Map

The presence of the combined NYSDOT/Canal Corporation maintenance facility and the Town of Pittsford's Sewer District facility make up the light industrial character of the study area. Both facilities are located on the north edge of the Canal. The Town of Pittsford's Sewer District facility consists of two large one-story maintenance buildings and a few small storage buildings. The NYSDOT/Canal Corporation facility consists of approximately 9 buildings, including:

- two 2-story masonry structures (approximately 100' x 40'),
- a one-story butler building-type garage (approximately 65' x 20'),
- a Quonset hut building (approximately 65' x 20'),
- a one-story garage (approximately 220' x 25'), and
- four small storage buildings.



At the west end of the maintenance facility, the NYSDOT and Canal Corporation share a large open space (approximately 2 acres) for storage. The Canal Corporation also maintains an 80' wide by 100' long maintenance bay and gantry crane adjacent to the canal (see Figures 2 and 3). According to the Canal Corporation, the gantry crane is used approximately 12 times per year for boat maintenance and the moving of operational equipment. The length of time the maintenance bay is used varies between a few hours to a few weeks during the summer which is the prime operating season for the canal, both recreationally and commercially.



*Figure 2. Maintenance Bay*



*Figure 3. Gantry Crane*

The only commercial entities within the study area are two music supply merchants (Central Music Supply and Onondaga Music Service), which occupy a two-story building at the southwest corner of the Brook Road and Old Monroe Avenue intersection.

The residential character of the study area consists of single-family detached housing that occupies the north side of Brook Road.

The recreational/open space within the study area primarily consists of the Canalway Trail, which is aligned parallel with the canal until it meets the study area. Within the study area, the trail utilizes Brook Road and Old Monroe Avenue to route trail users around the NYSDOT/Canal Corporation maintenance facility. It should be noted that Monroe Avenue (NYS Route 31) is also designated as NYS Bike Route 5, a cross-state bicycle touring route.



## C. Methodology

This study, requested by the NYS Canal Corporation, is being conducted by the Genesee Transportation Council (GTC), with assistance from the consultant team of Environmental Design & Research, P.C., Behan Planning Associates, and Clark Patterson Associates. The Genesee Transportation Council is the designated metropolitan planning organization (MPO) for the nine-county Genesee/Finger Lakes Region.

The NYS Canal Corporation, NYSDOT, and the Town of Pittsford were integrally involved throughout the course of the study as representatives on the study's steering committee (see Page 16 for a list of members). Adjacent residents have also provided input since the project's inception in 1997.

The following tasks were used in the process of this study:

- *Data Collection* included the collection and review of existing information regarding the study area, including base maps; meetings and site visits with local government representatives, state agencies, neighbors and other stakeholders to identify various issues and concerns; and data collection for trail user type and frequency in the study area was conducted along with observations of the NYSDOT/Canal Corporation and Sewer District operations.
- *Development of Alternatives* included the investigation into the possible alternatives for re-aligning the Canalway Trail within the study area. Based on the issues and concerns raised from all stakeholders and the desired objective outlined by the study's Steering Committee, five trail re-alignment alternatives were developed.
- *A Recommended Improvement Plan* was developed upon review of the alternatives by the Study Steering Committee. This task involved an objective process to select one alternative that serves the trail users, the residential and commercial neighbors, and operations at the NYSDOT/Canal Corporation maintenance facility and the Town of Pittsford Sewer District facility.

## D. General Site Analysis

As a result of the existing trail alignment, three general areas of concern were identified by the participants of this study:

### 1) Trail User Safety

Within the study area, trail user safety is compromised at primarily three locations:

- *Entry/Exit of the Trail at Brook Road.*  
A sight line problem at the Brook Road entry/exit occurs because the trail empties onto the road's radial turn (see Figure 4). Trail users arriving at this location from both directions have difficulty seeing oncoming vehicular traffic. Likewise, vehicular traffic on Brook Road also has a difficult time seeing trail users

entering or exiting the trail. Universal pedestrian access at this location is also a problem because of the steep incline from the road to the trail entry/exit and the restrictive gate.

- *Intersection of the Trail and Old Monroe Avenue.*

A sight line problem exists at the intersection of Old Monroe Avenue and the existing canal-side trail. The trail's sharp turn limits the visibility of trail users traveling in either direction and requires difficult maneuvering for bicyclists and in-line skaters (see Figure 5). Also, damage to the surface from heavy vehicles creates safety and maintenance issues at this location.

- *Intersection of Old Monroe Avenue and Brook Road.*

The potential safety problem at the Brook Road/Old Monroe Avenue intersection is due to the lack of a parking lot/street definition which encourages trail users to cut across traffic lanes and the music store parking lot.



Figure 4. Brook Road Trail Entry/Exit



Figure 5. Trail Entry/Exit at Monroe Ave. Bridge



Figure 6. Brook Rd./ Old Monroe Ave.  
Intersection



Figure 7. Brook Rd., View West

## **2) Minimum Disturbance to the Adjacent Property Owners**

The adjacent property owners have a vested interest in the area, so any plans to re-align the trail should respect their privacy and security.

## **3) The Security of the NYSDOT/Canal Corporation Facility**

At present the Town of Pittsford Public Sewer District and NYSDOT do not require access to

the canal. The Canal Corporation, however, requires access to the canal at two locations. One access location is the maintenance bay with the gantry crane and the other is located west of the maintenance bay and is used for loading and unloading maintenance equipment from the canal. Security is important at all the facilities. Currently, chain link fencing surrounds the boundaries of the facilities with exception of the canal edge.

## E. Street-Side Alternatives

Based on meetings with the Town, adjacent property owners (residential and commercial), NYSDOT, and the Canal Corporation, three alternative street-side routes were developed for improvements to the Brook Road and Old Monroe Avenue sections of the study area. Each of these alternatives will be discussed in the following section.

### Alternative #1

*Alternative #1 proposes to maintain the current alignment of the trail, but provide designated bicycle travel lanes along the shoulders of Brook Road (see Figure 8).*

This alternative provides a visual demarcation between vehicles and trail users. Marked bicycle lanes, separating motor vehicles and trail users, may help clarify user space and increase trail user safety.

The Steering Committee determined this alternative to be unfeasible due to the limited width of Brook Road. Adequate bicycle lane widths (minimum 4' width each direction) cannot be obtained without constricting the vehicular travel lanes below safe design standards. Also, this type of treatment is typically used on more heavily trafficked streets, not local residential streets. Therefore, this alternative is also somewhat out of context with neighborhood setting.

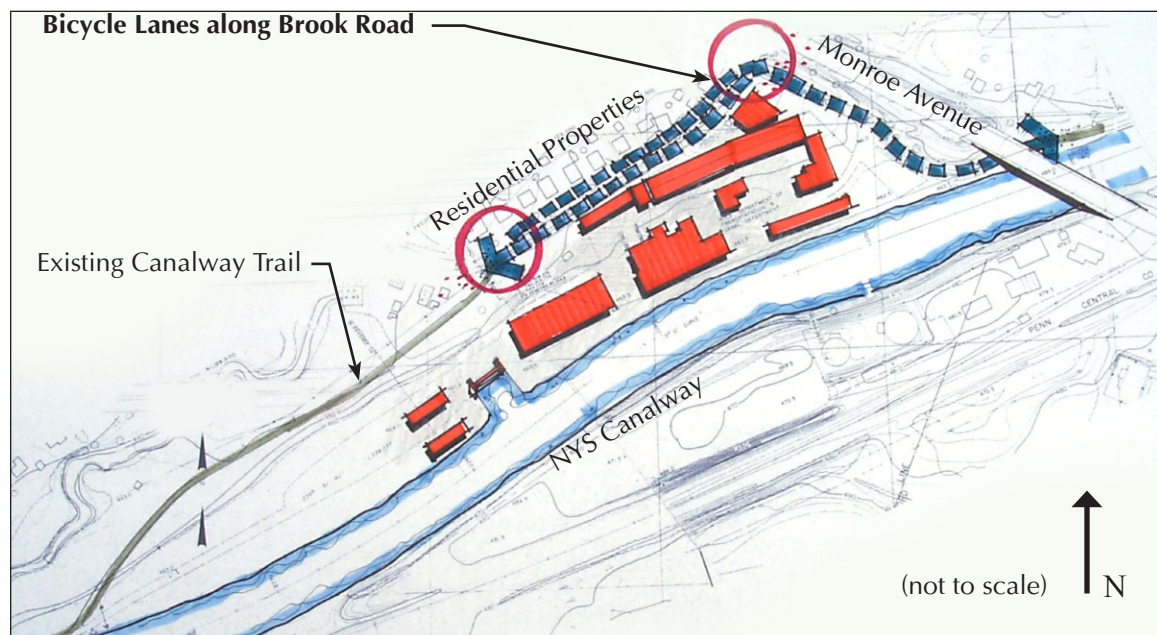


Figure 8. Alternative #1



An option to create a single 8' wide, two-way trail along the south shoulder of Brook Road was also investigated but was eliminated as an option due to the unsafe operational conditions it would create. Existing topography between the edge of the pavement and the structures along the south edge of the road also would not allow the trail to be separated from the road, thus, potentially creating additional conflicts and liabilities.

## Alternative #2

*Alternative #2 also proposes designated bicycle lanes on Brook Road, and: 1) extends the trail through the existing open space owned by the State of New York (known as "Roger's Park"), and 2) aligns a section of the trail behind the Central Music Supply building (see Figure 9).*

The trail alignment in this option reduces the distance trail users would need to travel on Brook Road. The trail reconfiguration behind the Central Music Supply building averts potential vehicular/trail user conflicts at the intersection of Old Monroe Avenue and Brook Road. Reconfiguring the existing trail through "Roger's Park" reduces trail users use of Brook Road by approximately 120'. In addition, the alignment through Roger's Park creates the opportunity for a "T" intersection with Brook Road further east from the existing access/egress point. This new trail access/egress improves overall sight lines for trail users.

The Steering Committee determined that the bypass behind the Central Music Supply building is unfeasible for several reasons. One, liability from this option is the unavoidable vehicular/trail user conflicts created by the service area located behind the Central Music Supply building (e.g. garbage pickup and truck deliveries). Other drawbacks of this option include inadequate trail width and obstructed sight lines for trail users approaching the roads from behind the Central Music Supply building. In addition, the trail behind the Central Music Supply building would create an isolated, unsupervised zone, possibly increasing security risks.

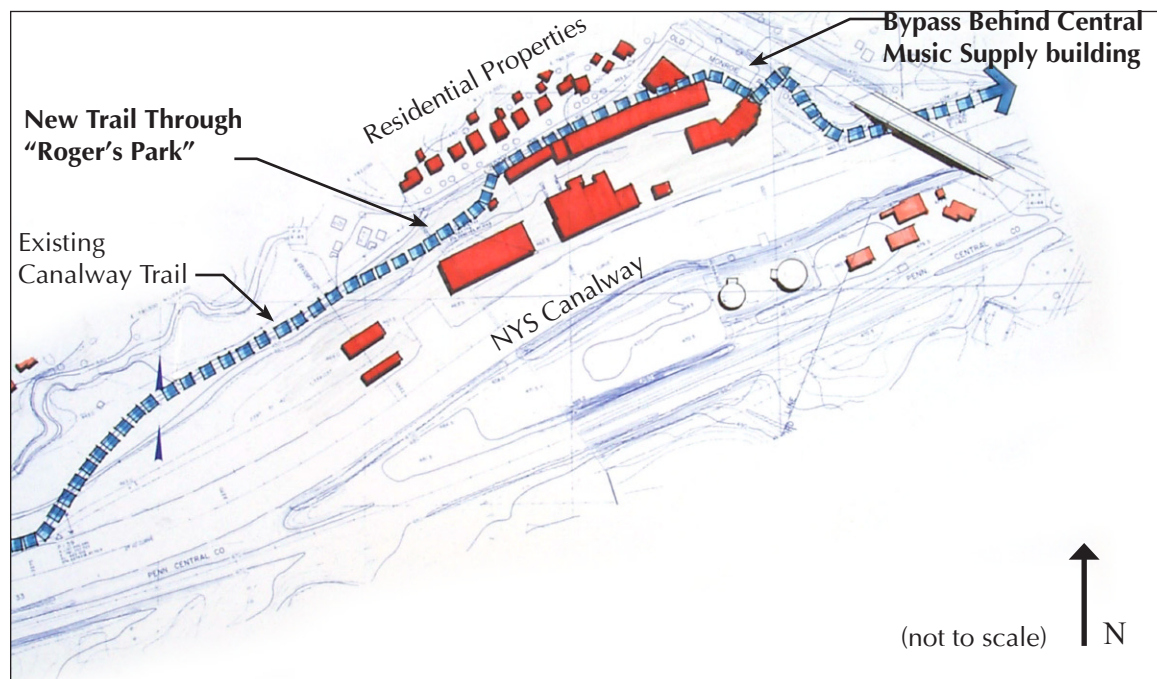


Figure 9. Alternate #2

### Alternative #3

*Alternative #3 proposes a trail extension through “Roger’s Park”; improved trail access/egress; and the creation of a separate 13’ (4m) wide trail from the Brook Road intersection along the base of the Monroe Avenue bridge right-of-way to the existing canal-side trail (see Figure 10). This option also calls for the reconfiguration of the Brook Road/Old Monroe Avenue intersection and the reduction of Old Monroe Avenue’s width (from the Central Music Supply building to the canal) to 18 feet.*

The major benefit of this alternative is the physical separation of the trail and Old Monroe Avenue. By separating the trail from the road there is an opportunity to raise the grade of the trail one to three feet to further separate the trail from Old Monroe Avenue and improve overall sight lines for both trail users and vehicular traffic on Old Monroe Avenue. Other benefits of this option include an improved trail link with Brook Road (with clearly defined traffic movement), increased trail user safety, space for trail head parking (approximately 8 automobiles), and an opportunity to improve the parking system at the Central Music Supply building.

To curtail trail users from cutting across the Brook Road/Old Monroe Avenue intersection, a curbed and landscaped bump-out is proposed at the southwest corner and along the south side of the Central Music Supply building. This alternative also allows for landscaping at the gateway to the Brook Road neighborhood, improved separation of the parking area from the intersection, as well as aesthetic improvements for Central Music Supply.



Figure 10. Alternative #3

## F. Waterfront Alternatives

### Waterfront Alternative #1

*Alternative #1 proposes to re-align the trail along the canal's waterfront by joining the existing trail system at the east and west ends of the study area with a 13' (4m) wide trail through the State/Town-owned properties (see Figure 11).*

The major benefits of this alternative are improved trail user safety; continuity of the overall linear trail system along the waterfront; minimization of trail user intrusion upon adjacent residential properties; and optimum utilization of the Canal as a public recreational resource.

A major constraint of this alternative is the potential to create conflicts with Canal Corporation operations. Because this alternative proposes to span the 80' wide maintenance bay with an impermanent structure when the maintenance bay is not in use, an alternative route is required so the maintenance bay can be accessed by the Canal Corporation. A secondary trail bypass around the maintenance bay would need to be developed (see Figure 11) or the trail would need to be blocked by gates at the east and west ends of the study area (as is currently) and trail-users would need to be re-routed back onto Old Monroe Avenue and Brook Road.

The advantage of a secondary trail around the maintenance bay is that trail users would be able to travel further along the canal waterfront. A constraint of this option, however, is that there is limited space available between the gantry crane and the existing fuel station located immediately opposite the gantry crane. The distance between these two structures is approximately 26' which offers inadequate space for 13' (4m) trail lane and two 10' drive lanes (one lane available for fueling and one lane for passing vehicles). This option also initiates potential conflicts with the schedule and use of the gantry crane.

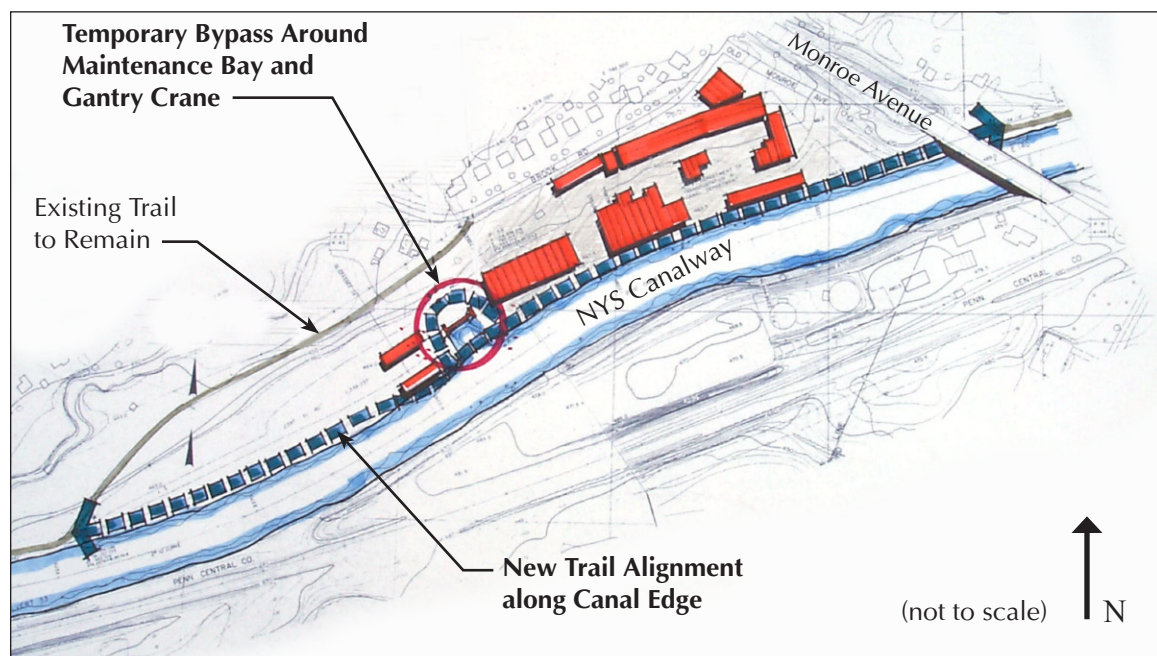


Figure 11. Waterfront Alternative #1



## Waterfront Alternative #2

Waterfront Alternative #2 proposes to re-align the trail along a section of the canal's waterfront and through the NYSDOT/Canal Corporation property. A single 13' (4m) wide waterfront trail would continue from the east and then divert north between two maintenance buildings and continue along the north edge of the NYS DOT/Canal Corporation property until linking with the existing west side trail (see Figure 12).

The major benefits of this alternative are the increased trail distance on the canal's waterfront and the total removal of the trail from Brook Road. Continuing the trail along the waterfront and avoiding Brook Road would eliminate any potential vehicular/trail user conflicts. An added benefit is that a trail link can remain for the adjacent residential properties.

The major constraints of this trail alignment are the trail user conflicts with vehicular traffic and the distinct security and safety liabilities for the NYS DOT/Canal Corporation facility. Aligning the trail to cross between the NYS DOT/Canal Corporation buildings creates the potential for conflicts with heavy operating equipment, parking, and service lane crossings.

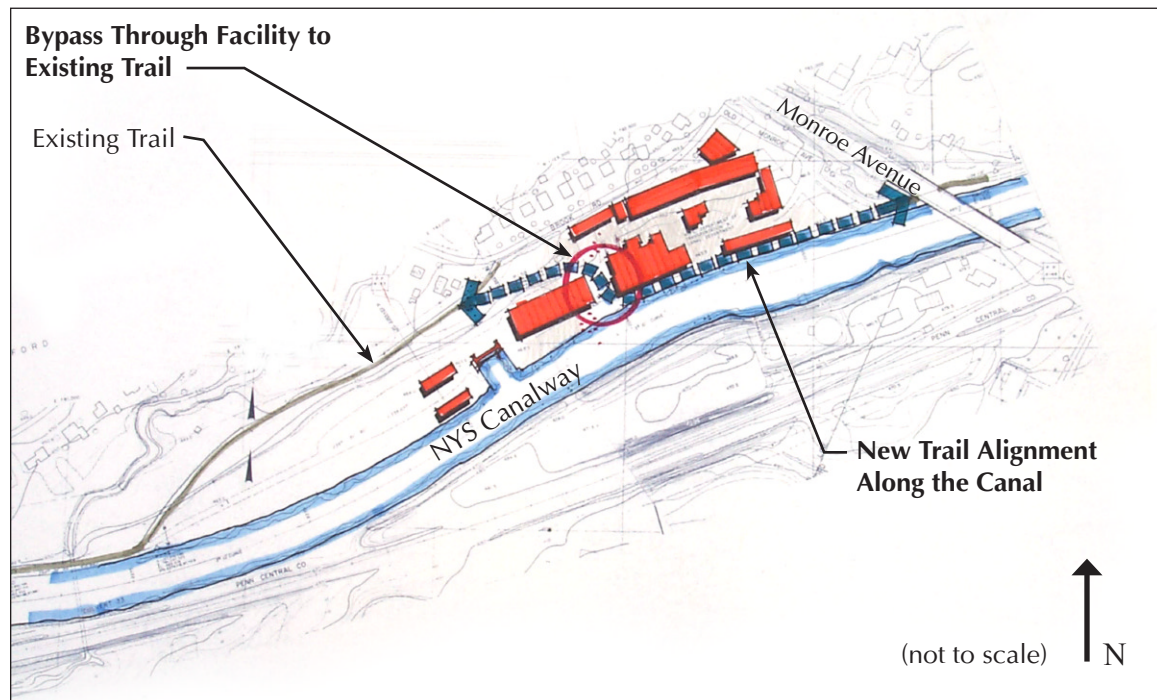


Figure 12. Waterfront Alternative #2

## G. Recommended Improvement Plan

By combining the most feasible improvements from the street-side and waterfront alternatives, a recommended improvement plan was developed to satisfy the needs of everyone involved -- trail users, the Canal Corporation, the adjacent neighborhood residents and businesses, and NYSDOT. Accordingly, the Recommended Improvement Plan takes into account safety, security, and aesthetics.

The Recommended Improvement Plan calls for the construction of a primary trail along the canal edge (see Figure 13). Amenities will include a “floating trail” crossing over the maintenance bay, a new loading pier, seating, lawn areas, and additional vegetation. The primary trail will link the east and west ends of the study area by a single 13’ asphalt trail. The western end of the Canal maintenance building will be separated from the trail by a tall fence preserving security, employee parking, and access to the building. The remainder of the area between the trail and building facades would be green space open to trail and canal users.

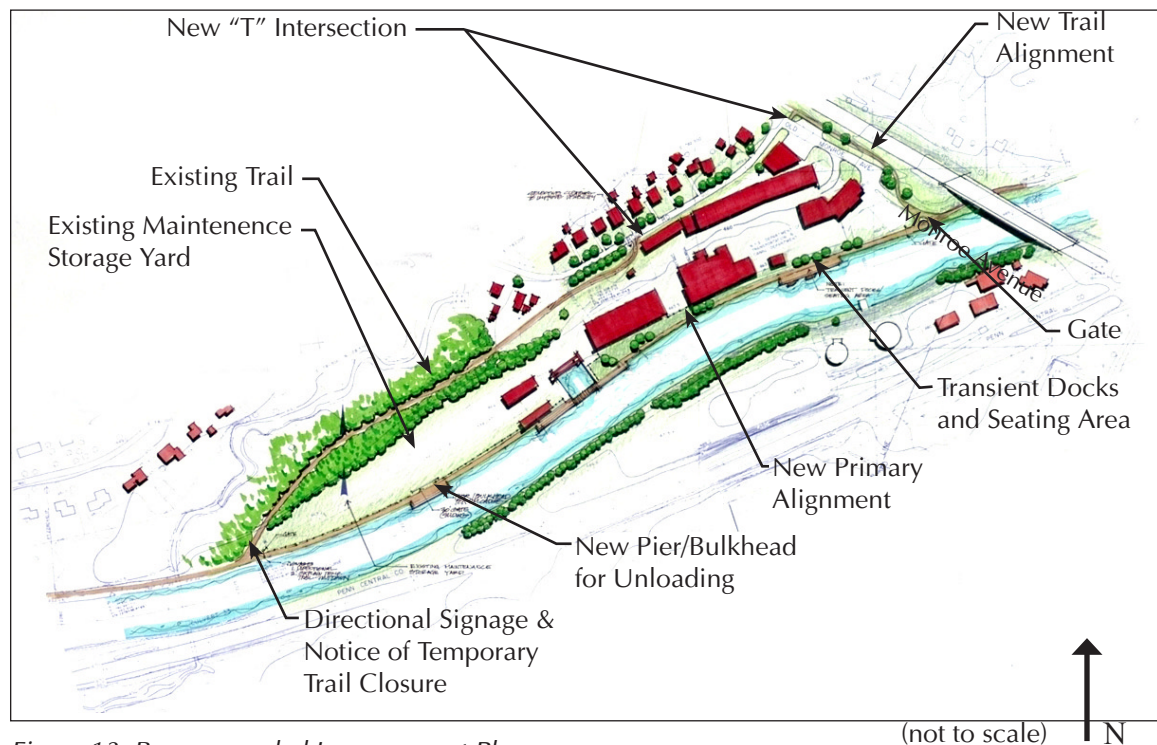


Figure 13. Recommended Improvement Plan

Two options were developed for the crossing of the maintenance bay. The first option calls for a “floating trail” that pivots away from the boat slip (see Figure 14). The second crossing option also calls for a “floating trail”, but one that is configured as a boat landing that can be relocated under the power of a small outboard engine and is secured along the canal bank (see Figure 15). The second option is the most practical option because the floating landing can be relocated in a one step process with a single outboard engine.

Although these options offer the safest solution for trail users and are technically and economically feasible, it is apparent that the canal-side trail use would have to be interrupted at various times throughout the year to accommodate the Canal Corporation’s maintenance operations. In order to minimize the length of the interruption, the slip will need to be lengthened to fit canal scows and vessels in the slip while the bridge is in place. This will allow extended use of the slip without long-term closures of the canal-side trail.

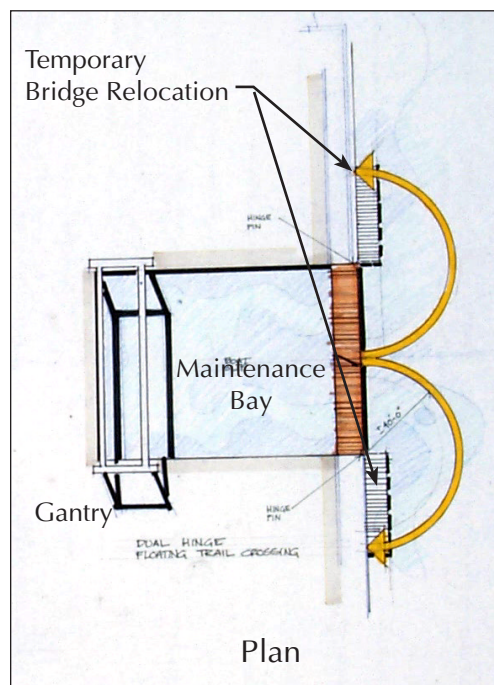
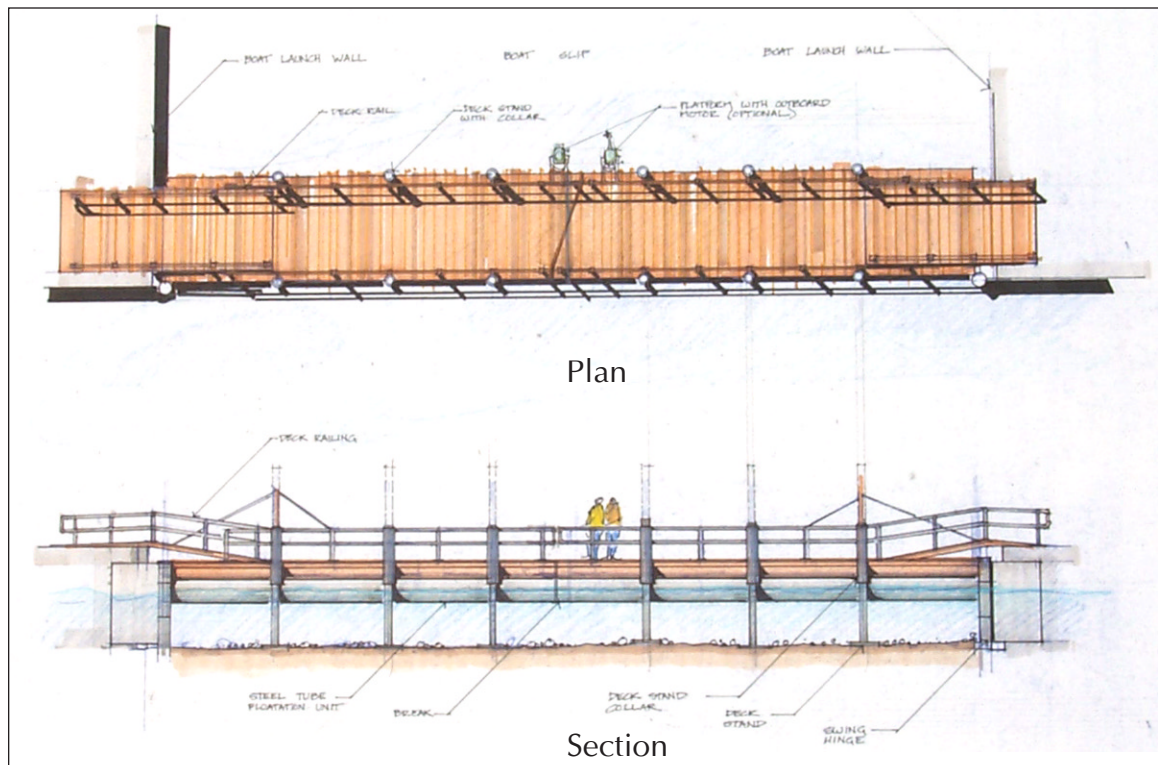


Figure 14. Maintenance Bay Crossing--Option 1



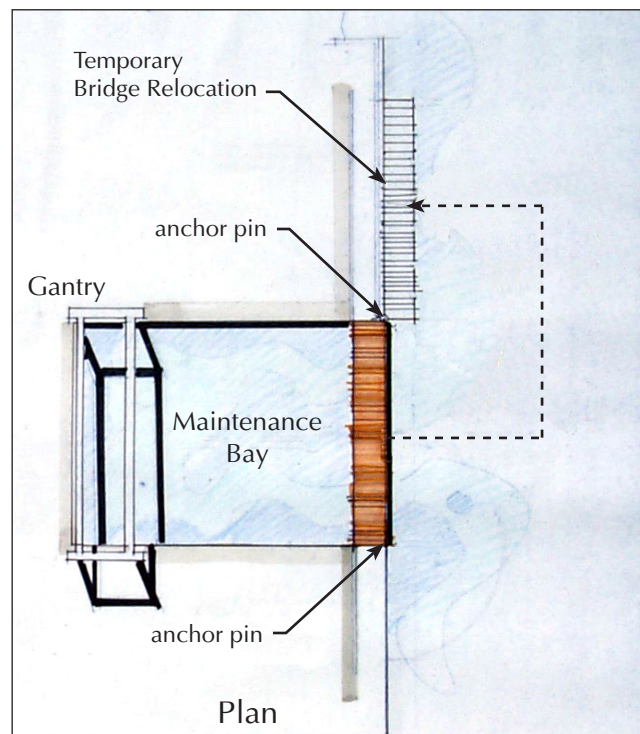
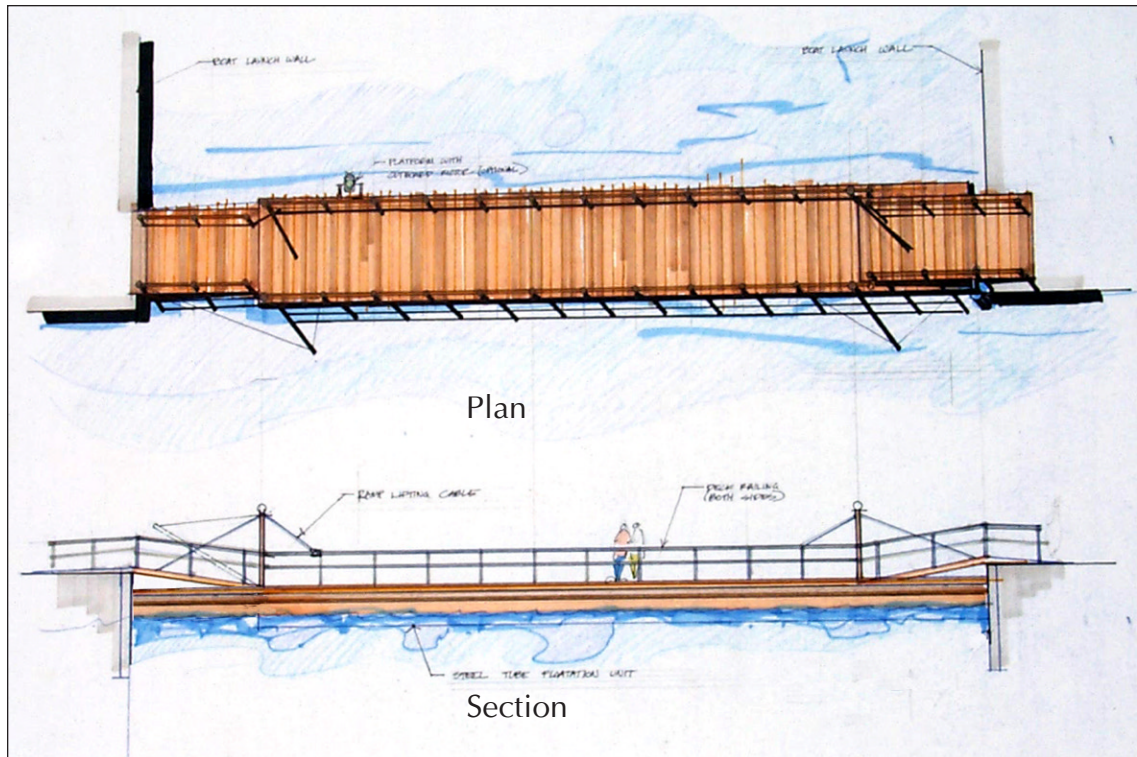


Figure 15. Maintenance Bay Crossing--Option 2

In order to accommodate continuing Canal Corporation and NYSDOT operations, the existing trail route along Brook Road and Old Monroe Avenue should also be improved (as identified in short-term alternative #3). The following three improvements need to be established to minimize disturbance to the residential neighborhood and maximize the safety and comfort of the trail-user:

- 1) Reduce the width of Old Monroe Avenue to 18 feet and create a separate trail east of Old Monroe Avenue (see Figure 16).
- 2) Redesign the intersection of Old Monroe Avenue and Brook Road, including the curb bump-out adjacent to Central Music Supply (see Figure 16).
- 3) Construct a new trail entrance/exit onto Brook Road that has improved visibility and sight lines (see Figure 17), utilizing “Roger’s Park” (state-owned property).

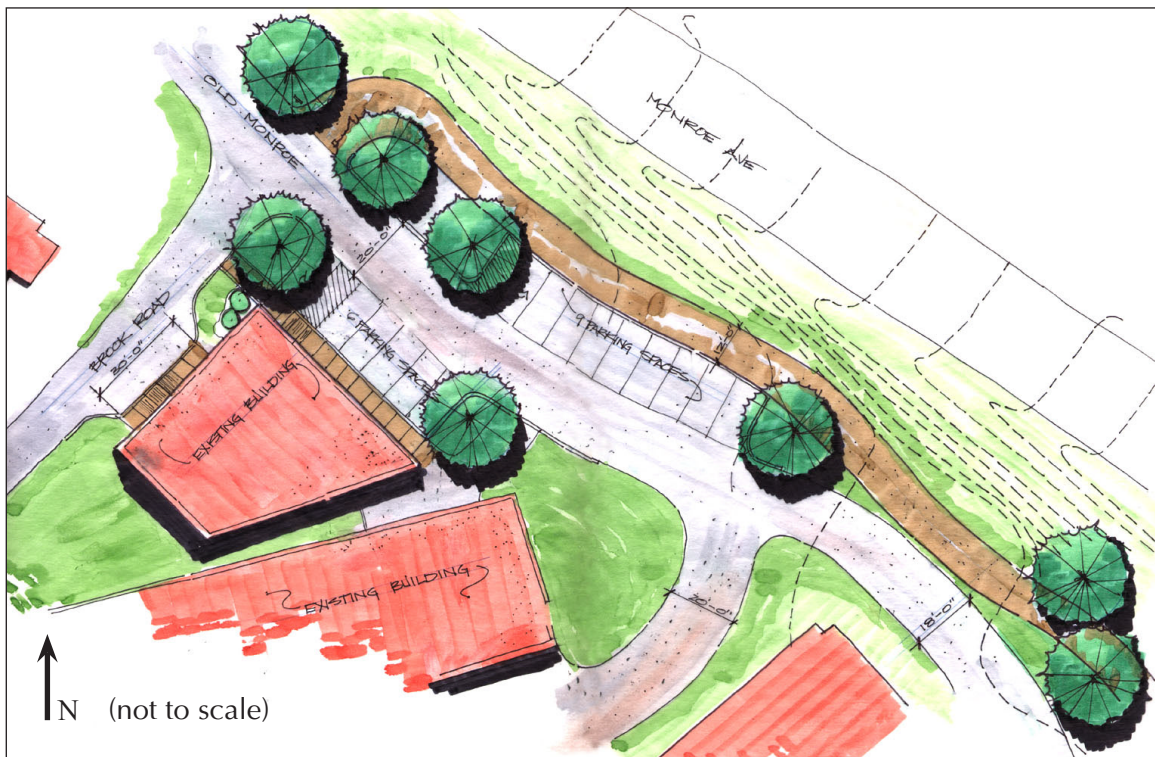


Figure 16. Old Monroe Avenue/Brook Road Intersection Reconfiguration

Although the design necessitates that the trail continue along Brook Road, this was determined acceptable given the limited expected use of the trail at this location. The proposed improvements to the street-side trail section also would better serve the commercial and residential property owners needs as well as trail users who wish to access Brook Road or Old Monroe Avenue as part of their trip. It should be noted that Old Monroe Avenue will always serve as the primary connection to the trail for trail users coming from NYS Route 31 (Monroe Avenue).



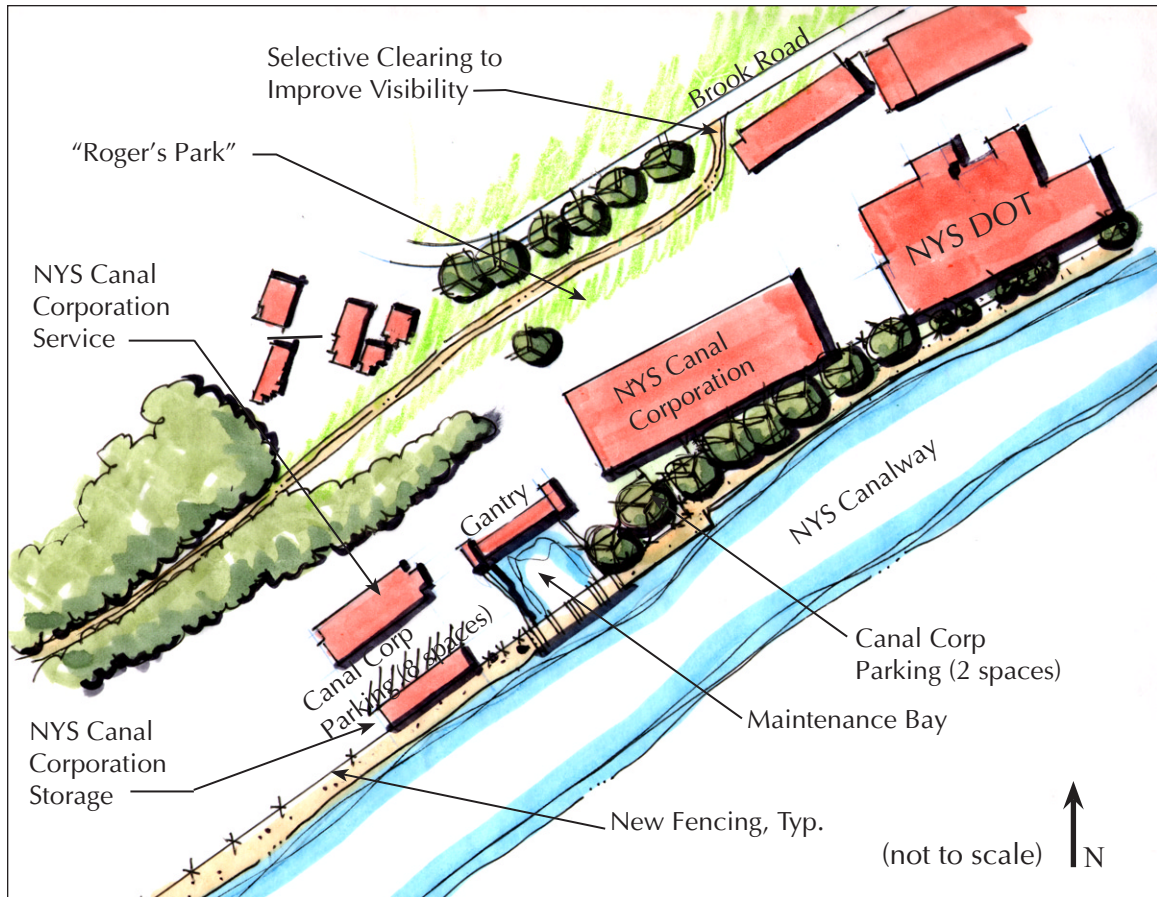


Figure 17. Enlargement of Recommended Improvement Plan Showing Trail Extension through Roger's Park with "T" Intersection at Brook Road and Improvements along the Canal



Figure 18. Potential Area for Canal-Side Trail and Green Space



Figure 19. Potential Area for Canal-Side Trail and Green Space



## H. Steering Committee

The following participants were involved in this study:

Bill Carpenter	Supervisor, Town of Pittsford
Tom Elliott	Director, Town of Pittsford Public Works
David Martin	NYS Canal Corporation (Buffalo Office)
Larry O'Connor	NYS Canal Corporation (Buffalo Office)
Robin Salsbury	NYS Department of Transportation
Kristin Bennett	Genesee Transportation Council

### *Consultant Team*

David Crandall	Environmental Design & Research, P.C.
William Arlow	Environmental Design & Research, P.C.
John Behan	Behan Planning Associates
Art Buckley	Behan Planning Associates
Dan Duprey	Clark Patterson Associates

## I. Budget Estimates

The following are estimates for the two trail options discussed in the **Recommended Improvement Plan**:

### Canal-Side Trail Improvements

DESCRIPTION	UNIT	QTY	UNIT COST	TOTAL COST
Clearing and Grubbing (includes clean-up of Canal Corp. debris disposal area)	LS	1	\$40,000.00	\$40,000.00
Sub-base Course Type 4	CY	665	\$20.25	\$13,466.25
Asphalt Concrete - Type 3 Binder Course	T	277	\$55.00	\$15,235.00
Asphalt Concrete - Top Course	T	166	\$77.00	\$12,782.00
Unclassified Excavation	CY	1108	\$8.00	\$8,864.00
Saw Cut Asphalt Concrete	FT	20	\$2.00	\$40.00
8' Chain Link Fence	FT	2200	\$15.00	\$33,000.00
Permanent Signage	EA	8	\$300.00	\$2,400.00
Topsoil	CY	204	\$20.00	\$4,080.00
Seeding	A	2	\$1,000.00	\$2,000.00
Removable Trail Section/Bridge	LS	1	\$155,000.00	\$155,000.00
<b>SUBTOTAL</b>				<b>\$286,867.25</b>
Maintenance and Protection of Traffic (2%)	LS	1		\$5,737.35
Survey and Stakeout (4%)	LS	1		\$11,474.69
Miscellaneous (field office, etc.) (10%)	LS	1		\$28,686.73
Contingencies (20%)				\$57,373.45
<b>SUBTOTAL</b>				<b>\$390,139.46</b>

### Brook Road/Old Monroe Avenue Improvements

DESCRIPTION	UNIT	QTY	UNIT COST	TOTAL COST
Clearing and Grubbing	LS	1	\$20,000.00	\$20,000.00
Sub-base Course Type 4	CY	334	\$20.25	\$6,763.50
Asphalt Concrete - Type 3 Binder Course	T	280	\$55.00	\$15,400.00
Asphalt Concrete - Top Course	T	241	\$77.00	\$18,557.00
Unclassified Excavation	CY	1421	\$8.00	\$11,368.00
Saw Cut Asphalt Concrete	FT	20	\$2.00	\$40.00
Wood Bollards	EA	4	\$250.00	\$1,000.00
Permanent Signage	EA	12	\$300.00	\$3,600.00
White Reflectorized Pavement Striping	LF	700	\$0.25	\$175.00
Topsoil	CY	33	\$20.00	\$660.00
Seeding	A	2	\$1,000.00	\$2,000.00
<b>SUBTOTAL</b>				<b>\$79,563.50</b>

Maintenance and Protection of Traffic (4%)	LS	1		\$3,182.54
Survey and Stakeout (4%)	LS	1		\$3,182.54
Miscellaneous (field office, etc.) (10%)	LS	1		\$7,956.35
Contingencies (20%)				\$15,912.70
<b>SUBTOTAL</b>				<b>\$109,797.63</b>

<b>TOTAL</b>	<b>\$499,937.09</b>
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### J. Trail Realignment Funding Strategy

Several joint funding opportunities will be examined for implementing the Canalway Trail Realignment Project. A list of the potential funding sources includes but is not limited to:

- *Environmental Protection Fund - 2000-2001 Local Waterfront Revitalization Program Grant.* This program provides 50/50 matching grants for implementing components of Local Waterfront Revitalization Programs. The applicants will reach their 50% funding match through a combination of capital funds and/or in-kind services.
- *Transportation Improvement Program (TIP).* This biennial funding process provides 80/20 matching funds from several federal transportation funding sources under the Transportation Equity Act of the 21st Century (TEA-21). The 20% funding match can be achieved through a combination of capital funds and/or approved in-kind services.
- *Transportation Enhancement Program (TEP).* This federal reimbursement program is authorized under TEA-21. The TEP provides 80/20 matching funds for implementing projects that add human and environmental value to the transportation system. This project would likely be eligible under the "Bicycle and Pedestrian Facilities" category.

The plan participants are committed to implementing the design elements of this plan and may use existing capital funds and/or in-kind services to complete the proposed trail improvements. Additional funding sources will be explored as they are identified in the future.

# APPENDIX



## **PUBLIC COMMENTS**

Public comments received on the Canalway Trail Realignment Study at the November 9, 2000, Town of Pittsford Board Meeting:

### **John Gallea, 4 Brook Road, Pittsford**

Mr. Gallea inquired about the floating dock proposed in the study recommendations. He also asked about access to Brook Road from the improved trail and if there would be any elevation changes to Brook Road. [Kristin Bennett, GTC, noted that the existing trail access point on Brook Road would be closed and rerouted through Brook Road. There would be no elevation changes to Brook Road.]

### **Ray Betz, 9 Brook Road, Pittsford**

Mr. Betz expressed concern about security and undesirable activities if the "Roger's Park" area was opened up for the trail's use. He also requested clearer signage throughout the project area to properly direct people as well as to discourage loitering. He also suggested adding rumble strips to the street to alert motorists. [Supervisor Carpenter suggested that the improved Brook Road detour through Roger's Park be closed at all times except when the gantry is in use and the waterfront trail must be closed due to Canal Corporation activities.]

### **Chad Paynter, 19 Wind Tree Circle, Pittsford**

Mr. Paynter inquired about whether the trail would be paved or not. [Kristin Bennett, GTC, noted that the plan calls for an asphalt (paved) surface to match with the existing paved Canalway Trail on either side of the project area.]

### **Nancy Beeley, 11 Brook Road, Pittsford**

Ms. Beeley inquired about the possible future uses of the NYSDOT/Canal Corporation property if they ever move from that location. [Supervisor Carpenter noted that possible future land uses have been outlined in the Local Waterfront Revitalization Plan recently completed by the Town.]

### **Bob Beeley, 11 Brook Road, Pittsford**

Mr. Beeley expressed his support for the study's recommendations and thanked the Town, GTC, and the Canal Corporation for following through on the neighborhood's concerns. He also asked some questions about the operations of closing the waterfront trail during Canal Corporation use and routing people safely and efficiently through the detour.