

## A master plan for the **New Jersey Capital Park**



### **Acknowledgements**

#### **New Jersey Capital Park Master Plan**

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#### **Steering Committee**

Raymond A. Arcario

N.J. Department of Treasury, Division of Project Management & Construction

#### Yosry Bekhiet

N.J. Department of Transportation, Division of Planning, Research & Local Government Services

#### Andrew Carten

City of Trenton, Department of Housing and Economic Development

#### Kathleen Crotty

N.J. State Capitol Joint Management Commission

#### Richard Flodmand

N.J. Department of Treasury, Division of Project Management & Construction

#### Taneshia Nash Laird

Trenton Downtown Association

#### Donna M. Lewis

County of Mercer, Department of Planning

#### Tom Moran

N.J. Department of State, N.J. State Council on the Arts

#### Jeanne Mroczko

N.J. Department of Environmental Protection, Division of Parks & Forestry

#### Alvin J. Payne

N.J. Department of Environmental Protection, Office of Resource Development

#### Ingrid W. Reed

Capital City Redevelopment Corporation

#### **Daniel Saunders**

N.J. Department of Environmental Protection, Historic Preservation Office

#### Staff

Pasquale V. Papero, Administrative Project Manager

N.J. Department of the Treasury, Division of Project Management & Construction

#### Sally Lane, Project Manager

N.J. Department of Environmental Protection, Natural & Historic Resources

### The Heart of Capital Park is the State House Common.



In 2006, the State of New Jersey held a competition to transform a portion of Trenton's historic, yet underutilized, waterfront into an urban state park. The area behind the State House has over the years been cut off from the rest of the city and given over to roadways and parking lots. Wallace Roberts & Todd's (WRT) winning proposal for the New Jersey Capital Park re-casts Trenton as a great waterfront city and a heritage destination. The park will reconnect New Jersey's capital to its historic sites and existing parks, and reclaim the historic Stacy Park along the Delaware.

This master plan explores and tests the ideas suggested in the competition. The competition vision developed by WRT and its consultant team seized on the opportunity to remake Trenton as a more livable, accessible, and dynamic capital city. Drawing on Trenton's artistic and industrial heritage, combined with its tremendous historic and cultural resources, the plan pulls together a fragmented waterfront into a compelling whole.

The vision for the park rests on five themes that re-cast Trenton, reframing and reshaping the capital city: Government, Environment, Industry, History and Infrastructure. The plan expresses these themes in all aspects of design, creating a new State House Common, establishing a strong ecological framework for the park, drawing on an industrial landscape language, focusing on the significant historic sites, and using existing and new infrastructure to create memorable places.

The design proposes four essential actions to recast Trenton: Reinforcing the Capital Core, Reforming the Delaware Riverfront, Releasing the Assunpink Creek, and Reconnecting Trenton to its surroundings. The New Jersey Capital Park is envisioned as a sequence of compelling places with focal points at the State House, at the riverside, and along the Assunpink. The design also reconnects the park with the surrounding community, the city, and the region.

The master planning process outlined herein was designed to explore the concepts and ideas of the competition proposal and to consider them within the reality of existing conditions, jurisdictions, and management issues. Through the planning process, WRT and the Capital Park Steering Committee tested the design against a greater understanding of the historic and archaeological resources, and against the issues of transportation, security, programming, and park maintenance and operations. The master plan team included specialists in planning, landscape design, security, historic and cultural resources, engineering, and park management.

The final results of the planning process closely follow the original design proposed for the competition. The changes that have been made relate to practical issues of transportation, phasing, or other realities that were unknown during the competition. The final plan describes a sustainable, realizable and visionary park for the city, state, and the region.





# The focus of this effort is on Capital Park, but the effects will radiate throughout the city.



Terraces lead down to the River.



The Capital Park vision is based on five themes that are identified as key to Re-casting Trenton: Government, Environment, Industry, History and Infrastructure. Re-casting Government evokes Trenton's pride as the seat of state government and its connection to all aspects of civic and cultural life. Re-casting Environment celebrates the Garden State's agricultural, horticultural and natural landscapes, and the importance of water to the life of a city – where the landscape of New Jersey and the city come together. Re-casting Industry draws on the products and processes that built Trenton's manufacturing prowess. Re-casting History brands Trenton as the major heritage destination it deserves to be. Re-casting Infrastructure weaves together existing and proposed infrastructure, creating an interconnected system of roads, paths, bridges, drainage and utilities that move beyond the pragmatic to create a beautiful landscape. The five themes come together in a park that will be a symbol of civic identity and well-being. Re-casting this large area of downtown Trenton at the river creates a series of connected spaces that will improve the quality of life in the city on many levels. Capital Park provides places to learn, to explore, to refresh, and to revive.

The Capital Core is centered on the new State House Common, with a Visitors Center that will also be a magnet for cultural life. The cultural buildings to the west are re-cast around a cultural plaza, which leads to a new sculpture park with panoramic river views. Archaeological remains of the early industrial development will be explored to reclaim and interpret the Petty's Run area as a companion to the Old Barracks.

The River's Edge is re-cast as a place where people can feel the power

of the river and appreciate its rich natural environment. A new river center looks out over the water past a riverfront walkway and gathering place. People can stroll, skate, fish, sunbathe, and feel at one with the river environment.

The Confluence Garden marks the place where the Assunpink and the Delaware meet, under a series of pedestrian bridges with hanging gardens that reuse some of the leftover girders of the Route 29 bridges. The vegetated spans link the Capital Core and the river's edge to the proposed Lower Assunpink riverfront neighborhood.

Moving upstream on the Assunpink, the wooded banks provide a rich wild-life sanctuary. The currently-buried stretch of the Assunpink between South Warren and South Broad Streets will be uncovered and transformed into **Assunpink Park**, a new urban gathering place that draws city life down to the newly restored creek banks. A restaurant and markets will animate the park and provide attractions for neighborhood residents, workers, and visitors.

Beyond the physical limits of Capital Park, the initiatives of the master plan extend to other key features of the city, integrating the Battle Monument and the Delaware & Raritan Canal into the recreational and heritage experience.

The vision for Capital Park shapes a unique identity for these new landscapes as distinctive places while creating a common design language for them to be perceived as a unified system. This system of park spaces will have a flow and logic and level of interest that will sustain visits from one hour to an entire day.



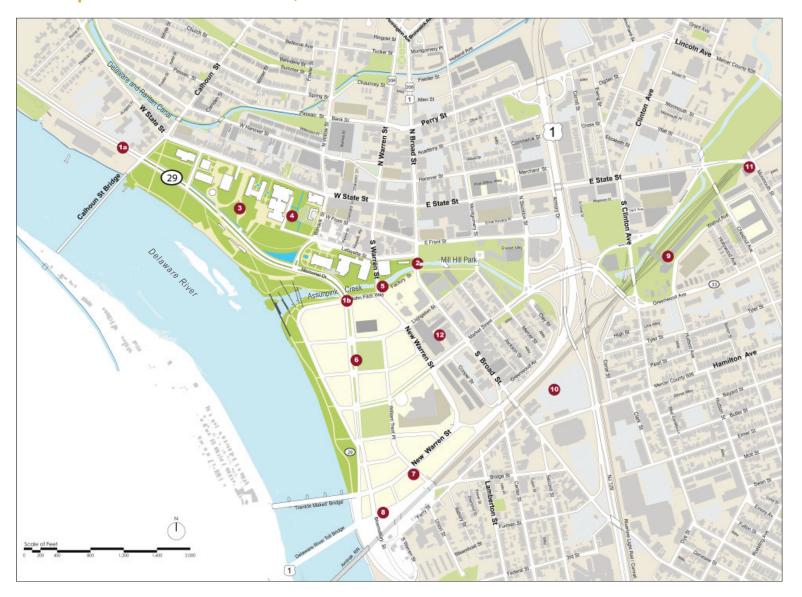


## The project is predicated on the conviction that the capital city's riverfront should be for pedestrians and nature, more so than vehicles.

Map of selected Projects within the master plan context area

#### Legend

- Route 29 Boulevard (NJDOT)
  - 1 North of Calhoun Street
  - South of Calhoun Street
- South Broad Street Bridge Replacement (NJDOT)
- Parking Garage behind State House Evaluation
- ◆ Security Plan Implementation
- Lower Assunpink Creek Environmental Restoration and Assunpink Greenway.
- Lower Assunpink Riverfront Neighborhood (Dept of Health and Agriculture site)
- Mixed-Use Development
- Route 1 Access Ramp Alignment (NJDOT)
- Trenton Amtrak / NJ Transit Station
- The Foundry on 129 (Retail / Entertainment District)
- ① Chestnut Avenue and Monmouth Street Bridge Replacement (NJDOT)
- 12 Mercer County Courthouse Extension



The design vision for Capital Park is powerful, realizable and sustainable, and is grounded in the realities of the city and the region. The master plan lays out a framework for leveraging the Capital Park's maximum success, exploring its influences and effect at the county, city, and site level. Understanding the park's effects on and the influences of its context is essential to its success. Detailed understanding of adjacent land uses, road networks, pedestrian connections, recreational, historical and cultural opportunities, and environmental issues will help ensure the success of Capital Park by providing a grounded basis for its design, programs and activities.

Ongoing projects with significant impacts near and adjacent to Capital Park include the Route 29 Boulevard, the Lower Assunpink Riverfront Neighborhood, the Lower Assunpink Environmental Restoration Project, the South Broad Street Bridge Rehabilitation Project, and the Mercer County Court House Extension Project, among others. The master planning process was informed by working sessions with stakeholders and agencies responsible for all of these projects. The outcome of these sessions was to integrate fully the Capital Park master plan with the objectives and schedules of each.

#### **Archaeology and Heritage**

Trenton's rich historic and archaeological resources rise to the surface in the design of Capital Park. Many significant historic sites lie within the Capital Park area and surroundings, sites of equal importance in the emergence of the nation as Valley Forge, Bunker Hill, and other treasured historic sites. The Capitol Complex is part of the State House Historic District, which is listed on the National Register of Historic Places. Historic buildings include the State House and its Annex, the Old Barracks, Thomas Edison State College, and the Trenton War Memorial.

The second battle of Trenton occurred at the eastern end of the Capital Park area, on both sides of the South Broad Street Bridge crossing Assunpink Creek. Substantial portions of mill foundations and other artifacts have been found in several locations near the Petty's Run area, between West State Street and West Front Street, and near the State House. The exact archaeological character of both the Assunpink Creek and Petty's Run areas is yet to be determined. Future archaeological exploration of these areas will explore their potential for heritage tourism. Hunter Research Inc. led the master plan team in evaluating the Petty's Run area so that the archaeological finds will gradually be revealed over time. The master plan also proposes sensitive integration of many other aspects of Trenton's rich historic and archaeological heritage into Capital Park, such as the mills along the Assunpink Creek and the remains of the Trenton Water Power Canal.





Trenton sur la Delaware c1800

Washington Crossing the Assunpink Bridge in 1789

Inside the Petty's Run Culvert



One of the first steel furnaces in North America is buried next to Petty's Run.



View of the Petty's Run area





Petty's Run Archaeological Resources and Subsurface Investigations

#### **Ecological Framework**

Re-casting Trenton provides a clear action agenda addressing the three realms of sustainable development: environmental stewardship, economic stability, and societal equity. The Capital Park project will provide positive effects in all three realms, but the nature of the actions and the leadership by NJDEP focuses most of the benefits in the realm of environmental stewardship. The Capital Park vision acknowledges that the three realms are interrelated and that each has a profound effect on the other two. The enhanced ecosystem along the river and creek will substantially improve the regional riparian habitat.

#### **Ecology and Infrastructure**

The existing infrastructure of bulkhead, highway, and vast parking fields has rendered the park site inhospitable to people and has severely precluded natural habitat. These conditions have all but eliminated the riparian vegetation and wildlife that once flourished on this site. The proposed relocation of Route 29 will significantly change the picture, providing a larger swath of riverfront to restore to a higher degree of ecological integrity.

The tremendous forces of the Delaware need to be considered in all aspects of design, taking into account the currents as well as routine flooding during storm events. The banks of the Assunpink from Route 29 to Warren Street are currently stabilized by vegetation, and although erosion is evident, NJDEP considers the current bank profile and vegetation as something to safeguard and enhance rather than replace.

#### **Utilities**

The consultant team collected known utility locations using available maps from a variety of sources. At the present time, some utility locations remain unknown, especially the locations of sanitary sewers. Further investigation is required to ascertain the structural condition of the Petty's Run culvert, its shape, and current status as a storm drain.

#### **Mobility and Access**

The circulation component of Re-Casting Trenton is based on the need for drastic change to the current level of access, which cannot support a successful public landscape. The consultant team documented the existing pedestrian and vehicular conditions, parking, and transit connections, and evaluated various access and circulation options, such as bus staging areas, potential parking area options and availability, access to the proposed visitors center, options for extending the proposed River Line light rail transit system, and options for Route 29, including possible redesign of the Calhoun Street interchange. Access is critical to the success of the vision of Capital Park.





The Assunpink channel

Concrete bulkhead on the Delaware River





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The new landscape of roads, paths, bridges, drainage, and utilities recasts Trenton as a green, healthful city, reusing infrastructure as well as creating new models of sustainable landscape.



#### **The Capital Park Design**

The current fragmented condition of the sites to be assembled into Capital Park requires broad, bold design moves to signal that there really is a worthwhile core there, to stitch the pieces together, and to express the natural edges of both river and creek. The design team established major organizational and physical design principles as guides for further refining each design element of Capital Park.

The site plan recognizes several elements within three distinct places of Capital Park: the Capital Core, the Riverfront, and the Assunpink.

#### **The Capital Core**

- State House Common: State House Common becomes a center of the new Capital Park, an important place for ceremonial and cultural gatherings and a focal point for proposed park programs and activities throughout the year. It recreates Stacy Park and provides an elegant frontage to the War Memorial.
- Petty's Run: Petty's Run is a buried stream of historic importance that flows in a culvert between the State House and the Old Barracks. The master plan proposes to retrieve this lost resource, making it a heritage "node" of Capital Park and an attraction that provides archaeological exhibits of colonial-era Trenton coordinated with the Old Barracks. Detailed archaeological exploration is suggested in this area in the initial phase of the park's development. "Live" archaeological exploration of this area is recommended as a programming opportunity that could

become a heritage tourism attraction. Viewing platforms, displays, site tours, presentations, and media events could be incorporated as part of the ongoing exploration in the near and long terms. The design of this heritage tourism node can also provide a security moat and buffer for the State House.

• Visitors Center: The park plan includes a new Visitors Center as part of the overall tourism development plan and as a base of operations for Capital Park. Part of a larger re-design of the area between the State House and the Annex, the center will greatly expand on the existing Welcome Center along the bermed wall of the garage. It will create a more open and accessible gateway to the city and State House Complex through demolition or modification of the Power Plant and the Sub-Station building between the State House and the Annex. This center is centrally and visibly located to provide access to the various destinations within and surrounding the park and to act as a staging location for various tours (heritage tours, capitol tours, etc.). The Capital Park Visitors Center will complement the newly opened Trenton Downtown Visitors Center at the Old Masonic Lodge.



sitors Center at State House Common

- Arrival Plaza: A new arrival plaza at the corner of Barrack and West
  Lafayette Streets will welcome visitors to the capital core and orient
  them to the surrounding attractions. Due to security needs, there is
  currently no clear visitor friendly point of entry to the capitol core. The
  plaza will allow for bus and car drop-off at a strategic node in Capital
  Park between the State House and War Memorial at the State House
  Common.
- Cultural Center: The Cultural Center (State Library, Museum, Planetarium, Auditorium, and State Archives) will be integrated into the overall capital park interpretive program, becoming a "Museum without Walls." The Museum without Walls concept will link the improved programming and exhibits in the landscape with the content of the museum, allowing for a richer visitor experience. The internal programming of the museum its art, science and history collections will be mirrored and extended into the landscape of the civic campus, riverfront, and creek with exhibits and programs.
- NJ Garden: The rooftop of the garage landscape will be redesigned as the New Jersey Garden, focused on the plants and unique environments of the New Jersey landscape. A new roof deck will be built over the existing parking and loading area around the planetarium to complete the upper terrace landscape and hide the loading dock and parking areas. The roof deck will be built around and frame the planetarium as viewed from the river side.

• Calhoun Street New Development: Redesign of Route 29 provides an opportunity to capture underused land for development of state office space and to make an attractive gateway along Calhoun and West State Streets to the Capitol Complex. After studying many solutions to traffic flow and urban design, the recommended solution balances trade-offs with greater advantages. The new development area is seen as an extension of the Capitol Campus and a way to efficiently consolidate state office and administrative functions. Pedestrian friendly uses (such as restaurants and public service functions of agencies housed in the buildings etc.) are recommended at the ground floor of the new development with two or three levels of parking that tie the development to the existing cultural center via a pedestrian walkway. The development also incorporates two new street connections to provide for vehicular access to the Route 29 Boulevard and pedestrian access to the riverfront from West State Street.

#### The Civic Riverfront

Reclaiming the civic riverfront includes constructing a major park along the length of the city's river frontage from Calhoun Street to the Fishing Wharf south of the three bridges. The key action to enable creation of the park is the re-alignment of Route 29 inland, and the re-envisioning of the current high speed, limited access highway as an urban boulevard.

- Rivers Edge: Riverfront Park will extend from Calhoun Street to the three bridges and will be a hub of the city's open space system. It will provide a connection between Stacy Park to the north of Calhoun Street and the riverfront park south of the three bridges, to the Assunpink Greenway, the Delaware & Raritan Canal, and across the river to the Delaware & Lehigh National Heritage Corridor and trail. While limited in width, the park is large enough to provide a high quality riverfront experience and gathering spaces. The north and south parks will be designed as a single composition, but with different characters that will provide a variety of experiences and address the difference between the adjacent civic land use to the north and mixed land use to the south.
- Riverfront Park South: Riverfront Park South will lie between the river bank and the proposed riverside frontage road, stretching from Assunpink Creek to the Route 1 bridge. The park includes walkways at both the street and water levels. Access points are provided at all intersections with the new riverfront street. The park includes a series of terraces that lead down from the riverside street to the water. The riverfront park provides frontage for the proposed Lower Assunpink Riverfront Neighborhood. Stormwater / rain cascades will be located in the park at intersections with the frontage road as emblems of Capital Park's commitment to improved water quality.
- River Pavilion / Landscape Bridge: A river pavilion will be located opposite the garage, on the west side of the boulevard. It will include a small environmental education center and riverfront café. The pavilion is linked by a landscape bridge to the upper level of the Capital Core, allowing access to Riverfront Park without the use of steps or elevators. Traversing the bridge will provide a dramatic experience of entering the river landscape with a curving panorama of the riverfront.









The blank walls of the State House Garage can be enlivened through plantings, architectural treatments, and/or wrapping the garage in a transparent building with active uses.

 Garage Edge Redesign / Bio-Canal: Architectural design solutions to redesign the garage exterior wall will be considered as part of Capital Park with the intent being to improve the pedestrian environment along the riverfront park and the Route 29 Boulevard.

A "bio-canal" is proposed to evoke the former Trenton Water Power canal along the east side of the Route 29 Boulevard near the garage. It will capture stormwater runoff from the adjacent buildings and the boulevard and filter it in a shallow channel lined with emergent and aquatic plants, draining eventually to the river via open aeration cascades.

#### The Assunpink

The Assunpink will be transformed into a linear park system along three blocks of the creek in the project area. This park will provide for pedestrian access, passive recreation, historic interpretation, stormwater quality enhancement, and ecological restoration. A pedestrian/bike connection at water level from Mill Hill Park to the river will enable park users to get to the river easily without the conflict of crossing streets. The trail will also connect three new park areas along the creek to Mill Hill Park and could be extended up to the train station.

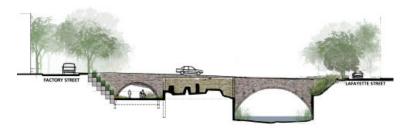
Assunpink Daylighting: The box culvert containing the Assunpink
 Creek is proposed for removal in its entirety from South Warren Street
 to South Broad Street to restore the free-flowing creek. Three goals of
 this effort are to restore to some degree the ecological function of the
 creek, to conserve and interpret the cultural heritage of the creek's
 milling district, and to improve the visual appearance and recreational

experience. The U.S. Army Corps of Engineers has prepared an environmental assessment of the effects of resolving the culvert condition. The master plan recommends three additional design measures in addition to removing the culvert and stabilizing the adjoining soil:

- Instead of a sloped and fully naturalized edge, create level terraces (some paved and some planted) for use by pedestrians
- Investigate and excavate in part the remnant mill foundations for interpretation
- Expose and restore the South Broad Street Bridge
- South Broad Street Bridge: The original central portion of South Broad Street Bridge will be restored and preserved as a landmark structure. The bridge is important due to its strategic role in Trenton's history. It occupies the site of a Native American crossing, a Colonial road crossing (the first crossing from the river), the Second Battle of Trenton, and the City's original mill complex. The major actions for the bridge include excavation; stabilizing and restoring the historic core of the bridge structure; opening the second arch of the bridge that was used as a mill race; and creating a pedestrian underpass beneath South Broad Street. The bridge project will be combined with the Assunpink Daylighting project for design coordination and planning.
- Assunpink Park: Assunpink Park will improve the environment of the
  creek and provide public access and heritage interpretation from Mill
  Hill Park to the Delaware River. Capital Park proposes to create Assunpink Park along its three-block length, consisting of the South Broad
  Street Bridge, hotel, and confluence.

The Bridge Block: The South Broad Street crossing of the Assunpink Creek provided the initial stimulus for the settlement of Trenton. The creek continued as a focus of Trenton's early industrialization in the 18th and early 19th centuries, its water power supporting milling operations of varying types. Mill ruins and other historic site features will be studied for archaeological potential and interpreted as part of the story of the creek. The creation of the Assunpink Park at the South Broad Street block will include excavation, stabilization, and interpretation of all or some parts of the mill ruins. The creek park will integrate the ruins into its overall design. A small heritage museum south of the park and a café on the north side will be considered for this block.

The Hotel Block: For the Hotel Block, there are three options: preserve the stream cross section as is; preserve the north side while terracing the south side for a walkway; or terrace both sides. Any terracing will likely result in removal of all or most of the existing vegetation. At present it is recommended that the creek walk connection be located at street level in this block to preserve the existing Trenton Water Power abutments and vegetation. A comprehensive hydraulic and hydrologic engineering analysis will be necessary to determine the impacts of the terracing and walkway options under consideration. This will include flood volume modeling, flow and scour analysis, and other studies as deemed necessary. Future infrastructure projects would be a catalyst triggering the two more aggressive bank treatment actions. Any consideration of a lower walkway would be dependent on construction of the Lower Assunpink riverfront neighborhood and the rest of the park.



The South Broad Street Bridge over the Assunpink Creek will be restored as a cultural landmark honoring Trenton's industrial birth place and the Battle of the Assunpink in the American Revolutionary War.







Top: Planted gabion terraces can stabilize creek and river banks while providing ecological value.

Bottom: Historic ruins can be incorporated into the design of the park as attractions, such as at Mill Ruins Park in Minneapolis. The Confluence: The existing highway bridges that cross the Assunpink at the confluence of the river and creek are proposed to be reused as pedestrian bridges. Four bridges cross the creek. Once the four bridges are abandoned when the boulevard and its creek bridges are built, their parapet walls and deck will be removed and reused in whole or part. The design treatment of the bridges will include construction of pedestrian decks and planters between and/or on the exposed beams.

The highway bridges and the riverfront trail will be a focal point and the primary creek crossing point along the Trenton riverfront.

Assunpink Greenway Paths will connect from the riverfront to the creek on both banks. A bridge garden terrace on the north side will be a gathering place and a focal point for exploration of the confluence.

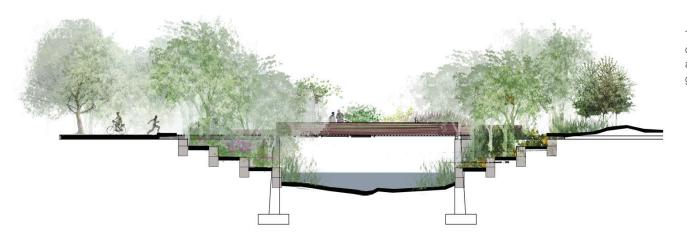
The Confluence Garden will be created by removing or drastically reducing the height of the concrete bulkheads at strategic locations, terracing the bank, and keeping all or some of the abandoned highway bridges as pedestrian bridges and hanging gardens.

Upon removal of all or some of the bulkhead, the tapered/terraced slope will be protected from erosion by some form of erosion proof/ resistant treatment in three prototypical conditions. An "urban access" (hard surface) condition will be used in some areas to allow pedestrian access to the water level. A "Transitional Condition" will use plants and structural terracing for slopes. A "Natural Condition" will use plants to anchor earth slopes. A very diverse range of floodplain and riparian plants will give the confluence a rich and textured image.

Due to the flow volumes, velocities, heights, frequency, and winter

ice conditions, any replacement of the bulkhead will require thorough analysis and engineering design.

• Shaping the Lower Assunpink riverfront mixed-use neighbor-hood development: The immediate adjacency of the proposed Lower Assunpink riverfront neighborhood and Capital Park requires close coordination on the design of the Assunpink and especially the south Riverfront Park. The William Trent House should be clearly linked to the park. NJDEP's sustainable development guidelines should be applied to the development. For example, urban storm water filtration, and water harvesting urban design should be coordinated with the park so that street level uses and physical development guidelines reinforce the objectives of a walkable, green neighborhood.



The girders from the Route 29 bridges over the Assunpink Creek will be reused as pedestrian bridges with hanging gardens.







The Route 29 bridges over the Assunpink will be reused as hanging gardens and pedestrian bridges at Confluence Garden.



The Park will re-forge connections within Trenton.

#### **Pedestrian and Bicycle Circulation**

The master plan proposes a network of connections tying the park to commercial and cultural destinations in downtown Trenton and integrating with the regional transportation and trail system. The park will provide connections for pedestrians, bicycles, automobiles, and transit. Some of these connections are made possible by the park itself, and others will entail a larger cooperative effort between the state, city, county, and federal government.

Improved pedestrian circulation is the heart of the park plan. A seamless connection between downtown Trenton and the riverfront depends on creating many points of river access. Pedestrian movement is given maximum priority between the various precincts of the park, between the city and the river, and among Trenton's cultural and heritage destinations.



#### **Vehicular Circulation and Transit**

The vehicular circulation plan creates a more easily navigated system of roads and streets for automobiles and transit. The plan assumes that Route 29 will be converted to an urban boulevard; however, an interim access plan is proposed for the short term. The interim access concept proposes a temporary roundabout at the Memorial Drive interchange on Route 29. Barrack Street will be extended past the War Memorial to connect with this roundabout. This will allow motorists leaving Route 29 to access the State House Garage for convenient parking for the State Capitol Complex, War Memorial, and other tourist attractions, as well as to use Barrack Street to reach downtown Trenton.

The plan includes recommended locations for traffic signals, new streets, and conversion from one-way to two-way operations. The park plan supports efforts to extend the River Line, which will provide greater accessibility to Capital Park and the State Capitol Complex. Because the alignment is not presently determined, the plan proposes that the future right-of-way be reserved pending further analysis of three corridors: Market Street/Route 29; Front/Lafayette/Willow; and Clinton/State Street. Tour, charter, and school bus access is accommodated at assigned locations around the capitol core. City bus routes will be adjusted to conform with the new park and circulation pattern, and attractive and convenient bus stops and shelters will welcome park visitors. The intent of the public transit, pedestrian and bicycle system is to reduce the present dominance pf parking at the waterfront.

#### Parking and Transportation Demand Management (TDM)

The goal of the parking plan is to provide convenient parking for visitors, tourists, commuters and residents. The creation of Capital Park will entail removal of much of the surface parking in the Capitol Complex, necessitating a coordinated strategy to replace parking and direct visitors to the new and reconfigured locations.

Based on the analysis provided within the ongoing City of Trenton Downtown Parking Study, there are more vacant spaces within the downtown Trenton area than is the common perception — The Trenton Parking Authority has some 500 unused spaces in its garages and lots on a daily basis.

The master plan recommends opening the existing State House Garage to the public on a limited basis during business hours and entirely during night and weekends. The plan also considers strategies to coordinate the use of existing downtown parking lots and structures as a business opportunity for private sector garage owners within the downtown.

The plan proposes a phased approach in which parking is removed as part of an overall build-out strategy that proposes new parking facilities and sharing of existing facilities during off-peak hours. The plan also proposes managing demand for parking by employees as both an economic and environmental strategy. This strategy includes a recommendation for creating a coordinated parking plan by establishing an Office of Transportation Coordination, which will manage all state owned and



leased parking, track parking utilization, and implement a Transportation Demand Management Program. This office should also be empowered to work with the Trenton Parking Authority, the City of Trenton and the Trenton Downtown Association to manage downtown parking more efficiently.

#### **Security**

The consultant team reviewed the existing security analysis of the Capitol Complex conducted by the State in 2003. Recommendations of this study, such as installing bollards along West State Street in front of the State House building and improving security for the executive parking are currently being considered.

The Capital Park design follows the principles of Crime Prevention through Environmental Design landscaping elements such as the day-lighting of Petty's Run, the Bio-Canal, etc., which will serve as natural barriers and boundaries.

A dedicated area of the State House Garage can be opened to public parking with adequate security screening procedures during normal threat levels. A Park Ranger / Ambassador program will enhance security and provide assistance for visitors, school children, and state employees.

Secure access will be provided to the executive parking area south of the State House as a part of a security perimeter that includes the bollards along State Street and the re-opening of Petty's Run.

#### **Public Art, Signage and Way-finding**

Public art can be used to help express the city and state's tangible and intangible identity, history, environment and sense of place within the framework provided by the Capital Park design. The master plan recommends that a public arts program be administered within Capital Park. This program will include sites for sculpture at the cultural center sculpture park, as well as artist-designed signage, paving, and furnishings at other locations.

The plan also recommends a coordinated way-finding and interpretive signage system for use throughout Capital Park. The intention at the master planning stage is to create a signage and wayfinding system that is simple and unobtrusive, but clearly branded as the Capital Park. The gravity of the Capital and the historic importance of numerous sites throughout the park call for a graphic design that is timeless, accessible, and classic. The team will coordinate with other existing parks and signage systems in the City to ensure that the Capital Park retains the quality of both city and park.

#### **Site Furnishings**

A coordinated site furnishing program will link the different parts of the park. The intention at the master planning stage is to select a common materials package - wood and concrete, for instance - with different scales and applications for the different parts of the park. Benches and chairs in the Capital Core can be larger in scale than at Assunpink Park, for example; benches at the former can be backless, with a sleek profile

that can work with the strong architecture of the Capitol and the cultural center, while at the latter they will have backs, for more leisurely visits. At areas where concessions and restaurants will spill into outdoor spaces, a common set of furnishings will be chosen.

#### **Park Programming**

Capital Park programming will appeal to a wide range of ages, groups, and income levels, serving the city's and region's diverse audiences, and attracting park visitors on a more frequent basis than for special events and during off-peak times. School groups will provide a constant source of visitors, drawn to the attraction of New Jersey history and government. The extraordinary numbers of tourists that visit New Jersey have yet to be tapped in a significant way. Trenton's rich array of cultural resources, museums and historic assets has the combined potential to increase tourism in the downtown area. Analysis of other state capitals in the US suggests numerous opportunities to increase visitation to Trenton. Such an increase in visitation will require a carefully coordinated marketing program and increased hospitality measures, such as a Visitors Center within the Capitol Complex.

Significant findings of the cultural needs analysis of the master plan include:

 To support park improvements and stimulate attendance, Trenton must be perceived as being welcoming to visitors, offering all the necessary visitor amenities, such as improvements in parking, retail,



The park will extend the programs of the cultural buildings in the State Capitol Complex outdoors to create a "Museum without Walls."



The park will be a place to hold civic gatherings and events. Photo: Public Square, Nashville, TN (WRT)

restaurants and way-finding. This may appear obvious, but is currently not the case.

- There must be a critical mass of engaging cultural, recreational, and other activities to attract visitors.
- The visitor experience must be enhanced and expanded for the success
  of Capital Park. Expansion and co-ordination with existing institutions
  within the downtown area is needed for history programming and
  historic sites interpretation. A diverse range of additional programs
  such as arts and environmental science are needed so that Trenton's
  institutions and the future park can draw a broader audience.
- It will be necessary to develop cross-cultural links, universal themes, and non-history programming in order to attract a wide diversity of audiences from Trenton and the region.

Partnerships with surrounding cultural organizations and sites such as the New Jersey State Museum, Old Barracks, State House, and War Memorial, as well as other educational and tourist institutions, neighborhood and downtown associations, and others, will be essential to the success of Capital Park programming. A formal organizational structure will be required to plan, coordinate, and execute the dynamic and engaging programs necessary to appeal to diverse audiences and to compete with other area leisure attractions. Trenton's image must be redefined as a safe and welcoming place with local, regional, and national appeal. Financial and programmatic sustainability will be critical to the success of the Capital Park. A centralized, inter-linked, and coordinated programming infrastructure must be established to take advantage of the potential market and help to effect real change in Trenton.



#### Legend

- State House
- State House Common
- Visitors Center
- Petty's Run
- Trenton War Memorial
- 6 Assunpink Park
- Confluence Garden
- New Jersey Garden
- Riverfront Park
- Hotel
- Calhoun St. New Development
- Lower Assunpink Riverfront Neighborhood
- William Trent House





#### **Coordinated Planning Strategy**

Implementation through a coordinated strategy that includes key ongoing projects by federal and state agencies, the City of Trenton, and Mercer County, together with the Capital Park project, will unlock major economic development benefits for downtown Trenton. In the absence of external intervention, however, each ongoing project in the master plan context area will proceed through its environmental approval process independently and in isolation - with little efficiency and even less synergy.

The master plan recommends a strategy to combine and coordinate the ongoing projects and planning initiatives by various state and federal agencies within the context area for the purposes of funding and regulatory approvals. A combined funding and approvals strategy is needed - urgently - to avoid duplication of efforts, to streamline the regulatory approval process, to integrate design and planning of projects, to share design and mitigation components between projects, and to identify and leverage funding resources. Of all the outcomes of the master planning process, this will have the most profound impact on development of the park in the short and long terms.

#### **Capital Park Management Structure**

Three potential management models for the Capital Park have been identified: a public agency with a park superintendent, a public/private partnership, and a private authority. While all three models are still under consideration, the currently preferred management structure is

some form of public/private partnership. Many such partnerships exist and have proven to be an effective means of improving, managing, and raising funds for public parks and open space (e.g., Hudson River Park Trust, NY).

Formation of some form of coordinating committee is recommended as the first step in developing a management structure for Capital Park. This committee would act as the focal point for coordinating design, construction, and management of the park among the various public, institutional, and private stakeholders. Key functions would include, among others:

- Identifying sustainable funding sources, including possible establishment of an endowment fund to provide revenue for park operations and maintenance on a consistent, long-term basis
- Setting annual management and spending priorities, work programs, and budgets

A Memorandum of Agreement will be required between the NJDEP and the State Capitol Joint Management Commission. Retaining an Executive Director should be an immediate priority of the committee. The director's responsibilities would initially focus on coordination and management of detailed park planning, design, and construction. These responsibilities would eventually transition to supervision of park management and operations and coordination of special events and programming, including the "Museum without Walls" concept.

#### **Maintenance and Operations**

A comprehensive and fully integrated park management, maintenance, and operations plan would be implemented under the supervision of an Executive Director. The plan would include actions to:

- Develop new sources of consistent revenue and build on existing ones
- Develop and implement a unified management structure to coordinate all maintenance and operations
- Ensure consistent, high-quality maintenance standards and service delivery
- Develop a park-wide special events policy balancing protection of the park with the demand for events
- Instill a long-term sense of ownership and stewardship among the park's stakeholders and users

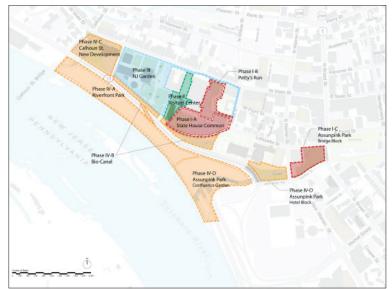
#### **Cost Estimate**

The master plan includes an order-of-magnitude cost estimate for all phases of Capital Park implementation. The cost estimate is based on existing conditions analysis and preliminary design and engineering studies performed during the course of the master planning process. The findings of detailed engineering studies and results of ongoing archaeological explorations are likely to refine the design of the park, as well as change the master plan cost estimate in the subsequent schematic design stage of each phase.

State House Common	\$5,509,000
Petty's Run	\$2,655,000
Assunpink Park - Bridge Block	\$4,791,000
Visitors Center Block	\$10,488,000
NJ Garden / Cultural Center/ W. State /Barracks St. Streetscape	\$19,851,000
Riverfront Park	\$15,616,000
Improvements along Route 29 and Bio-Canal	\$14,693,000
Assunpink Park - Confluence Garden and Hotel Block	\$13,590,000
	Petty's Run Assunpink Park - Bridge Block  Visitors Center Block  NJ Garden / Cultural Center/ W. State /Barracks St. Streetscape  Riverfront Park  Improvements along Route 29 and Bio-Canal Assunpink Park - Confluence Gar-

#### Cost Estimate Note

- 1. Estimates are considered to be for budgeting purposes and are based on the Master Plan drawings and sketches.
- 2. Estimates are based on the overall extent and type of work but do not reflect a specific engineering design.
- Sources of unit cost estimates are derived from Means Cost Estimation Guides, other similar WRT projects that have been escalated to current costs, and similar project cost estimates provided by professional cost estimators.
- 4. Budget costs are based on the assumption that various project components shown in the drawings are "permitable" by relevant regulatory agencies. If major modifications in design approach are required for regulatory reasons, costs of such modifications are not included. Costs of regulatory compliance are not included.
- 5. The Initial phase of archaeological exploration of Petty's Run area, associated analysis and technical reporting, and provision of historical and archaeological input into the Petty's Run area conceptual design and preliminary exhibit development are included in the Petty's Run Phase IB. Archaeological exploration costs do not include permanent stabilization of exposed ruins.
- Demolition and stabilization of the existing Assunpink Creek Culvert is not included as part of the Assunpink Creek culvert cost estimate.
- The Visitors Center cost estimate (Phase 2) does not include costs associated with the relocation of the central mechanical electrical and plumbing (MEP) systems for the State House complex.
- 8. The Phase 4B Garage Edge redesign and Bio-Canal design does not include the cost of renovation of the Garage.
- 9. The Phase IVC –Calhoun Street New Development costs are not included as part of the master plan.
- 10. The costs are for capital construction only and do not include professional fees.



The conceptual phasing plan coordinates park planning with related projects such as the Route 29 Boulevard and the Assunpink Creek Environmental Restoration.

#### **Phasing**

The phasing plan proposes that the first three phases of Capital Park proceed independently of the Route 29 Boulevard Project. Implementation of Phase IV of Capital Park will depend on the Route 29 project. Full benefits of riverfront access for the park will not materialize until the completion of Phase IV.

Phase I consists of the State House Common, Petty's Run, and preliminary work on Assunpink Park. Implementation of the State House Common and Petty's Run in Phase I will anchor the vision of the master plan and provide initial visibility for the Capital Park. Day-lighting of the Assunpink Creek between South Warren Street and South Broad Street will be part of the Phase I, including the rehabilitation of the South Broad Street Bridge currently under evaluation by the NJDOT. Because the USACE has completed the Environmental Assessment of the project, NJDEP will need to co-ordinate with USACE, NJDOT, and the City of Trenton to formalize an agreement detailing the next steps.

Phase II includes construction of the Visitors Center that will extend the existing welcome center and replace the existing State House garage berm. This will entail demolition of the existing sub-station and Power House buildings, opening a clear passage from the Common to West State Street.

Phase III consists of design and construction of a New Jersey sculpture garden, which will require modifications of the existing State House garage roof. This phase also includes West State and Barrack Streets streetscape improvements. Completion of Phase III will mark substantial changes to the Capitol Complex.

Phase IV is divided into four sub phases that will complete the vision of Capital Park as envisioned in the master plan, including:

Phase IVA: Riverfront Park

Phase IVB: State House Garage Renovation / Garage Edge Redesign /

Bio-Canal

Phase IVC: Calhoun Street - New Development

Phase IVD: Assunpink Park -Confluence Garden / Hotel Block

#### **Funding Sources**

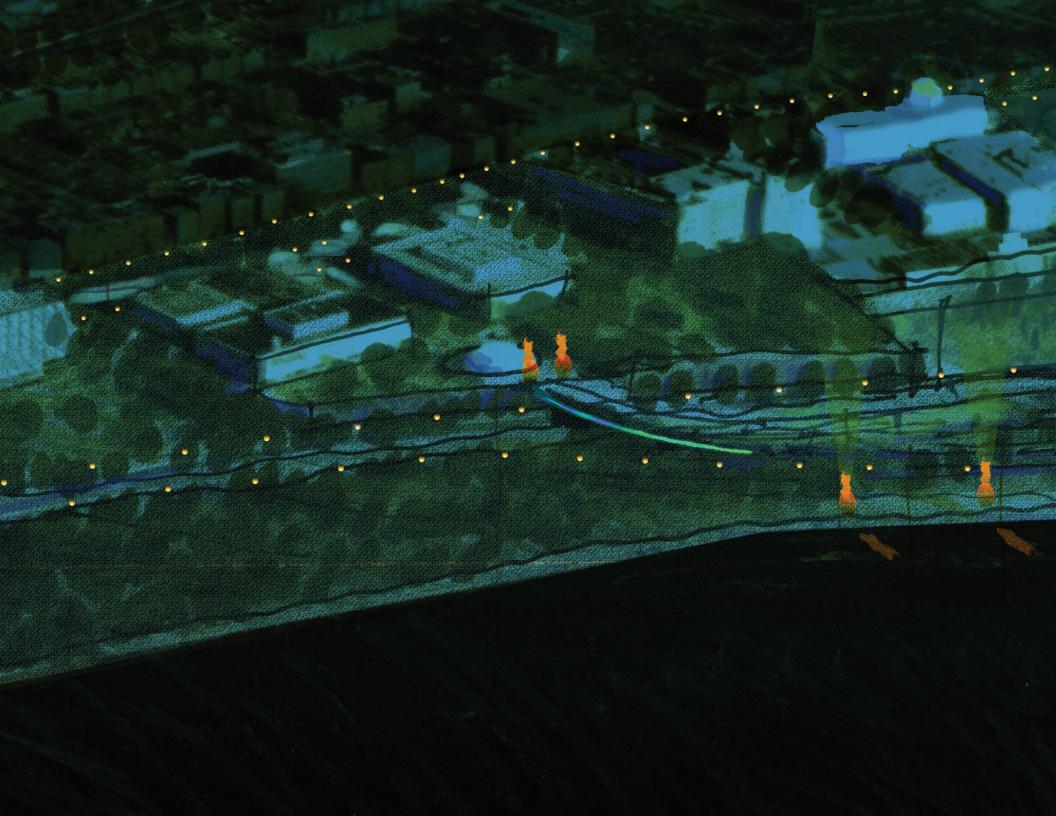
There are many non-traditional federal and local funding sources that can also be engaged to help fund short and long-term construction of Capital Park.

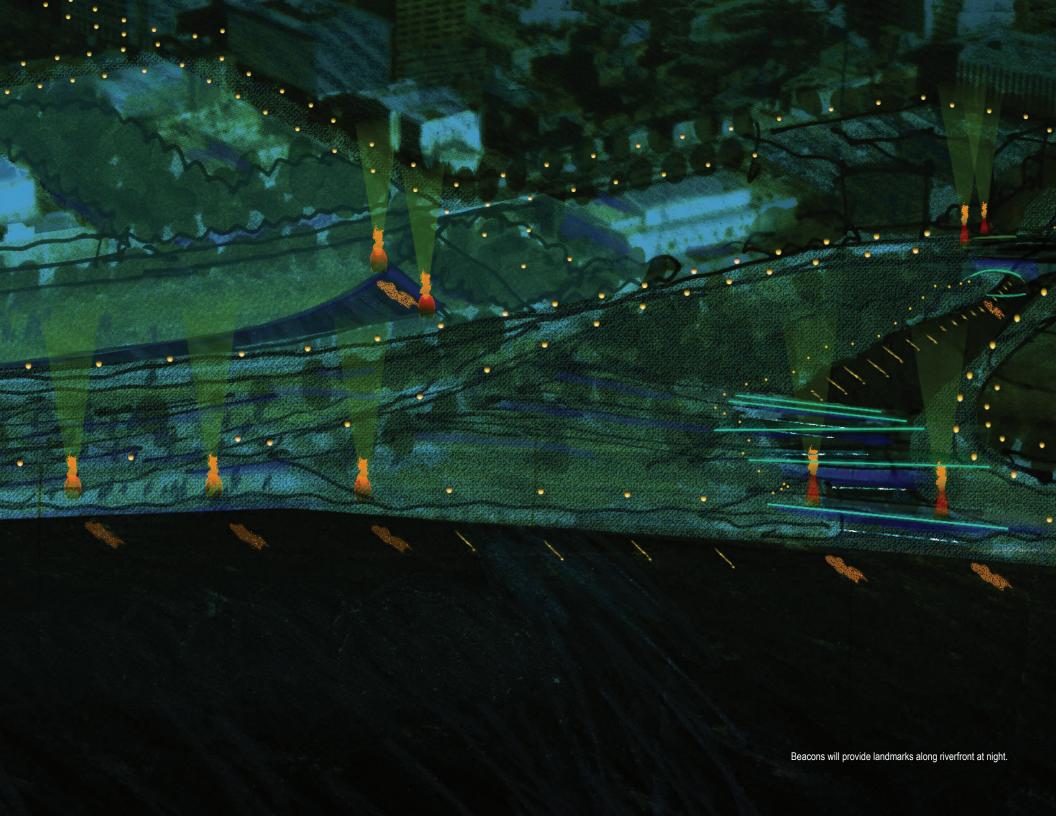
#### **Next Steps**

Now that the master plan has been approved by the Steering Committee, NJDEP will need to adopt the master plan for implementation, and coordinate with the State Capitol Joint Management Commission and the Office of the Governor on next steps. There are two approaches for how to proceed with Phase I:

- Proceed with Phase I independent of the decision regarding the combined funding and approvals strategy
- Include Phase I as part of the combined funding and appropriate strategy

The next steps in preparing such a combined strategy will depend upon ongoing negotiations with various key agencies. Discussions with NJHPO and other involved agencies concern the appropriateness of a programmatic vs. project phase-by-phase approach to the cultural resources review. Regardless of whether an independent or a combined strategy is selected, a Memorandum of Understanding among federal, State, City and perhaps County bodies will create the basis for the integrated partnership needed to implement the master plan. The schematic design of Phase IA and IB of the master plan will begin in Spring 2008, allowing construction of the Phase IA of park to begin by end 2008.





#### Making it a Legacy

The master plan and design for Capital Park knit together many disparate physical spaces, jurisdictions, and projects. Once the implementation strategy has taken the project successfully from vision to reality, the park will become Trenton's front door. The park has received strong state support, first in the competition and subsequently from those charged with shepherding of the project, including senior officials from the Governor on down. This commitment should continue with a promotional and educational effort that gets the word out on the new Trenton. Park managers should mobilize existing marketing and promotional structures within the State or outsource to professionals with a deep knowledge and understanding of the great promise of the city and the park. This process needs to begin now, to generate energy and enthusiasm for this long-awaited urban renaissance.

#### **Consultant Team**

Wallace Roberts & Todd, LLC

Planning, Urban Design, Landscape Architecture, & Architecture

Bioengineering Group (with Rowbear Consulting)

Environmental and Regulatory Consultant

**ETM Associates** 

Urban Park Management and Maintenance

Hunter Research, Inc.

Archaeological and Historic Resources

**Lord Cultural Resources** 

Cultural Resources, Interpretive and Exhibit Planning

**Nelson \ Nygaard Consulting Associates** 

Transportation Planning

Sadat Associates, Inc.

Civil Engineering

**System Planning Corporation** 

Security Planning