2.0 **Inventory & Analysis**

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2.0 Inventory & Analysis

2.1 Project Area – Overview

The Southside Greenway project area was defined by the City of Bethlehem to be the fourteen (14) properties that comprise a former railroad spur line that is owned by the Norfolk Southern Corporation and runs through the center of South Bethlehem (from Lynn Avenue to where Riverside Drive crosses under the Hill-to-Hill Bridge.)

Adjacent areas that directly impact the study corridor generally include the streets that touch the Greenway R.O.W. and the streets approximately 1-2 blocks on either side, parallel to the greenway (Third and Fourth Streets)

Consideration was given to related uses of transportation, recreation, redevelopment plans, and land use in the general vicinity the Greenway project area.

2.2 Methodology for Data Collection / Observation

A list of resources that were reviewed as part of the project inventory and analysis is included in the appendix of this master plan.

The team walked the project corridor several times and photographed the area conditions in different segments over the course of the project.

The project base plan was a CAD file provided by the City, as well as historic railroad valuation maps on paper from 1916.

Aerial photography from the 2001 US Geological Survey was used to verify conditions found in the field and to observe the larger general area – specifically for potential trail linkages outside the project corridor.

*The South Bethlehem Greenway is 1.75 miles in length from Union Station on the west to the Lynn Avenue Bridge on the east.*
2.3 Public Involvement

A public involvement program was conducted throughout the course of the master plan study to introduce the public and potential project partners to the concepts that were evolving for the Greenway. The public participation process allowed residents and patrons opportunities to share their knowledge about how the neighborhoods actually function, as well as their guidance about how improvements and operation of the public Greenway would best be implemented.

Eight (8) public meetings were held at various locations throughout the Southside over the eight (8) month planning process. Meeting minutes are included in the Appendix of this report.

A Steering Committee was convened by the City of Bethlehem to include representatives from the following stakeholder organizations: City of Bethlehem, Bethlehem Parks and Public Property, BethWorks Now, Northampton County Community College, Lehigh University, Delaware & Lehigh Heritage Corridor, Community Action Committee of the Lehigh Valley, Community Action Development Corp. of Bethlehem, Arts Quest, Southside Vision 2012 Open Space Committee.

The consultant team met with the Steering Committee five (5) times over the course of the project to review progress, receive guidance and coordinate the public meetings. Minutes of those meetings are contained in the appendix of this report.

A list of “Key Person” interviews was provided by the City of Bethlehem to ensure a maximum outreach to a wide circle of stakeholders. The consultant team interviewed about a dozen individuals in this process. Their comments and ideas were incorporated into this master plan. A list of interviewees is included in the Appendix of this report.

The comments that were solicited during the public meetings and key person interviews are included in the Appendix of this report.

Local television and newspaper coverage of the project was excellent. Copies of newspaper articles are contained in the appendix of this report.
2.4 Project Area – Inventory and Analysis

The project study area extends from Lynn Avenue to Riverside Road at the Hill-to-Hill Bridge. This alignment of the Greenway corridor makes it a very important catalyst for many other initiatives in South Bethlehem.

The Greenway Project area has been divided into three (3) “segments” with very distinct characteristics and opportunities:

- Segment 1: East – Linear Corridor;
- Segment 2: Central – Commercial / Residential;
- Segment 3: West – Public Events.

The following is an annotated list of significant locations along and adjacent to the Greenway with a discussion of potential improvements that can accomplish the following objectives:

- Connect the Greenway to the community;
- Provide needed Greenway facilities; and
- Foster adjacent redevelopment initiatives.

Details of specific locations are described by either “Points” or “Blocks” along the Greenway.

2.4.1 Segment 1: East - Linear Corridor

The “Eastern Segment” of the Greenway extends from the Lynn Avenue Bridge to the intersection of Third and Hayes Streets, and is uninterrupted by any on-grade roadway crossings (except at Third Street – which requires a major remedy.)

The R.O.W. segment can be characterized distinctly as a linear transportation corridor – bounded directly to the north by an adjacent railroad yard and Route 412 / Daly Avenue. The adjacent residential neighborhood to the south sits above the R.O.W. and is effectively buffered by a significant elevation difference. The BethWorks Now redevelopment site is planned directly to the north of Route 412 along

The Lynn Avenue Bridge is in the process of being redesigned.
this Greenway segment. A future trail link eastward to Saucon Park from Lynn Avenue may be feasible in future study.

**Point: Lynn Avenue** – The Lynn Avenue Bridge is scheduled to be replaced by the City in the next four years. The existing bridge was designed with some distinct architectural features that are now deteriorated, but are considered noteworthy features in the community. The replacement bridge should incorporate “context-sensitive design” features that evoke the traditional architectural style of the historic public infrastructure in Bethlehem. This bridge serves LANTA bus routes and school buses.

The new bridge should have a minimum five (5) foot wide pedestrian walkway on at least one side. The existing pedestrian walkway is on the east side, which also appears reasonable for the new walkway. The pedestrian approach walk from the south is steeper than from the north and should be redesigned to meet ADA requirements. The southeast side of the approach wall appears to be a preferable location for a new ADA-accessible walkway that begins at the local sidewalk grade at Lynn and East Sixth Streets and runs down to meet the Greenway trail at the RR R.O.W. below the bridge. This Greenway linkage walk should be lighted. The complete pedestrian package of facilities – including crosswalks at Lynn and East Sixth Streets should be designed and built as an integral part of the bridge replacement project.

**Block: Lynn to Fourth Streets** – This segment of the Greenway corridor runs adjacent to an active railroad yard and an active railroad spur that turns north and crosses under Fourth Street in a separate culvert from the Greenway alignment. The Greenway in this section should hug the southern side of the R.O.W. and be at least 20 feet wide to provide sufficient width for a trail, planting strip and drainage swale. This segment must be fenced along the northern side to separate the Greenway from the active rail uses. Due to its relative remoteness (compared to the other Greenway blocks) it is important to present the impression through physical design and surveillance that this segment is an important part of the total public Greenway amenity and not an industrial cul-de-sac.
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Point: Fourth Street Bridge – The deck elevation of this recent PennDOT bridge is significantly above the grade of the Greenway. The bridge abutments and wing walls form a significant “canyon” effect where the greenway passes below. The general location of this site was considered as a major “junction” point along the Greenway corridor for several reasons:

- **Access to Bus Transit** – LANTA bus routes intersect at the corner of Fourth and William Streets. With minor improvements, such as walkways and a bus shelter, this location is very suitable as a multi-modal site for transit, trail and motor vehicles.

- **Potential Greenway Trailhead Site** – The triangular-shaped parcel at the northeast corner of the Fourth and William Street intersection is currently owned by PennDOT – but may be eligible for acquisition by the City to serve as a major “trailhead” site for the eastern segment of the Greenway. This parcel can house a bus shelter as well as provide local pedestrian / bicycle access to the Greenway trail.

  With minor improvements, a sidewalk connection can be made along Steel Avenue where that roadway runs directly adjacent to the Greenway R.O.W. This section of parallel alignment is approximately 500 feet long. By shifting the Greenway trail to the north side of the R.O.W. in this section, an off-street parking area of approximately 50 spaces can be created to serve the trailhead. This site will allow residents and visitors from the east and south to drive or take a bus to reach the Greenway. The City Parking Authority has indicated that it would develop and maintain public metered spaces in this and other potential locations along the Greenway.

- **Potential Skate Park Site** – Below the Fourth Street Bridge the Greenway corridor is distinctly “industrial” and aesthetically hard. The Lynn Avenue Bridge can be seen to the east. A vantage location for clear visibility and security along this Greenway section will be created when the parking improvements are installed.

  This section may be well suited to locate a recreation skate park. The skate park would be bound on the north by the bridge abutment wall. A tall picket fence canGreenway R.O.W. below Fourth Street Bridge is a potential location for a skate park.
enclose the other three sides of the skate park allowing for a twenty (20) foot wide trail corridor on the southern side of the R.O.W. for a continuous trail to pass under the bridge. The area should be lighted for Greenway trail use. The skate park could be closed and locked at dusk. This recreation use would not be directly adjacent to residences in this segment of the Greenway, but would be close enough as a walking destination to the eastern residential neighborhoods that currently include a significant youth population. No other facility of this type exists in South Bethlehem. This strategy for a mixed transportation and recreation use will allow the construction of the primary “through-trail” facility. In the future, the skate park apparatus could be easily moved to another location if a wider section of R.O.W. is necessary in the future, possibly for use by a dedicated transit facility within the R.O.W. alongside the trail.

Block: Fourth Street to Hayes Street – This section of Greenway is characterized by its alignment in a grade “cut” between Daly Avenue (Route 412) and below a residential neighborhood that abuts the R.O.W. directly to the south. There are several linkage opportunities and development partnerships in this section of the Greenway, including:

- **PennDOT Route 412 Improvements (I-78 to Minsi Trail Bridge)** – PennDOT District 5 is currently administering the planning / design project to widen Route 412 from Route I-78 north to the intersection with the Minsi Trail Bridge at Daly Avenue. The Route 412 Widening Project runs directly adjacent to the north side of the Greenway R.O.W. from the Fourth Street Bridge to the Minsi Trail Bridge. The highway widening in this segment will likely occur on the north side of Route 412. It appears that there is room within this segment of the Greenway corridor to share a portion of the R.O.W. for highway widening – and still build the trail and parking area along Steel Avenue. Adequate compensation to the City will need to be negotiated for this type of partnership. Roadway / Greenway improvements along this section will likely require grading / drainage, utility relocation, street tree removal and replanting, fencing, lighting and retaining wall reconstruction.
• **BethWorks Now Entryway** – The symbolic entry to the proposed BethWorks Now development is to be from the north side of Route 412, about 400 feet east of the Minsi Trail Bridge. The new drive is planned to pass under the mammoth gantry crane that remains in place from the active mill days. This new intersection should include 3-way crosswalks and pedestrian call-signaling. The crosswalks across Daly Avenue should be ADA-accessible and should meet a landing on the south side of the highway with an opening in the Greenway fence for a walkway that links to the Trail.

• **Potential Daly Avenue Widening Project** – The concept has been advanced to extend the Route 412 widening improvements west to the intersection of Third Street and Founders Way. Existing grades slope down sharply to the north of Daly Avenue within BethWorks Now property along this entire section. Highway widening improvements west of the Minsi Trail Bridge present several opportunities for the City and its Greenway partners. Improved intersections along Daly Avenue at Third Street, Hayes Street, and Founders Way offer the potential to improve safety for both pedestrians and motorists, as well as provide better options for disbursement of motor vehicles from the primary Third Street route to both Second and Fourth Streets.

Widening Daly Avenue and Third Street in this section could be accomplished entirely to the south side of the Route 412 corridor. The developer could acquire a narrow strip along the north side of the Greenway R.O.W. in exchange for some potential greenway improvements.
The City has several options to form partnerships for acquisition, construction and maintenance of this segment of Greenway. The options for widening the Route 412 corridor west of Minsi Trail Bridge should be evaluated with a traffic study concurrent with the PennDOT Route 412 Widening project.

- **Third and Daly Intersection** – This intersection is perhaps the most troublesome of all twelve (12) “on-grade” Greenway road crossings. The existing skewed alignment where Third Street veers eastward from Daly Avenue as the “local” street is an ambiguous intersection for motorists. The alignment poses significant problems for creating a safe Greenway pedestrian crossing within the current geometry.

  For the purposes of this study the intersection is shown realigned to create a perpendicular geometry of streets with a one way turning movement into Third Street from Daly Avenue. This conceptual configuration reduces the street crossing distance by creating a standard crosswalk facility for Greenway users. It also provides clear information for motorists about how to negotiate turns, while forcing them to reduce speed rather than accelerate as they enter Third Street. This intersection and the direction of traffic flows on Third Street (east of Daly Avenue) should be included in the traffic study for the Route 412 Widening project.

- **Greenway Linkages to Local Streets via Stairs / Sidewalks / Ramps** – The section of Greenway between the intersections of Third Street and Steel Avenue, and Third and Hayes Streets lies at an elevation approximately 6 to 12 feet lower than the existing residential neighborhood that abuts the southern edge of the R.O.W.

  This grade separation creates a linear transportation corridor that is uninterrupted by local streets located directly to the south of the R.O.W., that dead end or turn above and run parallel to the grade. At the northern ends of four local streets (Hobart, Throne, Hill and State) there are opportunities to make local pedestrian linkages to the Greenway trail via stairs and perhaps ADA ramps. These local access-ways would be created primarily in the existing R.O.W. of the Greenway and local streets.
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• **Structural Improvements along the Greenway Grade** – This section of Greenway can be expected to be the most structurally intensive due to the deteriorated existing slope on the south side of the grade. The solution for the Greenway developer is to re-grade and replant the slope where it is possible. The construction of new retaining walls in other areas will be necessary. The design and construction of these highly visible walls should be considered very carefully because they will serve as a continuous “billboard” and represent Bethlehem’s attention to detail at this important entry to the Southside. Utilitarian materials can be considered for the retaining walls – if they are skillfully designed and articulated with a combination of plantings and art. These vertical surfaces can become a City-sponsored “canvas” for local artists. Perhaps here the history of Bethlehem can be told in images and words at a large visual scale for the benefit of travelers on the Greenway and Daly Avenue.

1**Point: Hayes Street Gateway** – The intersection of Hayes Street, Third Street and Daly Avenue is a major signalized intersection along the Route 412 corridor. Hayes Street is also a major, two-way collector street that runs south from Third Street, up into the heart of Southside neighborhoods. The Greenway R.O.W. crosses Hayes Street on-grade, directly south of the Third Street intersection. This intersection is considered a demarcation between major Greenway segments of different characters. Hayes Street is also considered an important entry point to the Southside business community, including Fourth Street commercial establishments.

The intersection of the Greenway and Hayes Street provides the opportunity to create a formal “entry” from the Third Street corridor into the Southside community. This desire to link the local community to the new BethWorks Now and attract BethWorks Now visitors into the local community was an expressed goal of both residents and the developer. Hayes Street can serve as the formal expression of that goal. Physically, the Hayes Street “Gateway” offers the opportunity to create an inviting streetscape for three (3) blocks – between Third and Fourth Streets. Five (5) of the six (6) blocks fronting Hayes Street are open landscape with structures set back 30-50 feet from Hayes. These open parcels are currently mowed, but could be enhanced with street tree plantings and sidewalk improvements and other preferred amenities that will extend the Greenway “effect” for three (3) blocks into the community. At least one block on the west side of Hayes appears suitable for some metered parking as well as

The existing Hayes Street / Daly Avenue intersection is a gateway to local neighborhoods.
streetscape improvements. The east side of Hayes is developed more privately, but the opportunity exists for partnerships between the City and the owners to make landscaping improvements that will reinforce the streetscape improvements along the west side of Hayes.

2.4.4 Segment: Central - Commercial/Residential

The Central Segment of the Greenway extends west from Hayes Street to Third Street and is interrupted eight (8) times by on-grade street crossings. The character of the Greenway in this area includes residential and commercial and service uses that back onto the R.O.W. For several blocks the Greenway is fronted by former Bethlehem Steel parking lots that are planned for future residential development. On several other blocks the Greenway is fronted to the north by City-owned, Mechanic Street parking lots.

This Greenway segment essentially runs between the rear of central business district buildings that front on Third and Fourth Streets. The major street crossing in this segment is at New Street. The block of the Greenway between New Street and Third Street is a transition section where the R.O.W. alignment curves to the north to cross Third Street.

As a new alternative transportation corridor and public amenity, the Greenway offers the incentive for some existing and some new “infill” buildings to turn and address the new civic green space with entrances and compatible uses.

It should be noted that the former Bethlehem Steel planted many edges of the railroad R.O.W. near employee parking lots with shade trees that were raised in its own nursery in Hellertown. Today, Bethlehem enjoys the grace of these mature Sycamores, Maples, and Ginkgos. The crosswalks at each local intersection with the greenway need to be improved and formalized into a system that is repeated at each intersection – for safety, identity and amenities. The Greenway trail is generally proposed to be located to the southern side of the R.O.W. in this segment (except for several blocks between Fillmore and Webster Streets, where it is aligned to the northern side of the corridor).
The Greenway intersections with local roadways were analyzed and the streets were found to have irregular one-way traffic patterns. With minor modifications to traffic directions on several blocks, a regular alternating pattern of one-way traffic direction on sequential streets can be created that helps motorists and Greenway users to comprehend a consistent system and travel more safely.

1 **Point: Founder’s Way & Third Street Intersection** – Founder’s Way is included in this section because it is already constructed as a major vehicular and pedestrian entry into the future BethWorks Now site. This street will serve the BethWorks Now complex from Third Street, which appears to be a logical place to end the Route 412 Widening project. Currently, the PennDOT study to widen Route 412 extends only from I-78 to the Minsi Trail Bridge. The section of Daly Avenue between the Minsi Trail Bridge and Founder’s Way will likely need future roadway and intersection improvements, even without an immediate BethWorks Now renaissance. An extension of the PennDOT Route 412 study to the Founder’s Way intersection would also capture the Route 412 intersections with Third Street and Hayes Street allowing for their further study and analysis. This extended study could include coordinated traffic signalization and additional turning lanes in this section of the highway where widening is physically possible to achieve without disrupting homes, businesses, and the established community fabric that exists further west on Third Street.

2 **Block: Hayes to Buchanan** – This segment is characterized by the transition from a R.O.W. “cut”, west of Hayes, to a “bench” grade east of Hayes. The bench is supported for a significant distance by a large retaining wall on the north side of the Greenway. This structure needs to be studied and recommendations made for short-term stability and long-term maintenance.

To the south is the former Bethlehem Steel parking lot destined for residential redevelopment. It would be advantageous for community access to the Greenway if Monroe Street were extended north through this new block of residential development as a public easement to create a walkway connection to the primary trail. To the north is the small public plaza created by BethWorks Now opposite Founders Way. Formal pedestrian steps and an ADA-accessible spur trail to the Greenway trail should be created here.
Block: Buchanan to Pierce – It appears that residential units are planned for construction on a portion of the block south, and the entire block north of the Greenway. The opportunity exists for some of the new units to have individual access directly onto the Greenway in this block. The City should review its zoning to determine if the existing ordinances will actually direct development in the ways desired for construction proposed adjacent to this new public open space. An important and immediate visual issue is whether the existing mature trees that were planted along the R.O.W. by Bethlehem Steel will be protected from direct construction and the indirect impacts of construction that could affect their existence.

Block: Pierce to Fillmore – Northampton County Community College (NCCC) has taken over redevelopment of the Discovery Science Center (formerly Bethlehem Steel offices) one block directly north of this Greenway block. One of these streets should be chosen as the “gateway” to the NCCC and receive appropriate streetscape improvements and signage – similar to the Hayes Street gateway concept.

The Bethlehem Steel high-rise across Third Street in this block is about to be converted to a multi-unit residential building that will rely on the Greenway open space to be its “back yard.”

The blocks to the north and south of the Greenway in this section are planned for new residential uses. The same issues that apply to the Buchanan to Pierce block directly east of this section, apply here. In this block the Greenway trail can run along the north side of the R.O.W. to relate more directly to the Mechanic Street corridor that has commercial redevelopment potential, and to allow the balance of green space within the R.O.W. to abut directly to properties on the south side of the Greenway.

Block: Fillmore to Polk – The rear yards of multiple mixed-use properties abut the south side of the Greenway in this block. Community groups, neighborhood associations, and citizens have offered ideas how each block of the Greenway might be developed with specific amenities and maintained by local partners. The detailed design of this and other blocks will be developed in the next phase of the planning and design. For master planning purposes, the trail is currently sited to one edge or the other within the R.O.W. This design maximizes the open area with the Greenway for other potential public uses. A small residential facility is located at the northeast edge of the Greenway in this block.
Block: Polk to Taylor – A new mixed-use commercial/residential building has recently been constructed at the corner of Third and Polk Streets. The Parking Authority owns parking lots on three blocks between the Greenway and Mechanic Street – from Polk to Adams Street. Two of those lots (between Polk and Webster Streets) have been leased to the owner of the Polk Street building as “permit parking” for the new tenants. There is no private open space on that new building site and residents will ultimately use the Greenway as their “backyard” park and promenade.

Block: Taylor to Webster – The Greenway trail can remain to the north of the R.O.W. to serve as a Mechanic Street promenade. This alignment also allows the vista of green open space to extend visually past the limits of the R.O.W. to the senior residential tower in this block near Third Street. Greenway trail coordination and partnerships can include creating ADA walkways directly from the residential building to the public space.

Block: Webster to Adams – The Boys and Girls Club and the Church of the Nativity parochial primary school abut the Greenway directly to the south in this block, with the rear yards facing the Greenway. The Club currently has a fenced recreation yard that is an asphalt surface, approximately four (4) feet higher elevation than the adjacent Greenway grade. The opportunity exists to provide the

Former Bethlehem Steel high-rise office building is to be converted to a multi-unit residential tower, one block north of the Greenway at Pierce Street.

The existing R.O.W. adjacent to the Mechanic Street parking lots.
opportunity for the Club playground to expand its recreation space by opening out into to the Greenway space of the south side of the corridor. The trail location will remain on the north side of the R.O.W. in this block.

Currently, various users park cars along the south side of this Greenway block. These spaces will be eliminated when the R.O.W. is developed. Considerations that must be addressed if the play area is to be expanded into this section of the Greenway include; security, keeping a physical separation between the playground area and the “through” trail, possible fire access between the Greenway and the buildings to the south, and the universally accessible grade change between the two levels. Development of alternative parking opportunities in this area should also be studied as part of this design.

**Block: Adams to South New** – This is a transition block where the R.O.W. begins to curve northward. A regional service bus station and a police substation are located in temporary trailer facilities in this block. Most of the persons interviewed expressed the need to keep these two uses within the central business district of Southside, but not in this specific location.

This block is viewed as one of the most critical to exhibit the Greenway potential and enhance nearby commercial redevelopment opportunities. The skewed angles of this R.O.W. parcel create visual interest that can be exploited to help introduce activities and new mixed uses such as public plaza and outdoor market / vendor areas. This block has the potential to accommodate some parking with the vendor areas – perhaps by expanding vending uses into this small parking area during busy weekends and festivals.
Block: South New to Third – New Street is the symbolic and visual “Gateway” to Lehigh University campus from the Southside. The vista along New Street also extends across the Fahy Bridge to the Bethlehem municipal complex on the north side of the Lehigh River. New Street should continue to be a focus of streetscape improvements. The Greenway intersection with New Street will be a relatively busy crosswalk – designed for two-way traffic. The curving R.O.W. alignment through this block abuts the rear yards of several commercial structures that front Third and New Streets. The Greenway in this area has the potential to widen as it approaches Third Street. The paving treatments and spatial design can transform from trail toward plaza-type features. The redevelopment of the commercial properties and the Greenway in this block can be highly symbiotic, with open-air cafes and restaurants developed that spill “out” onto the Greenway. Here the Greenway design treatments can take on a more detailed, urban flavor. There is an opportunity for small open-air music venues (public or private) that draw people to this block. The Banana Factory, the Southside cultural center, is located directly opposite this block on the north side of Third Street. The Greenway can serve as a public space and catalyst for other related cultural venues and recreation amenities to blossom from the existing heart of the arts on the Southside.

The “street fair” concept for the Greenway is envisioned to germinate in this block with the potential to expand block by block to the east as it succeeds. A hotel is located directly west of the Greenway in this block. The potential exists for the hotel to feature a promenade connection directly to the Greenway as an amenity to its guests.

The R.O.W. is adjacent to an open lot and existing buildings fronting on Third Street.
2.4.3 Segment 3: West - Transportation Hub

This Segment is the shortest and begins at Third Street where the former freight railroad yard and “roundhouse” building once served as the locomotive repair facility. From there the R.O.W. alignment crosses both Third Street and Brodhead Avenue in a skewed alignment before tapering out directly east and below the Hill-to-Hill Bridge - at the former Union Station that has been converted to serve as an outpatient center for St. Luke’s Hospital. This segment of Greenway features several attractions, opportunities and challenges.

**Point: Banana Factory Arts Center** – This cultural center devotes its efforts and space to “kindle, support, and celebrate the artistic, cultural, and creative spirit of the Lehigh Valley.” The Banana Factory is a converted industrial building that sits on the eastern end of a block bounded by Second, Third, Brodhead and Northampton Streets. The primary entrances are from the west side, through a plaza that fronts onto a parking lot to the west. The driveway to the parking runs the width of the block, from Second to Third Street. There is a LANTA bus shelter that has been decorated with a mosaic art mural west of the Third Street driveway entrance. The skewed alignment of the former railroad R.O.W. crosses Third Street just west of the bus station at mid-block. For safety reasons the alignment of the new Greenway crosswalk needs to be modified to be perpendicular to Third Street. The crosswalk could land at the Banana Factory plaza, and this mid-block crossing should be included in the PennDOT project to redesign the Third Street Ramp to the Hill-to-Hill Bridge. From there, the Greenway route west would be via a short section of Third Street sidewalk to reconnect with the R.O.W. as it cuts diagonally through the block toward Brodhead – or as an alternative, through the Banana Factory plaza to the Second Street sidewalk and west to the intersection with Brodhead.

**Point: The Lehigh Riverport Development** – This new mixed-use development is an adaptive reuse of a former industrial building located on Second Street, directly north of the Banana Factory and directly west of the Fahy Bridge. Project construction was underway during this Greenway planning, and the new mixed-use development will house residential units, a restaurant, a health club, and parking dedicated to both new residents and metered public parking.
This project is a significant redevelopment of one of the last remaining active heavy industrial areas within the center of the Southside. The new residents of Lehigh Riverport will have no open space amenities on site and will be urban dwellers with a demand for public open space in this section of town. The existing Banana Factory plaza is the closest public amenity in the neighborhood. These users will likely use the Fahy Street Bridge to access the larger open space amenities on the North Side of the Lehigh River, but the Greenway in this segment also offers significant opportunities to serve as a neighborhood park, as well as a place to entertain visitors.

Block: PennDOT Second Street Ramp Project – The new design for the proposed ramp to the Hill-to-Hill Bridge is pivotal to the redevelopment of this entire corner of South Bethlehem. The project is currently in redesign and anticipated to be completed by September 2007. A major question to be answered is – what is the primary purpose for the new ramp? There is a strong case to modify a previous preliminary design to create a new ramp that is aligned directly into Second Street at Brodhead Avenue.

This Greenway master plan provides the City with concepts regarding adjacent land uses, potential business partnerships, and multi-modal transportation opportunities that should be considered in the design of the new highway ramp. Issues regarding the ramp redesign include property acquisition, relocation, context-sensitive design of the new bridge features, traffic study refinements for the general area, crosswalk improvements at surrounding intersections, and use of remnant parcels – including reuse of the parcel with the existing ramp from Third Street. PennDOT has invited the City to participate in the project design.
2 Point: Weldship Corporation – The block bounded by Second and Third Streets, and Northampton Street and Brodhead Avenue is currently occupied by the Banana Factory to the east and several small buildings that front Third Street on the west end of the block. A lot used to store large steel industrial gas containers on trailers lies between the diagonal Greenway alignment through the center of this block and the Banana Factory parking lot. This is a highly visible location for a use that serves a tank reconditioning operation located directly across Second Street. The question exists whether the tank storage use between Second and Third Streets can be relocated nearby to allow this strategic parcel to be redeveloped. With a new highway ramp to deliver travelers to this location, it appears that this site is suitable for structured parking. Such a development could be a mixed-used structure that might incorporate ground floor commercial and transportation uses such as a relocated bus station for LANTA and long distance routes. The police substation could be relocated into this facility. The design of such a facility could be in partnership with its surrounding uses. The facility could provide the footprint for a generous Greenway alignment around the perimeter, improve/expand the parking and the plaza at the Banana Factory, create a streetscape environment that would accommodate some on-street parking, and maintain the ability of the current industrial operation to move tank trailers through Second Street to the processing plant. One option that appears to synthesize transportation and land use planning in this area is the concept of moving the tank storage function to the center of the “cloverleaf” created by a new Second Street Ramp. This appears to be a reasonable use for such a space, than for other options such as commercial or public open space that would be much more difficult to accommodate.
Point: Transportation Hub / Mixed commercial – The concept for a parking structure along Brodhead Avenue between Second and Third Streets offers the potential for motorists to have easy access to immediate parking from both the Hill-to-Hill and the Fahy Bridges. From this location the potential exists to get people out of cars and on foot via the Greenway to destinations around the Southside.

The Brodhead Avenue parking structure should be considered as a “big picture” concept that includes mixed uses. Parking structures around the nation successfully incorporate ground floor commercial uses, as well as other functions – such as transportation centers. The strategic location could be the point of entry into the Southside for visitors during peak periods. A transportation “hub” facility that serves local and long-distance buses could be housed within this facility – providing direct access to both bridges. The location is also one block south of the active rail corridor along the river levee. Walking connections to the North Side and Sand Island already exist across both bridges.

Block: Brodhead Ave to Hill-to-Hill Bridge – This “block” is currently maintained as a mowed grass strip of the original R.O.W. that extends from the corner of Second Street and Brodhead Avenue to the former Union Station, just below and east of the Hill to Hill Bridge. An extension of the Greenway trail should be constructed between this intersection and the Union Station building for walking between the St. Luke’s outpatient facility and the center of the Southside business district. The trail terminates at Union Station for the foreseeable future because physical trail linkages are not considered feasible to the Lehigh River levee at this time due to the active rail crossing issue. A trail linkage west along Riverside Road can be explored in a later phase of study.

Looking west with Weldship tank storage lot on the left.
A linkage from this block to North Bethlehem currently exists via the Fahy Bridge or the Hill-to-Hill Bridge. If a new Hill-to-Hill Bridge ramp is built by PennDOT to Second Street, it should include a pedestrian walkway up to the bridge sidewalk.

The green swath of R.O.W. looks pleasant in this industrial side of town, but this parcel should ultimately be considered as a potential part of the solution to the Second Street ramp. The Greenway R.O.W., Second Street, Brodhead Avenue, Riverside Drive and the driveway for Union Station all converge at the base of the proposed Second Street Ramp. The Greenway R.O.W. may become an extremely valuable parcel to accommodate that mix of transportation demands. The section of greenway to St Luke’s could be part of the ramp design. Potential mitigation for the use of greenway could include adjacent Greenway improvements, improvements to the St. Luke’s parking, use of the ramp cloverleaf for a tank storage area and other possibilities.

In the interim, the “green” in this section of greenway could serve as a “nursery” location for future greenway trees and plants – similar to the history of arboriculture practiced by Bethlehem Steel. As the Greenway is developed, the trees could be transplanted to their ultimate locations.