THE iQUILT PLAN
Phase 2

DELIVERABLES PACKAGE:

Economic Development and Capital Improvement Plan for Bushnell Park and Surroundings

Programming and Pre-Design Segment

Suisman Urban Design
Michael Vergason Landscape Architects
Smith Edwards Architects
Domingo Gonzalez Associates
Nelson Byrd Woltz Landscape Architects
Biederman Redevelopment Ventures Corporation
Richter and Cegan

May 11, 2011

NOTE:
This report is a summary of the work completed in the first, two-month segment of the year-long iQuilt Phase 2 effort. It focuses on establishing basic principles, economic issues, goals, and needs (programming) and the parameters which will frame the subsequent design effort (pre-design). The findings in this report will be incorporated into the final documents at the end of Phase 2.

Contents

Introduction

Background on the iQuilt Project
iQuilt Phase 2
Governance
Design Team
Programming and Pre-Design Segment
Documents Referenced

1 Bushnell Park Preliminary Program

Background - The GreenWalk
Early Stakeholder and Public Input
Park Uses - Historic Background
Park Uses - Stakeholder Input in Phase 2
Stakeholder Input - Park Walkabout
Stakeholder Input - Programming Workshop
Stakeholder Input - Presentation / Discussion
Stakeholder Input - Future Meetings
Structures
Statues, Memorials, and Sculpture
Gates, Edges, and Walls
Play Areas
Biking
Food and Drink
Planting
Paths
Paving
Furnishings
Maintenance
Lighting
Potential Economic Benefits of Park and Surroundings
Summary

2 Gully Brook Technical Review

Background
Public Process
Stakeholder Input - Gully Brook Workshop
Preliminary Terrain Assessment within Park
Costs and Potential Economic Benefits of a New Brook

3 GreenWalk Extensions: Initial Feasibility Review

Bushnell Gate
Tower Square
Pulaski Circle
Capitol North Lawn

4 Connecticut Square Preliminary Program

Background
Green Infrastructure
Event Infrastructure
Emphasis on Public Right-of-Way at Perimeter
Parking Spaces
Grading and Circulation Analysis
Stakeholders
Public Engagement - Stakeholders Site Visit
State of Connecticut Interest and Issues
Potential Shared Uses
Parking, Performance, Festival
Initial Grading Review
Costs and Potential Environmental Benefits

5 Identity and Wayfinding – Preliminary Strategy

Identity and Branding: Region, City and Downtown
iQuilt Identity and Branding: Guiding Principles
Identity Strategy:Thematic Clusters
Walking and Wayfinding
Potential Economic Benefits
Wayfinding Techniques
Pilot Projects

6 Public Engagement Strategy

General Approach
March Meetings
Membership Strategy

7 Enhanced Website

Website Strategy
Site Content

8 Next Steps

Aerial view of proposed improvements to Bushnell Park and surroundings as part of the iQuilt Plan's GreenWalk concept (source: Suisman Urban Design)

Introduction

Background on the iQuilt Project

In 2007, a visiting panel of experts organized by the Urban Land Institute evaluated Hartford's built environment and economic challenges. They made a a single over-arching recommendation: "focus on thoughtful, creative in-fill projects to link and leverage Hartford's cultural assets." Hartford's cultural assets are one of the city's greatest strengths. A 2008 study found that Hartford ranked ranked 14th in arts and culture among America's 140 largest cities. The Western States Arts Foundation, which has developed an analytical method they call the Cultural Vitality Index (CVI), ranked Hartford 15th out of the 50 largest U.S. cities. The top two CVI ratings were 2.52 and 2.32 (Washington and New York); the lowest were 0.61 and 0.41 (Richmond and Riverside). Hartford's ranking was 1.18, putting it ahead of such culturally vibrant cities as Philadelphia, Pittsburgh, Chicago, and New Orleans.

Whether these rankings are accurate, or match public perception, they strongly suggest that, as the ULI panel recommended, Hartford's enjoys a competitive advantage in the arts and culture. The city's creative sector generates nearly $245 million annually in economic activity. But these assets have not been leveraged for their full economic potential.

In 2008, the Bushnell Center for the Performing Arts and the Greater Hartford Arts Council initiated The iQuilt, a proposed pedestrian network linking downtown's cultural assets to maximize their social and economic benefits. The effort was funded in part by the Bushnell and by a grant from the Hartford Foundation for Public Giving. In 2009, after more than a year of public dialogue and input, an iQuilt vision plan was formulated by Suisman Urban Design, in collaboration with Smith Edwards Architects. The plan garnered considerable public support from arts organizations, elected officials, and the media, including several positive articles and editorials in the Hartford Courant. In 2010, the iQuilt vision plan was adopted and incorporated as a signature component of "One City / One Plan," Hartford's 10-year plan of conservation and development.

The iQuilt calls for a vibrant network of pedestrian routes and public spaces that will weave together downtown Hartford's key cultural sites and institutions around the theme of innovation. Hartford's exceptionally compact downtown contains over 45 significant cultural assets including The Bushnell theaters, State Capitol, Bushnell Park, Wadsworth Atheneum Museum of Art, Hartford Stage Company and the new Connecticut Science Center. Though physically close, the scattered assets seem far apart because downtown's public realm is not especially walkable or lively, a condition the iQuilt seeks to remedy.

iQuilt Phase 2

With the vision plan successfully completed, the Bushnell and the Arts Council sought to move the project forward. A steering committee was formed that included the City of Hartford, the State of Connecticut, the Metropolitan District Commission, the Metro Hartford Alliance, the Arts Council, the Bushnell, and the Bushnell Park Foundation - the Foundation because Bushnell Park plays such a key role in the iQuilt plan.

The City of Hartford and the Bushnell joined forces to apply for a special grant from National Endowment for the Arts, called MICD 25, in honor of the 25th anniversary of the Mayor's Institute of City Design, a component of the NEA. The grants could range from $25,000 to $250,000. From a pool of more than 200 applicant cities, Hartford was selected to join a group of 60 finalists. In July 2010, it was announced that Hartford was one of 22 winning cities, and one of only five to be awarded the highest grant level of $250,000. The chairman of the NEA, Rocco Landesman, indicated to Hartford officials that the city's proposal had been considered the best of the entire group.

NATIONAL ENDOWMENT FOR THE ARTS

MICD 25
$250,000
Grant

AIA American Institute of Architects California Council

2010
Honor Award
in
Urban Design

The grant made it possible to assemble the balance of the funds needed to continue with "Phase 2" of the iQuilt. As an added boost, the iQuilt earned further recognition at the national level when it was given an Honor Award in Urban Design by the American Institute of Architects, California Chapter (where Suisman Urban Design is located).

Currently taking place throughout 2011, the iQuilt Phase 2 focuses on the design of three key elements:

- iQuilt Strategic Plan
- GreenWalk Master Plan
- Connecticut Square Master Plan

The process of designing all three plans is expected to foster community engagement and participation, and to promote economic development in the city.

Governance

In tandem with the work on Phase 2, the City, the Bushnell, and the other key stakeholders have formed a new broad-based non-profit organization named "The iQuilt Partnership," whose mission will be to carry forward the multifaceted activities of the iQuilt initiative. It is expected to become active in the spring of 2011.

Design Team

Suisman Urban Design (SUD) - Lead
Doug Suisman
Jack Hartley
Eli Garsilazo

Michael Vergason Landscape Architects (MVLA)
Michael Vergason
Beata Corcoran
Rob Holmes

Smith Edwards Architects (SEA)
Tyler Smith
Kent McCoy

Domingo Gonzalez Associates (DGA)
Domingo Gonzales
Nancy Lok
Savina Romanos

Nelson Byrd Woltz Landscape Architects
Thomas Woltz
Jeffrey Longhenry
Jennifer Brooks

Biederman Redevelopment Ventures Corp. (BRVC)
Dan Biederman
Ted Furst

Richter & Cegan (RC)
Bill Richter

Programming and Pre-Design Segment

As the work of Phase 2 unfolds, the City of Hartford is launching the effort with this focused two-month study of the programming and pre-design input needed to assure a strong economic development impact for the iQuilt elements in this phase. This document does not seek to provide specific design solutions, but to establish the needs, constraints, parameters and scope of the design work to follow.

Documents Referenced

In the process of developing the original iQuilt plan, and during Phase 2, numerous previous plans and documents have been and continue to be reviewed, analyzed, and where possible, integrated into the ongoing work. The following is a partial list.

Plans for Hartford

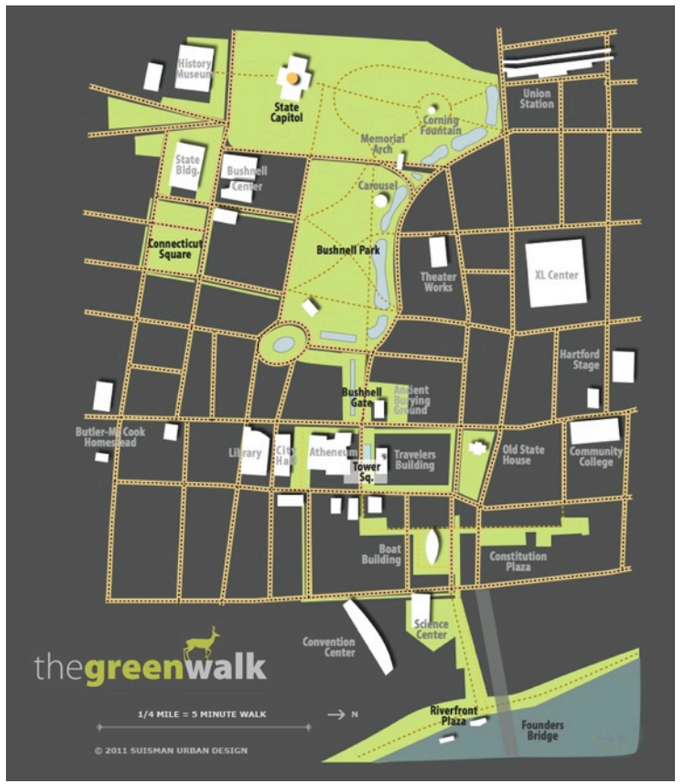
- Bushnell Park Replanting Pan 1988
- The Downtown Hartford Economic and Urban Design Action Strategy ("Greenberg Plan") 1998
- South Downtown Neighborhood Strategic Plan 2001
- Hartford New Britain Busway Reports 2006 and various
- Hartford - Redeveloping an Urban Gateway by ULI 2007
- Destination Attractiveness of Hartford for Convention Business by Greater Hartford Visitors and Convention Bureau 2008
- Downtown Hartford Transit Circulation Study by CRCOG 2009
- One City One Plan - City of Hartford Plan of Conservation and Development 2010
- Union Station Planning Study by CRCOG 2010
- Hub of Hartford Study CRCOG 2010

Hartford History

- Monument - The Connecticut State Capitol edited by David Park Curry and Patricia Dawes Pierce 1979
- Hartford - An Illustrated History of Connecticut's Capital by Glenn Weaver 1982
- The Nineteenth Century Parks of Hartford by John Alexopoulos 1983
- The Great Hartford Picture Book by Wilson H. Faude 1985
- Structures and Styles - Guided Tours of Hartford Architecture by Gregory Andrews and David Ransom 1988
- Hartford Volume II by Wilson H. Faude 1995
- Lost Hartford by Wilson H. Faude 2000
- Hartford's Trolleys 2004
- The Story of Bushnell Park by Wilson H. Faude 2005
- Jacob Weidenmann - Pioneer Landscape Architect by Rudy J. Favretti 2007

Other Cities

- Legible London - A Wayfinding Study by AIG / Central London Partnership 2006
- Public Spaces / Public Life - Sydney by Gehl Architects 2007
- What's Next, Downtown? Des Moines 2008
- What If? - Greenwich South Study, New York 2008
- Active Design Guidelines - Promoting Physical Activity and Health in Design - New York City 2010
- High Performance Landscape Guidelines - 21st Century Parks for NYC - 2010
- The Value of Green Infrastructure - A Guide to Recognizing Its Economic, Environmental and Social Benefits - Center for Neighborhood Technology, Chicago 2010
- Brooklyn Waterfront Greenway - West Street Sustainable Stormwater Study - 2010



Schematic plan of the GreenWalk, which links the Capitol to the Connecticut River waterfront while connecting downtown's cultural assets, shown in white (source: Suisman Urban Design)

1 Bushnell Park Preliminary Program

Background - The GreenWalk Master Plan

The iQuilt is focused on improving the walkability of downtown Hartford's public space - its parks, plazas, streets, sidewalks, and crosswalks - so as to increase foot traffic, add social vibrancy and economic activity, and improve connections between cultural assets. The proposed central feature of the iQuilt is a chain of public spaces called the GreenWalk, extending from the Capitol and Bushnell Park on the west to the Connecticut River on the east.

Many of the public spaces on the proposed GreenWalk already exist, notably the Capitol grounds, Bushnell Park, Tower Square, State House Square, Constitution Plaza, and Riverfront Plaza. But the spaces are not very well connected, and though many are in good physical condition, they are at times underpopulated and lacking in vitality. Today it is physically possible to walk from the Capitol to the riverfront; but the route is not part of the mental map of downtown for most Hartford residents. The path is not easily visible, is not indicated on wayfinding signs, and is not shown on maps.

Yet a park-to-river sequence of walkable green space would provide a strong organizing armature for downtown: almost all the sites of cultural interest are either on the GreenWalk, or within a five minute walk from it.

Bushnell Park is the oldest, largest, and most significant of the spaces on the GreenWalk. It is a destination in itself, and creates an important longitudinal connection from west to east. It also provides opportunities for important north-south connections - from the central business district along Asylum, Pearl, and Trumbull to the important cultural destinations south of the park: the two Bushnell theaters, the proposed Connecticut Square, the State library and history museum, and the new performance space planned at the former Christian Science church on Lafayette Street. The north-south linkages work fairly well during daytime hours and fair weather, although even then the routes and destinations are not clearly marked. But at night, when the park is technically closed, or in poor weather when rain, snow or ice make traversing difficult, the park becomes a pedestrian inhibitor, if not an outright barrier.

For all these reasons, the Phase 2 GreenWalk master plan has a strong focus on Bushnell Park, and will contain a comprehensive Bushnell Park restoration and upgrading plan. This section focuses on the programming and pre-design issues that will be critical for Bushnell Park itself. Section 2 focuses on the technical issues related to the proposed reintroduction of moving water into the park. Section 3 focuses on the feasibility of introducing or enhancing extensions of Bushnell Park to make the GreenWalk a visible, attractive, and vibrant chain of open spaces.

Early Stakeholder and Public Input

Bushnell Park belongs to all the people of the city of Hartford, and its planning, design, maintenance and use are a matter of broad public interest. In addition, there are numerous entities - governments, foundations, groups, companies and individuals - with a special interest because of their role in the life of the park, or their proximity to it. The City of Hartford is the park's owner and primary caretaker. In many cities across the country during the mid-20th century, shrinking budgets and growing social demands hampered the ability of municipalities to adequately maintain parks. This led to the creation of many nonprofit organizations whose mission was to support the maintenance, enhancement and enjoyment of individual parks. The Bushnell Park Foundation, founded in 1971, is such an organization. Since 2009, the iQuilt team has been working closely with the City and the Foundation. The iQuilt plan, whose centerpiece is the GreenWalk and Bushnell Park, has been presented numerous times to the public and key stakeholders. The latter include:

- City of Hartford - owner of park (HT)
- State of Connecticut - owner of adjacent Capitol grounds (CT)
- Bushnell Park Foundation (BPF)
- Metropolitan District Commission (MDC)
- Bushnell Center for the Performing Arts (BC)
- Connecticut Department of Environmental Protection (DEP)
- Trustees of the Ancient Burying Ground (ABG)
- Wadsworth Atheneum (WA)
- Travelers Insurance Company (TIC)
- SoDo Neighborhood Association (SODO)
- Bushnell Tower Homeowners Association (BTHA)
- Chase Enterprises - Cheryl Chase (CHA)
- Albemarle Equities - Phil Schoenberger (ALB)
- Common Ground Community, Inc. - 410 Asylum (CG)

Meetings in 2009 and 2010

Since 2009, the iQuilt team has held numerous public meetings about the future of the park, as well as private meetings with key stakeholders. Ideas for the restoration and updating of Bushnell Park have been presented at meetings on or around these dates:

- March 17-19, 2010
- April 27-30, 2010
- June 9-11, 2010
- July 9 Green Infrastructure Conference (broadcast on Connecticut Public Television)
- September 16-18
- March 18 (1000 Friends of Connecticut Conference)
- October 15 (National Association of State Arts Agencies - National Conference, Austin)
- December 1-2

Park Uses - Historic Background

Horace Bushnell's original vision, as captured in the landscape design by Jacob Weidenmann, was a public but pastoral setting where all the citizen of Hartford could find escape from 19th century urban pressures, an opportunity for contact with nature, and the unusual possibility of mingling with a wide cross-section of society. Horace Bushnell is quoted in a 1953 city report describing park uses as follows:

> *"An opening in the heart of the city, to which citizens will naturally flow in their walks..."*
>
> *"A place where children will play and the poor invalid go to breathe the freshness of nature..."*
>
> *"A place for holiday scenes and celebrations..."*
>
> *"A green carpet of ground..."*
>
> *"[A place where] high and low, rich and poor will exchange looks and make acquaintance through the eyes..."*
>
> *"An outdoor parlor..."*
>
> *"A place of life and motion..."*

Bushnell's vision would therefore include strolling, sitting, standing, riding in horse-drawn carriages, talking, reading, listening to music, playing, and celebrating as primary activities. In 1870, Jacob Weidenmann, the park's landscape designer, wrote that Bushnell Park had become "the principal resort of the citizens for recreation, amusement, and outdoor concerts."

The River

It should be emphasized that the park's dominant physical feature, apart from its broad lawns and, later, magnificent trees and architectural monuments such as the Memorial Arch and the Capitol, was the Park River. Bushnell discusses the river at length in his writings, and in his preliminary design it figures powerfully in the composition, with four bridges at key crossing locations.

View of the wooden bridge at the foot of Mulberry Street, crossing the Park River into Bushnell Park. The bridge was built in 1855 on the foundations of the previous railroad depot bridge; it was later replaced with another wooden bridge in 1878, which was in turn replaced by the stone Hoadley Bridge in 1909. Hoadley Bridge was demolished in 1945 (source: Connecticut Historical Society)

Bushnell was clear that interacting with the river was expected to be an important if not primary aspect of the park experience: seeing the river from the adjacent buildings and streets; crossing the bridges and stopping to look at the water, to hear it, and - perhaps less positively judging from the reports - to smell it. In a private letter in 1868, just seven years after the park opened, Bushnell wrote:

The only regret that I now have is that [the land purchases] did not take in all the southward slope on the north side of the river up to Pearl Street. Then [the park] would have been a complete thing; face to face with itself across the...waving line of the river, showing every ornament and every person moving on it, and displaying a scene as picturesque in its beauty as can well be imagined, and as nature itself provided for.

For Bushnell, the park was not a space on the other side of the river; rather the river itself was the flowing heart of the park, with surrounding gardens and greenswards. Crossing one of the bridges was not, then, a way into the park, but a central experience of already being in the park.

After crossing on one of the bridges, several paths continued along the river's interior edge. Given the formality of mid-19th century life, and the apparently polluted state of the river, it may have been unlikely that park visitors were expected to descend to the river's banks, touch the water, or, much less, swim in it. But the curved watercourse, its small falls near Asylum known as "The Steps", its winding and irregular edges, the varied bands of lawn, trees, grasses, bushes and flowers which lined it, the views back

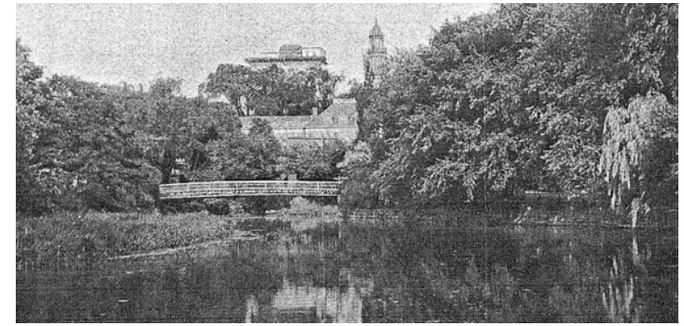
View, c. 1910, of the bend in the Park River at Asylum Street, looking south towards the YMCA and Memorial Arch (source: vintage postcard)

of the various bridges and the sturdy brick and brownstone buildings on the far side of the bordering roadways - all this must have created a constantly changing set of vistas, panoramas, and points of interest. The framing and viewing of water can thus been seen not only as the park's main visual feature, but as its main kinetic "event." The precipitating action is the movement of the visitor, reflected and amplified by the movement of the water.

This episodic, unfolding, almost cinematic engagement of the pedestrian with the features of the landscape and the city epitomizes the approach to landscape design known as "The Picturesque" - the very word used by Bushnell in the quote above. As with many 19th century designed landscapes, Bushnell Park was probably conceived as much to be seen as to be used. Horace Bushnell was explicit about the importance of the park to create a positive first impression of Hartford for visitors (including sophisticated New Yorkers) who, arriving by train on the curved, elevated tracks from the southwest, would see the Capitol, the lawns, and the river as a magnificent, welcoming tableau.

Even further south and west, in the interior of the park, the curved pathways across the lawns, and the punctuation of the large and naturalistic central pond and of the formal fountain (later Corning Fountain), were echoes of the shifting, watery landscape along the northern riverine edge.

The river ran the entire length of the park - simply walking along it would cover more than a mile in length. Combined with an occasional crossing back and forth on the bridges, such a riverside promenade, at a slow and dignified pace, could easily have provided several hours of pleasure to someone on a stroll. While the photographic evidence confirms the existence of some riverside paths, especially near Union Station, another photo (above right) from the early twentieth century looking east towards the Trumbull Street bridge (the spire of the Center Church is visible above on the Main Street ridge) is labeled, "A



1910 view of the bend in the Park River looking east towards the slightly arched wood Trumbull Street footbridge (source: The Picturesque Parks of Hartford)

view seldom seen, for neither path nor other suggestion lead people along the banks."

Sitting and Strolling

Given the formality of the period, evidenced in people's comportment, speech and dress, it is unlikely that the lawns were seen as primary activity areas. A formal picnic may have been an

1910 view of strollers and seated visitors in Bushnell Park near Asylum Street

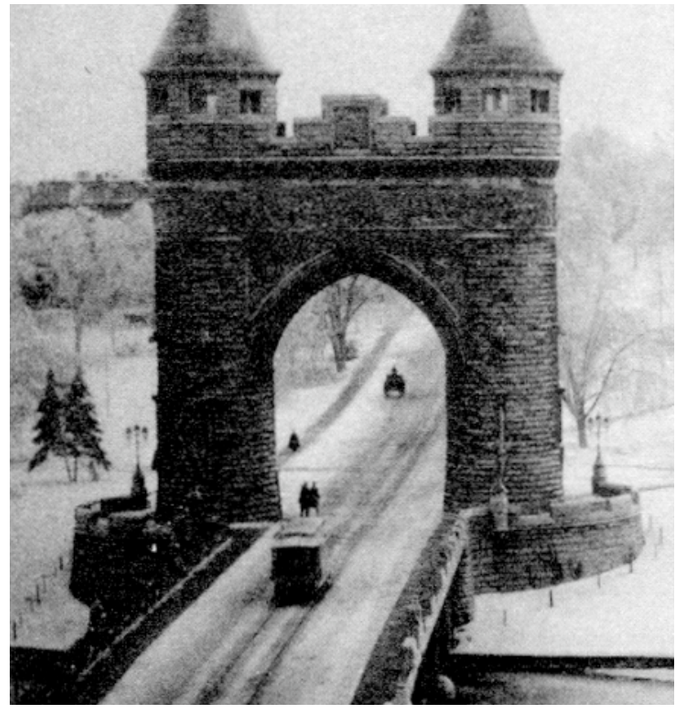
occasional part of the scene, but the photographs of the period show most activity confined to the pathways, bridges and roadways. The 1910 photo above shows seating confined to park

benches, not on the ground. It seems safe to conclude that the lawns were developed to be enjoyed primarily as graceful foregrounds for the key monuments and surrounding scenes.

Vehicles and Public Transport

Leisurely promenades on foot can be undertaken only at limited times, and under fairly ideal conditions. Rain and snow would preclude such activity for most pedestrians, although it is important to stress that Bushnell included "drives" in his earliest designs. Weidenmann elaborated this in his final plan to include pathways labeled "Drive" and "Concourse," which were considerably wider than the web of proposed pedestrian paths and clearly intended for horses and horse-drawn vehicles. The use of the park as place to ride a horse, or drive around in the relative quiet of a horse-drawn carriage (as is still done in New York's Central Park) would have made perfect sense, echoing the harmonious use of horses and carriages in the tranquil countryside.

This recreational use of vehicles in and around the park was slowly supplanted by vehicles intended for practical transportation purposes. In 1863, just a few years after the opening of the park, public transportation began in Hartford in the form of horsecars - steel carriages on steel rails drawn by horses. In 1881, Bliss Street (now Trinity) was widened to accommodate more vehicles, which included horsecars. This widening started was the beginning of an effect - unintended by Bushnell and Weidenmann - of bifurcating the park into an eastern and western portion. That division is still strongly felt today. In 1894, the former "Hartford and Wethersfield Horse Railroad" changed its name to the "Hartford Street Railway," and by the following year all the lines had been electrified. The 1910 photo (right) shows an electric streetcar (as well as a private horse-drawn carriage) traversing the snow-covered park under the arch on a sloshy Trinity Street.



Aerial view of streetcar, horse-drawn carriage, and pedestrians on Ford Street at the Memorial Arch

While the trolley system was, like most transit systems, built primarily for commuting from home to work, transit operators recognized the value of promoting the system for touring and recreational purposes to boost the normally lower ridership on weekends and holidays. In 1910, a guide was published called "Trips by Trolley Around Hartford." The effort echoes the famous series of posters, commissioned by the London Underground, depicting tourist destinations near subway stations around metropolitan London to encourage use of the system for day trips). Such a strategy may be worth remembering in the context of the iQuilt's goal of linking downtown cultural destinations for pedestrians. The presence of integrated public transport service can maintain those connections in poor weather, when walking is not an attractive option; and can extend the spread of the cultural network to destinations a short distance outside of downtown, but beyond normal walking distance, such as Coltsville, Trinity, Real Art Ways, Mark Twain and Stowe Houses, and the Artists Collective.

Bicycles

In the 1880s and 1890s, Hartford was a manufacturing center for bicycles, dominated by the companies of Albert Pope, including Pope Manufacturing and the American Bicycle Company. Information on the early use of bicycles in Bushnell Park is scant - a major constraint on the use of bicycles generally was the paucity of paved roads. Nevertheless this early 20th century photo of Trinity Street (below) shows numerous bikers passing

View of bicyclists, streetcar, and pedestrians on Ford Street south of the Memorial Arch
(source: The Picturesque Parks of Hartford)

through the park. This longstanding use continues with the annual Discover Hartford Bicycle and Walking Tour, which covers a large area of downtown and the city, but originates and ends in the Bushnell Park. Downtown and the park are also part of a planned network of municipal bike routes and pathways. Bushnell Park is also directly on the path of the East Coast Greenway, a nearly 3,000 mile path for walking and biking running from Florida to Maine.

The Automobile

Once they began arriving in the early 1900s, automobiles - with their attendant noise, speed, and risk - could not be accommodated in the same way as trolleys. They took up more room, had a more disturbing affect on the clean and quiet natural environment of the park, were not restricted to a predictable path along rails, and required parking space.

It is worth noting that whatever negative impacts the automobile may have had on the park, these were probably considered minor compared to the positive affects cars had on Hartford's economy, prosperity, and pride as a manufacturing city.

Most contemporary urban parks, including Bushnell, have struggled to reckon with the car - and its associated traffic and parking demands - without destroying the very pastoral qualities which define them.

Concerts

Weidenmann references concerts in his 1871 comments. These likely included performances by uniformed military bands, as was the custom of the day. In 1936, a concrete bandshell was constructed in the east end of the park, and classical music was performed there for several summers. However, the bandshell was unexpected demolished in 1939, a move that was apparently unrelated to the flooding of the previous year. The east end has continued to serve as the venue for smaller, more informal musical events such as the fiddlers festival. Larger concerts migrated to the larger western portion, especially after 1995 when the Performance Pavilion was built. The well attended Hartford Jazz Festival is held there each summer.

Night Use

As with the countryside, the park was conceived and designed for daytime use. Widespread street lighting was still rare in smaller

Hartford Jazz Festival in Bushnell Park, north of the Capitol

American cities in the mid-to-late 19th century, and no provision for park lighting was made. Indeed, there was little nighttime activity in the surrounding city, except perhaps at the taverns. It is worth noting that theater was banned in Connecticut in 1800 - it was viewed as a religious affront by Congregationalism, the official religion of Connecticut until 1818. The theater ban, one of Connecticut's famous "Blue Laws," remained on the books until 1952, although it had long ceased to be enforced. But in Bushnell's era, the notion of an urban park as an accessory to nightlife in the city would have been completely foreign.

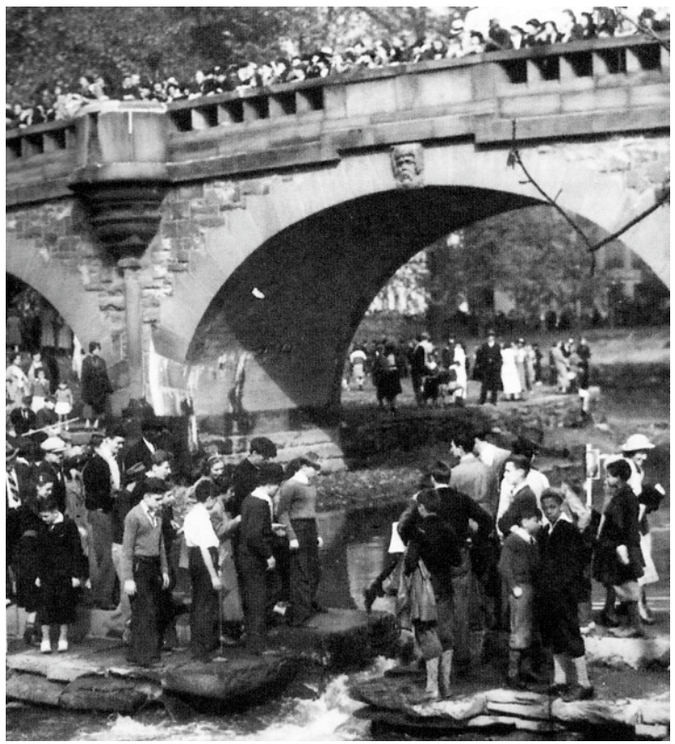
Statues, Sculpture, Memorials, and Monuments

The first statuary - the tribute to Israel Putnam - made its appearance in 1874, and was followed by a growing collection of memorials and monuments. The early tendency to use sculpture to commemorate notable individuals or events has been joined by a more contemporary interest in public art without an explicit memorial program.

The use of park space for such purposes has on occasion been controversial. While some feel the use is appropriate to park space, others feel that it can intrude on the park's natural character and recreational purpose, and fear that without some rules and constraints, the park will become overcrowded with additions, since once introduced, these elements are rarely if ever removed. For further discussion, see Page 17.

Evolution of the Park's Uses

What is striking is that the park's history is less about the arrival of new uses than the loss of a primary one. The introduction of new uses has been quite limited (as compared with, say, Central Park), but the removal of the Park River to an underground conduit, after repeat floods in the 1930s, is the biggest physical change the park has undergone since its opening in 1861. It could also be argued that the undergrounding was the biggest change not just of the park's form but of its use and experience. The 1936 photo below shows dozens of schoolchildren visiting Bushnell Park by crossing the Park River on Hoadley Bridge, and then crossing back on the low boulder step dam. This kind of engagement with a powerful, linear water landscape, so central to Bushnell's vision, disappeared almost entirely with the burial of the river and the destruction of the bridges. The park, arguably, became not more than it should be, but less.



1936 photo of school group visiting Bushnell Park; some cross over Hoadley Bridge while others cross back over the Park River on the stepping stone dam. (source: Faude / Hartford Times)

In Horace Bushnell's era, under the influence of the great landscape architect Frederick Law Olmsted (who was, not insignificantly, a native of Hartford), parks were seen as having a serious, if not solemn, social function for adults - as answers to the depredations of industrialization. The needs of children were considered, as indicated in Bushnell's 1853 comments, but they were probably not as central to park planning as they are today. It does seem safe to assume that the river, with its rocks, reeds, flowing water, bridges, and vistas, (and rowboat rides, as evidence in some engravings), must have been a strong attraction and source of enjoyment for families with children. The introduction the carousel in 1974 and the playground in 1999 suggests a growing sense that the park, minus the river, did not have enough provision for children, and could be seen to some extent as compensatory for the loss of the river.

One hundred and fifty years after the completion of Bushnell Park, Hartford is posed to grapple with the question of how to reconcile Horace Bushnell's vision, the loss of the Park River, and the dramatically different expectations and possibilities for urban parks in the 21st century. That reconciliation should form the foundation of a new master plan for the park, based on a broadly shared vision of who the park is for, and how it should be used.

Park Uses - Stakeholder Input in Phase 2

As noted before, the iQuilt design team has met with representatives of the City, the Bushnell Park Foundation, and other stakeholders on numerous occasions. The Foundation's board has been very supportive of the effort, and very helpful and cooperative in providing assistance and background information. As a followup to these earlier discussion, and as an initial step in iQuilt Phase 2, the design team in December 2010 asked Joseph Williams, President of the Bushnell Park Foundation, if he could request from the Foundation board a preliminary list of its goals for a new master plan for the park. Mr. Williams kindly complied and in January 2011, provided the team with the following list, adopted by the board:

Preliminary List of Goals from the Bushnell Park Foundation

- Recognize the historical character and origin of the park. Any proposed improvements must be respectful of the park's character and feel, as well as the original intent of the Reverend Horace Bushnell and of the design by Jacob Weidenmann.
- Traffic calming. There is a longstanding need to calm and better control traffic on Trinity Street through the park, particularly on the approaches to the Memorial Arch, with methods such as narrowing the travel lane, bump-outs, bollards, speed tables, etc. A similar review should be done for Pulaski Circle. In reviewing traffic calming measures, attention should be paid to maintaining adequate traffic flow as well.
- Vehicle entry and usage. The plan should recommend guidelines for limiting and controlling entry of City and private vehicles into the park, many of which cause excessive damage. Consider establishing a system of issuing parking passes for events, which the City would need to monitor and enforce.
- Improve and maintain the entrances to and perimeter of the park to ensure an attractive appearance and an inviting presentation. Better define, reinforce and maintain the park edges with a new combination of long term sustainable and affordable treatments such as plantings, iron fencing and low brownstone walls.
- Encourage events and activities that promote greater use and enjoyment of the park, night and day, in every season (a la the ice skating rink and First Night activities). Keep the park open at night and encourage appropriate usage as well as safety measures. It is also important that the City establish and

Skaters enjoy the temporary ice skating rink in Bushnell Park, January 2011 (source: Greater Hartford Arts Council)

consistently follow a policy requiring every event organizer to post adequate surety to repair the park after events, and that the City make sure that the work is done.

- Evaluate establishing year-round food service in the Pump House.
- Refurbish and care for existing structures (Memorial Arch, Corning Fountain, Winged Victory, etc.). Consider improvements to enhance the usability of the interior of the Arch.
- Establish rigorous standards and a public hearing process for consideration of any proposed permanent monuments or structures to be added to the park.
- In reviewing the locations and connectivity of the paths in the interior of the park, evaluate methods to prevent turf damage and erosion near path junctures.
- Repair the sink holes in the park.
- Explore reintroducing flowing water in the area of the former Park River bed along Ford/Jewell Streets, replacing the existing pond. Ideally this will coincide with the unearthing or replication of some of the bridges as well. Otherwise, a comprehensive renovation of and long-term maintenance plan for the pond is needed.
- Evaluate the need for permanent restrooms in the park at each end.
- Improve the lighting at the entrances to the park, at internal nodes, along the interior paths, and for vehicles using Trinity Street near the Arch.
- Evaluate a consolidated children's play area that would combine the current playground and the swing sets.
- Assess the current availability and future need for public water supply in key areas (such as the Pump House) and electrical supply.
- Emphasize that all existing or new plantings, other improvements, and activities and events in the park must be supported by adequate resources for long and short term maintenance, restoration, repair and security.

Stakeholder Input - Park Walkabout (1.17.11)

This preliminary set of goals from the Foundation provided a helpful base for launching the Phase 2 process. The team and Foundation agreed that a joint "walkabout" of the park would be a helpful next step. On January 17, a group assembled at a restaurant next to the park and then headed out. The timing was selected so that there sufficient time for daylight observation, but also the opportunity to observe the park at dusk and nightfall to discuss issues related to lighting, security, and visibility (see "Lighting" section for a summary by DGA). The recent heavy snowfall, icy paths, and cold temperatures also helped focus the group on how to encourage park use during less than optimal conditions. The participants included:

- Jonas Maciunas (BPF, HTFD)
- Joe Williams (BPF)
- Sally Taylor (BPF)
- Michael Vergason (MVLA)
- Beata Corcoran (MVLA)
- Doug Suisman (SUD)
- Domingo Gonzales (DGA)
- Tyler Smith (BPF, SEA)

Stakeholder Input - Programming Workshop (1.18.11)

On January 18, a Phase 2 Kickoff session was conducted with the design team, the client group, and key stakeholders. Following the general introduction, a focus session was conducted on Gully Brook (see Section 2), followed by a focus session on programming in Bushnell Park. Participants included:

- City of Hartford
- Bushnell Park Foundation
- The Bushnell
- Connecticut Department of Environmental Protection (DEP)
- Metropolitan District Commission (MDC)
- Camp Dresser & McKee (CDM)
- Hartford Business Improvement District (HBID)
- iQuilt Design Team

The following is a summary of the discussion in that session.

User Groups

The intended Park audience should be as broad as can be, incorporating a wide range of activities for a broad range of people. Everyone should be welcome, from regional visitors, suburbanites, dogs (on leashes), families, small children, the elderly, teenagers, downtown workers, the homeless, the disabled, and veterans (especially considering that the city's Civil War and Spanish-American War monuments to veterans are both located in the park). Park design should discourage the gathering of large, organized sport teams. The design should help discourage criminal, disruptive, or antisocial behavior.

Current Uses - Active and Passive

Today, the park is a primary landmark and beloved feature of downtown. But its location, which Horace Bushnell conceived as

central to downtown, feels somewhat peripheral to downtown's main activity centers. At night and in poor weather, the park has the effect of dividing north and south downtown rather than connecting them. While the park is heavily used for special events, and fairly well used at certain times in fine weather, much of the time it feels underused and underpopulated. It falls short of its potential.

All agreed that the park has sporadic use during the weekdays, some use during the weekends and little to no evening activity. Seasonal special events, such as the Jazz Festival, draw large crowds in the summer; and the success of the recent temporary ice rink shows the potential for drawing more visitors in the winter.

Future Uses

The group made an informal list of activities, and listed them as either as "Recommended," "Possibly Recommended," and "Not Recommended":

Recommended Passive Uses

- strolling
- people-watching
- sitting
- relaxing

Recommended Active uses

- jogging
- ice skating
- carousel
- play (children)
- weddings
- picnics
- small music performances
- informal pickup games (soccer, frisbee, cricket)
- board games (chess, checkers, backgammon)

Possibly Recommended Uses

These need further discussion:

- volleyball
- ping pong
- basketball
- bocce / petanque
- horse-drawn carriage rides around the park
- biking
- skateboarding
- farmers markets
- book loaning/book carts
- weather station
- puppet theater (UConn's Balard School)
- barbecuing
- Christmas market

Not Recommended Uses

- formal athletic fields
- loud music (outside of festivals)
- structured dog runs/areas

Summary/Opportunities

All agreed with the need for a reevaluation of the park's programming for today's needs, to encourage and sustain both daytime and night use as well as expand the seasons of visitation. The location of existing program elements such as the playgrounds and the carousel will be further evaluated recognizing the great benefit gained from keeping these family friendly elements together. Additional programming will be explored and evaluated, recognizing the value of focusing activity on the north and eastern perimeter of the park along Jewell. There will be a carefully balancing of the historic precedent of a pastoral retreat in the city, and the need to enliven the park for Hartford today.

Stakeholder Input - Presentation / Discussion (1.18.11)

A larger forum was held at the Bushnell on the evening of January 18. The invitation went out to all client and stakeholder groups and their members. There was a brief introduction of the client group and design team, and a review of the scope of work for Phase 2. While Bushnell Park was not the focus of this discussion, the outlines of the master plan were provided, and the request was made for strong stakeholder and public participation throughout the yearlong process.

Stakeholder and Public Input - Future Meetings

See Section 6, "Outreach Strategy"- Meetings held at the Hartford Public Library

Draft Principles Developed by the Design Team

Considering input from the stakeholders, both in work sessions and in writing, the team subsequently formulated a general set of principles for the master plan, for review by stakeholders:

Respect History

- Preserve cultural and historical integrity of Bushnell Park as a landmark and destination
- Maintain expansive views and dominant pastoral quality of Bushnell Park

Integrate Park and City

- Tie Bushnell Park to its urban district surrounds (its environs, edges, seams, portals, and extensions)
- Connect Bushnell Park to a sequence of public spaces (the GreenWalk)
- Increase the traversability of Bushnell Park both day and night and throughout the four seasons

Enliven the Park

- Attract diverse audiences to Bushnell Park
- Expand Bushnell Park uses as appropriate for 21st century without compromising its integrity
- Develop Bushnell Park facilities that generate revenue for the benefit of the park
- Ensure Bushnell Park supports and contributes to social and economic revitalization of downtown

Engage Nature

- Offer diverse ways to engage the natural environment, beyond strolling and viewing
- Support the natural systems in Bushnell Park recognizing their heightened value in the urban context
- Strengthen the city's ecological functioning through restoration and regeneration of lost or damaged ecosystems such as the river

Enhance Sustainability

- Develop a broad public and private constituency to upgrade and maintain Bushnell Park (stewardship entity modeled on Central Park Conservancy - beyond Bushnell Park Foundation)
- Fund a long-term management and maintenance strategy (developed by stewardship entity)

Structures

Memorial Arch

Bushnell Park's Gothic Revival triumphal archway was dedicated in 1886 on the anniversary of the Battle of Antietam as a Memorial to Soldiers and Sailors, honoring 4,000 Hartford citizens who served in the Civil War. Designed by Hartford architect, George Keller, it is both an iconic symbol in the city and serves as a threshold and portal to the downtown. A decorative terra cotta frieze wraps the structure, depicting scenes from the Civil War. Midway down the structure is a series of figures, representing citizens of Hartford who served in the War. There is stair access to the towers from the street side. Two statues of angels grace the tops of the towers, Gabriel and Raphael, replicated in bronze in 1987 as part of a 1.5 million arch restoration project.

The 1886 Memorial Arch is the principal monument within the park, and provides a shifting counterpoint to the Capitol

The archway has a unique role as the park's principal monument, crossing over Trinity Street and rising over the original path of the Park River. The traffic through the archway has been limited to one-lane moving south due to the concerns with the wear and tear on the archway columns. The northbound lane now swings around the arch on the outside for a free right-turn. When the river was buried in a conduit for flood control in the 1940s, the brownstone bridge was buried as well. Site observation strongly suggests that a good portion of the original bridge remains, buried by soil; the condition of the piers has yet to be determined.

Evening lighting for the arch accents the mid to upper portions of the structure. There may be opportunities to consider additional event lighting on this structure as part of the park renewal.

Performance Pavilion

This Pavilion is located at the western end of the park, down slope from the State Capitol. It was built in 1995 as a substitute for temporary structures which had served since the destruction of the concrete bandshell in 1939. The current pavilion hosts a number of major events during the calendar year.

The current siting and orientation of the stage unfortunately do not take full advantage of the adjacent topography. The slope down from the State Capitol forms a natural amphitheater, but the bandstand is located at one edge of the slope, rather than sitting in the center of the amphitheater and facing upslope.

Outdoor performances, long an integral part of the park, present a challenge in balancing intensive use with environmental compatibility. Though urban parks have long been used for outdoor musical events, the construction of permanent performance structures is often controversial because of their size, their bulk, and their lack of openness or transparency.

Further exploration will address location, historic context, appropriate balance between large and small venues, the balance between permanent and temporary needs and performance management.

Carousel

A vintage carousel from 1914 sits on the northern side of the Park, next to the playground between Trinity Street and Ann Streets. The Knox Foundation brought the Stein and Goldstein

carousel to Hartford from Canton, Ohio in 1974. The 24-sided pavilion has 48 hand-carved wooden horses and two chariots. Stein and Goldstein horses are distinguished by their flamboyance, their big teeth, bulging eyes, and their real horse hair tails. This is only one of three Stein and Goldstein carousels left in existence. Operating seasonal, May through mid-October, it brings life to the northern side of the park.

Enthusiasts are concerned about the settlement of the structure's foundation, which may be tied to the fact that it sits in the area of fill close to the former Park River bed. Appropriate Park setting, foundations and adjacencies will be explored in the next stage of review.

Pumphouse

Built in 1947 by the Army Corp of Engineers, the "Pumphouse" is a working pumping station for the city, part of the Connecticut River Flood Control Project. It continues to maintain water levels and prevent floodwaters of the Connecticut River from backing up into the city.

It is the only habitable building in the park (other than the room atop the Memorial Arch). Its massing, materials and diminutive scale are reminiscent of an English cottage. Materials include stones from the Park River bridges (dismantled when the Park River was buried) and slate roofs. It is sited comfortably in the park's southeastern corner. The structure and roof are showing signs of wear and are in need of maintenance.

Bushnell Park Café, which is open only in the summer months, occupies the building's southern wing, and offers drinks and dining on an outdoor patio (seating approximately 150). It also has a small indoor dining area, the Pump House Gallery, which features work from local artists.

Scheduling of events and food service hours are unpredictable. Further review of management both inside and out could give the cafe a strong identity. Enhancements to the exterior seating areas as well as additional upgrades to and the around this building may renew and expand park services. There is also interest in expanding the food service year-round. Further review of kitchen and serving space, or offsite kitchen options, are required if services are augmented.

Restrooms

Presently, there are no public restrooms in the park, though early plans show a "Comfort Station" on the south side of the Park River, a short distance east of the Trumbull Street Bridge. The Bushnell Park Foundation has recommended evaluating the need for permanent facilities. Further review of additional program will guide the locations, but it is expected that facilities would be considered in at least one and perhaps two locations in the park. These facilities would need to be thoughtfully designed to respect the historic integrity of the existing architectural structures in the park (particularly the Pumphouse and the Memorial Arch), considering scale, materials and architectural character. There might be additional support and program associated with these facilities such as storage of maintenance materials, but these considerations need to be limited to avoid introducing an inappropriately scaled structure into the park setting. The addition of rest facilities requires continued maintenance and monitoring for users and safety needs to be part of an overall maintenance plan. Further discussions on this are planned.

Statues, Memorials, and Sculpture

The park has a large number of statues, sculptures, monuments and memorials that are spread throughout the park. Each of these structures occupies its own place in the broader park structure, and many are additions introduced after the Weidenmann and Olmsted plans. Their role in the park and history in the city should be reviewed as there maybe opportunities for enhancing their role in the cultural life of the city through historic narrative and walking paths. In cases where necessary and appropriate, relocation may be considered.

- Arch - Soldiers and Sailors Memorial (see above)
- Spanish-American War Memorial -- This 1927 memorial is the work of Evelyn Beatrice Longman, one of the country's foremost sculptors of the period. It is composed of a bronze sculpture of Nike, the Greek goddess of war, set on a broad base with a limestone bench. It is located between Trinity and Clinton Streets at Elm Street facing west. While a beautiful piece, there may be an opportunity to more fully integrate it into the overall park structure in its relationship as a threshold into the park from the south. This should be evaluated further.
- Israel Putnam Statue -- by John Quincy Adams Ward, one of the pre-eminent sculptors of his time. This bronze eight-foot statue of an American Revolutionary War General, Israel Putnam, has stood in the park since 1874. Bushnell himself attended the dedication of this piece located in the western side of the park, midway down Trinity Street. It is set under the canopy of mature trees, as a figure and pedestal in the landscape.
- Horace Wells Statue -- In the east section of the park, next to the pond, is a bronze statue of a capped gentleman that commemorates the work of this Hartford resident who is best known for his dentistry and his discovery of anesthesia. The statue was designed in 1874 by T.H. Bartlett, father of the sculptor who created the statue of Lafayette south of the Capitol.
- Corning Fountain -- This sculptural three tiered fountain was designed by James Massey Rhind and introduced in 1899 as a tribute by John Corning (Corning Glass Works) to his father, who had originally owned a grist mill on the site. The stone and marble fountain standing 30 feet at its center, aligns with the axes of the cupola of the Capitol to the south and Pearl Street to the east. At its top is a stag, or a hart, surrounded by

Saukiog Indians, the city's first inhabitants. Water cascades from the two upper tiers falling into a round basin, creating a visual pun as the hart crosses the "ford". A planting bed surrounds the lowest basin and is filled with annuals. A pedestrian pathway surrounds the base, accessed by a pedestrian path off of Pearl Street.

- "Harmony," a sculpture by Connecticut sculptor Charles Perry, is located at the western end of the pond. It was a donation of Travelers Insurance and dedicated in 1990. It is a contemporary piece, made of stainless steel. It is a recent addition to the park, set in the pond to optimize reflections with the light but is a piece that draws attention due to its location and design.

Guidelines need to be further developed for sculptures and memorials in the park to be sure that supplemental additions enhance the park's integrity and history. This is an issue faced by many municipalities and organizations. Park management needs to play an active role in the acquisition of new pieces and memorials, recognizing the need for balance and restraint which would support the original intent of the park as a place for the pleasure and enjoyment of all citizens. The memorialization of too much of the territory could detract from its role as a natural refuge in the city.

Gates, Edges, and Walls

Historically, the definition between the edge of the city and the park were clearly separated by bridges over the Park River on the north and by the dramatic contrast between the city and the park. The Park provided a place for contact with nature, a true respite from the city life.

Fencing was part of the visual language of the park as early as 1863, when a fence was erected to separate the park from the Trinity College campus. In 1884, the Parks Commission discussed the removal of much of the fencing around the perimeter of the park, particularly along Elm Street, because of obstructed views.

Five bridge locations across the Park River created strong gateway experiences across the river and into the main body of the park. When the river was buried in the 1940s, the bridges were destroyed (or buried, in the case of Ford Street Bridge). In some of the locations, gateways were erected, sometimes using stones from the bridges. The widening of perimeter roadways, and the increase in volume and velocity of vehicular traffic made the park perimeter less hospitable to pedestrians. Fencing took on the function of a barrier more than an ornamental threshold.

Union Station Gate

The Park's most northwestern entry is across from Hartford's Union Station. Historically, the bridge at this location provided a dramatic view of the park with the Corning Fountain and the Capitol beyond. Many of the old postcard views capture this iconic city view.

This entry is the critical connection to the city's regional transit access and is the point of arrival for State workers traversing the park to State offices on the south side of the park.

The existing brownstone wall and pillars were designed to create a formal entry to the park. The lack of regular maintenance makes the area look uncared for and paving has heaved and the walls need to be cleaned and pointed. Trees are not maintained and need to be limbed up to more graciously open the corner to the park. Richter and Cegan recently (Oct 2009) developed conceptual studies for improvements to this entry. Potential upgrades to this area show configurations for expanded native plantings, lights, furnishings, decorative paving and special (historical) plaque pavers. Great opportunities exist to consider stronger connections to Union Station, to recapture the views of the Capitol and make further connections to the adjacent elevated rail line and walls to the west.

Trumbull Gate

The Trumbull Gate (Fox Memorial Entrance) is the primary northern downtown entry to the park, located at the terminus of Trumbull Street and the park. This was the former site of a footbridge crossing from downtown. A significant number of the park's older majestic trees stand in this corner of the park providing dappled light and a gracious canopy for visitors. Recent upgrades to the streetscape on Trumbull Street reaffirmed its connection to the park. Stone columns serve as a threshold into the Park. Making some food and beverage service available along the northern edge of the park could strengthen its link to the Trumbull Street area.

Hoadley Gate

The western most entry to the park is located at the former street alignment of Mulberry Street and the existing Wells Street. Four different bridges have occupied the site: the original 1838 bridge for the railroad depot; the 1855 wooden footbridge built as an entrance to the park, and constructed on the footings of the depot bridge; a replacement wooden footbridge built in 1878; and the monumental Hoadley Bridge, built in 1909 and comprised of three arch stone arches. Brownstones from the demolished bridge were used in 1943 to create Hoadley Gate at the site of the former bridge's eastern end. Today, a split pedestrian path recalls the location of the bridge and a double allée of cherry trees lines the walks.

The Mall

The original plan for the Park along Elm Street included a majestic grouping of Elm trees planted along what was named the Mall. The Elm Street Mall was lined with stately elms, shrubs and flower beds. Shaded seating provided places to engage in casual conversations. Weidenmann's plan included this formal promenade as a counterpoint to the pastoral landscape beyond. In this plan, Elm Street was shown as a divided roadway with a

median down the middle defining the more public and formal edge of the park. We see this design technique applied in other parks, particularly the Central Park Mall which leads to the Bethesda Terrace. Used to the same effect, it provides the only purely formal feature in the naturalistic plan for Olmsted's Central Park. Designers, Olmsted and Vaux acknowledged that "A 'grand promenade' was 'an essential feature of a metropolitan park.'"

The Elm Street Mall is not legible today for a number of reasons. Dutch elm disease decimated most of the Elms, and the trees that replaced them are not strong enough, the shrubs are no longer there, and some of the remaining benches are in disrepair.

The notion of a more formal promenade is still a valid one for the park. Designs should consider ways that this park edge can be strengthened through plantings.

Play Areas

Historically, the Weidenmann and Bushnell plans did not provide areas of structured play. Attitudes to child development have evolved considerably since the middle of the 19th century resulting in the introduction of two play areas; one north of the Carousel on Jewell and the other on Wells Street north of the Pumphouse.

A critical look at the current uses and visitation will help guide improvements in the play areas in the park. Though the number of families with small children living downtown is very small, many families visit the park from different neighborhoods of Hartford, and from around the region. As with other program elements, the play areas require certain adjacencies, amenities and support to be most beneficial to families. At a minimum, to support increased visitation, there need to be places for parents and guardians to sit, observe, talk, read, eat a sandwich or drink a coffee while children play.

Existing Playground Along Jewell

The newer of the two play areas, installed in 1999, is located on the north side of the Carousel near Jewell Street, and includes contemporary play structures and a water feature. The water feature, a narrow child-sized water channel, is meant to recall the history of the park with the Park River. Included are statuary and fountains of snakes, fish and turtles, which once thrived on this site. The rubberized surface on the floor of the play area is showing signs of wear and the fountains run infrequently due to slick surface of the material. There is standard bench seating for adults on the perimeter. Upgrades and expansion to play opportunities for kids of varying ages is warranted.

Existing Play Area along Wells

The second play area is a deteriorated fenced area at the east end of the park, north of the Pumphouse. This broad area consists mainly of two older swing sets, an asphalt surface and a few large trees. This area is underutilized and insufficient to serve older children and families.

Both play areas need to be evaluated further as to their size, location and role in the larger life of the park. Merging two play areas into one, as suggested by the Bushnell Park Foundation, may have great merit. New designs for play areas should focus on integrating play into the setting. Increasing the opportunities and types of activities for children and families will serve to broaden the role of the park in the life of the city and make families an integral part of the life of the park.

Walking

Making downtown Hartford more walkable as a means of connecting cultural assets is a central goal of the iQuilt Plan, and the GreenWalk is proposed as the district's central walking spine from the Capitol to the Connecticut River. Bushnell Park becomes a key site for walking: within, around, and through.

The motivations for walking are multiple, and include: walking to work, shop, or dine; walking to the bus or train; walking to cultural events or venues; walking to enjoy the outdoors, weather, fresh air, trees, plants, and flowers; walking the dog (a major current use of the park by nearby residents); walking for relaxation and contemplation; walking for conversation and walking for exercise. The health benefits of exercise are documented beyond question, and have become central tenets of public policy from the Federal government down to municipalities, including Hartford. The health component of walking (and biking) are of considerable interest to insurance companies everywhere, not least the health and life insurance companies of Hartford, whose financial interests are strengthened through healthy lifestyles for their policyholders.

Walking in Bushnell Park should be seen, therefore, not just as a set of paths, but as an important public system: a pedestrian network used throughout the year, week, and day by many parts of the population for a wide range of purposes. The network should be designed to accommodate such a wide range of uses and users.

Biking

There are few if any specific facilities or provisions for biking in or around Bushnell. This is unfortunate for a number of reasons. First, bicycle manufacturing and biking have a long association with Hartford: the industrial activity of Albert Pope and others underscore the iQuilt's focus on Hartford's cultural innovation. Second, biking is a natural adjunct to walking, and biking and pedestrian facilities are often grouped together for funding purposes under the category of "non-motorized transport." Like walking, biking is considered by transportation experts as a

serious and useful form of transportation, not merely a recreational activity, and reinforces the iQuilt's focus on sustainable urbanism and transport. As a vigorous activity, biking can contribute to personal and public health, and reinforces the iQuilt message that walking and biking are both pleasurable and healthy.

Food and Drink

From the decades-long research condensed in his seminal book, "The Social Life of Small Public Spaces," William Whyte demonstrated conclusively that vibrant public space in contemporary cities requires food and drink, along with appropriately flexible seating. Currently there is no regular food and drink service anywhere in the park - this even includes the provision of drinking fountains.

The Bushnell Park Café

Located at the Pumphouse, the Bushnell Park Café offers drinks and dining on an outdoor patio (seating approximately 150) adjacent to the Pumphouse. It also has a small indoor dining area, which also features work from local artists. Because the Café's seating is primarily outdoors, it operates on a seasonal schedule.

There is interest in augmenting the seasonal food service to expand it throughout the year. Further review of management will give better identity to the place. Enhancements to the exterior seating areas as well as additional upgrades to and around this building may renew and expand park services. Further review of kitchen and serving space, and or offsite kitchen options, are required if services are augmented.

Drinking Fountains (see Furnishings)

Food Trucks

Trucks including outposts of local restaurants, operate along the edges of the park, notably Elm Street, particularly during weekday lunchtimes, offering affordable fare.

Nearby Offerings

Outside the park, restaurants and bars are found primarily to the north and northeast, on Asylum, Trumbull, and Main. To the south, there are very few options - the numerous restaurants along Park Street are considered too far on foot. Before performances, the Bushnell Center has a cafe and restaurant open to the public.

Next Steps

Meet with restauranteurs and food purveyors such as the Max Group, Billings Forge, Market at 21 and others to get advice on potential market, locations, strategy.

Planting

Review of park renderings, plans, and historical photographs makes it abundantly clear that the character, species, and arrangement of plantings within the park have changed considerably since its founding. Understanding the historical evolution of the park's plantings is the key to understanding their current state, as the park is covered by a collage of trees and shrubs from every era of its history and attitudes towards the use of plantings have shifted in conjunction with changing attitudes towards the role of the park in the life of the city.

Historical Evolution of Plantings

In the 1988 tree care and rehabilitation plan, "Replanting Bushnell Park," the plantings are separated into four distinct historical periods: 1. the original Weidenmann plan, 2. the period from 1864 to 1943, 3. the Olmsted Brothers plan (which followed the burial of the Park River), and 4. the trees planted from 1943 to 1988. To these periods, we can add 5. the trees planted during the restoration of Bushnell Park and up to the current day.

The Weidenmann plantings can be differentiated from the park today by several characteristics. There is some historical evidence (see Curry and Pierce) that Horace Bushnell's intention was for the park to function as a kind of arboretum, a "natural museum of plant species." One of Bushnell's terms for the park was a "spacious ornamental ground," and it seems safe to assume that ornament in this case would refer not only to the undulating ground plane itself, but to the variety of plantings. There has been a dramatic decline in the variety of species, from Weidenmann's original 157 varieties of trees and shrubs, to a survey in the 1980s which indicated the presence of 75 different species, though it should be noted that even this reduced number includes both large specimens of unusual species such Cucumber Magnolia, Chinese Mahogany, Chinese Toon, and Hardy Rubber Tree and impressive specimens of more common trees such as London Plane, White Oak, Northern Red Oak, and Turkey Oak.

Along with variety, Weidenmann's plan also emphasized the use of evergreens and formal shrub plantings to frame views and direct movement through the park, as well as distinctly separating the park from the city – a move which reflects the origins of the American park movement in the desire to provide haven and respite from the industrializing city of the mid-19th century. The plantings were concentrated along the early paths, walkway intersections, and the banks of the Park River.

Only three specimens from Weidenmann's original plantings remain: the Cucumber Magnolia, a Northern Red Oak, and a London Plane, all large and magnificent exemplars of their species. These three trees, which are all found in the eastern half of the park, deserve special care and maintenance as they age.

The bulk of the mature plantings remaining in the park are roughly evenly divided between the second and third periods noted in "Replanting Bushnell Park," and so date from anywhere between 1864 and the execution of the Olmsted Brothers plan in the 1940s. Though they are not quite as old as the Weidenmann plantings, these trees include many equally magnificent specimens, including four state champion individuals (Chinese Toon, Hardy Rubber Tree, Turkey Oak, and Oriental Oak), and deserve great care and maintenance. The park also is reputed to contain at least one scion (offspring) of the famous Charter Oak, a specimen of Quercus alba which stood on Wyllys Hill for around seven centuries. Most sources point to the White Oak which sits just off Elm Street at the entrance from Clinton Street as the Charter Oak scion, but the Bushnell Park Tree Walk brochure points instead to the two massive White Oaks immediately west of the Hoadley gate.

Unlike the Weidenmann plan, the Olmsted Brothers plan emphasized canopy and flowering ornamental trees at the expense of evergreens and flowering shrub plantings, while the formal perimeter plantings were removed in favor of smaller, informal clusters of plantings. The Olmsted brothers plan also de-emphasized the edges of the park, distributing plantings more equally throughout the whole. These two changes served to produce a park that was visually more connected to the surrounding urban fabric, as the interior was no longer so heavily screened from the street.

The 1988 tree care and rehabilitation plan was intentionally divided into a series of smaller upgrades which could be carried out as individual projects, and many of those projects have been at least partially completed since then. These newer plantings aimed to restore some aspects of the Weidenmann plan, "redefining open lawn areas, screening the surrounding streets, and creating special entries areas." The grove of flowering cherry trees at the Hoadley Memorial Entry, the buffers of shrubs and flowering ornamentals that separate the pond and carousel from Jewell Street, and the allée of street trees along Trinity Street are typical examples of the plantings installed since 1988.

Overview of Existing Planting Conditions

The current character of the park thus reflects a hybrid of the intentions of the Weidenmann plan and the Olmsted Brothers plan. There is little to no shrub layer and few evergreens to be found in the park, producing clear views and open sightlines across the park, particularly in the north-south direction. But the 1988 restoration plan has resulted in an increase in the definition of edges and entries around the park.

The majority of the largest trees are distributed along the northern and eastern lowland (the former river's bed and banks), particularly in the eastern half of the park, and include major specimens of various species of Sycamores, Oaks, Lindens, Maples, and Elms. The path running east-west from the Hoadley Gate to the Israel Putnam statue is shaded by the canopies of many of these large trees, as is the older playground by the Pumphouse. Other large specimens are found scattered throughout the park, such as near the Spanish War Memorial Statue, the Israel Putnam Statue, and the Union Station Entrance.

The centers of both the eastern and western halves of the park are primarily open lawn, though it can be expected that the western half in particular will become more heavily shaded as the more recent plantings along paths mature.

The southern edge of the park along Elm Street, once the park's promenade and a popular destination for strolling, was originally lined by an allée of English Elms, but these were decimated in the later half of the 20th century by Dutch Elm disease. The 1988 restoration plan led to the reintroduction of canopy trees along this edge, but these trees have yet to mature and the edge is not entirely legible.

Since the latest tree survey we have found dates to 1988, maintenance should begin with a new survey and condition evaluation by a certified arborist. Along with this technical review, the plantings in the park should be evaluated both for their cultural significance – such as the Charter Oak scion(s) – and for the role that they play in shaping interactions between the park and the city, defining park spaces, and adjusting the legibility of the park's edges and entrances.

Paths

Many of the existing paths are from Weidenmann's original design, especially on the east side of the Park. The majority of the paths connect to the primary intersections at the park perimeter. The paths follow a series of informal, graceful curves connecting around and through the park, comfortably following the gentle slopes of the topography. There is one exception to the idea of gentle sweeps which is demonstrated in the tight curve of the path that sweeps across the foot of the Capital slope. This path, designed after the removal of the Capitol's Western Plaza (terrace overlook) in 1941, does not connect comfortably to the path network and should be evaluated for function and setting.

A cursory review of slopes and accessibility show the majority of the paths have gentle, fully accessible grades. Two general areas where accessibility is less than ideal is where slopes vary between 8-15%. The paths that rise toward the Capitol and paths connecting to the Hoadley Gate have slopes greater than 8%.

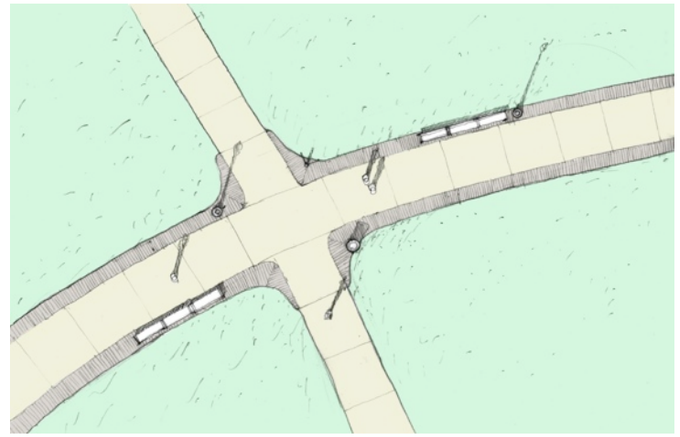
Further analysis will address accessibility and connections to areas not served as well as they could be. Further review will include path width and use, examining major and minor routes, and potential recommendations for adjustment.

Paving

Paving in the park is city standard concrete with some clear areas where maintenance vehicles and over-use has caused significant degradation of the shoulder planting and turf. Some areas are in

great disrepair, particularly on the eastern walkway from the Pumphouse to the Fox Gate and on the western path running from Union Station to the center of the park at Trinity. While there could be a variety of strategies for future park paving, path maintenance and vehicle access are critical factors to consider for the design.

One strategy would be to consider a hierarchy of paths that might have a special treatment, perhaps in a complementary material, of the heavily used "shoulder" of the path. Furnishings might occupy this area.



Heavily used paths could receive a special paving treatment on the "shoulder" to reduce damage and provide a furnishing zone (source: Michael Vergason Landscape Architects)

Materials needs to be carefully considered for durability, appropriateness, cost, and availability. A closer examination of paving throughout the park will identify potential areas for special shoulder treatment.

Furnishings

It appears that the original plans for the park did not include any park furnishings, yet clearly benches were intended be part of the effort from the start. It is unclear whether drinking fountains and trash receptacles, lights or signage were part of this design. We know that park users of the 19th century came particularly to sit and observe the people and activities in the place. By the early 1900s photographs record the existence of a number of seating areas in the park including Western Plaza, some of the main entrances, around the pond and set along some of the main paths.

Bushnell Park Foundation

Adopt-a-Bench Program

Celebrate someone you love by adopting a bench in their honor.

Create a lasting memory.

Perfect for weddings and anniversaries, births and birthdays, business gifts, in memoriam – or just saying "I love you."

Designed for the 1939 World's Fair, Bushnell Park benches are constructed of ipe wood and cast iron and feature circular armrests.

Your gift will assure continued years of use in the Park – Hartford's downtown jewel.

Name:

Address:

Telephone:

Email:

Yes, I want to adopt a bench!

Refurbish existing 6' bench _____ $500 Refurbish existing 8' bench _____ $700

Purchase new 6' bench _____ $1,000 Purchase new 8' bench _____ $1,200

Your entire donation is tax deductible to the extent permitted by law. The Foundation will provide a receipt.

The Bushnell Park Foundation will acknowledge your adoption with a plaque on your bench. 3 lines of text, up to 30 characters per line.

Please make checks payable to the *Bushnell Park Foundation*.

Detach and return to: Bushnell Park Foundation, P.O. Box 230778, Hartford, CT 06123

(860) 232-6782 BushnellPark.org

Furnishings in the park are scarce today, offering few opportunities for seating along main pedestrian paths and even along the Mall along Elm Street. Over time, the seating has both deteriorated and been vandalized. The existing bench style is a familiar bench, same as that used in Central Park in New York.

While this style feels appropriate to the place, the condition of these benches varies throughout the park. Some of these benches could improved through a power washing, others need a more comprehensive restoration. To address this, the Bushnell Park Foundation has instituted an Adopt-a-Bench Program.

A number of trash receptacle styles can be found throughout the park. The utilitarian green cans are found on the western side of the park around the Corning Fountain and a newer Victor Stanley model is seen around the pond.

To address furniture in a comprehensive way, the Park needs a furnishings plan, which would evaluate appropriate furnishing specifications including seating, trash receptacles and water fountains.

Maintenance

A reduction in city services has left the park with minimal maintenance staff. New work in the park will need to establish a maintenance plan, perhaps on the Bryant Park model, where operating expenses are matched and even exceeded by revenues from well managed park facilities and amenities.

Lighting

Existing Lighting - Types and Placement

Existing lighting types and placement of lighting in the Park may be seen in the adjacent plan, along with photographs of the fixtures discussed below. The spacing between poles in the Park varies considerably-ranging from approximately 53' o.c. to 150' o.c. -though several locations in the Park- around the pond, and at selected paths on the east side of the Arch- have spacing of approximately 80' o.c.

The typical lamp pole found in the pedestrian areas of the Park is a cast-iron B-Pole, finished in black. Topped by a white globe, the fixtures are approximately 10 feet high, and illuminated with a 175w metal halide lamp. Park entrances are marked with twin armed globe/pole fixtures. It is estimated that these date from the 1995 park landscape upgrade project. At this time we have not been able to identify the manufacturer(s), though Sentry, Spring City, Magni-flood, Visco, and Emery are potential sources.

A series of white globes- some incorporating ironwork- are installed on the brownstone piers to the north of Memorial arch. These are part of what remains visible of Trinity Bridge, which is otherwise buried below. These luminaires appear to be electrified versions of the original gas lamps as the brownstone of the piers has been cut to accommodate electrical conduit to the fixtures.

Around the Capitol, more ornate, gaslight inspired Lumec, "Hartford" lanterns are used, distinguished by a height of approximately 12 feet and the use of arms to support a gold dome over a globe containing a 150w high pressure sodium lamp. These fixtures are inspired by the dome of the State Capitol and are somewhat newer than the typical fixtures throughout the Park. These fixtures are also used exclusively at the Riverfront Recapture project.

Special lighting does exist at the two major architectural monuments in the Park. At Corning Fountain, fixtures were installed to celebrate the sculpture and the water, but these are in a state of disrepair and deferred maintenance. This installation includes 8 Widelite floodlights, a number of which are inoperable, and 8 Kim water-submersible fixtures, none of which are in use; their serviceability is undetermined.

At Memorial Arch, 4 poles, each with 2 ABS metal halide floodlights per pole, 6 floodlights mounted at the top of the Arch, and 2 uplight/downlights were surface mounted to the underside of the Arch. Of these, only one ABS flood was operational during inspection by the Design Team.

"Cobrahead" fixtures, produced by Union Metal, are used for most roadways bordering the park - Asylum, Ford, Jewell, Wells, and Elm - as well as on Trinity Street through the park. Bordering the park, the YMCA has facade lighting (not currently in operation) in the form of up/down lights between the blind arches. It provides an example of the concept of reinforcing the "urban room" of the park by illuminating the surrounding facades. This particular case, and the overall illumination concept will be addressed in detail during the design phase of iQuilt2.

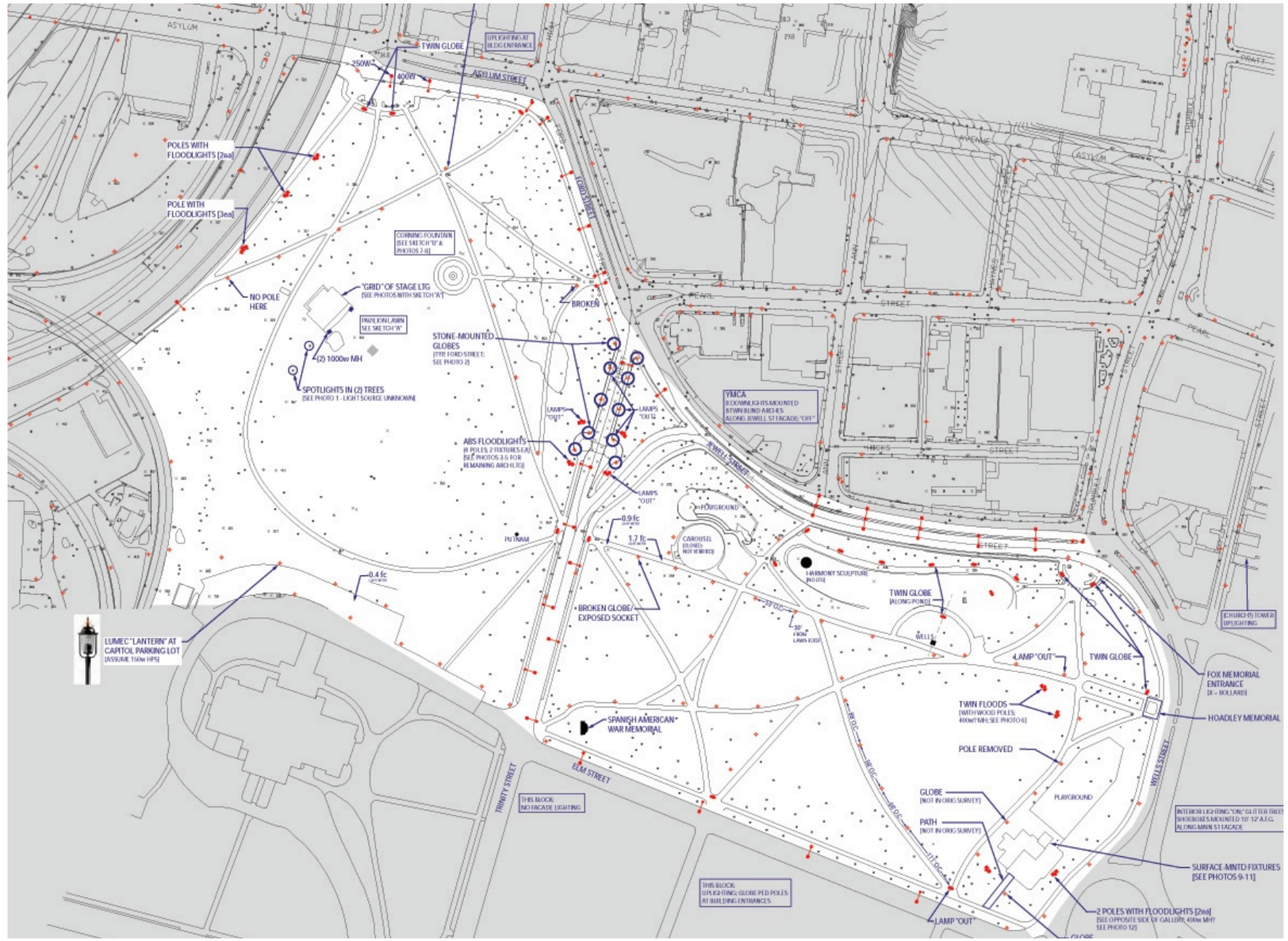
Moving forward into the next Master Plan phase, in the interest of energy efficiency and dark sky considerations, the possibility of replacing the existing globe luminaires with the Hartford luminaire could be explored for feasibility and historic "fit."

Preliminary Lighting Objectives for Bushnell Park

We propose the following as a preliminary set of lighting objectives:

Urban Wayfinding and Safety

- Improve park walkway lighting levels; both measured & perceived [vertical brightness] *



Lighting Inventory of Bushnell Park and surroundings
(source: Domingo Gonzalez Associates)

- Emphasis at park entrances & along key pathways
- Highlight key park elements
- Reinforce the sense of visual transparency through the park, connecting the central business district on the north to Elm Street and the Bushnell on the south, as well as Main Street to the Capitol from east to west
- Enhance visual acuity through the use of better color rendering sources [i.e. metal halide or LED]
- Possible use of color lighting to assist in wayfinding

Economy

- Capital Cost (Initial)
- Operational Cost (Maintenance)
- Energy efficient/long life light sources (Metal Halide & LEDs)
- Appropriate Standard of Durability

Drama / Identity

- Reinforce park identity through the use of distinctive historic light pole selection
- Explore a supplemental path lighting program to emphasize park circulation
- Highlight key historic elements (Monuments & Structures)
- Identify potential infrastructure upgrades to support Future Art installations, Seasonal Lighting Treatments, Holiday & Special Events, Performances
- Coordinate lighting with park furniture, planting, wayfinding, and identity programs
- Develop a strategy for lighting building facades around the park's perimeter to reinforce the sense of a large urban "room"
- Revisit and improve lighting at current key Park elements: Bushnell Gate, Carousel, Corning Fountain, State Capitol
- Develop a comprehensive program for lighting of the new water feature or brook
- Develop specific strategy for lighting proposed bridges across the water

Potential Economic Benefits of Park and Surroundings

One of the top goals for the iQuilt initiative, shared both by City of Hartford officials and leaders of downtown's cultural institutions, is to leverage public investments in public space and cultural linkages to spur further private reinvestment in downtown.

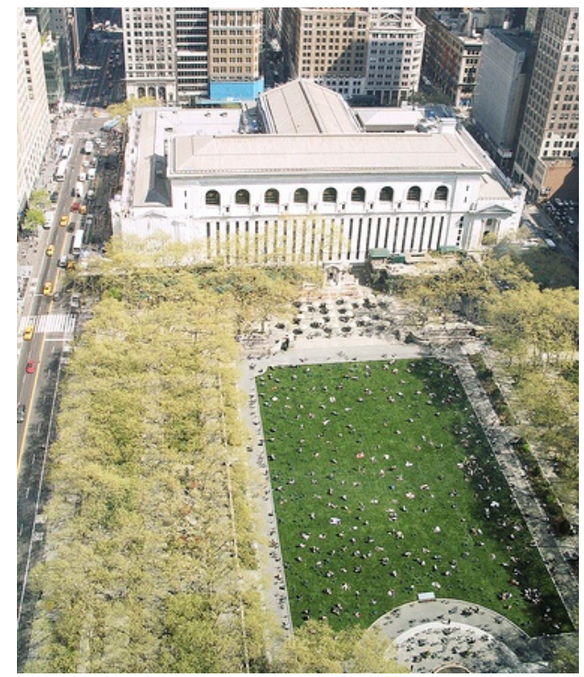
Since its inception, the economic role of Bushnell Park has been of keen interest to its champions and city officials. In 1869 Horace Bushnell himself observed,

> *Now the Park is universally popular – I do not know that it has an enemy. Millions of dollars would not buy the property...This one thing is now clear to us all, that everything in the outward look of our city has been improving since the Park was made. Our endeavors have courage in them; for we see that we can have a really fine city. Indeed, the Park has already added millions to the real estate values of our property... I [now] hear of it as being said every few days by one or another of the old economic gentlemen that opposed [building the park] with most feeling: 'After all, the best investment our city has ever made is the Park.'*

Parks can indeed increase the value of property, particular those which adjoin it and offer occupants landscape views. But park improvements require major capital investment, and the ongoing costs of maintenance and operation must be incorporated into any master plan. Few would argue that Bushnell Park currently enjoys a generous budget for maintenance; and the hoped for redevelopment around its edges has been slow in coming. While there are strong investments of new projects such as residential conversion of former commercial buildings, the construction of new residential towers, and the presence of some addition retail and restaurants, segments of the perimeter of the park have also suffered disinvestment in the form of empty buildings, demolished buildings, and surface parking lots.

New Park Models - Bryant Park

New models for the design, operation and maintenance of public space have evolved, in which operating expenses can be matched and even exceeded by revenues from well managed park facilities and amenities. A prime example is Bryant Park in New York. It is operated by a nonprofit corporation, which is committed to the operation of thriving facilities and programs which are financially self-sustaining, without public financing or subsidies. Design team member Dan Biederman is the cofounder and president of the Bryant Park Corporation.



The Bryant Park business model has now been successfully applied to numerous parks and public spaces in other American cities, and this plan will explore its applicability to Bushnell Park. This approach seeks to develop a specific, economically viable strategy for park programming. It considers existing and new uses, programs, uses, users, and facilities, and calculates what the park can reasonably be expected to sustain.

Bushnell Park to Tower Square

Considering previous analysis and input, the team will focus on the revenue potential of the eastern end of Bushnell Park, from Trumbull to Pulaski Circle, and the "Four Corners": the proposed Bushnell Gate extension combined with Tower Square and Gold Street (see Bushnell Gate and Tower Square in Section 3: "GreenWalk Extensions"). This cluster of spaces lies at the geographic centroid of the iQuilt and the network of cultural destinations. But location alone is not sufficient to assure its success, which depends most heavily on a reliable base of users.

Calculating the Viable Area for Downtown Hartford

A key first step is to identify a viable amount of programmable, revenue-generating public space in relation to the number of people needed to enliven and sustain it. From this is derived the acreage which can be programmed - one which is big enough to support the opportunity, but not so big as to lose the visitor density necessary for success.

In some urban settings, a large surrounding residential population or large numbers of tourists could be counted on to activate a park space, but this is not currently the case in downtown Hartford. To avoid overly optimistic projections of expected users, Biederman recommends a conservative approach to calculating viable acreage by basing it primarily on the number of nearby office workers - the most reliable potential pool of users.

Downtown Hartford likely to depend most heavily, as does Bryant Park, on nearby office workers using the park at peak times: lunch hour and just after the work day. This forms the economic base of the park business plan. Residents and visitors can add to the mix, but as compared with cities such as New York or San Francisco, we will assume that, in the short term, Hartford's relatively small student, residential and tourist populations will contribute only a modest amount to the user population. Similarly, residents of surrounding suburbs, though large in actual numbers, will be assumed to constitute only a minimal percentage; that could change if downtown becomes a true regional draw, but it will not be assumed at the start.

The design team has been collecting data about the size and location of the current workforce population in downtown Hartford (the team is fortunate to have access to a wide range of data and analysis from Jon Putnam, Executive Director of Cushman & Wakefield of Connecticut, Inc.).

Catchment Population

We have assumed conservatively that the walkable catchment population is within a 1000-foot radius of the project area, based on the distance that workers might normally walk to a park on a regular basis at lunch hour and after work. 1000 feet represents a 4-minute walk at average pedestrian speed. We are also calculating the catchment population within a 1250-foot radius (5-minute walk) and 1500-foot radius (6-minute walk), but will not depend on those more optimistic projections.

Capture Rate

Whatever the catchment population is, only a small percentage will use the park on any given day. The Biederman firm recommends using a conservative rate of 1% (by contrast, Bryant Park has an extraordinarily high rate of 4%).

Density Standard

The density standard is the minimum number of people per acre of public space needed to create the necessary liveliness and economic activity for successful public space. This number may vary in different cities and different cultures. Pittsburgh's Schenley Park has 130 people per acre; London's Trafalgar Square has 150; and Bryant Park typically draws an unprecedented 800 people per acre. For Hartford, we are using a density goal of approximately 125 people per acre.

Estimating the Size of the Catchment Population

We have now gathered enough data to make a preliminary estimate of the number of people who could be expected to visit the east end of Bushnell Park and Tower Square at peak times.

If we set the centroid exclusively on the eastern area of Bushnell Park near the Trumbull Street entrance, we have a 1000-foot catchment population of approximately 15,300 workers. If the centroid is shifted eastward to Tower Square, we obtain catchment population of approximately 14,800 workers.

The two centroids are approximately 750' apart, or a 3-minute walk. If they could be physically and experientially linked as an integrated, attractive public space - in a kind of barbell configuration with focal points at each end (as has been proposed in the "Bushnell Gate" concept) - the numbers jump dramatically to more than 30,000 workers within 1000 feet.

Estimating the Size of the Programmed Space

If we used eastern Bushnell Park as the centroid, a 1% capture rate of 15,300 workers would yield 1,530 workers at the park at peak hours. The density standard then suggests that the programmable area should be no larger than 1.25 acres. If the Tower Square centroid is used, a 1% capture rate of 14,800 works

Analysis drawings of potential catchment area and population, market share, visitor density, and programmable area for revenue generating public space in Bushnell Park and Tower Square (source: Biederman Redevelopment / Suisman Urban Design)

would yield 1,480 workers at the park at peak hours, suggesting a programmable area no larger than 1.18 acres.

If the two centroids could be effectively combined as an integrated public space sequence, a 1% capture rate of 30,100 workers would yield 3,010 workers at the extended park space at peak hours, suggesting a programmable area no larger than 2.4 acres. It may be helpful to compare this to Bryant Park's programmed area, which is approximately 5.8 acres.

These numbers, ranging from 1.18 acres to 2.4 acres, suggest that the programmed area should initially be relatively small, but with room to grow. Expansion would be justified if any of the following occurred:

- the nearby worker population expands
- workers prove willing to walk further than an average of four minutes (for example, because walking conditions or attitudes change)
- the capture rate increases (for example, because of the park's popularity)
- the residential population increases and residents use the park heavily
- the tourist population increases
- the student population increase

Development of Preferred Programming

Once the size and location of the programmed area is identified, the roster for activities would need be developed. Some of these may already exist in the park; some may be new but reflect local culture and preferences; other new activities may be introduced which are imported from other cities or even countries, but with a record of popularity in similar parks.

The key for Bushnell Park or Tower Square, as elsewhere, is to look for activities which are unique, create excitement, and draw regular visitors. Bryant Park currently has 25 different activities and programs, from food and free WiFi to Tai Chi and skating. The French game pétanque has developed into a popular pass time and draw; ping pong has also proven to be extremely popular. Programs may also be unique and local (in Atlanta, NASCAR and football are generally popular and are proving popular as themes for activities in Olympic Park). In downtown Hartford, learning and culture-based based activities may prove most attractive. The various arts, musical and performing arts venues can contribute programming. Further examples include:

Food vending

This can include carts, kiosks, and in some cases pavilions - permanent or temporary - which can be used for special occasions.

Ice skating

This seasonal activity which generates weekend and evening usage, and collateral food consumption. There is a long tradition of skating in the park, with references to it as early as 1863, and the recent success of the temporary rink in Bushnell Park firmly establishes public interest. In some cases, as at one location in downtown Baltimore, permanent rink infrastructure results in less desirable space when the rink not in use. Bryant Park has a setup / takedown rink which is 160' x 100'- bigger and more popular than Rockefeller Center. There is a supporting Warming Tent of 9000 s.f., which houses the skate rentals, storage, and children's area (the rink is organized by "Ice Rink Events").

Music

Regular casual, ambient performance, as well as paid events (there is a long tradition of musical performance in Bushnell Park, with references dating back to 1865).

Reading

Bryant Park has the *Bryant Park Reading Room* - carts which offer various reading materials for park visitors. Today's program extension of the Reading Room includes author talks, book collections. This program was staffed by volunteers and now by students who receive nominal pay. The program costs roughly $85K in New York, and would probably cost $35K+/- in Hartford. The Hartford Public Library could use such an idea as an extension of its public programming.

As this list develops, based on stakeholder and public input as well as economic analysis, the design team will solicit ideas and involvement from potential participating institutions such as the Hartford Public Library, the Wadsworth Atheneum, the Hartford Symphony, the HartBeat Ensemble, City Arts on Pearl, Hartford Stage, the Science Center, UConn's Balard School of Puppetry, and The Bushnell, along with restaurant and concession operators and entrepreneurs. This consultation will be a key part of the programming process.

Estimating Cost of Programming

As the list of programs is developed, it will be important to obtain estimates of the cost of programming. The goal is to assure that activities and facilities are self-sustaining.

Estimating Potential Revenue

For each activity, it will be critical to identify sources and amounts of potential revenue. How does the programmed activity pay for itself and benefit the community? A balanced budget is required once the project has established itself.

In the final GreenWalk Master Plan, the Design Team will outline specifics about the square footage of programmed area, more refined program types, and preliminary pro forma financials for the self-sustaining programmed amenities envisioned for Bushnell Park and Tower Square.

Summary

In all regards, this report attempts to look back at the historic layers of Bushnell Park in order to look forward to revitalization and renovation. Current city needs and aspirations demand that the park take on a more integrated and engaged role in the life of the city. Carefully balancing the pressures of increased use and popularity will mean greater need to impose a maintenance structure and staff to support it. While the bones of the place are strong, maintenance and guidelines are critical. The reintroduction of water however, is no small moment in the history of this place. The design challenge is to integrate all these disparate needs with upgrades that make it feel fresh and energized yet reflect an inevitable step in park and city history.

2 Gully Brook Technical Review

Background

As noted previously, the meandering Park River was rerouted to a straight underground conduit in the 1940s, due to repeat flooding in the 1930s. Though the psychological and financial impact of the floods was severe, so was the impact of the undergrounding of the river. The cost was high, the physical destruction of the natural and urban landscape was significant, and the damage to Horace Bushnell's original vision of riverside parkland would be hard to overstate.

At the time, the science of flood control probably offered few alternatives. Today, it is unlikely that such a drastic step would have been taken, given new technical capabilities in flood control, and changed attitudes about environmental protection. A kind of collective regret of the necessity of burying the river has, over the years, led many Hartford residents to dream not only of lifting the Park River back up to the surface - "daylighting" it - but also rerouting the waters back to their former serpentine course near the northern edge of the park, freeing the waters from their concrete conduit beneath the southern park lawns.

Consultation with many experts, officials, and stakeholders leads the team to conclude that such a project is not feasible, and perhaps not advisable. The costs and disruption would again be enormous; the waters of the Park River remain significantly polluted, and the risk of flood would remain.

However, in 2008, officials at the Metropolitan District Commission proposed an alternative. A second, smaller watercourse, named Gully Brook, had once flowed into the Park River near Union Station. When the Park River was placed in an underground conduit, so was Gully Brook. The MDC suggested that, if the Park River could not feasibly be daylighted, Gully Brook could. Its waters, though significantly smaller in volume, would for the most part be exceptionally clean. The MDC floated this concept, along with some preliminary drawings, and received a ringing endorsement from the Hartford Courant. But the time may not have been ripe, and some park stakeholders were concerned about a large but uncertain project that might have major impacts on the park.

Public Process

In 2009, the iQuilt team reviewed the Gully Brook concept, and felt it had great potential to restore Bushnell's original vision, to activate downtown's public space, to generate economic activity and investment, and to create a memorable link between cultural destinations. The restoration of moving water in Bushnell Park became a signal feature of the proposed GreenWalk. Working closely with the board of the Bushnell Park Foundation, the iQuilt team received a strong endorsement when the Foundation board, in December 2009, voted to recommend proceeding with the iQuilt, the GreenWalk, and the potential for restoring moving water to the park.

Working Group

Camp Dresser & McKee (CDM) had prepared the early MDC Gully Brook daylighting concept drawings, and so was very familiar with the proposal and the technical issues involved. As a consultant to the MDC, CDM and MDC staff are now part of working group with the iQuilt team to explore options for bringing back water into the park.

Stakeholder Input - Gully Brook Workshop (1.18.11)

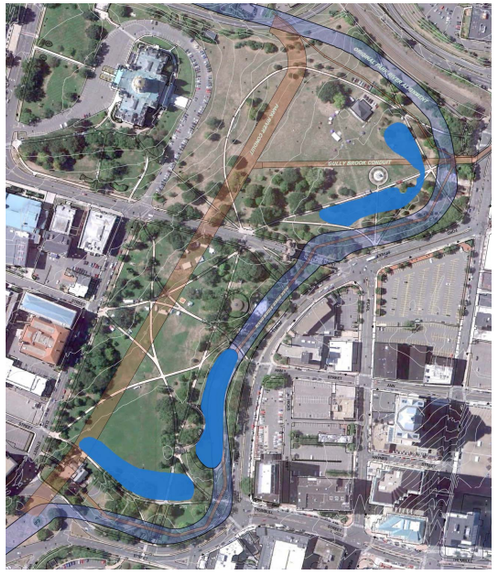
As part of the kickoff process, a focus workshop on Gully Brook was conducted at the Bushnell on January 18. Tim DuPuis of CDM and Carl Bard of MDC provided the following input:

Technical Parameters

- Gully Brook could be the source of water for any daylighting considerations because the quality of water, after CSO improvements, will be good.
- A pump station will be required to 'lift' the Gully Brook water from the Conduit to daylight, most likely located at the west end of the park
- 262 acres is the drainage area to the headwaters of the Gully Brook Conduit at Keany Park
- 1286 acres is the full drainage area to the Gully Brook Conduit (this is inclusive of the 262)
- Conduit base flow is 1-2 MGD, approx. 700 to 1400 GPM
- Fall is 5-6 feet over approximately 2400 linear feet, approx. 0.25% (from the Union Station Gate to the Pumphouse)
- Restored water element would need to be lined in order not to lose the majority of water to infiltration
- A 1 year storm event presents the possibility of sewage overflow that could require temporary cut-off of flow through the park.
- 105 acres is the drainage area/catchment of the downtown area that could be used as surface runoff (stormwater) to the water feature. It is bounded by the park to the south, Main Street to the east and I-84 to the north and west.

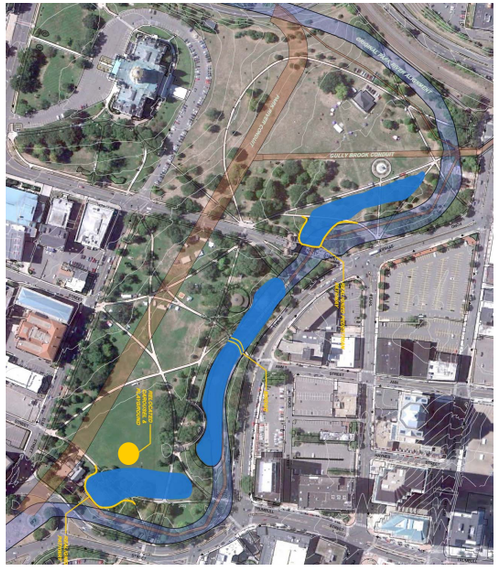
Preliminary Daylighting Options

CDM offered a series of daylighting options ranging from lesser to greater intervention. All scenarios have the option to use the available water from Gully Brook. Estimated base flow is 1 to 2 million gallons of water per day within the catchment of the Gully Brook Conduit. Consequently, the volume of water flowing through the park in the daylighting options is more characteristic of a 'brook' than the substantially greater volume of flow associated with the Park River. Each scenario can be evaluated for impact to the existing site and, eventually, relative cost. The options are summarized below.



Option I - Three Ponds

(source: MDC / CDM)



Option II - Interrupted Streams / Serial Ponds

(source: MDC / CDM)

Option I – Three Ponds

Option I preserves the existing pond and adds two new ponds of similar size. The first is at the western end of the Park in association with the Corning Fountain; the second is at the eastern end of the Park in association with the Pump House. The three ponds could be operated independently with make up water drawn from the Gully Brook Conduit, or they could be connected by underground pipe through gravity flow. The precise placement and configuration of the additional ponds could be refined to preserve all the 'land bridges' into the Park and minimize tree impacts.

Among these three options, Option I is the least expensive and has the least impact on site and trees, but also the least impact on the experience of the Park

Option II - Interrupted Stream/Serial Ponds

Option II explores a hybrid between a series of ponds and a continuous stream. It imagines a new body of water in the western end of the Park 'flowing' to and 'under' the Trinity Bridge. The grades on the west side of the bridge would be excavated to reveal the original arches. The existing pond is expanded to the west to produce the longer proportions of a stream, stopping short of the bridge and allowing the retention of the northbound lanes of Trinity Street. A pedestrian bridge is added near Jewel and Ann Streets. The carousel is relocated to the east end of the Park, where a second new pond is added in area of the Pump House. The land bridge at the Fox Gate is preserved and the path at the Hoadley Gate is redirected around the southern end of the new pond. The ponds are interconnected underground to provide a continuous turnover of fresh water, but on the surface they would appear to be three separate features. Each pond would be lined and might contain an aerator or other mechanical device to both improve water quality and add the effect of water movement

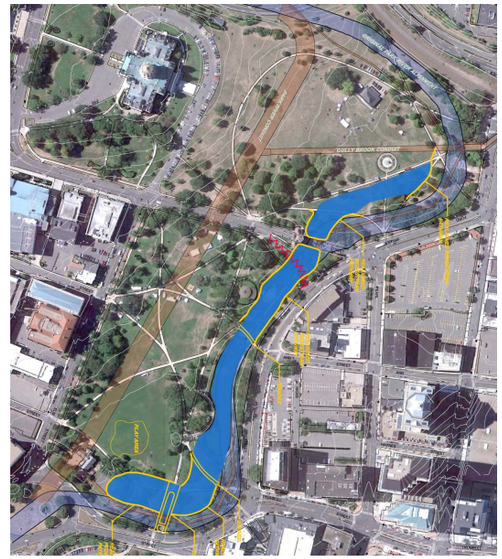
Option II stakes out a middle ground between stream and pond. It allows for a partial revelation of the Trinity Street Bridge, a significant increase in quantity of water in the Park, and considerable flexibility in the configuration of the water to work around the best trees. Costs would fall between Option I and Option III.

Option III – Continuous 'Flowing' Stream

Option III restores water in the park to a form closely resembling Bushnell's original vision for the park. It provides for a continuous 50' wide stream-bed originating near the Union Station Entrance and dropping back into the conduit at the Pump House. In general length and scale, it resembles the Park River, whose width within the Park ranged from 50' to 125' in 1940. However, because the base flow from Gully Brook is only a fraction of the flow volumes and velocities of the Park River, the 50'-wide channel would carry only 4" of water under normal conditions. In addition, the section is designed to accommodate as much as 2' of stormwater storage for treatment of runoff from the 105 acre drainage area/catchment of downtown north of the Park.

The Trinity Street Bridge would be excavated and restored, while additional bridges would be reintroduced in roughly their historic locations. The diverging northbound lanes of Trinity Street would be eliminated, so that both northbound and southbound traffic would pass under the Memorial Arch. The carousel would be relocated to the east, and the playgrounds consolidated near the Pump House.

While this option is the most challenging from an engineering, tree preservation, and cost standpoint, it offers the most transformative effect to the park, with the most complete restoration of the park's most scenic and dramatic feature, as well as the greatest potential ecological benefit.



Option III - Continuous 'Flowing' Stream

(source: MDC / CDM)

Summary

The work done be MDC and CDM provides an excellent foundation for continued work. Further explorations of variations and hybrid approaches on the daylighting of Gully Brook will be a centerpiece of the thinking about Bushnell park and an integral piece of the strategies for the GreenWalk.

There is a clear priority to bring water back into the park in as continuous an element as feasible. Work will continue evaluating alternative treatments of the watercourse, including varying the width of the edge, depth, origin and terminus, geometry, and character. Explorations of the water in the park need to be carefully integrated and balanced with other park elements and upgrades including tree preservation expanding program, special event use, long-term and short-term maintenance. The next phase of design exploration will be working with each of these things to refine the options for water as a fully integrated element in the park.

Preliminary Terrain Assessment within Park

Slope analysis

The Park's topography is shaped by the lost trace of the Park River. The curves of the river flowed along the northern edge of the park, mapping the edges of modern Asylum Avenue, Ford Street, Jewell Street, and Wells Street. This edge is now the lowest part of the park; particularly at the eastern end. The park sits noticeably lower than the adjacent streets. Moving south from the former riverbed, the park slopes rapidly upward to meet the State Capitol on its hill. The primary grade changes in the park, then, are from north to south. From east to west, the park does slope gently towards Downtown and the Connecticut River, but this slope is quite gradual – approximately five feet from one end to the other.

This topography informs potential daylighting strategies. The most natural location for bringing flowing water back to Bushnell Park is along the former riverbed, as it remains a valley even where it is dry, but the gradual east-west slope dictates that daylighted water will flow gently and every effort will need to be made to effect the feel of flowing water within the Park.

Costs and Potential Economic Benefits of a New Water Feature

MDC will be able to provide the group with cost estimates once the form of water feature and the extent of water flow are better defined. Refinements to the water element's form and function are necessary to establish a cost range for the effort and determine any associated economic benefits.

Potential List of Components for the New Brook

The following is a general list of components and materials associated with bringing water back into the park. A detailed budget estimate will be developed and further refined as the design progresses.

- Pump in Bushnell Park near Asylum Street to lift water out of the Gully Brook conduit
- Associated plumbing at origin and terminus of water feature
- Basin membrane/liner for full length of water feature
- Hardscape at brook basin and edges as defined
- Softscape at brook basin and edges as defined
- Planting: Canopy trees, understory plantings, groundcovers at limit of disturbance and perimeter of the water
- Riparian planting and raingardens along Jewell Street with associated plumbing, materials and underdrainage
- Stone step bridges, across water
- Excavation and restoration of Ford Street Bridge
- New pedestrian bridges
- Lighting of paths and bridges

Sketch from March workshops showing one option for the new brook in Bushnell Park
(source: Michael Vergason Landscape Architects)