



Big Creek

Greenway Trail Alignment &
Neighborhood Connector Plan

Master Plan Report
February 2009

Big Creek

Greenway Trail Alignment &
Neighborhood Connector Plan

Master Plan Report
February 2009

prepared by:



Acknowledgements



Cleveland Metroparks
Jim Kastelic



City of Cleveland
George Cantor



City of Parma
Shelley Cullins



City of Brooklyn
Donna Thompson



Northeast Ohio Areawide Coordinating Agency
Michelle Johnson

Friends of Big Creek

Friends of Big Creek
Bob Gardin

Advisory Committee Members:

Donna Thompson
George Cantor
James Kastelic
Greg Frey
Kathleen Pucci
Regis Barrett
Greg Gens

Tom Ockington
Shelley Cullins
Bob Gardin
Joe Magrey
Mary Lee Bowan
Dennis Petro
Richard Sicha

This document completes the study of the Big Creek Greenway begun with the Lower Big Creek Greenway Redevelopment & Restoration Plan



Contents

1	Introduction
5	The Big Creek Watershed Resources
9	Public Involvement
13	Trail Route Alternatives
17	Trail & Greenway Concept
18	<i>Greenway Concept</i>
22	<i>Trail Concepts</i>
23	Upland Trail Description
29	Valley Trail Description
35	Neighborhood Connector & Loop Trail Descriptions
36	<i>Marquardt Park Connectors</i>
38	<i>Key Bank Connector</i>
38	<i>Biddulph Road Connector</i>
39	<i>Schools Connector</i>
40	<i>American Greetings Connector</i>
40	<i>Brooklyn Landfill Loop Trail</i>
42	<i>Oxbow Area Trails</i>
43	Priorities & Next Steps
47	Funding Strategies
	Appendices
	<i>Appendix A - Development Guidelines</i>
	<i>Appendix B - Master Plan Maps</i>
	<i>Appendix C - Parcel Ownership Maps</i>
	<i>Appendix D - Cost Estimate</i>
	<i>Appendix E - Frequently Asked Trail Questions</i>
	<i>Appendix F - Public Meetings</i>

Introduction





The City of Brooklyn developed a 2004 comprehensive master plan that reinforced the importance of the preservation of green space and the creation of greenway linkages throughout the city. At the same time and over the past decade, a coalition of partner agencies including: the City of Cleveland, Ohio Canal Corridor, Cleveland Metroparks, and Old Brooklyn Community Development Corporation studied the entire lower Big Creek segment of the watershed, culminating in the **Lower Big Creek Greenway Redevelopment and Restoration Plan** in June 2008. The proposed preservation areas and linkages were also envisioned by the Cuyahoga County Planning Commission's **Greenspace Plan** and explored by the local conservation group, the Friends of Big Creek.

The City of Brooklyn in partnership with Cleveland Metroparks, Friends of Big Creek, the Cities of Cleveland and Parma pooled financial resources and applied for and received a grant from the Northeast Ohio Areawide Coordinating Agency under the Transportation for Livable Communities Program to undertake the **Big Creek Greenway Trail Alignment and Neighborhood Connector Study** to develop a greenway and trail system that protects community natural resources and provides connections among the communities. The **Big Creek Greenway Trail Alignment and Neighborhood Connector Study** completes the prior efforts by assessing the feasibility of developing a system of trails and preservation areas in the City of Brooklyn. This system aims at preserving green space and riparian edges along the Big Creek corridor and



connecting the existing 9.6 mile trail through the Big Creek Reservation in Parma to the Memphis Picnic Area in Brooklyn and the Brookside Reservation in Cleveland.

An additional study currently underway by the Cuyahoga Remedial Action Plan in cooperation with the seven community and partner agencies in the watershed has focused attention on the feasibility of establishing a greenway corridor along Big Creek. Funding for the comprehensive Watershed Management Plan was acquired in 2007 from the State of Ohio's Coastal Zone Management Program and each of the partner communities for the first phase of a comprehensive Watershed Management Plan. This plan serves as the foundation for improving stormwater management and water quality improvements throughout the Big Creek watershed. Both of these studies support the notion that protecting and restoring the riparian corridor of the creek is beneficial to the livability and economic sustainability of the community.

The **Big Creek Greenway Trail Alignment and Neighborhood Connection Study** identifies opportunities for protection and conservation of open space, in addition to examining options and making recommendations for a preferred alignment of a trail system that connects the Cleveland Metroparks' Big Creek Reservation in Parma to the Memphis Road Picnic Area in Brooklyn and to the Brookside Reservation in Cleveland. The plan also identifies linkages to surrounding neighborhoods, local schools, parks, the City's commercial areas and its Civic Center.

This all-purpose trail system provides a safe alternative mode of transportation for the over 40,000 residents and employees within one mile of the trail alignments.

The Big Creek Greenway Trail system and the associated greenspace areas provide another connection in the regional trail system. It links the City of Brooklyn with Parma and Cleveland while enhancing livability of the community and region. This trail system also improves transportation by providing alternatives to automobile use and strengthening the interface with public transit.

The Big Creek Watershed Resources





Big Creek is the third largest tributary of the Cuyahoga River, with a watershed of 39 square miles in several cities. Beginning at its headwaters south of Pleasant Valley Road, Big Creek passes through several communities including Cleveland, Brooklyn, Linndale, Parma, Parma Heights, Brookpark and North Royalton, on way to its confluence with the Cuyahoga River. The Creek joins the Cuyahoga River in Cleveland at a point about 7.4 miles above the mouth of the River at Lake Erie. Big Creek in Brooklyn is impacted by urbanization of the watershed and man-made changes to channel alignment. Despite these impacts the floodplain is mostly intact with a significant floodplain forest community populating the valley and its valley side walls.

The Big Creek Greenway is a major natural stream corridor feature that makes up a significant portion of Cleveland's Emerald Necklace of parks and natural areas. Along the greenway, several areas have been preserved that make up a portion of the Cleveland Metroparks system and include the Big Creek Reservation and Brookside Reservation.

The Big Creek greenway in Brooklyn varies in width, depth and condition of its natural state. The greenway passes through heavily urbanized commercial developments, under interstate

highways and through natural ravines. It has been altered in several areas while seemingly untouched in others. It is this corridor that forms the spine of the Big Creek Greenway system and adds a critical link in the Emerald Necklace.

The Big Creek Reservation just south of Brookpark Road and the Brooklyn City limits is an area where Big Creek has retained its natural character. North of Brookpark Road, where Big Creek enters the City of Brooklyn, there is a transition to a channelized and rock stabilized creek that passes between big box retail store parking lots, through the Cascade Crossings commercial area and under the Interstate 480 highway at the Tiedeman Road interchange. North of this point, the stream channel has retained a natural meandering character as it passes through the wooded riparian ravine below the Tiedeman Road residential corridor and below the steep shale cliffs of the Memphis Road Picnic Area. This is especially true between Biddulph and Memphis Roads. Yet, while this area has avoided the stream channelization of other areas of the creek, there is evidence of bank erosion and stream channel siltation resulting from highly fluctuating storm surges from the surrounding densely populated neighborhoods.



1916 STINCHCOMB MAP SHOWING CLEVELAND'S EMERALD NECKLACE GREENWAY PLAN THAT CONNECTS THE COUNTY'S PARKS AND NATURAL AREAS. IT HIGHLIGHTS THE BIG CREEK GREENWAY IN BROOKLYN.



North of the Memphis Road Picnic Area, Big Creek has been realigned into a concrete lined channel below steep shale cliffs along Interstate 71 and a parallel railroad corridor. Much of this lower reach of Big Creek along Interstate 71 to Ridge Road in Brooklyn and on to its confluence with the Cuyahoga River at Harvard Avenue is subject to intense rainfall surcharges and periodic combined sewer overflow discharges during storm events. Its banks are poorly vegetated and occasionally armored with walls or rock. Water quality is poor and, combined with the storm surges, produce a weak ecology.

Public Involvement





The **Big Creek Greenway Trail Alignment and Neighborhood Connector Study**

was developed through an intense public involvement process. Included in this process were regular meetings of an Advisory committee of the project partners and neighborhood leaders, individual interviews of key stakeholders and property owners along the greenway and public involvement workshops. The workshops engaged local residents and business owners and encouraged them to identify key attributes in the community and along the Big Creek corridor that should be considered when developing the trail alignment. They were also asked to express their preferences about several alternative trail alignment options available. Stakeholder interviews were held in the spring and summer of 2008 and public involvement workshops were held in the summer and fall of that same year. The workshops were widely advertised in the local media, where the public and interested parties were invited to attend.

Each meeting resulted in follow up study sessions to resolve issues discussed in committee. The final Advisory Committee meeting in December was attended by a group of residents interested in discussing the priority trail route along the CEI corridor. They expressed their concerns about the impact of the trail on their privacy, safety and drainage issues in the corridor. The committee promised to discuss the location of the trail and their concerns with them prior to trail development.

The first public workshop reviewed alternate routes and land uses that may be considered including the Valley Route and the Upland Route that form the main trail in the network in addition to several Neighborhood Connector and Loop Trail Route options. The public was invited to comment at work stations about the various options presented, identify additional options that should be considered and important features or issues that should be addressed in the plan.

Advisory Committee meetings were held approximately monthly during the year long planning effort. Committee meetings focused on review and discussion of the results of public input and of progress in plan development, gaining direction from the committee on their preferences.

A series of four stakeholder interviews were then held to engage land owners along the proposed trail routes and whose partnerships are critical to the plan's success. These individual interviews gave participants the opportunity to speak freely about the potential impact of the plan on their



own plans and goals.

The second public workshop presented the draft concepts that resulted from the meetings of the advisory committee, stakeholder interviews, the first public meeting and several site visits. Again, the public was invited to comment stations about the plan elements in a general work session. Several speakers were present to frame the conversation, including representatives from the National Park Service, Cleveland Metroparks, the City of Brooklyn and the West Creek Preservation Committee.

Comments, although diverse, were mostly positive about the potential the plan has to address important community access, recreation, environmental recovery and economic growth issues. Several adjacent residents to the proposed routes expressed their concerns about privacy, security and protection of their interests. Others indicated their belief that the routes would add to community livability, safety for family recreation and safe alternatives for children between home and school.

A presentation was made in September 2008 to the City's Chamber of Commerce,





a diverse group of business and community leaders. Comments from the business community were positive about the plan. The final plan was also presented to Council and the Mayor at a committee workshop prior to the City's regular Council meeting in early December.

Summaries of the meetings are included in the appendix.

Trail Route Alternatives





EXISTING HOUSING DEVELOPMENT NEAR BIDDULPH PLAZA
WITH COMMON GREENSPACE & SIDEWALK CONNECTIONS

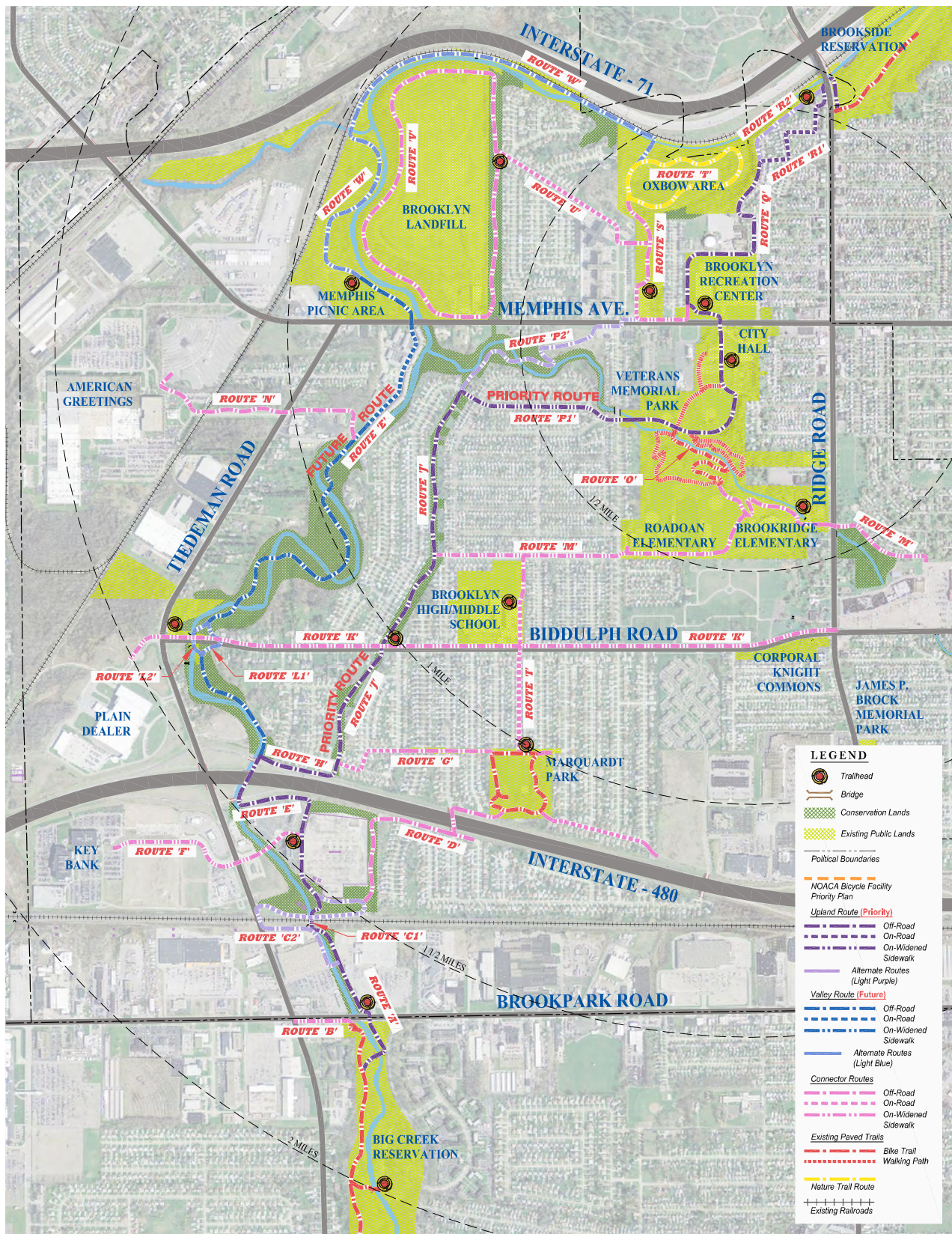


The accompanying Alternative Routes Map and Matrix outlines the numerous different options that were considered during plan development. Both Valley and Upland Routes were considered, along with a number of Neighborhood Connectors. A number of objectives were considered when selecting the preferred trail routes. These are outlined in the matrix and the relative success that each alternative achieved in meeting the plan’s objectives. These included:

1. Minimizing flooding of built resources along the trail corridor.
2. Providing accessible pedestrian connections for the residences and visitors of the trail.
3. Improving Brooklyn’s vitality as a desirable community.
4. Building healthy life-style alternatives in the City of Brooklyn.
5. Forming a catalyst for preserving and enhancing the Big Creek greenway.
6. Connecting Brooklyn’s schools with the surrounding neighborhoods.
7. Connecting Brooklyn civic center and parks with its neighborhoods
8. Connecting the Big Creek Reservation with the Memphis Picnic Area and trailhead.
9. Connecting the Big Creek Reservation with the Brookside Reservation.
10. Providing alternative access to visitor services throughout the City of Brooklyn.
11. Providing continuous off-road pedestrian routes throughout the City of Brooklyn.
12. Providing visual access to the Big Creek valley for pedestrians.
13. Providing cost effective solutions.

	Minimizing flooding of built resources	Provide accessible pedestrian connections for residents and visitors	Improve Brooklyn's vitality as a desirable community	Building healthy life-style alternatives in Brooklyn	Forming a catalyst for preserving/enhancing the Big Creek greenway	Connecting Brooklyn's school's with its neighborhoods	Connecting Brooklyn civic center and parks with its neighborhoods	Connecting the Big Creek Reservation with the Memphis trailhead	Connecting the Big Creek Reservation with the Brookside Reservation	Providing alternative access to visitor services	Providing continuous off-road pedestrian routes	Providing visual access to the Big Creek valley for pedestrians	Providing cost effective solutions
Route A													
Route B													
Route C1													
Route C2													
Route D													
Route E													
Route F													
Route G													
Route H													
Route I													
Route J													
Route K													
Route L1													
Route L2													
Route M													
Route N													
Route O													
Route P1													
Route P2													
Route Q													
Route R1													
Route R2													
Route S													
Route T													
Route U													
Route V													
Route W													

NOTE:
LIKE COLORS
DENOTE ROUTES
THAT WHERE
COMPARED
WITH ONE &
OTHER WHEN
SELECTING THE
PREFERRED
ROUTES



LEGEND

- Trailhead
- Bridge
- Conservation Lands
- Existing Public Lands
- Political Boundaries
- NOACA Bicycle Facility Priority Plan
- Upland Route (Priority)
 - Off-Road
 - On-Road
 - On-Widened Sidewalk
- Alternate Routes (Light Purple)
 - Valley Route (Future)
 - Off-Road
 - On-Road
 - On-Widened Sidewalk
 - Alternate Routes (Light Blue)
 - Off-Road
 - On-Road
 - On-Widened Sidewalk
- Connector Routes
 - Off-Road
 - On-Road
 - On-Widened Sidewalk
- Existing Paved Trails
 - Bike Trail
 - Walking Path
- Nature Trail Route
- Existing Railroads

Big Creek Greenway Trail Alignment & Neighborhood Connector Plan

Trail Route Alternatives Considered

Client Partners:



Prepared By:



E:\BROOK\NTP\08-08-08\08-08-08\NTP\BASEMAP FOR CONCEPT OVERALL MAP.DWG - 5/21/2009 10:00:08 AM

Trail & Greenway Concept



BIG CREEK PARKWAY &
GREENWAY AT BROOKPARK RD.

UNDEVELOPED RICHARD DR. GREENBELT
LOOKING WEST TOWARD MARQUARDT PARK



The concept for the **Big Creek Greenway and Neighborhood Connector Trail Plan** is to preserve and protect the Big Creek corridor as it passes through the City of Brooklyn, form a pedestrian trail connection between the Big Creek and Brookside Reservations and create trail linkages radiating out into the community, providing connections to parks, schools, commercial districts, Brooklyn’s Civic Center and other local resources. The greenway associated with Big Creek is ideally situated in the City of Brooklyn to provide much desired contact with nature for the residents of the neighborhoods and visitors to the area. Nearby to this greenbelt corridor along Big Creek are the commercial districts, several neighborhoods, schools, parks and other community resources that include the Civic Center and Veteran’s Memorial Park. The Big Creek Greenway and Trail system will protect this beautiful and under-appreciated green space, while forming a trail network that connects all of these vital community resources with other regional attractions including the Memphis Picnic Area, Brookside and Big Creek Reservations, the Cleveland Metroparks Zoo and the Ohio and Erie Canalway. The plan outlines these trail and preservation components in the following paragraphs.

Greenways Concept

Greenways are protected natural open space corridors, often following natural land or water features, that are managed for conservation and recreational purposes. Greenbelts as defined here are narrow green corridors that offer access between resources and buffer adjacent uses. They are often a mix of publicly or privately owned properties that often are the result of public/private partnerships. Typically they include trails to provide access by the community for public enjoyment or alternative ways of travel within communities.

The Big Creek Greenway includes natural areas associated with Big Creek and greenbelts associated with the trail network. The Greenway follows the Big Creek water course as it passes through the City of Brooklyn. The Greenway includes the creek and the valley that borders the creek, its banks, shale cliffs and forested valley walls, wetlands and open grasslands between the creek and adjacent development. This riparian zone includes ecologically sensitive areas that protect the creek by stabilizing the surrounding soils, by shading the creek and lowering its water temperature, by improving water quality in the stream and providing habitat for wildlife diversity.

This natural zone also protects green space that is critical for the health of the community by limiting flooding and providing passive recreational space for residents and visitors.

The greenbelts associated with the plan are narrow green corridors paralleling utility corridors or street rights-of-way that allow public access among community resources and have sufficient remaining greenspace to buffer adjacent uses. Preservation of the Big Creek greenway and greenbelts are critical to livability in the City of

Brooklyn. Many cities are now finding that existing and potential future residents and businesses desire locating in communities that protect these natural amenities.

Preservation of the Big Creek Greenway will retain the last vestiges of nature in Brooklyn for its residents. The Greenway will add to previously protected areas including the Big Creek Reservation, the Memphis Picnic Area and Brookside Reservation. The greenways and greenbelts are owned by a variety of interests,



INTACT BIG CREEK FLOODPLAIN



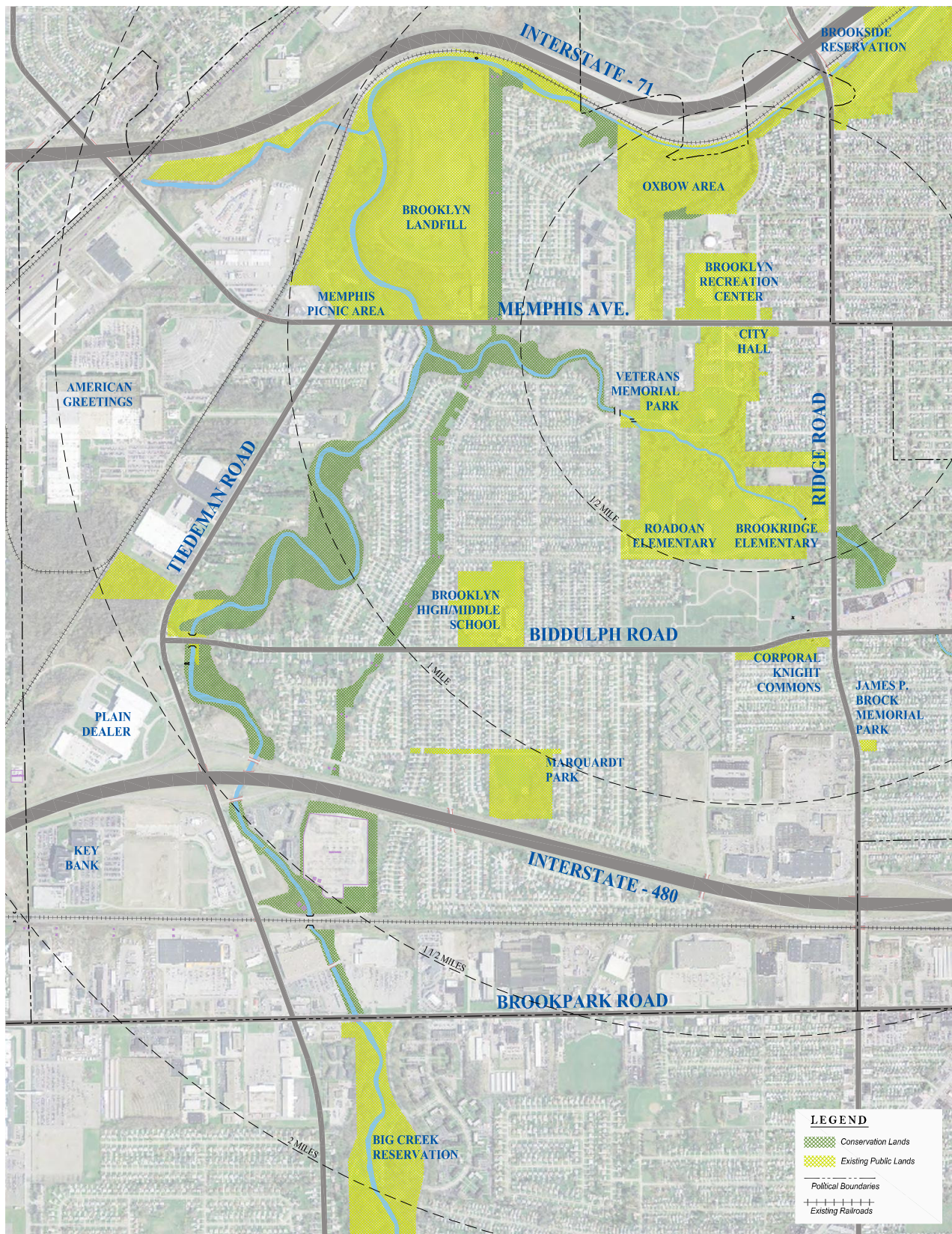
requiring a cohesive strategy for protection and management. It is recommended that the City adopt riparian and steep slope legislation to protect greenspace in the City and to identify the greenspace in this plan for priority protection. The legislation should call for limiting development or alterations of the greenspace and include provisions for securing conservation easements over the land, allowing for consistent management and controlled pedestrian access.

A conservation easement is a legal agreement between a land owner and a government agency or land protection organization such as the Friends of Big Creek, for the purpose of conservation. The property remains the private property of the landowner. The easement is strictly a voluntary decision by the landowner. Once set in place, the restrictions placed in conservation easement agreement are binding to all future landowners of the property. The restrictions placed in the easement spellout what can and cannot be done in the easement area and define the physical limits of the easement. It should be pointed out that these protections may either provide pedestrian access or restrict such access, depending on the language of the easement agreed to by the parties involved.

While this plan recommends that such legislation apply to the entire City, the easements can further define protection and access limitations for individual parcels.

Equally important to the future of the proposed greenways is improving watershed management techniques. As previously described, Big Creek is impaired by the excess runoff reaching the stream from upground sources. Parking lots, roads and rooftops are dominant in the watershed and little protection has been installed to diminish drainage impacts on the stream. There are many noteworthy techniques now being employed in our region to restore the balance of pervious and impervious surfaces in watersheds. Rain gardens combined with downspouts disconnect programs, bioswales and infiltration zones, created and restored wetlands and basins to slow and filter drainage flows are all options to reducing runoff and improving water quality.

This plan encourages adoption of City-wide policies requiring incorporation of these practices in new development and an informational program that educates residents and businesses of the benefits of stewardship of Brooklyn's natural resources. For residents this might include information about the use of fertilizers and pesticides; for businesses it

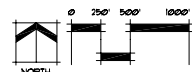


Big Creek Greenway Trail Alignment & Neighborhood Connector Plan

Overall Conservation Lands

Client Partners:

Friends of Big Creek



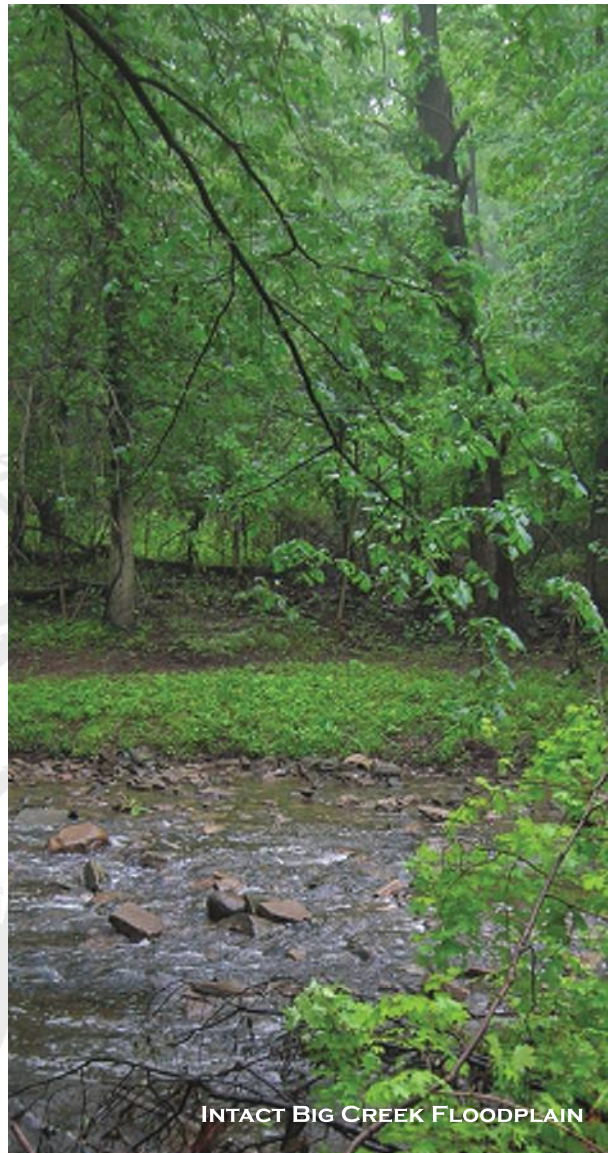
Prepared By:





STICKNEY CREEK NEAR
BIDDULPH PLAZA

might include discussions concerning pavement removal and installation of infiltration areas and water quality buffers; for schools it might include identifying sites for rain gardens and wetlands restorations on school sites for their educational value. The City should pursue these initiatives in concert with the Watershed Management study currently being completed.



INTACT BIG CREEK FLOODPLAIN



WALKING PATH IN
VETERANS MEMORIAL PARK

Trail Concepts

In addition to Greenspace the plan includes a network of trails throughout the community that give access to community resources. These trails are seen as critical alternative transportation routes for the community. Comments at the public meetings indicated that the community, as a whole, supported trails as links that allow recreational opportunities and safe passage for their children through the neighborhoods and to and from schools and parks.

The Upland Trail provides the main connecting trail between Big Creek Reservation to the south and the Brookside Reservation to the north. The trail follows a series of greenbelt utility corridors and street rights-of-way, from the Big Creek Reservation at Brookpark Road, to Veterans Memorial Park and the Civic Center and Brookside Reservation at Ridge Road. The Valley Trail provides the main trail access to the Big Creek valley and connection between the two Big Creek Reservation use areas of Big Creek Reservation at Brookpark Road and the Memphis Road Picnic Area. The trail follows the creek through Cascade Crossing commercial area, under Interstate 480 and through the valley to where it crosses Memphis Road to the Memphis Road Picnic Area.

Radiating from both of these major trails are a series of Neighborhood Connector Trails that link several city parks, schools, businesses and other natural areas along the Creek. Several Loop Trails provide access to special community resources like the open space and views of the City landfill and the Oxbow area of Big Creek's valley.



EXISTING TRAIL IN BIG
CREEK RESERVATION

Upland Trail Description



WEST BLVD.

The Upland Trail forms the most direct route through the City of Brooklyn neighborhoods from Big Creek Reservation at the south to Brookside Reservation at the north. The Upland Trail begins at the Cleveland Metroparks Brookside Reservation at Ridge Road on the north side of the City and is a continuation of the Brookside Trail, which follows John Nagy Boulevard east through the Brookside Reservation from Ridge Road to the Cleveland Metroparks Zoo.

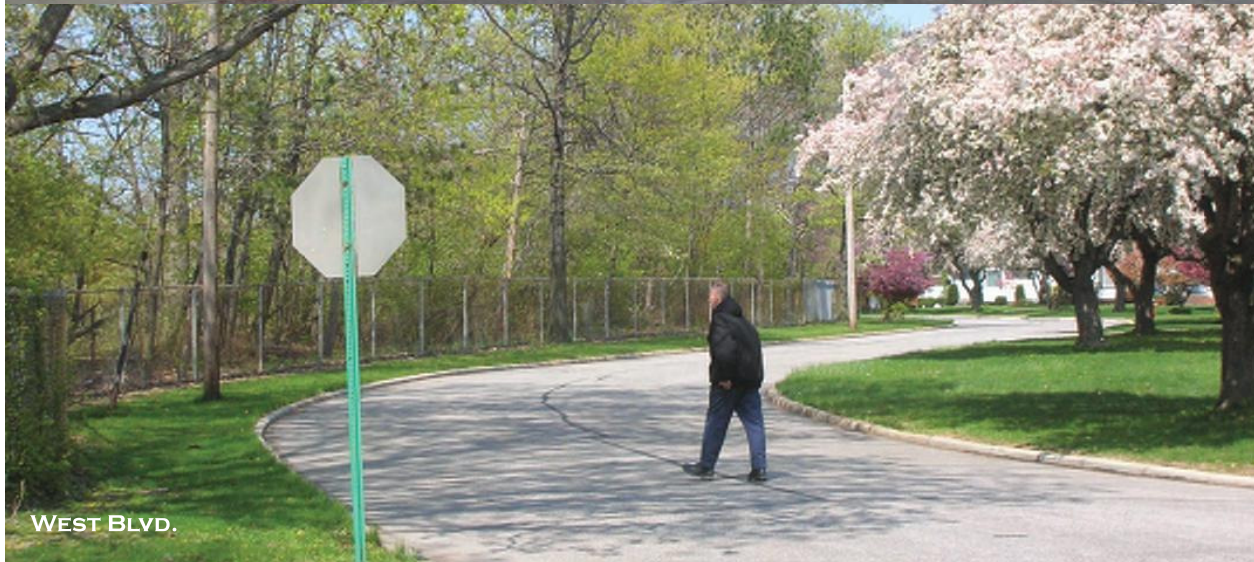
The Upland Trail, passes under the Ridge Road

Bridge into the Harmony Baptist Church parking lot. From this parking lot, the trail enters the low-traffic volume residential street network, heading south into the City of Brooklyn. The trail follows a nearby alley to Orchard Grove Avenue, west to Parkside Drive, south to Meadowbrook Avenue and west to West Boulevard.

An alternate route for this on-road portion is suggested. This route, once leaving the church property, follows the bluff overlooking the I-71 corridor. Along this length it is mostly at the rear



PARKSIDE DRIVE



WEST BLVD.



property line of backyards and would require negotiated easements with the landowners.

At West Boulevard, the trail exits the road network to a new trail along the west side of the road. At this point, trail users have views to the west off of shale cliffs to the Oxbow area below. This trail connects to the sidewalk network at Brookside Drive and Amber Drive at St. Thomas Moore School where it then enters the Brooklyn Recreation Center property. A new trail passes through the Center's property and on to Memphis Road and the pedestrian crossing at the City Municipal Complex entrance. A Loop Trail heads west at this point towards the Brooklyn Landfill trail that will be discussed in detail in the later Neighborhood Connector and Loop Trail section.

At Memphis Road, the Upland Trail intersects with an on-street bicycle trail, designated as such in the NOACA Bicycle Facility Priority Plan. After crossing Memphis Avenue, the Upland Trail follows the existing driveway past City Hall and the Brooklyn Senior Center to the Veterans Memorial Park trail. At this point, trail users have access to a series of walking trails throughout the park and a bike trail section that leads to a proposed bike connector trail to Brookridge Elementary. The Upland Trail spine passes west through the park to Rodoan

Road where it again utilizes widened sidewalks as it meanders through the residential neighborhood. The trail follows Memphis Villas Boulevard to the CEI utility corridor.

The CEI utility corridor runs north-south through the City of Brooklyn and provides a green buffer to the surrounding densely populated neighborhoods. This potential Conservation Land green space provides a natural corridor for a large segment of the Upland Trail. The trail follows this corridor to a proposed trailhead at Biddulph Road. This main trail spine connects with Connector and Loop Trails along the way at Behrwald Avenue and Biddulph Road. These trails are detailed in the Neighborhood Connector and Loop Trail section of this report.

The Upland Trail crosses Biddulph Road at a new pedestrian crossing and proceeds along the CEI corridor, where it connects to the Valley Trail just south of where it crosses Shady Drive. At Shady Drive, a Connector Trail enters the existing low-traffic volume street network towards Marquardt Park. See the Neighborhood Connector and Loop Trail section for more detail.

At the terminus of the Upland Trail, a small section of trail follows the Interstate 480 right-of-way



JOHN M. COYNE RECREATION CENTER



VETERANS MEMORIAL PARK



CEI CORRIDOR

and connects to the main Valley Trail spine at Big Creek near the Tiedeman Road off-ramp. The Valley Trail section will detail this connection and the rest of the Valley route.



LOOKING FROM I-480
R.O.W. AT CEI CORRIDOR



LOOKING WEST DOWN I-480
R.O.W. AT TIEDEMAN ROAD

Valley Trail Description





The Valley Trail follows the Big Creek riparian corridor from the Big Creek Reservation at the southern boundary of the City of Brooklyn to the Cleveland Metroparks Memphis Picnic Area. This is an off-road trail except for a short section though an apartment complex near Memphis Road. The Valley Trail branches off from the Big Creek Reservation Trail just south of Brookpark Road and crosses to the east side of Big Creek on a proposed new pedestrian bridge in the park. At Brookpark Road, the trail crosses at grade on a new pedestrian crosswalk.

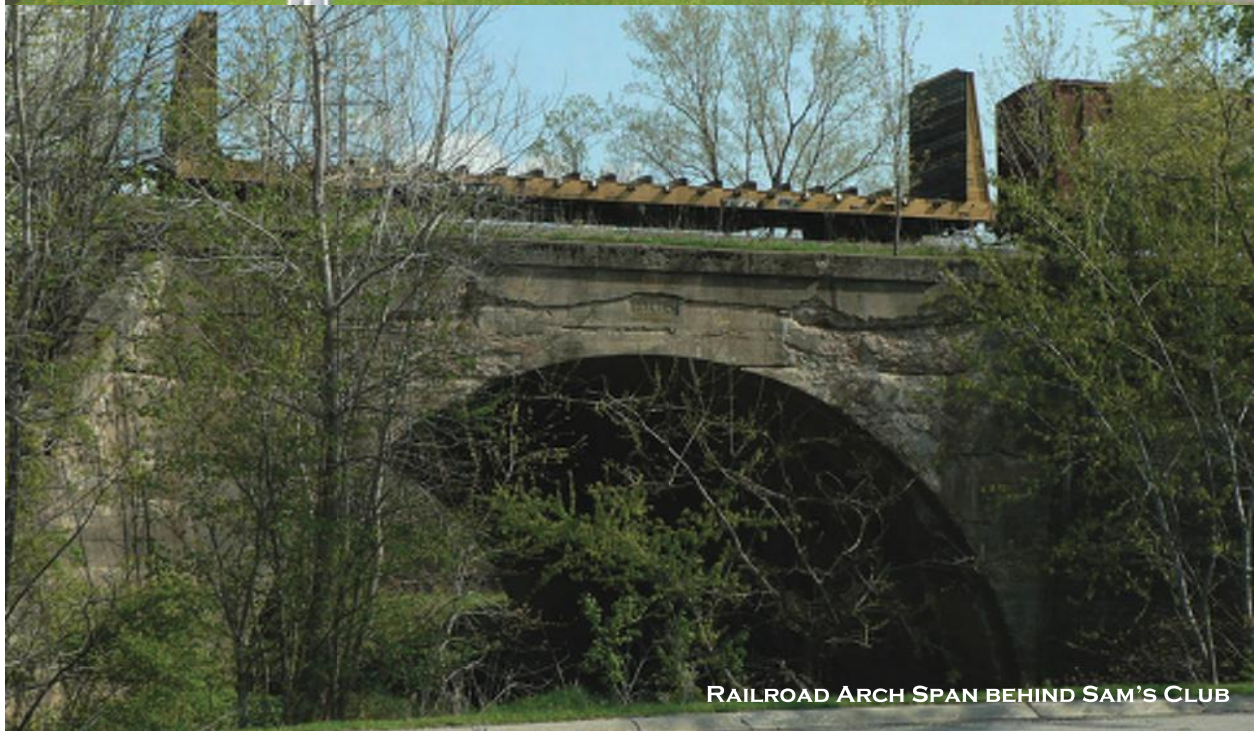


Through a partnership with Walmart, a new trailhead will be located in the store parking lot. Also, parking spaces along the western edge of the parking lot will be removed to accommodate a planted riparian zone along this area of channelized creek that will include the Valley Trail. At this point, there are two opportunities for extending the trail past the CSX railroad tracks. The trail can remain on the eastern edge of Big Creek, following the proposed riparian zone to the railroad underpass, where a cantilevered structure will be constructed through the underpass that carries the creek under the tracks. The second option is for the trail to cross the Big Creek channel on a proposed pedestrian bridge located between the Walmart parking lot and Sam's Club

to the west. The trail will follow the west side of the creek and run behind Sam's Club to the Tiedeman Road underpass at the railroad tracks. This will require restriping at Tiedeman Road to allow for a widened sidewalk along the eastern edge of the road at the underpass. From here, the trail runs east and utilizes the existing railroad bridge over Big Creek where it turns north towards the Cascade Crossing commercial area.

North of the CSX railroad tracks from either of the outlined options, the Valley Trail will head north

along the west side of the CEI substation, through the Cascade Crossing. This allows access to the trail from nearby hotels and provides access to surrounding restaurants and business from the trail. At this point, a Neighborhood Connector trail heads north along the east side of the CEI substation. This connector trail is covered in the next section. The trail reaches the Interstate 480 right-of-way on the north side of Cascade Crossing where it turns west to Big Creek. The Valley Trail passes along the creek and under Interstate 480 where it connects to the terminus of the Upland





GREENSPACE BEHIND THE
HOTELS AT CASCADE CROSSING



I-480 OVERPASS AT BIG CREEK



GABION WALL JUST NORTH OF I-480

Trail. The trail runs north following the creek to Biddulph Road. Two options are provided to pass north of Biddulph Road. The Trail follows old Biddulph Road east to an on-grade pedestrian crossing where it follows an existing grade cut back to the creek valley. Option two passes under Biddulph Road on a cantilevered structure hung from the underpass that passes Big Creek.

The Valley Trail enters the most pristine portion of the Big Creek riparian corridor at this point north of Biddulph Road. The trail meanders through

this wooded valley crossing the creek in five locations over five proposed pedestrian bridges. Several conservation easements will be required to construct a public trail this portion of the Big Creek ravine. Yet the beauty of this ravine justifies every effort to share this hidden wonder with the community.

The Valley Trail reaches Memphis Road through the Parkview Estates apartment complex drive. This will require a partnership agreement with the apartment complex but will also provide



A TRANQUIL SPOT IN THE
BIG CREEK VALLEY



MEMPHIS PICNIC AREA

renters with easy access to the trail system. Crossing Memphis Road on-grade at a pedestrian crosswalk, the trail enters the Memphis Road Picnic Area and the nearby trailhead.

The Valley Trail creates a major off-road pedestrian corridor through the community that provides critical links to commercial, recreational and natural areas. Residents will be connected to areas previously inaccessible to the public. Trails will provide recreational opportunities to the surrounding neighborhoods. And access to and from local commercial areas will benefit both trail users and local business alike.



WOODED FLOODPLAIN IN THE BIG CREEK VALLEY



TIEDEMAN HOUSE

Neighborhood Connector & Loop Trail Descriptions



CROSSWALK AT BROOKRIDGE ELEMENTARY SCHOOL



MARQUARDT PARK



EXISTING SIDEWALK FROM SOUTHWOOD DRIVE

The neighborhood connector trails provide easy neighborhood access to the two major north – south trails in the trail network. They also potentially serve as interim connections for parts of the major routes until such time as continuous routes are able to be developed. Each is described below.

Marquardt Park Connectors

Several routes connect Marquardt Park and its existing trail loop with adjacent neighborhoods and the major routes. The extension of the Park’s trail west along the undeveloped portion of the Richard Drive right-of-way and a segment of trail signed along Richard Drive, Sunny Lane and Shady Drive connects the Park with the Upland Trail at Shady Drive. A signed route east along Saybrook Drive through the County pump station property allows a pedestrian connection to the Ridge Park Square shopping complex. A signed route north along Brook High Drive to a proposed crosswalk at Biddulph Road allows a park connection to Brooklyn High and Middle Schools. This connection offers an interim route for the Upland Trail until such time as private property easements could be developed between Shady Drive and Biddulph Road for the Upland Trail.

A trail west from Marquardt Park and along the I-480 right-of-way permits connection to the Southwood Drive bridge overpass. At the bridge a consolidation of sidewalks is needed to permit an 8-foot walk to be constructed on the bridge’s east side for the trail. The trail here would be separated from traffic with a railing. West and south from the bridge the trail continues to the major trail within Cascade Crossings at the CEI substation access drive. This trail would be constructed within existing undeveloped street right-of-way, I-480 right-of-way, County pump station property and CEI property.



SAYBROOK DRIVE TERMINATING INTO MARQUARDT PARK



UNDEVELOPED RICHARD DRIVE



Key Bank Connector

Workers at Key Bank will benefit from a proposed trail connection between their complex west of Tiedeman Road and the Valley Trail at Cascade Crossings. The sidewalk along the south side of the Key Bank complex access road is widened to 8 feet to its intersection with Tiedeman Road. A pedestrian actuated signal is proposed at the existing intersection. The trail continues east on the south side of the Cascade Crossings access road, again as a widened sidewalk. It intersects with the Valley Trail at the trailhead proposed in the existing parking lot behind the Hampton Hotel.

Biddulph Road Connector

A trail is planned along the north side of Biddulph Road right-of-way replacing the current sidewalk. The right-of-way here is sufficiently wide to permit a meandering 8' walk to be constructed. The trail extends from Tiedeman Road on the west to Ridge Road on the east, interconnecting the neighborhoods with the two major trail routes. This includes neighborhoods along Biddulph Road but also the neighborhood east of Ridge Road. It forms the major east-west connector within the system. The trail crosses numerous residential street intersections with Biddulph Road and so signed crosswalks will be needed to alert on-coming car traffic. At its western terminus, the trail crosses Tiedeman Road at the existing signaled crossing and follows old Biddulph Road right-of-way to the Plain Dealer complex, permitting workers access to the trail network.



BROOKLYN HIGH & MIDDLE SCHOOLS



TYPICAL BICYCLE USAGE AT BROOKLYN HIGH & MIDDLE SCHOOLS WITH EXISTING WALK CONNECTOR

Schools Connector

A trail developed on a widened sidewalk on the north side of Behrwald Avenue connects the Upland Trail with Brooklyn High School and Middle Schools, Rodoan and Brookridge Elementary Schools, the Brooklyn branch of the Cuyahoga County Public Library and the City's Veterans Memorial Park. The trail further extends to the residential neighborhood east of Ridge Road. At the east end of Behrwald the trail continues along the north side of School Drive through the elementary schools complex. Here reconfiguration of parking at Rodoan Elementary School will be needed to permit the trail to be developed separately from the road. The trail continues east through the fields in the complex to the Library parking lot which will serve as a trailhead. It also travels north to connect with the existing pedestrian path system in Veterans Memorial Park. A portion of the existing path to the bridge that crosses Stickney creek is widened to serve as a multipurpose trail, connecting with the Upland trail at Park Drive.

The trail also extends east parallel to the Library drive to Ridge Road and a signaled crossing. The trail continues east, replacing a narrower walk in

neighborhood association open space behind the homes on Dawning Drive to a connection with Biddulph Plaza.



TRAIL CONNECTION AT REAR OF BROOKRIDGE ELEMENTARY SCHOOL



CUYAHOGA COUNTY PUBLIC LIBRARY IN BROOKLYN



American Greetings Connector

A trail is proposed to connect American Greetings new employee fitness trail with the Valley Trail at the Cleveland Bible Baptist Church property. The trail is located in American Greetings open space north of American Road to its intersection with Tiedeman Road. It crosses at a pedestrian actuated signal and continues east along the north side of the Church’s property. The house on that property is planned for removal. The trail follows the Church’s access drive into the Big Creek valley and connects with the valley trail in their playfields area.



Brooklyn Landfill Loop Trail

The Brooklyn Landfill is a major open space feature in the City north of Memphis Avenue. It is currently in operation and that is expected to continue for a number of years. Once closed, the property has the potential to be managed as a natural area, perhaps as a native prairie or meadow. Its perimeter today is quite scenic with long views of the Big Creek valley and beyond. A looped trail is planned in that perimeter that gives visitors access to the views. The western leg passes under tree canopy and overlooks the valley. The eastern leg parallels the CEI right-of-way and the adjacent residential neighborhood. A trailhead is planned for the western terminus of Rabbit Run Drive at the CEI corridor and is the primary access point for the trail. A signed trail route in Rabbitt Run Road is planned that connects this looped trail to the Oxbow area and the Civic Center.



COMMANDING VIEW OF MEMPHIS PICNIC
AREA FROM BROOKLYN LANDFILL



BIG CREEK VALLEY RIM AT THE BROOKLYN
LANDFILL WITH EXISTING NATURE TRAIL



OVERLOOKING OXBOW FROM WEST BLVD.



OLD BIG CREEK CHANNEL
IN OXBOW AREA

Oxbow Area Trails

Another major open space area in the City north of Memphis Avenue is the Oxbow area. It is a part of the Big Creek valley that features the original channel alignment of the creek before it was rerouted and channelized when Interstate 71 was constructed. The old alignment serves as a backwater and tributary channel for the creek. The valley floor is dominated by a floodplain forest remnant.



WOODED FLOODPLAIN IN THE OXBOW AREA

A nature trail loop is planned in the valley forest that is accessed from a proposed trailhead parking area in the adjacent rear parking lot of the Fire Station. The trail leading from the parking lot to the nature trail also connects with the Rabbit Run Drive trail at the community center of the adjacent Westbrook Village apartment complex. A trail in the parking lot drive of the Fire Station connects to a proposed widened sidewalk segment on the north side of Memphis Avenue to the Coyne Recreation Center property and the Upland Trail.



SIDEWALK IN FRONT OF FIRE
STATION ALONG MEMPHIS AVE.

Priorities & Next Steps





A conceptual stage construction cost opinion has been included in the Appendix for the public improvements needed to complete the plan. The cost opinion is divided geographically to depict segments of the trail and greenway improvements, giving readers the opportunity to view costs by probable construction phases. Details about the cost of professional fees, environmental clean-up, easements, property acquisition or relocation expenses are not included, given the variability of these costs and the relative lack of knowledge at this time about the factors affecting cost. Costs for the suggested land use changes are also excluded.

The cost opinion outlines a long-term series of activities needed to achieve the plan in its entirety. Realizing that a plan of this nature will require funding from a number of sources over a period of years, the Advisory Committee has discussed priority elements of the plan. The Advisory Committee has concluded that the Upland Trail Route from Big Creek Reservation to Brookside Reservation is the priority trail to focus attention on.

Although the Committee is committed to the benefits of the entire plan, the committee determined that certain plan elements of the Upland Trail route were more readily accomplished

than others. These have been grouped as priorities and are included in order of importance:

1. Pursue easements/acquisition with key landowners along the priority trail route (First Energy, ODOT, Walmart/ Bob Stark, the property owners that overlay the CEI easement).
- 2a. Develop the unimproved portion of the Richard Drive right-of-way for trail purposes.
- 2b. Develop the priority trail in Veterans Park paralleling Park Drive. Also widen the existing walking path connection to the schools connector trail.
- 2c. Develop the elementary school connector trail to the Veterans Park walking path between Rodoan and Brookside elementary schools and the library.
- 2d. Develop the priority trail at the Coyne Recreation Center to St. Thomas Moore School.

3. Develop the Oxbow natural area nature trail/connector and trailhead at the Fire Station.
4. Develop priority trail within CEI right-of-way from Biddulph to Memphis Villas Blvd.
5. Develop priority trail in CEI right-of-way from I-480 to Biddulph.
6. Develop priority trail connection in I-480 right-of-way from Cascade Crossings to CEI right-of-way north of I-480.
7. Develop conservation easements in Big Creek Valley greenway.
8. Develop the priority trail in the Walmart/Sam's Club properties.



Funding Strategies





The implementation of the **Big Creek Greenway Trail Alignment and Neighborhood Connector Plan** will be a multiple phase project, requiring 20 or more years to complete. Completion of the improvements will require support from an array of sources including governmental, public and private support.

The City of Brooklyn and its project partners have historically been successful in acquiring various grants and awards for the wide array of project needs envisioned for the plan. The funding for the diverging diamond intersection at I-480, this plan and the Big Creek Watershed study currently underway are examples of such efforts. Such grants and awards have been obtained individually by the City and in partnership with Friends of Big Creek, Cleveland Metroparks and other governmental bodies. The City of Brooklyn has been the administrative agent for a wide variety of the community development and neighborhood improvement programs that the City has undertaken and are on-going. Brooklyn and its partners are well versed in the intricacies of grant and loan development and administration. The City will play the lead role in raising the funds necessary for the plan's development, drawing on the strengths of its partner agencies when needed.

The City in concert with Friends of Big Creek and Cleveland Metroparks will continue to apply for funding for trail design, engineering, and construction, as the opportunities arise. Both public and private funds will be sought locally, regionally, and nationally. The Cleveland Metroparks has and will continue to play a vital role in the implementation of the Greenway trail network, as demonstrated by their significant investment in trail development within the Brookside and Big Creek Reservations and their desire to interconnect resources at the two Metroparks Reservations. As progress is made for the **Big Creek Greenway Trail Alignment and Neighborhood Connector Plan**, the City of Brooklyn, Friends of Big Creek and Cleveland Metroparks will coordinate efforts to guide the successful management and construction of the Greenway.

Granting agencies are very specific in their definition and scope of work. Trail and greenway projects will be delineated as to where funding is possible and not possible. Certain agencies, organizations, and foundations have very specific projects and programs they fund. For example, one may fund the acquisition of land, but limit any construction or engineering activity, while another may only be for engineering and design.



The key to setting the final trail alignments will be the success in acquiring fee title or conservation easements and negotiating right-of-way agreements with the various parties involved. As land is acquired or made accessible, trail design and engineering funds will then be sought. Acquisition and construction funds will be sought from both public and private entities. Such funding sources include, but are not limited to:

- Ohio Department of Natural Resources
 - o Natureworks Program
 - o Recreational Trails Program
 - o Land and Water Conservation Fund
 - o Coastal Restoration Program
- Ohio & Erie Canalway Association
- Lake Erie Protection Fund
- Ohio EPA (multiple programs)
- US EPA (multiple programs)
- NOACA (Transportation Enhancement/Improvement Program)
- Private Foundations
- Mitigation

The City of Brooklyn and its partners will be the primary parties responsible for acquiring the necessary funds for the plan's development.

Prioritized funding will be applied to the priority projects, pending funding availability, land acquisition, and alignment probability.