



Concept Plan Report

Devereux Meadow Park

November 15, 2022

Credit: DesignWorkshop

PREPARED FOR

City of Raleigh

Parks, Recreation, and Cultural Resources
Department Park Development and
Communications Division

PREPARED BY

Tetra Tech Engineering, P.C.

4000 Sancar Way, Suite 200
Research Triangle Park, NC 27709
Tel 919-485-8278 tetratech.com



Credit: DesignWorkshop

The primary authors of this report are:

Jonathan Smith and Rob Sok - Tetra Tech Engineering, P.C. – Research Triangle Park, NC

Emily McCoy and Lindsey Naylor - Design Workshop, Inc. – Raleigh, NC

Kevin Tweedy and Emmett Purdue - Ecosystem Planning & Restoration – Raleigh, NC

City of Raleigh Project Manager:

Gary Claiborne, Capital Project Manager – Parks, Recreation, and Cultural Resources Department; Park Development and Communications Division for the City of Raleigh

The Devereux Meadow Park Design Resource Team and the project Stakeholder Committee provided input throughout the design development.



TETRA TECH

DESIGNWORKSHOP



ECOSYSTEM
PLANNING &
RESTORATION

CONTENTS

1. EXECUTIVE SUMMARY.....1

2. PROJECT OVERVIEW2

 2.1 Project Stages.....2

 2.2 Site History.....3

 2.3 Site Description 11

 2.4 Site Environmental Conditions..... 16

 2.5 Remedial Investigation..... 18

 2.6 Public Engagement Strategy.....20

 2.7 Project Timeline.....21

3. CONCEPT ALTERNATIVES22

 3.1 Concept Alternative 1 - Line Drive.....23

 3.2 Concept Alternative 2 - Sculpt.....25

 3.3 Concept Alternative 3 - Meander.....27

 3.4 Stream Restoration Comparison.....29

 3.5 Concept Alternatives Cost Estimate.....32

 3.6 Concept Alternatives Public Engagement.....32

 3.7 Community Feedback to Concept Alternatives33

4. Concept Plan.....34

 4.1 Concept Plan Design38

 4.2 Concept Plan Cost Estimate43

 4.3 Concept Plan Public Engagement43

 4.4 Community Feedback to Concept Plan.....44

5. NEXT STEPS46

Appendix A-G..... Attached

1. EXECUTIVE SUMMARY

The City of Raleigh Parks, Recreation and Cultural Resources Department (PRCR) is in the planning and design process for a proposed new urban park in north downtown Raleigh. The project site, known informally for many years as “Devereux Meadow”, is a 14-acre City of Raleigh-owned property currently used as a city maintenance yard and vehicle fleet facility. The City of Raleigh intends to convert this property into a natural and passive urban park.

A majority of the site is currently covered by buildings, pavement, relic building slabs, and other infrastructure. Testing on the site has identified the presence of contaminated groundwater. While these site characteristics provide several challenges to park implementation, they also provide opportunities for park features and amenities.

The project began in 2017 with PRCR initiating a process to better understand constraints of the site. Using feedback from multiple stakeholders and engagement with the public, three concept alternatives were developed in 2021. In 2022, results of an additional round of public engagement along with an improved understanding of site constraints resulted in the development of a concept plan which met the City’s project vision. The concept plan proposes the entire site be converted into a passive, urban park space offering passive recreation experiences including walking paths, gathering spaces, and naturalized areas. The plan is centered around the restoration of Pigeon House Branch, which includes new alignment of previously culverted portions of the stream in the southern area of the site.

Key features of the concept plan include:

- Complete removal of existing buildings and pavement
- Site remediation to address

contaminated groundwater and soil

- Restoration of Pigeon House Branch
 - Daylighting of the culverted sections of the stream
 - Relocating a portion of the stream into a natural alignment
- Development of a natural and passive park
 - Pathways and plaza areas
 - Flexible gathering spaces in open lawns or wooded areas
 - Various landscape areas including mowed lawns, meadows, ornamental beds, riparian and wooded areas, landscaped buffers, and preservation of an existing oak tree line
 - Graded landforms
 - Stormwater management practices to address on-site and off-site stormwater runoff

During the November 8, 2022 general election, the 2022 Raleigh Parks Bond measure was approved by Raleigh voters. The 2022 Parks Bond, along with the original project funds from the 2014 Raleigh Parks Bond and other city funding opportunities, provides the capital for project design, permitting, site remediation, and construction.

On November 15, 2022, Raleigh City Council formally approved and adopted the Devereux Meadow Park Concept Plan. At this same meeting, Council also formally approved a project name change. Starting November 16, 2022, this project will now be known as Smoky Hollow Park.

The next phases of work include environmental remediation planning and implementation, design, permitting, and construction.

2. PROJECT OVERVIEW

The Devereux Meadow Park project is part of the City's long-term vision for improved transportation and an expanded parks system. The City's 2012 Capital Boulevard Corridor study identified the project site as a potential location for a new public park to serve area residents. The study looked at ways to provide improved transportation along Capital Boulevard and the park was identified as a possible gateway for a new greenway connecting downtown Raleigh to the existing Crabtree Creek Greenway.

In 2015, a Downtown Plan prepared by Sasaki Associates, Inc. for the City of Raleigh

identified biking and walking connections to link downtown Raleigh with neighborhoods and parks city-wide. In 2017, the City of Raleigh contracted with the Tetra Tech Engineering P.C. team, which includes Design Workshop and Ecosystem Planning & Restoration (Project Team) to proceed with investigation and conceptual design of the proposed park.

This report documents the development of concept alternatives for Devereux Meadow Park and the subsequent development of a concept plan reflective of preferences and comments obtained through a public engagement process.

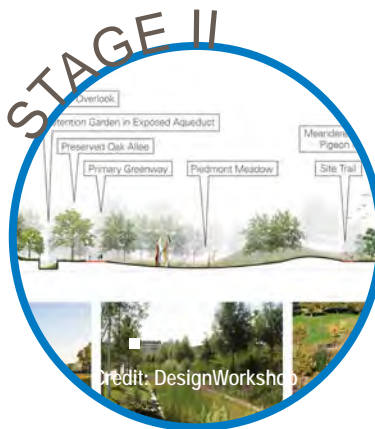
1.1 PROJECT STAGES

The project is being implemented in three stages based on the sequencing of site investigations, design process, and funding availability.



2017-2020

- Environmental Site Analysis and Constraints Assessment
- Phase II Environmental Site Assessment
- City Office Building Vapor Intrusion Study
- Engagement with Environmental Regulators



2020-2022

- Topographic Survey
- Public and Stakeholder Engagement
- Preliminary Remedial Investigations
- Conceptual and Schematic Design



To be determined, based on future project funding

- Complete Remedial Investigations
- Site Remediation
- Design Development/ Construction Documents
- Permitting
- Contract Bidding
- Construction

1.1 SITE HISTORY

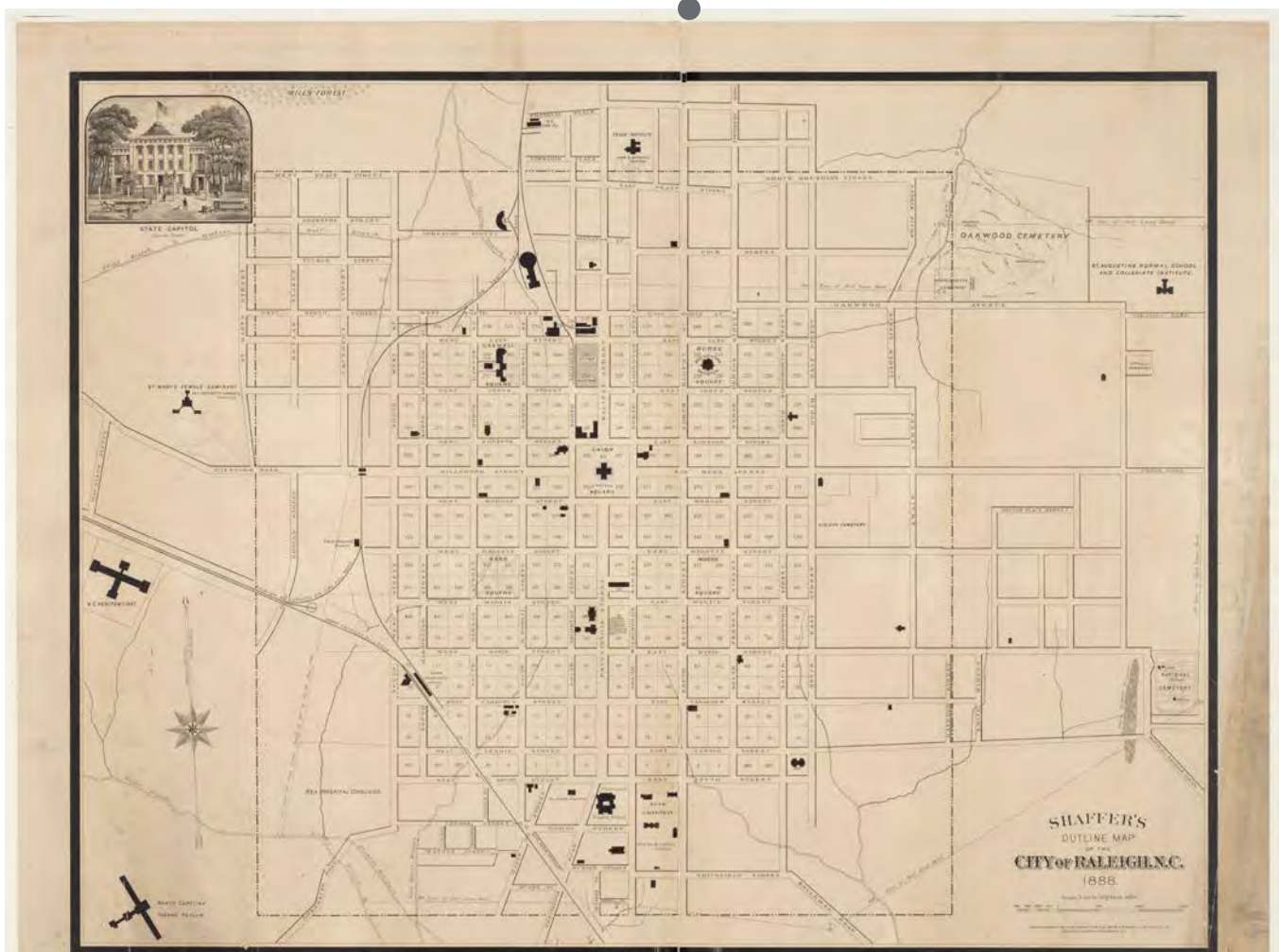
The Devereux Meadow Park project site has a rich, complex history tied to moments in Raleigh's past.

The earliest known use of the area around current day Raleigh dates to indigenous Native American groups who lived nearby. Both the Occaneechi and Tuscarora people used what is now Wake County as a hunting ground.

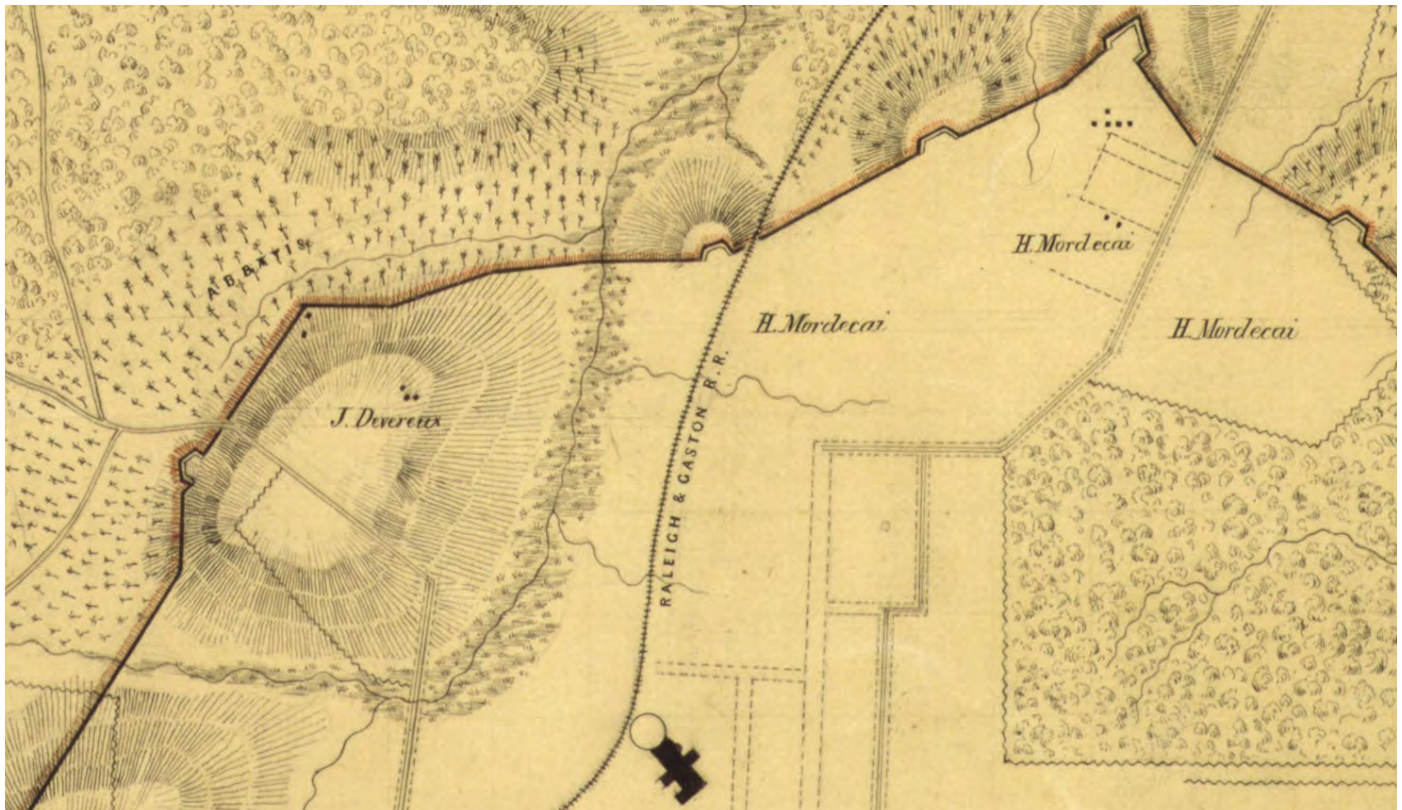
Starting in the 18th century, the site was included in several large landholdings owned at different times by the Halton, Lane, Mordecai, and Devereux families. In her 1906 memoir titled *Plantation Sketches*, Margaret Mordecai

Devereux noted that the land was part of the land grant her great grandfather, Joel Lane, received from the Crown prior to the American Revolution. Joel Lane's extensive grant covered today's downtown Raleigh and much of the adjacent areas.

The 1888 map of Raleigh below shows the outline of the original Joel Lane Deed. In the upper left, Will's Forest is visible.



1888 Shaffer's Outline Map of the City of Raleigh



1873 Map indicating Devereux and Mordecai land holdings

For reference, the Raleigh & Gaston Railroad line seen intersecting the image can be found in the upper left of the Shaffer's Outline Map on the previous page.

Moses Mordecai acquired 958 acres of land when he married into the Lane family in 1819. Moses' parcel included the area of today's Mordecai Historic Park, as well as the area of Devereux Meadow, Fred Fletcher Park, and beyond. In his final will, Moses bequeathed his home (the Mordecai House) to his eldest son, Henry, and divided the land among his heirs.

The land would eventually be passed down to Ann Willis "Nancy" (Lane) Mordecai. Between 1840-1844, Nancy established a home and plantation called "Will's Forest" which included the area now known as Devereux Meadow. In modern context, the house at Will's Forest stood on the east side of Glenwood Avenue between today's Devereux Street and Will's Forest Street.

In 1854, Nancy's daughter and son-in-law, Margaret and John Devereux, Jr., inherited Will's Forest, which they continued to operate as a plantation. John Devereux, Jr. was born in Raleigh into a wealthy family with extensive holdings of property and people. The greater Devereux family were among the largest slave-owners in North Carolina and owned many plantations in eastern North Carolina, including Conacannarra, Feltons, Looking Glass, Montrose, Polenta, Barrows, Runiroi Meadows, The Lower Plantation, and Over the Swamp, as well as the property in Raleigh known as Will's Forest. Margaret Mordecai Devereux estimated that the family owned "between fifteen and sixteen hundred negroes" prior to emancipation in 1865.

In addition to being a southern planter, John Devereux, Jr. occasionally practiced law and served the Confederacy as an officer throughout the Civil War. In 1861, Major John Devereux was appointed Chief Quartermaster for North Carolina, a position overseeing the outfitting and feeding of North Carolina troops.

During the Civil War, the project area may have included earthwork structures, many of which were possibly built by enslaved people. Union troops may have camped on the project site, which was then referred to as “Devereux Grove.” There is also a later reference to the property having a millpond that was locally referred to as “Mordecai’s millpond.”



Circa 1906 *Will's Forest home*



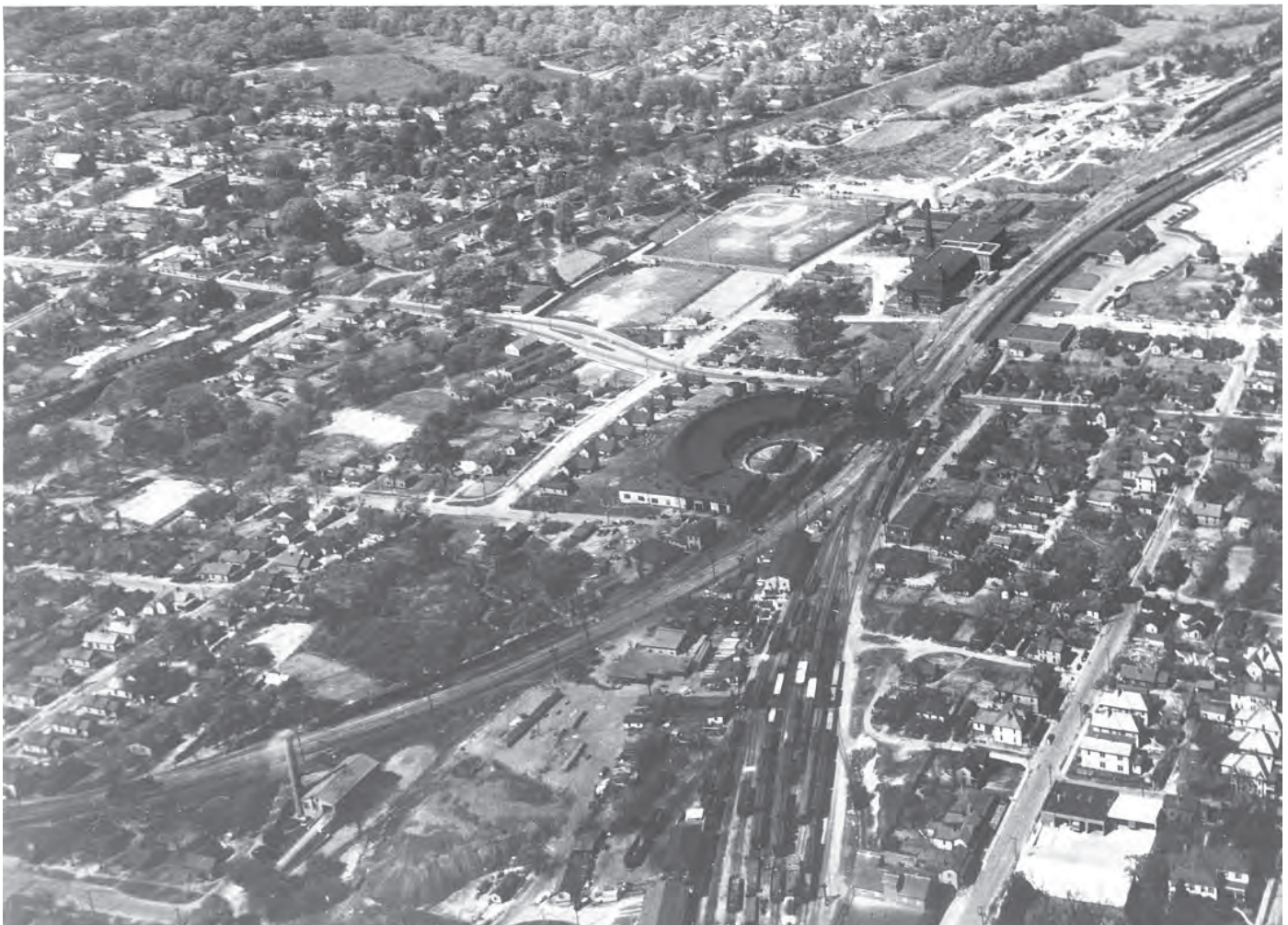
1865 *The Devereux family poses in front of the Will's Forest home*

John and Margaret Devereux continued to live at Will's Forest after the Civil War yet faced financial difficulty as former slaves claimed freedom and left to establish their own lives. A work contract from 1867 between John Devereux and "Miles Warren, freedman" suggests an attempt to continue farming at Will's Forest with the use of paid labor. However, debt eventually required John and Margaret to sell portions of their land and look to other business pursuits for income.

After John Devereux's death in 1893, Margaret sold the Will's Forest house and attached properties to various investors for development. Margaret lived the remainder of her life in

a home on North Person Street. John and Margaret Devereux are buried in Oakwood Cemetery.

Around the end of the 19th Century, there is the first documented instances of the project site being used as a gathering place and as a public playground including public ball fields and other recreational uses. At the same time, newspaper accounts began using the term "Devereux Meadow", "Devereux Grove", and "Devereux Playground". Several communities developed around this area of Raleigh as well as the construction of a new railroad. These communities were referred to as Brooklyn and Smoky Hollow.



1945 *Smoky Hollow and Seaboard neighborhoods*

“Devereux Meadow” is mentioned to be a community gathering space by several of the neighborhood churches. Several mills were built nearby such as Pilot and Cotton Mill along with houses for the mill workers in the Smoky Hollow community. Nearby neighborhoods around the project site, such as Smoky Hollow, were residential communities until the 1950s when

both African American and white families were forcibly removed from the neighborhood and their homes demolished.

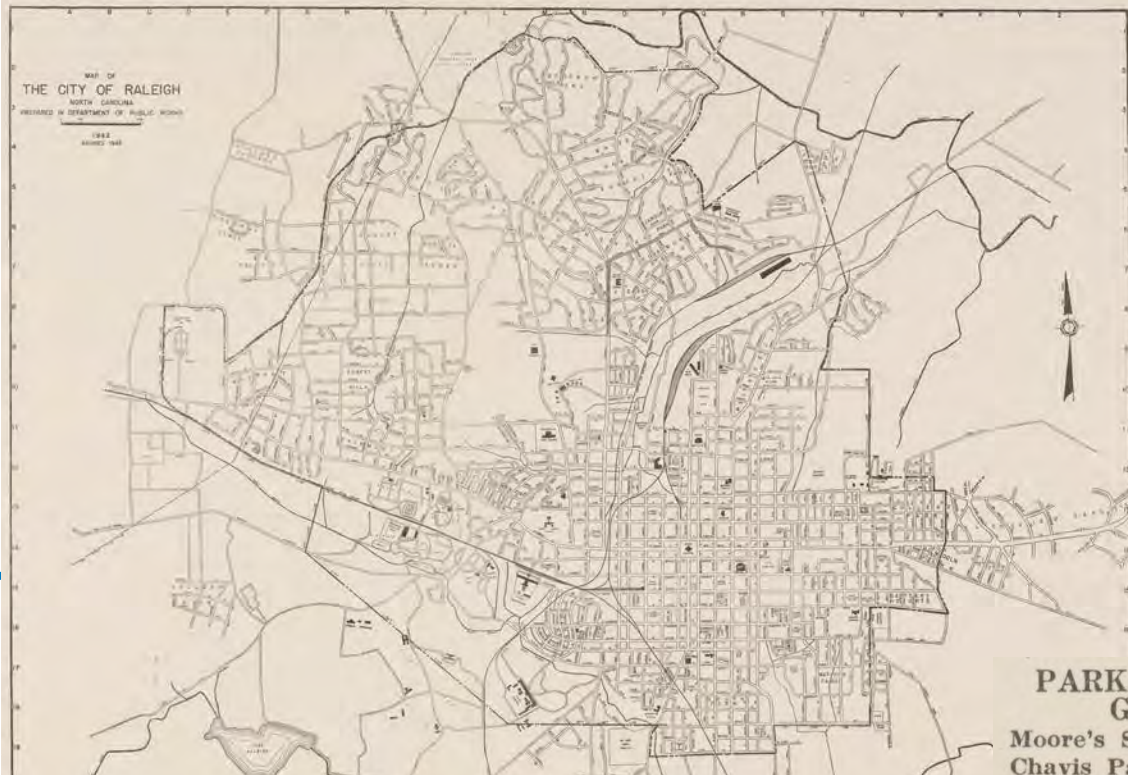
In 1940, a baseball stadium was constructed on the southern portion of the site using funds from the Works Project Administration (WPA).



1938 Corner of Peace Street and Dawson Street looking northwest



Undated Devereux Ballpark



1938 Excerpt from Raleigh Chamber of Commerce map

After continued development, the project site now called Devereux Meadow Baseball Park is near the center of the map.

PARKS AND PLAY-GROUNDS

Moore's Square	15-Q
Chavis Park (c).....	17-S
Devereaux Meadow	
Baseball Park.....	11-O



1940s View from behind home plate at Devereux Meadow stadium



1947 View from Devereux Meadow stadium bleachers

The Devereux Meadow Stadium hosted a series of local and Minor League baseball teams, such as the Raleigh Capitals and the Raleigh Cardinals. The Raleigh Capitals were a farm team for the Boston Red Sox, and it is understood that several baseball greats, including Carl Yastrzemski and Ted Williams, played at Devereux Meadow.

Although the stadium was usually a segregated space, there are a few instances of integrated events taking place, such as when Jackie Robinson's All-Star team played at the stadium in 1950 against the Raleigh Tigers, the local Negro League baseball team. The last professional baseball team stopped playing at the Devereux Meadow Stadium in 1971, and

1950 Front page cover of *The Carolinian*

the stadium was demolished in the late 1970s. Portions of the stadium bleacher wall still stand along the western edge of the project site.

In the 1940s, a municipal vehicle maintenance facility was constructed on the property, north of the baseball stadium, as well as a number of supporting and related buildings over the next few decades. These municipal maintenance structures included a vehicle fueling and service station, a bulk storage salt shed, and several other small storage and support buildings. After the stadium was demolished, the maintenance facility expanded with a single-story municipal office building constructed just south of the old

stadium and the stadium field was paved to serve as municipal parking for employees and maintenance vehicles.

During the 1800s and into the early 1900s, Pigeon House Branch followed a meandering path which is believed to generally approximate its pre-development location. During the minor league baseball stadium construction, Pigeon House Branch was relocated to the western side of the project site, and a segment of the stream was confined to a concrete covered, rock-lined channel under the stadium bleachers where it presently remains.



1959 *At the edge of the stadium, Pigeon House Branch floods the rock-lined channel*



1959 *Peace Street flood*



1960 *Smoky Hollow neighborhood, view of the 500 block of North West Street looking towards Peace Street*

From 2016 to 2019, portions of the northern end of the site were used as a staging area by the North Carolina Department of Transportation for the construction of the Capital Boulevard Improvement Project. This led to the removal of all but two site buildings which includes a vehicle fueling and service building and a single-story office building. The office building is currently used by City staff from Engineering Services, Transportation, and Parks, Recreation and Cultural Resources departments. Around

the office building, the site is used as parking for City maintenance and fleet vehicles and staff personal vehicles.

The vision for repurposing the project site as a public park and greenway has been around for several years. The Capital Boulevard Corridor Study Report (2012) and the Raleigh Downtown Plan (2015) both noted the development of a park at this site as a priority for the City.



2021 Aerial image from the midpoint of the site towards downtown



2021 Pigeon House Branch exiting the stone cap

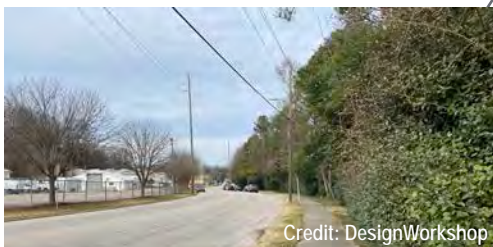
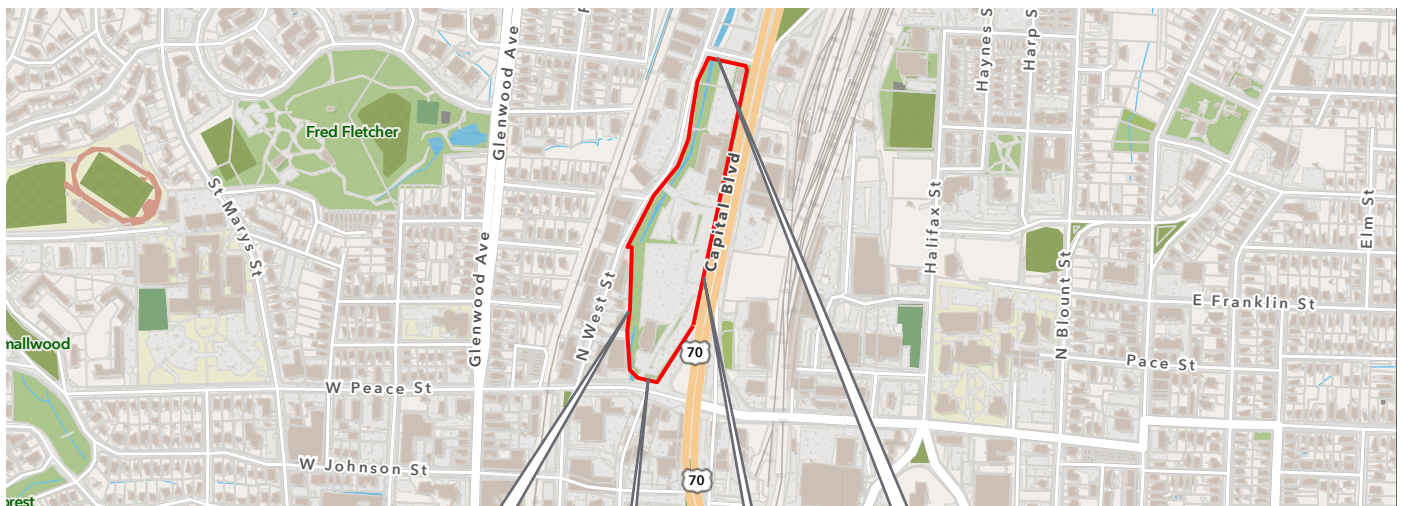
1.1 SITE DESCRIPTION

The Devereux Meadow project site is approximately 14 acres in size, consisting of two parcels located less than a mile north of downtown Raleigh.

The project site is owned by the City of Raleigh and was most recently used as a maintenance and vehicle service facility for several City departments. This has resulted in the area being dominated by buildings, paving, relic building slabs, or other infrastructure.

Site Boundaries

The site is bound by North West Street to the west, Dortch Street to the north, Capital Boulevard to the east, and West Peace Street to the south.



Credit: DesignWorkshop

West Street boundary of project site, looking north



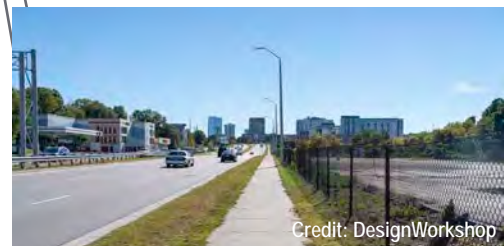
Credit: DesignWorkshop

Pigeon House Branch exits at Dortch Street



Credit: DesignWorkshop

Peace Street entrance to site, looking west



Credit: DesignWorkshop

View of downtown from Capital Boulevard, site on right

Site Features

The site contains various utility infrastructure including a sanitary sewer main running north-south paralleling Pigeon House Branch, three overhead utility lines which cross the site in an east-west direction, and several storm sewer drainage systems which serve both internal and off-site drainage areas.

The dominant natural feature of the project site is Pigeon House Branch, an urban stream originating west of the Village District shopping center. The drainage area for Pigeon House Branch is over 800 acres (1.3 sq. mi.) and includes a significant portion of downtown Raleigh. Due to the highly urbanized nature of this contributing watershed, Pigeon House Branch is prone to flash flooding following heavy rains.

Pigeon House Branch flows from south to north, entering the southern end of the project site at

Peace Street. It flows through approximately 800 feet of mortared, rock-lined channel. The southernmost portion of the channel has an open top while the northern portion is enclosed by a concrete top slab. Near the mid-point of the project site, Pigeon House Branch exits the enclosed rock-lined channel and drops several feet over concrete rubble into the natural stream channel. The natural stream channel continues north through the project site for about 1,100 feet to where it exits the project site and flows under Dortch Street.

The natural stream channel is deep with steep banks 10 to 20 feet high in some areas which is typical of unhealthy streams in urban areas. During rain events, high volumes of water move through the stream channel causing stream bank erosion. Both the stream function and water quality of Pigeon House Branch are impaired.



Most of the project site is within the 100-year floodplain. During heavy rainfall, such as tropical storms and hurricanes, the site and the adjacent Peace Street roadway often flood.

There are two buildings on the site. A vehicle fueling and service building and a single-story office building.

**Current uses of the site
will be phased out as the
project advances.**



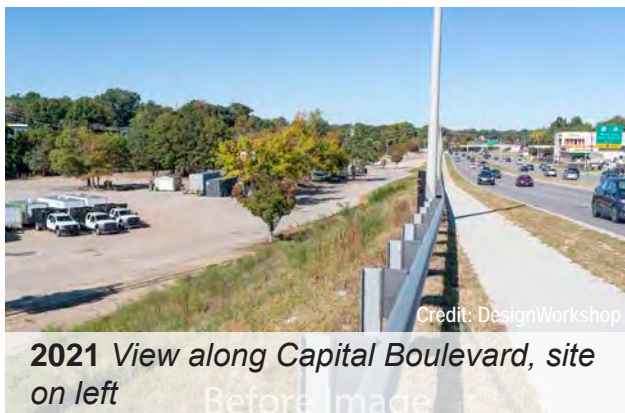
Credit: DesignWorkshop

2021 Aerial view of service station near center of site



Credit: DesignWorkshop

2021 Existing office building, view from Peace Street



Site Access

Within a 10-minute walk of the site is a mix of old and new residential and commercial developments.

Residential neighborhoods include historic Glenwood-Brooklyn, Mordecai, Cameron Park, Five Points, and the rapidly developing new districts of Glenwood South and North Central Downtown. Both Fred Fletcher Park and Halifax Park are located within a 5-minute walk of the project site. North Central Downtown, south of the project site, does not have a park or greenspace within walking distance, which is a critical need for an area projected to increase in population.

The Downtown Plan outlines a biking and walking route to link the Devereux Meadow project site to the Rocky Branch Greenway and Dix Park. The route follows West Street to Cabarrus Street, although in the short term, this route may be accomplished by following Dawson or Boylan Streets.

There are three vehicular and pedestrian access points to the project site. These are located at Peace Street, Dortch Street, and West Street. The West Street entrance is at the approximate mid-point of the project site and crosses a large culvert at Pigeon House Branch.

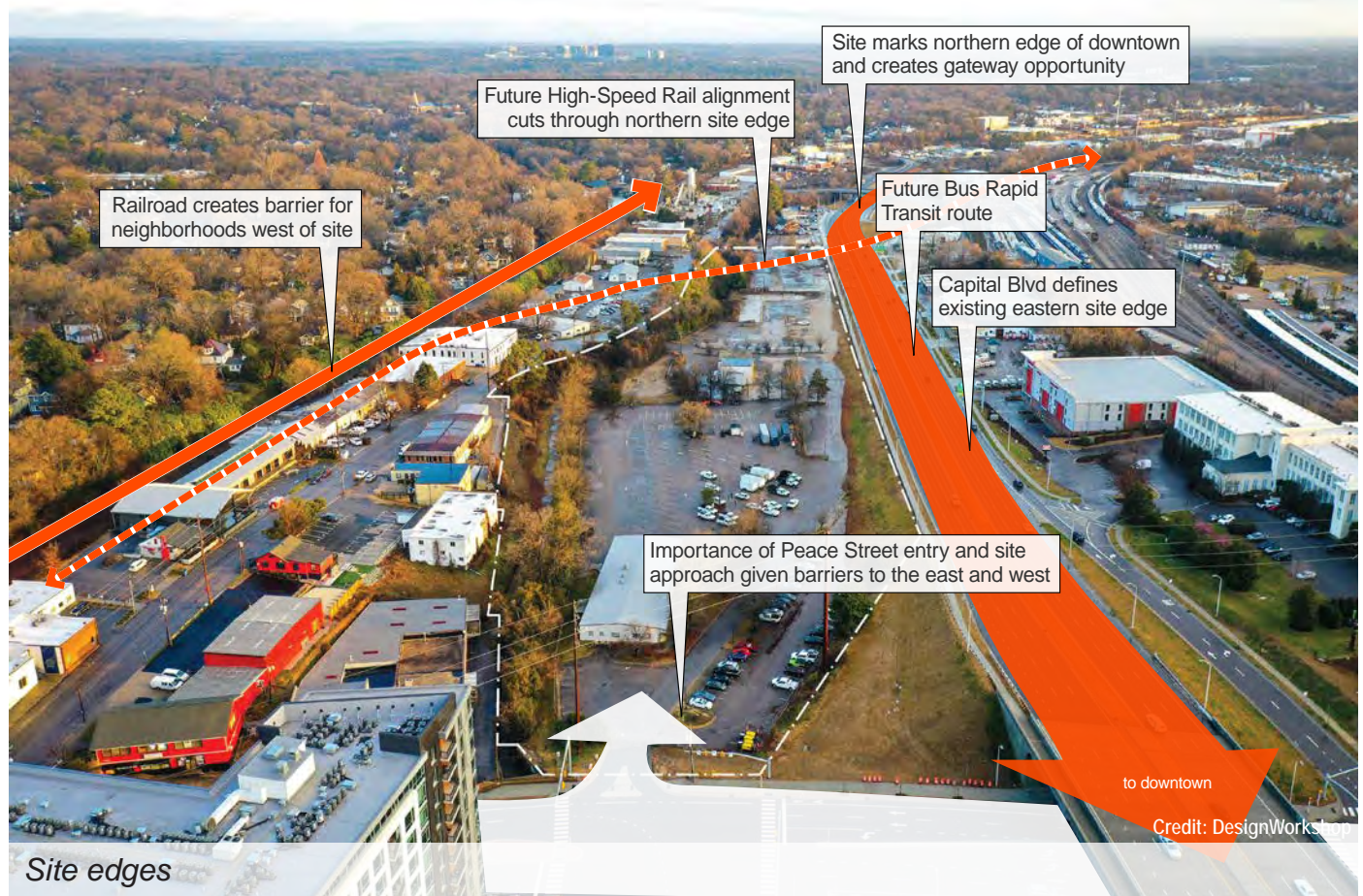
A Norfolk Southern railroad line runs parallel to North West Street, west of the project site. The proposed Southeast High Speed Rail Corridor between Richmond, VA and Raleigh is currently planned to cross the Devereux Meadow project site on the north end using a bridge.

On the east side of the project site, a Bus Rapid Transit line is under construction on Capital Boulevard.



Walkshed map of the Project Site

Residents living in the unshaded areas of the walkshed map have no access to an existing park within a 5 or 10 minute walk.



1.1 SITE ENVIRONMENTAL CONDITIONS

The Project Team conducted a series of environmental assessments and investigations from 2017 to 2021. These include:

- Stream Geomorphic and Stormwater Assessment (2018)
- Phase II Environmental Site Assessment (2019)
- Soil Vapor Intrusion Investigation (2021)
- Preliminary discussions with regulatory staff from the North Carolina Division of Environmental Quality (2020-2021)
- Topographic Survey (2021)
- First phase of Remedial Investigations (2021)

Past vehicle maintenance, fueling, and equipment storage on the site have resulted in environmental concerns, as concluded by the Project Team's investigations and research of other available reports. Potential environmental concerns associated with adjacent properties may also be affecting the site. There are at least 13 underground storage tanks (USTs) located on the site that have been used for petroleum storage since the 1940s. The USTs, some of which are abandoned, are a current and future potential environmental liability. The Project Team recommends the City consider the removal and closure of the USTs as part of Phase III site remediation.

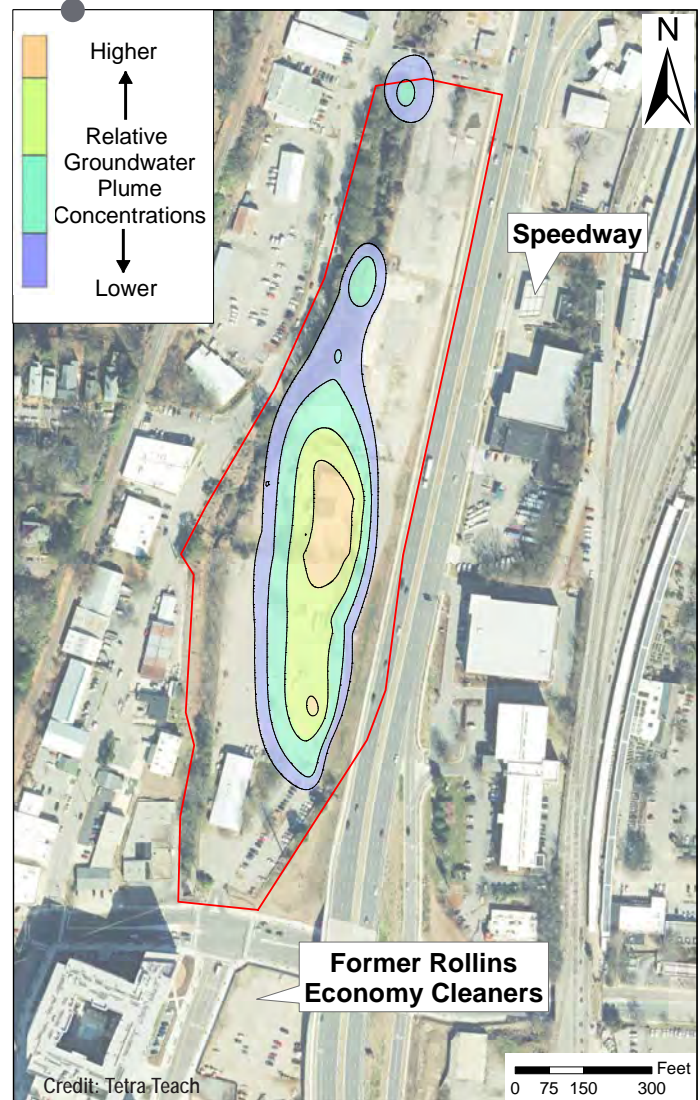
Investigations have also indicated that chlorinated volatile organic compounds (CVOCs) are present at the project site in subsurface soil and groundwater that are above North Carolina regulatory standards. While future investigations may further the understanding of contaminant extent, it is possible that the source of contamination may not be revealed. Benzene was also detected in subsurface soil and groundwater above North Carolina regulatory standards around one UST. This UST location is associated with a previous vehicle maintenance facility and indicates residual petroleum contamination.

Four metals were observed exceeding surface water screening levels (copper, iron, lead, and manganese). CVOCs, polycyclic aromatic hydrocarbons (PAHs), and other metals were present at low levels in the surface water and sediment samples collected from Pigeon House Branch and surrounding areas. Since groundwater at the site flows west/northwest towards Pigeon House Branch, their presence indicates these contaminants may originate on the project site or from sources further upstream.

Multiple possible sources of contamination originating off-site have been identified. Two notable sources are immediately adjacent to the park site, Rollins Economy Cleaners south of the site at Peace Street and Speedway #6983 east of the site on Capital Boulevard. These locations represent known sources of groundwater contamination that have, or may, migrate into the site.

Regulatory representatives from the North Carolina Division of Environmental Quality (NCDEQ) indicated that the project site is currently categorized as “low-risk” and will likely qualify for a risk-based cleanup approach. Risk-based cleanup methods focus on the reduction of risk and prevention of harm based on the intended use of the property.

Investigation results have not identified the source of the CVOC contaminants.



Approximate extent of CVOC contamination in groundwater



1.1 REMEDIAL INVESTIGATION

The Project Team completed the first phase of Remedial Investigations (RI) at the project site in the summer of 2021. This investigation served as the first step of a multi-phased approach to better understand the nature and extent of the contamination, to assess the contamination risks to human health and the environment, and to provide hydrogeologic and geochemical data to support future remedial decisions for the site. The investigations included the collection and analysis of soil, groundwater, surface water, and sediment samples. Sample locations and constituents of interest were selected based on information from previous investigations.

Groundwater contamination (principally CVOCs) appears to be concentrated in and around the existing service station near the center of the site. The groundwater

contamination plume ranges in depth from 8-30 feet below the surface and is generally migrating in the direction of Pigeon House Branch. Potential future remedial actions are under consideration by the Project Team and any actions will be better evaluated after the RI is complete.

Remedial actions under consideration include:

- Removal of the USTs
- Subsurface substrate injections to enhance natural degradation
- Use of bio-reactive matting
- Removal of contaminated soils once identified and delineated

Based on the Project Team's current understanding of site conditions and discussions with NCDEQ representatives, the project site will require a complete remedial investigation and the development and implementation of a remedial action plan to address the groundwater contamination. Additional phases of the RI should occur prior to the development of the final design documents/plans, while the remedial action plan can be developed concurrent to the development of final design.

The concept designs presented in this report anticipate that any remedial actions required under a risk-based cleanup scenario will not present significant barriers to park development, however, some adjustments to the park design may be warranted as additional details about the site conditions and risks to contamination are determined.

The Project Team has prepared a plume map of the groundwater contamination. The plume map provides an interpretive visual representation of the approximate extent of groundwater contamination on the project site based on existing site data. The Project Team uses this representation of groundwater contamination to look for potential conflicts with the park conceptual designs. The groundwater plume will be revised and updated based on additional data obtained during future RI activities and used to evaluate/design any required remedial actions.



2021 Soil core collection

Credit: Tetra Tech



2021 Soil core analysis

Credit: Tetra Tech

1.1 PUBLIC ENGAGEMENT STRATEGY

The Project Team obtained information and feedback from a broad set of engagement groups throughout the design development process. These engagement groups were a vital part of producing designs that met the needs of the City and public, the conditions of the site, and support future plans in this area of Raleigh.

There were four primary engagement groups.

City Project Design Resource Team: The Design Resource Team (DRT) consists of approximately 20 City staff from the Parks Recreation and Cultural Resources, Engineering Services, Planning, Transportation, Public Utilities, and Police Departments, and the City Attorney's Office. See Appendix A for a full list of names.

The Project Team met with the DRT periodically to provide project updates and exchange information on other City projects that may affect the Devereux Meadow Park project.

Stakeholder Committee: The Stakeholder Committee was formed at the start of the conceptual design process to provide input. The committee consists of 14 members representing the Parks, Recreation, and Greenway Advisory Board, Bicycle & Pedestrian Advisory Committee, Wake County, Raleigh Youth Council, surrounding neighborhoods, and local development, housing, and business interests. See Appendix B for a full list of names.

The first meeting was held on March 23, 2021, where the three concept alternatives were presented. In-meeting polling and a post-meeting survey documented feedback to guide future decisions on the concept alternatives.

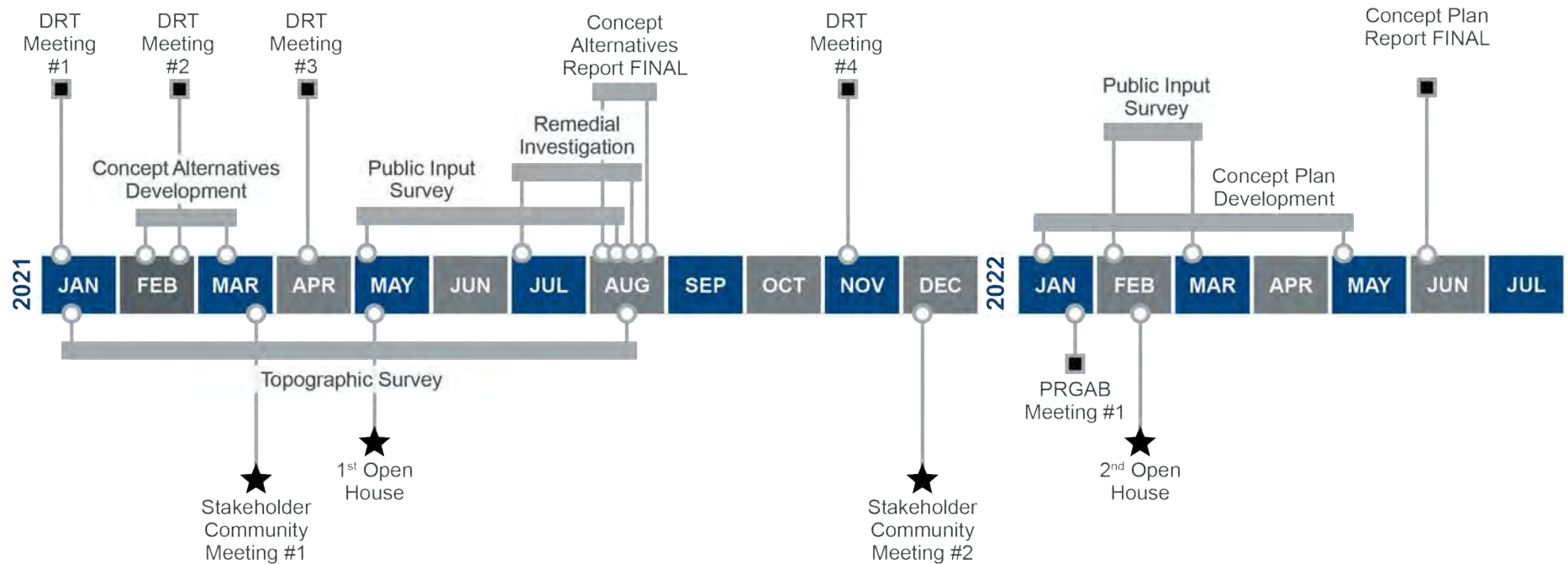
The second Stakeholder Committee meeting was held on December 7, 2021, where the preliminary concept plan was presented.

General Public: Two open house events were held to collect input from the general public on the project. The first was held virtually on May 6, 2021. It introduced the project to the public, shared the three concept alternatives, and gathered feedback from participants. The two-hour virtual meeting, held and recorded via Zoom, was attended by over 120 participants. Polling was conducted throughout the virtual presentation and a public input survey was issued following the meeting.

A second open house was held on February 12, 2022, to present the concept plan. The open house, which was organized as a four-hour walk-up event, was held outdoors at Halifax Park where printed posters of the concept plan were displayed. Staff from the Project Team and City PRCR staff were available to answer questions and encourage participants to complete a public input survey which was available online for approximately 1 month following the event. PRCR expects to continue public engagement as project plans advance, pending additional funding.

Small Group Meetings: The Project Team and PRCR met with City of Raleigh Engineering Services staff, Public Utilities staff, Duke Power representatives, adjacent property owners and developers, NCDOT, and citizen groups. These meetings helped further develop the Project Teams understanding of site needs and unique considerations.

1.1 PROJECT TIMELINE



3. CONCEPT ALTERNATIVES

During Winter and Spring 2021, three concept alternatives were prepared by the Project Team and presented to the DRT, Stakeholder Committee, and the general public.

Each of the concept alternatives considers different types of activities, aesthetics (the look

and feel of the park), storytelling (artistic and historic interpretation), and natural restoration (stream channel and its floodplain, urban nature/greenspace).

Each concept alternative shares three core design objectives.

1) Embrace a passive park experience

Create a safe and attractive greenspace. Provide a variety of spaces for gathering, respite, and open play. Include storytelling/education/interpretation with signage, art, and events. Create walking paths, greenway connection, and incorporate scenic natural areas with native trees, flowers, and birds/wildlife.

2) Restore the Pigeon House Branch stream

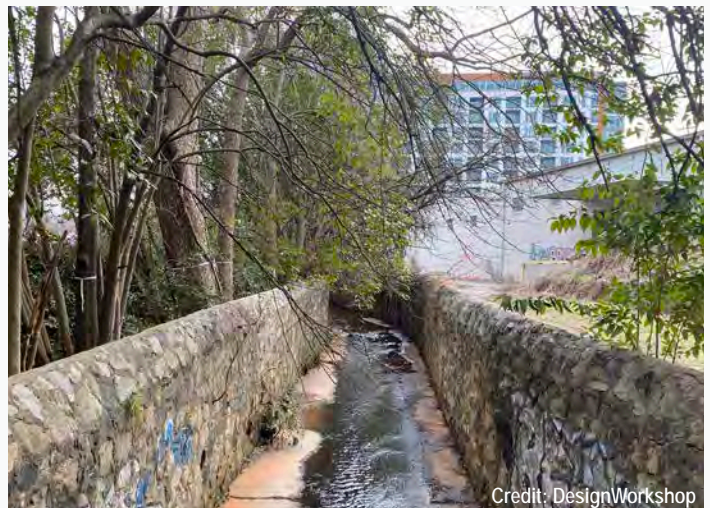
Create a healthy and stable stream channel. Improve flood capacity and management. Improve watershed health. Provide an attractive and safe place for park visitors.

3) Work with the existing site

Avoid buried utilities (underground sewer and stormwater pipes). Remediate possible site contamination (soil and groundwater). Restore the stream channel. Retain the existing allee of large oak trees. Respect and retain artifacts such as stone walls. Work with surrounding land uses, developments, and urban improvements.



2021 *The oak allee at the western edge of the site is one of the features which may be preserved*



2021 *The rock lined portion of Pigeon House Branch can be preserved as-is, or converted to a stormwater management feature*

An “allee” is a symmetrical, straight line of trees bordering a roadway or promenade.

1.1 CONCEPT ALTERNATIVE 1 - LINE DRIVE

Concept Alternative One - Line Drive offers the most active and urban vision for Devereux Meadow. The style of the park and the walking path alignments are derived from the footprint of the former baseball stadium. The crisscrossing paths extend throughout the site and create varied spaces for gathering plazas and gardens. A generous open lawn occupies the former baseball outfield and, along with the series of site-wide plazas and gardens, offers a place to host a variety of pop-up or annual events.

Along the Capital Boulevard boundary, a planted buffer and a 'super graphic' wall dampen the sounds of traffic and tell the story of the baseball outfield wall which is still present on the site today. Pigeon House Branch stays

in place, with the concrete cap remaining over the channel along its southern stretch, and selective stabilization of the exposed northern stretch to add a floodplain shelf, restore native plantings, and build stream features to improve water quality.

Crisscrossing pathways converge where Pigeon House Branch emerges from underneath its cap creating places for park visitors to mingle or travel through to neighborhood destinations on West Street and Capital Boulevard. With its paths and plazas, Concept One creates the highest number of ways for people to access the park and the greatest connection to the neighborhood on West Street and the surrounding community in anticipation of future development.



Key features

Pigeon House Branch is stabilized in place, with stream shelf and instream structures to promote floodplain connectivity and bedform diversity

Primary greenway runs along the site's eastern edge

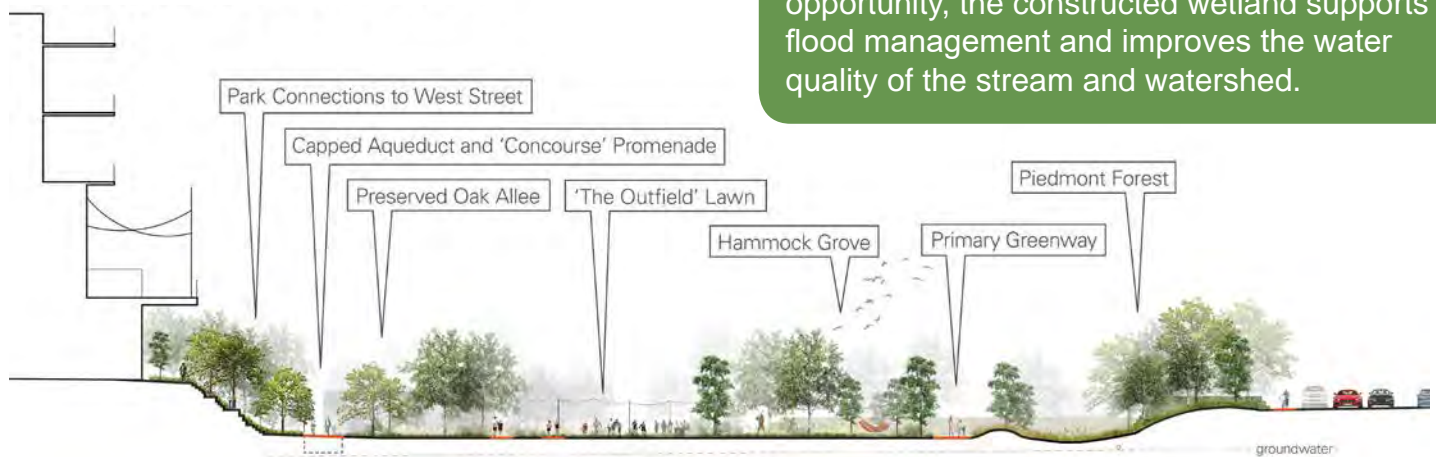
Super graphic wall mitigates impact of Capital Blvd and recalls the Devereux Meadow outfield wall

Paths define a series of sitewide plazas, gardens and gathering areas

Concrete cap remains over aqueduct, creates space for 'Concourse' Promenade along the historical stone wall and oak allee

Secondary paths reflect adjacent street grid and historical base lines

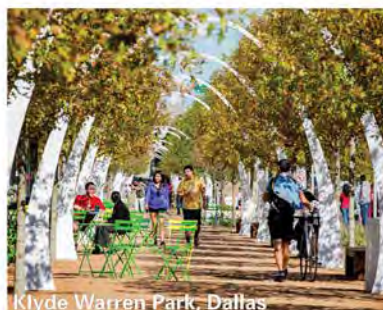
Concept One features a centrally-located constructed wetland with paths, overlooks, and small plazas. In addition to being visually interesting and an excellent educational opportunity, the constructed wetland supports flood management and improves the water quality of the stream and watershed.



Character Images



MLK Park, France



Klyde Warren Park, Dallas



Discovery Green, Houston

Section Key



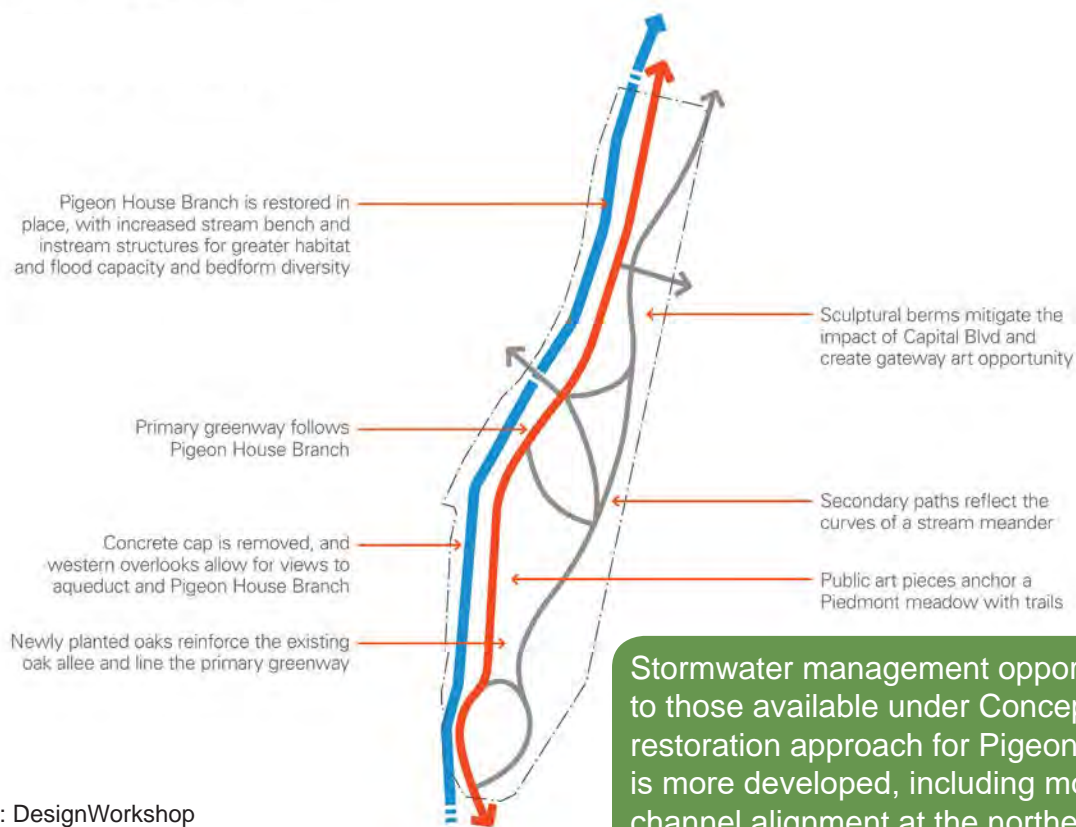
Credit: DesignWorkshop

1.1 CONCEPT ALTERNATIVE 2 - SCULPT

Concept Alternative Two - Sculpt offers a balance of urban park and natural restoration elements. It spotlights public art, detailed park features, and sculpted landforms that cultivate playfulness, whimsy, and discovery. The concrete cap on the southern section of Pigeon House Branch is removed to let park visitors see the stream within its historic stone channel. On the northern section of the stream, the existing culvert is removed for greater restoration of the floodplain and natural stream flow. Although the stream remains confined to its stone channel, the pathways throughout the park are curved and meandering to mimic the natural shape of a Piedmont stream. The landforms and art gardens emphasize a sculpted look and feel.

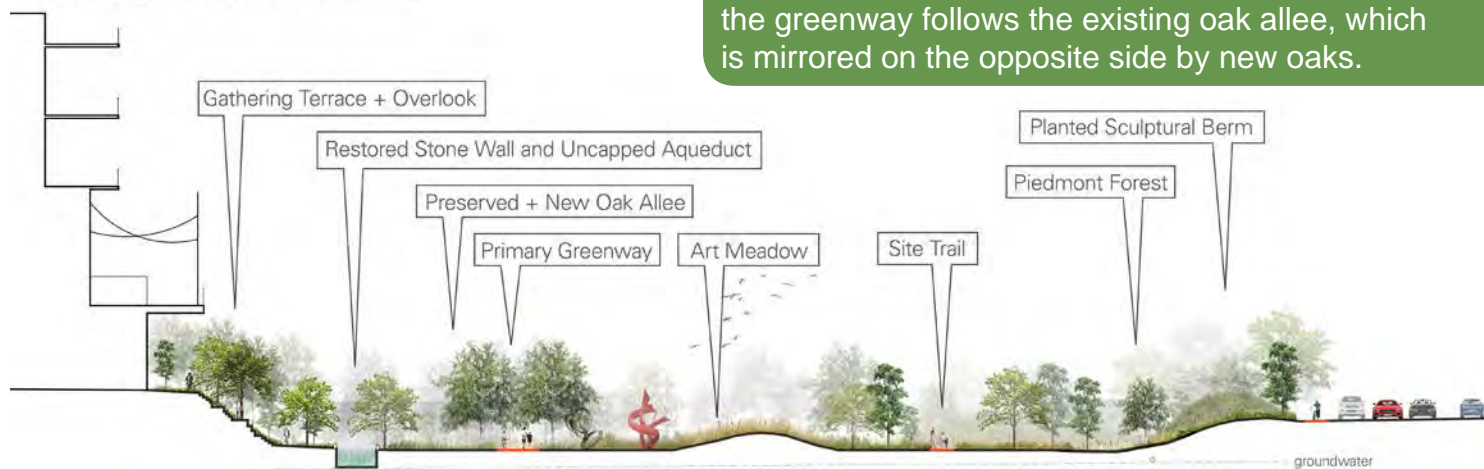
Concept Two offers the greatest opportunity for spectacular views of downtown from atop its sculpted landforms with the site's restored natural areas, public art, and lighting as a beautiful foreground. There is a primary overlook plaza for gathering and people-watching, in addition to a series of paths for quieter exploration and discovery. Sculpted and planted berms with a gateway sculpture define the park's view at its eastern edge, offering a visual and sound buffer with a striking view of the park from Capital Boulevard. Concept Two also features a centrally-located constructed wetland system, defined by the paths and landforms.





Credit: DesignWorkshop

Stormwater management opportunities are similar to those available under Concept One. The restoration approach for Pigeon House Branch is more developed, including modifications to channel alignment at the northern end of the project site. The primary greenway follows Pigeon House Branch. Through the site's southern half the greenway follows the existing oak allee, which is mirrored on the opposite side by new oaks.



Character Images

Section Key



Credit: DesignWorkshop

1.1 CONCEPT ALTERNATIVE 3 - MEANDER

Concept Alternative Three - Meander offers a true escape to nature within the City. Park experience is focused on stream and habitat restoration and the creation of a natural setting that transports park visitors to the site's imagined pre-development condition.

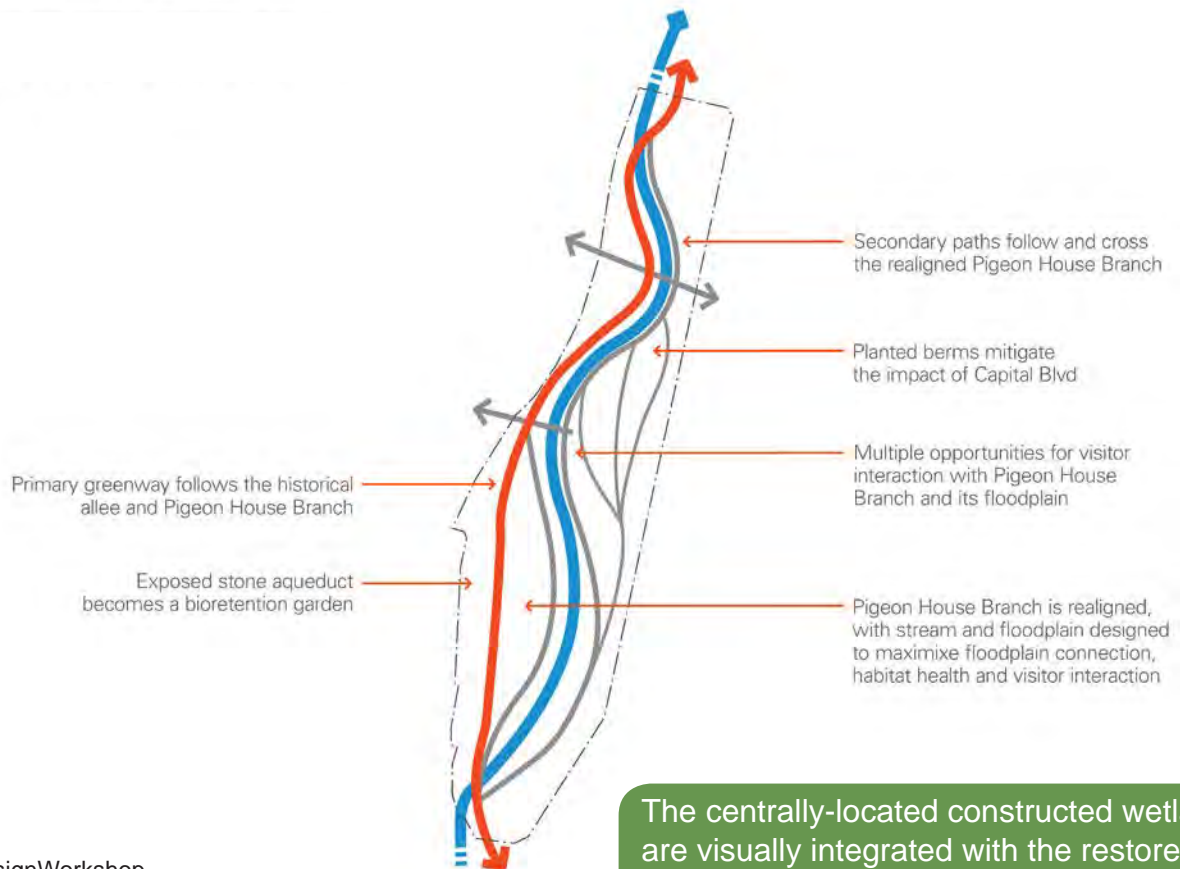
Concept Three is defined by the full restoration of a natural channel for Pigeon House Branch, with a curving and meandering stream. The natural, meandering channel carves out and defines smaller spaces throughout the park for natural areas and recreation. Paths follow and cross the new stream channel, creating ample opportunities for park visitors to interact with the stream and its floodplain. Where the stream used to flow through the historic stone channel,

the empty channel is now transformed into a rain garden to highlight and preserve the site's history and provide a focal point anchor for the park's western edge.

The primary greenway follows the historical oak allee, exposed stone aqueduct, and bioretention plantings along the western site edge before cutting east to follow the realigned Pigeon House branch. Secondary trails follow and cross the realigned Pigeon House Branch and wetland providing a variety of visitor interactions.

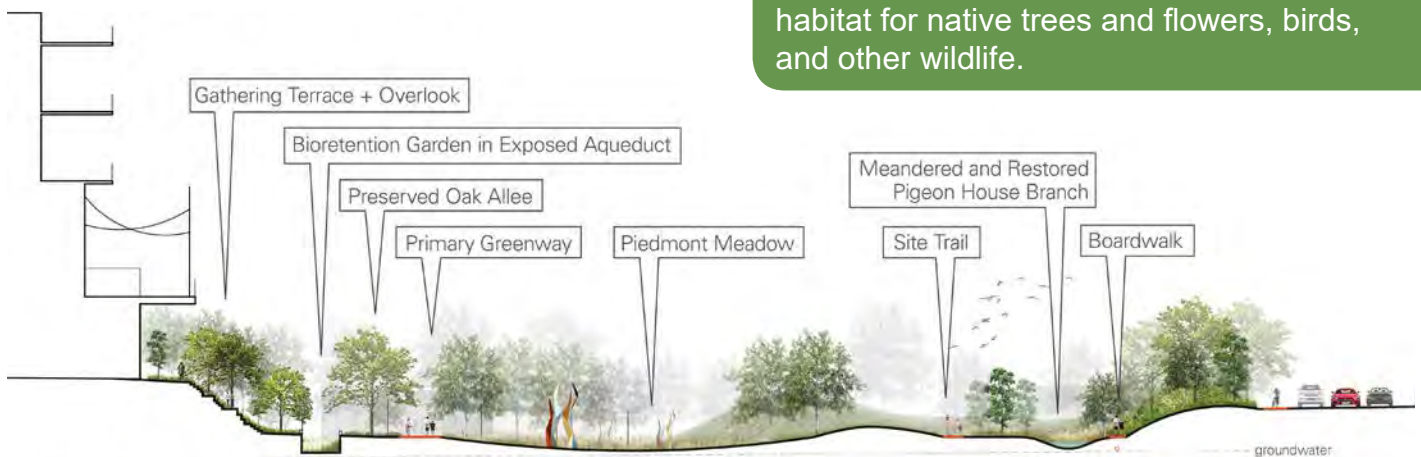


Key features

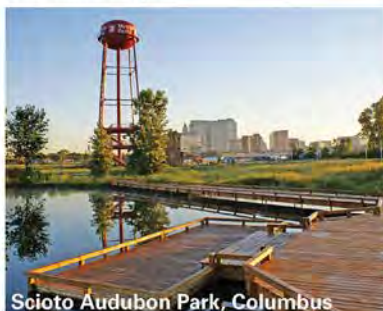


Credit: DesignWorkshop

The centrally-located constructed wetlands are visually integrated with the restored stream. The restored floodplain maximizes effective flood management and healthy habitat for native trees and flowers, birds, and other wildlife.



Character Images



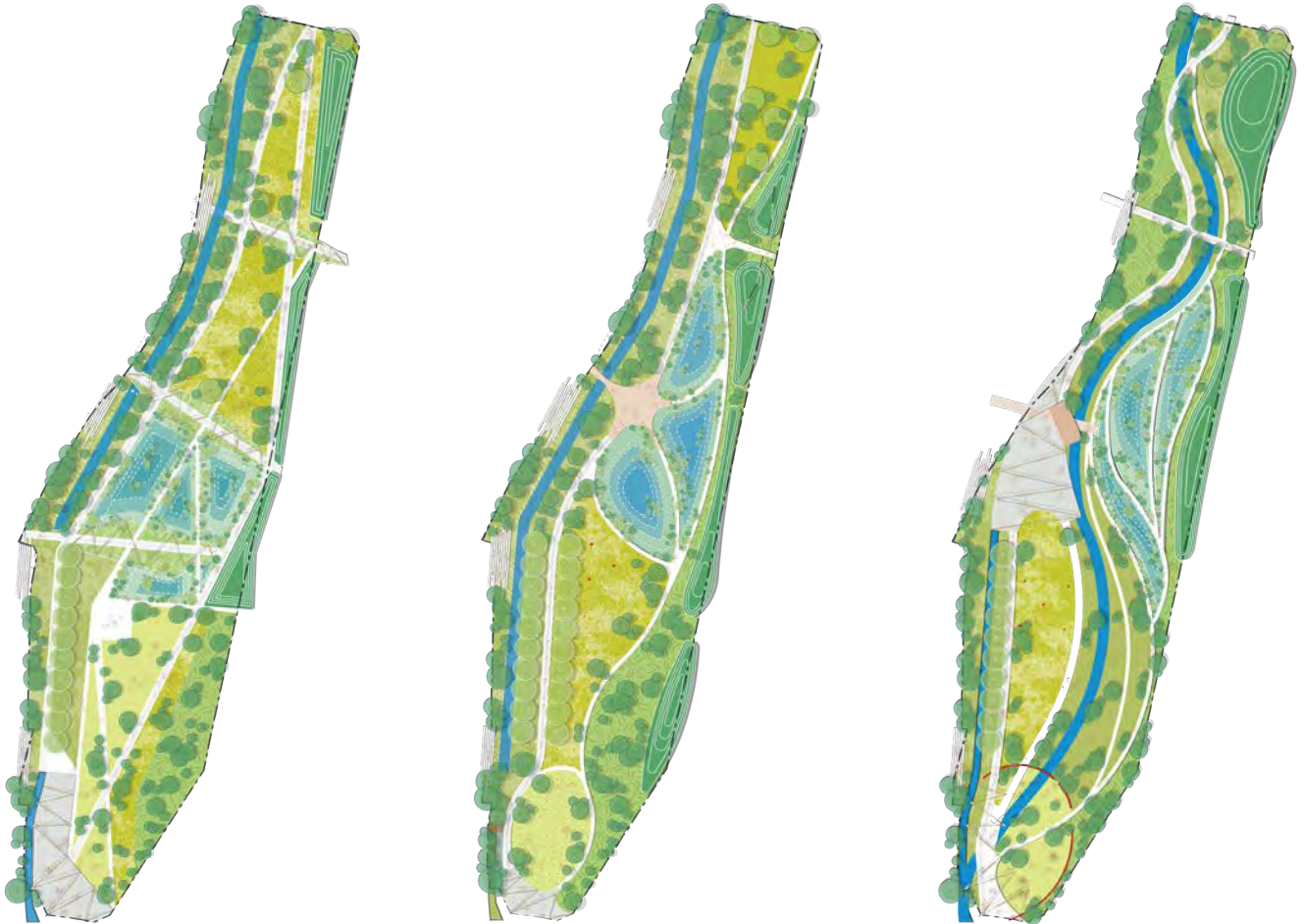
Section Key



Credit: DesignWorkshop

1.1 STREAM RESTORATION COMPARISON

The options for stream restoration approaches set the foundation for the three concept alternatives and present a range of possible features, experiences, and stories. The approaches also offer varying levels of ecological benefit and flood prevention.



Credit: DesignWorkshop

Concept Alternative 1 – Line Drive: The northern section of the stream is stabilized in place while the southern section remains covered. The park features focus on urban greenspace, with generous plazas and flexible spaces for gathering, pop-up events, and play.

Concept Alternative 2 – Sculpt: The entire stream is uncovered (cap removed; rock channel remains) and the northern section is restored. Park features are a balance of nature and urban recreation options.

Concept Alternative 3 – Meander: The entire stream channel is moved and restored to reflect a natural meandering stream, with a floodplain typical of a Piedmont stream. The park features are designed to deliver a nature-in-the-city experience.

Concept Alternative One - Line Drive

stabilizes the stream in the northern portion of the site while the southern portion remains confined to a partially covered channel/aqueduct. This design reflects the site constraints which limit the restoration of the stream's current location. A stream shelf is incorporated into the northern section to promote floodplain connectivity.



Credit: DesignWorkshop

- Minimizes stream corridor and maximizes space for other park elements
- Incorporates limited habitat diversity
- Limited opportunity to implement stormwater management but offers some decrease in flooding
- Retains historic concrete culvert/aqueduct
- Increases the erosion potential at the access road and Dortch Street culverts; maintenance will be required
- Significant excavation may be required which can create issues with soil and prohibit plant growth

Concept Alternative Two - Sculpt

removes approximately 500 linear feet of the top slab along the existing mortared rock channel while maintaining the integrity of the historic walls. As described in Concept One, the alignment would remain in place and all the ecological benefit would come from stream enhancement work performed on the downstream portion of the reach.



Credit: DesignWorkshop

- Minimizes stream corridor
- Incorporates moderate habitat diversity
- Limited opportunity for stormwater management but offers some decrease in flooding
- Retains historic concrete aqueduct and daylights covered section (if the culvert cap can be removed without compromising the integrity of the walls)
- Increases the erosion potential at the access road and Dortch Street culverts; maintenance will be required
- Significant excavation may be required which can create issues with soil and prohibit plant growth

Concept Alternative Three - Meander

provides the greatest ecological benefit. The stream and floodplain are re-sized. The stream profile creates areas of "active" water. The design encourages diverse habitat communities within the stream and allows for the most flexibility for incorporating future stormwater treatment.



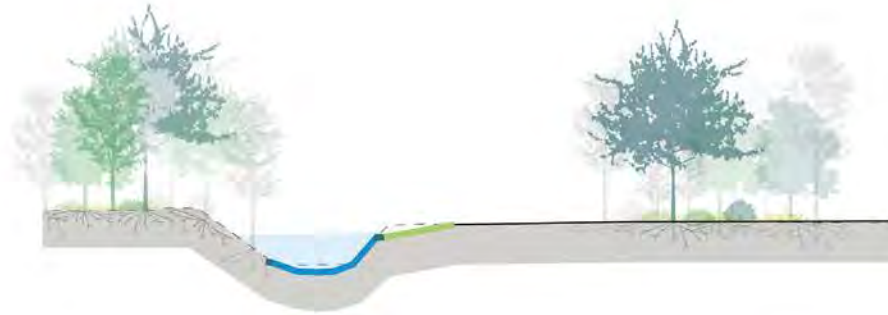
Credit: DesignWorkshop

- Expansive, free flowing floodplain and moderate stream grades create a stable stream environment
- Most ecological benefit
- Re-purposes historic concrete channel/aqueduct for stormwater treatment
- Large stream corridor limits some program elements
- Room for more habitat complexity or stormwater management to be implemented later
- Balances floodplain capacity with stream profile resulting in a net "no effect" to flood management
- Manageable excavation depths create less concern for soil disturbance

Concept No. 1

Stabilization in place.

All culverts remain.

**Concept No. 2**

Restoration of channel
north of access culvert.

Slight shift of profile and
alignment.



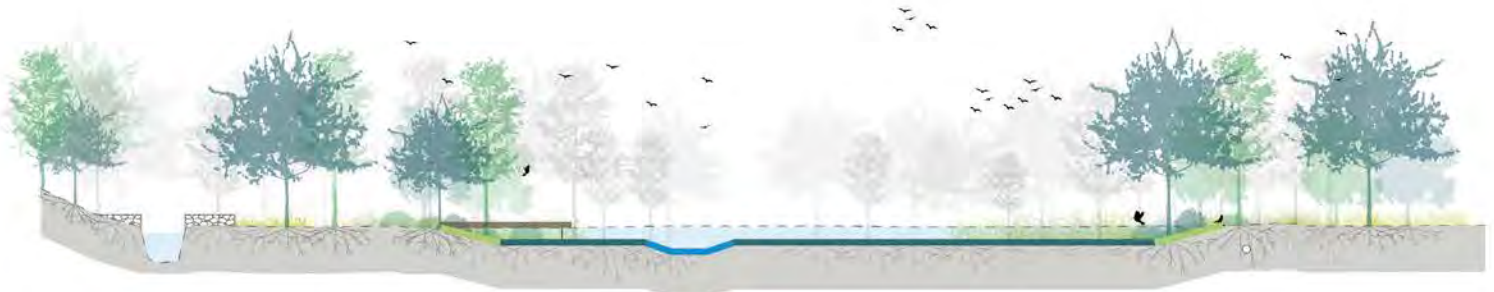
- Channel
- Floodplain Bench
- Cut Slope
- Existing Grade
- Pigeon House Branch at Approx. 1.5-Year Flood Level

Concept No. 3

New stream profile,
alignment and floodplain.

Access culvert removed.

Aqueduct used for
stormwater.



Credit: DesignWorkshop

Stream restoration cross-sections

1.1 CONCEPT ALTERNATIVES COST ESTIMATE

The estimated cost for each concept alternative includes previously spent and currently contracted consultant fees and projected future design, remediation, permitting, and construction costs. See Appendix C for details on the cost estimates. The Remediation Only option assumes UST removal will be completed and groundwater contamination will be addressed but no other site improvements such as greenway, stream restoration, and stormwater treatment will be performed.

*Total Project Costs Summary**

Concept Design	Consultant Fees	Remediation	Construction	Total Project Cost
Alternative 1: Line Drive	\$ 2,800,000	\$ 1,200,000	\$ 13,000,000	\$ 17,000,000
Alternative 2: Sculpt	\$ 2,800,000	\$ 1,200,000	\$ 12,800,000	\$ 16,800,000
Alternative 3: Meander	\$ 2,800,000	\$ 1,200,000	\$ 13,300,000	\$ 17,300,000
Remediation Only	\$ 1,800,000	\$ 1,200,000	\$ -	\$ 3,000,000

*Component costs are rounded up to the nearest \$100K. More refined cost information is available in Appendix C.

1.2 CONCEPT ALTERNATIVES PUBLIC ENGAGEMENT

The project was widely publicized through PRCR's Raleigh Park News weekly e-blasts, Facebook, and Twitter; project information at local PRCR community centers; and outreach to local media, churches, neighborhood groups, and local condominium and apartment developments. The City also hosts a project website that contained general project information including project contacts and links to presentations and site history videos.

An open house was held virtually May 2021. A summary of comments and responses is provided in Appendix D. The Project Team released an online survey in May 2021, to solicit public input on the concept alternatives. Survey questions focused on the public's opinion of design alternatives, components, and the proposed park's value to the community. The survey allowed multiple opportunities for respondents to give open-ended and written comments. Hardcopy versions of the project

survey were available at community centers and distributed to Raleigh Housing Authority residents.

PRCR also relied on partnerships with the Project Stakeholder Committee and the City of Oaks Foundation to further publicize the project. This outreach resulted in a continued uptick in survey responses from June through August 2021. The public input survey remained open until mid-August 2021. Nearly 1,300 distinct written comments were collected.

A separate memo, prepared by the Project Team and PRCR staff, details survey results (Appendix E).

+1,285

Distinct written comments
were gathered by the end of the
August 2021 survey

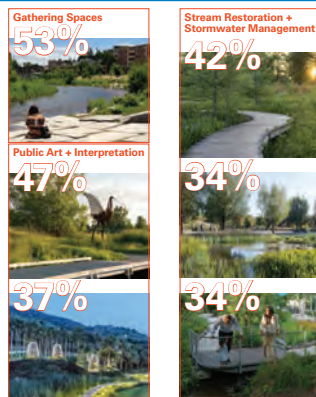
1.1 COMMUNITY FEEDBACK TO CONCEPT ALTERNATIVES

Feedback from the concept alternatives public engagement suggested a high level of public interest in the future park as a “downtown oasis” – an escape to nature in the city, with an emphasis on walking trails and the sights and sounds of a restored Pigeon House Branch.

The primary takeaways were that the naturalized park vision and stream restoration proposed in Concept Alternative 3 - Meander should be the primary drivers of the final concept plan highlighting the restored Pigeon House Branch as the organizing feature for the design. Some elements from the other two concept alternatives also received positive feedback.

Public Survey Results

Which of the following images best capture your vision for _____ at Devereux Meadow Park?



Percent of respondents who live within walking distance of the site: **44%**

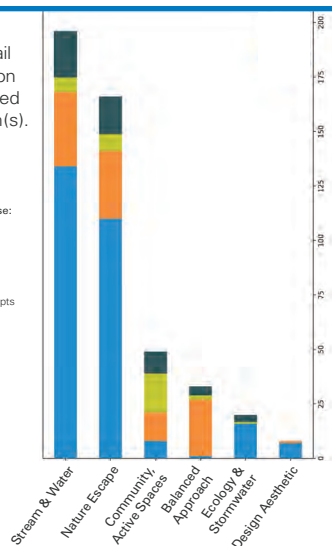
At a future Devereux Meadow Park site, I would be most excited about (check all that apply):

1. Walking the site trails (**75%**)
2. Enjoying the sights and sounds of the stream (**74%**)
3. Enjoying a nature destination in the city (**73%**)
4. Passing through on the greenway (**54%**)
5. Visiting the site to eat lunch or for a picnic (**53%**)

Give more detail about the reason for your preferred concept design(s).
(Open Response)

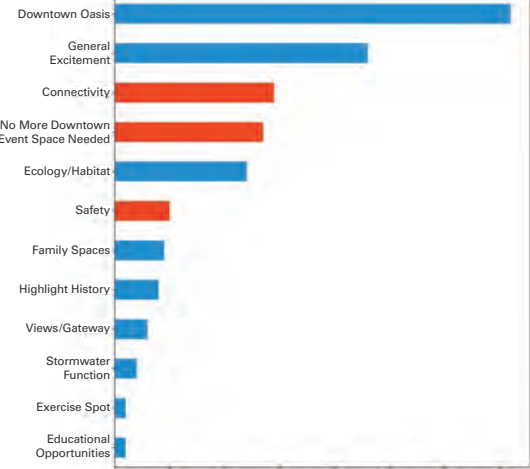
Respondents Who Chose:

- Concept 3
- Concept 2
- Concept 1
- Mix of Concepts



Please share any other comments or reactions to the design concepts.
(Open Response)

Response Expressing Excitement or Positivity
Response Expressing Concern



Concept No. 3

Credit: DesignWorkshop

4. CONCEPT PLAN

A draft concept plan was created to reflect the preferences expressed during the concept alternative public engagement process and incorporate a refined understanding of environmental contamination and other site constraints. The draft concept plan was developed primarily based on concept alternative three with a focus on a re-aligned stream channel, constructed wetlands, and flowing path system. Other features in the draft concept plan were drawn from some of the public preferences in the other two concept alternates, such as more gathering spaces and the inclusion of public art. This was presented to the Design Resource Team, Stakeholder Committee, and PRGAB for further refinement.

Revisited Site Constraints

- Updated stream alignment reflects the team's latest understanding of site contamination while maintaining the design's focus on ecological restoration and a site experience defined by Pigeon House Branch
- Site elements and layout were double-checked to ensure no conflict with future remediation or long-term monitoring

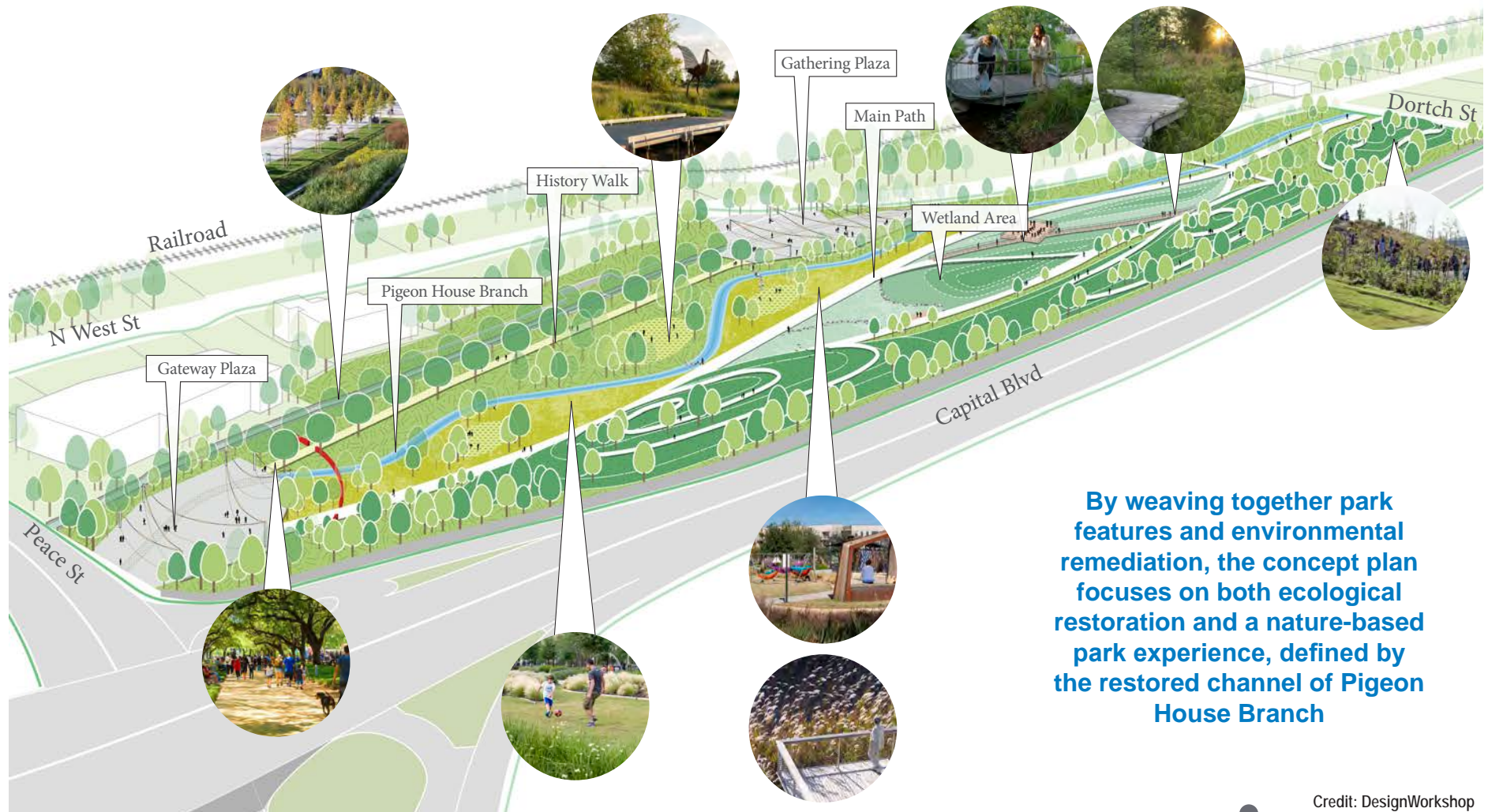
Refined City Guidance

- Refined the site forms, scale, and layout to accommodate utilities, City goals and needs, and incorporate feedback from the Design Resource Team
- Reviewed construction costs to ensure they are within the project budget
- Following additional, internal design refinements in early 2022, a revised concept plan was presented to the general public through a second round of public engagement





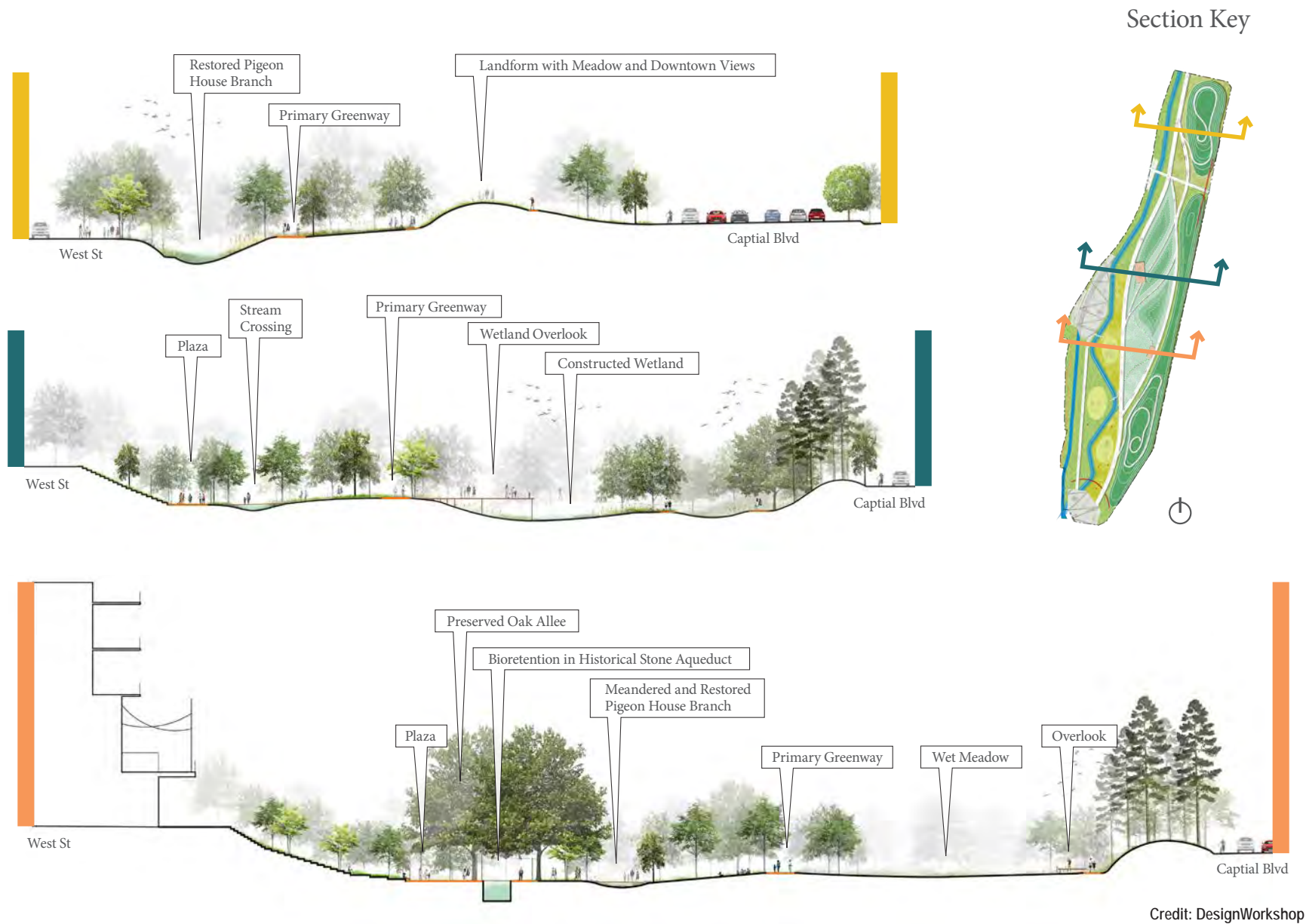
Concept plan



By weaving together park features and environmental remediation, the concept plan focuses on both ecological restoration and a nature-based park experience, defined by the restored channel of Pigeon House Branch

Credit: DesignWorkshop

Key features of the concept plan



Cross sections

1.1 CONCEPT PLAN DESIGN

The concept plan proposes:

- A true escape to nature within the city
- Celebration of water and our native plant communities
- Diversity of experiences, from social gathering spaces to places for individual reflection and respite, where all people feel welcome
- Storytelling and interpretive features to honor the site's history and surrounding area's rich past



Greenway rendering

Overall Park Experience: Set within a natural environment, the park serves as a northern gateway to downtown Raleigh.

Restored Stream: The daylighted channel of Pigeon House Branch meanders through a broad floodplain in the southern part of the park. The floodplain helps with managing stormwater within an interactive, natural space.

Pathways in the Park: The central path provides the first link of the future greenway that will connect Crabtree Creek Trail to downtown. This main path also connects the two plazas along Peace and West Streets. Secondary paved paths loop through the park and connect to sidewalks along the park's edge. Natural trails and boardwalks provide smaller

paths to explore the park. A walkway along the old baseball stadium's first baseline becomes a "history walk" with interpretive opportunities to tell the story of the site.

Plazas and Gathering Points: Plazas at West and Peace Streets welcome park visitors and host temporary events. Smaller lawn areas scattered along the park's paths provide smaller-scale gathering areas. Views across the park and to the city skyline are enhanced with public art installations.

Native Plantings: A variety of trees, grasses, and blooming plants native to the North Carolina Piedmont create a natural setting and enhance the park's ecology.

The Park Experience

The overall park experience creates a restorative setting immersed in nature, establishes a precedent for a new, dynamic park style in the Triangle area, and serves as a gateway to downtown Raleigh. Visitors find a true escape to nature within the city, with a diversity of experiences, from social gathering spaces to places for individual reflection and respite. The park is designed as a place where all people feel welcome, with interpretive features to honor the history of this place and the area's rich past. Weekday visitors enjoy a restorative stroll along park-wide trails or find a place to eat lunch while listening to the natural sounds of birds, wind in the trees, and the restored stream. A variety of gathering spots provide families and friends with places to meet and socialize. On weekends, the street-edge plazas and interior lawns provide ample space for community events and pop-up performances. With a diverse natural environment, the park serves as a learning place for people to connect with nature through learning events, water quality workshops, and bird walks. The park stands as a gateway to downtown Raleigh for people traveling along Capital Boulevard. The park scenery highlights the nature and culture of Raleigh and enhances the look of this busy and important roadway.

Natural Stream

Pigeon House Branch travels through a naturalized channel, flowing from south to north through the park. The stream enters at the Peace Street culvert and street-edge plaza, and is relocated and daylighted from the encased box culvert. The channel in this part of the park has sweeping bends and meanders through a broad floodplain. The floodplain is home to native trees and other plants suited to stream-side habitat. The broad floodplain accommodates high waters during moderate storm events when Pigeon House Branch overtops its banks and serves an important role in managing urban stormwater and protecting city infrastructure. The stream channel's slope is designed for better stability with improved aquatic habitat including riffles, rock features, and pools for fish habitat. The public expressed a strong interest in hearing the music of the stream. Although Pigeon House Branch is a small stream, certain places offer visitors the chance to hear the quiet sound of flowing water as it splashes in the pools. As Pigeon House Branch flows north toward Dortch Street, the floodplain narrows, and the music of the stream increases with a steeper gradient and larger rocks, riffles, and pools. The stream exits the park through a culvert under Dortch Street.



History walk rendering



Pathways in the Park

The concept plan shows paths throughout the park, from wide promenades to narrow trails, each with its own unique experience. The main path runs through the park and is intended as the first link of a future greenway connecting downtown to Crabtree Creek Trail. This main path links the park's street-edge plazas with a 16-foot wide paved path large enough for casual use by park visitors and greenway through-traffic.

Secondary paths connect gathering spaces within the park with walking loops that wind through diverse habitats and scenic views. The secondary paths join to surrounding street sidewalks. Visitors enter the park on foot from surrounding neighborhoods at the Peace Street and West Street plazas and at Dortch Street and Capital Boulevard sidewalk connections.

Nature trails and boardwalks provide intimate, small-scale routes to explore the park. A boardwalk runs through the constructed wetland and a nature trail spirals through the longleaf pines to an expansive view over the park and downtown.



Plazas and Gathering Points

The street-edge plazas at West and Peace Streets serve as a venue for community events, with the adjacent lawn areas and open floodplain forests supporting crowd spillover. The Peace Street plaza serves as the park's primary entrance. Flexible seating makes the Peace Street plaza a good place to meet a friend, eat lunch, and enjoy the scenery along the urban street. The West Street plaza is designed to be responsive and adaptive to future development along West Street. This plaza also offers views across the park and to Pigeon House Branch. Within the park's interior, smaller gathering areas scattered along the park's paths and boardwalk let family and friends meet and socialize. Art installations and interpretive features placed at gathering points help tell the story of the park and its history.

The proposed plazas will be similar in size to these existing gathering spaces in Raleigh.



Native Plantings for a Natural Oasis

The concept plan includes a variety of habitats and plant communities native to the Piedmont Region of North Carolina. Habitats range from streamside and bottomland forests, wet savannas, and constructed wetlands, to dry oak-hickory woodlands, longleaf pine groves, and open fields. Hills and low areas provide interest and help the variety of plants thrive. Tucked in among the native plant communities are a series of small lawns and traditional paths with shade trees, creating a series of distinct yet complementary site experiences. In addition to providing habitat and an interesting park experience, the plant communities also help clean the water and the air for the benefit of park visitors and the overall watershed. Shrubs and grasses trap airborne pollutants from traffic on Capital Boulevard, and trees planted in the park replenish oxygen. The native

plantings in the floodplain assist with cleaning stormwater for improved health of aquatic plants and animals living in the stream, and the downstream watershed.

Native plants, like the beautyberry, attract songbirds to the park.



1.1 CONCEPT PLAN COST ESTIMATE

The estimated costs for the concept plan include previously spent and currently contracted consultant fees and projected future design, remediation, permitting, and construction costs. See Appendix C for details on the cost estimates.

While the cost estimate does reflect a refined design and reduced uncertainties regarding site constraints, the project design is still in a conceptual phase. Future design and refinement of remediation plans will likely impact final project costs.

*Concept Plan Costs Summary**

Concept Design	Consultant Fees	Remediation	Construction	Total Project Cost
Concept Plan	\$ 2,900,000	\$ 1,200,000	\$ 13,500,000	\$ 17,600,000

*Component costs are rounded up to the nearest \$100K. More refined cost information is available in Appendix C.

1.2 CONCEPT PLAN PUBLIC ENGAGEMENT

Public engagement on the Devereux Meadow Park concept plan occurred from February to March 2022. The project was widely advertised via Raleigh Parks News, the City's Facebook page and Twitter, yard signs, flyers at local community centers, Stakeholder Committee outreach, and direct email correspondence with previous project participants. The project received coverage in the News and Observer, Nextdoor, and several local news stations along with targeted Facebook advertisements.

A project presentation was recorded by City staff and posted for public viewing on the City's YouTube channel. In early February 2022, PRCR hosted a public open house at the Halifax Park Community Center. Over 80 people attended the open house where the Project Team and City staff were able to individually speak to attendees, describe the project design in detail and solicit feedback. Following the open house, Raleigh Parks released a survey via the City's PublicInput.com website. Prior to taking the survey, respondents were encouraged to watch the YouTube presentation and review project plans.

After 6-weeks active, the survey concluded in mid-March 2022. The survey received over

500 participants and over 1,000 individual comments. City staff also received direct emails from citizens both during and after the survey cycle. A summary of the survey results and comments are included in Appendix F.



Public open house flyer

1.1 COMMUNITY FEEDBACK TO CONCEPT PLAN

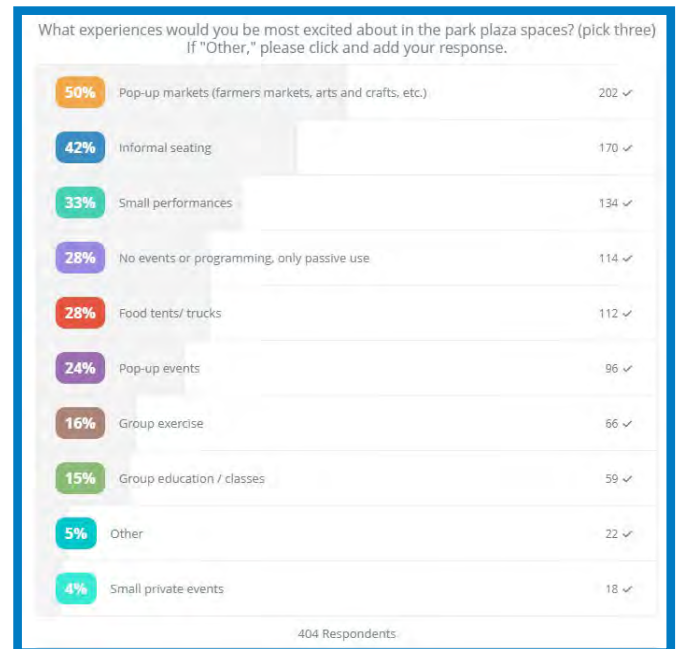
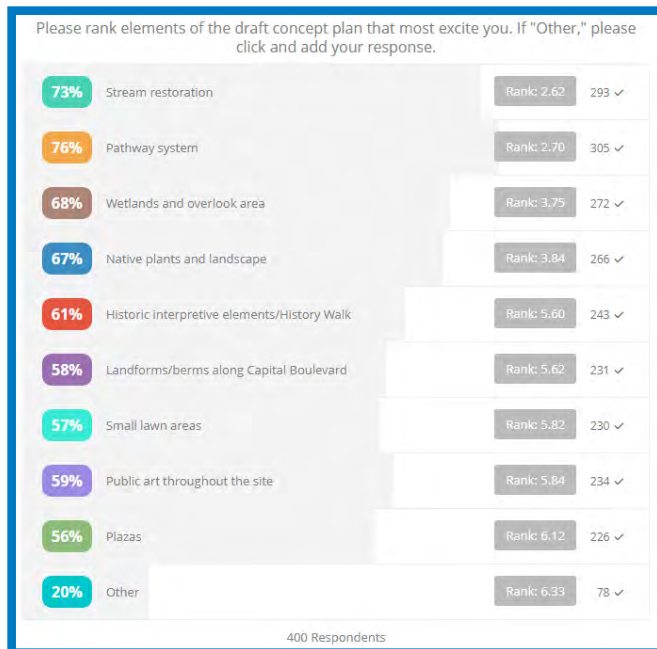
Based on the public engagement, the concept plan design received mostly positive responses with a general consensus to continue with the concept plan as a passive park highlighted by stream restoration, pedestrian paths, and passive programming. Most respondents preferred informal, nature park-focused elements along with more individual and small group spaces within the park. Preferred physical elements of the design were the stream restoration, pathway system, wetlands, and native vegetation. Favored programmatic elements included opportunities for pop-up markets, informal seating, and small performance areas.

A review of all comments from the Stakeholder meetings, open house, survey, and direct emails indicates the following (in no order):

- Most respondents are excited about the park and would like the park built soon.
- Stream restoration is an important part of the park's design.
- Design should also have an emphasis on wetlands and native plants.
- The park is seen as a "gateway" and "welcome" feature into downtown Raleigh.
- Greenway and pedestrian connections are important features.
- There should be a recognition of the site's history, including baseball and its plantation past.
- Park design should generally remain passive with less focus on active, sport, and recreational park programming.
- Green, open spaces and areas for wildlife habitat are needed within the Downtown area.
- Smaller scale and temporary events are preferred over larger programmed events.
- Park should be an area for quiet respite and a "natural oasis".
- Planning of the areas around the park should include pedestrian and multi-modal transportation connectivity to the park, with an emphasis on improved pedestrian access to the park from the east side of Capital Boulevard.
- Park design should be as accessible as possible.
- Respondents showed support for future project funding and inclusion of the park in the Parks Bond package.
- The majority of respondents agreed with a passive vision of the concept plan.
- Some showed support for active uses such as skate park, playground, dog park, and more activated plaza and gathering spaces.
- Some respondents advocated for the addition of public parking within the park site, whereas other respondents were against adding parking.



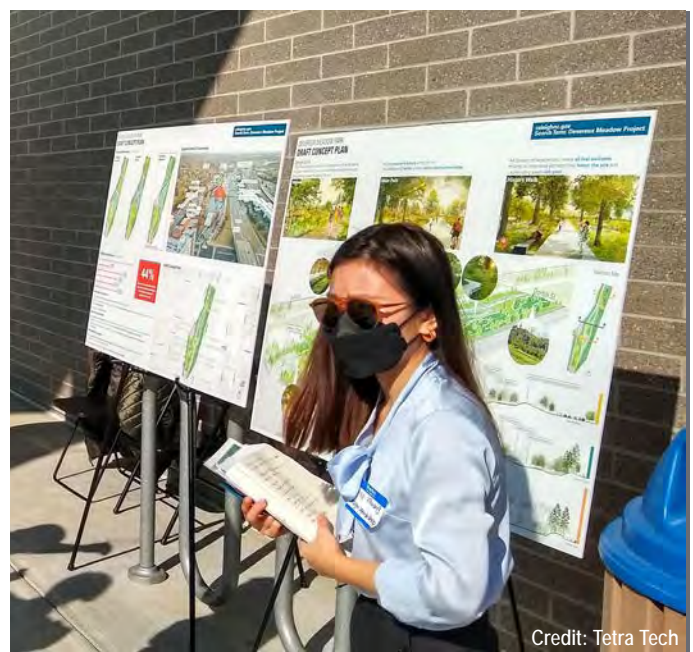
Survey information



Credit: Tetra Tech



Credit: Tetra Tech



Credit: Tetra Tech

2022 2nd Open House held February 2022 at Halifax Park Community Center

5. NEXT STEPS

Since 2017, the Devereux Meadow Park project has been funded by the 2014 City of Raleigh Parks Bond. With the passage of the 2022 Raleigh Parks Bond, additional funding has been secured to bring the project through site remediation and construction, although project implementation may have to be phased based on budgets. Following City Council approval of the concept plan in November 2022, the next immediate next steps for the project are below.

Remedial Investigations and Remedial Action Planning

Additional remedial investigations are necessary to provide a refined understanding of how site contamination will impact project implementation. These investigations should be conducted in a multi-step process that may occur before or concurrent to schematic design. Once investigations are complete, remedial action planning can occur which considers the park design and can be integrated into design elements. Additional detail on the remedial investigation and remedial action planning steps is provided in Appendix G.

Schematic Design

Schematic design is the first stage in the preparation of construction documents. During schematic design, the Project Team will further refine the concept plan through development of plan drawings, narratives, and outline specifications. The Project Team will conduct detailed hydrologic and hydraulic analysis of Pigeon House Branch and the proposed stormwater treatment elements as well as other engineering analysis to support final design development. The refined plan will include information on individual park elements, such as specific amenities, material types (e.g., path or plaza surfaces), and vegetation species, size, and proposed location.



Adams St

N West St

Ca

50

50

W Peace St

Capital Blvd



TETRA TECH

DESIGNWORKSHOP



ECOSYSTEM
PLANNING &
RESTORATION



Tilden St



Credit: DesignWorkshop