HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY

SEPTEMBER 2015

Prepared For:

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1.0 INTRODUCTION

1.1 Purpose of Study

1.1.1 Objectives

The purpose of this study is to undertake a conceptual planning, design and feasibility study of potential public access improvements into and through the High Falls District and Genesee River Gorge to include the proposed "GardenAerial" project as well as other adjacent public infrastructure and waterfront access improvements. This will include a conceptual feasibility study of a potential new pedestrian bridge across *the* High Falls, how access into the river gorge from High Falls should be established, how High Falls can be more directly connected to Downtown Rochester through river-edge trails, and what access improvements should be made to other district assets including the City's existing Upper Falls Terrace Park on the east side of the gorge, adjacent to St. Paul Street. The analysis will include recommended improvements, "order of magnitude" costs, impacts on historic resources, and additional follow-on studies.

The study tasks include:

Task 1: Evaluate the "GardenAerial" concept including 1) New pedestrian bridge over the falls; 2) Trail components and connections; 3) Pont de Rennes Bridge improvements; and, 4) Upper Falls Terrace Park improvements.

Task 2: Evaluate options to improve access between High Falls and Downtown Rochester including 1) East and west side river trail (street access and/or river-adjacent); and, 2) Potential connections to other trails.

Task 3: Evaluate options for gorge access including 1) Use of the Triphammer site; 2) "Switch-back" trails into the gorge; 3) reuse of the former Beebee Station site; and, 4) Improvements to Beebee Park to provide water access.

Task 4: Prepare a "punch list" of future additional design and engineering studies or work tasks that will be required to complete phased implementation of the recommended High Falls access improvement project alternatives as described above. Develop a final plan that includes information and recommendations from Tasks 1-3 and the "punch list" of future studies needed. Prior to finalization, the plan will be presented to the Project Advisory Committee and other City staff for review and comment.

1.1.2 Study Area

The study area includes the High Falls District of the City of Rochester. The study area boundary includes Andrews Street to the south, Smith Street to the north, and State Street to the west, and St. Paul Street to the east. This study is within the proposed boundary of the City's Local Waterfront Revitalization Program (LWRP) Update (which is currently being funded by a grant from the New York State Department of State), as well as the boundary of the City's Comprehensive Plan (also known as the

"Renaissance Plan"), the Center City Master Plan, and the Urban Cultural Park Management Plan.

Refer to Figure 1-1 *Study Area* and Figure 1-2 *Property Ownership*.

1.1.3 Project Advisory Committee

Preparation of the plan was coordinated by a Project Advisory Committee (PAC). Members of the PAC included representatives from the City of Rochester and GardenAerial organization. Representatives from CSX Railroad, RG&E and the High Falls Business Improvement District (BID) did not participate in PAC meetings but provided input used in the study. The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and other community groups, property owners and stakeholders were also notified of the project.

1.2 Project Background

1.2.1 Resources within the District

The High Falls District in the City of Rochester functions as a multi-faceted tourist destination, residential neighborhood and downtown mixed-use development hub. It includes a local and national preservation district and is also designated as a New York State Heritage Area which highlights many significant historic and industrial resources along the Genesee River and their importance to the development and history of the City of Rochester. The district is a vital contributor to heritage tourism by providing significant tourism resources and attractions and by serving as an urban neighborhood connector and "node" or "hub" along the City's Genesee River and Erie Canal trail systems that run into and through Downtown Rochester.

Situated within Rochester's Center City and adjacent to the Central Business District, the High Falls District consists of approximately 35 acres. In 1992, the City was awarded a New York State Urban Cultural Park grant to develop the area as an historic/interpretive district (Heritage Area). The district includes the spectacular High Falls and Genesee River gorge; the historic Brown's Race, Interpretive Center and Trip hammer Mill Site; the Pont de Rennes pedestrian bridge over the river; High Falls festival site including the historic ruins at the brink of the falls; the City owned Upper Falls Terrace Park, the RG&E Beebee Station power plant (to be demolished); the Genesee Brewery and Visitor's Center; major office buildings and residential areas; as well as other historic buildings and structures.

Several other important planning, development and infrastructure projects are also underway or have been completed within the proposed study area. These include the "LYLAKS" Brownfield Opportunity Area (BOA) planning study, acquisition by the City of Rochester of the former CSX Railroad right-of-way along the eastern rim of the Genesee River gorge at High Falls, and the proposed demolition of the RG&E Beebee Station power plant.

High Falls Pedestrian Access Improvement Study Project Area

A. Kodak World Headquarters
B. Potential MCC Urban Campus
C. Frontier Field
D. RG&E Beebee Station (closed)
E. Genesee Brewery / Visitor's Center
F. High Falls Park
G. High Falls
H. Triphammer Park
I. Genesee River Gorge
J. Development Site
K. Pont De Rennes Bridge
L. Proposed "Garden Aerial" Bridge
M. Center City (Downtown)
N. Amtrak Station
O. CSX Right-of-Way

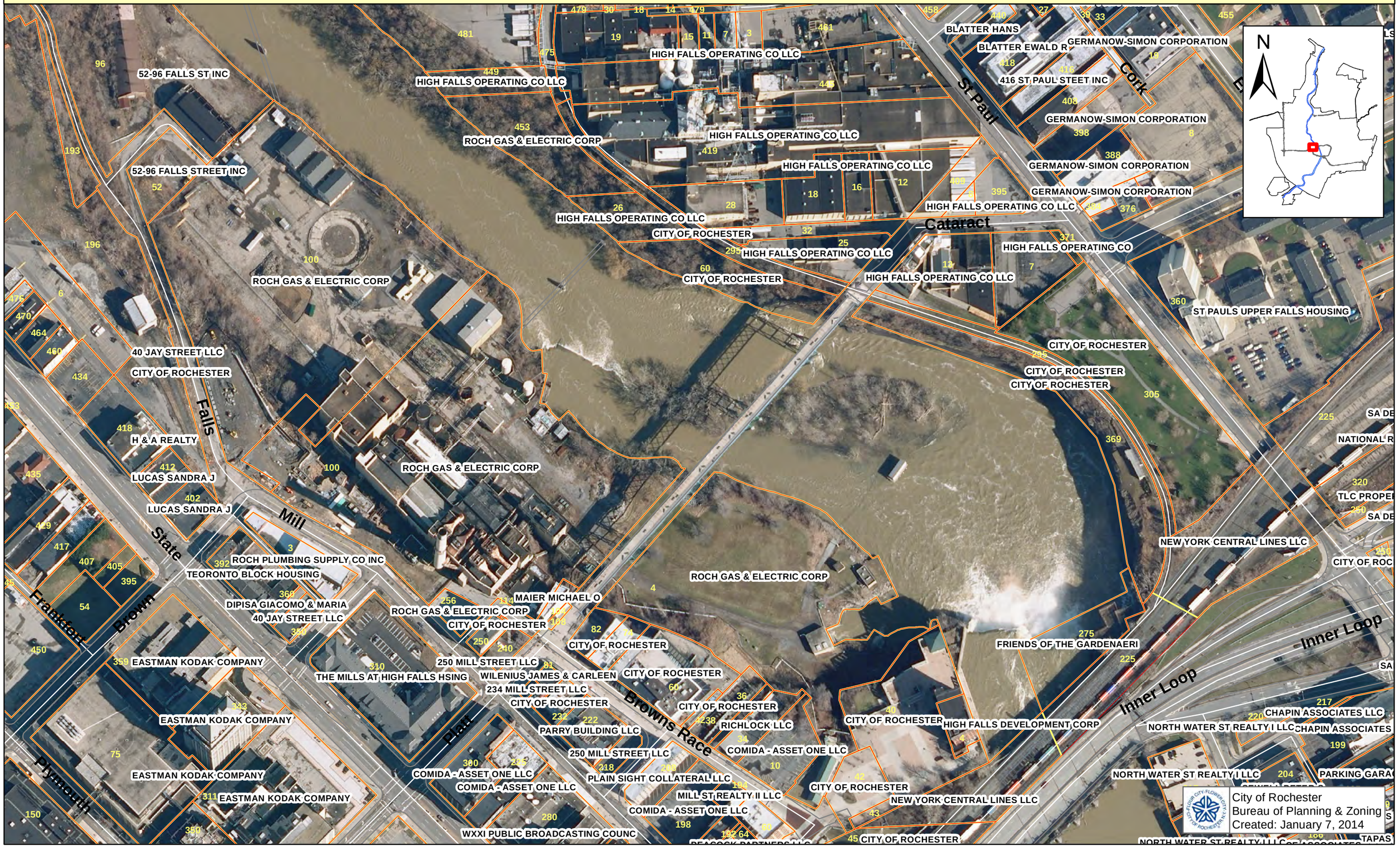
Legend

- Project Area Boundary
- NYS Urban Heritage Area
- Lyell Brownfield Opportunity Area
- Proposed Garden Aerial Trail Concept
- Local Historic Preservation District
- Parcels

Ogden, Hardin, Cliff, Lake, White, Vincent, Cliff, Adair, Spence, Carter, Lyell, Vincent, Lind, Saratoga, Verona, Oak, Smith, Frankfort, Falls, Mill, Factory, Volt, Platt, Plymouth, Verona, Broad, Brown, Jay, Grape, Charles, Butler, Orange, Romeyn, Parker, Campbell, Erie, Platt, Morrie Silver, I-490, I-490, Sunfrg, Bausch, Lowell, Upper Falls, Wrays, Martin, Gorham, Dowling, Cataract, Inner Loop, Commercial, Browns Race, State, Inner Loop, Allen, Fitzhugh, Hippie, Church, Front, Water, Carthage, St Paul, Andrews, Pleasant, Mortimer, Bragdon, Division, Main, East, Bittner, Evans, Bristol, Franklin, Franklin, Franklin, Amity, Liberty Pole, Achilles, Ellison, Chestnut North, Ormond, Ormond, Cumberland, WeScott, St Bridgets, Joseph, Clinton, Cark, Emmet, Ward, Marietta, Lynds, Central, Harrison, Oregon

Map created by Josh Artuso
Bureau of Planning & Zoning
Created: May 6, 2014

High Falls District Property Ownership



1.2.2 GardenAerial / Greentopia Concept

The GardenAerial project will transform the immediate area around the rim of the Genesee River Gorge at High Falls, creating an exciting new public green space, trail hub / pedestrian node and tourist destination at the very birthplace of Rochester. This study's project area incorporates the proposed "GardenAerial" project, and recommendations from this study will directly impact and inform the overall course and progress of the GardenAerial project.

The GardenAerial project is envisioned to include three main phases. Phase 1 (which is currently underway) will create and prepare new trails and gardens on the east and west sides of the gorge. Trail improvements on the east side (near Genesee Brewery) as well as the initial construction work on the "Flour Garden" (at Brown's Race) began in 2014.

Phase 2 of the GardenAerial project will include analysis, design and construction of a new pedestrian bridge across the top of High Falls and a downtown connection "system" which will complete a 3/4 mile trail hub around the rim of the gorge. It will also include the possible re-adaptation or re-programming of the RG&E Station #4 power plant and site, which is the oldest extant hydroelectric station in the City of Rochester. This asset was recently purchased by the GardenAerial organization. These architecturally stunning additions to High Falls would finally give residents and visitors breathtaking access, up-close engagement with, and views of the river and falls for the first time in over a century.

Phase 3 of the project will include the creation of an arboretum, floating high above the Genesee River Gorge on the Pont de Rennes pedestrian bridge. This will create an exciting, unique and spectacular urban greenway and a new "garden in the sky." Phase 3 may also include the construction of a new environmentally-friendly public winter garden and horticultural genetic specimen bank on the east side of the gorge (perhaps located in Upper falls Terrace Park) which will be a stunning new venue with panoramic views of the falls.

1.2.3 Brown's Race Historic District

The Brown's Race Historic District is generally bounded by Mill Street, Volt Place, the CSX Railroad, and the Genesee River Gorge, and also extends to State St to include 300 State Street. The district contains approximately 31 structures including the Pont de Rennes Bridge and Brown's Raceway. The overall district is on the National Register of Historic Places, while the individual structures are on the New York State Register of Historic Places.

National Historic District regulations permit property owners to make modifications provided that no Federal money is involved, and it is recommended but not required that the State Historic Preservation Office (SHPO) be contacted regarding modifications to structures. If Federal money is involved, then the project must be reviewed by the Advisory Council on Historic Preservation.

1.2.4 City of Rochester Preservation District

The City of Rochester has established a Preservation District that includes the area bounded by Mill Street, Volt Place, the CSX Railroad, and the Genesee River Gorge, as well as 300 State St. The Preservation District has a similar boundary to the Brown's Race Historic District but does not include the Pont de Rennes Bridge.

The City of Rochester has a Preservation Ordinance that governs projects within Preservation Districts. Review by the City's Preservation Board and approval in the form of a Certificate of Appropriateness is required for exterior alterations to properties within the district. Alterations may include additions, removal of features, demolition, and major landscaping.

1.2.5 New York State Urban Heritage Area

The High Falls Urban Heritage Area is established by the New York State office of Parks, Recreation and Historic Preservation and includes a large area along the Genesee River bounded by Andrews Street, State Street / Lake Avenue, Driving Park Avenue, St. Paul Street, and Bittner Street. State Heritage Areas are designated to further goals of "acquiring, preserving, rehabilitating or restoring lands, waters or structures of significance". Projects within this district require review by the State Historic Preservation Office (SHPO) and may be eligible for grants under the state's Heritage Areas Program.

1.2.6 EcoDistrict

An EcoDistrict can be described as a neighborhood or district with a commitment to achieve neighborhood-scale sustainability, using tools such as green buildings, smart infrastructure, and public-private partnerships. EcoDistricts are in place in cities such as Portland, OR, Washington, DC, Boston, MA, Vancouver, BC and international cities as well. Here in Rochester, Greentopia has begun the process to establish the first EcoDistrict in New York State. The district would include the High Falls neighborhood, a portion of the JOSANA neighborhood, and areas in the vicinity of Frontier Field, Sahlen's Stadium, and the future MCC Downtown Campus. A team of local stakeholders including Greentopia, City of Rochester staff, developers and consultants has been established to bring the EcoDistrict's goals to fruition.

The EcoDistrict would target projects in transportation, energy, recycling, bio-diversity and water that can benefit residents, develop new green spaces, and reduce the area's greenhouse gas footprint.

1.2.7 Identification of Cultural / Historic Resources

As identified above, the study area contains significant cultural and historic resources. The implementation of projects identified in this study will likely require review under the *State Environmental Quality Review Act* (SEQR) and possibly the *National Environmental policy Act* (NEPA) if federal funds are used. In addition, the City's Environmental Commission will provide guidance as well as the State Historic Preservation Officer (SHPO). Since all of the improvements recommended in this study are within the High Falls Urban Heritage Area, SHPO review is required.

Specific resources that could be affected by recommendations developed as part of this study include:

- High Falls Festival Site Ruins including the public terrace area and the area just south of the Upper Falls Office Building (re: construction of the western abutment of the new pedestrian bridge). There is an old archeological raceway on the south side of the Upper Falls Office Building which extends through the building and is also under the terrace area. The City has determined that an EIS is necessary to deal with future modifications to the old Gorsline Building and archeological areas.

- Trip Hammer Forge Site and/or adjacent vacant City-owned lot to the south (re: construction of stairs and boardwalk into the gorge). This City-owned park is part of the Brown's Race Historic District.

- Water Works Building and/or Granite Mills Park (re: construction of a gorge elevator with connection to the building or park). This City-owned building is part of the Brown's Race Historic District.

- Pont de Rennes Bridge (re: modification of deck to introduce permanent landscaping). The bridge is part of the Brown's Race Historic District and is one of the most significant and recognizable remnants of the early 20th century in the area.

It is noted that the former RG&E Station 4 has been determined to be "not eligible" for listing on the New York State Register of Historic Places.

1.2.8 Local Waterfront Revitalization Plan

This study is within the proposed boundary of the City of Rochester's Local Waterfront Revitalization Program (LWRP) Update which is currently being funded by a grant from the New York State Department of State (NYSDOS).

1.2.9 RG&E Properties

Rochester Gas & Electric Corporation (RG&E) / Iberdrola USA owns significant properties within the study area. These include the Beebee Station site as well as associated lands within the gorge from lower Falls Street southerly to the hydroelectric generation facility near the High Falls.

Contaminated soil is known to have existed on some of the RG&E-owned land (primarily south of the Pont de Rennes Bridge). Currently there is a Memorandum of Understanding between the City and RG&E regarding public access to the gorge area located south of the Pont de Rennes Bridge. In essence, the City gave up some of their rights of access, however, when it is environmentally safe, public access can be allowed. Joe Biondolillo from the City's Division of Environmental Quality has commented on the RG&E clean-up in the gorge. In general, RG&E has complied with their scope of work for clean-up. The soils in this area may not be a significant issue concerning public access, but this would need to be confirmed.

Currently, the Beebee power station is in the process of being demolished. Opportunities for redeveloping the site have been considered in this study. There will always be a need to maintain

access and security for RG&E's hydroelectric facilities within the gorge and electric Substation 137 which is adjacent to Beebee Station at the gorge rim.

1.2.10 Lyell Brownfield Opportunity Area

2.0 GardenAerial CONCEPTUAL DESIGN PLAN

2.1 General Needs Assessment

There is a need to improve public accessibility and the overall experience along the east and west sides of the Genesee River Gorge. This includes the need to upgrade existing facilities and the need to construct new facilities to complete a loop around High Falls. Having a complete loop, or "Hub", would promote walkability and connectivity between the various areas in the High Falls District and would allow the public to experience the gorge and falls from every angle.

Figure 2-1 *Existing Conditions Photos* includes depictions of existing features and facilities within the study area.

2.2 New Pedestrian Bridge at High Falls

2.2.1 Engineering Considerations of New Pedestrian Bridge at High Falls

The following sections describe some of the engineering considerations that were taken into account when evaluating the feasibility of various pedestrian bridge concepts.

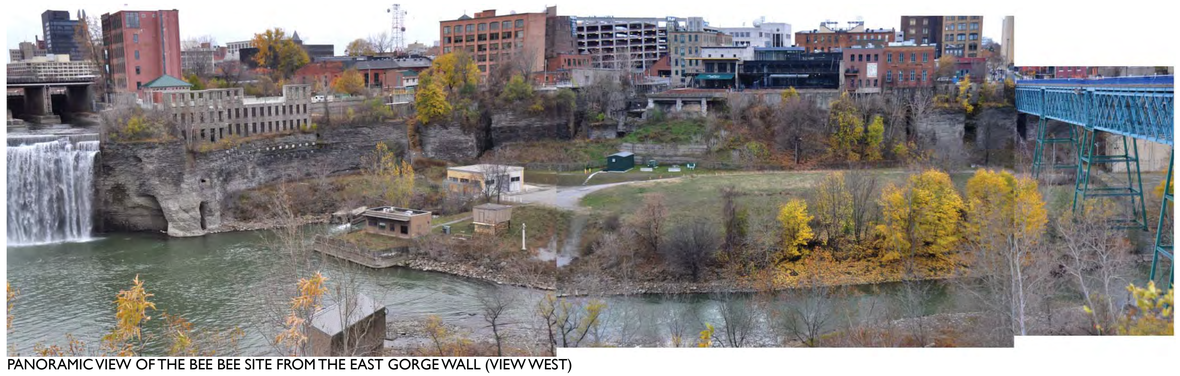
2.2.1.a Geotechnical Considerations

In general, the bedrock is fairly solid however it does have "discontinuities" throughout. The "discontinuities" are fairly tight except when exposed. There is a significant failure wedge plane located to the west of the falls and parallel to the gorge rim. It runs lengthwise through the Gorsline building and is stabilized by the rock bolts. Unfortunately the rock bolts are nearing their useful lifespan. It is noted that the falls are undercut by 15 feet or more. This, and much more information, is available in the 2011 report prepared by LaBella Associates & Kenney Geotechnical for the City of Rochester.

Due to the presence of possible "discontinuities" efforts were made to locate all substructures as far from the gorge edge as possible. It is recommended that soil / rock borings be taken at potential substructure locations to better determine localized conditions and suitability of rock structures to support a new structure.

2.2.1.b Preferred Location for West Abutment

Two locations were explored for the location of the west abutment: the terrace area of the High Falls Festival Site, and the area immediately south of the Upper Falls building. The river wall at the terrace area of the High Falls Festival Site creates an existing and natural point to begin the structure since this location already has public access and connects with an existing ADA assessable route. The design of an abutment at this location would need to consider the historic Gorsline building ruins including the multiple basements located below the terrace area in question. The cost and design benefits of utilizing the existing plaza and river wall make this the preferred alternative for the west abutment.



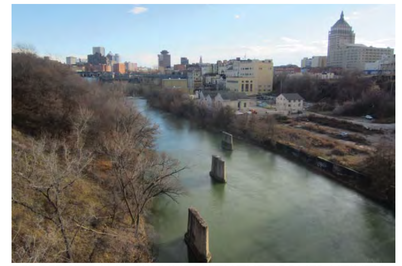
PANORAMIC VIEW OF THE BEE BEE SITE FROM THE EAST GORGE WALL (VIEW WEST)

PANORAMIC VIEW OF THE BEE BEE SITE FROM THE PONT DE RENNES (VIEW NORTH)

VIEW OF THE TRIPHAMMER FORGE SITE'S UPPER TERRACES AND WATER WHEEL PIT

VIEW OF EAST GORGE WALL FROM THE TRIPHAMMER FORGE SITE

VIEW OF THE TRIPHAMMER FORGE SITE FROM THE PONT DE RENNES



BEE BEE SITE AND SKYLINE, WITH THE FORMER UTILITY BRIDGE FOUNDATIONS IN THE FOREGROUND (VIEW SOUTH)

HISTORIC PHOTO OF THE INCINERATOR, SMITH STREET BRIDGE, GAS WORKS, AND FORMER UTILITY BRIDGE (VIEW NORTH)

GENESEE RIVERWAY TRAIL THROUGH EXISTING COAL HOPPER

LABELLA Associates, P.C.

TROWBRIDGE WOLF MICHAELS TWLA LANDSCAPE ARCHITECTS

GARDENAERIAL CONCEPTUAL DESIGN PLAN

EXISTING CONDITIONS PHOTOS

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY

FLOUR CITY-FLOWER CITY-ART CITY OF ROCHESTER

GARDENAERIAL CONCEPTUAL DESIGN PLAN

FIGURE 2-1

Utilizing the river wall behind and south of the Gorsline building creates several issues that make it a less attractive option. They include maintaining access to the building, dumpsters and RG&E equipment. Also, there is an 8 to 10 ft. grade differential to make up as well. Therefore, the preliminary concept for the western bridge approach includes a short span (about 100 ft.) over the existing RGE equipment and a 200 ft. ramp at 5% slope down to ground. The alignment would be directly adjacent to the existing CSX ROW where there is an existing retaining wall. Approximately 20 parking spaces would be affected. A promenade could be constructed to reduce many of these impacts but would require additional costs to construct and create a less accessible-feeling design.

2.2.1.c CSX Bridge Considerations

The following considerations have been identified with regard to the CSX Railroad Bridge over the Genesee River:

1. Supporting a portion of the bridge from the existing CSX bridge piers was investigated. It would require cantilevering the new structure from the ends of the piers. The positives being that new substructures wouldn't be required within the river and the shorter spans may be easier to construct. But based upon the following list of concerns and unknowns it was removed from further consideration. The concerns/unknowns were:

    - Bridge would be located within the CSX right-of-way (ROW) requiring an easement from CSX. It was determined this would be unlikely to occur.
    - The existing CSX bridge would need to evaluated for the new loading and the condition of the substructures below water level is unknown.
    - The close proximity and location below the track level would require the new pedestrian bridge to be covered for protection from possible debris.
    - The bridge would be located farther away from the falls compared to other alternatives and would require landing to the south of the Gorsline building which is not the preferred location for the west abutment.

2. Utilizing the existing CSX bridge pier footings was also investigated. In two locations they extend beyond the other footings where they had previously supported utility poles. They also appear to fall outside the CSX ROW. These footings appear to be extensions of the CSX footings but the presence of a construction joint indicates they may have been constructed separately. They could potentially be reused to support new substructures which could help limit work in the river. The downside is that the footings appear to be in poor condition and have significant concrete spalling and visible erosion at the water line. The footings would need further investigations before they could be considered for reuse. This work would include a hands-on inspection, concrete cores and an underwater inspection of the footing. No existing plans for these footings could be found which means their anchorage into the rock is unknown which also raises concerns over their suitability to be rehabilitated and reused. Until further investigations can be performed, it is recommended that the footings be avoided or potentially removed and new footing installed in their place. Locating new substructures in-line with the existing pier footings would help reduce hydraulic effects and potential debris impacts.

3. Much consideration was given to the location of the structure in relation to the CSX ROW. The location of ROW lines, as provided by the City, has been displayed on the plan views of each of the preferred alternatives. It was determined that locating a permanent structure within the CSX ROW was unlikely to be acceptable to CSX. Utilizing the CSX ROW provided minimal benefits and as such, all preferred alternatives were developed outside of the CSX ROW. However, coordination with CSX and use of their ROW during construction would be beneficial in increasing ease of site access and construction. This coordination would occur during the design and construction phase.

The City may want to consider acquiring the small triangular portion of the CSX ROW near the proposed eastern abutment locations in the Upper Terrace Falls Park. This would provide additional space to construct the abutments and potentially a physical barrier between the park and the tracks.

2.2.1.d Station 4 Considerations

The preliminary structural assessment completed for the Station 4 building (Larsen Engineers, 2014) confirmed its poor condition and stated that "The existing poor condition of this building makes it unlikely to take any additional load without substantial structural modifications and large capital expense". Furthermore, within the report, SJB stated "At this time, based on SJB's observations, the existing building is not structurally sound. A significant structural rehabilitation, if not full structural re-construction, of the building will be required for this project. Additional investigation work will be necessary to evaluate the concrete and its foundation along with vertical and lateral support by the underlying bedrock and adjacent bedrock face."

Consideration was given to using the existing building as a support structure for the new bridge or an overlook. It was determined, based upon the report and our visual observations, that the entire building would need very expensive and exhaustive rehabilitation to accommodate the proposed structures. So while Station 4 could potentially be reused, it will be very expensive to stabilize the entire structure. Options were developed that utilized Station 4 directly (pier within the building), were constructed immediately adjacent to it or avoided it completely. We agree with the preliminary report that a more detailed inspection would be needed to evaluate the feasibility and cost of rehabilitating the structure.

2.2.1.e Use of East River Wall as Abutment

The east river wall is located adjacent to Station 4 and along the eastern edge of the Genesee River. Locating an abutment, or pier, on this river wall poses several risks / challenges, with the foremost concern being the location of the gorge wall. The gorge wall runs immediately behind the river wall with Station 4 being constructed directly up against it. This means any structure founded here would be located close to the gorge wall. Based upon the condition of Station 4 it cannot be counted on to provide stability to the gorge wall. As noted in the geotechnical concerns of Section 2.2.1.a. this would be an undesirable location with respect to stability. Secondly, locating an abutment, or pier, in

this location would require a 300ft or greater span to reach the preferred location in Upper Falls Terrace Park. This span length would eliminate the use of traditional steel girders or trusses and require a specialty bridge type. Based upon these concerns it was determined that the east river wall was an undesirable location for use as an abutment or pier.

2.2.1.f East Abutment Location within Upper Falls Terrace Park

The geometry of the gorge and Upper Falls Terrace Park limits potential locations for the eastern abutment. CSX also owns the small triangular portion of property south of the existing building along the gorge in the southwest corner of the park. The east abutment will need to be located south of the existing building but north of the CSX ROW on the existing abandoned railroad track berm. The abutment will also need to be located away from the gorge edge due to previously stated rock stability concerns. In addition, the slopes near the gorge edge are steep and prone to sliding as is evidenced by the debris pile within the gorge. While the abutment could be constructed at the existing berm height it would be advantageous to locate it lower by excavating the railroad embankment area. This would help flatten the bridge grade for accessibility, be more visually appealing and easier to construct. The elevation of the existing railroad berm is approximately 512 ft and the elevation of the preferred west abutment is 490 ft at the terrace area of the High Falls Festival Site.

2.2.1.g General Constructability Issues

Due to the location of the site, constructability is a serious concern. Much of the new bridge would be constructed within the river or gorge. Some alternatives require construction within the gorge and immediately adjacent to Station 4. Access issues and safety next to Station 4 are challenging. Precast construction that is assembled on-site may be necessary to limit construction times and personnel exposure if Station 4 isn't rehabilitated as part of the project, or prior to construction. All alternatives will require construction within the river above the falls. This will require coordination with the Central Avenue Dam operators (RG&E), the use of cofferdams and diligent safety protocols. Access to these sites will again be limited. Access its limited along the west by the Gorsline Building, the CSX tracks limit access from the south while the gorge / steep slopes of the east gorge rim also limit access. Potential crane locations are shown in Figure 2-2. Many locations will require substantial coordination, temporary lane closures or the construction of causeways. The difficulty of access is a main contributor to the cost of the project.

2.2.1.h Typical Bridge Design Criteria

The bridge should be designed, at a minimum, for the following criteria:

1. 12 ft minimum clear width to allow shared pedestrian and bicycle use.

2. Pedestrian and maintenance vehicle loadings in accordance with the AASHTO Guide Specifications for the Design of Pedestrian Bridges.

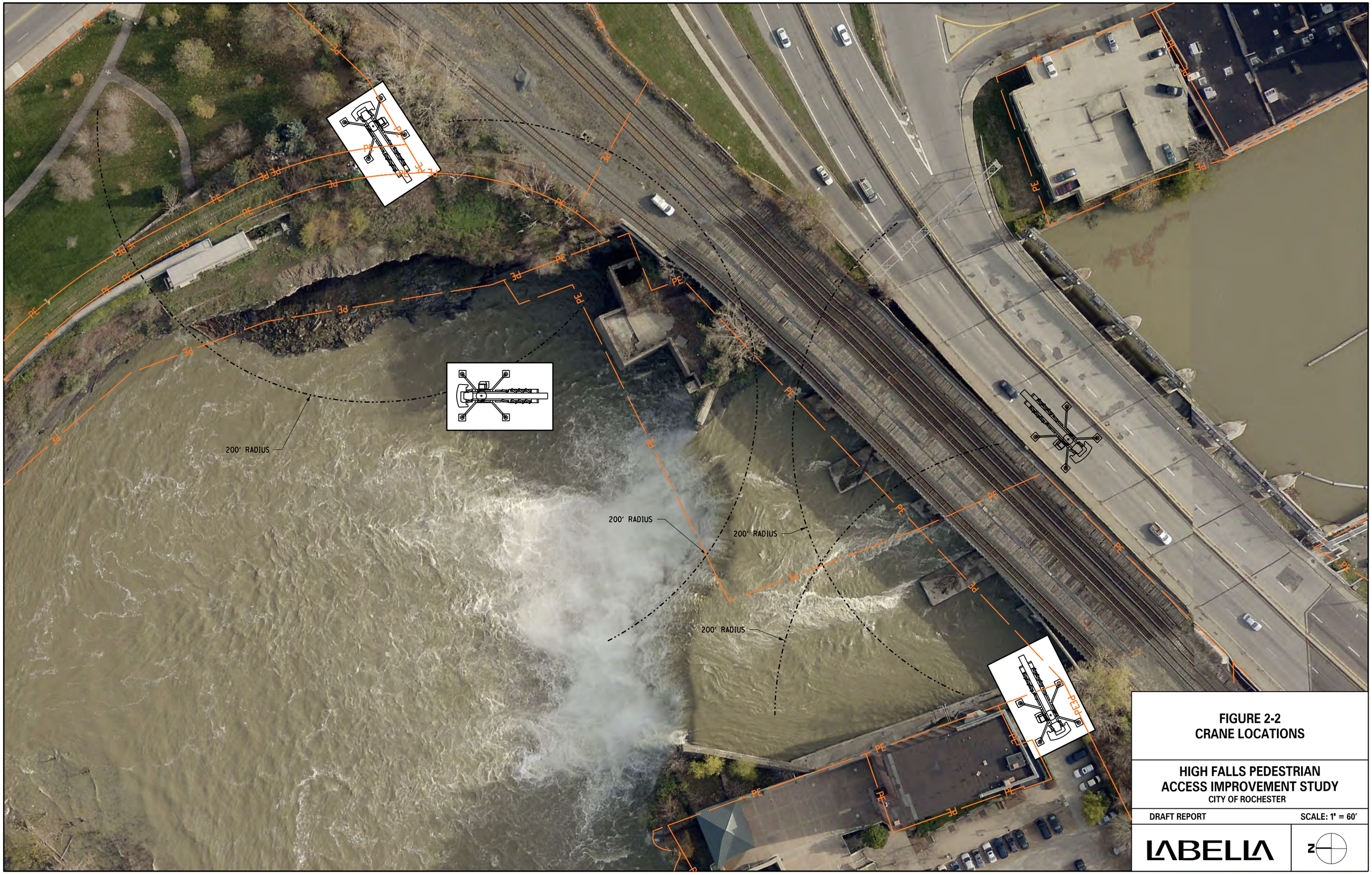


FIGURE 2-2
CRANE LOCATIONS

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY
CITY OF ROCHESTER

DRAFT REPORT | SCALE: 1" = 60'

LABELLA

3. Handicap accessibility in accordance with the Americans with Disabilities Act (ADA) guidelines.

4. Low maintenance and with a 75 year design life.

5. With sufficient hydraulic clearance to pass design storm events and debris.

2.2.2 High Falls Pedestrian Bridge Alternatives

2.2.2.a Alternative Evaluation – Options Investigated and Discarded

Nine bridge alternatives were initially developed and discussed as part of this study. Of those nine alternates there were six unique types. The other three alternatives were variations on one of the six unique types. Ultimately only four alternatives were chosen to be considered further and are detailed in Section 2.2.2.b. The remaining five alternatives were dismissed and are described briefly below.

1. Three Span Steel Pedestrian Truss – Utilized long span steel trusses with two piers. One pier would be constructed abutting the end of the CSX bridge footing and the other would be constructed within Station 4.

2. Precast Concrete Arches with Steel Pedestrian Trusses – Six precast concrete arches constructed adjacent to the CSX bridge, connecting the area behind the Gorsline Building to the East River Wall. Then two steel truss spans with a pier located within Station 4 to connect to the Upper Falls Terrace Park.

3. Curvilinear Cable Stayed Bridge – Two towers supporting the curved deck and running from Upper Falls Terrace Park to the area south of the Gorsline Building. One tower would be constructed above the falls in the river and the other adjacent to Station 4 within the gorge.

4. Curvilinear Cable Stayed Bridge – Two towers supporting the curved deck and running from Upper Falls Terrace Park to the area south of the Gorsline Building. One tower would be constructed above the falls in the river and the other within Station 4.

5. Straight Cable Stayed Bridge – This alternative utilized one tower located within the gorge and in front of Station 4. It ran directly from the terrace area of the High Festival Site over the falls to High Falls Terrace Park.

2.2.2.b Alternatives Investigated in Detail

Four alternatives, from the nine alternatives initially developed, were chosen for more detailed investigation. Below is a list of common bridge considerations that applies to all the alternatives. In addition, each chosen alternative (Concept) is briefly described and its advantages and disadvantages are listed. Also see Table 2-2: Preferred Pedestrian Bridge Alternatives for further details.

Common Bridge Considerations:

- Bridge alignments have been chosen to avoid encroachment onto CSX right-of-way.
- Each concept offers good views of the falls from several different perspectives.
- Bridge alignments have been established to parallel the edge of the falls / gorge to the extent possible.
- Bridge piers located upstream of the falls have been positioned within the river to be in line with the existing railroad pier footings to the extent possible. The goal is to minimize hydraulic disturbances and debris impact.
- When establishing the preliminary bridge alignments, piers, towers & abutments have been set back from the gorge face a reasonable distance in consideration of geotechnical concerns related to rock stability.
- On the west side of the river, the terrace area of the High Falls Festival Site is considered the most desirable location for the new bridge connection. It is believed the western river wall & footing can be modified to construct the new bridge abutment without significant impacts to the High Falls Festival Site and associated historic resources.
- The eastern river wall is not considered a desirable location for a pier because it is on the interface between Station 4 and the vertical face of the gorge wall. The resulting span length to Upper Falls Terrace Park would be excessive for conventional bridge types (> 250 ft).

Concept 1: 3 Span, Steel Pedestrian Truss

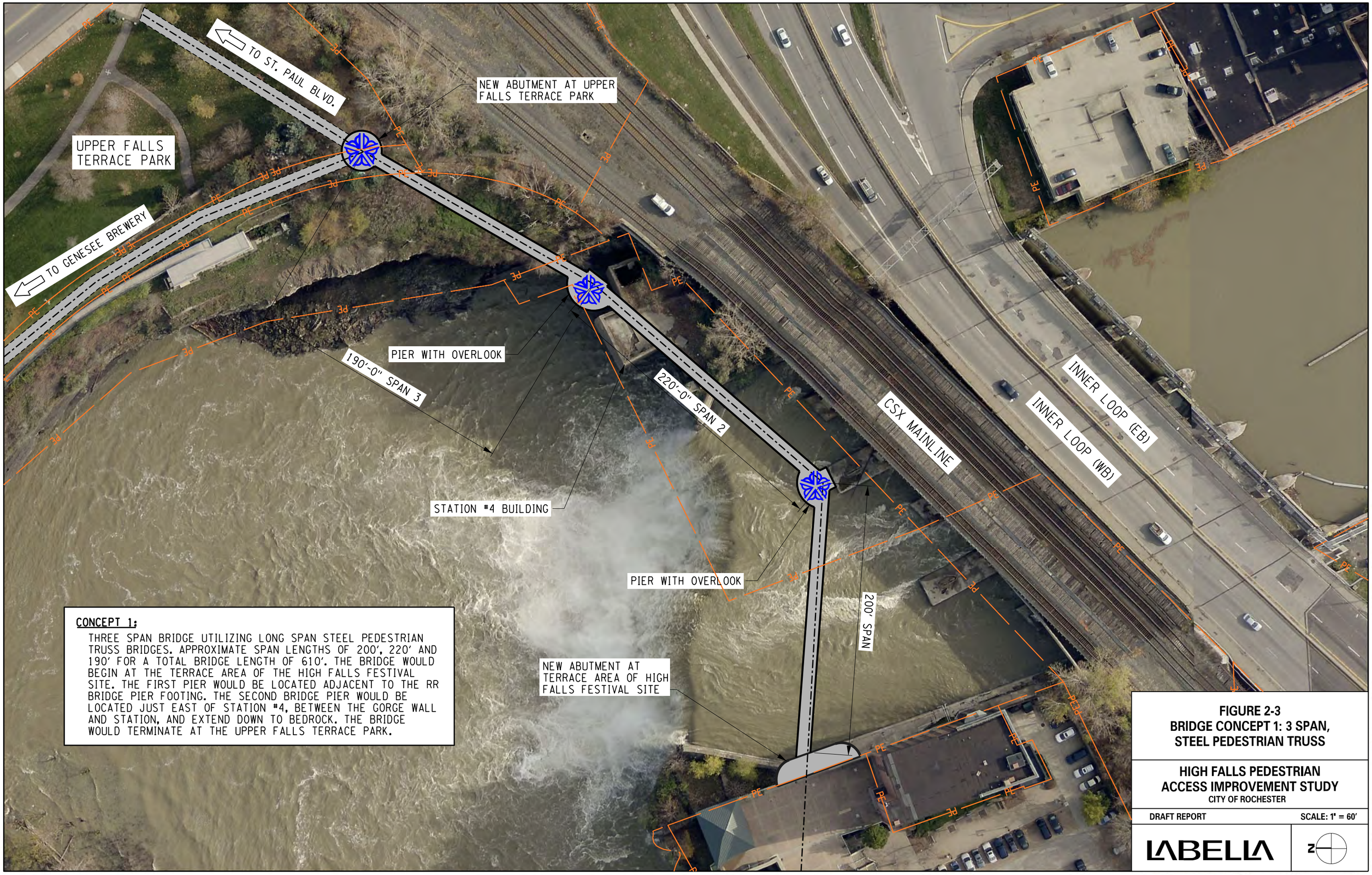
Bridge Concept 1 is a three-span bridge utilizing long span steel pedestrian truss bridges. The approximate span lengths are 200 ft, 220 ft and 190 ft for a total bridge length of 610 feet. The bridge would begin at the terrace area of the High Falls Festival Site. The first pier would be located adjacent to the CSX Railroad bridge pier footing. The second bridge pier would be located just east of Station 4, between the gorge wall and station, and extend down to bedrock. The bridge would terminate at Upper Falls Terrace Park. Refer to Figures 2-3 and 2-4 for a plan and visual simulation of Bridge Concept 1.

Advantages of Concept 1:

- Conventional bridge type that can be pre-fabricated.
- Bridge alignment provides a direct connection to the existing terrace area of the High Falls Festival Site.
- Pier #2 is independent of Station 4 and can be constructed without directly impacting the building. Therefore, substantial stabilization of the building isn't required. This reduces cost and makes the bridge easier and safer to construct.
- Pier #2 could be formlined, or a falsefront could be constructed around the pier to mimic the appearance of Station 4.
- Visually the truss has a low profile that doesn't interfere with the downtown skyline.
- Lowest cost option: $7.0 M.

Disadvantages of Concept 1:

- Construction of Pier #2 may still require some investment to stabilize Station 4 because of the close proximity of the building to the pier.



CONCEPT 1:

THREE SPAN BRIDGE UTILIZING LONG SPAN STEEL PEDESTRIAN TRUSS BRIDGES. APPROXIMATE SPAN LENGTHS OF 200', 220' AND 190' FOR A TOTAL BRIDGE LENGTH OF 610'. THE BRIDGE WOULD BEGIN AT THE TERRACE AREA OF THE HIGH FALLS FESTIVAL SITE. THE FIRST PIER WOULD BE LOCATED ADJACENT TO THE RR BRIDGE PIER FOOTING. THE SECOND BRIDGE PIER WOULD BE LOCATED JUST EAST OF STATION #4, BETWEEN THE GORGE WALL AND STATION, AND EXTEND DOWN TO BEDROCK. THE BRIDGE WOULD TERMINATE AT THE UPPER FALLS TERRACE PARK.

FIGURE 2-3
BRIDGE CONCEPT 1: 3 SPAN, STEEL PEDESTRIAN TRUSS

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY
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DRAFT REPORT | SCALE: 1" = 60'

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FIGURE 2-4
BRIDGE CONCEPT 1: 3 SPAN, STEEL PEDESTRIAN TRUSS

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY
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- The constructability of a tall pier below the falls and adjacent to Station 4 is challenging.
- Temporary supports would likely be required above the falls and in the river to install the truss sections.
- Pedestrian views would be partially obstructed by the trusses, except at the pier locations. Not as "open" of a feeling while on the bridge as compared to other concepts.

Concept 2: Curvilinear Cable Stayed Bridge

Bridge Concept 2 features two towers and curved cable-stayed spans linking the terrace area of the High Falls Festival Site, via a promenade, to the Upper Falls Terrace Park. The approximate total bridge length is 615 ft. The first tower would be located at the end of the CSX Railroad bridge pier footing, and the second bridge tower would be located within Station 4 and extend down to bedrock. Station 4 would need to be stabilized to construct the pier. Refer to Figures 2-5 and 2-6 for a plan and visual simulation of Bridge Concept 2.

Advantages of Concept 2:

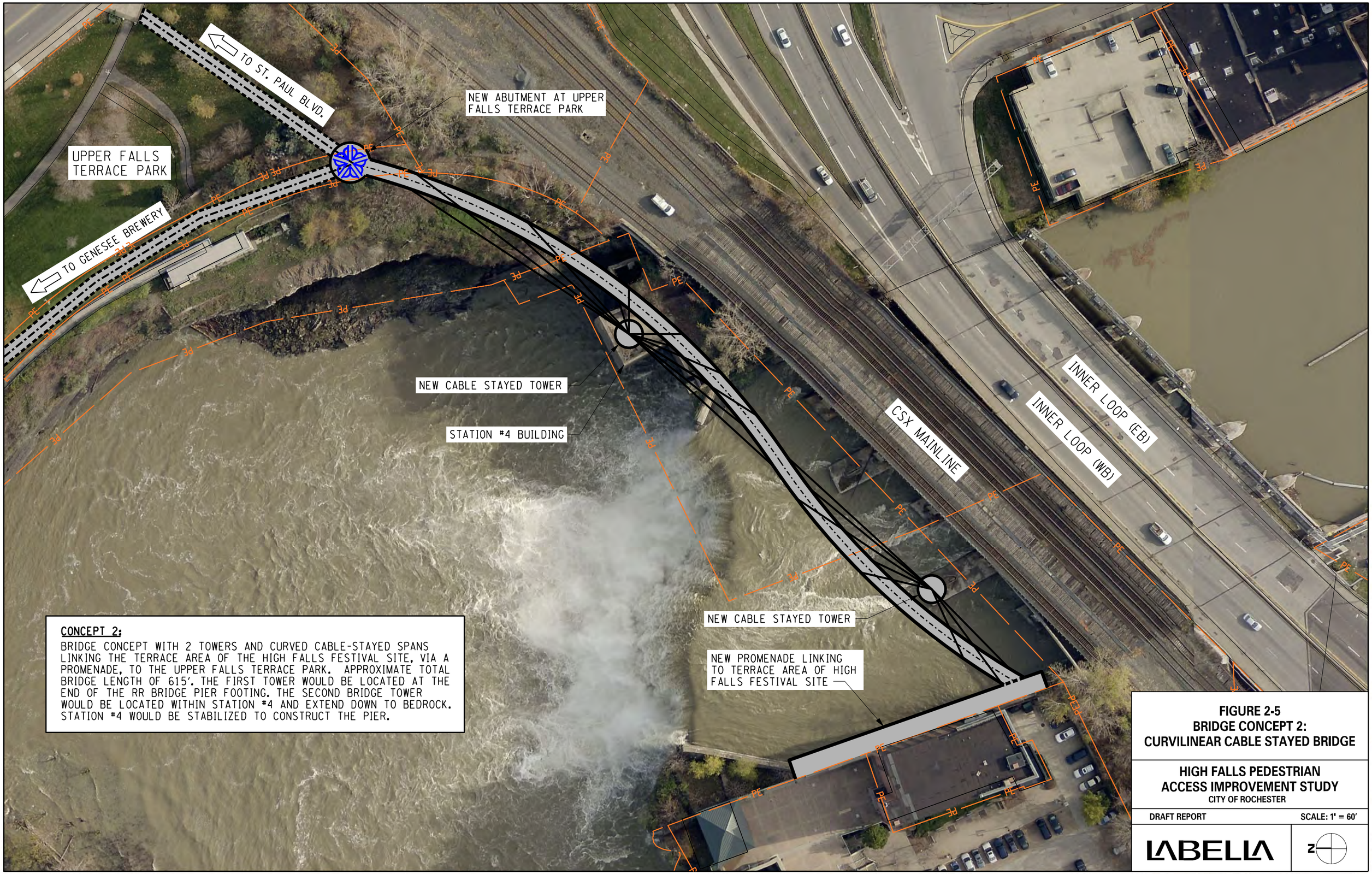
- Signature-type bridge structure.
- The lower portion of Tower #2 is "hidden" within Station 4 therefore providing visual balance between the two tower heights.
- Curved walkway provides a unique pedestrian experience.

Disadvantages of Concept 2:

- The recommended curvature of the superstructure does not allow for a direct connection to the terrace area of the festival site. A river-adjacent promenade would be necessary to complete the connection, thus adding cost and additional walking distance.
- Concept 2 does not parallel the edge of the falls / gorge due to its reverse curvature.
- The construction of Tower #2 is dependent on the ability to strengthen and stabilize Station 4. Station 4, in its current condition, is considered structurally "unstable". Therefore, the construction of a tall pier within Station 4 is considered very complicated and costly.
- Visually, the bridge height and scale overlaps with the downtown skyline.
- Second most expensive concept: $23.0 M.

Concept 3: Cable Stayed Bridge with 2 Span Curved Girder Approach

This concept utilizes a single tower, two-span cable stayed bridge (375 ft) and a two-span curved girder bridge (85 ft and 105 ft spans) to link the terrace area of the High Falls Festival Site to the Upper Falls Terrace Park. The approximate total bridge length is 565 feet. The bridge tower would be located northeast of Station 4 and extend down to bedrock. The pier terminating the cable stayed main span will be located adjacent to the existing CSX Railroad bridge footing. The pier for the curved girder bridge would be located between the railroad bridge and the falls. The lower portion of the bridge tower could potentially be hidden behind a false front that mimics the look of the existing Station 4. Refer to Figures 2-7 and 2-8 for a plan and visual simulation of Bridge Concept 3.



CONCEPT 2:

BRIDGE CONCEPT WITH 2 TOWERS AND CURVED CABLE-STAYED SPANS LINKING THE TERRACE AREA OF THE HIGH FALLS FESTIVAL SITE, VIA A PROMENADE, TO THE UPPER FALLS TERRACE PARK. APPROXIMATE TOTAL BRIDGE LENGTH OF 615'. THE FIRST TOWER WOULD BE LOCATED AT THE END OF THE RR BRIDGE PIER FOOTING. THE SECOND BRIDGE TOWER WOULD BE LOCATED WITHIN STATION #4 AND EXTEND DOWN TO BEDROCK. STATION #4 WOULD BE STABILIZED TO CONSTRUCT THE PIER.

FIGURE 2-5
BRIDGE CONCEPT 2:
CURVILINEAR CABLE STAYED BRIDGE

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY
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FIGURE 2-6
BRIDGE CONCEPT 2:
CURVILINEAR CABLE STAYED BRIDGE

HIGH FALLS PEDESTRIAN
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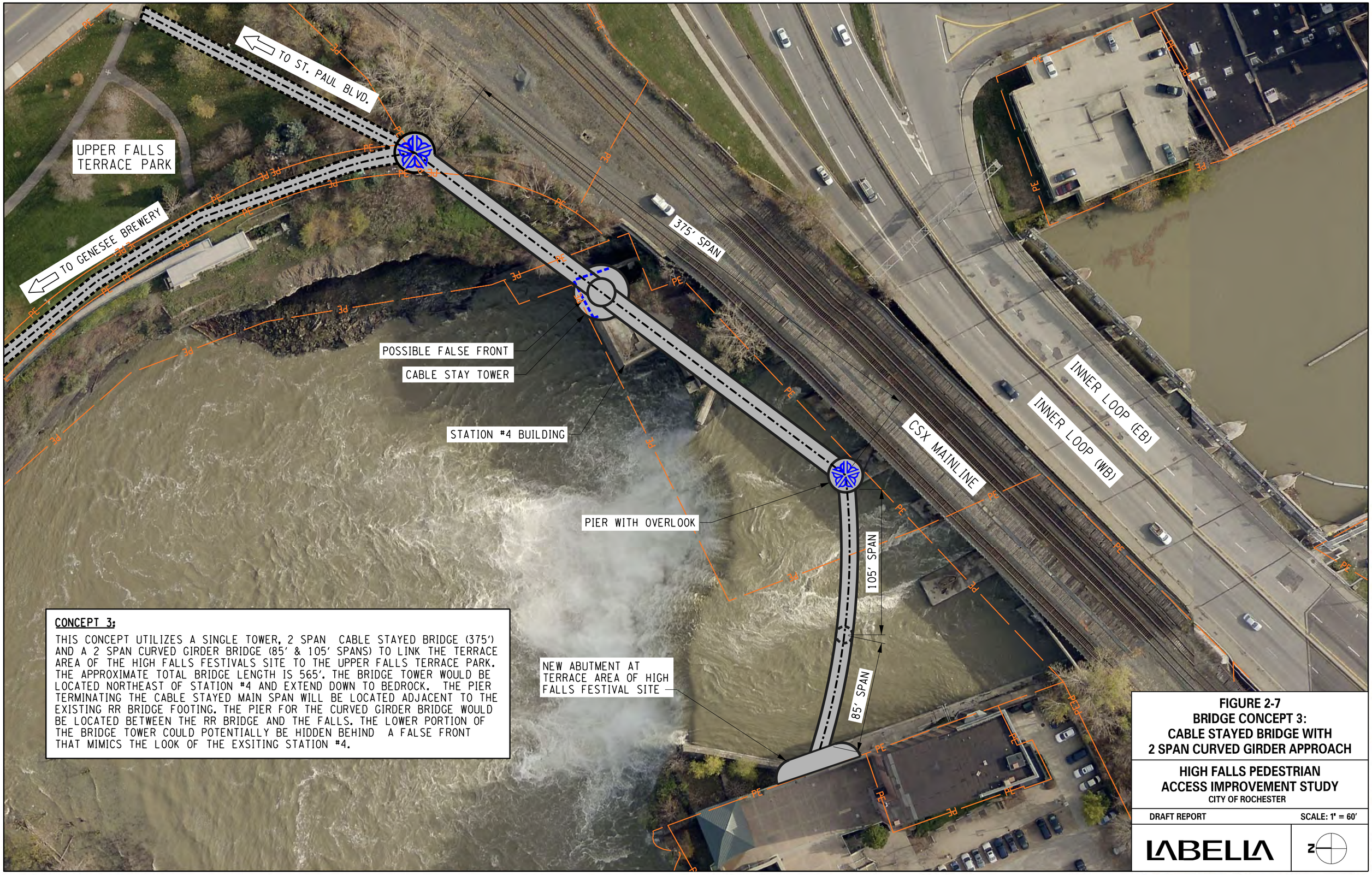

CONCEPT 3:

THIS CONCEPT UTILIZES A SINGLE TOWER, 2 SPAN CABLE STAYED BRIDGE (375') AND A 2 SPAN CURVED GIRDER BRIDGE (85' & 105' SPANS) TO LINK THE TERRACE AREA OF THE HIGH FALLS FESTIVALS SITE TO THE UPPER FALLS TERRACE PARK. THE APPROXIMATE TOTAL BRIDGE LENGTH IS 565'. THE BRIDGE TOWER WOULD BE LOCATED NORTHEAST OF STATION #4 AND EXTEND DOWN TO BEDROCK. THE PIER TERMINATING THE CABLE STAYED MAIN SPAN WILL BE LOCATED ADJACENT TO THE EXISTING RR BRIDGE FOOTING. THE PIER FOR THE CURVED GIRDER BRIDGE WOULD BE LOCATED BETWEEN THE RR BRIDGE AND THE FALLS. THE LOWER PORTION OF THE BRIDGE TOWER COULD POTENTIALLY BE HIDDEN BEHIND A FALSE FRONT THAT MIMICS THE LOOK OF THE EXSITING STATION #4.

FIGURE 2-7
BRIDGE CONCEPT 3:
CABLE STAYED BRIDGE WITH 2 SPAN CURVED GIRDER APPROACH

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY
CITY OF ROCHESTER

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FIGURE 2-8
BRIDGE CONCEPT 2:
CURVILINEAR CABLE STAYED BRIDGE

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY
CITY OF ROCHESTER

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Advantages of Concept 3:

- Signature-type bridge structure.
- Bridge alignment provides a direct connection to the existing terrace area of the High Falls Festival Site.
- Approach spans curve slightly and better parallel the edge of the falls.
- The tower is independent of Station 4 and can be constructed without directly impacting the building; therefore, substantial stabilization of the building isn't required. This reduces cost and makes it easier and safer to construct.
- A falsefront could be constructed around the pier that mimics the appearance of the existing Station 4.
- Less costly than concepts 2 and 4: $ 17.0 M

Disadvantages of Concept 3:

- Construction of Pier #2 may still require some investment to stabilize Station 4 because of the close proximity of the building to the tower.
- Pier #1 is located in the river (i.e. not directly adjacent to the railroad bridge footing) and is therefore more vulnerable to debris collection and increased hydraulic impacts.
- The constructability of a tall pier below the falls and adjacent to Station 4 is challenging.
- Visually, the bridge height and scale overlaps with the downtown skyline, but less so than Concept 2.

Concept 4: Cantilever Spar Cable Stayed Bridge with 2 Span Curved Girder Approach

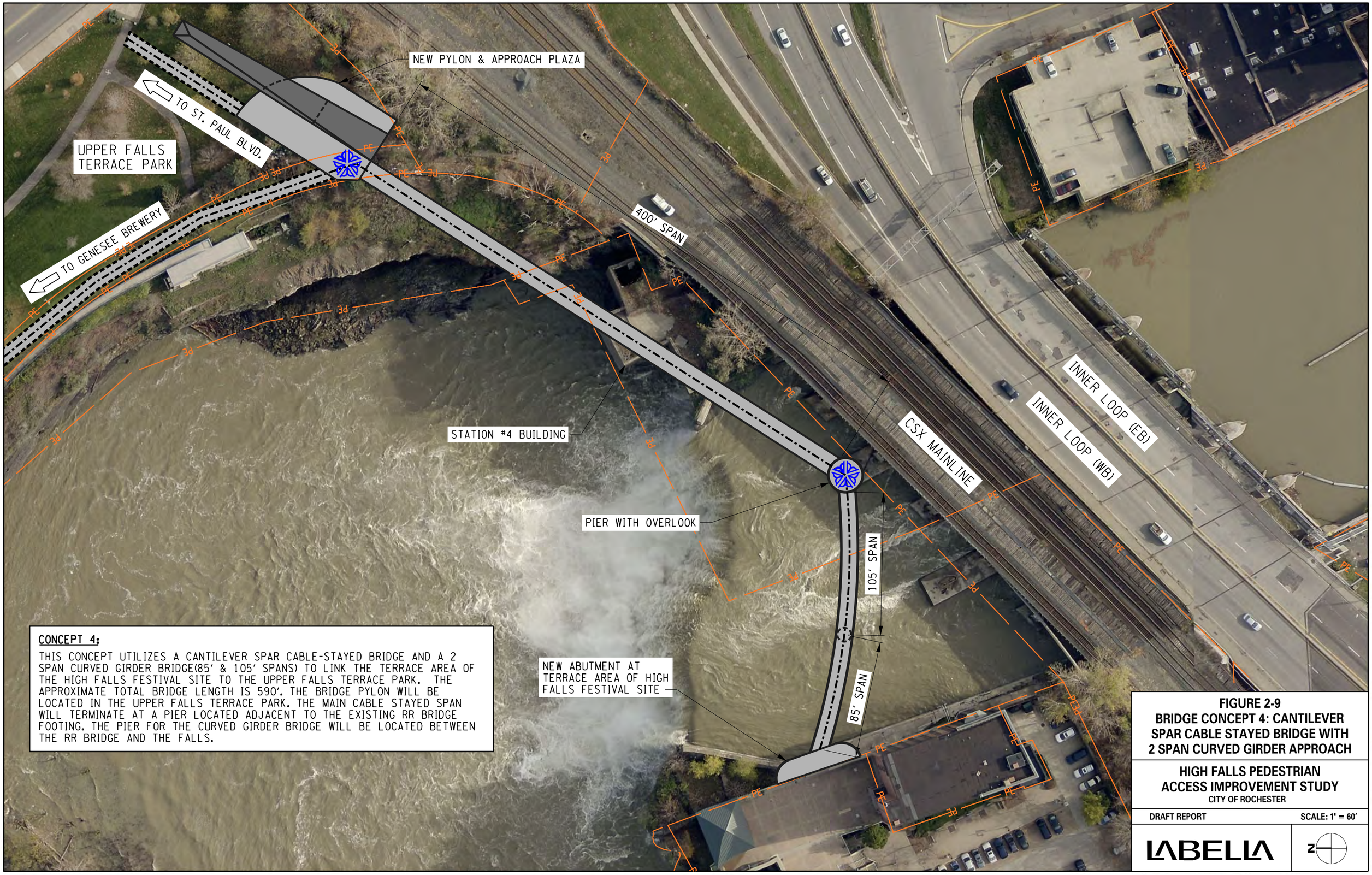
Bridge Concept 4 utilizes a cantilever span cable-stayed bridge and a 2 span curved girder bridge (85 ft and 105 ft spans) to link the terrace area of the High Falls Festival Site to the Upper Falls Terrace Park. The approximate total bridge length is 590 feet. The bridge pylon will be located in the Upper Falls Terrace Park. The main cable stayed span will terminate at a pier located adjacent to the existing CSX Railroad bridge footing. The pier for the curved girder bridge will be located between the railroad bridge and the falls. Refer to Figures 2-9, 2-10 and 2-11 for a plan and visual simulations of Bridge Concept 4.

Advantages of Concept 4:

- Signature-type bridge structure.
- Bridge alignment provides a direct connection to the existing terrace area of High Falls Festival Site.
- Approach spans curve slightly and parallel the edge of the falls.
- The most "open" feeling structure while on the bridge.
- Construction within the river is minimized since this concept eliminates the tall pier / tower within the gorge near Station 4. Therefore, this concept is completely independent of Station 4 and stabilization of the building isn't required.
- Visually spectacular with a dramatic pylon that is offset from the downtown skyline.

Disadvantages of Concept 4:

- Pier 1 is located in the river (i.e. not directly adjacent to the railroad footing) and is therefore more vulnerable to debris collection and increased hydraulic impacts.
- Structurally, this concept is less efficient than the other cable stay bridge types.
- Highest cost option: $25.0 M



CONCEPT 4;

THIS CONCEPT UTILIZES A CANTILEVER SPAR CABLE-STAYED BRIDGE AND A 2 SPAN CURVED GIRDER BRIDGE(85' & 105' SPANS) TO LINK THE TERRACE AREA OF THE HIGH FALLS FESTIVAL SITE TO THE UPPER FALLS TERRACE PARK. THE APPROXIMATE TOTAL BRIDGE LENGTH IS 590'. THE BRIDGE PYLON WILL BE LOCATED IN THE UPPER FALLS TERRACE PARK. THE MAIN CABLE STAYED SPAN WILL TERMINATE AT A PIER LOCATED ADJACENT TO THE EXISTING RR BRIDGE FOOTING. THE PIER FOR THE CURVED GIRDER BRIDGE WILL BE LOCATED BETWEEN THE RR BRIDGE AND THE FALLS.

FIGURE 2-9
BRIDGE CONCEPT 4: CANTILEVER SPAR CABLE STAYED BRIDGE WITH 2 SPAN CURVED GIRDER APPROACH

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FIGURE 2-10
BRIDGE CONCEPT 4: CANTILEVER SPAR CABLE STAYED BRIDGE WITH 2 SPAN CURVED GIRDER APPROACH

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FIGURE 2-11
BRIDGE CONCEPT 4: CANTILEVER SPAR CABLE STAYED BRIDGE WITH 2 SPAN CURVED GIRDER APPROACH

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2.3 GardenAerial Hub Trail

The GardenAerial Hub Trail will be a continuous loop formed by the Pont de Rennes Bridge to the north, new trails on the abandoned rail corridor along the east rim of the gorge, Upper Falls Terrace Park, a new pedestrian bridge over High Falls to the south, and the reconstructed Brown's Race to the west (see Figure 2-11, *Garden Aerial Hub Concept Plan*). The loop trail will provide spectacular viewing opportunities and a variety of immersive experiences in the rich natural, cultural and historic surroundings. Enhancements to various segments of the loop, such as plantings on the Pont de Rennes Bridge, development of the FlourGarden along Brown's Race, rehabilitation of Upper Falls Terrace Park, and development of wayfinding and interpretive signage throughout will further enrich the experience of traversing the GardenAerial Hub. Section 2.6: Summary of GardenAerial Concept Design Plan includes a more detailed description of the Hub Trail.

2.4 Pont de Rennes Bridge Improvements

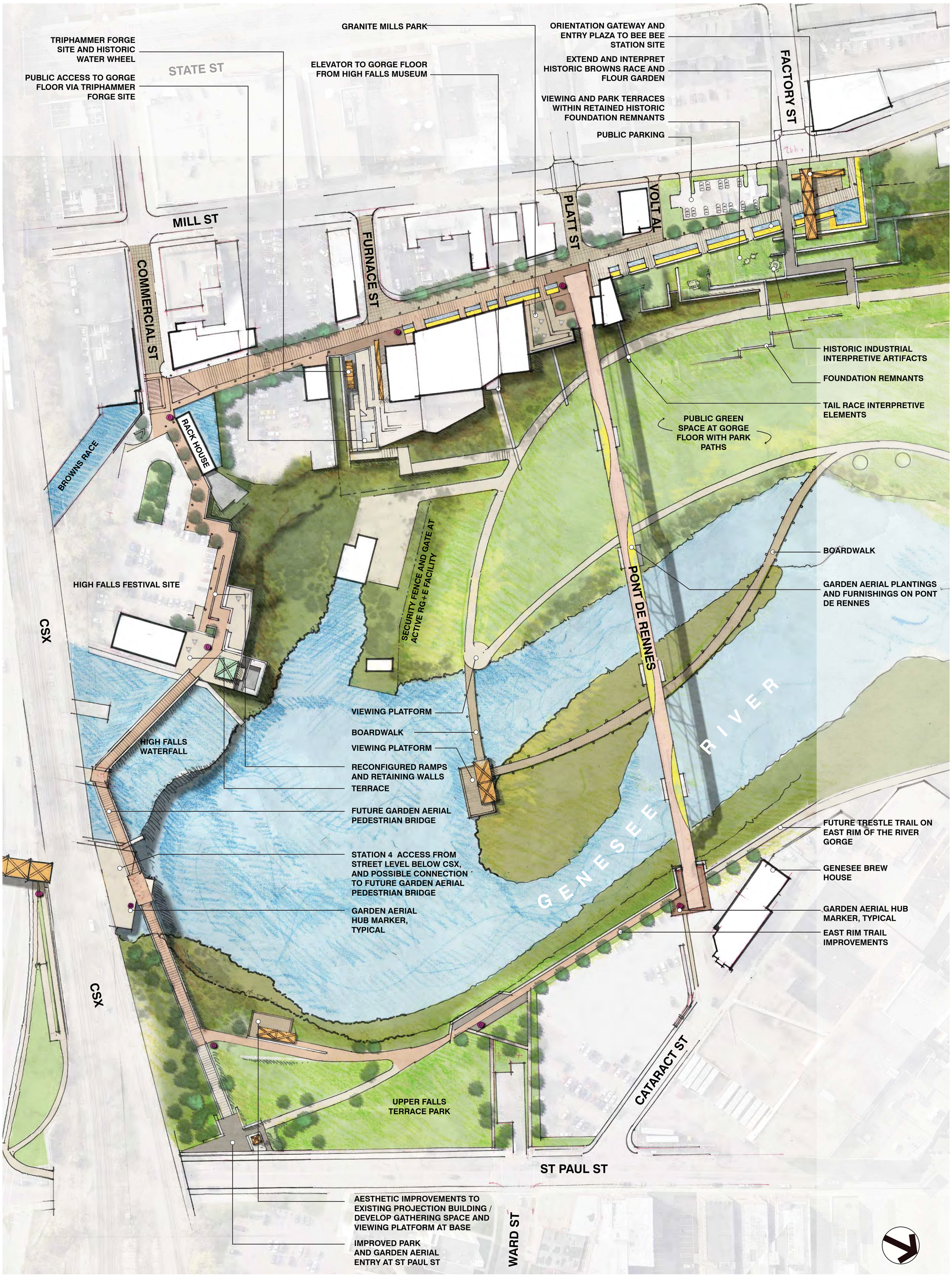
See Section 2.6 for details regarding conceptual plan elements for the Pont de Rennes Bridge. While the bridge is located within a historic district, it is not currently listed as eligible for listing in the National Register of Historic Places. However, significant changes would likely require review by the City and State Historic Preservation Office (SHPO). Based upon the existing structural analysis (performed in 1999) and recent inspections, the bridge appears to be capable of supporting a load of 85 pounds per square foot (psf). This is the design load currently used in pedestrian bridge design. The analysis does not indicate excess capacity beyond the 85 psf loading. As such, any plans for the structure should not exceed the 85 psf loading. For reference, this is equivalent to approximately 6" to 12" of soil, depending upon the density of the soil. An updated structural analysis is recommended if additional capacity is needed.

2.5 Upper Falls Terrace Park Improvements

Access to Upper Falls Terrace Park is currently fragmented and the park lacks a strong cohesive identity. The dominant feature in the park is the projection building which is no longer in use and has a dilapidated appearance, although it does provide an impressive viewing platform into the gorge below. The redeveloped Upper Falls Terrace Park will include a reorganized circulation system with a well-defined entrance at St. Paul Street. The projection building will be brought to life with programming, architectural treatments appropriate to the gorge setting, and outdoor plaza spaces with furnishings. Native landscaping is envisioned to complement the dramatic gorge setting. Section 2.6: Summary of GardenAerial Conceptual Design Plan includes a more detailed description of the elements of Upper Falls Terrace Park.

2.6 Summary of GardenAerial Conceptual Design Plan

Refer to Table 2-1 *Summary of GardenAerial Conceptual Design Plan* and Figure 2-12 *GardenAerial Hub Plan*.



GARDENAERIAL HUB CONCEPT PLAN

LABELLA Associates, P.C.

TROWBRIDGE WOLF MICHAELS LANDSCAPE ARCHITECTS

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY

GARDENAERIAL HUB CONCEPT PLAN

FIGURE 2-12

TABLE 2-1
SUMMARY OF GardenAerial
CONCEPTUAL DESIGN PLAN

Garden Aerial Segments Around High Falls – "The Hub"		Description / Objectives	Components / Engineering Attributes	Major Design Issues	Trail Connection & Usage Issues	Further Studies Needed	Additional Remarks	Order of Magnitude Costs (1)
1	**New Pedestrian Bridge over Genesee River at the High Falls** **(Refer to separate table of bridge alternatives)**	A number of bridge concepts were investigated. The list was narrowed down to four: • Concept 1: Three Span Steel Truss (Piers Independent of Station 4) • Concept 2: Curvilinear Cable Stayed Bridge with Two Towers • Concept 3: Straight Cable Stayed Bridge with One Tower and Two Span Curved Girder Approach • Concept 4: Cantilevered Spar Cable Stayed Bridge with Two Span Curved Girder Approach	• Span length (High Falls Terrace Park to High Falls Festival Site): Ranges from 565 ft. to 615 ft. • Proposed width of deck: 12 ft. • Existing elevation - east rim at old railroad embankment: Approx. 512 feet. • Existing elevation - Upper Falls Festival Site Terrace: Approx. 490 feet. • Approximate longitudinal slope: 3.6% to 3.9%.	• Geotechnical: The stability of the rock face of the gorge is a concern due to undermining and fracture planes. Bridge footings should be set back from the gorge face. • Station 4: Alternate No. 2 considers integrating the building with Tower 2. The feasibility of modifying, stabilizing and strengthening the building would need to be confirmed. • CSX ROW: All of the bridge alternatives avoid the need for CSX ROW acquisition. • Constructability: the site is very constrained for access and lifting purposes. Construction in the river channel (both above and below the falls) poses significant challenges. • West abutment: the preferred location is the High Falls Festival Site - Terrace area. The river wall will require modification. Connection to the terrace will need to consider the Gorsline Building Historic Site and its multiple basements. • East Abutment: removal of railroad embankment is a consideration in order to facilitate better grades.	• Complete the GardenAerial Hub • Connect the High Falls Terrace Park (east side) with the High Falls Festival Site (west side)	• Geotechnical Investigation for foundation and substructure construction. • Station 4 detailed structural and architectural evaluation to assess the building for: 1) reducing the risk of it collapsing and damaging the new bridge, and/or, 2) for its use as part of the support for the bridge.	• Western terminus of bridge is within Brown's Race Historic District and City Preservation District. Gorsline Building is on NYS Register. Entire bridge is within NYS Urban Heritage Area. • The public terrace at the Gorsline building forms a roof over a protected archeological site consisting of multiple basements and the historic raceway that once served the building.	• Concept #1: $ 7.0 M • Concept #2: $23.0 M • Concept #3: $17.0 M • Concept #4: $25.0 M
2	**Pont de Rennes Bridge**	• Add landscaping and/or streetscape upgrades to existing bridge deck	• Landscaping may include permanent planting beds with stock able to survive in shallow soil or movable planters. • Upgrade furnishings, railing, pavements and aesthetic treatments.	• Allowable dead load / live load on bridge truss is 85 psf per 1999 Pont de Rennes Investigation. • Assume soil is 110 lbs/cf. • Based on current load rating, allowable thickness of growing media & drainage layer would be approximately 8” - 10". Pedestrians would not be allowed on planted areas. • Tree planters would likely be too heavy. • Irrigation of planted areas would be required. • Consider waterproofing and drainage of deck.	• Bridge is a vital link in the GardenAerial Hub. Current usage includes pedestrians and bicycles. • Existing trail heads are located at either end of the bridge.	• The ability to provide landscaping is feasible but limited. An updated structural analysis / load rating would be required to assess the landscaping issue. The analysis should take into account the 2012 bridge inspection report.	• Landscaping should not exceed 85 psf unless more detailed analysis is performed. • Bridge is within Brown's Race Historic District, NYS Urban Heritage Area and is on NYS Register.	

TABLE 2-1 (CONTINUED)
SUMMARY OF GardenAerial CONCEPTUAL DESIGN PLAN

Garden Aerial Segments Around High Falls – "The Hub"		Description / Objectives	Components / Engineering Attributes	Major Design Issues	Trail Connection & Usage Issues	Further Studies Needed	Additional Remarks	Order of Magnitude Costs (1)
3	**East Side Trail**	• Pont de Rennes Bridge, southerly to Upper Falls Terrace Park utilizing old railroad alignment	• Construct new trail on existing rail corridor, relocated further back from gorge rim. Extend to St. Paul Street, existing overlook and new GardenAerial Bridge. • Lighting, furnishings, railing and landscape treatment.	• Slope adjacent to existing railing and trail is failing and requires stabilization. Walkway to be relocated further back from gorge rim. • Driveway to projection building isn't used and divides the park / cuts off access to south end. Consider filling drive to create continuous uninterrupted park space.	• Construction of Genesee Riverway Trail on east side of bridge, extending south through Upper Falls Terrace Park to intersection at SE corner will provide clarity for this section of trail. • Linkage to the north with future Trestle Trail to Smith Street.	• Geotechnical evaluation of gorge rim.	• City has grant for implementation on railroad bed. • Within NYS Urban Heritage Area.	City grant application estimated cost of $XX
4	**West Side Trail**	a. Brown's Race	• Enhance linkage between GardenAerial Bridge and Brown's Race. Consider signage, landscape, pavement, and lighting. • Strengthen gateway at intersection of Brown's Race / Commercial Street at Rack House. • Complete FlourGarden.	• Address visibility of entrance / access to GardenAerial Bridge (location deep within site and not apparent from street).	• GardenAerial connects with Genesee Riverway Trail at Brown's Race.	• Conditions assessment of existing Brown's Race pavements, furnishings, and wayfinding elements to minimize reconstruction.	• Within Brown's Race Historic District, City Preservation District and NYS Urban Heritage Area.	
		b. High Falls Festival Site	• High Falls Festival Site terrace area could provide appropriate entry platform for GardenAerial Bridge.	• Integration of circulation with plaza programming. Existing ramps at High Falls Festival Site are narrow - replace with broad sloping walk to clarify approach. • Address visibility of entrance / access to GardenAerial Bridge (location deep within site and not apparent from street).	• Depending on final location of bridge landing, the area between High Falls Festival Site and Brown's Race would become a dismount zone.	• Geotechnical assessment to confirm stability of terrace.	• Within Brown's Race Historic District, City Preservation District and NYS Urban Heritage Area. • Identify and protect existing archeological resources.	
5	**Upper Falls Terrace Park**	a. Reconfiguration of Pathways	• Construct new Genesee Riverway Trail and connect with integrated pathway system that links to entry plaza at St. Paul Street, an enhanced observation deck on the projection building, and the GardenAerial Bridge.	• Circulation currently fragmented and SE edge is inaccessible. • Strengthen entrance at St. Paul Street and connection to Downtown.	• Link Genesee Riverway Trail from Pont de Rennes through Upper Falls Terrace Park to new entrance at St. Paul Street.	• Geotechnical evaluation of gorge rim.	• Within NYS Urban Heritage Area.	
		b. Aesthetic improvements to Projection Building / Observation Deck - consider potential programs for repurposing building	• Consider rustic wood sheathing applied to projection building and viewing deck so that it appears more harmonious within park setting. • Develop plaza at base of building with seating. • Provide viewing scope / binoculars.	• Programming of projection building. Sheathing material for building. • Consider eliminating or minimizing access drive to projection building while allowing for future use.	• Crossroads of Genesee Riverway Trail and GardenAerial Bridge.	• Concept design for aesthetic treatments and potential programming for projection building. • Geotechnical evaluation at area to confirm gorge stability.	• Consider removing building in favor of a spectacular overlook structure. • Within NYS Urban Heritage Area.	
		c. Landscape treatment - consider re-introduction of native gorge rim plant species	• Re-establishment of native species could provide appropriate character for dramatic natural setting and provide additional interpretive opportunities.	• Soil condition and stability.	• Links Genesee Riverway Trail to GardenAerial Bridge.	• Soils analysis for plant growth. • Concept design for landscape plan considering geology and native species.	• Within NYS Urban Heritage Area.	

TABLE 2-2
Summary of Preferred Pedestrian Bridge Alternatives

Preferred Bridge Alternatives		Concept 1: 3 Span, Steel Pedestrian Truss	Concept 2: Curvilinear Cable Stayed Bridge	Concept 3: Cable Stayed Bridge w/ 2 Span Curved Girder Approach	Concept 4: Cantilever Spar Cable Stayed Bridge w/ 2 Span Curved Girder Approach
1. Description & Components	a. Superstructure	Prefabricated arch style trusses utilizing weathering steel and a concrete deck. The approximate span lengths would be 200', 220' and 190' for a total bridge length of 610'. The clear width of the walkway would be 12'.	Two tower Cable-Stayed bridge with curved steel superstructure. Steel cables would support the curved steel supresstructure with a concrete deck. The approximate length of the bridge would be 615' with a clear width of 12'.	Cable-Stayed bridge with one tower on a straight alignment with 2-span curved girder approach. Steel cables would support a main span of approximately 375'. The main span would utilize a steel framed superstructure with a concrete deck. The approach spans would be approximately 85' a 105' in length and utilize curved steel girders and a concrete deck. The approximate length of the bridge would be 565' with a clear width of 12'.	Cantilever spar cable-Stayed bridge on a straight alignment with 2-span curved girder approach. Steel cables would support a main span of approximately 400'. The main span would utilize a steel framed superstructure with a concrete deck. The approach spans would be approximately 85' a 105' in length and utilize curved steel girders and a concrete deck. The approximate length of the bridge would be 590' with a clear width of 12'.
	b. Substructure & Foundations	Piers: Two concrete piers would be utilized. Pier 1 would be founded at the termination of the fourth pier of the railroad bridge and above the High Falls. It would be approximately 18' tall from the river bed. Pier 2 would be founded northeast of Station #4, adjacent to the building, and be approximately 135' tall. Both piers would be concrete and founded on rock sockets drilled into the rock. Abutments: Two concrete abutments would be required. The eastern abutment, terminating at Upper Falls Terrace Park, would be founded on piles driven to rock. Excavation of soil would be required to construct the abutment at an elevation slightly lower than the current embankment. The western abutment, terminating at the terrace area of the High Falls Festival site, would utilize the existing riverwall. Modification of the river wall and plaza would be required.	Towers: Two concrete towers would be utilized. Tower 1 would be founded at the termination of the second tower of the railroad bridge and above the High Falls. It would be approximately 170' tall from the river bed and approximately 150 from the bridge deck. Tower 2 would be founded within Station #4 and extend down within the building to bedrock. Tower 2 would be approximately 280' tall and require significant stabilization of the Station #4 building. Both towers would be concrete and founded on rock sockets drilled into the rock. Abutments: Two concrete abutments would be required. The eastern abutment, terminating at Upper Falls Terrace Park, would be founded on piles driven to rock. Excavation of soil would be required to construct the abutment at an elevation slightly lower than the current embankment. The western abutment would terminating at the southeast corner of the Gorsline Building at the existing river wall. It would then link to a promenade(see below) . Promenade: A raised promenade would follow the existing river wall along the Gorsline Building to a terminus at the terrace area of the High Falls Festival site. This would serve as the access to the bridge at the western approach.	Tower: The tower would be founded adjacent to Station #4. It would be founded on a rock socket drilled into the rock and would be approximately 275' tall. Piers: Pier 1 would be founded at the termination of the fourth pier of the railroad bridge and above the falls. It would be concrete and approximately 18' tall from the river bed and founded on a rock socket drilled into the rock. Pier 2 would be founded approximatley 100' from the edge of the falls and 85' from the western abutment at the HIgh Falls Festival site. It would be concrete and approximately 15' tall from the river bed and founded on a rock socket drilled into the rock. Abutments: Two concrete abutments would be required. The eastern abutment, terminating at Upper Falls Terrace Park, would be founded on piles driven to rock. Excavation of soil would be required to construct the abutment at an elevation slightly lower than the current embankment. The western abutment, terminating at the terrace area of the High Falls Festival site, would utilize the existing riverwall. Modification of the river wall and plaza would be required.	Pylon: The pylon would be founded at the eastern abutment in Upper Falls Terrace Park. It would be constructed of steel and founded on a concrete footing that is anchored into the rock. Anchor cables for the pylon may be required and would be drilled into the rock behind the pylon. Piers: The first concrete pier would be founded at the termination of the fourth pier of the railroad bridge and above the falls. It would be approximately 18' tall from the river bed and founded on a rock socket drilled into the rock. The second concrete pier would be founded approximatley 100' from the edge of the falls and 85' from the western abutment at the HIgh Falls Festival site. It would be approximately 15' tall from the river bed and founded on a rock socket drilled into the rock. Abutments: Two concrete abutments would be required. The eastern abutment, terminating at Upper Falls Terrace Park, would be founded on piles driven to rock. Excavation of soil would be required to construct the abutment at an elevation slightly lower than the current embankment. The western abutment, terminating at the terrace area of the High Falls Festival site, would utilize the existing riverwall. Modification of the river wall and plaza would be required.
2. Engineering Issues & Impacts	c. Access (east & west)	West Side: • Terrace area of High Falls Festival Site which is accessible from Commercial Street and Browns Race. East Side: • From new pedetrian path along gorge rim thru Upper Falls Terrace Park. • From St. Paul Boulevard sidewalk.	West Side: • Terrace area of High Falls Festival Site which is accessible from Commercial Street and Browns Race. East Side: • From new pedetrian path along gorge rim thru Upper Falls Terrace Park. • From St. Paul Boulevard sidewalk.	West Side: • Terrace area of High Falls Festival Site which is accessible from Commercial Street and Browns Race. East Side: • From new pedetrian path along gorge rim thru Upper Falls Terrace Park. • From St. Paul Boulevard sidewalk.	West Side: • Terrace area of High Falls Festival Site which is accessible from Commercial Street and Browns Race. East Side: • From new pedetrian path along gorge rim thru Upper Falls Terrace Park. • From St. Paul Boulevard sidewalk.
	d. Station 4 Involvement	The structure is constructed independent of Station 4. However, some consideration should be given to long term protection of the pier should Station 4 collapse in the future. Also, protection wil be needed during construction to ensure worker and site safety.	A tower is being constructed within Station 4. This will require that Station 4 is structurally strengthened so that the tower can be safely constructed.	The structure is constructed independent of Station 4. However, some consideration should be given to long term protection of the tower should Station 4 collapse in the future. Also, protection wil be needed during construction to ensure worker and site safety.	The bridge is constructed well above Station 4 and doesn't involve the structure.
	e. Maintenance Considerations	Relatively low maintenance, similar to other truss bridges the City owns. Using weathering steel would reduce painting maintenance. Access for performing maintenance is standard. Inspections could be done with standard inspection equipment.	Relatively low maintenance but access to perform maintenance duties will be more difficult due to tower heights, locations, and the cables. Recommend galvanizing the steel to reduce maintenance. Inspections would require specialty access and non standard inspection equipment.	Relatively low maintenance but access to perform maintenance duties will be more difficult due to tower height, location, and the cables. Recommend galvanizing the steel to reduce maintenance. Inspections would require specialty access and non standard inspection equipment.	Relatively low maintenance but access to perform maintenance duties will be more difficult due to pylon height and cables. Recommend galvanizing the steel to reduce maintenance. Inspections would require specialty access and non standard inspection equipment.
	f. Other Considerations	• Common bridge type. • Trusses can be prefrabricated offsite. • Access for construction & lifting above, and below, the Falls is very difficult and complicated. •Falsework may be required within the river for erecting the trusses.	• Complex bridge type. • Access for construction and lifting above, an below, the falls is very difficult and complicated. • Promenade needs to be constructed along the west river wall and immediately adjacent to the Gorsline building.	• Complex bridge type. • Access for construction and lifting above, an below, the falls is very difficult and complicated.	• Complex bridge type. • Access for construction and lifting above, an below, the falls is very difficult and complicated.
3. Environmental	a. Permits	City, NYSDEC, ACOE, CSX, NYSDOT	City, NYSDEC, ACOE, CSX, NYSDOT	City, NYSDEC, ACOE, CSX, NYSDOT	City, NYSDEC, ACOE, CSX, NYSDOT
	b. Historical Impacts	The bridge would be located within a historic heritage district and be subject to additional review. SHPO coordination will be crucial.	The bridge would be located within a historic heritage district and be subject to additional review. SHPO coordination will be crucial. The use of Station 4 will require additional coordination.	The bridge would be located within a historic heritage district and be subject to additional review. SHPO coordination will be crucial.	The bridge would be located within a historic heritage district and be subject to additional review. SHPO coordination will be crucial.
	c. Hydraulics	Pier 1 would need to be evaluated for hydraulic effects. But its location behind the existing CSX bridge footing would limit its effect on flow and ability to collect debris.	Tower 1 would need to be evaluated for hydraulic effects. But its location behind the existing CSX bridge footing would limit its effect on flow and ability to collect debris.	Pier 1 would need to be evaluated for hydraulic effects and possible debris collection as it is located above the falls and is not protected by the existing CSX bridge footings. Pier 2 would also need to be evaluated for hydraulic effects. But its location behind the existing CSX bridge footing would limit its effect on flow and ability to collect debris.	Pier 1 would need to be evaluated for hydraulic effects and possible debris collection as it is located above the falls and is not protected by the existing CSX bridge footings. Pier 2 would also need to be evaluated for hydraulic effects. But its location behind the existing CSX bridge footing would limit its effect on flow and ability to collect debris.
4. Aesthetics		The structure has a relatively low profile and doesn't compete with the skyline. Trusses tend to evoke an older, more industrial feel which ties in well with the history of the area. Pier 2 could be formlined and stained to better match the brick of Station 4. Views from on the bridge will be partly obstructed by the truss itself. The bridge itself aligns well with the edge of the falls and gorge line.	The structure has a substantial profile that competes heavily with the skyline behind it. The bridge is much more modern feeling than the surroundings. Tower 2 would be visually striking as it emerges from within Station 4. The base of Tower 2 being hidden within Station 4 also allows the the two towers to appear similar in height which helps balance the structure visually. Views from on the bridge would be mainly unobstructed. Lighting the towers and cables could add dramatic nighttime effects and tie into the lighting recently installed at the falls themselves. The bridge doesn't align with the edge of the falls and gorge but the curvature of the bridge deck adds a unique feeling while on the structure.	The structure has a substantial profile that competes with the skyline behind it, but much less so than concept 2 since there is only one tower. The bridge is much more modern feeling than the surroundings. Tower 2 could be formlined and stained to better match the brick of Station 4. Views from on the bridge would be mainly unobstructed. Lighting the tower and cables could add dramatic nighttime effects and tie into the lighting recently installed at the falls themselves. The bridge aligns well with the edge of the falls and gorge while the curved approach spans add interest for the users.	While the pylon is large, its location away from the skyline allows it to not detract from the falls. The portion of the structure above the falls will have much less visual weight and blend into the background without taking away from the skyline. The bridge is much more modern feeling than the surroundings. Views from on the bridge would be mainly unobstructed. Lighting the pylon and cables could add dramatic nighttime effects and tie into the lighting recently installed at the falls themselves. The bridge aligns well with the edge of the falls and gorge while the curved approach spans add interest for the users.
5. Order of Magnitude Costs		$7 Million	$23 Million	$17 Million	$25 Million

3.0 CONCEPTUAL ACCESS PLAN: CONNECTIONS TO DOWNTOWN AND OTHER TRAILS

3.1 General Needs Assessment

The High Falls District is directly adjacent to Downtown Rochester, but the two areas are separated by significant barriers. These include the Inner Loop, a limited-access urban expressway owned by NYSDOT, the CSX Railroad which includes mainline and siding tracks, and the Central Avenue Dam which is operated by RG&E. Ideally, it would be preferred to have a promenade directly adjacent to the river (similar to the Genesee Crossroads Park) if it were feasible to somehow cross these features. Other options to promote better access include improvements to the existing street network.

The CSX Railroad is elevated approximately 25 feet above the surrounding grade and is supported by berms and retaining walls. The Inner Loop varies in grade: the section near the Genesee River is approximately at-grade, west of the river the highway is supported by retaining walls and rises to approximately 20 feet above grade, and east of the river the Inner Loop becomes a sunken expressway and passes under St. Paul Street. The Central Avenue Dam is almost entirely within the Genesee River Channel but is in close proximity to the Inner Loop Bridge. Unfortunately, none of these barriers is planned for removal in the foreseeable future. In fact, a NYSDOT project is currently underway to rehabilitate the Inner Loop Bridge over the Genesee River in its current configuration. There is a need to investigate alternatives that would better connect the High Falls District to Downtown Rochester.

3.2 Alternatives to Better Connect High Falls to Downtown

Options for improving access to and from Downtown Rochester could involve constructing new trails and pedestrian facilities or improving existing infrastructure. Access routes adjacent to the Genesee River are preferred. This is best exemplified by the existing river promenade along Corn Hill Landing. However, it is acknowledged that river-edge access is not feasible at all locations.

3.2.1 River Adjacent Trail

3.2.1.a Feasibility of Crossing Central Avenue Dam, Inner Loop and CSX Railroad

River-adjacent trails along the east or west side of the Genesee River would need to pass by the Central Avenue Dam (owned by RG&E) and cross the Inner Loop (owned by NYSDOT) and CSX Railroad. There is sufficient vacant land to by-pass the dam, but crossing the Inner Loop is problematic. Crossing the highway at-grade is not considered feasible since it is classified as an urban expressway.

Engineering drawings were provided by NYSDOT in an effort to investigate the feasibility of crossing under the Inner Loop. The limiting factor was determined to be the ability to access the underside of the bridge given the close proximity of the Central Avenue Dam. The existing bridge would need to be modified to allow a set of stairs to be installed to access a new pedestrian walkway under the bridge. Installing the stairway adjacent to the bridge fascia girder would likely not be feasible due to insufficient space between the bridge and Central Avenue Dam. Installing the stairway in the bridge sidewalk area (cutting an opening in the sidewalk) would also not be feasible due to the presence of a bridge girder and a bank of asbestos conduits underneath the sidewalk. Therefore, it is

our opinion that crossing underneath the Inner Loop bridge in its current configuration is not feasible, and the most likely option for crossing the Inner Loop would be via an overhead pedestrian bridge or using the existing street infrastructure to cross over or under the expressway.

Should the Inner Loop bridge over the Genesee River ever be removed or narrowed, there may be an opportunity to develop a walkway under the bridge to the High Falls District and future GardenAerial trail loop. The walkway would likely be suspended from the bridge and/or attached to the bridge piers. It would need to avoid the active raceway which is integral with a part of the western abutment. Per the NYSDOT record drawings and Genesee River flow data, there is approximately 10 feet of clearance between the high pool elevation and the bottom of the bridge superstructure. Approval would be needed from NYSDOT for the trail to occupy its right-of-way and also for any modifications to the Inner Loop bridge. It is noted that removal or replacement of the Inner Loop bridge is unlikely in the foreseeable future, as NYSDOT is currently rehabilitating the bridge in its current configuration.

The CSX Railroad is elevated as much as 25 feet above the surrounding grade, and therefore crossing underneath the railroad is feasible with regard to clearance. On the east side of the Genesee River, a path or sidewalk could be constructed underneath the easternmost span of the CSX bridge, connecting an existing sidewalk along the Inner Loop with the Station 4 site. Improvements would be needed to construct a trail at this location, including minor grading, lighting, railing, and a structural roof system over the trail to keep debris and ballast from falling onto the trail (the tracks above have open railroad ties). On the west side of the river, a trail would be suspended over the river as it crosses underneath the Inner Loop and CSX Railroad, connecting to the High Falls festival site. It is noted that crossing under the Inner Loop on the west side has been determined to be infeasible with the bridge in its current configuration.

Any trail within the CSX right-of-way would require an agreement to allow public access on CSX property.

3.2.1.b East Side Trail

On the east side of the Genesee River, existing pedestrian facilities are located south of Andrews Street and also north of the CSX Railroad within High Falls Terrace Park. There is a gap in river-edge access between Andrews Street and the falls. Within this area, Water Street and St. Paul Street each have sidewalks and provide the closest north/south route for pedestrians and bicycles traveling along the east side of the river.

Providing river-adjacent access between Andrews Street and High Falls is complicated by two primary factors. First, the Inner Loop, Central Avenue Dam and CSX Railroad are significant barriers to cross (see discussion in Section 3.2.1.a). Second, the buildings along Water Street have foundations that also serve as a river wall. Providing public access along the river between Andrews Street and the Inner Loop would involve constructing a walkway within the river channel. The walkway could be attached to the building foundations and cantilevered outward or built directly in the river as a self-supporting structure. Both options would be costly and require easements or agreements to

construct. Plus, this option may have an adverse effect on historic structures, as the buildings along Water Street are part of the St. Paul-North Water Street Historic District and are well-preserved 19th century buildings along the river's edge. The City of Rochester does own a small mid-block parcel along Water Street (Water Street Commons) that is currently used as a park overlooking the river, but the City does not own the adjacent buildings or properties.

Considering the aforementioned complications of an east side river-adjacent trail between the High Falls District and Downtown Rochester, this study focuses on improving the Water Street and St. Paul Street corridors in order to strengthen the connections between the two districts. However, it is recommended that if replacement or removal of the Inner Loop bridge over the Genesee River is ever considered, pedestrian access should be provided along the Genesee River to provide direct access to the High Falls District (Station 4 site assuming it is renovated into a public space).

3.2.1.c West Side Trail

On the west side of the Genesee River, existing pedestrian facilities are located south of Andrews Street (within Genesee Crossroads Park / Charles Caroll Plaza) and north of the CSX Railroad within the High Falls Festival Site. There is a gap in river-edge access between Andrews Street and the falls. Nearby access routes include Front Street, a narrow pedestrian tunnel under the Inner Loop aligning with Mill Street, and sidewalks to and from State Street which crosses under the Inner Loop. The Genesee Riverway Trail is officially designated along Front Street, the Inner Loop eastbound entrance ramp, State Street, and Commercial Street.

There is an opportunity to continue the river promenade from Andrews Street northerly to the Inner Loop. In essence, this would be an extension of the Genesee Crossroads Park along the vacant RG&E parcel (known as #84 Andrews Street) along the river (see Figure 3-1). The site has recently undergone environmental remediation and will likely be sold and available for private development. An easement for public riverfront access should be secured as part of any future development of this property.

Continuing a river-adjacent trail to the High Falls Festival Site would face the same challenges described in Section 3.2.1.b – East Side Trail with regard to crossing the Inner Loop and CSX Railroad. Crossing underneath the Inner Loop in its current configuration has been determined to be infeasible, but if the Inner Loop bridge is ever considered for removal or replacement, pedestrian access under the bridge should be provided.

3.2.2 New Pedestrian Bridge over Inner Loop and CSX Railroad

The feasibility of constructing a pedestrian bridge over the Inner Loop and CSX Railroad was investigated (refer to Figure 3-1). The alignment would be a continuation of the promenade along the west side of the Genesee River. On the south side, the bridge would connect to a new public walkway along the river edge of #84 Andrews Street, and on the north side, the bridge would connect to the Gorsline Plaza. The bridge span would be approximately 280 feet, and the bottom of the bridge would be approximately 50 feet above grade due to clearance requirements over the railroad which is already elevated approximately 25 feet above the surrounding grade. For

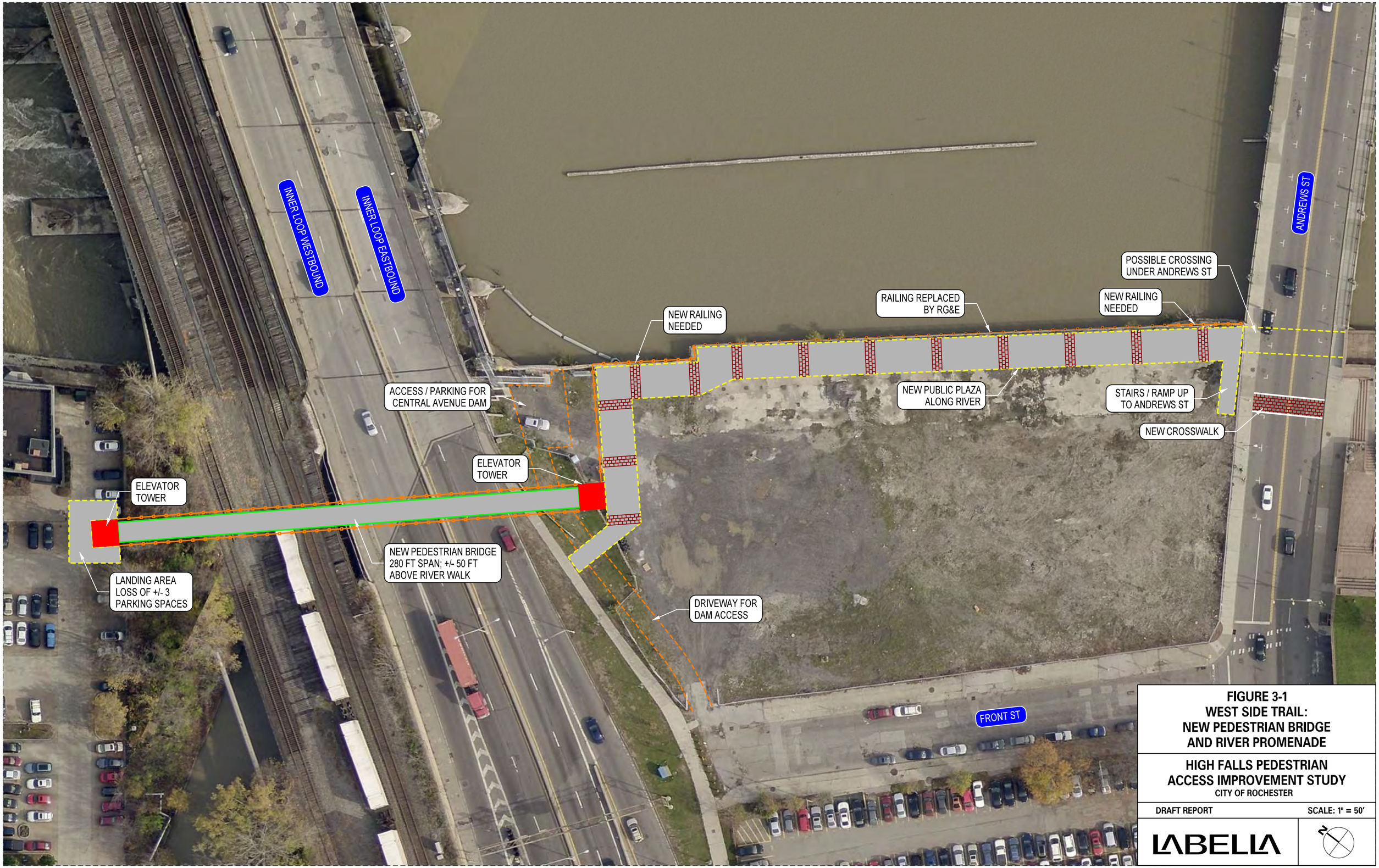


FIGURE 3-1
WEST SIDE TRAIL:
NEW PEDESTRIAN BRIDGE AND RIVER PROMENADE

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planning purposes it is assumed that stair towers and elevators would be provided at each end of the bridge.

Benefits to a pedestrian bridge at this location include providing a safe and direct route for pedestrians traveling along the west side of the river to get to the High Falls District, and particularly the High Falls Festival Site. Drawbacks to this option are the relatively high cost, especially with two elevators, the additional ongoing maintenance responsibilities, and safety / security perceptions associated with pedestrian bridges and enclosed stairways and elevators. The bridge would also tower over the adjacent landscape (although views from the bridge would be impressive). The benefits would need to be weighed against the costs, given that State Street is located approximately 700 feet to the west and the existing pedestrian tunnel under the Inner Loop is approximately 450 feet to the west. Both existing routes are available for pedestrians and bicyclists to cross under the Inner Loop.

3.2.3 Improvements to Existing Streets

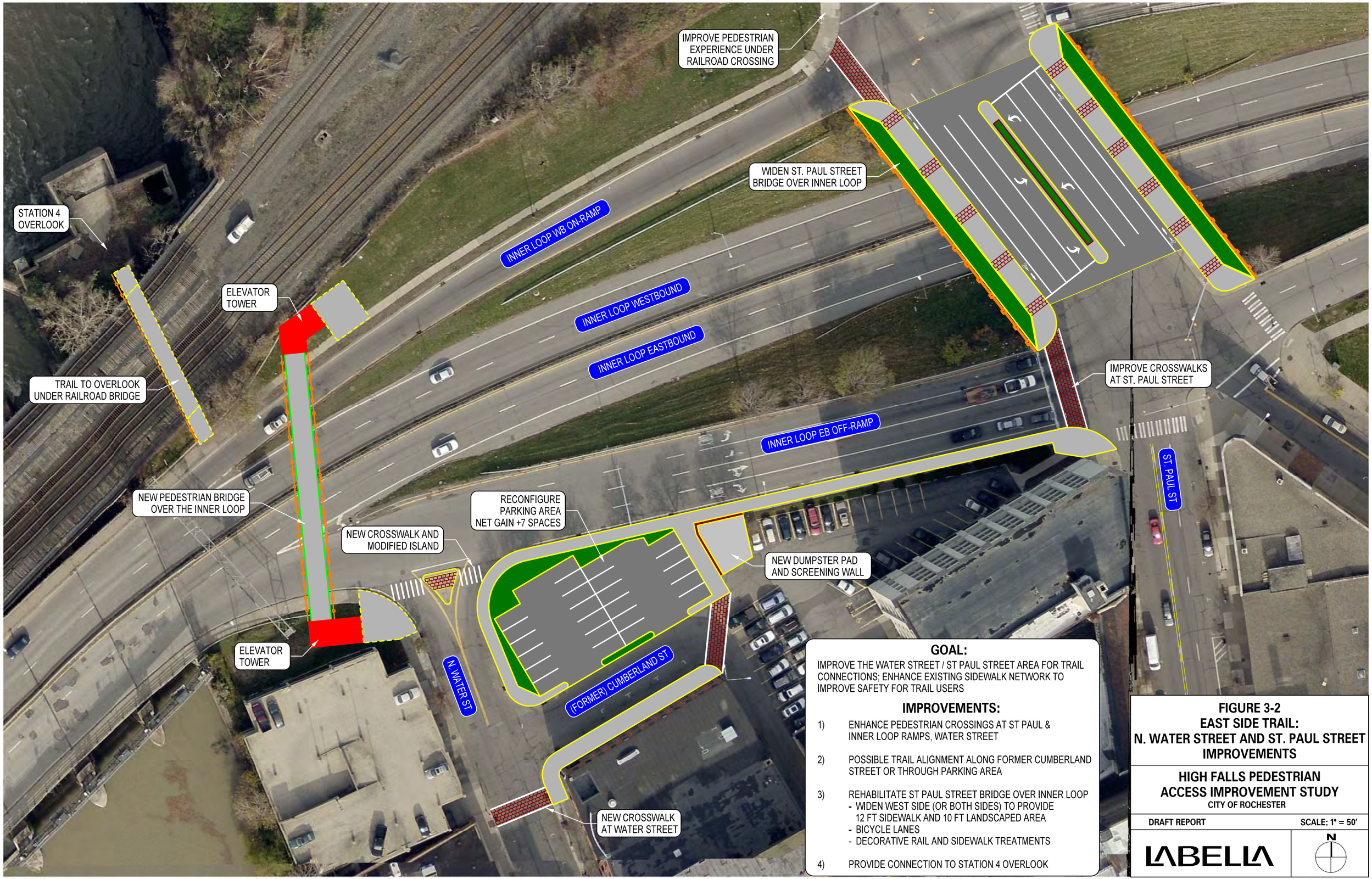
This section focuses on improvements that could be made to existing City streets in order to make them safer and more accessible for pedestrians traveling between High Falls and Downtown Rochester, recognizing that providing a river-edge trail may not be feasible in all areas.

3.2.3.a East Side: N. Water Street and St. Paul Street Area

The N. Water Street corridor is suitable as a pedestrian route, as it features sidewalks approximately 10 feet wide that are generally in good condition, has a parallel alignment to the Genesee River, and has relatively low traffic volumes. A recommended improvement at the south end of N. Water Street is to install a mid-block, high-visibility crosswalk at Andrews Street to provide continuity with the existing river promenade south of Andrews Street.

One possible trail alignment would follow the west side of N. Water Street to the Inner Loop where a new pedestrian bridge would provide a means to cross the expressway (refer to Figure 3-2). North of the Inner Loop, a pedestrian could either choose to travel easterly to St. Paul Street or northerly under the CSX Railroad bridge to the Station 4 site where future improvements include an observation deck and possible bridge connection to Upper Falls Terrace Park and the High Falls Festival Site.

The feasibility of installing a pedestrian bridge over the Inner Loop was investigated. The most suitable location for a pedestrian bridge is spanning between the north end of N. Water Street (where the existing private parking structure is located) and a narrow grass strip (approximately 30 feet wide) between the Inner Loop WB on-ramp and the CSX Railroad right-of-way. On the south side, this location would align with a recommended trail alignment along N. Water Street, and on the north side, the location would provide convenient access to Station 4 via a path under the CSX Railroad bridge. The span of the bridge would be approximately 160 feet, with standard 16 foot clearance over the Inner Loop travel lanes. For planning purposes, it is assumed that there would be a stair tower and elevator at each end of the pedestrian bridge due to space constraints.



GOAL:

IMPROVE THE WATER STREET / ST PAUL STREET AREA FOR TRAIL CONNECTIONS; ENHANCE EXISTING SIDEWALK NETWORK TO IMPROVE SAFETY FOR TRAIL USERS

IMPROVEMENTS:

1) ENHANCE PEDESTRIAN CROSSINGS AT ST PAUL & INNER LOOP RAMPS, WATER STREET

2) POSSIBLE TRAIL ALIGNMENT ALONG FORMER CUMBERLAND STREET OR THROUGH PARKING AREA

3) REHABILITATE ST PAUL STREET BRIDGE OVER INNER LOOP
   - WIDEN WEST SIDE (OR BOTH SIDES) TO PROVIDE 12 FT SIDEWALK AND 10 FT LANDSCAPED AREA
   - BICYCLE LANES
   - DECORATIVE RAIL AND SIDEWALK TREATMENTS

4) PROVIDE CONNECTION TO STATION 4 OVERLOOK

FIGURE 3-2
EAST SIDE TRAIL:
N. WATER STREET AND ST. PAUL STREET IMPROVEMENTS

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Benefits to a pedestrian bridge at this location include providing a safe and direct route for pedestrians traveling along the east side of the river to get to the High Falls District, and particularly the Station 4 site. Drawbacks to this option are the relatively high cost, especially with two elevators, the additional ongoing maintenance responsibilities, and safety / security perceptions associated with pedestrian bridges and enclosed stairways or elevators. The benefits would need to be weighed against the costs, given that the St. Paul Street bridge over the Inner Loop is located approximately 450 feet to the east and is available for pedestrians and bicyclists to cross over the Inner Loop.

A second possible trail alignment would follow the west side of N. Water Street to former Cumberland Street and/or the Inner Loop off-ramp where it would proceed easterly to St. Paul Street (refer to Figure 3-2). The existing sidewalk system along St. Paul Street is available to provide connections to Upper Falls Terrace Park and the Station 4 site. An alternate (and slightly more direct) alignment was investigated to connect N. Water Street with St. Paul Street. The alternate alignment would utilize the south side of former Cumberland Street, cross a parking area, and then follow the south side of the Inner Loop exit ramp to St. Paul Street. This route provides an opportunity to reconfigure some of the parking at the southeast corner of Water Street & Inner Loop ramp, possibly increase parking supply by 7 spaces, and better delineate vehicular versus pedestrian spaces. The parking lot is privately owned, and modifications to the lot would require coordination with the property owner.

A number of improvements along St. Paul Street have been investigated with the goal of improving the pedestrian experience. This section of St. Paul Street includes the bridge over the Inner Loop and the CSX Railroad underpass. A conceptual plan has been developed for the rehabilitation of the St. Paul Street bridge over the Inner Loop (refer to Figure 3-2). The plan includes widening the bridge to provide consistent 12 foot wide sidewalks (the existing sidewalks vary from 20 feet wide at each end to 8 feet wide at the center of the span). The widening would also include 10 foot wide raised landscaped areas on both sides. Decorative sidewalk treatments and railings, bicycle lanes and a new center median are also included. Improvements such as these should be considered as part of any future bridge rehabilitation project. A rehabilitated bridge with these types of treatments would also act as a gateway into Downtown Rochester.

A sub-alternative of the St. Paul Street bridge rehabilitation was also developed to show a reduced-scope rehabilitation that would maintain the existing bridge width, but still provide bicycle lanes and decorative sidewalk and railing treatments (refer to Figure 3-3). This sub-alternative involves narrowing the pavement width by eliminating one southbound travel lane (maintaining one thru lane and a left turn lane) and removing the center median.

The St. Paul Street crossing under the CSX Railroad is currently a rather dark and uninviting experience. It is recognized that CSX owns the bridge, and significant physical changes to the structure (such as raising the bridge to increase clearance) are unlikely in the foreseeable future. The bridge is currently undergoing rehabilitation as part of the Rochester Station project, but the rehabilitation is focused on strengthening the bridge superstructure and aesthetic or pedestrian-related improvements are not included. However, smaller-scale improvements that would benefit public access and safety could

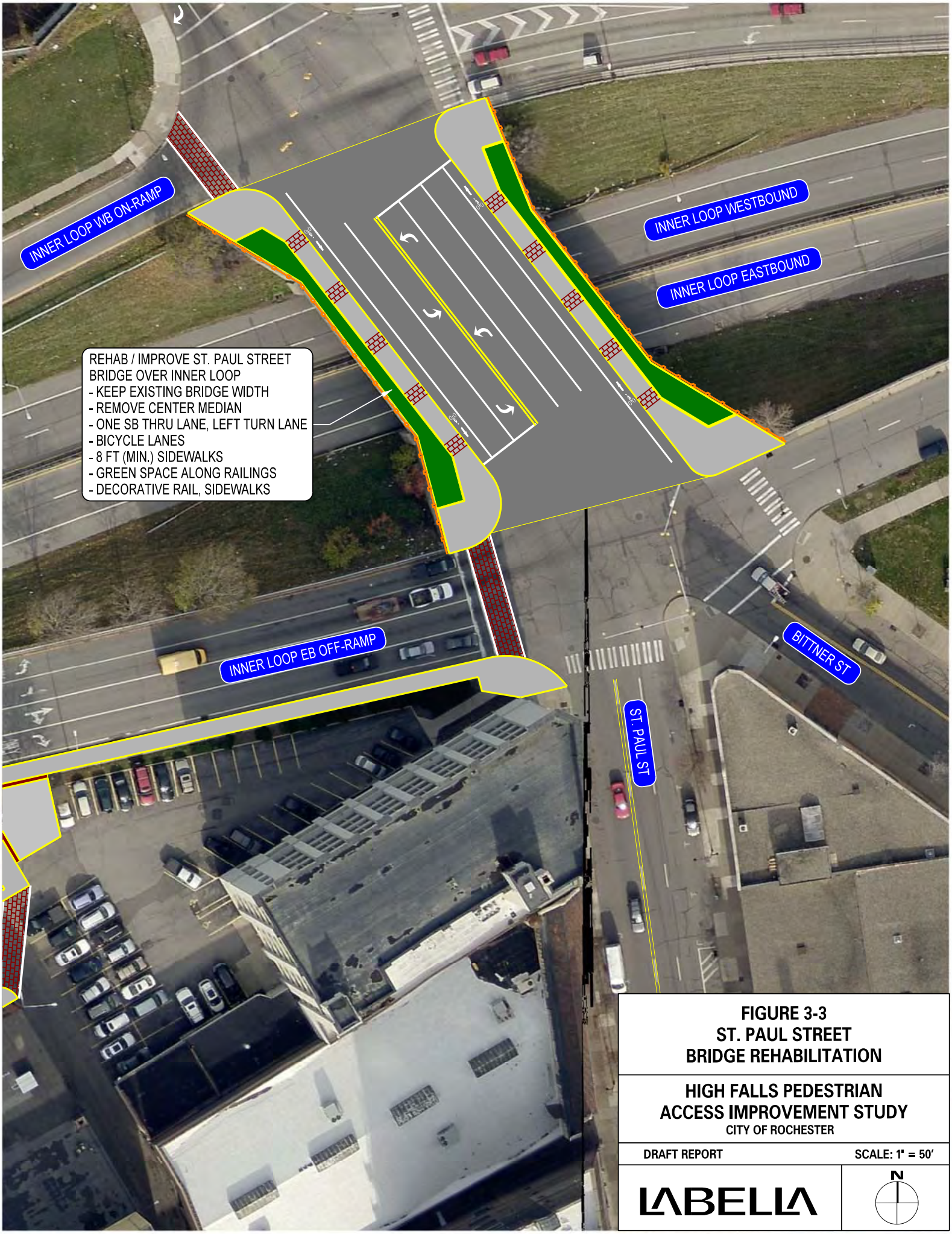

FIGURE 3-3
ST. PAUL STREET
BRIDGE REHABILITATION

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be pursued (refer to Figure 3-4). Recommended improvements include additional lighting (skylights could be added in areas without tracks overhead), bridge painting, public art / murals, railings to separate the sidewalk from adjacent travel lanes, and the installation of wayfinding elements to and through the underpass. Maintenance should also be a priority in this area to prevent the build-up of leaves and litter under the bridge.

Other improvements along St. Paul Street include upgrading existing crosswalks at the Inner Loop Ramp intersections with decorative or high-visibility treatments. Wayfinding signage should also be installed.

3.2.3.b West Side: Mill Street Area

The closest access route between High Falls and Downtown Rochester on the west side of the Genesee River involves crossing Inner Loop entrance and exit ramps and passing through a 7 ft wide tunnel under the Inner Loop mainline, which is aligned approximately with Mill Street. This route is challenging for several reasons: heavy and fast moving traffic on the Inner Loop ramps, narrow sidewalk approaches to the tunnel, and undesirable characteristics of the tunnel (narrow width, low ceiling, and safety concerns). A conceptual plan has been prepared depicting several possible improvements at this location (refer to Figure 3-5).

First, the eastbound Inner Loop entrance ramp could be narrowed to provide for a shorter pedestrian crossing. The existing ramp is approximately 24 ft wide at the crossing and begins to taper to a single lane east of the crossing. The entire ramp could be narrowed to a consistent width of 16 feet, providing one travel lane between State Street and the Inner Loop merge. Second, the westbound Inner Loop exit ramp could be modified so that it is narrowed to one lane between the Inner Loop and Mill Street and widened to three travel lanes between Mill Street and State Street. This would result in a narrowed width at the pedestrian crossing while providing a similar amount of vehicle queuing area as the existing two-lane ramp. Both of these ramp modifications would also allow for wider landings at either end of the pedestrian tunnel. The pedestrian crossings should have appropriate advance warning signage and high-visibility crosswalk treatments. Preliminary traffic analysis indicates that the proposed Inner Loop ramp improvements are feasible with regard to Level of Service (LOS), but detailed traffic analyses should be completed during the design phase to confirm this.

It is recommended that a new pedestrian tunnel be installed just east of the existing tunnel. The existing tunnel would be abandoned or filled in. The new tunnel should be wider (recommended at 20 feet wide) and could be a precast structure such as an arch or concrete box. It is also recommended that the new tunnel include enhanced lighting and have aesthetic treatments such as paint, public art or murals to make the crossing more appealing. Maintenance should also be a priority in this area to prevent the buildup of leaves and litter within the tunnel.

3.3 Alternatives to Better Connect High Falls to Other Trails and Neighborhoods

The High Falls District offers connections to Rochester's trail network primarily via the Genesee Riverway Trail, which currently traverses the project area along several connected segments, crossing

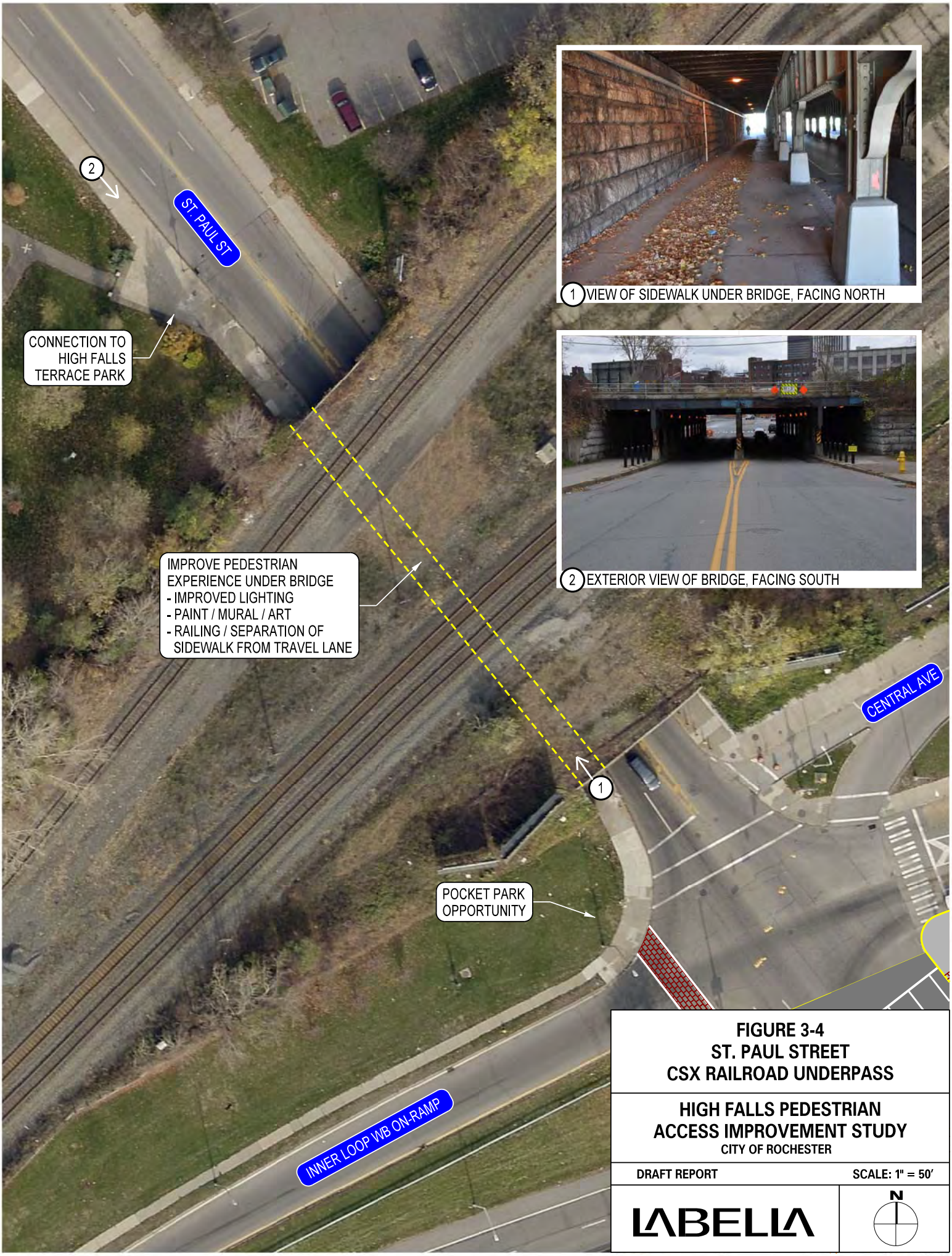

FIGURE 3-4
ST. PAUL STREET
CSX RAILROAD UNDERPASS

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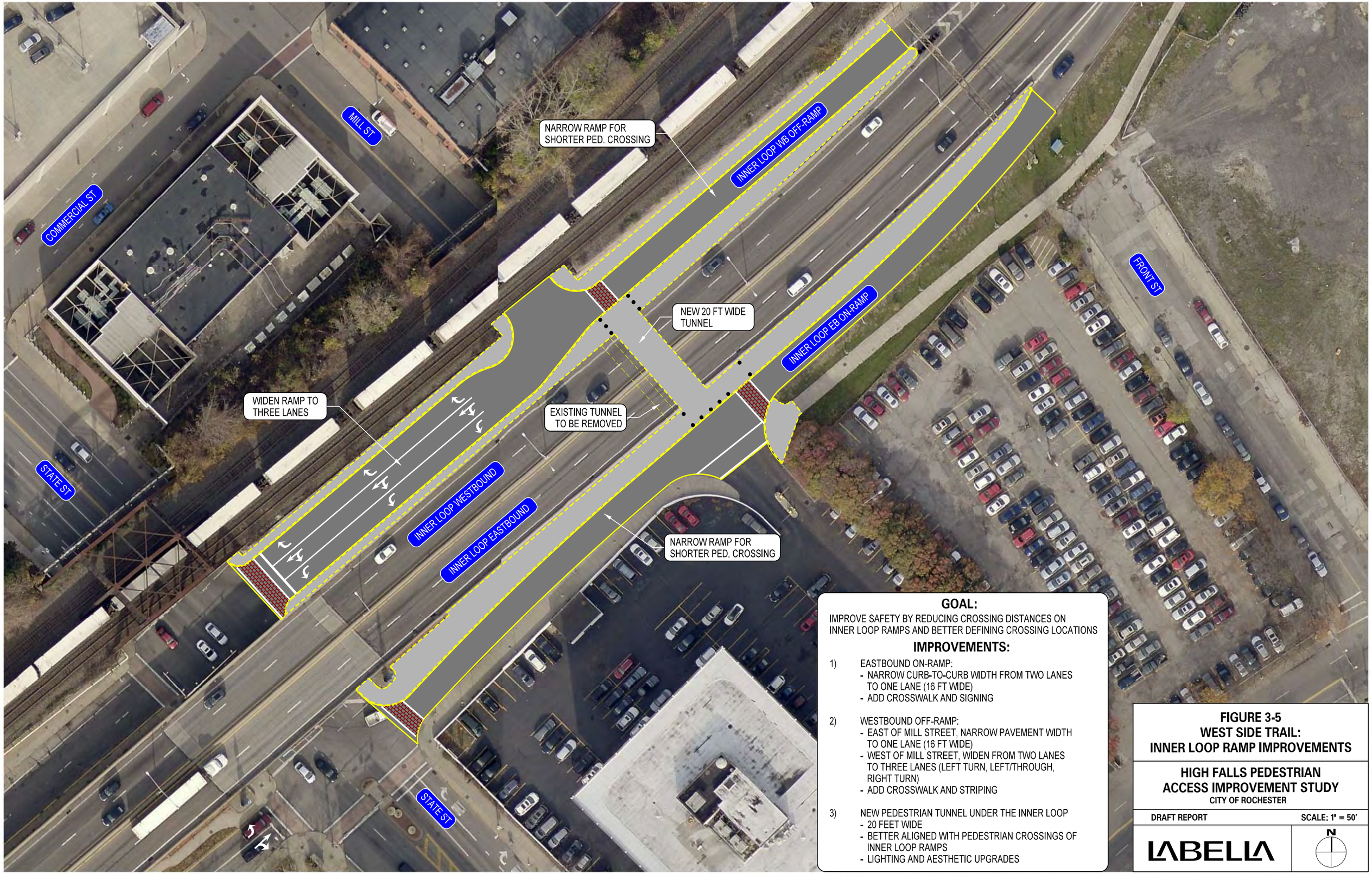

GOAL:

IMPROVE SAFETY BY REDUCING CROSSING DISTANCES ON INNER LOOP RAMPS AND BETTER DEFINING CROSSING LOCATIONS

IMPROVEMENTS:

1) EASTBOUND ON-RAMP:
   - NARROW CURB-TO-CURB WIDTH FROM TWO LANES TO ONE LANE (16 FT WIDE)
   - ADD CROSSWALK AND SIGNING

2) WESTBOUND OFF-RAMP:
   - EAST OF MILL STREET, NARROW PAVEMENT WIDTH TO ONE LANE (16 FT WIDE)
   - WEST OF MILL STREET, WIDEN FROM TWO LANES TO THREE LANES (LEFT TURN, LEFT/THROUGH, RIGHT TURN)
   - ADD CROSSWALK AND STRIPING

3) NEW PEDESTRIAN TUNNEL UNDER THE INNER LOOP
   - 20 FEET WIDE
   - BETTER ALIGNED WITH PEDESTRIAN CROSSINGS OF INNER LOOP RAMPS
   - LIGHTING AND AESTHETIC UPGRADES

FIGURE 3-5
WEST SIDE TRAIL:
INNER LOOP RAMP IMPROVEMENTS

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several bridges, the Brown's Race Historic District, and existing park and open spaces. Two future trail projects in the vicinity, the El Camino Trail extension and the JOSANA Trail, offer potential for additional access to other trails, neighborhoods and destinations throughout the city.

Identified below are proposed conceptual improvements to strengthen trail connectivity in the High Falls District and enhance the trail network for recreational and commuting users from the surrounding neighborhoods.

3.3.1 East Side Connections

Future Trestle Trail and East Rim Trail: The segment would provide improved public access from Cataract Street north to Smith Street, partially utilizing a former railroad alignment behind the North American Breweries facility. This potential link could provide a 1,500 foot long breathtaking river-adjacent trail segment for the Genesee Riverway Trail to replace or complement the existing alignment in this area. This potential link is not without its challenges. The former railroad alignment utilized a wood trestle structure for much of its length, which likely requires reconstruction to provide safe public passage. Additionally, the current City right-of-way does not provide continuous access from Cataract to Smith Street, so further easement agreements or acquisition would need to be negotiated with the brewery to complete the connection.

Cataract Street East to Ward Street and Eastern Neighborhoods: Neighborhoods immediately to the east of the High Falls project area would benefit from improved connections to the High Falls District. Several east-west streets could potentially accommodate some type of improved trail facility to encourage public pedestrian and bicycle access to High Falls. Ward Street and Upper Falls Boulevard should both receive further study to identify potential implementations for improved east-west connections, as well as St. Paul Street itself to optimize pedestrian and bicycle safety at the controlled intersections.

Future Trail Connection into Gorge via Suntru Street: This existing City street right-of-way enters the river gorge from Smith Street and could potentially provide access to the wide lower gorge area north of the Smith Street Bridge. Like the former Beebee Station to the southwest, this area was formerly home to generations of intense industrial use, with some remaining active utility function. Wildlife can frequently be seen in this quiet and secluded segment of the gorge, with successional vegetation naturally reclaiming the disturbed landscape. Among many considerations, the environmental condition of the area should be clarified prior to encouraging public access or establishing new trails, as well as potential impacts to the flora and fauna of the gorge.

Gasworks Pedestrian Bridge: In years past, RG&E's Beebee Station utilized a coal gasification process to generate electricity. A crucial component of that process, a large gasworks and bellows structure, was constructed and operated on the east side of the river at the base of Suntru Street. Connecting power generating infrastructure on both sides of the river was a small bridge to convey a number of utilities. While the utilities and piping have been removed, the original concrete foundations remain prominently in the Genesee River. By re-establishing a lower gorge river crossing, a new Gasworks Pedestrian Bridge could facilitate a more continuous river-side experience in one of the most culturally significant and geologically impressive sections of the gorge. Additional engineering and planning studies must be conducted to assess the

condition of the piers, as well as identify potential trail alignments on both sides of the river to connect to Falls Street on the west and Suntru Street on the east.

3.3.2 West Side Connections

JOSANA Trail: The feasibility study for the JOSANA Trail was concluded and published in July, 2015. As envisioned through an extensive public process, this trail would largely utilize an abandoned railroad right-of-way to provide an approximately one mile long, multi-use trail through the JOSANA Neighborhood in the City's northwest quadrant. This trail will connect to the Genesee Riverway Trail on the east, and the Canalway Trail on the west. The proposed trail will link neighborhoods, businesses, and other recreational amenities along its corridor.

The JOSANA Trail's potential connection to the High Falls project area is significant and will connect a neighborhood currently underserved by the City's trail network with a district rich in natural and cultural resources. Additionally, the JOSANA Trail could unify a forthcoming trail network envisioned through several west side neighborhoods as identified in the LYLAKs Brownfield Opportunity Area study that is currently underway.

Falls Street Extension to Smith Street: A city owned right-of-way extends from the lower (north) end of Falls Street to the corner of Smith Street and S. Vincent Street. This corridor currently functions as informal access via an earthen path and a degraded wooded lot. The City should consider formal trail enhancements here to complement the existing Genesee Riverway Trail facilities at this location, as well as the future proposed extension of the El Camino Trail via Cliff Street to the north of Smith Street. This trail link could provide direct public access to future improvements in the river gorge for many neighborhoods to the west and north of the project area. Additionally, it would provide a potential loop trail opportunity when connected with the newer portion of the Genesee Riverway Trail above the gorge rim.

3.3.3 Trail Connection Nodes

Nodal improvements can provide visual reminders of the available trail resources, welcoming points of entry to the system at major crossings and attractions, and connective wayfinding elements throughout the trail system.

Pont de Rennes Bridge East Side: With the existing and proposed trail improvements in the area, as well as the increasing public awareness of the High Falls District, the east landing of the Pont de Rennes Bridge could be improved to provide greater identification of the trail system in the High Falls District, as well as a connection to the proposed GardenAerial Hub.

Upper Falls Terrace Park: As the proposed eastern landing location of the new GardenAerial Pedestrian Bridge, the Upper Falls Terrace Park should be improved to enhance the public's experience, acknowledge the increased importance of the park, and increase public awareness of the river gorge from St. Paul Street. Additionally, the existing projection building on the gorge rim should be assessed to determine its usefulness and potentially renovated to serve a new function to complement the park's use.

Pont de Rennes Bridge West Side at Granite Mills Park: At the west end of the Pont de Rennes Bridge is Granite Mills Park, providing an important link from the street level experience to the

spectacular open views of the bridge. The existing Granite Mills Park restricts views into the gorge and should be reconsidered to better transition from the public experience of Brown's Race on the gorge rim and the Genesee River Gorge. The envisioned public access to the Beebee Station Site, as well as the GardenAerial initiative will further elevate Granite Mills Park.

Mill Street and Commercial Street: The existing CSX and Inner Loop bridges over the river immediately south of the High Falls District are barriers to public access between High Falls and Downtown. As a result of the trail offsets necessary to provide passage through the existing pedestrian tunnel under the Inner Loop and/or State Street underpass, the Genesee Riverway Trail must follow a circuitous route several blocks west of the river. Mill and Commercial Streets currently serve this function. Improved streetscape identity and other wayfinding elements will assist the public in crossing the existing barriers to connectivity in this area. Additionally, the narrow, dark and unwelcoming tunnel is perceived to be unsafe and is an unpleasant pedestrian route. An improved pedestrian tunnel below the Inner Loop, along with minor roadway changes to allow for safer tunnel entries, would improve the connectivity between Downtown and High Falls. This concept is discussed in greater detail in Section 3.2 of this report.

High Falls Festival Site: The existing High Falls Festival Site is a likely landing location for the west abutment of the proposed GardenAerial Pedestrian Bridge. The preferred bridge concept design for the new pedestrian bridge alignment identifies the plaza area north of the former Gorsline Building as the landing location. Improved wayfinding and streetscape identity will assist the public to locate the bridge entry from Brown's Race, and connect the GardenAerial Hub with the Genesee Riverway Trail and other public amenities.

In summary, the Genesee River and its gorge, waterfalls, parks and greenspaces is an outstanding natural feature providing an array of attractions in the city. This corridor is central to the connectivity and success of the trail network. The following Figure 3-6, *High Falls Conceptual Access Plan*, illustrates the existing and proposed trail network in the project area, as well as the surrounding vibrant residential and commercial neighborhoods.

Section 3.4: Summary of Conceptual Access Plan includes a more detailed description of the elements of the existing and proposed connections to Downtown and other trails.

3.4 Summary of Conceptual Access Plan

Refer to the following Table 3-1 *Summary of Alternatives to Connect High Falls to Downtown* and Table 3-2 *Summary of Opportunities to Connect High Falls to Other Trails and Neighborhoods.*

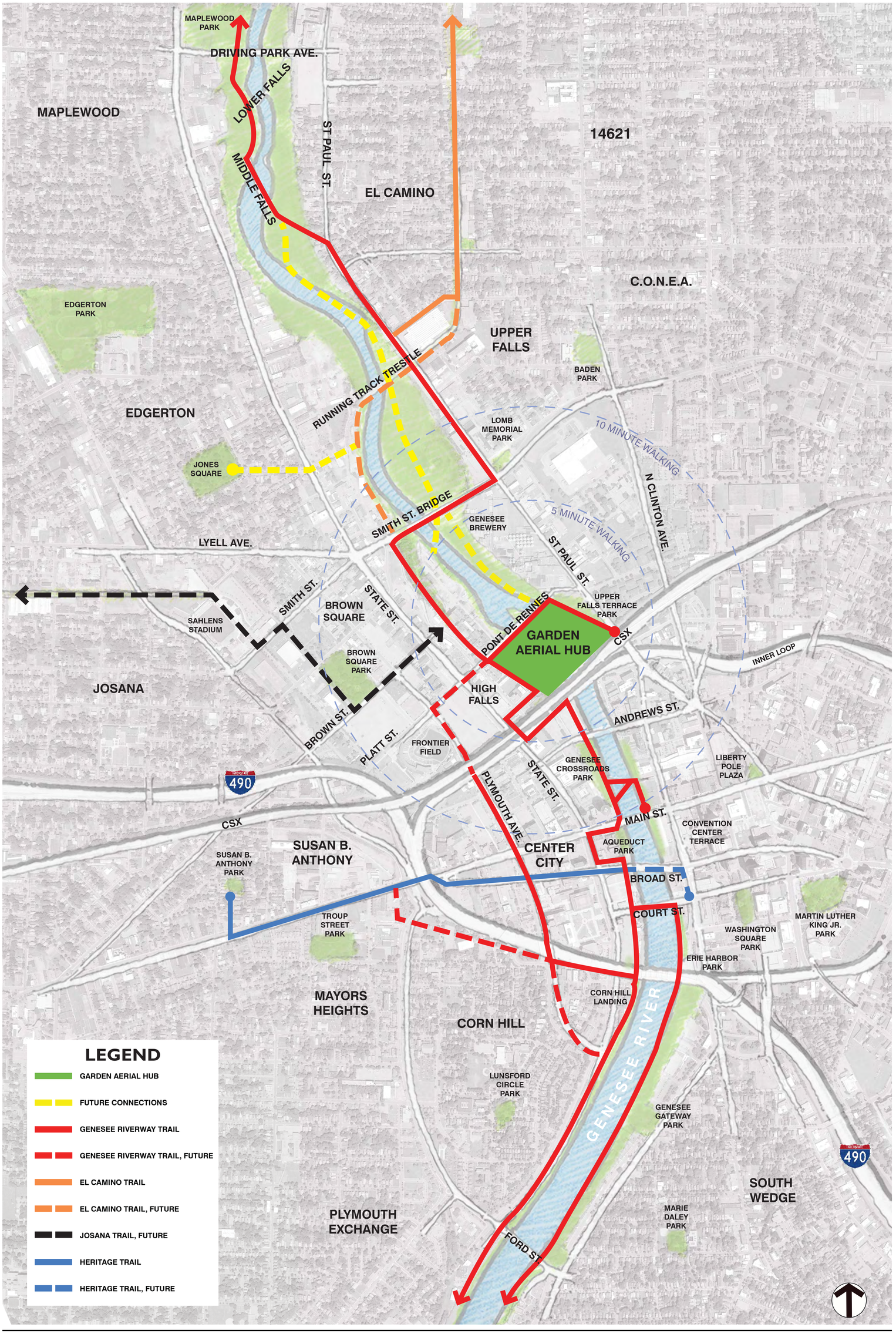

FIGURE 3-6

HIGH FALLS CONCEPTUAL ACCESS PLAN

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY

HIGH FALLS CONCEPTUAL ACCESS PLAN

TROWBRIDGE WOLF MICHAELS LANDSCAPE ARCHITECTS

LABELLA Associates, P.C.

TABLE 3-1
SUMMARY OF ALTERNATIVES TO CONNECT HIGH FALLS TO DOWNTOWN ROCHESTER

Options for Access from High Falls to Downtown		Description / Objectives	Components / Engineering Attributes	Major Design Issues	Trail Connection & Usage Issues	Further Studies Needed	Additional Remarks	Order of Magnitude Costs (1)
1	**West Side: Adjacent to River**	• Riverside promenade between Andrews Street & Inner Loop	• Property currently owned by RG&E. • Consider a 20 ft min. reservation for public access. • Install sidewalk / public plaza. • Lighting, furnishings and aesthetic treatments	• Mid-block crossing of Andrews St: at-grade or possible tunnel under street. • River wall and rail repairs (most of the rail was replaced by RG&E). • Aesthetic consistency with Genesee Crossroads Park. • ADA compliance.	• Extension of the Genesee Crossroads promenade northerly to Inner Loop. • Connect promenade with sidewalk along Inner Loop. • Easement from property owner needed.	• Investigate options to secure public access prior to sale. • River wall evaluation. • Confirmation of environmental clearance.	• Front Street corridor should be improved in conjunction with development of the RG&E parcel. • Within NYS Urban Heritage Area; Andrews St Bridge is on NYS Register	$300,000
2	**West Side: Crossing Inner Loop & CSX**	a. Pedestrian bridge spanning Inner Loop and CSX railroad tracks	• Enclosed 240 ft span; 12 ft wide bridge. • Elevator & staircase tower approximately 50 ft. high (22 ft clearance required over CSX). • Elevators at each approach.	• Complicated Bridge design given the span and height. • Constructability: Inner Loop temporary closures. • Impact on RG&E equipment in High Falls Festival Site. • NYSDOT and CSX Coordination • Elevator design.	• Elevators not as convenient as at-grade or under-bridge crossing. • Southern terminus near future Riverside promenade. • Northern terminus in High Falls Festival Site.		• 50 ft tall bridge may look out of character, but views from the bridge will be impressive. • Maintenance issues will be significant. • North portion within Brown's Race Historic District, City Preservation District; All within NYS Urban Heritage Area	$2.3 Million
		b. Walkway under Inner Loop Bridge & CSX Bridge to High Falls Festival Site (considered not feasible at this time)	• Construct a staircase along the southern fascia of Inner Loop bridge to access a walkway under the Inner loop and CSX bridges.	• Bridge girder and utility duct beneath sidewalk on south side of Inner Loop bridge. • Proximity of Central Avenue Dam is problematic for constructing staircase. • Freeboard under Bridge during flood stage may not provide much leeway. • RG&E raceway causes design complications.	• Direct connection to High Falls along the river.	• This option may warrant further study if the Inner Loop bridge were ever narrowed, raised or removed.	• This option is considered Not Feasible unless major bridge modifications are made. • Raceway within Brown's Race Historic District and City Preservation District; All within NYS Urban Heritage Area	N/A
3	**West Side: At Grade using Existing Streets and Tunnel Under Inner Loop**	a. Improve Pedestrian Crossing at Inner Loop EB Entrance Ramp	• Narrow ramp from 24 ft to 16 ft travel lane (south curb line maintained). • Sidewalk along north side would widen from +/- 7 ft to 12 ft to provide a better staging area for pedestrians to cross. • Install high-visibility crosswalk and signage.	• Consider pedestrian-activated rectangular rapid flashing beacon. • NYSDOT Coordination for Inner Loop; MCDOT & City coordination for State Street.	• Traffic calming strategies can benefit this crossing. • Not a river-adjacent trail.	• Traffic analysis to confirm State Street & Inner Loop Ramp Intersection Level of Service.	• Within NYS Urban Heritage Area	$350,000
		b. Construct new pedestrian tunnel under Inner Loop	• New 20 ft wide pedestrian tunnel adjacent to existing tunnel (existing tunnel would be abandoned). • Precast box or arch structure with adequate lighting.	• Jacking precast unit under Inner loop or open cut construction. • Filling and/or abandoning existing tunnel. • NYSDOT coordination.	• These improvements (Items a, b, and c) would greatly improve the safety of this existing pedestrian crossing. • Not river-adjacent trail.		• Upgraded lighting and aesthetic treatments should be included. • New tunnel would be better aligned with Mill St • Within NYS Urban Heritage Area	
		c. Improve pedestrian crossing at Inner Loop WB Exit Ramp - Narrow pavement width between Inner Loop and Mill St - High-visibility crosswalk and signage - Widen to three lanes between Mill St and State St	• East of Mill Street: Narrow south side of ramp to provide a single 16 ft wide travel lane (north curb line maintained); 12 ft +/- safety walk along south side of ramp. • West of Mill Street: Widen both sides of ramp to provide three 11 ft wide lanes approaching State Street; 4 ft - 5 ft safety walks on both sides of ramp.	• Geometry / radii at State Street intersection. • Signal timing is critical at this high volume and complicated intersection. • Limited space for snow storage in three-lane section of ramp. • NYSDOT Coordination.	• These improvements would greatly improve the safety of this existing pedestrian crossing. • Sidewalks between Mill St and State St. would be replaced with a safety walk/snow storage area (no pedestrians). • Not a river-adjacent trail.	• Traffic analysis needed to verify acceptable intersection Level of Service / queuing along ramp.	• Within NYS Urban Heritage Area	$350,000

TABLE 3-1 (CONTINUED)
SUMMARY OF ALTERNATIVES TO CONNECT HIGH FALLS TO DOWNTOWN ROCHESTER

Options for Access from High Falls to Downtown		Description / Objectives	Components / Engineering Attributes	Major Design Issues	Trail Connection & Usage Issues	Further Studies Needed	Additional Remarks	Order of Magnitude Costs (1)
4	**East Side: At Grade Using Water St. with a Direct Connection Over the Inner loop to Station 4 Site**	a. Water Street pedestrian enhancements	• New decorative / high-visibility mid-block crosswalk at Andrews Street. • Decorative / high-visibility crosswalks at Inner Loop ramp (existing east /west crossing). • Modify the concrete island at Water Street / Inner Loop EB Exit Ramp.	• Crosswalk material. • Design of concrete island.	• The mid-block crossing on Andrews Street would connect the Genesee Crossroads promenade with Water Street. • Water St. is not a river-adjacent route.	• Mid-block crossing analysis at Andrews Street.	• Adjacent to St Paul-North Water Street Historic District; within NYS Urban Heritage Area.	$50,000
		b. New pedestrian bridge over Inner Loop with elevators	• 160 ft span; 12 ft wide bridge. • Elevators and staircase at each approach. • 16 ft clearance over Inner Loop.	• Bridge and elevator design. • Space constraints at both approaches. • Relocation of a NYSDOT overhead sign structure. • NYSDOT coordination. • Queuing lengths need to be confirmed.	• Most direct connection to the Station 4 site.		• North approach could have ramp (approx. 400 ft long) instead of elevator. • Within NYS Urban Heritage Area.	$1.5 Million
		c. Walkway under CSX Bridge to Station 4 site & future observation deck	• 10 ft wide path from existing sidewalk along Inner Loop to the roof of Station 4. • Lighting, safety railing, roof system, minor grading under CSX bridge.	• Structural system needed to catch debris from open tracks overhead. • CSX Coordination. • Opportunity for other enhancements under CSX bridge.	• Most direct connection to Station 4 site. • Connects with sidewalk along north side of Inner Loop.	• Coordination with CSX to obtain an easement for public access.	• Sidewalks along Inner Loop should be improved (barrier between traffic and pedestrians and/or widened sidewalks). • Within NYS Urban Heritage Area.	$125,000

TABLE 3-1 (CONTINUED)
SUMMARY OF ALTERNATIVES TO CONNECT HIGH FALLS TO DOWNTOWN ROCHESTER

Options for Access from High Falls to Downtown		Description / Objectives	Components / Engineering Attributes	Major Design Issues	Trail Connection & Usage Issues	Further Studies Needed	Additional Remarks	Order of Magnitude Costs (1)
5	East Side: At grade using Water Street, Former Cumberland Street and St. Paul Street to cross the Inner Loop and Access Station 4 Site and High Falls Terrace Park	a. Improve pedestrian flow through former Cumberland Street and existing parking area	• Utilize sidewalk on south side of Cumberland St with a new crosswalk and sidewalk connection to the Inner Loop Ramp sidewalk. • Opportunity to reconfigure parking layout (net gain up to seven spaces).	• Parking lot design. • Coordination with property owner. • Public easement across private parking lot.	• Not ideal to have trail along Inner Loop Ramp. • Not a river-adjacent trail.	• Coordination with property owners.	• Adjacent to St Paul-North Water Street Historic District; within NYS Urban Heritage Area.	$375,000
		b. Improve pedestrian and bicycle experience on St. Paul Street bridge over Inner Loop: Widen bridge to provide wider sidewalks and green space	• Existing Bridge approx. 100 ft wide (fascia to fascia) with 8 ft. sidewalks. • Widen bridge 14 -18 ft. each side to provide 12 ft sidewalks & 10 ft green space & additional space for bike lanes (same number of travel lanes). • Transform center median into landscaped area.	• Bridge design. • Green space design. • NYSDOT Coordination. • Bridge loading (capability to accommodate green space). • Traffic analysis if lanes are reconfigured.	• Bridge would better serve pedestrians and bicyclists. • Bridge would be a gateway into Downtown Rochester. • Not river-adjacent trail.	• NYSDOT & City Bridge Scoping at such a time when the structure is scheduled for rehabilitation or replacement.	• Within NYS Urban Heritage Area.	
		c. Improve pedestrian and bicycle experience on St. Paul Street bridge over Inner Loop: Using existing bridge width, reconfigure lanes to allow sidewalk widening and/or green space to be added.	• Existing Bridge approx. 100 ft wide (fascia to fascia) with 8 ft. sidewalks. • Reconfigure lanes: take away one SB thru lane and center median. • Maintain 8 ft min. sidewalks and add 5 ft min. green space & bicycle lanes. • Incorporate decorative sidewalks, railings.	• Bridge design. • Green space design. • NYSDOT Coordination. • Bridge loading (capability to accommodate green space). • Traffic analysis if lanes are reconfigured.	• Bridge would better serve pedestrians and bicyclists. • Not river-adjacent trail.	• NYSDOT & City Bridge Scoping at such a time when the structure is scheduled for rehabilitation or replacement.	• Opportunity for the St. Paul Street Bridge to become gateway between Downtown Rochester and High Falls. • Within NYS Urban Heritage Area.	
		d. Improve Pedestrian Crosswalks	• Replace existing crosswalks with 10 ft. wide decorative, high visibility crosswalks.	• Durability, maintenance considerations and ADA compliance.	• Heavy traffic at St. Paul & Inner Loop Ramp intersections (challenging pedestrian crossing).		• Within NYS Urban Heritage Area.	$30,000
		e. Improve Pedestrian Experience on St. Paul Street under CSX Railroad	• Add / replace lighting under bridge. • Aesthetic treatments & furnishings. • Paint bridge, murals.	• Lead paint removal. • Lighting design. • CSX Coordination.	• Pedestrian "tunnel" not ideal. • Not a river-adjacent trail.	• Lead paint analysis • Investigate installing skylights in areas without track overhead.	• Existing sidewalk under bridge in good condition. • Maintaining area under bridge (debris & litter removal) is important. • Within NYS Urban Heritage Area.	$925,000

TABLE 3-2
SUMMARY OF OPPORTUNITIES TO CONNECT HIGH FALLS TO OTHER TRAILS AND NEIGHBORHOODS

Access Options		Description / Objectives	Components / Engineering Attributes	Major Design Issues	Trail Connection & Usage Issues	Further Studies Needed	Additional Remarks	Order of Magnitude Costs (1)
1	East Side Connections	a. Future Trestle Trail and East Rim Trail from Cataract Street north to Smith Street utilizing old railroad alignment	• Reconstructed or stabilized trestle structure. • Railing, pavements, furnishings, lighting, signage. • Potential overlook at gorge rim.	• Public ROW / ownership incomplete through corridor. • Active brewery complex. • Steep and erodible slopes may challenge construction. • Poor condition of trestle structure.	• Connections to Genesee Riverway Trail at north and south end of trail segment. • Future trail connection north to Suntru St could offer access to gorge.	• Structural assessment of existing trestle structure behind brewery. • ROW/ easement investigation. • Geotechnical evaluation of steep slope areas along corridor to identify construction strategies.	• GardenAerial and Genesee Riverway Trail connections could strengthen public use of this trail segment. • Near the Pont de Rennes trail head, brewery, and Upper Falls Terrace Park this segment is highly accessible to the public. • Historic interpretation potential of former railroad siding. • Within NYS Urban Heritage Area.	$1,600,000
		b. Cataract Street east to Ward Street and Eastern neighborhoods	• Future trail facility extending east from Upper Falls Terrace Park. • Associated trail network development in neighborhoods to the east of St. Paul Street.	• No existing trail network currently to the east of St Paul Street in this area. • St. Paul Street traffic may challenge future pedestrian and bike connectivity from east side neighborhoods.	• Connections to Genesee Riverway Trail and GardenAerial.	• Consider overall trail and bike network and potential benefits of extension into the eastern neighborhoods. • Identify locations for improving pedestrian and bike crossings of St. Paul St		$200,000
		c. Future trail connection into gorge via Suntru Street	• Improved pedestrian crossing at Smith and Suntru Streets. • Connection to Genesee Riverway Trail. • Trail infrastructure on Suntru Street with ongoing access for existing RG&E facilities. • Pavements, lighting, signage. • Associated trail network development in gorge.	• ADA accessibility. • Trail head improvements at Smith Street to Genesee Riverway Trail and GardenAerial. • Suntru Street must continue to accommodate ongoing access for RG&E. • Potential environmental clean up to enable public access.	• Future trail network development in gorge (on former Bausch & Lomb site with connections to High Falls) connects to Genesee Riverway Trail and El Camino to north toward Middle Falls and Maplewood Park.	• Suntru Street width constrained; needs study to determine feasibility of trail infrastructure. • Potential environmental assessment. • Future trail network study in gorge.	• Within NYS Urban Heritage Area.	$800,000
		d. Future bridge and trail on existing foundations crossing the Genesee River (Gasworks Bridge)	• New bridge and trail on existing foundations. • Connective trails at bridge landings. • Associated trail network development in gorge on both sides of river.	• Construct a new bridge structure to support pedestrian and bicycle trail crossing of the river and connect both sides of the river gorge bottom.	• Future trail network development and public access development in river gorge.	• Structural assessment of existing foundations. • Future trail network study in gorge.	• Within NYS Urban Heritage Area. • Historic interpretation potential of foundations which formerly carried RG&E gasworks infrastructure.	Cost of trails = Cost of bridge =

TABLE 3-2 (CONTINUED)
SUMMARY OF OPPORTUNITIES TO CONNECT HIGH FALLS WITH OTHER TRAILS AND NEIGHBORHOODS

Access Options		Description / Objectives	Components / Engineering Attributes	Major Design Issues	Trail Connection & Usage Issues	Further Studies Needed	Additional Remarks	Order of Magnitude Costs (1)
2	**West Side Connections**	a. JOSANA Trail using Brown St and Mill St south to Pont de Rennes Bridge node or north to river gorge floor via Falls Street	• Improvements to street intersections, signage, wayfinding, identity. • Trail head at High Falls terminus of JOSANA Trail.	• Intersection upgrades with consistent signage, wayfinding and identity. • JOSANA Trail terminal view at Mill Street is at RG&E facility to be maintained rather than an open gorge view; need to 'deflect' north or south.	• Connection to Genesee Riverway Trail, GardenAerial, and future gorge trail network via Falls Street. • Connection to BeeBee historic interpretation site and access into gorge.	• Current feasibility study of JOSANA Trail is west of this area and would need to be extended to High Falls.	• Within NYS Urban Heritage Area; High Falls terminus in Brown's Race Historic District, City Preservation District; Mill St / Brown St adjacent to Teoronto Block Historic District.	Feasibility study area cost = $5,000,000 Connection to High Falls cost = $800,000
		b. New Falls Street extension trail to link with Genesee Riverway Trail and El Camino Trail at Smith Street Bridge	• Utilize existing Falls Street ROW for trail linkage from Smith Street directly into gorge. • Trail head connection for Genesee Riverway Trail and El Camino Trail at Smith Street.	• Potentially steep grades into Beebee site, signage, visibility, lighting. • ADA accessibility.	• New trail segment to create continuous loop between Falls Street and Genesee Riverway Trail. • Connection to future El Camino Trail across Smith Street bridge.	• Potential improvements to Jones Ave and Cliff St to connect to historic Jones Square Park from the future El Camino extension should be evaluated.	• Within NYS Urban Heritage Area.	$250,000
3	**Trail Connection Nodes**	a. Pont de Rennes Bridge East Side	• Existing trail head, minor enhancements.	• Existing trail head, minor enhancements.	• Connection to improved future Genesee Riverway Trail south to Upper Falls Terrace Park and north to future trestle trail / east rim trail.	• Consider site in a coordinated way with other trail improvements on the east side of gorge.	• Within NYS Urban Heritage Area; Pont de Rennes Bridge within Brown's Race Historic District and City Preservation District, on NYS Register.	$50,000
		b. Upper Falls Terrace Park	• Trail realignment to former railroad corridor. • Railing, lighting, pavement, signage. • Aesthetic treatment of existing projection building/viewing platform. • Improved Genesee Riverway Trail trailhead at St. Paul Street. • Parking lot improvements. • Improved pedestrian connection across St Paul at Ward Street. • GardenAerial bridge east landing.	• Erosion/stabilization at gorge rim. • South edge of park will receive new GardenAerial Pedestrian Bridge connection.	• Pedestrian bridge offers connection to Genesee Riverway Trail. • Direct connection St. Paul Street via GardenAerial bridge extension. • Public parking facility in the park offers access to trail systems in and around gorge. • Location offers gateway/welcoming potential adjacent to the north edge of Downtown.	• Explore programming potentials of projection building. • Explore landscape and planting treatment to evoke naturalized gorge character.	• Within NYS Urban Heritage Area.	$1,000,000
		c. Pont de Rennes Bridge (west side) at Granite Mills Park	• Existing trail head, minor enhancements.	• Existing trail head, minor enhancements. • Current visibility of the gorge is limited from Park. • GardenAerial identity and wayfinding.	• Connection to improved Genesee Riverway Trail and potential Brown's Race extension north through former Beebee Site.	• GardenAerial has proposed park improvements to coordinate with the FlourGarden which should be evaluated.	• Within Brown's Race Historic District, City Preservation District, NYS Urban Heritage Area; Pont de Rennes Bridge on State Register.	$500,000
		d. Mill St and Commercial St	• Wayfinding improvement for realigned Genesee Riverway Trail.	• Signage and wayfinding.	• Connection to improved pedestrian tunnel to downtown.		• Within Brown's Race Historic District, City Preservation District, NYS Urban Heritage Area.	$250,000
		e. High Falls Festival Site	• Potential improvements to plaza at GardenAerial bridge west landing, including ramp and stair configuration.	• Signage, wayfinding, GardenAerial identity.	• GardenAerial bridge and connection to east side of gorge. • GardenAerial bridge landing location is not highly visible from Mill and Commercial Streets, seek to improve presence to the visiting public.	• Ongoing structural assessment. • Potential historic interpretation.	• Within Brown's Race Historic District, City Preservation District, NYS Urban Heritage Area.	$350,000

4.0 CONCEPTUAL ACCESS PLAN: GENESEE RIVER GORGE

4.1 General Needs Assessment

With the decommissioning and demolition of Beebee Station, the City of Rochester has an opportunity to restore public access to the signature natural resource in the heart of the city – the Genesee River Gorge at High Falls. The Conceptual Access Plan explored several potential ways of providing safe public access to the bottom of the gorge.

4.2 Access from Rim Into Gorge

4.2.1 Triphammer Forge Site

There is an opportunity to extend public access through the Triphammer Forge Site and down to the bottom of the gorge. Public access is currently available through the upper portion of the site via ramps and stairs. In order to access the lower levels, two new stairways, a new concrete slab and boardwalk would be needed to reach the existing arch at the northeastern corner of the ruins. Outside of the Triphammer Forge, new stairways and a trail along an existing terrace would allow access to the base of the gorge. Refer to Figures 4-1 and 4-2 for access plans within and outside of the Triphammer Forge Site.

Although access to the gorge via the Triphammer Forge Site appears feasible, there are many challenges and considerations involved. The grade change is significant and space is tight. Portions of the trail would be narrow and many stairs would be required (it is unlikely that this route could be ADA-accessible). The required modifications to the Triphammer Forge ruins may be determined to have an adverse impact to historic resources, as the site is on the NYS Register and within a National Historic District, City Preservation District and NYS Urban Heritage Area. Within the gorge, fencing or other delineation would be required to keep the public out of RG&E facilities that will remain.

As an alternative to extending public access through the Triphammer Forge site, there is a vacant, city-owned parcel directly southeast of the forge site that appears to be suitable for installing stairways and pathways to the gorge bottom. This site has many of the same challenges as the Triphammer Forge site – narrow space, many stairs required, and non-ADA accessible – as well as lacking the historic value of the forge ruins. But the adjacent vacant parcel may be more feasible to develop with respect to historic resources.

4.2.2 Elevator and Stairway

The installation of an elevator to provide access to the bottom of the gorge was investigated. Two possible locations were identified: 1) the east side of the Water Works building, and 2) the northeast edge of Granite Mills Park, adjacent to the west abutment of the Pont de Rennes Bridge. The elevator would be contained in a custom-designed, free-standing structural tower with a glass curtain wall. A bridge would connect the upper elevator entrance with adjacent land, and a plaza / landing would be provided at the lower entrance. A separate stairway with approximately 172 steps would be provided in the tower.

FIGURE 4-1
GENESEE RIVER GORGE ACCESS FROM TRIPHAMMER FORGE SITE

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY
CITY OF ROCHESTER

DRAFT REPORT | SCALE: 1" = 50'

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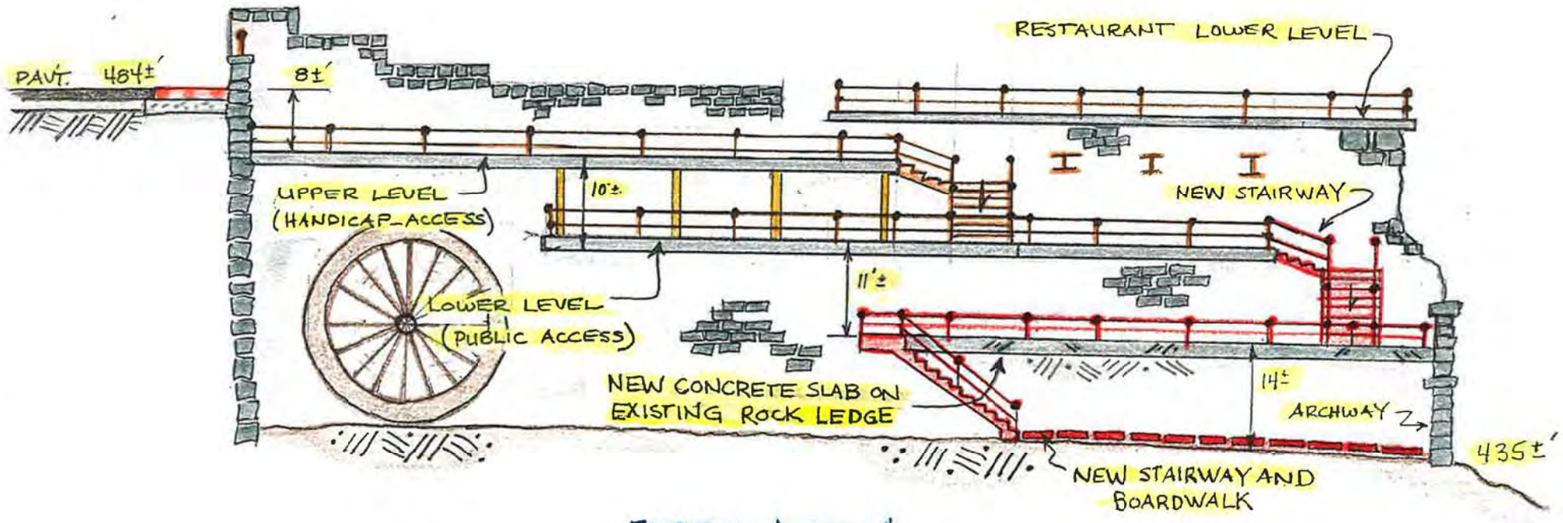
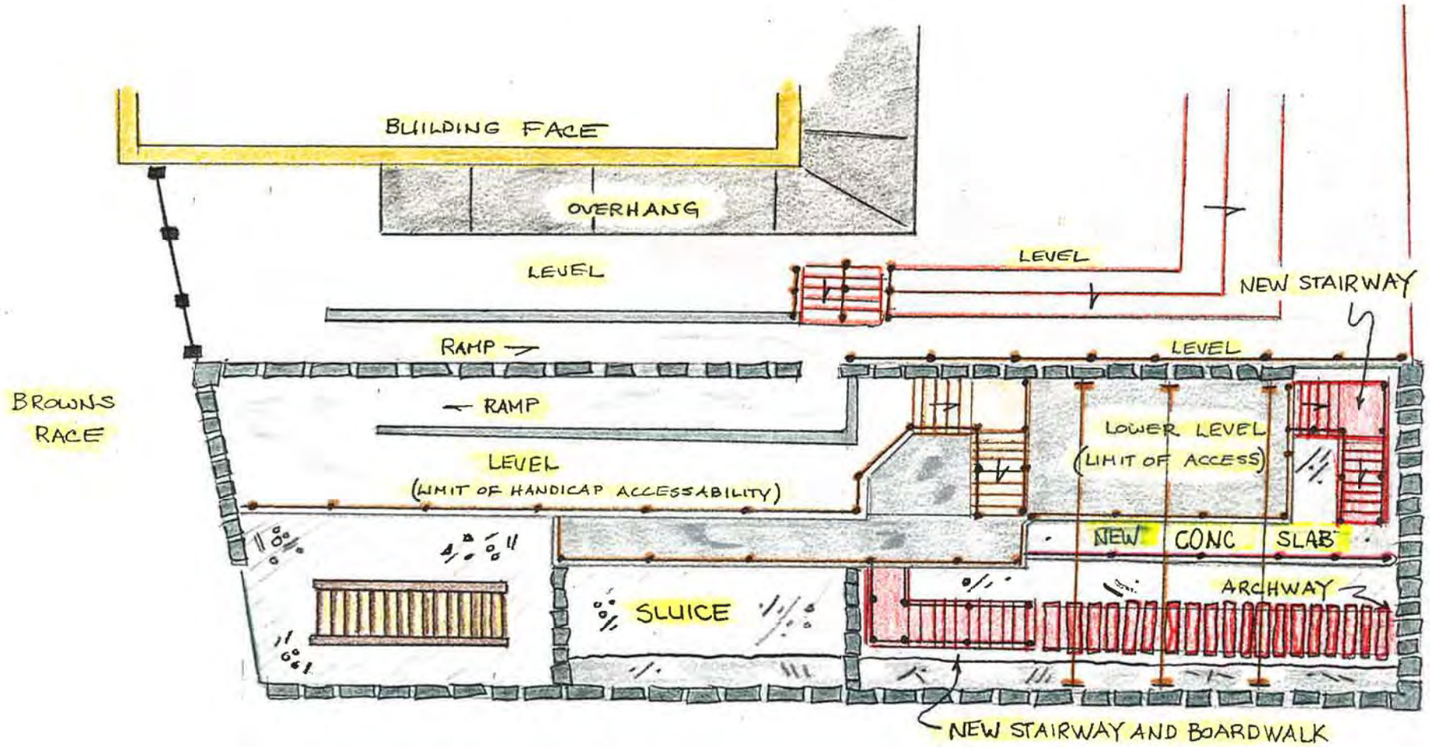


ELEVATION VIEW

NOTE:

ELEVATION DROP TO TOE OF SLOPE AT RG:E PROPERTY APPROX. 18'.



PLAN VIEW

FIGURE 4-2
TRIPHAMMER FORGE SITE ACCESS

HIGH FALLS PEDESTRIAN
ACCESS IMPROVEMENT STUDY
CITY OF ROCHESTER

DRAFT REPORT

SCALE: 1" = 50'

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The primary benefit to having an elevator is the direct, convenient and ADA-accessible connection between the GardenAerial Hub trail and new park facilities within the gorge. The elevator tower would be an impressive and unique structure, and spectacular views of the gorge would be present while riding up and down the elevator. Concerns include a complicated foundation with regard to geotechnical issues, the upper connection between the tower and adjacent land or the Water Works building (the building is on the NYS Register and is within a National Historic District, City Preservation District and NYS Urban Heritage Area), and the cost to construct the elevator as well as ongoing maintenance responsibilities.

4.2.3 Falls Street

Falls Street is an existing City-owned street that provides access into the gorge, connecting with Mill Street at the upper end and RG&E facilities at the bottom of the gorge. The upper end of Falls Street also connects with the Genesee Riverway Trail. The street is narrow, with existing pavement widths between 20 feet and 24 feet. Sidewalk is provided along the RG&E Station 137 frontage in the upper portion of the street, but sidewalk is not present in the lower portion.

The Falls Street corridor presents challenges to multi-modal gorge access due to steep grades and limited width, and it is recommended that improvements be made to better accommodate and increase safety for all road users (although it is not likely this route could be ADA-accessible). The street should be widened to a minimum of 24 feet, and sidewalk along the east side should be extended down to the gorge bottom. Additional study would be needed to evaluate geotechnical and slope stabilization concerns associated with the widening and new sidewalk. Fencing and a gate would be needed at the bottom to separate the public spaces from RG&E facilities that will remain.

The Falls Street right-of-way continues from the gorge bottom north to Smith Street, and a former access road is present along the right-of-way. It is recommended that a multi-use trail be installed to connect Falls Street at the bottom of the gorge with Smith Street, which is designated as the Genesee Riverway Trail and is adjacent to a future trail extension of the El Camino Trail. A new trail surface would be required, as well as minor grading and clearing of the right-of-way.

4.2.4 Switchback Trail Into Gorge

A primary entrance to the lower gorge and Beebee Park is envisioned to be aligned with Factory Street and the Kodak Tower. As envisioned, this switchback trail would connect the upper street network and Brown's Race with the proposed trail network in the lower gorge. A "tailrace slide" could also provide a playful connection between the upper and lower levels.

4.3 Reuse of Beebee Station Site

4.3.1 Opportunities for Public Use on Gorge Rim

RG&E is currently in the process of abating and demolishing the decommissioned Beebee Station Main Plant located on the rim of the gorge. Complete demolition of the facility is proposed by RG&E. It is recommended that the City of Rochester work with RG&E to retain elements of the facility such as foundation walls, tail races, and other potentially interesting features. Preserving remnants of the plant such as these will retain essential historic fabric that imparts an authentic

and unique character to the property, and tells the story of the history of the site. Artifacts such as these can provide a focus for the new park, as they create an intrinsically interesting destination and opportunity for interpretation. A series of terraces and program spaces amid the historic foundation walls and other remnants is envisioned to create a dynamic setting. Figure 1-3 *Beebee Station "End State" Concept* illustrates what is proposed by RG&E. By contrast, Figure 4-3 *Industrial Artifacts Integrated into Public Space*, is an image of Mill Ruins Park in Minneapolis, Minnesota that provides one model of what could be possible if historic artifacts were retained.

Historically, Brown's Race extended north of its current terminus at Platt Street. Demolition of Beebee Station would allow for the historic alignment of Brown's Race to be restored, with the characteristic Brown's Race streetscape elements and the FlourGarden potentially extended north to Factory Street. A gateway entrance to Beebee Park is envisioned at Factory Street. Access to the lower gorge via a series of ramps / terraces and switchback stairs would originate here.

4.3.2 Opportunities for Public Use Within the Gorge

The lower gorge is envisioned as a large meadow / greenspace with accessible parking, a trail network, fishing and kayak access, and scenic overlooks. A seasonally accessible boardwalk could extend to the seasonal island within the gorge to offer an experience of complete immersion in this dynamic environment. Long term, the large open meadow could be available for future mixed-use redevelopment.

4.4 Reuse of Beebee Park and Adjacent Areas of the Gorge

Programming and site development should take advantage of the unique gorge setting and exploit the industrial heritage of the site by incorporating materials and interpretation that recall this history in an authentic and integral manner. As previously stated, preserving foundation walls and elements of the historic Beebee Station will establish a unique and authentic identity and allow for interpretation. Recreation activities should focus on water, nature and historic / cultural resource orientated activities. Landscape treatment should emphasize native gorge species and landscape restoration. Limited landscaping on the Pont de Rennes Bridge is a possibility and along with new furnishings can create a more welcoming environment. Figure 4-4 *Potential Programmatic Elements* includes examples of the concepts described here.

4.5 Summary of Genesee River Gorge Conceptual Access Plan

Refer to Table 4-1 *Summary of Alternatives for Access and Reuse of the Genesee River Gorge* and Figure 4-6 *Genesee River Gorge Conceptual Access Plan*.

TABLE 4-1
SUMMARY OF ALTERNATIVES FOR ACCESS AND REUSE OF THE GENESEE RIVER GORGE

Options for Access and Reuse of the Gorge		Description / Objectives	Components / Engineering Attributes	Major Design Issues	Trail Connection & Usage Issues	Further Studies Needed	Additional Remarks	Order of Magnitude Costs (1)
1	**Triphammer Forge Site**	a. Pedestrian access through Triphammer Forge Site to bottom of gorge (Not ADA accessible).	• Within the Triphammer Forge Site: two new staircases to bottom of discharge raceway. Total elevation drop is approximately 25 ft. • Construct floor slab for lower deck. • Outside the Triphammer ruins: boardwalk and two new stairways to access bottom of gorge. • Total elevation drop approximately 18 feet. • Maintain / construct security fencing and/or screening along RG&E hydroelectric operations within gorge. • Connect to new trails/parkland in gorge (assumed to be an elevated boardwalk to river's edge).	• Significant grade change & space limitations (likely cannot provide ADA accessibility. • Liability issues. • Protection of historic / archeological resources. • Protection of RG&E facilities. • Establishing public access to RG&E property in gorge. • Lighting and security within Triphammer Forge Site.	• Direct connection from GardenAerial loop (around gorge rim) to new park facilities in gorge bottom.	• Detailed assessment of Triphammer Park and gorge (instrument survey; ADA accessibility; structural integrity of discharge raceway, masonry walls and retaining wall below the Triphammer site). • Explore range of alternatives for ADA access to gorge (ramps, elevator, etc).	• Non-ADA compliant. • Identity within a park system surrounding and including the gorge (applies to all potential access locations). • Design vocabulary to consider context and existing materials palate. • Possible alternate route adjacent to Triphammer Forge site. • Within Brown's Race Historic District, City Preservation District, NYS Urban Heritage Area; Triphammer Site on NYS Register.	$460,000
2	**New Elevator**	a. Create an ADA accessible route to access the gorge from the west side.	• Free-standing structural tower with elevator and staircase (Approx. 24'x14'). • 10'x10' custom traction glass elevator. • Glass curtain wall around structural steel. • Stairway: 172 risers. • Install patio/gathering area at base of elevator. • A bridge would connect land to upper elevator entrance. • Other features: heated structure with special lighting.	• Possible location for new elevator: 1) connect to east side of Water Works Building; or 2) connect to park adjacent to west abutment of Pont de Rennes bridge. • Geotechnical foundation complicated. • Provide spectacular view of falls while inside elevator. • Elevator would be custom designed and unique.	• Direct ADA-accessible connection from GardenAerial loop (around gorge rim) to new park facilities in gorge bottom.	• Detailed assessment of preferred location, including the feasibility of connecting to Historic Water Works building.	• Within Brown's Race Historic District, City Preservation District, NYS Urban Heritage Area.	$3,203,000
3	**Falls Street Access Route**	a. Improvements to Falls Street between Brown Street and BeeBee Park to provide for improved vehicle, pedestrians and bicycle access.	• Existing road to base of gorge: pavement 20-24 feet wide. • Widen road to provide 24 ft. pavement and sidewalk on east side. On the downslope side, a retaining wall and parapet/railing along the sidewalk may be needed to facilitate widening and safe pedestrian use. • Fencing and gate at terminus to allow RG&E vehicles in and keep public vehicles out.	• Slope stabilization & geotechnical issues to facilitate road embankment widening. • Narrow width presents challenges for shared use; opportunities to widen road are limited.	• Connection to Genesee Riverway Trail at Brown Street. • Due to steep slopes, ADA accessibility would be via vehicle into the gorge.	• Feasibility study (including instrument survey) to provide a detailed assessment of constructability and cost to widen street for multi-modal use.	• Within NYS Urban Heritage Area, adjacent to Teoronto Block Historic District.	$750,000
		b. Multi-use trail connection from Falls Street (at bottom of gorge) to Smith Street	• New 10 ft. wide multi-use trail following existing graded surface from Smith Street to Falls Street. • New trailhead at Smith Street. • Existing right-of-way. • Clearing and minor grading required.	• Safety and security perceptions. • Protection of trail users from steep slopes.	• Connection to Genesee Riverway Trail at Smith Street. • Connection to future El Camino Trail extension at Smith Street.	• Detailed assessment of site, instrument survey, construction methods to minimize erosion and stormwater impacts due to slopes.	• Within NYS Urban Heritage Area.	$115,000

TABLE 4-1 (CONTINUED)
SUMMARY OF ALTERNATIVES FOR ACCESS AND REUSE OF THE GENESEE RIVER GORGE

Options for Access and Reuse of the Gorge		Description / Objectives	Components / Engineering Attributes	Major Design Issues	Trail Connection & Usage Issues	Further Studies Needed	Additional Remarks	Order of Magnitude Costs (1)
4	**Reuse of former BeeBee Site: Area on Gorge Rim**	a. Extend Browns Race along top of Gorge Rim	• Extend landscape character of Brown's Race and the FlourGarden along former alignment of historic Brown's Race north of Platt Street. • New public parking lot at gorge rim. • Screening of RG&E facility to remain at Brown and Falls Streets.	• Extend the successful urban character of Brown's Race into open space created by the demolition of BeeBee Station.	• Potentially relocate Genesee Riverway Trail to Brown's Race extension one closer to the river.	• Design feasibility study for the various streetscape features, pavements, and Flour Garden.	• Further reveal the historic route and extent of Brown's Race. • Within Brown's Race Historic District, City Preservation District, and NYS Urban Heritage Area.	$1,700,000
		b. Beebee Gateway Park	• Integrate public access with remnant foundations of Beebee Station. • overlooks / viewing areas, seating, performance space, vendor space, play elements to capitalize on industrial past ("tail race" slides / climbing wall) within a terraced interpretive landscape • Potential for boardwalk system to navigate through ruins.	• Final condition of Beebee Station site / extent of foundation walls to remain and condition of slope unknown. • Integrating public access on steep slopes with foundation remnants challenging. • Safety and security perceptions.	• Historic interpretation opportunities for Brown's Race and former industrial features.	• Coordinate with RG&E regarding potential for retention of artifacts / wall remnants to integrate in park interpretive site. • Once Beebee Station is removed and clean-up is complete, assess slope and wall stability.	• Strive to retain some foundation walls and remnants of Beebee Station - the historic artifacts are intrinsically interesting and provide a focal point and identity for the site. • Within NYS Urban Heritage Area.	$3,500,000
		c. Beebee Park Stairs	• New staircase aligned with Factory Street to connect the upper rim and BeeBee Gateway Park with gorge floor.	• Feasibility of ADA accessibility challenging; steep slopes.	• Provide a direct connection to the lower river gorge from Genesee Riverway Trail.	• Explore range of alternatives for ADA access to gorge (ramps, elevator, etc) integrated with historic foundation remnants.	• Supplement other vertical circulation opportunities to connect the upper and lower gorge levels. • Within NYS Urban Heritage Area.	$300,000
5	**Reuse of BeeBee site and Park- Gorge Bottom**	a. Public Access Parking	• Creation of public parking lot at base of Falls Street. • Screening of RGE facilities to remain.	• Maintain security for active operations of RGE facilities. • Safety and security perceptions.	• Facilitate public and ADA access to the lower gorge.		• Within NYS Urban Heritage Area.	$600,000
		b. Lower Gorge Park	• Public trail system on the gorge floor, including boardwalk connection to a new viewing platform, boardwalk loop across seasonal island, and historic interpretation features related to Beebee station. • Falls lighting.	• Relocate existing RG&E access road to west edge/gorge wall to create more open site. • Environmental concerns; Landscape restoration / ecological restoration. • Maintain security for active operations of RGE hydro facility at base of falls. • Final condition of Beebee station site unknown therefore reuse/redevelopment potential unk. • Allow for future potential mixed use redevelopment.	• Loop trail can provide connection to multiple points of vertical circulation and public access into the lower gorge. • Potential major destination for users of the surrounding trail network by expanding recreation and scenic amenities.	• Consider safety perceptions, emergency access, ongoing maintenance and operation. • Confirm extent of environmental cleanup and suitability for public use. • Soils and ecology studies considering industrial past and geology.	• Strive to retain some foundation walls and smokestack. • Consider potential for phytoremediation. • Within NYS Urban Heritage Area.	$4,200,000
		c. River Access	• Car-top boat launch and accessible fishing dock access	• Boat launch / floating dock structure to accommodate fluctuations in water level and high currents; safety downstream at Middle Falls.	• NA	• Consider safety concerns related to river access between the falls, emergency access.	• Within NYS Urban Heritage Area.	$250,000
		d. Gasworks Bridge river crossing	• Gasworks Pedestrian Bridge over the river utilizing existing piers across river, with trail segments and interpretive elements.	• Trail continuance on east side and connection to Suntru Street uncertain.	• Potential future trail segments on the east side of the river on the B&L site with connection to Suntru Street up to St. Paul Street with access to the Genesee Riverway Trail and El Camino Trail.	• Study existing conditions of structure and suitability for reuse; trail segments at either end.	• Within NYS Urban Heritage Area.	
		e. Incinerator Smoke Stack	• Consider stabilizing incinerator smokestack as interpretive element and highly visible icon for the lower gorge park.	• Condition, removal, and clean up of remaining incinerator building.	• NA	• Environmental concerns. • Structural concerns (state of existing incinerator bldg).	• The smokestack provides a focal point and identity for the site. • Within NYS Urban Heritage Area.	TBD

LABELLA Associates, P.C.

TROWBRIDGE WOLF MICHAELS TWLA LANDSCAPE ARCHITECTS

INDUSTRIAL ARTIFACTS INTEGRATED INTO PUBLIC SPACE

MILL RUINS PARK, MINNEAPOLIS, MINNESOTA

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY

CITY OF ROCHESTER, NY · FLOUR CITY · FLOWER CITY

INDUSTRIAL ARTIFACTS INTEGRATED INTO PUBLIC SPACE

FIGURE 4-3

HISTORIC AND CULTURAL INTERPRETATION
BUFFALO, NEW YORK

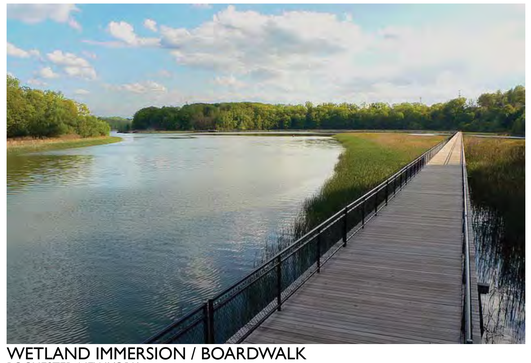
GATHERING
PROVIDENCE, RHODE ISLAND

PLAY/TAIL RACE SLIDE
DUISBERG, GERMANY

TEAR DROP PARK, USA

RIVER CRAFT ACCESS
VERMONT, USA

INDUSTRIAL ARTIFACTS INTEGRATED INTO PUBLIC SPACE
MINNEAPOLIS, MINNESOTA



WETLAND IMMERSION / BOARDWALK
ROCHESTER, NEW YORK

ACTIVE RECREATION
DUISBURG, GERMANY

ACCESSIBLE FISHING ACCESS
WHITEHALL, NEW YORK

POTENTIAL AESTHETIC TREATMENT FOR PROJECTION BUILDING
BROOKLYN, NEW YORK

ECOLOGICAL RESTORATION / NATIVE GORGE PLANTING
MOUNTAINVILLE, NEW YORK

ON-BRIDGE LANDSCAPING - POTENTIAL FOR PONT DE RENNES
CORNING, NEW YORK

MULTI USE TRAIL
TORONTO, CANADA

LABELLA Associates, P.C.

TROWBRIDGE WOLF MICHAELS
TWLA
LANDSCAPE ARCHITECTS

POTENTIAL PROGRAM ELEMENTS

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY

FLOUR CITY - FLOWER CITY - CITY OF ROCHESTER, N.Y.

POTENTIAL PROGRAM ELEMENTS

FIGURE 4-4

FIGURE 4-5
GAS WORKS BRIDGE

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY
CITY OF ROCHESTER

DRAFT REPORT | NOT TO SCALE

LABELLA

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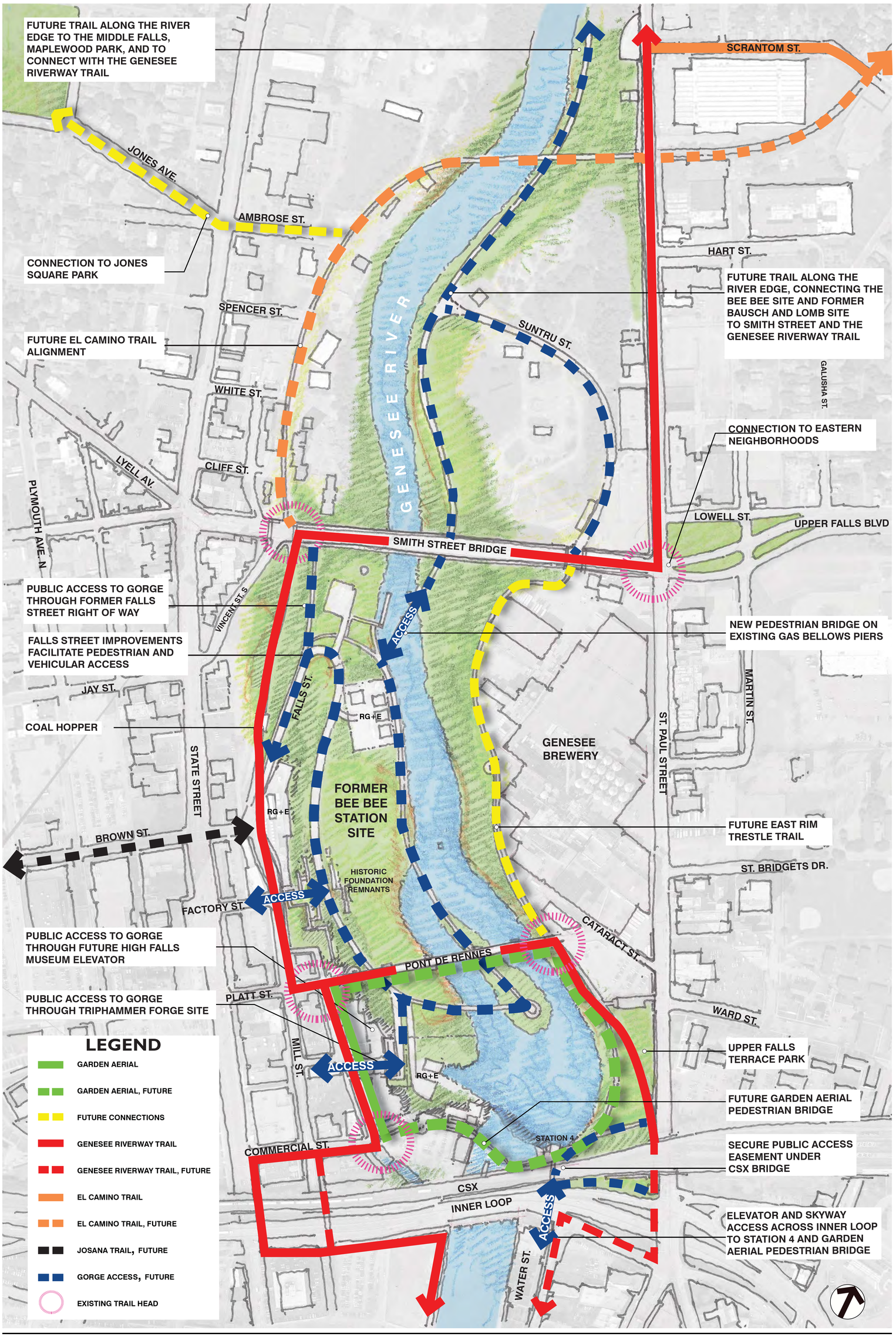

FIGURE 4-6

GENESEE RIVER GORGE CONCEPTUAL ACCESS PLAN

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY

GENESEE RIVER GORGE CONCEPTUAL ACCESS PLAN

TROWBRIDGE WALLACE MICHAELS LANDSCAPE ARCHITECTS

LABELLA ASSOCIATES, P.C.

5.0 PUBLIC INVOLVEMENT

5.1 General

On September 1, 2015, the City of Rochester held a public information meeting at 60 Brown's Race. Approximately 30 people attended the meeting. An "Open House" format was used which allowed visitors to casually move through the meeting space to view various stations that were set up. No formal presentation was given. Representatives from the City of Rochester, LaBella Associates and Trowbridge Wolf Michaels Landscape Architects were present to discuss the project, answer questions and receive comments.

The public meeting included a variety of stations which included information about this project as well as the "Genesee Falls Park 2025" plan. Approximately 19 poster boards were displayed which depicted study objectives, bridge concepts, access plans, and the Genesee Falls Park concept. Most of the boards that were used at the public meeting are included as figures and tables within this report.

Attendees at the meeting were given a comment sheet to use when providing comments. The comment sheet provided a means of: 1) ranking each bridge alternative according to preference; and, 2) providing written comments. Most comments were received at the meeting while some were provide via e-mail or regular mail. Twenty-one (21) individuals provided comments, and a complete transcript of the comments is included in Appendix B. A summary of the comments by topic follows.

5.2 Summary of Comments

Results of the bridge voting are shown in the following table. The results indicate that *Concept No. 1 - Pedestrian Truss* was most preferred.

Table 5-1: Pedestrian Bridge Voting Results

Bridge Concept	1 *Least Favorable*	2	3	4	5 *Most Favorable*
1. Pedestrian Truss (3 span)	1	2	2	2	12
2. Curvilinear Cable Stayed Bridge (2 Towers)	9	1	4	3	0
3. Cable Stayed Bridge with 2 Span Curved Girder Approach	6	3	5	0	3
4. Cantilever Spar Cable Stayed with 2 Span Curved Girder Approach	8	2	2	2	3

Note: Numbers refer to the total votes in that category

A summary of the comments received as part of the public outreach process is provided below. The comments are organized according to topic and have been paraphrased for clarity and brevity. A transcript of all the comments received is included in Appendix B.

1. Wildlife & Environment:
    - A study should be conducted to examine the impact on existing wildlife before consideration of new uses. (Miller, Phillips, Unknown, Herne)
    - Oppose "cable type" bridges due to potential bird loss, especially Peregrine Falcons. (Miller, Phillips, Herne, Summers)
    - The wildlife & natural beauty of the area should be protected. (Phillips, Unknown, Herne, Yamonaco)
    - The area should be a safe place for people and wildlife alike. (Phillips)
    - Gorge bottom should remain closed to the public. Allowing people access to the gorge will frighten the wildlife away. (Herne)
    - Trails around the top of the river gorge provide opportunities to watch wildlife that live in the gorge. Opening the river gorge to the public will cause the City to lose "watchable" wildlife opportunity and degrade the ecosystem / habitat. (Summers, Kahn)
    - The City should publicize the fact that there are opportunities to view wildlife in the gorge. (Summers)
    - Constructing so many trails as shown at the meeting would cause at least some wildlife to leave and would disturb nesting & denning. (Kahn)
    - Some of the wildlife that was cited includes: deer, turkey, beaver, osprey, turkey vultures, peregrine falcon (endangered), kingfisher, least bittens, fox, raccoon, mink and great blue heron. There are deer which have been separated from a larger population long enough to seem smaller than typical and some have piebald fur (similar to the white deer herd at Seneca Army Depot). The peregrine falcons regularly hunt and roost on cliffs.
    - Concern that changes will have a negative impact on the wildlife that inhabit and visit the area. (Yamonaco)
    - Recommend that decision makers look at the environmental impact of proposed changes. (Yamonaco)

2. New Pedestrian Bridge at High Falls:
    - Against "cable type" bridges due to potential bird loss. (Miller, Phillips, Herne, Summers)
    - A new pedestrian bridge will allow people to enjoy the natural environment. (Miller)
    - Will the bridge allow bicycling? (Miller)
    - Prioritize bridge construction as follows: 1 - Pont de Rennes Rehabilitation; 2 - Running Track Trestle Rebuild; 3 – New "Gas Works" Pedestrian Bridge; and 4 – New High Falls Bridge. (Beck)
    - The pedestrian truss (Concept No. 1) feels appropriate given the industrial history of the area. (Mayer, Allen)
    - Focus should be on the falls; the "signature" bridge concepts divert the focus to the bridge. (Mayer, Allen)
    - The pedestrian truss blends in best with the other structures. (Allen)
    - The pedestrian truss bridge is low cost and a local firm could build it. (Allen)
    - The Cantilever span frames the gorge and does not obstruct the view. The cables draw attention to the falls. The form is uplifting and inspiring and unique. (Russell)

- Bridge Concepts 1, 2 and 3 obscure the view of the falls to varying degrees. In particular, bridge option 2 overpowers the natural form of the geologic formation. (Russell)
- When price difference is so great, it's hard to support anything other than the least expensive. (Torzinski)
- Arched Tower (Concept 4) is attractive but probably too expensive. (Frey)
- Start with the less costly improvements to the north end of the project area before building a new High Falls pedestrian bridge. The bridge should come after the park is established and existing CSX Bridge is replaced or repaired. (Unknown)
- Any bridge would add to the existing "cluttered" view of the falls. Why not simply build viewing platforms on either bank? (Haven)
- Prefer Concept No. #4 because there are no large piers near old RG&E Station #4 or in front of the falls, the cantilever span tends to frame the falls in a very dramatic way and the design is almost sculptural. (Peet)
- A pedestrian bridge over Upper Falls is unrealistic for both budget and safety reasons versus the benefits which could be derived. (Kahn)
- It would only be usable for part of the year due to ice and or high water.
- It would be excessively expensive to build and maintain.
- It is dangerously close to the CSX rail bridge which consistently drops debris below it. The bridge is in great need of repair which has not occurred due to access issues, which is also why a new Inner Loop bridge has not been attempted.
- Any new bridge would take considerable effort to obtain permits for construction.
- The city would be at a liability risk to encourage more human use at Upper Falls, in current plans people will be too tempted to play in a highly dangerous area.
- Money would be better spent focusing on the northern end of the project near the Smith Street Bridge and building a pedestrian bridge on the old gas bellow piers. It would be safer, access is easier, parking is more readily available and it would be more cost effective provided the piers are in good condition. (Kahn)

3. Potential Zip-Line:
   - Concerned that the zip-line would destroy the beauty and design of the pedestrian walkways. (Miller)
   - Too commercial. (Miller)
   - No Zip-Line! (Phillips, Unknown)
   - Zip-Line will commercialize and destroy this natural resource. (Yamonaco)
   - Concerned about Greentopia's supposed support for a zip-line. Questions Greentopia's involvement and sincerity about any project that will have consequences to the natural surroundings. (Yamonaco)

4. Genesee Falls Park 2025:
   - Great Plan. (Beck)

5. Conceptual Access Plan:
   - Suntru Street trail connection to Scrantom Street node may not be feasible due to significant elevation difference. (Beck)
   - Completing the circle around High Falls and improving access from downtown is critical for Rochester. (Allen)

- Trails & access to gorge floor will be cool. (Allen)
- Most interested in bike / pedestrian access between High Falls and Downtown. The current gap hinders the utility of the existing "River Trail" system & discourages trips to High Falls. (Unknown)
- Focus needs to be on completing the "River Trail" along the river. (Unknown)
- Potential public / private partnership between RG&E, developer, City & State is critical to coordinate Front Street site redevelopment with new pedestrian skyway over Inner Loop & CSX. (Unknown)
- Priority should be given to the river trail by the Brewery. (Ford)
- The running track trestle would be an important addition and would connect this project with the El Camino Trail. (Frey)
- Focus on return on investment of any new infrastructure. (Unknown)
- Integrating opportunities or "play" into the urban design is an idea well suited to Rochester. (Unknown)
- There are safety concerns with allowing people at river level including flooding and adventurous rock climbers. (Summers)
- Regarding any (gorge) trails built as part of this project, access off the trails should be restricted by tall fences and elevated trails. Encouraging people to access the water between the falls is ludicrous and dangerous. Boating of any kind should not be allowed. (Kahn)

6. Bicycles:
   - Emphasis on bicycle infrastructure is needed. For example, the pedestrian skyway bridges over the Inner Loop (with elevator towers) are not bicycle friendly. Widening the tunnel under the loop is a good idea. (Mayer)
   - An explicit tie-in with the city's "Bicycle Boulevard" program would be helpful. (Mayer)
   - The greening of Pont de Rennes Bridge will make it almost impossible for people on bikes and people on foot to interact gracefully. (Allen)
   - Should have a bike connection to the south side of the CSX / Inner Loop to make this project attractive to funders. (McIntosh)
   - Will the new High Falls Bridge allow bicycling? Will they be required to park and walk? (Miller)

7. Pedestrian Skyway over Inner Loop and CSX Railroad:
   - The pedestrian skyway bridges over the Inner Loop (with elevator towers) are not bicycle friendly. (Mayer)
   - The skyway elevators will become creepy, dirty places that only the homeless frequent. Nobody will use them due to the hassle of stairs/elevator. It will become a psychological barrier. (Allen)

8. Widen existing tunnel under Inner Loop at Mill Street:
   - Widening the existing tunnel under the Inner loop is a good idea. (Mayer)
   - West Side Trail - the 20' wide tunnel is much better than pedestrian skyway with elevators. (Allen)

9. Pont de Rennes Bridge:
   - The greening of Pont de Rennes Bridge will make it almost impossible for people on bikes and people on foot to interact gracefully. (Allen)

10. St. Paul Street under CSX Railroad:
    - Underpass is grim. Improving St. Paul Street underpass is key. (Allen)

11. New "Gas Works" Pedestrian Bridge in Gorge:
    - Constructing a bridge on the old pylons by RG&E is great!! Just do it! (Allen)
    - The RG&E Gas Works access improvement is the most appealing feature of this project. It retains existing infrastructure and seeks to provide great access to the floor of the gorge. (Russell)
    - Conceptual reuse of the concrete piers from the old coal compound in the gorge for a new pedestrian bridge is good idea. (Peet)
    - Money would be better spent focusing on the northern end of the project near the Smith Street Bridge and building a pedestrian bridge on the old gas bellow piers. It would be safer, access is easier, parking is more readily available and provided the piers are in good condition construction would be more cost effective. (Kahn)

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary of Recommendations, Costs, Follow-on Studies

A summary of recommendations, follow-on studies and relative order of magnitude costs is included in Tables 2-1, 3-1, 3-2, and 4-1. Refer to Figure 6-1 *GardenAerial Concept Design Plan* for an overview of the recommendations.

EXISTING OVERLOOK AND INTERPERETIVE SIGNAGE

FUTURE EL CAMINO TRAIL ALIGNMENT AND TRAIL HEAD IMPROVEMENTS AT SMITH AND VINCENT STREET

EXISTING GENESEE RIVERWAY TRAIL ALIGNMENT AND TRAIL HEAD AT SMITH STREET

RESTORED NYSDEC INCINERATOR STACK AND FOUNDATION WALLS AS INTERPRETIVE ELEMENTS. TO PROVIDE A MONUMENTAL ICON OF THE SITE'S INDUSTRIAL PAST

FUTURE FALLS STREET TRAIL CONNECTION

PUBLIC PARKING AT THE BASE OF FALLS STREET

CAR TOP BOAT LAUNCH AND ACCESSIBLE FISHING DOCK

VEHICULAR ACCESS CONTROL GATE - ONLY RG+E VEHICLES BEYOND THIS POINT

IMPROVED PEDESTRIAN ACCESS ALONG FALLS STREET

EXISTING RG+E FACILITY TO REMAIN

EXISTING COAL HOPPER AND GANTRY INTERPRETIVE FEATURE

HISTORIC FOUNDATION REMNANTS INTEGRATED INTO PARK DESIGN

VIEWING AND PARK TERRACES

POTENTIAL TAIL RACE SLIDE

PUBLIC ACCESS TO GORGE THROUGH FORMER BEE BEE STATION HISTORIC REMNANTS

ORIENTATION GATEWAY TO BEE BEE STATION SITE

PUBLIC PARKING

VIEWING AND PARK TERRACES

EXTEND AND INTERPRET HISTORIC BROWNS RACE AND FLOUR GARDEN

GRANITE MILLS PARK

TAIL RACE INTERPRETIVE ELEMENT

HIGH FALLS MUSEUM & FUTURE ELEVATOR TO GORGE BOTTOM

SECURITY FENCE AND GATE SEPARATES RG+E AREA FROM PUBLIC ACCESS

PUBLIC ACCESS TO GORGE THROUGH TRIPHAMMER FORGE SITE (NOT ADA ACCESSIBLE)

CREATE GATEWAY TO EMPHASIZE ACCESS TO GARDEN AERIAL AT INTERSECTION OF BROWNS RACE AND RACK HOUSE

IMPROVED MILL ST. PEDESTRIAN TUNNEL & CROSSWALKS

FUTURE TRAIL ALONG THE RIVER EDGE TO CONNECT THE BEE BEE SITE AND FORMER BAUSCH AND LOMB SITE AS WELL AS POINTS NORTH

FUTURE TRAIL IMPROVEMENTS AT SUNTRU STREET TO CONNECT SMITH STREET WITH THE EAST RIM AND TRESTLE TRAIL

FUTURE PEDESTRIAN BRIDGE CROSSING SUPPORTED BY THE EXISTING REMNANT GAS BELLOWS CONCRETE PIERS

TRAIL AND BOARDWALK TO SEASONAL LOOP (NEAR TERM)

FUTURE TRESTLE TRAIL ON EAST RIM OF THE GORGE BEHIND THE GENESEE BREWERY TO PROVIDE A CONNECTION TO SMITH STREET

TRAIL AND BOARDWALK IMPROVEMENTS TO ISLAND (LONG TERM)

EAST RIM TRAIL

VIEWING PLATFORM (LONG TERM)

TERRACE

AESTHETIC IMPROVEMENTS TO EXISTING PROJECTION BUILDING / DEVELOP GATHERING SPACE AND VIEWING PLATFORM AT BASE

PARK + GARDEN AERIAL ENTRY

FUTURE GARDEN AERIAL PEDESTRIAN BRIDGE

ENHANCED PEDESTRIAN CROSSING UNDER CSX BRIDGE

SECURE ACCESS AGREEMENT FROM CSX UNDER BRIDGE

WIDENED ST. PAUL STREET BRIDGE WITH LANDSCAPE ENHANCEMENTS

LEGEND

- GENESEE RIVERWAY TRAIL
- GENESEE RIVERWAY TRAIL, FUTURE
- EL CAMINO TRAIL, FUTURE
- JOSANA TRAIL, FUTURE
- POTENTIAL TRAIL, FUTURE
- PRIMARY VIEWSHED
- SECONDARY VIEWSHED

FIGURE 6-1

GARDENAERIAL CONCEPTUAL DESIGN PLAN

HIGH FALLS PEDESTRIAN ACCESS IMPROVEMENT STUDY

GARDENAERIAL CONCEPTUAL DESIGN PLAN

TROWBRIDGE WALLACE MICHAELS LANDSCAPE ARCHITECTS
LABELLA Associates, P.C.

APPENDIX A

MEETING MINUTES

APPENDIX B

PUBLIC INVOLVEMENT