

City of Watertown <u>Downtown-Riverfront Parks</u> Connection Feasibility Study

June 2019





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Section I. Introduction

Project Introduction

The City of Watertown received a Strategic Planning and Feasibility grant from the New York State Department of State in order to improve pedestrian and bicyclist connections between the City's downtown Public Square and two of its riverfront parks, Veterans Memorial Riverwalk and Whitewater Park.

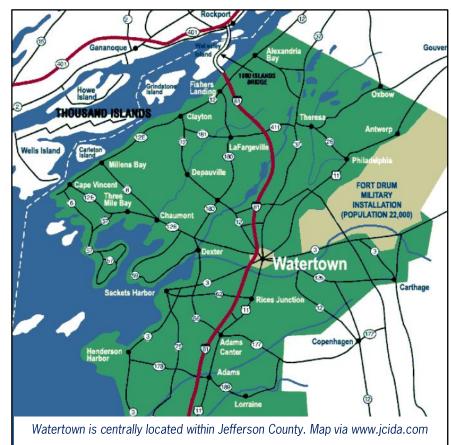
The City of Watertown: Downtown-Riverfront Parks Connection Feasibility Study (referred to as the "Feasibility Study" or "Study") advances a vision created during the development of the draft Local Waterfront Revitalization Program (LWRP) for the Black River (2010). Specifically, the most important priority identified by the community was the desire to develop a pedestrian-oriented connection drawing people to the riverfront from Public Square. This connection was identified in the draft LWRP as an integral component to the waterfront's overall success, and to spur redevelopment within Public Square and along the riverfront. The Study also supports the vision stated on the City of Watertown's website, to be "a vibrant, attractive community of rich recreational, cultural, and economic opportunity that maintains a small town appeal."

In addition to fostering opportunities that result in the enjoyment of the Black River, the City envisions that this Study will lay a foundation that will encourage people to value the river and support water quality protection, and inspire the development of partnerships amongst various community groups. By improving access to the river and the city's riverfront parks, the community will benefit from tourism and economic investment on local, regional, and state levels.

The City of Watertown

The City of Watertown is located at the northern edge of New York's Tug Hill Region. It has a population of 27,023 (2010) and is the county seat of Jefferson The City and County. surrounding area is home to a number of businesses. Jefferson Community College, and the U.S. Army Fort Drum and 10th Mountain Division. The Citv approximately 18 miles east of Lake Ontario and 25 miles southeast of the Thousand Islands Region.

Watertown is directly accessible from Interstate 81 (I-81) and is situated along the Black River. I-81 is a major north-south



thoroughfare for the community as it is the main route to the City of Syracuse (and points further south), Interstate 90, Canada, and Fort Drum. It has an annual average daily traffic (AADT) of 19,391 vehicles south of Coffeen Street, and 25,078 as it crosses the Black River, between Coffeen Street and Route 12.1

The Black River is historically significant to the City as it powered the wood and flour mills that once lined the shoreline, and it now provides hydroelectricity to the greater community. The river and adjacent upland areas offer a variety of recreational choices to residents and visitors within the city. Opportunities for fishing, walking/hiking, whitewater rafting, kayaking, and nature viewing may be found along the River. The consistent flows and varied whitewater features attract thousands of kayakers and rafters to the Watertown area annually; where they may enjoy



View of the Black River from Whitewater Park

the river and the rapids individually or in groups through local rafting companies. In addition, the river provides stunning views and a unique setting for shoreline development.

The city's location and resources place it in a competitive position for future economic development opportunities and population growth, which heightens the need for long-term planning to enhance and protect its water-based and related recreational resources.

Ongoing Community Development Efforts

The City of Watertown is proactive in planning for future community improvements. This Study will support implementation of a portion of the enhancements planned for the community over the next decade. Specifically, in October 2017, the City was awarded a \$10 million grant through the State's Downtown Revitalization Initiative (DRI) program. As part of the State's selection process, dozens of projects were vetted and fourteen projects were eventually selected for funding. These projects include:²

- Rehabilitation and façade improvements to the Masonic Temple Performing Arts Center
- Improvements to building façades along Franklin Street
- Streetscape improvements along Franklin, Court, and Coffeen Streets
- Rehabilitation of a downtown building that will house the Jefferson Community College Downtown TechSpace Center
- Renovation of the Lincoln Building to create a "Co-Working Innovation Center"
- Creation of a small business revolving loan and grant fund
- Modernization of the Jefferson County Historical Society and Museum
- Improvements to the Paddock Arcade common area
- Enhancements to the Strauss Memorial Walkway
- Implementation of wayfinding signage and branding for downtown

¹ https://www.dot.ny.gov/tdv, Counts as of 2015

² Watertown Awards Booklet available at https://www.ny.gov/sites/ny.gov/sites/ny.gov/sites/ny.gov/files/atoms/files/Watertown_DRI_Plan.pdf and DRI Plan available at https://www.ny.gov/sites/ny.gov/files/atoms/files/Watertown_DRI_Plan.pdf

- Installation of public art for downtown and the waterfront
- Development of a community café and grocery store at 138 Court Street
- Rehabilitation of the Paddock Arcade for housing
- Improvements to the Public Square fountain

In addition to these projects, which will help support downtown growth, a strategic investment plan was developed for the City's downtown.

In the fall of 2018, Watertown began the process of developing its first Comprehensive Plan. Once complete, the next step will be to update the zoning code. The City was awarded a Strategic Planning and Feasibility Studies grant from Empire State Development and is also supporting the effort with funds from the Community Development Block Grant program.³ The Comprehensive Plan will include long-range considerations as well as short-range actions, while serving as a guide for policy, proposed projects, and program evaluation, and provide a basis for zoning updates. The City will utilize the Comprehensive Plan as a tool to guide the vision of what the future of the city will be.⁴

Past Community Development Efforts

Prior to the development and award of the DRI funding, the City of Watertown had been active with a variety of planning/construction projects. Some of the initiatives undertaken over the last two decades include:

- Initial plans for revitalizing the Black River were first formalized in a local planning document entitled "Black River Recreation Plan" (1988). This plan recommended the development of several riverfront parks that would connect to existing open spaces by a series of walking trails and street right-of-ways. Construction of the Veterans Memorial Riverwalk and Waterworks Park were two of the more significant projects that came out of the planning process.⁵
- In 2003, the City began a Streetscape Enhancement Project which aimed to improve the aesthetic quality of the downtown core and resulted in the reconstruction of Public Square. Completed in 2008, these improvements to the Square included a redesigned traffic pattern with new street paving, curbing, sidewalks, brick pavers, street trees, tree grates, landscaping, ornamental streetlights, kiosks and street furniture. Other improvements included new water lines, sewer lines, improved crosswalks, event space, fountain repairs, modification to the existing channelizing islands and additional landscaping. This project was a product of the 1992 City Center Streetscape Plan.
- Also in 2003, the City initiated a Local Waterfront Revitalization Program for the Black River. The draft plan, completed in 2010 (yet to be adopted), provides a vision that will be used to

³ Fox, Craig. "Comprehensive Plan Session Set in Watertown." Watertown Daily Times. January 4, 2019. https://www.watertowndailytimes.com/news03/comprehensive-plan-sessions-set-in-watertown-20190104

⁴ City of Watertown. "Request for Proposals: Comprehensive Plan for the City of Watertown, New York." https://static1.squarespace.com/static/5717ac15a3360cf4481e28bc/t/5a998fd0f9619aa9f32f753b/1520013266280 /Watertown+Comprehensive+Plan+RFP.pdf

⁵ City of Watertown. "Request for Qualifications: Black River Parks Development Project," February 23, 2006.

⁶ City of Watertown. "Streetscape Project," https://www.watertown-ny.gov/index.asp?NID=275

guide planning and development along the Black River.⁷ As part of the draft LWRP, the City revised its zoning laws (2009) in order to bring them into compliance with the goals and objectives of the draft LWRP.

- While developing the draft LWRP, a series of complimentary projects were completed. The City initiated the Black River Parks Development Project in early 2006, resulting in improvements to Veterans Memorial Riverwalk, the Alex T. Duffy Fairgrounds, the Public Works Park site, and the Abe Cooper Site utilizing a Land and Water Conservation Fund grant. Additionally, improvements to the Hole Brothers site were funded though the Environmental Protection Fund.
- The Black River Whitewater and Trail Feasibility Study (2006)⁸ explored opportunities for inwater recreational enhancements along the river extending from the Delano Island Dam to the Vanduzee Street Bridge. An Economic and Market Condition Analysis⁹ was completed in May 2006 to identify demographic, economic, and real estate market conditions and commercial development opportunities for the downtown and waterfront areas of the city.
- The City was part of a collaborative effort, which included three counties and 37 municipalities, that resulted in A Blueway Trail Development Plan for the Black River (September 2007). The Plan called for a continuous 114 mile trail along the Black River (Blueway Trail) and proposed improvements such as "urban promenade" and "on road trail" segments¹⁰, which are reflected in this Feasibility Study.
- Further Black River initiatives resulted in an *Erosion Management Plan for the Black River Corridor* (March 2009).¹¹ This study was completed to identify areas susceptible to and undergoing erosion. The document serves as a guide for development and maintenance along the riverbanks.
- Projects identified as high priorities in the draft LWRP were undertaken by the City. The first, north shore access to the Route 3 wave, was completed in August 2007. Improvements to the Bicentennial Park and several other smaller parks were completed in 2008. In 2009, work at the Hole Brothers river access area was completed, along with improvements to the J.B. Wise Parking Lot, Bicentennial Park and Marble Street Park.
- The City also began work on a draft master plan for its trails. The *Draft Trail Master Plan Map* identified the following:
 - o existing shared use trail along Veterans Memorial Riverwalk,
 - proposed sidewalks connecting from the JB Wise Lot to the Riverwalk and along North Meadow Street, and

⁷ City of Watertown. "Waterfront Revitalization Plan," https://www.watertown-ny.gov/index.asp?NID=290

⁸ Gary M. Lacy and GYMO. Available at https://www.watertown-ny.gov/DocumentView.asp?DID=297

Gamoin Associates. Available at https://www.watertown-ny.gov/DocumentView.asp?DID=296

¹⁰ Peter J. Smith and Company, Inc. *Blueway Trail Development Plan for the Black River*. September, 2007. p 70. Available at https://www.tughill.org/wp-content/uploads/2011/10/BluewayReport9-5-07.pdf

¹¹ GYMO. Available at https://www.watertown-ny.gov/DocumentView.asp?DID=461

 shared roadway trails along Newell Street and Whitewater Way, connecting to Coffeen Street and what is now Whitewater Park.¹²

The Study Area

The City of Watertown commissioned this Feasibility Study to identify potential pedestrian and bicycle connections from the City's downtown Public Square to two of its riverfront parks, Veterans Memorial Riverwalk and Whitewater Park. In order to provide a variety of options, an appropriate Study Area was defined with assistance from the City of Watertown. The Study Area, as illustrated on the following page and in Figure 1 of Appendix A, includes the portion of the city bounded by the Black River to the north; Mill Street to the east; Coffeen, Court and State Streets to the south; and Engine Street to the west.

^{12 &}quot;City of Watertown. "Recreation." https://www.watertown-ny.gov/index.asp?NID=313



As discussed below, within the Study Area there are three points of interest identified by the City that should be linked together.

Downtown

Public Square is a central hub for downtown and the heart of the Public Square Historic District. It was recently improved to better accommodate vehicles and pedestrians. The center island includes a Soldiers & Sailors monument on the west end, gazebo on the east end, and a fountain in the center, with benches, landscape beds, and smaller monuments. The mixed-use buildings that line Public Square contain retail shops, restaurants and businesses, as well as residential units.



View of Public Square, looking west

Riverfront City Parks

Veterans Memorial Riverwalk

Constructed in 1993, the Veterans Memorial Riverwalk (Riverwalk) is a ¼-mile trail located along the southern bank of the Black River. The walkway was formerly a segment of Newell Street, extending westward from Adirondack River Outfitters to Arch Street. The grade change along the southern edge of the Riverwalk, with slopes ranging in height from 5' to 30', results in only two park entry points – at the eastern and western ends— and limits physical and visual access to the park and the river.

The Riverwalk is closed to vehicular traffic and is now a designated handicapped accessible shared



Western entrance to Veterans Memorial Riverwalk

use path that is enjoyed by cyclists, runners, and pedestrians. Along the walkway are picnic tables, overlook areas for viewing or fishing, bench seating, and a small pavilion with restrooms during the summer season. Ornamental lighting and fencing are continuous along the top of the riverbank, and parking is available at either end of the walk.



Looking west on Newell Street toward Whitewater Park

Whitewater Park

Whitewater Park is located at the western end of Newell Street on either side of Maggie's on the River (formerly Black River Brewing Company). In the City's 2006 plans for park creation¹³, these areas were referred to as Public Works Park (west of Maggie's) and Hole Brothers Park (in front of and east of Maggie's). The western portion was a former industrial site with several buildings, until a 1997 fire destroyed two large warehouses. The 2006 park plans included pathways, viewing areas, site furnishings, and direct access to the river for kayaking and fishing. Today, just west of the building is a green space with bench seating and

steps that provide access to the river's edge. Further west, there is a stone dust walking path with picnic tables and trees.

The area of the river directly in front of the restaurant includes the Hole Brothers kayaking and rafting access point. The Hole Brothers wave is popular with kayakers for 'rodeo' play and has been the site of freestyle competitions with spectators viewing the action from Whitewater Park. Prior to becoming an accessible park, the area in front of and east of the building was obstructed by a large concrete dam abutment and turbine housing structure, both of which were unsafe for spectators and visitors. In 2006, proposed improvements included limestone seating areas, viewing



Publicly accessible deck outside Maggie's

platform access, signage, trail access to the river, and stabilization of the riverbank and concrete structures. Today, a publicly accessible deck and walkway wrap the restaurant with tables and benches overlooking the river. The dam abutment remains and serves as the base of the overlook deck. The roof of the turbine enclosure is used as park space and the primary entry path to the overlook deck.¹⁴

¹³ City of Watertown. "Request for Qualifications: Black River Parks Development Project." February 23, 2006.

¹⁴ Prudent Engineering, LLP. "Structural Feasibility Report: Black River Parks Development Project – Hole Brothers Site, City of Watertown." January 2007.

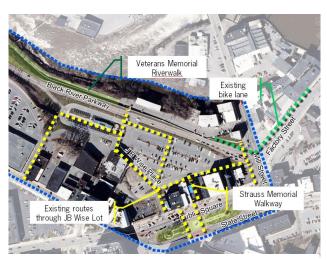
Existing Connectivity

<u>Public Square to Veterans Memorial Riverwalk</u>
Challenges exist for pedestrians, bicyclists, and other users to make their way between Public Square and the riverfront parks – topography,

roadways, and parking lots act as physical barriers.

The most direct route between Public Square and Veterans Memorial Riverwalk is through the JB Wise Parking Lot. From the Square, pedestrians can access the parking lot from either the Strauss Memorial Walkway or the sidewalk along Anthony Street.

The JB Wise Parking Lot is a public amenity with direct access to the Black River Parkway. This large parking lot, located behind the buildings that front Public Square, contains parking for 239 vehicles and 3 buses, as well as the Mayor Joseph M. Butler, Sr. Pavilion (Butler Pavilion) that is used for farmer's markets and other events. Not all pedestrian routes through the lot are ADA compliant, due to topographical variations and sidewalk curbing.



Existing Public Square – Riverwalk Connections



Pedestrian crossing from JB Wise Lot to the Riverwalk

On the western edge of the parking lot, a walkway extends from the farmer's market pavilion, crossing Black River Parkway and connecting to a staircase that takes pedestrians down to Newell Street. A retaining wall exists along the southern edge of Newell Street. It begins as a low wall at the eastern end, and becomes increasingly taller as it extends into the Riverwalk, reaching heights of nearly twenty feet, thus creating an isolating, unwelcoming environment for park users.

A major obstacle between downtown and the river is Black River Parkway. Generally, the Parkway is a two-lane corridor that widens to three and five lanes at Coffeen Street and Mill Street, respectively. This route sees frequent truck traffic in addition to passenger vehicles. Sidewalks are not present along the Parkway, and steep, rocky slopes are located along portions of its southern boundary. Pedestrians, cyclists, and other users navigating the corridor can feel overwhelmed and fearful for their safety.



Intersection of Black River Parkway and Mill Street

However, there is a pedestrian and bicycle connection to the Riverwalk from the recently completed bike route along Factory Street. It connects the eastern end of Newell Street to Mill Street and the intersection with Black River Parkway.

Veterans Memorial Riverwalk to Whitewater Park

Newell Street provides a direct connection between Veterans Memorial Riverwalk and Whitewater Park. However, the roadway does not exhibit the infrastructure needed to safely travel between the two Parks as proper signage (e.g. shared bike lane) and pedestrian lighting are lacking, and sidewalks are either non-existent, narrow, or in varying stages of disrepair. The only sidewalks that exist are located west of the Riverwalk, past the Court Street bridge. Available sidewalks are then located solely on the south side of the roadway.



Riverwalk connection from the Factory Street bike route



Existing sidewalk along Newell Street

Feasibility Study Goals and Objectives

This Study advances the vision stated in the City's 2010 draft LWRP, which called for "maintaining the existing water-dependent uses such as hydroelectric facilities, and whitewater rafting outfitters." ¹⁵ It also calls for transforming much of the waterfront from industrial and warehouse facilities to uses such as restaurants, specialty stores, and quality residential options. This new development should form a mixed-use pattern that fully showcases the natural, scenic, historic, and recreational opportunities of the riverfront and provides "people places" and areas for public interaction."

In the draft LWRP, the community identified opportunity areas along the Black River. The most important priority identified by the community was the development of a "Downtown Connection" – a pedestrian-oriented connection between Public Square and the waterfront. Achieving an effective linkage was viewed as the most critical to the long-term success of the waterfront and as a catalyst for the continued revitalization of Public Square.¹⁶

The objectives identified by the City and Advisory Committee for this Study, include:

- Improve pedestrian and cyclist safety.
- Incorporate universal access where feasible.
- Include formal and informal gathering spaces.
- Encourage and maintain vistas of the Black River, and establish points of interest.
- Maintain and encourage a specific vibrant sense of place for the waterfront area.
- Use design elements to improve wayfinding.
- Enhance connectivity between activity nodes to encourage increased use of park spaces.

To address these objectives, the Feasibility Study includes an inventory and analysis of the Study Area, preliminary design alternatives and associated cost estimates, and limited surveying and right-of-way analysis along Newell Street in order to identify areas that can accommodate new sidewalks, bike lanes, or shared paths. All design alternatives were created based on input from the City, Advisory Committee, and the general public.

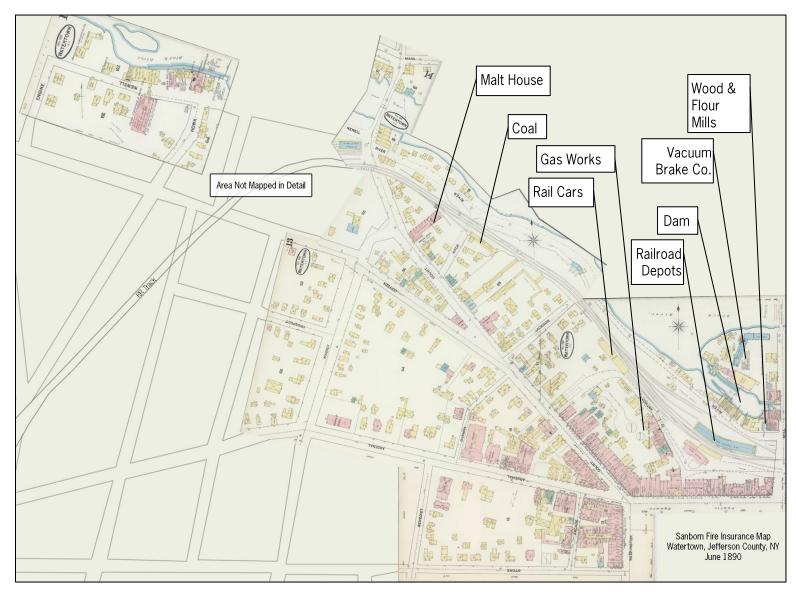
¹⁵ City of Watertown:Local Waterfront Revitalization Program for the Black River. Executive Summary, Page ii.

¹⁶ City of Watertown:Local Waterfront Revitalization Program for the Black River. Executive Summary, Page vi.

Section II. Inventory & Analysis

Historic and Cultural Resources

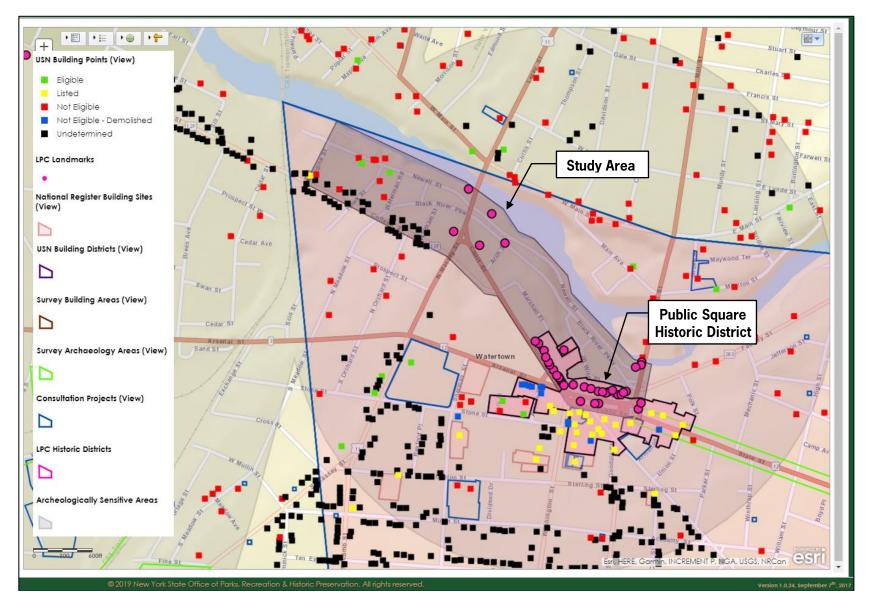
The City of Watertown has relied on the Black River for centuries, as it was a source of power for local industry and commerce, fueling mills and factories. The image below is a composite of the 1890 Sanborn Fire Insurance Map, and shows the mills, factories, and warehouses, and railroad that once existed in the Study Area.



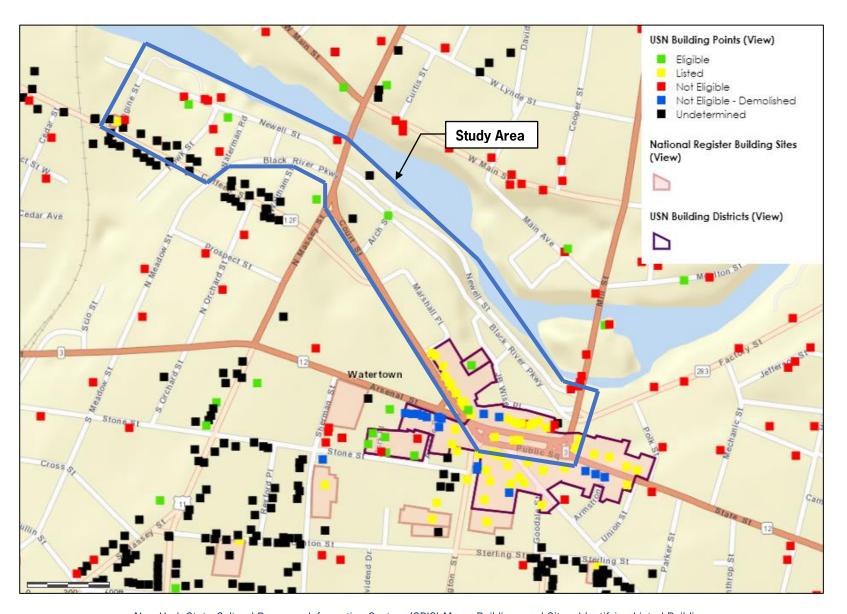
Although the City of Watertown is no longer a mill town, and most of the industry that once lined the riverbank is gone, it retains many historic features that remind the community and visitors of the past. The Mill Street dam still remains, along with a number of historic buildings, Black River Parkway follows the former railroad bed, and the JB Wise parking lot is located where the passenger and freight depots once stood.

In order to identify historic districts and culturally or archeologically sensitive areas within the Study Area, an online inquiry to the New York State Cultural Resource Information System (CRIS) (https://cris.parks.ny.gov) was completed. The resulting map on the following page shows that the Study Area contains a number of local landmarks and falls within an area of Archeological Sensitivity. The eastern end of the Study Area includes portions of the Public Square Historic District.

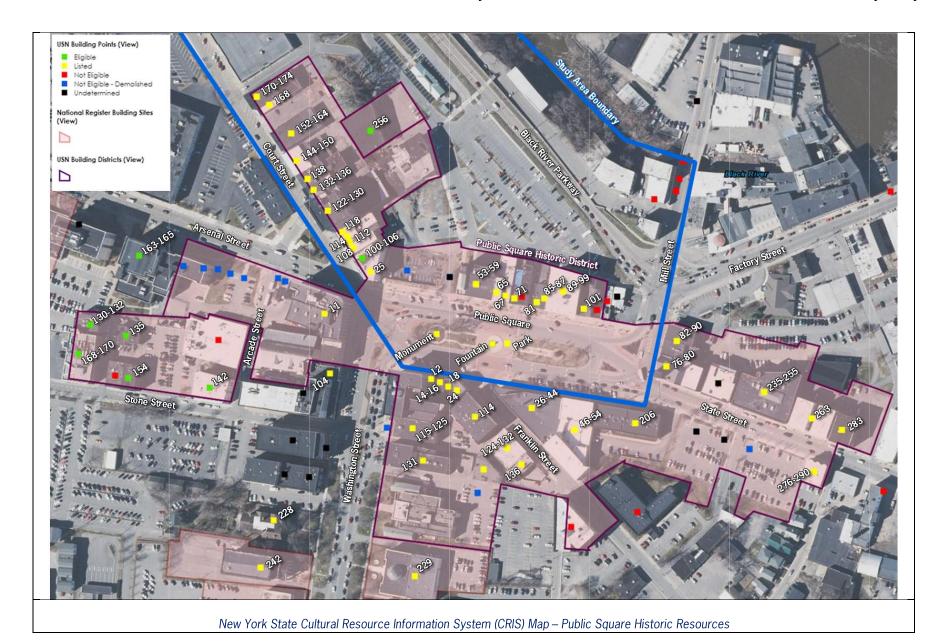
In order to further explore listed or eligible historic buildings, a second map was created through CRIS. As a result, 23 listed and 4 eligible buildings were found to be within the Study Area. The project, as described within this Study, does not include any direct impacts on these buildings. A map of historic resources in the Public Square area follows. A map of historic properties located throughout the overall Study Area was also completed and is included in Appendix A as Figure 6.



New York State Cultural Resource Information System (CRIS) Map - Overall



New York State Cultural Resource Information System (CRIS) Map – Buildings and Sites, Identifying Listed Buildings



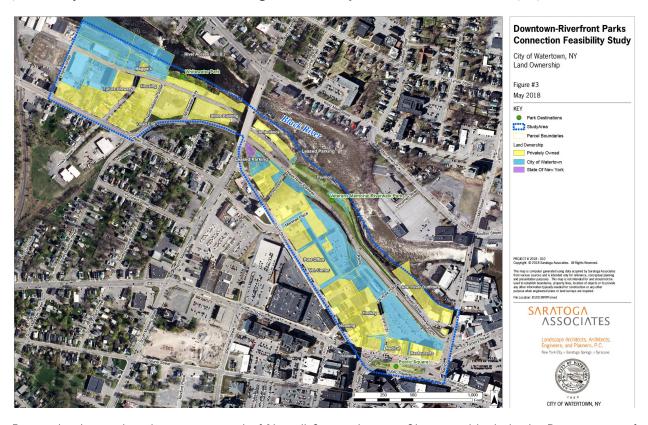
The table below lists the eligible and listed historic resources within the Study Area.

Study Area Historic Resources		
USN	Name	Status
4540.001527	Soldiers and Sailors Monument - Public Square Public Square	Listed
4540.001528	Fountain - Public Square Public Square	Listed
4540.000012	Public Square Park - Public Square	Listed
4540.000051	Iron Block - 25 Public Square	Listed
4540.001525	Woodruff Professional Building - 53-59 Public Square	Listed
4540.000054	(Avon Shoe Store) - 67 Public Square	Listed
4540.000067	First Baptist Church - 76-80 Public Square	Listed
4540.000057	(Dephtereos Commercial) - 81 Public Square	Listed
4540.000068	Buck Building - 82-90 Public Square	Listed
4540.000058	Crystal Restaurant - 85-87 Public Square	Listed
4540.000059	Lincoln Building - 89-99 Public Square 13601	Listed
4540.000060	(Grants Drug Store) - 101 Public Square	Listed
4540.000078	Safford Block - 100-106 Court St	Eligible
4540.000079	(House of Gee) - 108 Court St	Listed
4540.000080	Brick Commercial - 112 Court St	Listed
4540.001519	114 Court Street - 114 Court Street	Listed
4540.001520	118 Court Street - 118 Court St	Listed
4540.000081	Brighton-Empsall Building - 122-130 Court Street 31538	Listed
4540.000082	(Katzman Commercial) - 132-136 Court St	Listed
4540.000083	138 Court St, Watertown - 138 Court St 13601	Listed
4540.000084	Household Merit Furniture - 144-150 Court St	Listed
4540.000086	(Greystone Clocks & Antiques) - 168 Court St	Listed
4540.000087	170 Court St, Watertown - 170-174 Court St 13601	Listed
4540.000939	Arch Street Railroad Bridge - Arch St	Eligible
4540.000896	Jefferson County Jail Complex - 300 Coffeen St	Eligible
4540.001447	256 JB Wise Place, Watertown (Jefferson) - 256 JB Wise Place 13601	Eligible

Property Ownership, Land Use, and Zoning

Land Ownership

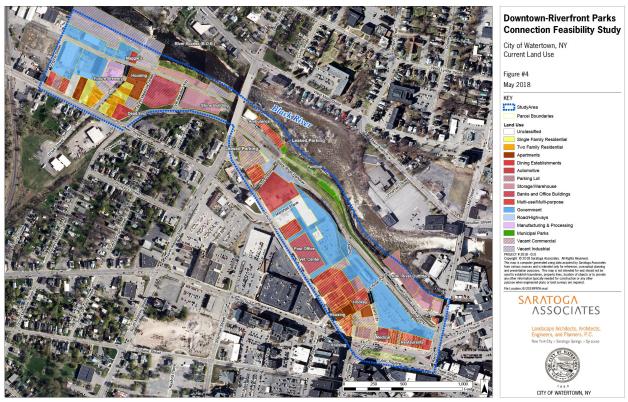
As illustrated below and by Figure 3 in Appendix A, the properties within the Study Area are almost evenly split between private ownership (in yellow) and City ownership (in light blue). In addition, one parcel, adjacent to the Court Street bridge, is owned by the State of New York (in purple).



Properties located at the western end of Newell Street that are City-owned include the Department of Public Works (DPW), bus garage, parking lots, and Whitewater Park. The City also owns the large parking areas east of the Court Street bridge, Veterans Memorial Riverwalk, and the Strauss Memorial Walkway. The remaining parcels are privately owned.

Land Use Classifications

All parcels of land are classified by the City using NYS property class codes according to their use (e.g. residential, commercial, industrial, community service, or recreation). The Study Area contains a variety of land uses, as shown below and by Figure 4 of Appendix A.



In the west, the properties near the Engine and Newell Street intersection are classified as government use and include DPW facilities, the bus garage, and parking areas. In the east, government uses include the JB Wise parking lot and Butler Pavilion. These parcels are all Cityowned.

Residential uses west of North Meadow Street include a mix of single-family, two-family, and apartments. Included are a few commercial uses – a tavern, brewery, and restaurant. Approaching the Riverwalk, uses include Guilfoyle Ambulance and commercial uses. In the eastern portion of the Study Area, there are mixed-use buildings near Arch Street and Public Square. These contain a mix of residential, office, and commercial uses. There are a few vacant parcels within the Study Area that are generally used for parking.

Zoning Districts

The general purpose of the City of Watertown's Zoning Ordinance (Chapter 310 of the City Code) is to establish districts with compatible uses. Originally adopted in 1959, the districts were recently updated in June 2011 and include the following:

Residence A (RA)
Residence B (RB)
Residence C (RC)
Limited Business (LB)
Neighborhood Business (NB)

Commercial (CD)

Downtown Core Overlay (DC)

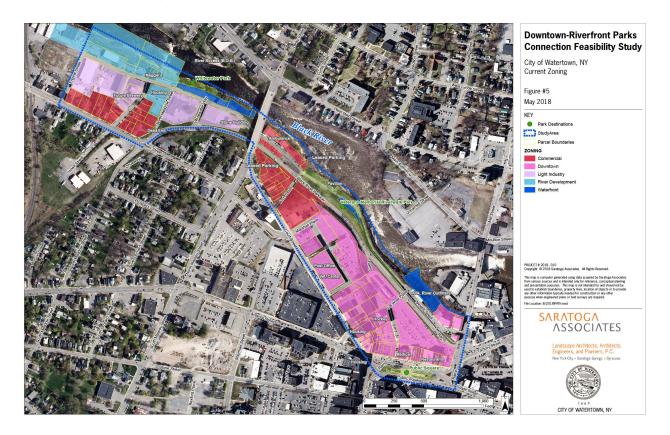
Downtown (DT)

Health Services (HS)
Light Industrial (LI)
Heavy Industrial (HI)
Piverfront Development Over

Riverfront Development Overlay (RD)*
Open Space and Recreation (OS)

Waterfront (WD)

Planned Development (PD)



Zoning districts within the Study Area, as shown above and by Figure 5 in Appendix A, include:

Commercial – Coffeen Street from Engine Street to North Meadow Street, Court Street to Marshall Place, and Newell Street east of the Court Street bridge;

Downtown – East of Marshall Place between Court Street and Newell Street, as well as those parcels on the east end of Newell Street near Mill Street:

Light Industry – South side of Newell Street between Engine Street and the Court Street bridge, with the exception of the southwest corner of Newell Street and North Meadow Street;

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Riverfront Development Overlay – North side of Newell Street between Engine Street and the Court Street bridge, and including the southwest corner of Newell Street and North Meadow Street;

*While this district remains in the parcel zoning data, the Riverfront Development Overlay was repealed in June 2011, when the Open Space and Recreation District was added. "The purpose and intent of this district is to provide a suitable classification for sites designated for park, open space and/or recreational use."

Waterfront – North of Newell Street from North Meadow Street to the Court Street bridge; within Veterans Memorial Riverwalk; and the parcel containing Adirondack River Outfitters.

Per the City Code, "The purpose and intent of this district is to allow the Black River to be used as an economic development catalyst while protecting its environmental characteristics. Priority is given to water-dependent uses and then water-enhanced uses. Providing public access to the river is an important policy that is promoted through these regulations."

Recreational Opportunities

The Black River attracts thousands of kayakers and rafters annually. The river is well-known for its whitewater features, which include a number of "holes" and "waves." Holes are created by water flowing over an obstruction near the surface and the river filling in below that flow, traveling back upstream. Meanwhile, a wave does not tend to fold back on itself.¹⁷



River access at Whitewater Park

Within the Study Area, there are designated entry points for rafters and kayakers, including Hole Brothers at Whitewater Park; B.O.B. Rafting on northern shore of the Black River; and Adirondack River Outfitters, east of the Veterans Memorial Riverwalk. The Hole Brothers access is very popular for kayakers interested in doing tricks on the waves, and also has a central pool with gentler side eddies. It should be noted that there are also informal points of entry that may be used by users.

¹⁷ http://paddleeducation.com/whitewater-kayaking/the-anatomy-of-a-river/river-features-2/holes-and-waves/

Swift currents, warm summer water temperatures, and a river bottom dominated by bedrock limit fish species likely found along the Black River within the Study Area. Fish ladders installed in the 1980's in the villages of Dexter and Glen Park (west of Watertown) enable some fish, such as steelhead and Chinook salmon, to travel up the Black River from Lake Ontario, but the dam at Mill Street prevents them from moving further upstream. Within the Study Area, anglers could expect to catch smallmouth bass, fall fish (the largest native minnow), rock bass, and the occasional Pacific salmon coming up the river to spawn in September and October. In addition, New York State Department of Environmental Conservation (NYS DEC) fisheries staff stock brown trout at the Vanduzee Street Bridge (just west of the Study Area) and at the Watertown Rotary Accessible fishing platform on Marble Street. ¹⁸

The city contains hundreds of acres dedicated to parks and playgrounds that offer a variety of recreational opportunities. Specifically within the Study Area, Veterans Memorial Riverwalk and Whitewater Park provide scenic views, trails for biking and hiking, and picnic areas along the Black River. In addition to serving local residents, these parks serve as a regional destination, attracting users from the nearby military base at Fort Drum, the County, and throughout the State.

Environmental Features and Sensitive Resources

Some land and water resources within the waterfront area may present a hazard to future development or be sensitive to developmental activities.

The Black River

As described in the draft LWRP¹⁹, the Black River extends approximately 4.5 miles through the city. The portion of the river that flows through the Study Area is less calm than the segments in the eastern part of the city, which are relatively undisturbed and contain flatter, more open areas with significant natural habitat, including some designated wetlands. As the river flows westward through the city, the banks become steeper and the river corridor narrows, creating a canyon-like effect. A stretch of river rapids and steep limestone cliffs traverse the industrial waterfront and continue past downtown Watertown. After passing downtown, the river corridor becomes wider and flatter, with isolated spots of rapids and waves.

Twelve miles of the Black River from Dexter Dam to the US Route 11 (Mill Street) bridge in Watertown are listed on the National Rivers Inventory (NRI) of the National Park Service. The NRI is a "listing of more than 3,400 free-flowing river segments in the United States that are believed to possess one or more outstandingly remarkable natural or cultural values judged to be of more than local or regional significance." Among the Black River's many features, the NRI recognizes the river as being important for its scenic, recreational, and fish resources, including the scenic Black River Gorge (just west of Watertown), the Class IV rapids at the Black River Gorge, and the outstanding fisheries including walleye, anadromous salmon, and steelhead trout.

¹⁸ Text provided by NYS DEC staff. Related information available at https://www.dec.ny.gov/outdoor/40570.html

¹⁹ City of Watertown: Local Waterfront Revitalization Program for the Black River, page 7. (Draft, 2010)

Water Quality and Hazardous Materials

The Black River serves as a source of drinking water for the City of Watertown, Fort Drum, and surrounding communities. Drinking water 'outtake' for the City of Watertown occurs near Route 3 (about 1.75 miles east of the Study Area); the water quality classification for the section immediately upriver is Class A.

The Black River watershed contains nineteen subwatersheds. The Lower Black River subwatershed includes the City of Watertown along with six towns and four villages. This subwatershed has the following key characteristics, as outlined in the Black River Watershed Management Plan:

- Almost 40 percent of the total population of the Black River watershed resides in this subwatershed.
- Almost 19% of this subwatershed is characterized by urban development, most of which is associated with the City of Watertown and its surrounding communities. This is the largest amount of urban development of all 19 subwatersheds.
- Approximately 40% of the lands in this subwatershed are in agricultural production.
- Less than 17% of this subwatershed is classified as forest.
- Only 40% of the riparian areas in this subwatershed are naturally vegetated (ie. forests, scrub/shrub, or grasslands).
- There are very few publicly-owned lands within this subwatershed.

Water quality classifications are defined in New York Codes, Rules and Regulations Title 6, Part 701. The current NYS DEC water quality classification for the portion of the Black River within the Study Area is Class C, indicating best usage for fishing and primary and secondary contact recreation, though the classification indicates that other factors may limit recreational uses. Primary contact recreation includes, but is not limited to, swimming, diving, water skiing, skin diving and surfing while secondary contact recreation includes, but is not limited to, fishing and boating.

The primary impacts on water quality within the city result from urban stormwater runoff which takes the form of non-point source urban runoff and rural runoff from upstream locations. Additional impacts to water quality within include acid rain and agricultural activities. The *Black River Watershed Management Plan* classifies the Lower Black River subwatershed, within which the City of Watertown is located, as a high priority subwatershed. With a large amount of urbanized and cultivated land, this subwatershed has little forest and wetland cover and very high levels of nitrogen and phosphorous loading. These nutrients are primarily from hay and pasture lands, developed lands, and on-site septic systems. The nitrogen load places the subwatershed just slightly lower than the threshold for impairment, while the total phosphorous load is almost double the impairment threshold value. Additionally, the subwatershed is characterized by a large amount of erodible soils in areas of steep slopes. Despite these characteristics, water quality for the Black River is not expected to pose constraints on future waterfront development, though considerations should be made for ways to incorporate effective stormwater management, green infrastructure, slope stabilization, and habitat preservation.

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²⁰ Black River Watershed Management Plan – Final Report Part I, May 2010. Pages 93, 122-124. Available via the Tug Hill Commission at https://www.tughill.org/projects/black-river-projects/watershed-initiative/

A hazardous or contaminated environmental condition is defined by ASTM standards (which guide Phase 1 Environmental Site Assessments) as the presence or likely presence of any hazardous substances or petroleum products (including products currently in compliance with applicable regulations) on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. Historical factory uses along the waterway may have contributed pollutants into the river or its watershed. According to the NYS DEC, this segment of the Black River is considered as having only minor impacts to its water quality, primarily from PCBs (from an unknown upstream source near the Village of Carthage) and pesticides, with impacts to non-game fish. Overall water quality is described as supportive of the water's aquatic life support and recreational

use. 21

Scenic Views

Scenic beauty is ranked as one of the most important criterion Americans use in choosing parks and recreation areas.²²

There are numerous viewpoints of the Black River along the Riverwalk and from Whitewater Park. However, the visual connection from the Riverwalk to the water is limited due to the growth of small trees and underbrush.

The falls at Mill Street can be seen from various vantage points, including the Adirondack River Outfitters and the northeast corner of Marshall Place, above the Butler Pavilion.



View from Veterans Memorial Riverwalk toward Mill St. falls.



Marshall Place view location

²¹ NYS DEC. "Black River, Lower, Main Stem" Assessment Report. www.dec.ny.gov/docs/water_pdf/wiblackrbrwc.pdf

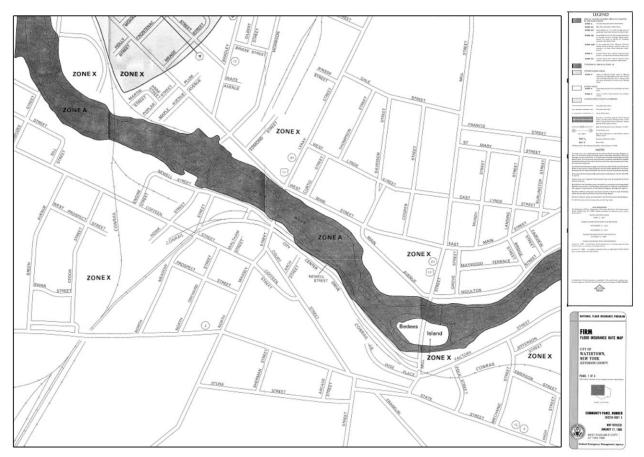
²² Alexander, L. 1987. Americans Outdoors: The Legacy, the Challenge. The Report of the President's Commission. Washington, DC: Island Press

Flood Zones

The water level of the Black River varies seasonally. There are no mapped wetlands within the Study

Area, but there is a floodplain bordering the Black River. The 100-year floodplain has been designated by the Federal Emergency Management Agency (FEMA) (the latest map became effective January 1990), but base flood elevation in the area is not determined. The 100-year flood zone represents a significant but calculated development constraint (i.e. has a 1% chance of occurring in any given year).

Generally, low lying, frequently wet soils are inappropriate for development and should be protected; therefore development within the floodplain is not recommended. Semi-annual severe storms pose a significant development constraint along exposed southeast-oriented shore areas. Figure 7 in Appendix A shows hydrography and flood zones in the Study Area, based on the following FEMA map.



A Portion of FEMA Flood Insurance Rate Map Panel 3603540001E, Revised January 17, 1990

The City of Watertown has a Flood Damage Prevention law (Chapter 152 of the City Code), which was adopted in 1993. The law aims to prevent or minimize the threat of destruction or loss of housing or facilities, as well as injury to or loss of life. Its stated purpose is "to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

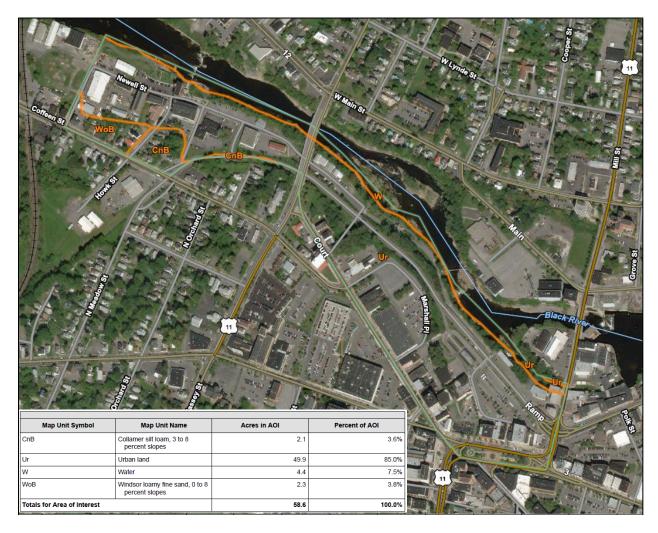
- A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.
- B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters.
- D. Control filling, grading, dredging and other development which may increase erosion or flood damages.
- E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.
- F. Qualify for and maintain participation in the National Flood Insurance Program."

Topography and Soils

The Study Area has varying topography with steep slopes along the riverbanks. The river elevation is approximately 389 feet, though varies seasonally. The upland portions of the southern bank of the Black River vary significantly within the Study Area. For example, the elevation of Newell Street ranges from approximately 450 feet at the far eastern end of the Study Area to 402 feet at the far western end. The banks and bed of the Black River are rocky, as are the steep slopes near the Riverwalk and Arch Street.

Figure 8 in Appendix A shows the topography within the Study Area.

The soils within the Study Area, as classified by the USDA, are primarily Urban Land (approximately 85%), with area near Coffeen Street and its intersection with Black River Parkway made up of Collamer silt loam with slopes of 3 to 8 percent and Windsor loamy fine sand, with slopes from 0 to 8 percent. The figure below illustrates the areas of identified soil types within the Study Area.

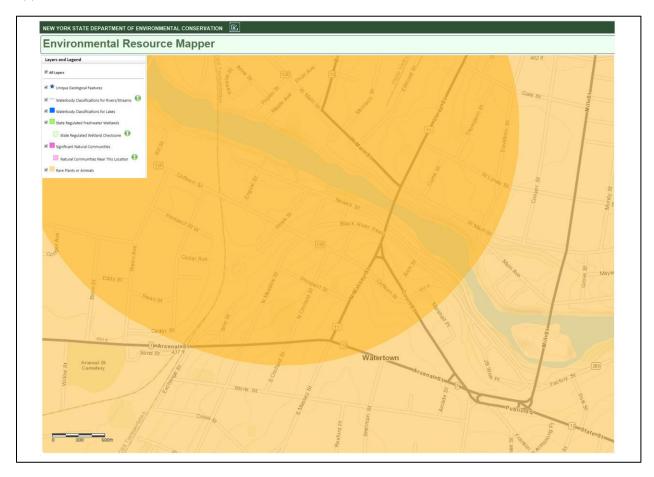


USDA Natural Resources Conservation Service Soil Map for the Study Area

Sensitive Habitat

The NYS DEC Environmental Resource Mapper was used to identify rare plants and animals, and significant natural communities at or in the immediate vicinity of the Study Area. No significant natural communities were identified; however, it did display the presence of State-listed bats in the overall project vicinity (shown in darker orange), and an area for rare plants (shown in lighter orange) – Crawe's Sedge (a threatened species last documented in 1865) and Lake-cress (a threatened species with no last date of documentation).

For consideration in new plantings for future projects, or management of existing vegetated areas, a list of historically present and native plant species, supplied by NYS DEC staff, is provided in Appendix D.



Key Connection Improvements

In the City's draft LWRP, the most important priority identified by the community was developing a pedestrian-oriented connection to draw people from Public Square to the waterfront. Overall, goals for making this connection were focused on improving wayfinding, safety, and aesthetics while also adding interest along the riverfront to attract users to the parks. The City viewed this linkage as the most critical for long-term success of the riverfront, and also as a catalyst for the continued revitalization of existing businesses along Public Square.

The City's trail and park system improvements will provide tourism and economic benefits on the local, regional, and state levels. Expansion of recreational opportunities, including bicycle and pedestrian connections, would support community health and wellness. Improvement of open spaces will provide areas for arts and cultural programs and community events (festivals, seasonal markets, art installations).

Connectivity Opportunities and Challenges

Proposed improvements should enhance community character, preserve open space, make efficient use of infrastructure, make beneficial use of waterfront locations, and minimize adverse effects of development.

Key enhancements include:

- 1. Improving public access for both pedestrians and cyclists by strengthening physical linkages between the riverfront and downtown, seeking to connect areas to one another and to existing transit stops;
- 2. Enhancing existing areas and creating new walkways with cohesive paving and design materials;
- 3. Adding wayfinding signage and artistic elements to create a unified system;
- 4. Incorporating pedestrian lighting, and tree and landscape plantings to improve aesthetics;
- 5. Incorporating seating areas with bicycle racks along the streetscape and at points of interest;
- 6. Enhancing the waterfront parks, allowing for program spaces and interpretive signage to increase interest and attract users;
- 7. Capitalizing on opportunities to complement potential development along waterfront parcels.

Opportunities:

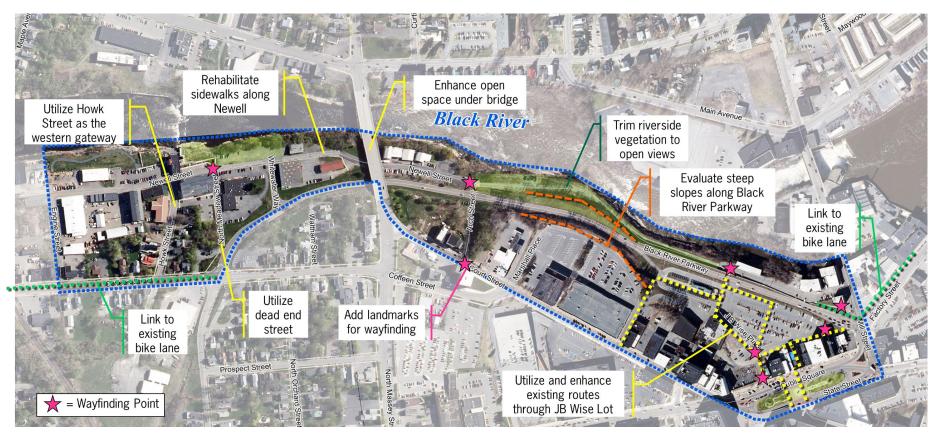
- Proximity to existing assets, such as the existing bike route along Coffeen Street and destinations such as the Public Square Historic District, Butler Pavilion, Maggie's restaurant, and Garland City Beer Works.
- A strong physical linkage between the waterfront and downtown amenities will provide a clear and distinct connection. Marketing and promotion efforts should be developed to highlight the waterfront and attract visitors.

- Include a space for hosting concerts or other outdoor entertainment, other forms of recreation, interpretive opportunities, or recreational rentals. Offer additional recreational opportunities, such as a playground. Identify opportunities for recreational elements included in the City's Comprehensive Plan.
- Provide interpretation of the historic, cultural, and natural resources along the riverfront.
- Incorporate local art and murals into wayfinding elements and into enhancements to the retaining wall within the Riverwalk.

Challenges:

- The former manufactured gas plant (MGP), located where the Empsall Plaza and JB Wise lot are currently (NYS DEC Site Code V00473), possess future development challenges. The former MGP operated at the site from approximately 1884 until it ceased operations in 1909. Demolition of the former MGP infrastructure began in 1909 and all MGP above ground structures were removed from the site by 1949; however, some subsurface structures still remain. Impacted soil was addressed as part of the City of Watertown water supply/sewer infrastructure and parking lot reconstruction project. Residual impacted soil remains at depths ranging from six to ten feet below grade. Since the site is covered with buildings and pavement, people will not come in contact with contaminated soils and groundwater unless excavation activities below the surface materials are initiated.
- Providing ADA accessibility in areas of steep slopes or significant elevation change, and incorporating ADA access from the JB Wise lot to the eastern entrance to Veterans Memorial Riverwalk.
- Slopes on either side of Black River Parkway and the elevation change between Public Square and the riverfront.
- Risk of erosion along the riverbank, flooding, debris deposits, maintenance challenges.
 The 100-year flood zone is generally well below the accessible area in the eastern end of
 the Study Area, due to the steep riverbank below Veterans Memorial Riverwalk, but does
 extend into Whitewater Park and the accessible shoreline at the western end of the Study
 Area (see Figure 7 in Appendix A).
- Private ownership of riverfront parcels, potentially requiring easements or acquisition for public access.
- Narrow width of right-of-way in certain locations, limiting the areas for sidewalks, streetscape and landscaping enhancements, and/or bicycle routes.

An annotated analysis graphic follows on the next page. Initial connection concepts – noting park destinations, potential landmarks or wayfinding elements, existing and potential routes, and areas of opportunity, are shown in Figure 2 within Appendix A.



Analysis of Existing Conditions within the Waterfront Revitalization Area – Annotated Graphic

Section III. Community Engagement

It is important to consider the various interests of local residents and stakeholders planning for their community's future. In order to ensure diverse and well-represented participation in this effort, a project Advisory Committee was established to provide input during the completion of the project. The Committee provided guidance in the overall design development, participated in public outreach activities, and assisted in the coordination for this project.

Advisory Committee

The Advisory Committee for the *Downtown-Riverfront Parks Connection Feasibility Study* included members representing the City of Watertown; the NYS Department of State; local business owners; environmental, economic development, and tourism representatives; and local residents. Individuals included:

Representing	Name
Planning	Michael Bourcy, Jefferson County Planning
	Hartley Schweitzer, Development Authority of the North Country
NYS Department Of State	Barbara Kendall
Chamber of Commerce	Kylie Peck
Community	Jason White
Environmental	Tom Voss, NYS Department of Environmental Conservation
	Carla Fowler, Tug Hill Commission
Recreation	Bob Peterson, BOB rafting
Economic Development	Don Rutherford, Local Development Corporation
Business Owners	John Johnson, Watertown Daily Times
	Brian Murray, Washington Street Properties
	Reg Schweitzer, Neighbors of Watertown, Maggie's on the River
	Steve Bradley, Abbey Carpet
	Don Coon, Paddock Arcade, Watertown RX, LLC
City Council	Mayor Joseph Butler, Jr.
	Mark Walczyk
	Cody Horbacz
	Lisa Ruggiero
	Ryan Henry-Wilkinson
	Sarah Compo
City of Watertown Staff	Michael Lumbis
	Jennifer Voss
	Geoffrey Urda
	Michael DeMarco
	Justin Wood

The Committee met four times throughout the process on March 23, 2018, July 31, 2018, February 13, 2019, and May 8, 2019. This group assisted in the development of the concept designs through participation in committee and public meetings, and via email correspondence with the City and consultants. In addition to the meetings, the Committee also reviewed interim project material,

providing comments and guidance on designs and documents completed as a result of the consultants' efforts.

Public Engagement

Engaging the public throughout the Study, rather than just informing them of its results, is critical so that it is well supported and embraced by both residents and visitors.

Advertising and Outreach

Keeping the media involved and knowledgeable regarding the planning process, progress, and meetings is an important component of public outreach.

Flyers were developed and distributed to advertise public meetings. An ad was also placed electronically via local news websites, in conjunction with a press release to the local media.

On the day of the first public meeting, a booth was set up at the Farmer's Market to increase awareness of the project, display preliminary concepts, and invite the public to the meeting that evening.

Public Meetings

Public meetings are the "main events" of the planning process. They generally begin with a presentation of project objectives and the intended outcome from the meeting. The goals for the public meetings in Watertown included identifying important issues and opportunities; discussing goals for streetscape character and park access; establishing short- and long-term priorities; and identifying potential obstacles to implementation.

The first public meeting was held on July 11, 2018. Twelve members of the public attended, in addition to City staff, consultants, and a member of the local press. The presentation introduced the project team, the study area, and the goals for the Feasibility Study. Concepts for improving the connections between the parks and the downtown area were discussed, and initial conceptual plans were reviewed. Discussion points and comments from the public were used to make revisions to the initial design, ultimately resulting in a preferred schematic design. As a result of the meeting and based on City infrastructure plans, Newell Street was identified as a high priority for implementation, along with an improved connection from the JB Wise lot to the Riverwalk.

Following the completion of the site survey of the Newell Street corridor to clarify rights-of-way and utilities, the preferred schematic design was updated and presented at a second public meeting. Held on March 13, 2019, the meeting was attended by approximately 20 participants. The goal of the second meeting was to solicit public input on the preferred schematic design. Those in attendance were primarily supportive of the designs presented. There were very few requests for changes to the plans, and only a few comments concerning pedestrian safety, primarily when crossing Black River Parkway. Attendees supported the idea of having a consistent design vocabulary (sidewalks with pavers, trees, and lighting) throughout the area. The public input was used to finalize the design and inform the feasibility study.

Section IV. Design Considerations

Design Intent

As previously stated, the objectives of this Study were to:

- Improve the pedestrian and cyclist environment, addressing connections and safety, and incorporating universal access for all ages, abilities, and skill levels where feasible.
- Encourage and maintain vistas and establish points of interest.
- Maintain and encourage a specific sense of place for the waterfront area.
- Use design elements to improve wayfinding.
- Enhance connectivity to encourage increased pedestrian traffic and use of park spaces.

Design elements, as discussed below, will program the area to reinforce a cohesive sense of place—design features can serve as focal points for activity that draws people to the waterfront parks, thereby linking the waterfront to the downtown.

Design Considerations

Overall, the design and development of pedestrian and bicycle connections between downtown and the riverfront parks must be consistent with the City Code, reflect the Local Waterfront Revitalization Program Waterfront Management Policies, and also conform to flood design guidelines where applicable. Care and consideration should be given to the use of each space, the relationship between activities, and possible future expansion within park spaces.

Direct access to the Riverwalk from the JB Wise parking lot and the downtown area is critical to increasing the usage of the park. Circulation should address various modes of transportation – pedestrians, cyclists, and vehicles – maintaining safe, visible, and comfortable spaces for all. Spaces for pedestrians and cyclists should be inviting and aesthetically pleasing, while still allowing for emergency and maintenance vehicle access as needed. Pavements, parking areas, and other design elements should also take into account landscaping, visual screening, and stormwater considerations.

Sightlines are also an important design consideration for orientation and safety along connection routes. Views can aid in wayfinding, prevent conflicts between modes of transportation, and also enhance the user experience by providing visual connections to points of interest. Views of the riverfront not only enhance the character of Watertown and the parks, but increase property values for properties on and near the river, thereby encouraging economic growth. The impact of built elements near the river and within these scenic viewsheds should be minimized, and any new tree plantings should preserve existing view corridors.

Site furnishings and materials are some of the most notable design elements that can create a sense of place for a downtown and waterfront district. Streetscape enhancements should incorporate a consistent palette of pavers, sidewalk pavement, and light fixtures. Lighting fixtures should be located along pathways and within park spaces. Connection routes should include fixtures that are both vehicular and pedestrian scaled, and should be dark sky compliant while minimizing both glare and blind spots. Lighting should clearly designate crosswalks, entrances, and exits and should provide adequate visibility at gathering and recreation areas.

Bicycle racks, critical to encouraging cyclists to use the enhanced connection routes, should be provided at buildings, gathering areas, and destination points which are accessible from vehicular

roadways or bicycle paths. Benches or other seating, some in shaded locations, should be provided at intervals along trails and pathways, along the waterfront, at the park entrances, at plaza and gathering areas, and at points of interest. Signage provides visible, distinct markers for entrances, provides directional cues, and identifies points of interest. Additional amenities, such as restrooms, drinking fountains, trash receptacles, barbeque grills, shelters, and information kiosks, should be consistent in character with the design vocabulary of other items within the waterfront and park areas. Integration of signage with architectural and landscape designs can contribute to an overall appearance that is harmonious in color, form, and proportion. Consistency among these furnishing elements provides a coherent sense of place.

Vegetation and variations in elevation can create visual interest, perspective, and linkages between spaces that connect the downtown to the waterfront. Landscaping can be used to buffer and screen parking and loading areas, filter noise and light, and soften architecture. Street tree plantings should be composed of a mix of deciduous, evergreen, and flowering trees, incorporating native species and avoiding invasive species. Large existing trees should be protected and canopy trees should be incorporated along paved paths and parking areas to provide shade, reduce heat, and minimize glare. Care should be taken to ensure that sight lines are clear near roadways and intersections, and that there are enough visual openings along trails and walkways to provide a sense of security and maintain views.

All designs should aim to incorporate green infrastructure elements, such as porous pavement and bioretention areas, whenever possible. These improvements would help to minimize stormwater runoff and improve water quality, potentially alleviating, even on a small scale, some of the water quality issues discussed in Section II. Implementing these elements also provides an opportunity to educate residents and visitors, using signage to explain the processes at work and the benefits provided by the pavements, plantings, or other techniques used.

Section V. Design Concepts

The cornerstone of successful waterfront revitalization is attractive, safe, and inviting public access; without public access, the riverfront could be cut off, private, or lack the single ingredient absolutely necessary for revitalization — people. Creating safe, inviting connections between downtown Watertown and the Black River will support the physical and visual river access at Veterans Memorial Riverwalk and Whitewater Park.

Successful public access has the following characteristics²³:

- It invites public use by virtue of its inviting design characteristics.
- It encourages the public to walk, jog and bike along the waterfront, while minimizing conflicts among types of users.
- It connects the downtown to the waterfront.
- It establishes, enhances, or preserves visual connections to the waterfront from upland sites and streets.
- It offers a variety of pedestrian experiences by using changes in width, elevation, orientation, plantings and surface treatment.
- It respects people's basic needs by providing comfortable street furniture; clean, safe restrooms; and shelter from rain.
- It sparks visitors' curiosity through interpretive markers and signs explaining the waterfront's
 role in history, its contemporary industries, natural environment and wildlife, and other
 intrinsically interesting stories.
- It respects the needs of children, the elderly, and the disabled.

The connectivity improvements should be pleasant and welcoming to all ages and ability levels of people, providing links to a wide variety of activities. The concepts developed sought to design features that draw people to the waterfront parks – to use site design to link the waterfront to the downtown.

The objective in the following concepts was to highlight existing resources and incorporate consistent materials and furnishings to reinforce a cohesive sense of place. The preferred design was developed through a process that involved public meeting and review by the Advisory Committee, the City of Watertown, and the NYS Department of State.

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²³ Good, J.W., and R.F. Goodwin, Waterfront Revitalization for Small Cities, Corvallis, OR: Oregon State University Extension Service, May 1992.

Schematic Designs

The schematic designs described on the following pages are presented in Appendix B.

Area 1: JB Wise Parking Lot

The first area of design addresses the connection from Public Square to Black River Parkway. Pedestrians can follow the sidewalk along Mill Street, or utilize either the sidewalk located along the western edge of the existing medical office building or the Strauss Memorial Walkway to then cross through the JB Wise parking lot. The connection along Mill Street was recently enhanced as part of a roadwork project at the intersection with Black River Parkway. The Strauss Memorial Walkway has been identified as a separate project to be undertaken independently of this Study as part of the City's Downtown Revitalization Initiative. As a result, this Feasibility Study focused on the western connection along Anthony Street, as it appears



Existing western sidewalk connection to the JB Wise Parking Lot

to be the most direct route and already has a wide walkway, street trees and lighting. The design recommends that additional street trees be planted and wayfinding signage be installed at the top and bottom of this walkway to enhance navigation.

At the rear of the buildings lining the north side of Public Square, a proposed sidewalk with a uniform width and brick edge treatment will connect to a seating area with shade trees, tables, benches, a bike rack, and an informational kiosk at the eastern end of the parking lot. In order to create this outdoor seating area, the City should coordinate with the adjacent property and business owners to identify a suitable location for dumpsters and service access that is convenient, yet does not detract aesthetically from the environment. A wall that compliments the materials on adjacent buildings, or vegetation that creates a "green wall" for visual screening, would provide an enclosure for the dumpsters.



Existing walkway through JB Wise Parking Lot

The current striped walkway through the center of the JB Wise parking lot will be replaced with a widened, pedestrian friendly tree-lined brick corridor with bollard lighting to enhance safety. At the end of this central corridor, a new sidewalk with pedestrian lighting shall extend eastward toward the seating plaza and Mill Street. An additional crosswalk through the lot will connect the Strauss Memorial Walkway with the new sidewalk along Black River Parkway.

Pedestrians must also be able to cross Black River Parkway safely. To improve safety, a new pedestrian plaza with crosswalks will be added near the Butler Pavilion, connecting the sidewalk along the parking lot to the existing stairway at Veterans Memorial Riverwalk. This area will include pedestrian style lighting, as well as a sign or sculpture for wayfinding. Some residents expressed concern about being able to cross safely and it may be necessary to conduct a traffic study for this location, or to add pedestrian crossing signals or stop signs.



Current view looking west from Butler Pavilion

The design also proposes that a sidewalk be constructed from Butler Pavilion westward, crossing Black River Parkway. Transitioning to the north side of the Parkway, it will lead to an overlook area that would provide views toward the Mill Street falls. From there, the walkway would continue westward, where a stairway would bring pedestrians down to the Veterans Memorial Riverwalk pavilion. A second stairway could be integrated into the slope on the south side of the Parkway that would bring pedestrians directly to the Riverwalk pavilion from the parking lot at Marshall Place.

Area 2: Veterans Memorial Riverwalk

Currently, visitors can enter the Veterans Memorial Riverwalk at the east end, accessible from Mill Street. The proposed design will provide a new crosswalk from the recently constructed path that connects to Black River Parkway. In addition to the existing stairway, a ramp would be provided near Adirondack River Outfitters. Adding a sign or sculpture to the area would improve wayfinding, and a new sidewalk with brick pavers and lighting along the northern edge of Newell Street would enhance safety. Trees should be planted to soften the scale of



Existing view near Adirondack River Outfitters



Existing vegetation impacts the view from the overlook at the western entrance to the Riverwalk



Existing pedestrian connection to the Riverwalk

the area.

Adirondack River Outfitters is a popular destination. To further accommodate cyclists, the proposed design adds a bike rack in this area. The existing paved area between the Outfitters and the retaining wall is quite expansive. The design recommends that the pavement be narrowed to make the space feel more welcoming and parklike (providing 14' wide emergency access). Additional improvements will include new landscaping, pavers, and benches. At the bottom of the existing stairs, a kiosk will provide additional wayfinding or event information, and a sign or sculpture will help to announce the entry to the park space.

Within the Riverwalk itself, views to the Black River could be improved through selective trimming of the existing vegetation. This improvement should first be focused at the existing observation areas and then additional vistas should be identified. While mature trees should be maintained, opening sightlines would greatly enhance the scenic views from the park.

The monolithic retaining wall along Newell Street and the Veterans Memorial Riverwalk, which becomes taller as one moves into the Riverwalk, provides a canvas for future artistic or historic murals. This area could also be a location for the interpretation of the historic industrial significance

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of the Black River as well as its importance as a natural resource. Residents suggested at public meetings that murals could include the area's waterfront industry, and the former trains and coal

Section V. Design Concepts

bunkers that would have been in the park area. It was even suggested that site furnishings, like trash receptacles, could become a form of public art.



The existing retaining wall is imposing to pedestrians.

Narrowing the trail pavement to 14' wide and adding recommended landscaping along the wall would help to soften the experience for park users. It was suggested that some of the landscaping could be wildflowers or pollinator gardens. Seating should be added along this main stretch of the walkway to encourage people to relax and enjoy the park.

Residents noted that they often bring children to the park, but there is not currently a space for them to play. The area of the park below Marshall Place, near the overlook area, could

become an expanded picnic area and perhaps incorporate a play space.



Concept Sketch: View over the Black River Parkway toward JB Wise Parking Lot and Veterans Memorial Riverwalk

Area 3: Arch Street



Arch Street slopes steeply down toward the Riverwalk.

Arch Street is a steeply sloping street that connects Court Street to Newell Street, passing under Black River Parkway via a historic narrow stone bridge. The upper portion of the roadway is wide enough for two vehicles, but the underpass can only accommodate a single vehicle.

The proposed concept provides a narrower roadway with mountable curbing at either end, to be used for emergency access only, and converts the space to a pedestrian street with brick pavers, lighting, and trees. A sign or

sculpture added at Court Street would announce the connection to the Riverwalk. Making Arch Street more pedestrian friendly would create a loop route for users, enabling them to travel from Public Square, through the JB Wise parking lot, along the Riverwalk, up Arch Street, and back along Court Street to downtown.



Concept Sketch: View over the Black River and Newell Street, toward Arch Street and Veterans Memorial Riverwalk

Area 4: Newell Street

Newell Street, extending from the Riverwalk to Whitewater Park, lacks continuous, comfortable sidewalks and does not have streetscape elements such as street trees or pedestrian scale lighting. The right-of-way width along the street varies: it is narrower to the west of the Court Street bridge.

The concept design includes a turn-around culde-sac at the Riverwalk, allowing space for a central sign or sculpture, with a bike rack and kiosk provided inside the park. A sidewalk and brick pavers will frame the turnaround and continue along the north side of Newell Street. New street trees and pedestrian lighting will also follow the length of Newell.



Current view looking west along Newell Street

Overall, the concept for this corridor includes formalizing curb cuts and entrances to parking areas, while providing a safe, designated walkway for pedestrians. The area under the Court Street bridge could become a seating area, and murals could be painted within the archways under the bridge. It was suggested that this space could be used as a small amphitheater space for performances.

Since the right-of-way narrows to the west of the Court Street bridge, the proposed sidewalk must shift to the southern side of Newell Street. This will allow for the continuation of the design vocabulary – sidewalk, brick pavers, lighting, and street trees. Overhead utilities along Newell Street could potentially be placed underground or relocated as the street is reconstructed.

Development of a sidewalk along the north side of Newell Street, between the Court Street bridge and Whitewater Park, would require acquisition of easements on the vacant private property or purchase of the properties. There are three privately owned properties between the Court Street bridge and Whitewater Park: 400, 410, and 424 Newell Street. Two (410 and 424) are associated with the Hudson River Rafting Company (no longer in operation) and the third is a small parcel adjacent to the bridge abutment.

As Newell Street meets Maggie's on the River, the entry and exit to the parking area will be formalized, and the trees, lighting, and sidewalks would be continued.



Concept Design Sketch: View along Newell Street at Whitewater Park and Howk Street



Concept Design Sketch: View along Newell Street at Whitewater Park and Howk Street Note: This concept illustrates what the view would be like if all of the utility lines were placed underground.

Area 5: Secondary Connections – North Meadow Street and Howk Street

North Meadow Street is currently a dead-end road as the connection to Coffeen Street is barricaded. The concept design recommends that a portion of the road beyond the necessary parking lot connections be converted to a pedestrian walkway lined with trees and lighting. The existing barriers at the Coffeen Street end should be replaced with more attractive bollards. Coordination with the owner of the property at the south end of North Meadow Street would be required, as removing the roadway would result in a landlocked parcel. The City should explore acquisition of this parcel, and perhaps the parcel on the corner of Coffeen Street, to create a gateway and trailhead area.



Looking down North Meadow Street from Coffeen Street



Looking south on Howk Street from Newell Street

Howk Street is primarily a residential street, with a new brewery at the northern end. It forms the western end of the waterfront area. As this may become a popular pedestrian corridor, and may see increased vehicular traffic, the design proposes improving the pedestrian areas with new sidewalks, brick pavers, street trees, and lighting to create an attractive environment. The street will be converted to a one-way street, with parallel parking provided along the western and a protected bike lane added on the eastern side. This bike lane could connect with the existing shared bike lane on Coffeen Street and create a gateway to the waterfront district.

Area 6: Whitewater Park

The recommended sidewalk and streetscape treatments would extend westward along Newell Street, past Whitewater Park, to Engine Street. Whitewater Park borders Maggie's restaurant, and provides open views of the Black River and whitewater areas. The existing gravel pathway could be paved, and trees, benches, and picnic tables could be added throughout the park to encourage pedestrian use. Bike racks and an information kiosk could also be installed. It was suggested at the second public meeting that pollinator and wildflower gardens be added to the park.



Current view looking west over Whitewater Park



View of Engine Street from Newell Street

The property west of the City of Watertown DPW facilities and Citibus is the subject of environmental remediation. Owned by Niagara Mohawk, this property was formerly the location of a Manufactured Gas Plant (MGP). Once the site is remediated, there is the potential for the DPW to lease a portion of the property for employee parking. A draft plan previously completed for the area suggests extending the existing Whitewater Park trail that is currently north of Citibus to the west of Newell Street, back toward the riverfront. This could eventually connect with the existing bike bath that leads to

the fairgrounds. These plans for parking and trail extension also support the inclusion of a sidewalk along Engine Street. This would provide safe pedestrian connections for the DPW employees and for park users to connect from the riverfront to Coffeen Street.

Additional Connectivity: Riverfront Boardwalk

Developing a boardwalk along the river would provide additional enhancement to the Newell Street corridor. It could provide an alternate connection between Veterans Memorial Riverwalk and Whitewater Park, with a potential overlook below the Court Street bridge. A boardwalk would also provide an unobstructed path for park goers, right along the Black River, with the potential to include interpretive signage along the way. The development of a boardwalk would require a feasibility study and further design.

Preliminary Cost Estimates

The preferred schematic design for each area is intended to provide the City of Watertown and its residents with improved access and connectivity between the downtown and the riverfront. The realization of this vision, or portions thereof, will likely occur in phases and will be driven by the availability of public and private investment resources. The preliminary cost estimates (2019 dollars) provide a general breakdown costs associated with each preferred design. The following list is presented by area, moving from east to west.

Area 1: JB Wise Parking Lot \$990,669

Area 2: Entrance Plaza at Veterans Memorial Riverwalk \$371,075

Area 2: Veterans Memorial Riverwalk \$229,586 (Note: does not include Pavilion renovations)

Area 2: Stairway Connections to Riverwalk and Waterfall Overlook \$461,838

Area 3: Arch Street \$282,615

Area 4: Newell Street

\$1,593,627 (Note: does not include work in the area which would require acquisition or utility improvements)

Area 5: North Meadow Street \$297,470

Area 5: Howk Street \$431,108

Area 6: Whitewater Park \$161.076

Area 6: Engine Street \$279,252

Future Boardwalk

Not Included – would require a feasibility study and detailed design

Total Study Area \$5,098,315

The above totals include overhead and profit (15%), escalation (4%), and a 5% field allowance. They do not include fees for detailed design documents or construction administration. The detailed cost estimates are included in Appendix C.

Regulations, Permits, and Requirements

Enhancement and development of the city streetscapes and park areas may involve a number of permits or be subject to a variety of regulations or requirements.

Depending on the extent of site impacts, the following permits will likely be necessary:

- Floodplain development permits and regulations
- Environmental permits relating to wetlands (Army Corps of Engineers (ACOE), Department of Environmental Conservation (NYS DEC))
 - o The placement of a boardwalk may require an ACOE Nationwide Permit (NWP) #42 Recreational Facilities (applies to disturbance less than ½ acre). Disturbance ½ acre or more may then require an individual permit from the ACOE and a longer application and approval time.
 - Once the preferred alternative is identified, coordination with ACOE should be requested to have them verify jurisdiction and confirm necessary approvals. There may be design requirements for the boardwalk (i.e., allowed width, clearance, type of materials, etc.) that ACOE may require or recommend.
- Navigable waters permits for Black River from ACOE
- Environmental permits relating to habitat (NYS DEC)
- Environmental permits relating to any potential site contamination
- Permits relating to the abatement or removal of hazardous materials
- Permits relating to historic, archaeological, and cultural resources (SHPO)

Additionally, in New York State, most projects or activities proposed by a state agency or unit of local government, and all discretionary approvals (permits) from a NYS agency or unit of local government, require an environmental impact assessment as prescribed by State Environmental Quality Review (SEQR) and evaluation by the State Historic Preservation Office.

Development should be consistent with City of Watertown Code, and the guidelines set out by the *Local Waterfront Revitalization Program* and its Waterfront Management Policies.

Designs should also incorporate ADA accessibility wherever practicable and conform to state and local building and health codes.

Summary Recommendations and Next Steps

Streetscape improvements and connectivity enhancement could serve as a catalyst for waterfront revitalization and economic development for the City of Watertown. The goal of this Feasibility Study is to identify potential connections from Public Square to Veterans Memorial Riverwalk and Whitewater Park, and to draw people from Public Square to the waterfront.

The schematic designs presented herein reflect the discussion of multiple options for pedestrian and bicycle connections. The preferred design concept was developed through a process that involved public meetings, and review by the Advisory Committee and the City. Feedback obtained during this process was used to inform a refined concept design.

The various design concepts were prioritized at an Advisory Committee meeting based on the feedback received. They were organized into four groups, as follows:

Priority 1

- JB Wise main pedestrian path and sidewalks (\$617,453)
- JB Wise seating area (\$153,436)
- JB Wise crossing plaza (\$161,333)
- Riverwalk entry ramp (\$58,447)
- Selective trimming of vegetation for river views along Veterans Memorial Riverwalk (\$10,000)
- Newell Street streetscape, west of Riverwalk (road reconstruction already planned by the City) (\$1,332,945)
 (Note: cost for Court Street bridge area separated out below.)
- Howk Street with bike lane (\$431,108)
- Arch Street pedestrian way (\$282,615)
- North Meadow Street pedestrian path (\$297,470)

Priority 2

- Sidewalk treatments from Mill Street to Adirondack River Outfitters (\$208,682)
- "Entry Plaza" at Adirondack River Outfitters (\$371,075)
- Sidewalk extension from Butler Pavilion, stairway from Black River Parkway to Riverwalk, and stairway from Marshall Place to Black River Parkway (\$381,238)
- Streetscape improvements along Engine Street (\$279,252)
- Waterfall overlook along Black River Parkway (\$80,600)
- Murals on retaining wall within Veterans Memorial Riverwalk (high priority, but would utilize other funding) (\$10,000)
- Murals and seating/program space under the Court Street bridge (\$52,000)

Priority 3

- Plantings/green space and benches along mural wall in the Riverwalk (\$85,000)
- Picnic area and playground in the Riverwalk (\$135,000)
- Whitewater Park pavement, landscaping, and seating (\$161,076)

Priority 4

- Future boardwalk along the Black River between Whitewater Park and Riverwalk (requires longer-term planning and design/engineering)
- Riverwalk pavilion renovation

The Priority 1 items are recommended for short-term implementation. The primary focus of this Study is to improve connectivity between the downtown Public Square area and the riverfront parks. As the main connection is through the JB Wise parking lot, these improvements should be implemented first, as soon as funding is available. Of all these improvements, the City should initially seek funding for the following:

- JB Wise main pedestrian path and sidewalks (\$617,453)
- JB Wise crossing plaza (\$161,333)
- Selective trimming of vegetation for river views along Veterans Memorial Riverwalk (\$10,000)

By completing the main pedestrian path, sidewalks and crossing plaza, the City will begin to implement the basic necessities to get users from Public Square to the Riverwalk. These initial improvements including lighting, sidewalk and roadway improvements, and street trees will help facilitate a safe link between Public Square and the Riverwalk. Seeking additional funding for other improvements associated with the JB Wise parking lot may then be easier. For instance, a new ramp will improve universal accessibility, while creating the new seating area will complement the planned improvements within the parking lot and Strauss Memorial Walkway (under the City's Downtown Revitalization Initiative), ultimately resulting in an aesthetically pleasing gathering space.

The City of Watertown already has plans to reconstruct Newell Street, so developing the streetscape with the recommended sidewalk treatments, lighting, and trees will improve safety and aesthetics while enhancing connectivity between the parks. In order to efficiently complete the proposed improvements contained in this Study, they should be constructed as Newell Street is revitalized.

Existing vegetation should be managed in a way which opens or maintains sightlines within the parks and to the riverfront. Trimming vegetation within the Riverwalk to open views toward the Black River and the falls should be addressed in the short-term, as it would not require construction work and would immediately improve the user experience within the park.

In the future, to support visual connections to the parks and maintain their attractiveness to visitors, a park and viewshed management plan should be undertaken. A broad-scale viewshed management plan would assist the City in maintaining views across the river and toward the falls. The plan development process should include a vegetative survey, to identify which species currently exist, particularly along the steep slopes. The resulting plan should include recommendations for keeping some select, non-invasive saplings that could be allowed to mature and shade the bank. Species with loose bark should be prioritized for long-term growth, as they could also provide habitat for species such as bats. Doing so could prevent future undergrowth, particularly of weedy invasives. Invasive trees and undergrowth could be replaced with low-height native shrubs which would aid in stabilizing the slopes. Native plants tend to require less maintenance and be better adapted to local growing conditions. Information on historically present and native plant species, supplied by NYS DEC staff, is provided in Appendix D.

The additional street improvements included in the Priority 1 group provide the north-south connections between the downtown and the riverfront. Howk Street was identified by the City and Advisory Committee as a western gateway to the riverfront district. Organized parking and improved sidewalks would enhance safety for residents and pedestrians along this increasingly busy road, while the bike lane would improve connections for cyclists who utilize the existing path on Coffeen Street.

Arch Street provides a direct connection to the western end of Veterans Memorial Riverwalk, but is narrow and lacks sidewalks and lighting. The proposed pedestrian street (with emergency vehicle access only) eliminates potential conflicts between vehicles and pedestrians or cyclists, improving safety while also providing aesthetic enhancements to complement the historic arch tunnel. Similarly, North Meadow Street is currently closed to traffic at Coffeen Street, and could be utilized to enhance the bicycle and pedestrian connectivity to the waterfront.

The projects listed under Priority 2 support the connections between the downtown and the riverfront, but are not the primary connection features. For example, the entry plaza at Adirondack River Outfitters greatly enhances the arrival experience at Veterans Memorial Riverwalk, but the plaza crossing Black River Parkway is seen as a higher priority since it directly impacts safety and the physical connection between the JB Wise Lot and the Riverwalk. Further design efforts are required to fully develop the connections between downtown Watertown and its riverfront parks. Once all relevant studies are completed and a design is finalized, detailed cost estimates can inform a phased implementation strategy that will allow for the improvements to be developed as funding allows.

The Priority 3 projects further enhance the park spaces themselves, while the Priority 4 items would require further design and engineering before being implemented.

In addition to the improvements noted above, the City should endeavor to generate increased interest along the riverfront. Having "anchors" to draw people to the river and encourage them to stay, such as food vendors, overlooks, artwork, and additional restaurants, would enhance activity levels and create vibrancy. Downtown Watertown has the potential to serve as a hub of the regional riverfront trail system, drawing users from Jefferson Community College and Brownville to the west, the Black River Trail and Fort Drum to the east, and the various city neighborhoods to the north and south. Given Watertown's rich history and overall walkability, which could be enhanced by the connectivity suggestions herein, there is the potential for a history trail to be incorporated along the city's streets and within its parks.

To implement some of the connectivity concepts, there are a series of steps that can be taken:

- Identify private sector and nonprofit project partners
- Secure funding for the next phases of design, right-of-way acquisition, permitting, and construction.
- Develop design concept and funding plan for public sculpture artwork, murals, lighting projects, etc.
- Confirm sites for new/enhanced riverfront anchor attractions
- Support anchor site economic development

Supporting opportunities for people to enjoy the Black River will encourage partnerships and connections between various community groups. Increased interest in the waterfront may, in turn, generate increased interest in water quality protection and habitat enhancement. Greater access to the river, the parks, and their recreational assets, as well as from these areas back to downtown Watertown, will support tourism while also encouraging broader economic investment on local, regional, and state levels, helping the City achieve its vision of becoming "a vibrant, attractive community of rich recreational, cultural, and economic opportunity that maintains a small town appeal."

Appendix A: Study Area Maps

List of Maps

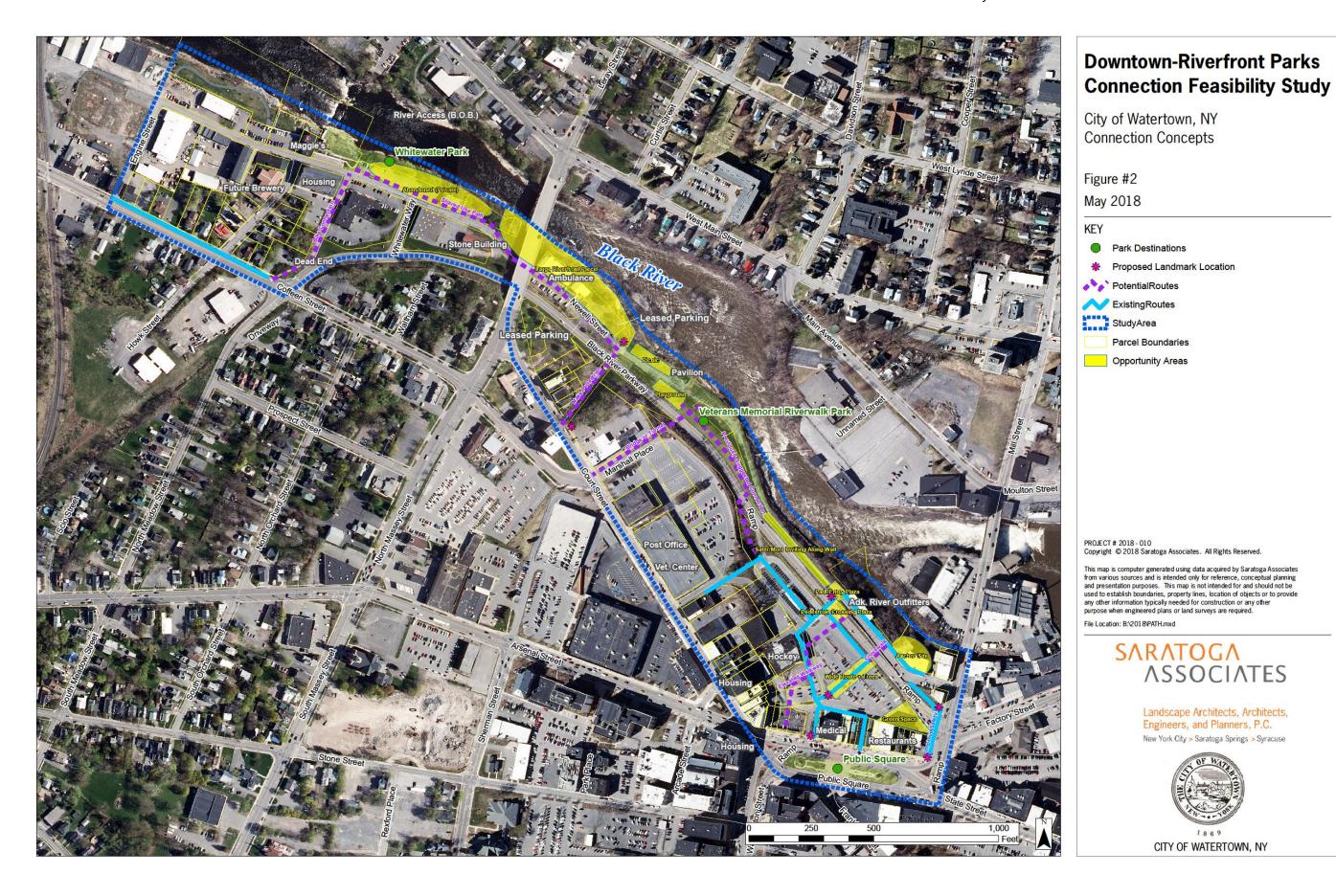
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- 2. Connection Concepts
- 3. Land Ownership
- 4. Current Land Use
- 5. Current Zoning
- 6. Historic Properties
- 7. Flood Zones
- 8. Topography

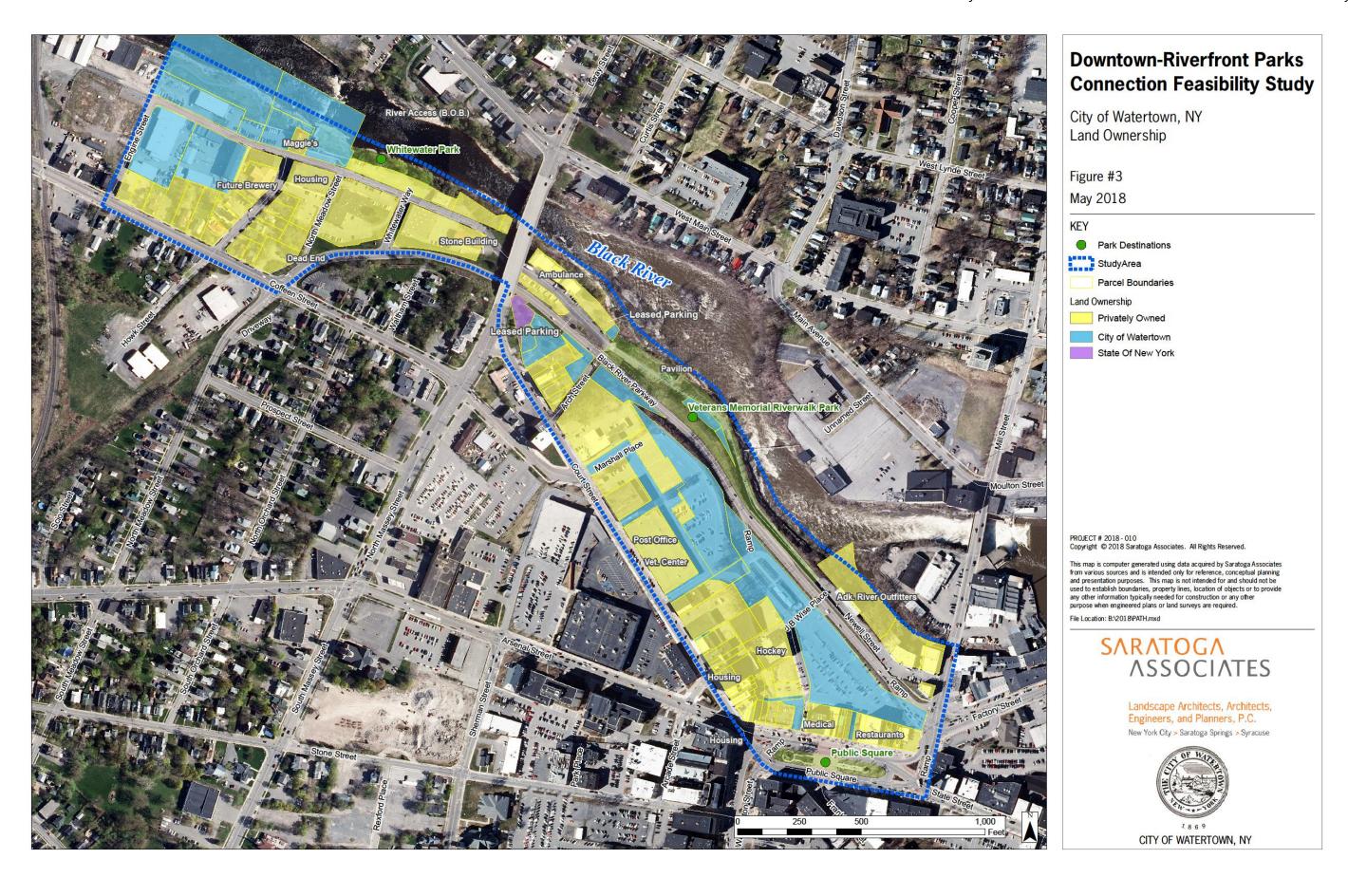
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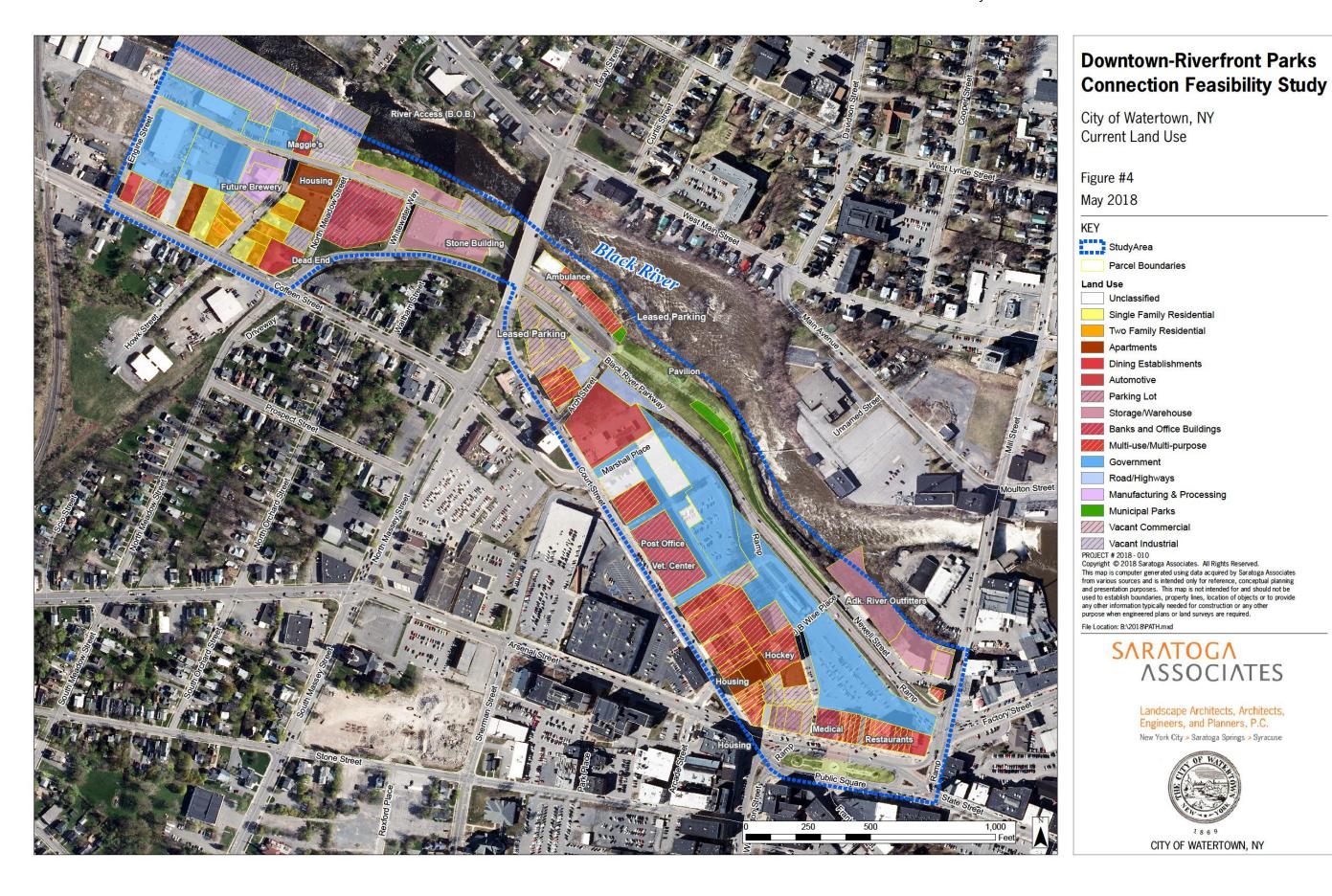
Landscape Architects, Architects, Engineers, and Planners, P.C. New York City > Saratoga Springs > Syracuse

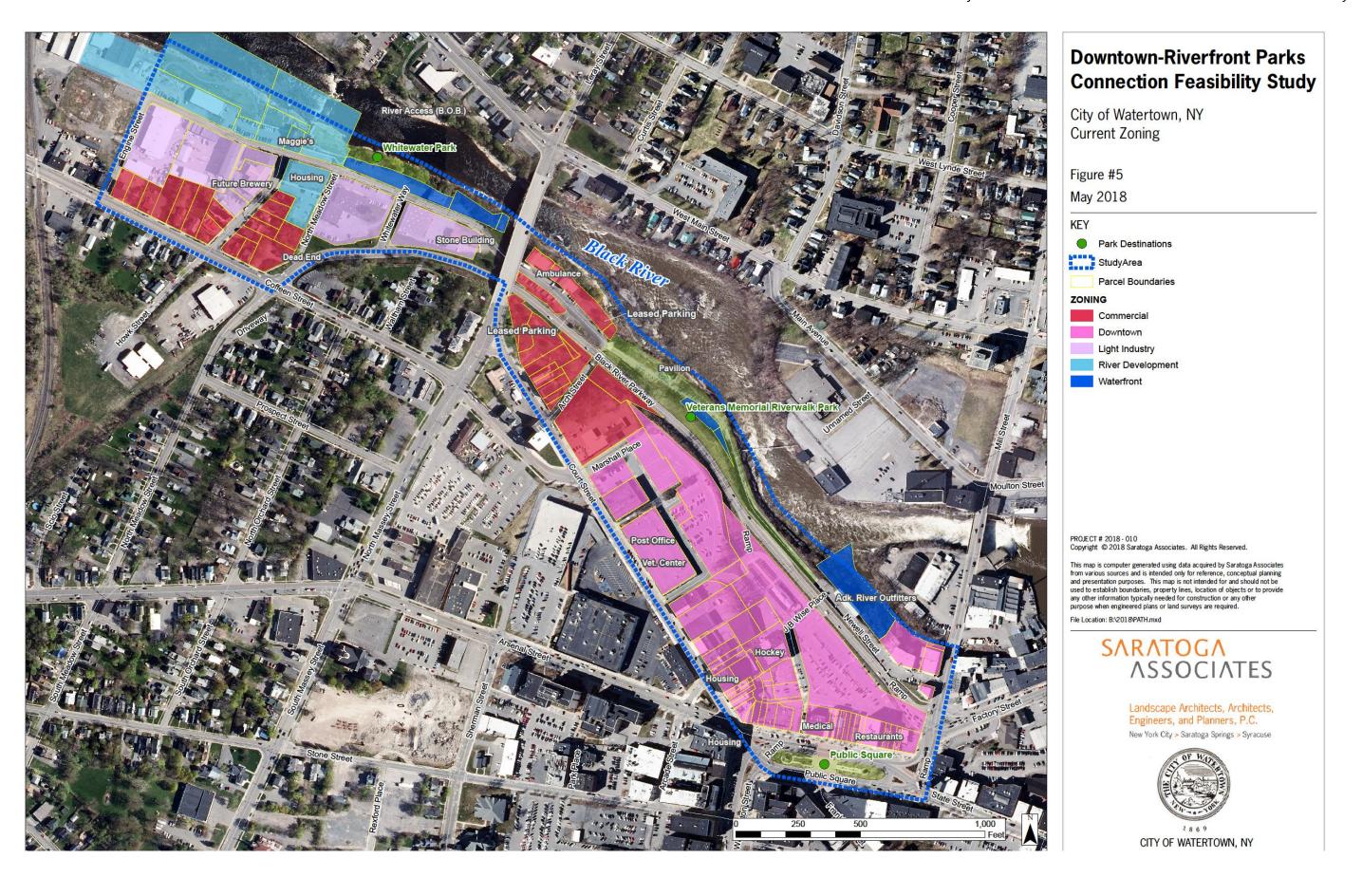
CITY OF WATERTOWN, NY

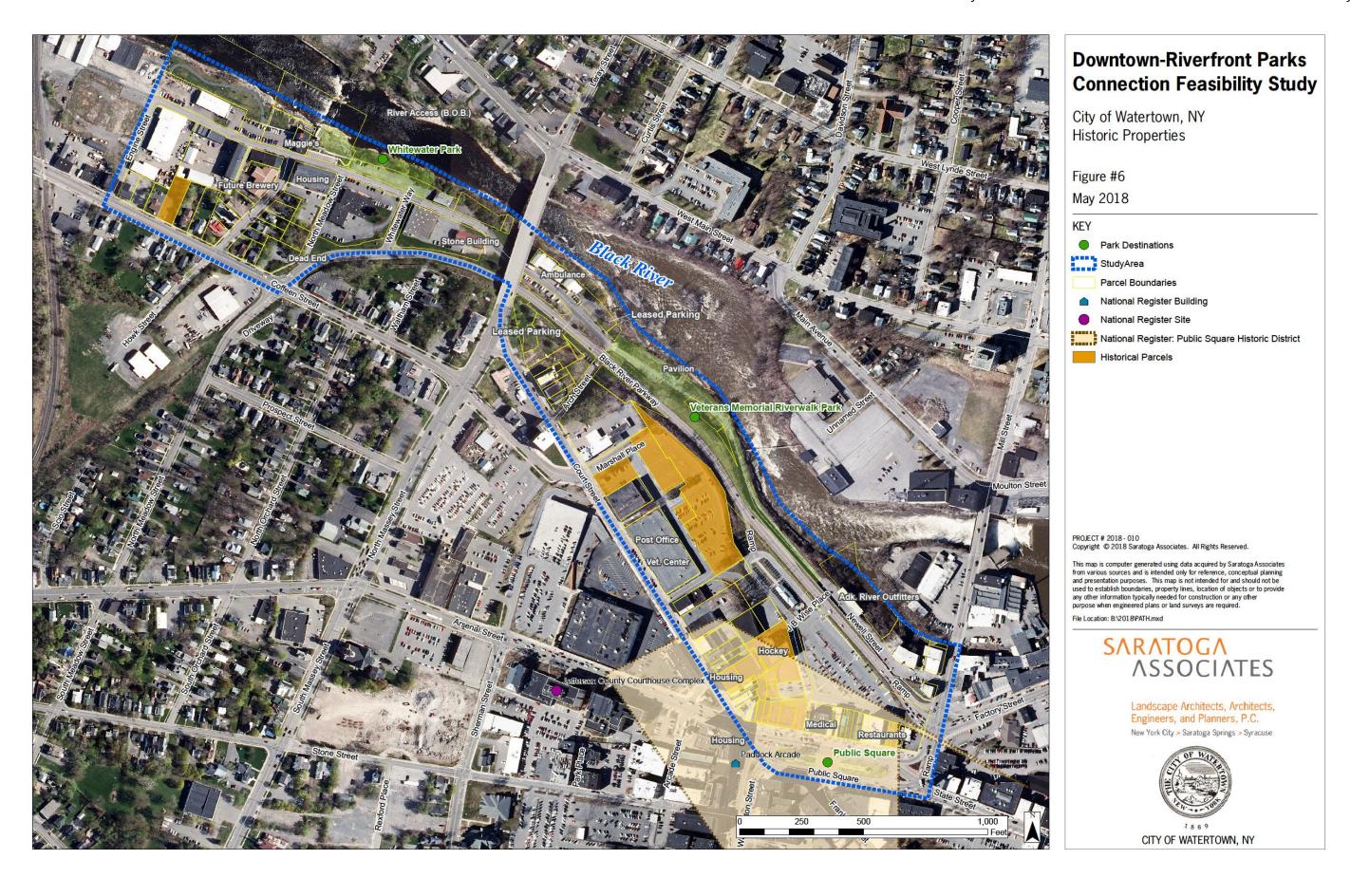


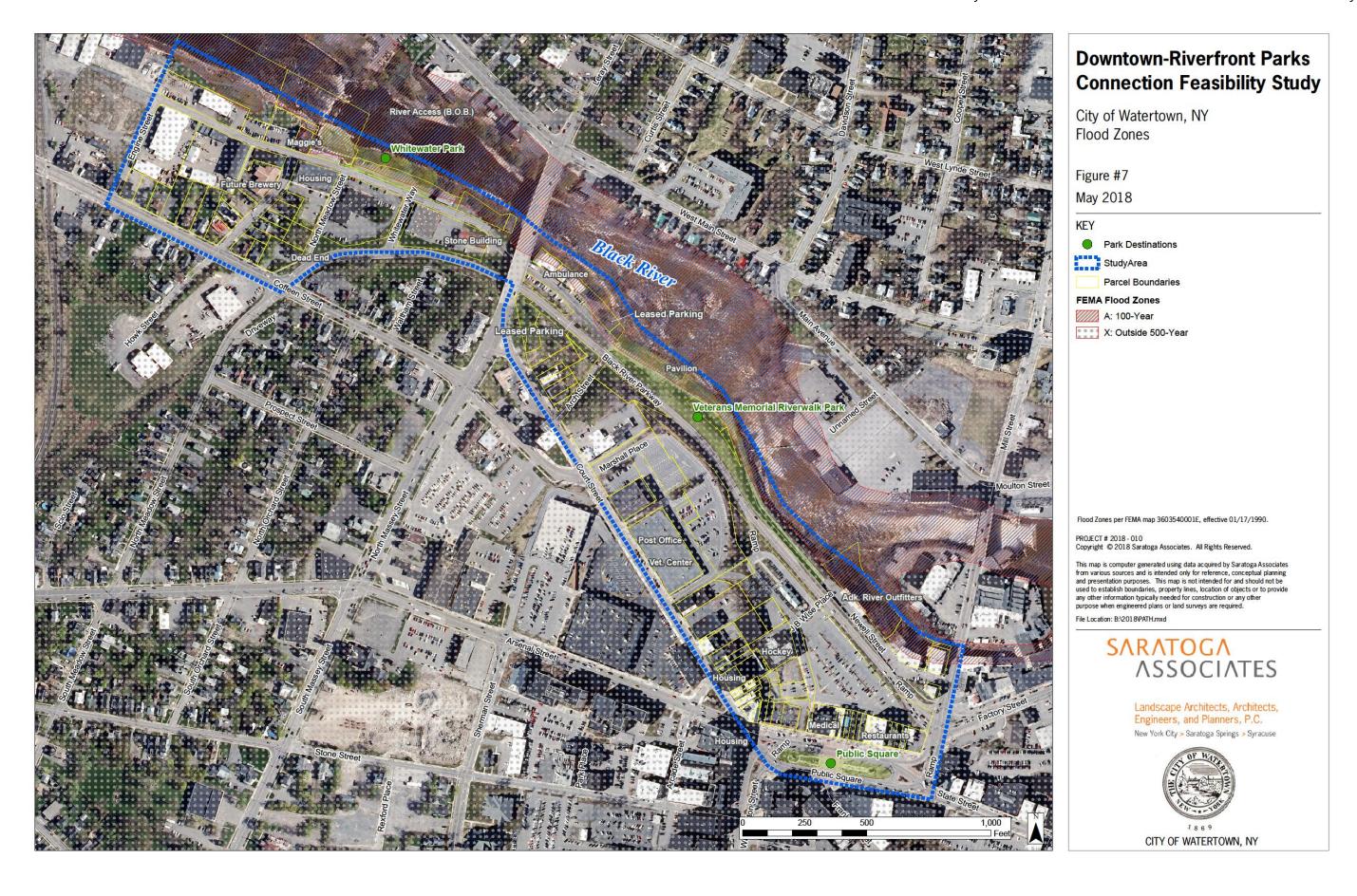


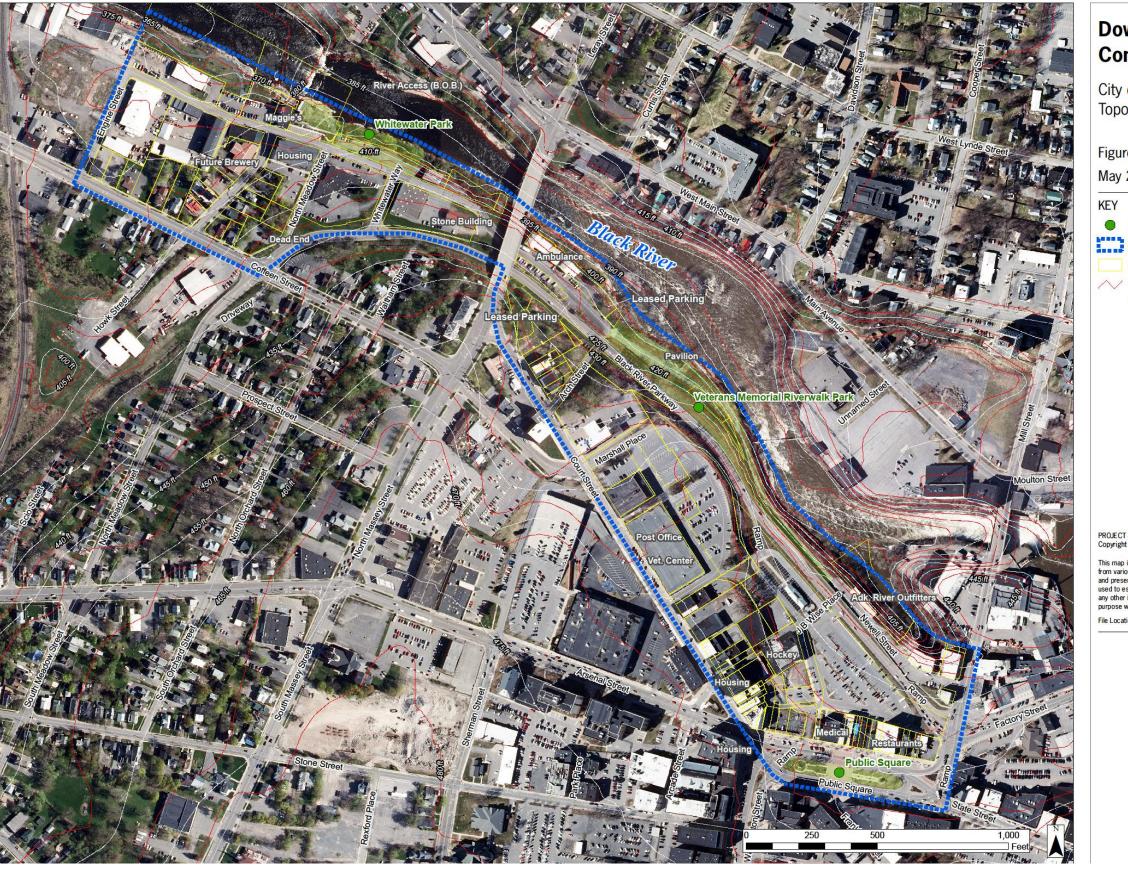












Downtown-Riverfront Parks Connection Feasibility Study

City of Watertown, NY Topography

Figure #8 May 2018

Park Destinations

StudyArea

Parcel Boundaries

10-foot Contour Line 5-foot Contour Line

PROJECT # 2018 - 010
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This map is computer generated using data acquired by Saratoga Associates from various sources and is intended only for reference, conceptual planning and presentation purposes. This map is not intended for and should not be used to establish boundaries, property lines, location of objects or to provide any other information typically needed for construction or any other purpose when engineered plans or land surveys are required.

File Location: B:\2018\PATH.mxd

SARATOGA ASSOCIATES

Landscape Architects, Architects, Engineers, and Planners, P.C.

New York City > Saratoga Springs > Syracuse



CITY OF WATERTOWN, NY

Appendix B: Schematic Designs

List of Areas

JB Wise Parking Lot

Entry to Veterans Memorial Riverwalk

Veterans Memorial Riverwalk

Arch Street

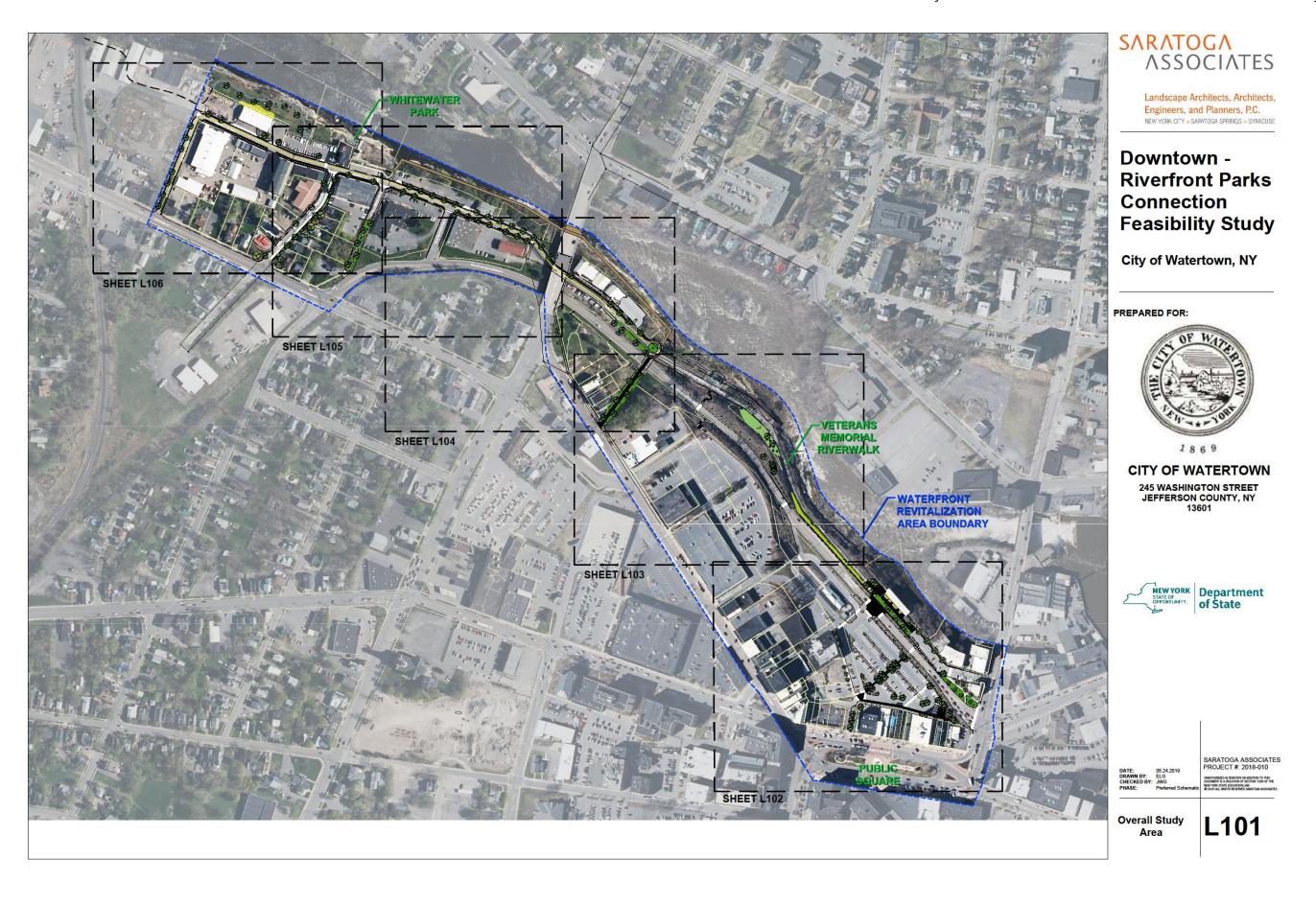
Newell Street

North Meadow Street

Howk Street

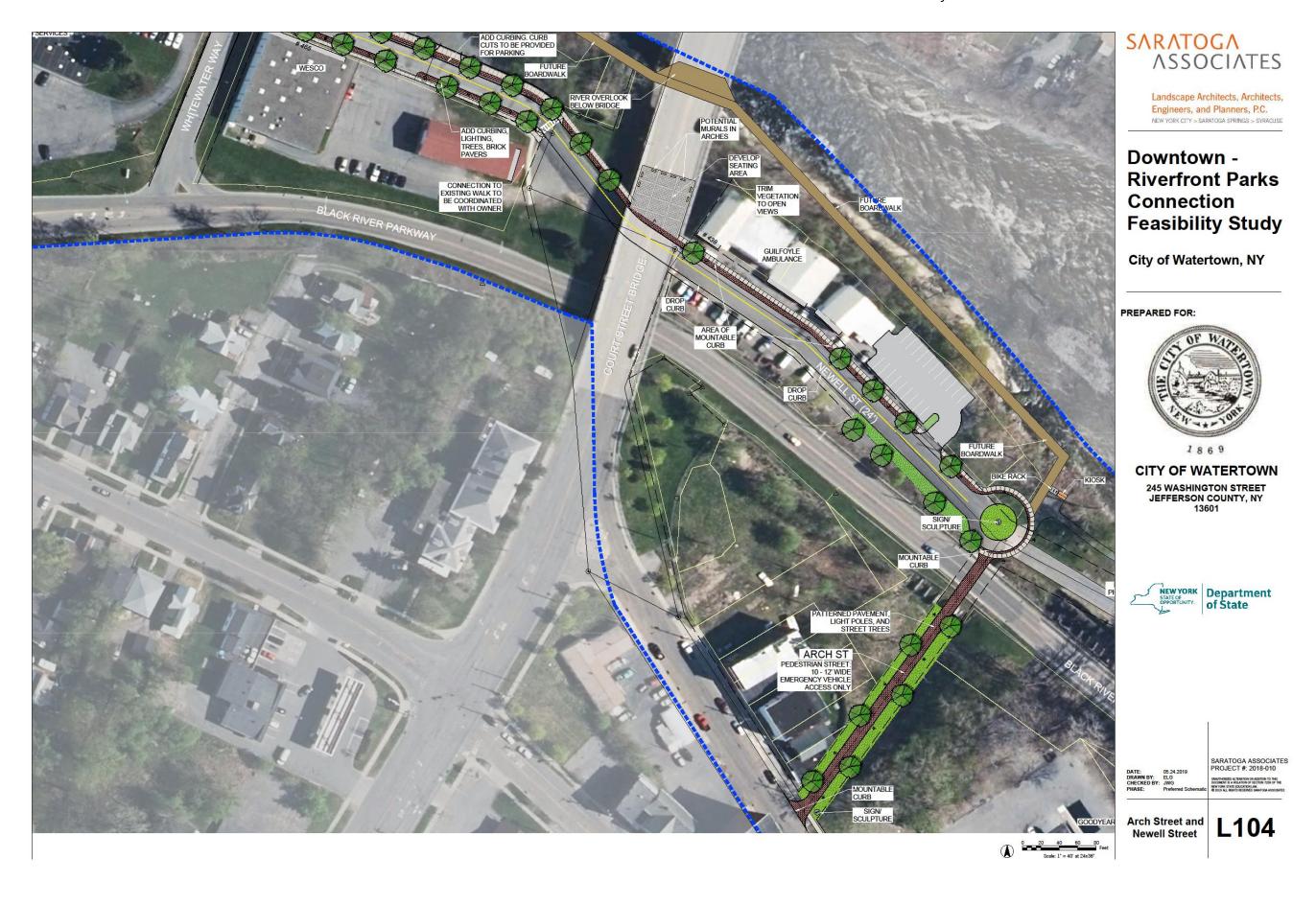
Whitewater Park

Appendix B Page 62













Appendix C: Schematic Cost Estimates

List of Areas

JB Wise Parking Lot

Entry to Veterans Memorial Riverwalk

Veterans Memorial Riverwalk

Arch Street

Newell Street

North Meadow Street

Howk Street

Whitewater Park

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SARATOGA ASSOCIATES

CITY OF WATERTOWN
DOWNTOWN-RIVERFRONT PARKS CONNECTION FEASIBILITY STUDY
PRELIMINARY COST ESTIMATE SUMMARY
SCHEMATIC DESIGN

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Total \$5,098,315

Exclusions:

- 1. Engineering fees are excluded from this estimate.
- 2. Relocation or modification of existing utilities is excluded from this estimate.
- 3. The future riverside boardwalk has been excluded from this estimate, as design and feasibility have yet to be explored.
- 4. Work in areas requiring acquisition along Newell Street has been excluded.

SARATOGA ASSOCIATES

City of Watertown

JB Wise Lot - Main Parking Lot Area

Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: New wayfinding signage and enhancement to the existing kiosk on Public Square, new trees and lighting along the medical offices; new brick treatment along the sidewalk; brick crosswalk treatment and new crosswalk striping within JB Wise lot; central pedestrian corridor with bollard lighting; sidewalk and lighting along south side of Black River Parkway.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS General Requirements	1	LS	\$25,000.00	\$25,000.00
Survey and Stakeout	1	LS	\$8,000.00	\$8,000.00
O4 OOOO FARTUNORY				\$33,000.00
31 0000 EARTHWORK SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$15,000.00	\$15,000.00
Saw cut pavement	1150		\$10.00	\$11,500.00
EARTHWORK				
Site Grading	1	LS	\$13,000.00	\$13,000.00
Unclassified Excavation	400		\$50.00	\$20,000.00
EROSION CONTROL				
Erosion Control Practices	1	LS	\$5,000.00	\$5,000.00
32 0000 EXTERIOR IMPROVEMENTS				\$64,500.00
AGGREGATE BASE COURSES				
Subbase Type 2 - Concrete Pavement (6")	167.5	CY	\$55.00	\$9,212.50
Crushed Stone - Brick Pavers (6")	99	CY	\$55.00	\$5,445.00
Geotextile - Concrete Pavement	1000	SY	\$6.50	\$6,500.00
Geotextile -Brick Pavers PAVEMENTS	594	SY	\$6.50	\$3,861.00
Concrete Pavement (4")	113	CY	\$550.00	\$62,150.00
Brick Pavers	594	SY	\$125.00	\$74,250.00
Crosswalk Striping CURBS AND WALLS	1350	LF	\$2.65	\$3,577.50
Granite Curbing SITE FURNISHINGS	995	LF	\$40.00	\$39,800.00
Wayfinding Signage	2	EA	\$3,500.00	\$7,000.00
Enhancements to Existing Public Square Kiosk	1	LS	\$1,500.00	\$1,500.00
Sculpture (at Parkway/Mill St intersection) LANDSCAPING	1	EA	\$5,000.00	\$5,000.00
Topsoil and seed disturbed areas	1040	SY	\$10.00	\$10,400.00
Deciduous Trees	21	EΑ	\$2,000.00	\$42,000.00
00 0000 UTU ITIFO				\$270,696.00
33 0000 UTILITIES STORMWATER MANAGEMENT				
WQv Treatment	1	LS	\$25,000.00	\$25,000.00
			_	\$25,000.00
SITE LIGHTING				
Light Pole and Fixture/w conc. bases Wire and conduit	15	EA LF	\$4,500.00	\$67,500.00
Hand Holes	850 10		\$15.00 \$250.00	\$12,750.00 \$2,500.00
Service Connection	2		\$5,000.00	\$10,000.00
Pedestrian Bollard Lights along center walk		EA	\$1,200.00	\$12,000.00
· ·			_	\$104,750.00
SUB TOTAL				\$497,946.00
OH + Profit 15%				\$74,691.90
Escalation to Midpoint (4%)				\$19,917.84
Field Allowance 5%			_	24,897.30
TOTAL				\$617,453.04

City of Watertown

JB Wise Lot - Main Parking Lot Seating Area Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: New seating area with kiosk, tables, bike rack, shade trees, and benches at the east end of the JB Wise parking lot.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$10,000.00	\$10,000.00
Survey and Stakeout	1	LS	\$3,000.00	\$3,000.00
•				\$13,000.00
31 0000 EARTHWORK				
SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$5,000.00	\$5,000.00
Saw cut pavement	100	LF	\$10.00	\$1,000.00
EARTHWORK				
Site Grading	1	LS	\$2,500.00	\$2,500.00
Unclassified Excavation	150	CY	\$50.00	\$7,500.00
Choladoliloa Excavation	100	٠.	Ψ00.00	ψ1,000.00
EROSION CONTROL				
Erosion Control Practices	1	LS	\$2,500.00	\$2,500.00
				\$18,500.00
32 0000 EXTERIOR IMPROVEMENTS				. ,
AGGREGATE BASE COURSES				
Subbase Type 2 - Concrete Pavement (6")	2.5	CY	\$55.00	\$137.50
Crushed Stone - Brick Pavers (6")	41	CY	\$55.00	\$2,255.00
Geotextile - Concrete Pavement	15	SY	\$6.50	\$97.50
Geotextile - Brick Pavers	246	SY	\$6.50	\$1,599.00
PAVEMENTS				
Concrete Pavement (4")	2	CY	\$550.00	\$1,100.00
Brick Pavers	246	SY	\$125.00	\$30,750.00
CURBS AND WALLS				
Granite Curbing	100	LF	\$40.00	\$4,000.00
SITE FURNISHINGS				
Tables/chairs	6	EA	\$3,500.00	\$21,000.00
Benches	2	EA	\$2,500.00	\$5,000.00
Kiosk	1	EA	\$6,000.00	\$6,000.00
Bike Racks	3	EA	\$1,500.00	\$4,500.00
Trash Receptacles	1	EA	\$1,200.00	\$1,200.00
LANDSCAPING				
Topsoil and seed disturbed areas	160	SY	\$10.00	\$1,600.00
Deciduous Trees	4	EΑ	\$2,000.00	\$8,000.00
				\$87,239.00
33 0000 UTILITIES				
STORMWATER MANAGEMENT				
WQv Treatment	1	LS	\$5,000.00	\$5,000.00
			_	\$5,000.00
SUB TOTAL			_	\$123,739.00
OH + Profit 15%				\$18,560.85
Escalation to Midpoint (4%)				\$4,949.56
Field Allowance 5%				6,186.95
TOTAL				\$153,436.36

City of Watertown

JB Wise Lot - Crossing Plaza

Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: Pedestrian plaza crossing Black River Parkway near Butler Pavilion.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$10,000.00	\$10,000.00
Survey and Stakeout	1	LS	\$5,000.00	\$5,000.00
				\$15,000.00
31 0000 EARTHWORK				
SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$5,000.00	\$5,000.00
Saw cut pavement	100	LF	\$10.00	\$1,000.00
EARTHWORK				
Site Grading	1	LS	\$5,000.00	\$5,000.00
Unclassified Excavation	150	CY	\$50.00	\$7,500.00
EROSION CONTROL				
Erosion Control Practices	1	LS	\$5,000.00	\$5,000.00
			_	\$23,500.00
32 0000 EXTERIOR IMPROVEMENTS				
AGGREGATE BASE COURSES				
Subbase Type 2 - Concrete Pavement (6")	9	CY	\$55.00	\$495.00
Crushed Stone - Brick Pavers (6")	68	CY	\$55.00	\$3,740.00
Geotextile - Concrete Pavement	105	SY	\$6.50	\$682.50
Geotextile - Brick Pavers	405	SY	\$6.50	\$2,632.50
PAVEMENTS				
Concrete Pavement - walks (4")	7	CY	\$550.00	\$3,850.00
Brick Pavers	405	SY	\$125.00	\$50,625.00
Crosswalk Striping	265	LF	\$2.65	\$702.25
CURBS AND WALLS				
Granite Curbing	72	LF	\$40.00	\$2,880.00
SITE FURNISHINGS				
Sculpture at Crossing Plaza	1	EA	\$5,000.00	\$5,000.00
LANDSCAPING	005	0) (040.00	00.050.00
Topsoil and seed disturbed areas	225	SY	\$10.00	\$2,250.00
00 0000 LITH ITIES				\$72,857.25
33 0000 UTILITIES SITE LIGHTING				
Light Pole and Fixture/w conc. bases	2	_^	¢4 500 00	¢42 500 00
Wire and conduit (extend from JB Wise Lot work)	3 300	EA LF	\$4,500.00 \$15.00	\$13,500.00
Hand Holes	300	EA	\$250.00	\$4,500.00 \$750.00
Hand Holes	3	LA	\$250.00	\$18,750.00
SUB TOTAL				\$130,107.25
OH + Profit 15%				\$19,516.09
Escalation to Midpoint (4%)				\$5,204.29
Field Allowance 5%				6,505.36
TOTAL				\$161,332.99

City of Watertown

JB Wise Lot - Crossing Plaza

Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: A new crosswalk with ramp connecting the central corridor through the JB Wise parking lot to the eastern end of Newell Street.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$8,000.00	\$8,000.00
Survey and Stakeout	1	LS	\$2,000.00	\$2,000.00
				\$10,000.00
030000 CONCRETE				
CAST-IN-PLACE				
Concrete Ramp - Walls and Footings	51	CY	\$500.00	\$25,500.00 \$25,500.00
31 0000 EARTHWORK				\$25,500.00
SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$1,500.00	\$1,500.00
wise. One periodicion		LO	ψ1,300.00	ψ1,300.00
EARTHWORK				
Site Grading	1	LS	\$1,000.00	\$1,000.00
Unclassified Excavation		CY	\$50.00	\$1,500.00
			•	* ,
EROSION CONTROL				
Erosion Control Practices	1	LS	\$1,500.00	\$1,500.00
				\$5,500.00
32 0000 EXTERIOR IMPROVEMENTS				
AGGREGATE BASE COURSES				
Subbase Type 2 - Concrete Pavement (6")	5	CY	\$55.00	\$275.00
Subbase - Ramp walls and footings (12")	8	CY	\$55.00	\$440.00
Geotextile - Concrete Pavement	28	SY	\$6.50	\$182.00
PAVEMENTS II. (41)				
Concrete Pavement - walks (4")	3	CY	\$550.00	\$1,650.00
Concrete Pavement - for ramp (4")	6	CY	\$550.00	\$3,300.00
Crosswalk Striping CURBS AND WALLS	135	LF	\$2.65	\$357.75
Granite Curbing	72	LF	\$40.00	\$2,880.00
SITE FURNISHINGS	12	LI	\$40.00	\$2,000.00
Benches	1	EA	\$2,500.00	\$2,500.00
Ramp Handrail	165	LF	\$75.00	\$12,375.00
LANDSCAPING	103	Li	Ψ75.00	Ψ12,373.00
Topsoil and seed disturbed areas	30	SY	\$10.00	\$300.00
		٠.	Ψ.σ.σσ	\$24,259.75
33 0000 UTILITIES				4 ,
SITE LIGHTING				
Light Pole and Fixture/w conc. bases	1	EA	\$4,500.00	\$4,500.00
Wire and conduit	175	LF	\$15.00	\$2,625.00
Hand Holes	1	EA	\$250.00	\$250.00
				\$7,375.00
SUB TOTAL				\$47,134.75
OH + Profit 15%				\$7,070.21
Escalation to Midpoint (4%)				\$1,885.39
Field Allowance 5%				2,356.74
TOTAL				\$58,447.09
· • · · · ·				+ 55, . 66

City of Watertown

Entry Plaza and Sidewalk, including the eastern end of Newell Street to Veterans Memorial Riverwalk. Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: New sidewalk and sculpture/sign along Mill Street; new sidewalk, brick, and lighting on north side of Newell Street, to Adirondack River Outfitters; brick plaza area with sculpture/sign outside Adirondack River Outfitters (up to Riverwalk entry); crosswalk and ramp from JB Wise lot; brick crossing plaza and sculpture/sign on Black River Parkway from JB Wise lot; bike racks, benches, and kiosk in plaza area.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$20,000.00	\$20,000.00
Survey and Stakeout	1	LS	\$5,000.00	\$5,000.00
04 0000 FARTHMORK				\$25,000.00
31 0000 EARTHWORK SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$15,000.00	\$15,000.00
Saw cut pavement	500	LF	\$10.00	\$5,000.00
out out paromone	300		Ψ10.00	ψ5,000.00
EARTHWORK				
Site Grading	1	LS	\$8,000.00	\$8,000.00
Unclassified Excavation	400	CY	\$50.00	\$20,000.00
EROSION CONTROL				
Erosion Control Practices	1	LS	\$3,500.00	\$3,500.00
				\$51,500.00
32 0000 EXTERIOR IMPROVEMENTS				
AGGREGATE BASE COURSES	40	CV	CEE 00	\$ 550.00
Subbase Type 2 - Concrete Pavement (6")	10 114	CY CY	\$55.00 \$55.00	\$550.00
Crushed Stone - Brick Pavers (3") Geotextile - Concrete Pavement	56	SY	\$55.00 \$6.50	\$6,270.00 \$364.00
Geotextile - Goriciete i avernent	680	SY	\$6.50	\$4,420.00
PAVEMENTS	000	01	ψ0.50	ψ+,+20.00
Concrete Pavement - walks (4")	6	CY	\$550.00	\$3,300.00
Brick Pavers	680	SY	\$125.00	\$85,000.00
CURBS AND WALLS				
Granite Curbing	110	LF	\$40.00	\$4,400.00
SITE FURNISHINGS				
Handrail	170	LF	\$75.00	\$12,750.00
Benches	6		\$2,500.00	\$15,000.00
Kiosk	1	EA	\$6,000.00	\$6,000.00
Bike Racks	6		\$1,500.00	\$9,000.00
Sculpture Trock Recenteds	1	EA EA	\$5,000.00	\$5,000.00
Trash Receptacle LANDSCAPING	1	EA	\$1,200.00	\$1,200.00
Topsoil and seed disturbed areas	1	LS	\$6,000.00	\$6,000.00
Deciduous Trees	6	EA	\$2,000.00	\$12,000.00
200.00000	Ü		Ψ2,000.00	\$171,254.00
33 0000 UTILITIES				***************************************
STORMWATER MANAGEMENT				
WQv Treatment	1	LS	\$15,000.00	\$15,000.00
			_	\$15,000.00
SITE LIGHTING				
Light Pole and Fixture/w conc. bases	6	EA	\$4,500.00	\$27,000.00
Wire and conduit	250	LF	\$15.00	\$3,750.00
Hand Holes	3		\$250.00	\$750.00
Service Connection	1	EA	\$5,000.00	\$5,000.00
				\$36,500.00
SUB TOTAL				\$299,254.00
			_	
OH + Profit 15%				\$44,888.10
Escalation to Midpoint (4%)				\$11,970.16
Field Allowance 5%			_	14,962.70
TOTAL				\$274 074 OC
IOIAL				\$371,074.96

City of Watertown

Veterans Memorial Riverwalk

Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: Replacement of pavement with lawn area along Veterans Memorial Riverwalk; painted murals on the retaining wall; trimming of riverbank vegetation; new benches and trash receptacles; and a play area with new trees, picnic tables, a bike rack, and play equipment.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$10,000.00	\$10,000.00
Survey and Stakeout	1	LS	\$5,000.00	\$5,000.00
			· <u></u>	\$15,000.00
31 0000 EARTHWORK				
SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$5,000.00	\$5,000.00
Clearing and Grubbing - Play Area	0.1		\$15,000.00	\$1,500.00
Selective Tree Trimming & Invasives Removal Along Bank	1	LS	\$10,000.00	\$10,000.00
EARTHWORK				
Unclassified Excavation (near retaining wall)	250	CY	\$50.00	\$12,500.00
Import Fill (near retaining wall)	150	CY	\$35.00	\$5,250.00
Import Topsoil (near retaining wall)	100	CY	\$50.00	\$5,000.00
Site Grading (near retaining wall)	1	LS	\$5,000.00	\$5,000.00
Site Grading (play area)	1	LS	\$5,000.00	\$5,000.00
EROSION CONTROL				
Erosion Control Practices	1	LS	\$7,500.00	\$7,500.00
				\$56,750,00
32 0000 EXTERIOR IMPROVEMENTS				, ,
SITE FURNISHINGS				
Picnic Tables	6	EA	\$2,000.00	\$12,000.00
Benches	10	EA	\$2,500.00	\$25,000.00
Bike Racks	3	EA	\$1,500.00	\$4,500.00
Trash Receptacles	2	EA	\$1,200.00	\$2,400.00
Play Structure Kids	1	EA	\$35,000.00	\$35,000.00
Play Structure Tots	1	EA	\$15,000.00	\$15,000.00
Murals (along 400 LF +/- of retaining wall)	1	LS	\$10,000.00	\$10,000.00
LANDSCAPING				
Topsoil and seed disturbed areas	550	SY	\$10.00	\$5,500.00
Deciduous Trees	2	EA	\$2,000.00	\$4,000.00
				\$113,400.00
SUB TOTAL			_	\$185,150.00
OH + Profit 15%				\$27,772.50
Escalation to Midpoint (4%)				\$7,406.00
Field Allowance 5%				9,257.50
TOTAL				\$229,586.00

City of Watertown

Veterans Memorial Riverwalk

Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: Sidewalk from Farmers' Market Pavilion to new Waterfall Overlook; brick, trees, and lighting at Overlook; sidewalk and stair from Overlook to Pavilion and from Marshall Place parking lot to Black River Parkway.

Note: Potential Rock Removal Costs for Stairways is EXCLUDED

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$20,000.00	\$20,000.00
Survey and Stakeout	1	LS	\$10,000.00	\$10,000.00
31 0000 EARTHWORK				\$30,000.00
SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$7,500.00	\$7,500.00
Clearing and Grubbing - Stairways	0.1	AC	\$15,000.00	\$1,500.00
Olcaring and Grubbing Gtall ways	0.1	AC	ψ13,000.00	ψ1,500.00
EARTHWORK				
Unclassified Excavation	300	CY	\$50.00	\$15,000.00
Site Grading	1	LS	\$10,000.00	\$10,000.00
C			• -,	* 1,111
EROSION CONTROL				
Erosion Control Practices	1	LS	\$7,500.00	\$7,500.00
				\$41,500.00
32 0000 EXTERIOR IMPROVEMENTS				
AGGREGATE BASE COURSES				
Subbase Type 2 - Concrete Pavement (6")	82	CY	\$55.00	\$4,510.00
Crushed Stone - Brick Pavers (6") - Waterfall Overlook	20	CY	\$55.00	\$1,100.00
Geotextile - Concrete Pavement	500	SY	\$6.50	\$3,250.00
Geotextile - Brick Pavers - Waterfall Overlook	120	SY	\$6.50	\$780.00
PAVEMENTS				
Concrete Pavement - walks (4")	54	CY	\$550.00	\$29,700.00
Brick Pavers - Waterfall Overlook	120	SY	\$125.00	\$15,000.00
Crosswalk Striping	400	LF	\$2.65	\$1,060.00
CURBS AND WALLS	70	LF	£40.00	# 2 000 00
Granite Curbing Stairway: Marshall Place to Black River Parkway	70 1	LS	\$40.00 \$30,000.00	\$2,800.00
Steel Handrails: Marshall Place to Black River Parkway	190	LF	\$30,000.00 \$75.00	\$30,000.00 \$14,250.00
Stairway: Black River Parkway to Pavilion	190	LS	\$35,000.00	\$35,000.00
Steel Handrails: Black River Parkway to Pavilion Stair	190	LF	\$75.00	\$14,250.00
Steel Handrails: Waterfall Overlook	80	LF	\$75.00	\$6,000.00
SITE FURNISHINGS	00		ψ10.00	ψο,σσσ.σσ
Benches - Waterfall Overlook	6	EA	\$2,500.00	\$15,000.00
Bench - Top of Stairway	1	EA	\$2,500.00	\$2,500.00
Sculpture - Top of Stairway	1	EA	\$5,000.00	\$5,000.00
LANDSCAPING				
Topsoil and seed disturbed areas	650	SY	\$10.00	\$6,500.00
Deciduous Trees - Waterfall Overlook	3	EA	\$2,000.00	\$6,000.00
				\$192,700.00
33 0000 UTILITIES				
SITE LIGHTING				
Light Pole and Fixture/w conc. bases		EΑ	\$4,500.00	\$85,500.00
Wire and conduit	1100	LF	\$15.00	\$16,500.00
Hand Holes	5	EA	\$250.00	\$1,250.00
Service Connection	1	EA	\$5,000.00	\$5,000.00
				\$108,250.00
OUD TOTAL				4070 450 00
SUB TOTAL			_	\$372,450.00
OLL - Destit 450/				MEE 007 50
OH + Profit 15%				\$55,867.50
Escalation to Midpoint (4%) Field Allowance 5%				\$14,898.00
i idia Allowatice 370			_	18,622.50
TOTAL				\$464 020 00
IOIAL				\$461,838.00

City of Watertown Newell Street

Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: Arrival/drop-off circle at east end of Newell Street with sculpture/sign; new curbing, brick treatment, new sidewalks, lighting, and trees along Newell Street; seating area under Court Street Bridge; new crosswalk striping; (2) information kiosks and (3) bike racks. Work extends from Veterans' Memorial Riverwalk to Engine Street.

Mata, Mark in	area requiring	a a a u i a i t i a n	haa baan	avaludad

Note: Work in area requiring acquisition has been excluded. DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS	3(1)	5	J 1 11	, 5111
General Requirements	1	LS	\$60,000.00	\$60,000.00
Survey and Stakeout	1	LS	\$10,000.00	\$10,000.00
,			_	\$70,000.00
31 0000 EARTHWORK				
SITE CLEARING AND REMOVALS				
Selective Tree Trimming	1	LS	\$5,000.00	\$5,000.00
Misc. Site Demolition	1	LS	\$35,000.00	\$35,000.00
Remove Concrete Walks	1	LS	\$15,000.00	\$15,000.00
Saw cut pavement	4280	LF	\$6.00	\$25,680.00
EARTHWORK				
Site Grading	1	LS	\$25,000.00	\$25,000.00
Unclassified Excavation	950	CY	\$50.00	\$47,500.00
EROSION CONTROL			# 40 000 00	* 40.000.00
Erosion Control Practices	1	LS	\$10,000.00	
22 0000 EXTERIOR IMPROVEMENTS				\$163,180.00
32 0000 EXTERIOR IMPROVEMENTS AGGREGATE BASE COURSES				
Subbase Type 2 - Concrete Pavement	233	CY	\$55.00	\$12,815.00
Subbase Type 2 - Stamped Concrete Pavement - Court St Bridge	233 55	CY	\$55.00 \$55.00	\$3,025.00
Subbase Type 2 - Stamped Controller avernment - Count St Bridge Subbase Type 2 - Asphalt Pavement at Circle	170	CY	\$55.00 \$55.00	\$9,350.00
Subbase Type 2 - Asphalt Pavement at Guilfoyle Parking Lot	132	CY	\$55.00 \$55.00	\$7,260.00
Crushed Stone - Brick Pavers	164	CY	\$55.00	\$9,020.00
Geotextile - Concrete Pavement	1400	SY	\$6.50	\$9,100.00
Geotextile - Stamped Concrete Pavement - Court St Bridge	310	SY	\$6.50	\$2,015.00
Geotextile - Brick Pavers	976	SY	\$6.50	\$6,344.00
Geotextile - Asphalt Pavement at Circle	500	SY	\$6.50	\$3,250.00
Geotextile - Asphalt Pavement at Guilfoyle Parking Lot	792	SY	\$6.50	\$5,148.00
PAVEMENTS	. 02	٠.	ψ0.00	ψο, ι ισισσ
Concrete Pavement	155	CY	\$550.00	\$85,250.00
Stamped Concrete Pavement - Court St Bridge	310	SY	\$65.00	\$20,150.00
Brick Pavers	976	SY	\$125.00	\$122,000.00
Asphalt Pavement at Circle	500	SY	\$45.00	\$22,500.00
Asphalt Pavement at Guilfoyle Parking Lot	792	SY	\$45.00	\$35,640.00
Crosswalk Striping	1190	LF	\$2.65	\$3,153.50
Parking Lot Striping	185	LF	\$2.65	\$490.25
CURBS AND WALLS			·	
Granite Curbing	4280	LF	\$40.00	\$171,200.00
SITE FURNISHINGS				
Murals - Court St Bridge	1	LS	\$4,000.00	\$4,000.00
Benches - Court St Bridge	8	EA	\$2,500.00	\$20,000.00
Kiosk at Circle	2	EA	\$6,000.00	\$12,000.00
Bike Racks at Circle	3	EA	\$1,500.00	\$4,500.00
Sculpture in Circle	1	EA	\$5,000.00	\$5,000.00
LANDSCAPING				
Topsoil and seed disturbed areas	700	SY	\$10.00	\$7,000.00
Deciduous Trees	27	EA	\$2,000.00	\$54,000.00
				\$634,210.75
33 0000 UTILITIES				
STORMWATER MANAGEMENT				
WQv Treatment	1	LS	\$25,000.00	\$25,000.00
				\$25,000.00
SITE LIGHTING				
Light Pole and Fixture/w conc. bases	37		\$4,500.00	\$166,500.00
Wire and conduit	2300	LF	\$15.00	\$34,500.00
Hand Holes	14		\$250.00	\$3,500.00
Service Connection	4	EA	\$5,000.00	\$20,000.00
				\$224,500.00
OUD TOTAL				£4 446 000 7-
SUB TOTAL			_	\$1,116,890.75
OU B (1) 45%				A407 :
OH + Profit 15%				\$167,533.61
Escalation to Midpoint (4%)				\$44,675.63
Field Allowance 5%			_	55,844.54
ΤΟΤΔΙ				\$1 384 944 53

TOTAL \$1,384,944.53

City of Watertown

Newell Street - East of Veterans Memorial Riverwalk Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: Sidewalk and brick to the east of Veterans Memorial Riverwalk, lighting, street trees, two signs/sculptures and crosswalk and parking striping.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$12,000.00	\$12,000.00
Survey and Stakeout	1	LS	\$4,000.00	\$4,000.00 \$16,000.00
31 0000 EARTHWORK				\$10,000.00
SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$5,000.00	\$5,000.00
Saw cut pavement	350	LF	\$6.00	\$2,100.00
EARTHWORK				
Site Grading	1	LS	\$5,000.00	\$5,000.00
Unclassified Excavation	150	CY	\$50.00	\$7,500.00
EROSION CONTROL				
Erosion Control Practices	1	LS	\$5,000.00	\$5,000.00
	•		Ψο,σσσ.σσ	\$24,600.00
32 0000 EXTERIOR IMPROVEMENTS AGGREGATE BASE COURSES				
Subbase Type 2 - Concrete Pavement	34	CY	\$55.00	\$1,870.00
Crushed Stone - Brick Pavers	28	CY	\$55.00 \$55.00	\$1,540.00
Geotextile - Concrete Pavement	200	SY	\$6.50	\$1,300.00
Geotextile - Concrete r avernent	167	SY	\$6.50	\$1,085.50
PAVEMENTS	107	01	ψ0.50	ψ1,000.50
Concrete Pavement	22	CY	\$550.00	\$12,100.00
Brick Pavers	167	SY	\$125.00	\$20,875.00
Crosswalk Striping	185	LF	\$2.65	\$490.25
Parking Lot Striping	540	LF	\$2.65	\$1,431.00
CURBS AND WALLS	340	LI	Ψ2.03	ψ1,431.00
Granite Curbing	375	LF	\$40.00	\$15,000.00
SITE FURNISHINGS	0.0		ψ10.00	ψ10,000.00
Sculpture	1	EΑ	\$5,000.00	\$5,000.00
LANDSCAPING	·		ψο,σσσ.σσ	φο,σσσ.σσ
Deciduous Trees	4	EΑ	\$2,000.00	\$8,000.00
				\$68,691.75
33 0000 UTILITIES				
STORMWATER MANAGEMENT				
WQv Treatment	1	LS	\$25,000.00	\$25,000.00
SITE LIGHTING				\$25,000.00
Light Pole and Fixture/w conc. bases	5	EA	\$4,500.00	\$22,500.00
Wire and conduit	400	LF	\$15.00	\$6,000.00
Hand Holes	2	EA	\$250.00	\$500.00
Service Connection	1	EA	\$5,000.00	\$5,000.00
Scivice Scinication	,	LA	ψο,οοο.οο	\$34,000.00
SUB TOTAL				\$168,291.75
OH + Profit 15%				\$25,243.76
Escalation to Midpoint (4%)				\$6,731.67
Field Allowance 5%			_	8,414.59
TOTAL				\$000 004
IOIAL				\$208,681.77

City of Watertown Arch Street

Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: Replacement of asphalt pavement with brick pavers, installation of granite curbing, installation of lawn area with lihgting and trees, (1) sculpture/sign at Court Street.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$10,000.00	\$10,000.00
Survey and Stakeout	1	LS	\$2,500.00	\$2,500.00
				\$12,500.00
31 0000 EARTHWORK				
SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$10,000.00	\$10,000.00
Saw cut pavement	50	LF	\$10.00	\$500.00
EARTHWORK				
Unclassified Excavation	450	CY	\$50.00	\$22,500.00
Import Fill	150	CY	\$35.00	\$5,250.00
Import Topsoil	100	CY	\$50.00	\$5,000.00
Site Grading	1	LS	\$10,000.00	\$10,000.00
EROSION CONTROL				
Erosion Control Practices	1	LS	\$2,500.00	\$2,500.00
				\$55,750.00
32 0000 EXTERIOR IMPROVEMENTS				
AGGREGATE BASE COURSES				
Subbase Type 2 - Concrete Pavement	5	CY	\$55.00	\$275.00
Crushed Stone - Brick Pavers	80	CY	\$55.00	\$4,400.00
Geotextile - Concrete Pavement	30	SY	\$6.50	\$195.00
Geotextile - Brick Pavers	480	SY	\$6.50	\$3,120.00
PAVEMENTS				
Concrete Pavement - walks (4")	5	CY	\$550.00	\$2,750.00
Brick Pavers	480	SY	\$125.00	\$60,000.00
CURBS AND WALLS				
Granite Curbing	700	LF	\$40.00	\$28,000.00
SITE FURNISHINGS				
Sculpture	1	EA	\$5,000.00	\$5,000.00
LANDSCAPING				
Topsoil and seed disturbed areas	690	SY	\$10.00	\$6,900.00
Deciduous Trees	6	EA	\$2,000.00	\$12,000.00
				\$122,640.00
33 0000 UTILITIES				
SITE LIGHTING				
Light Pole and Fixture/w conc. bases	6	EA	\$4,500.00	\$27,000.00
Wire and conduit	285	LF	\$15.00	\$4,275.00
Hand Holes	3	EA	\$250.00	\$750.00
Service Connection	1	EA	\$5,000.00	\$5,000.00
				\$37,025.00
SUB TOTAL			_	\$227,915.00
OH + Profit 15%				\$34,187.25
Escalation to Midpoint (4%)				\$9,116.60
Field Allowance 5%				11,395.75
TOTAL				\$282,614.60

City of Watertown North Meadow Street

Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: Replacement of asphalt pavement (beyond driveway entries) with lawn; removal of (2) curb cuts; new sidewalks along the north end of the street; installation of new pedestrian sidewalk, bollards at Black River Parkway, lighting, and street trees.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$10,000.00	\$10,000.00
Survey and Stakeout	1	LS	\$2,500.00	\$2,500.00
				\$12,500.00
31 0000 EARTHWORK				
SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$25,000.00	\$25,000.00
Saw cut pavement	50	LF	\$10.00	\$500.00
EARTHWORK				
Unclassified Excavation	400	CY	\$50.00	\$20,000.00
Import Fill	270	CY	\$35.00	\$9,450.00
Import Topsoil	130	CY	\$50.00	\$6,500.00
Site Grading	1	LS	\$10,000.00	\$15,000.00
EROSION CONTROL				
Erosion Control Practices	1	LS	\$2,500.00	\$2,500.00
2.00.0 000 1.00.000	·		<u></u>	\$78,950.00
32 0000 EXTERIOR IMPROVEMENTS				***************************************
Subbase Type 2 - Concrete Pavement	75	CY	\$55.00	\$4,125.00
Geotextile - Concrete Pavement	430	SY	\$6.50	\$2,795.00
PAVEMENTS			•	. ,
Concrete Pavement	110	CY	\$550.00	\$60,500.00
CURBS AND WALLS				
Granite Curbing	305	LF	\$40.00	\$12,200.00
SITE FURNISHINGS				
Bollards	8	EA	\$1,200.00	\$9,600.00
LANDSCAPING				
Topsoil and seed disturbed areas	1170	SY	\$10.00	\$11,700.00
Deciduous Trees	5	EA	\$2,000.00	\$10,000.00
				\$110,920.00
33 0000 UTILITIES				
SITE LIGHTING				
Light Pole and Fixture/w conc. bases	6	EA	\$4,500.00	\$27,000.00
Wire and conduit	285	LF	\$15.00	\$4,275.00
Hand Holes	5	EA	\$250.00	\$1,250.00
Service Connection	1	EA	\$5,000.00	\$5,000.00
				\$37,525.00
SUB TOTAL			<u>-</u>	\$239,895.00
OH + Profit 15%				\$35,984.25
Escalation to Midpoint (4%)				\$9,595.80
Field Allowance 5%			_	11,994.75
TOTAL				\$297,469.80

City of Watertown Howk Street

Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: new sidewalks and brick treatment along both sides of the street; new curbing; installation of pedestrian lighting and new street trees; striping of on-street parking; surface treatment for dedicated bike lane; and safety bollards for bike lane.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$20,000.00	\$20,000.00
Survey and Stakeout	1	LS	\$5,000.00	
O4 OOOO FARTINAORK				\$25,000.00
31 0000 EARTHWORK SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$25,000.00	\$25,000.00
Saw cut pavement	940		\$10.00	\$9,400.00
Caw cat pavement	340	Li	ψ10.00	ψ3,400.00
EARTHWORK				
Site Grading	1	LS	\$15,000.00	\$15,000.00
Unclassified Excavation	500	CY	\$50.00	\$25,000.00
EROSION CONTROL				
Erosion Control Practices	1	LS	\$5,000.00	\$5,000.00
				\$79,400.00
32 0000 EXTERIOR IMPROVEMENTS AGGREGATE BASE COURSES				
Subbase Type 2 - Concrete Pavement	90	CY	\$55.00	\$4,950.00
Crushed Stone - Brick Pavers	50	CY	\$55.00	\$2,750.00
Geotextile - Concrete Pavement	520	SY	\$6.50	\$3,380.00
Geotextile - Brick Pavers	300	SY	\$6.50	\$1,950.00
PAVEMENTS				
Concrete Pavement	60	CY	\$550.00	\$33,000.00
Brick Pavers	300	SY	\$125.00	\$37,500.00
Bike Lane (thermoplastic coating)	250	SY	\$65.00	\$16,250.00
Pavement Striping	1750	LF	\$2.65	\$4,637.50
CURBS AND WALLS	0.40		0.40.00	* 07.000.00
Granite Curbing	940	LF	\$40.00	\$37,600.00
SITE FURNISHINGS Safety Bollards for Bike Lane	60	EA	\$250.00	\$15,000.00
LANDSCAPING	60	EA	\$250.00	\$15,000.00
Topsoil and seed disturbed areas	500	SY	\$10.00	\$5,000.00
Deciduous Trees	9	EA	\$2,000.00	\$18,000.00
	Ü	_, .	<u></u>	\$180,017.50
33 0000 UTILITIES				,,
SITE LIGHTING			0.4 5 00 00	040 500 00
Light Pole and Fixture/w conc. bases	11	EA	\$4,500.00	\$49,500.00
Wire and conduit Hand Holes	500	LF	\$15.00	\$7,500.00
Service Connection	5 1	EA EA	\$250.00	\$1,250.00
Service Connection	'	EA	\$5,000.00	\$5,000.00 \$63,250.00
				_
SUB TOTAL			_	\$347,667.50
OH + Profit 15%				\$52,150.13
Escalation to Midpoint (4%)				\$13,906.70
Field Allowance 5%			_	17,383.38
TOTAL				\$431,107.70

City of Watertown Whitewater Park

Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: Replacement of existing gravel path with FlexiPave porous pavement; installation of new site furnishings: picnic tables, benches, informational kiosk, and bike racks.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$6,000.00	\$6,000.00
				\$6,000.00
31 0000 EARTHWORK				
SITE CLEARING AND REMOVALS Misc. Site Demolition			ΦE 000 00	ФE 000 00
WISC. Site Demolition	1	LS	\$5,000.00	\$5,000.00
EARTHWORK				
Site Grading	1	LS	\$5,000.00	\$5,000.00
Unclassified Excavation	100	CY	\$50.00	\$5,000.00
EROSION CONTROL				
Erosion Control Practices	1	LS	\$2,500.00	\$2,500.00
2.00001 Control 1 Tablesco	•		<u></u>	\$17,500.00
32 0000 EXTERIOR IMPROVEMENTS				,
AGGREGATE BASE COURSES				
Crushed Stone Subbase - Flexi Pave pavement	100	CY	\$55.00	\$5,500.00
PAVEMENTS				
Flexi Pave pavement	680	SY	\$55.00	\$37,400.00
SITE FURNISHINGS				
Picnic Tables	4	EA	\$3,500.00	\$14,000.00
Benches	6	EA	\$2,500.00	\$15,000.00
Kiosk	1	EA	\$6,000.00	\$6,000.00
Bike Racks	3	EA	\$1,500.00	\$4,500.00
LANDSCAPING				
Topsoil and seed disturbed areas	500	SY	\$10.00	\$5,000.00
Plantings: wildflowers and shrubs - pollinator garden	1	LS	\$5,000.00	\$5,000.00
Deciduous Trees	7	EA	\$2,000.00	\$14,000.00
				\$106,400.00
SUB TOTAL				\$129,900.00
			_	-
OH + Profit 15%				\$19,485.00
Escalation to Midpoint (4%)				\$5,196.00
Field Allowance 5%			_	6,495.00
TOTAL				\$161,076.00

City of Watertown Engine Street

Schematic Design: Preliminary Cost Estimate

June 2019

Estimate includes: New curbing on west side ofEngine street, brick treatment, new sidewalks, lighting, and trees. Work extends from Newell Street to Coffeen Street.

DESCRIPTION	QTY	UNIT	UNIT PR	AMOUNT
01 0000 GENERAL REQUIREMENTS				
General Requirements	1	LS	\$20,000.00	\$20,000.00
Survey and Stakeout	1	LS	\$5,000.00	\$5,000.00
				\$25,000.00
31 0000 EARTHWORK				
SITE CLEARING AND REMOVALS				
Misc. Site Demolition	1	LS	\$25,000.00	\$25,000.00
Saw cut pavement	500	LF	\$6.00	\$3,000.00
EARTHWORK				
Site Grading	1	LS	\$15,000.00	\$15,000.00
Unclassified Excavation	500	CY	\$50.00	\$25,000.00
EROSION CONTROL				
Erosion Control Practices	1	LS	\$5,000.00	\$5,000.00
			_	\$73,000.00
32 0000 EXTERIOR IMPROVEMENTS				
AGGREGATE BASE COURSES	40	0)/	055.00	40.000.00
Subbase Type 2 - Concrete Pavement	40	CY	\$55.00	\$2,200.00
Crushed Stone - Brick Pavers	31	CY	\$55.00	\$1,705.00
Geotextile - Concrete Pavement	239	SY	\$6.50	\$1,553.50
Geotextile -Brick Pavers PAVEMENTS	186	SY	\$6.50	\$1,209.00
Concrete Pavement	27	CY	\$550.00	\$14,850.00
Brick Pavers	186	SY	\$125.00	\$23,250.00
Crosswalk Striping	70	LF	\$2.65	\$185.50
CURBS AND WALLS				
Granite Curbing	450	LF	\$40.00	\$18,000.00
LANDSCAPING				
Topsoil and seed disturbed areas	100	SY	\$10.00	\$1,000.00
Deciduous Trees	7	EA	\$2,000.00	\$14,000.00
				\$77,953.00
33 0000 UTILITIES				
SITE LIGHTING				
Light Pole and Fixture/w conc. bases	8	EA	\$4,500.00	\$36,000.00
Wire and conduit	500	LF	\$15.00	\$7,500.00
Hand Holes	3	EA	\$250.00	\$750.00
Service Connection	1	EA	\$5,000.00	\$5,000.00
				\$49,250.00
SUB TOTAL			_	\$225,203.00
OLL - Profit 450/				#22.700.45
OH + Profit 15%				\$33,780.45
Escalation to Midpoint (4%)				\$9,008.12
Field Allowance 5%			_	11,260.15
TOTAL				\$279,251.72

Appendix D: NYS DEC Provided Plant Lists

The following documents were provided by NYS DEC staff to serve as reference materials for viewshed vegetation management, particularly along the steep slopes and bank areas.

- Historically Present Plant Species in the Waterfront Revitalization Area
- List of plants used in the NYS Finger Lakes Region for overlook planting, as of Fall 2017

Appendix D Page 86

Historically Present Plant Species in the Waterfront Revitalization Area

Table 1: Screenshot of the list of rare plant species that have historically been found at the project site.

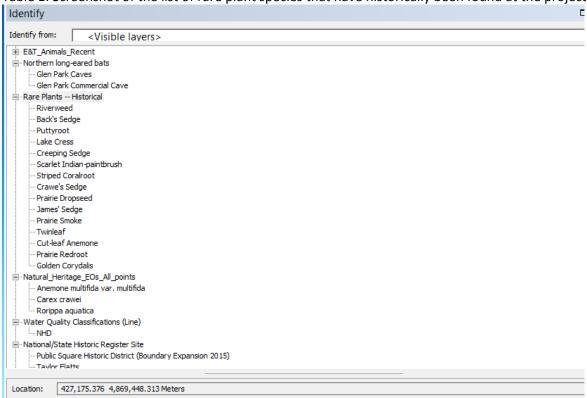


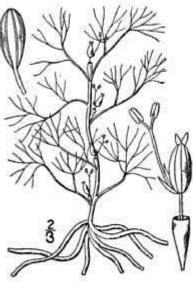
Table 2: Additional information about the historically present plant species at the project site.

	Scientific Name	Common Name	WIS	NYS Status	Sold by
1	Podostemum ceratophyllum	hornleaf riverweed	OBL	Threatened (S2S3, G5)	May be hard to find
2	Carex backii	back's sedge	UPL	Threatened (S2S3, G4)	May be hard to find
3	Aplectrum hyemale	puttyroot	FAC	Endangered (S1, G5)	Izel
4	Neobeckia aquatica	lakecress	OBL	Threatened (S2)	May be hard to find
5	Carex chordorrhiza	creeping sedge	OBL	Threatened (S2, G5)	May be hard to find
6	Castilleja coccinea	scarlet Indian paintbrush	FAC	Endangered (S1, G5)	Prairie Moon Nursery
7	Corallorhiza striata	striped coralroot	FACU	Endangered (S1, G5T4T5)	May be hard to find
8	Carex crawei	Crawe's sedge	FACW	Threatened (S2, G5)	May be hard to find
9	Sporobolus heterolepis	prairie dropseed*	FACU	Threatened (S2, G5)	Prairie Moon Nursery
10	Carex jamesii	James' sedge	UPL	Threatened (S2S3, G5)	Prairie Moon Nursery
11	Geum triflorum	prairie smoke*	UPL	Threatened (S2, G5)	Prairie Moon Nursery
12	Jeffersonia diphylla	twinleaf	UPL	Threatened (S2, G5)	Prairie Moon Nursery
13	Anemone multifida	cut-leaf anemone	UPL	Not persisting (SX, G5)	Splitrock Environmental
14	Ceanothus americanus	New Jersey tea*	UPL Shrub	Endangered (S1, G5)	Pinelands Nursery
15	Corydalis aurea	golden corydalis	UPL	Threatened S2	B&T World Seeds

Images of the Listed Plant Species in the Order They Appeared in GIS

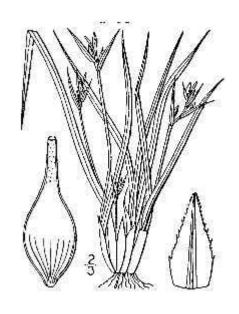
1. Hornleaf riverweed (Podostemum ceratophyllum)





2. Back's sedge (Carex backii)





3. Aplectrum hyemale (puttyroot) – Can be purchased from Izel Nursey



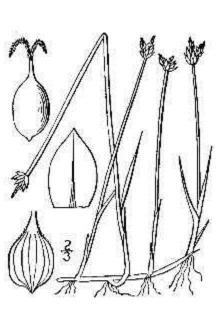


4. Lake cress





5. Creeping sedge (Carex chordorrhiza)





6. Indian paintbrush (Castilleja coccinea) – Can be purchased from Prairie Moon Nursery





7. Striped coralroot (Corallorhiza striata)





8. Crawe's sedge (Carex crawei)





9. Prairie dropseed (Sporobolus heterolepis) – Can be purchased from Prairie Moon Nursery





10. James' sedge (Carex jamesii) – Can be purchased from Prairie Moon Nursery





11. Prairie smoke (Geum triflorum) – Can be purchased from Prairie Moon Nursery



12. Twinleaf (Jeffersonia diphylla) – Can be purchased from Prairie Moon Nursery



13. Cut-leaf anemone (Anemone multifida) – Can be purchased from Splitrock Environmental



14. New Jersey tea (Ceanothus herbaceus) – Can be purchased from Pinelands Nursery





15. Golden corydalis (Corydalis aurea) – Can be purchased from B&T Nursery





Overlook Plants Fall 2017-	Desmodium canadense- Showy Tick Trefoil		
Acer penzylvanicum-Striped Maple	Diervilla lonicera-Nothern Bush Honeysuckle		
Ageratina altissima-White Snakeroot	Dryopteris marginalis- Marginal Shield Fern		
Agastache scrophulariifolia- Purple Giant	Echinacea pallida- Pale purple Coneflower		
Hyssop	Eupatorium perfoliatum- Common Boneset		
Amelachier Canadensis-Shadblow Serviceberry	Euphorbia corollata- Flowering spurge		
Anaphalias margaritacea- Western Pearly Everlasting	Eurybia divaricate-White Wood Aster		
Allium cernuum- Nodding Onion	Eurybia macrophylla- Large-leafed Aster		
Anemone canadensis-Canadian Thimbleweed	Eurybia macrophylla-Large Leafed Aster		
Anemone virginiana-Tall Thimbleweed	Eutrochium maculatum- Spotted Joe-Pye Weed		
Apocynum cannabium-Dogbane	Hamamelis virginiana-Witch Hazel		
Aquilegia Canadensis-Wild Columbine	Helianthus divaricatus- Rough Sunflower		
Aruncus dioicus-Goatsbeard	Heliopsis helianthoides- Oxeye		
Asclepias incarnata- Swamp Milkweed	Hypericum prolificum- Shrubby St. John's Wort		
Asclepias syriaca- Common Milkweed	Impatiens capensis-Jewelweed		
Asclepias tuberosa- Butterfly Weed	Liatris spicata-Dense Blazing Star		
Asclepias verticillate-Whirled Milkweed	Lindera benzoin-Northern Spicebush		
Baptisia australis-Blue Wild Indigo	Liriodendron tulipifera-Tulip Poplar		
Baptisia tinctoria- Yellow Wild Indigo	Lobelia cardinalis-Cardinal Flower		
Blephilia ciliate- Downy Wood Mint	Lobelia siphilitica- Great Lobelia or Blue Cardinal Flower		
Bouteloua Curtipendula- Sideoats Grama	Lupinus perennis- Wild Lupine		
Campanula rotundifolia- Harebell	Magnolia acuminate-Cucumber Tree		
Carex appalachica-Appalachian Sedge	Monarda bradburiana-Bradbury Beebalm		
Carex eburnean- Bristle-leaf Sedge	Monarda didyma- Scarlet Beebalm		
Carex pensylvanica- Pennsylvania Sedge	Monarda fistulosa- Wild Bergamot		
Carex plantaginea-Broadleaf Sedge	Monarda punctate- Spotted Beebalm		
Carex Rosea-Rosy Sedge	Panicum virgatum- Switchgrass		
Ceanothus americanus-New Jersey Tea	Pedicularis canadensis- Wood Betony		

Cercis canadensis-Eastern Redbud

Chelone glabra- Turtlehead

Pedicularis canadensis- Wood Betony

(tolerates more shade)

Penstemon calycosus- Calico Beardtongue

Penstemon digitalis- Foxglove Beardtongue

Penstemon hirsutus- Hairy Beardtongue

Penstemon pallidus- Pale Penstemon

Phlox subulata-Moss Phlox

Phlox stolonifera-Creeping Phlox

Physocarpus opulifolius-Eastern Ninebark

Physostegia virginiana-Obedient Plant

Polystichum acrostichoides- Christmas Fern

Pycnanthemum incanum-Hoary Mountain Mint

Pycnanthemum muticum- Short-tooth Mountain Mint

Pycnanthemum tenuifolium- Narrow-Leafed Mountain Mint

Pycnanthemum virginianum- Virginia Mountain Mint

Quercus montana-Chestnut Oak

Rhus aromatic-Fragrant Sumac

Rudbeckia fulgida-Orange Coneflower

Rudbeckia hirta-Blackeyed Susan

Rudbeckia triloba-Browneyed Susan

Schizachyrium scoparium- Little Bluestem

Scutellaria incana-Hoary Skullcap

Senna hebecarpa-Wild Senna

Solidago canadensis-Canada Goldenrod

Solidago speciosa-Showy Goldenrod

Symphyotrichum leave- Smooth Aster

Symphyotrichum novae-angliae- New England Aster

Symphyotrichum oblongifolium-Aromatic Aster

Tradescantia virginiana-Virginia Spiderwort

Veronia noveboracensis-NY Ironweed

Veronicastrum virginicum-Culver's Root

Viola sororia-Common Blue Violet

Zizia aptera- Heart-Leafed Meadow Parsnip