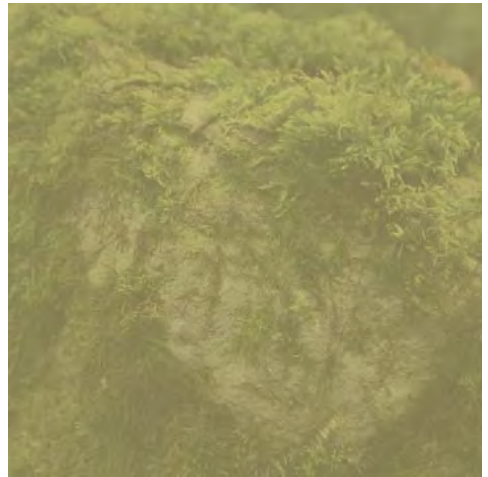
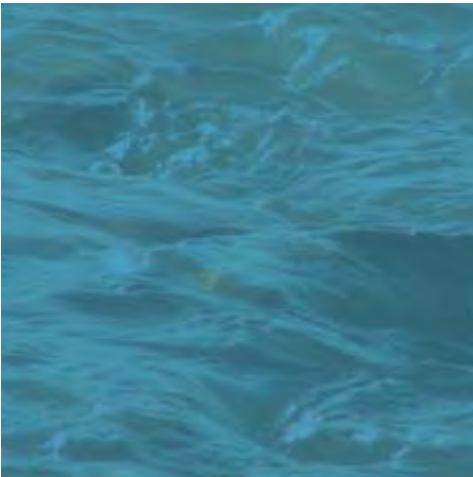


Olentangy Greenway Trail Alignment Study



Prepared for:

Columbus & Franklin County Metro Parks

January 2015



Project Background

CT Consultants, Inc has been retained by the Columbus and Franklin County Metro Parks to investigate three (3) alternative routes for the Olentangy Trail to extend from Highview Drive north to Highbanks Metro Park. This investigation is intended to be a general overview to better understand the barriers, opportunities and the constraints for each potential route. Each route has been evaluated by the following nine measures:

1. Physical Conditions
2. Property Ownership & Adjacent Landowner Impacts
3. Environmental & Cultural Impact
4. Bridges & Stormwater Management
5. Safety & Security
6. Aesthetics
7. Trail User Preferences
8. Constructibility
9. Construction Costs

The Olentangy Trail is part of the Central Ohio Greenways network. It's currently 18 miles in length and extends from Confluence Park in Downtown Columbus to Worthington Hills Park just north of Interstate 270. Some of the key points of interest along the route include: Old Worthington, Antrim Park, Whetstone Park, The Ohio State University campus, Confluence Park and Downtown Columbus. This family friendly route serves all levels of bicyclists, walkers, joggers, in-line skaters, nature enthusiasts and other modes of active transportation. This trail is heavily used for recreation, commuting to work and other casual purposes like shopping and going to sporting events. The existing multi-use asphalt trail is primarily an off-road facility that generally parallels the river bank. However, in the North Broadway area the trail is on-road and utilizes residential streets with pavement markings and trail signage.

The alignment study maps have been prepared on aerial photos overlaid with pertinent GIS information. The CT Team has walked much of the alignment and has assembled and reviewed background information about the project from available resources that includes park maps, recorded easements, right-of-way mapping, soil survey maps, wetland inventory maps, USGS map, prior parks and green space reports/discussions and other resources available for the site.

Proposed Trail Alignment "A"- 1.8 miles

This is the westernmost alignment studied, and would extend the trail north from Highview Drive on the west side of the Olentangy River utilizing existing public right-of-ways, easements, Plum Tree Drive, Water Treatment Facility and land owned by the Metro Parks. This trail would consist of off-road sidepath along Olentangy River Road (SR 315), on-road facilities on Plum Tree Drive, and greenway trail along the Olentangy River.

1. Physical Conditions

- a. Slopes and drainage: Drainage along the SR 315 right-of-way include ditches, storm culverts and one extended stream crossing (along SR 315). As the route approaches Plum Tree Drive there are steep side slopes descending from SR 315 to the Olentangy River on the east side of road. North of Mount Air the trail follows gently sloping topography until it connects to existing trails in Highbanks.
- b. Soils: Soils in this urban area are typically well compacted and suitable for bicycle facilities. Soil maps indicate this area to have soils of: Glynwood clay loam (6-12%), Genesee silt loam (occasionally flooded) and Ockley silt loam (2-



6%); none are hydric soils.

- c. Vegetation type: Vegetation consists of mowed lawns, large and mature landscaping, mature woodlot, old fields and large sycamore trees along the river.
- d. Vehicular traffic speed and volume along the route: Motor vehicle speed limits along this section of the SR 315 is 40 mph and has an Average Daily Traffic (ADT) is 15,000-18,000 trips per day between Clubview Blvd and the County line. Edgecliff Drive and Plum Tree Drive are low volume, low speed roads. Due to the high traffic volume on SR 315, exiting Edgecliff Drive and Plum Tree Drive can be difficult. The addition of trail users will add to the complexity of this intersection.
- e. Utility and other trail conflicts: There are numerous utility conflicts in and near the SR 315 right-of-way. These include: overhead electric/utilities, guardrails, large trees, mail boxes, brick columns, fencing, driveway culverts, and landscaping.
- f. Right-of-Way: SR 315 has a 60' ROW. Pavement is typically $\pm 28'$ wide- two 12' lanes with shoulders/ditch. The southern section (between Clubview and Mt. Airyshire Blvd) is $\pm 40'$ wide- (3) 12' lanes with shoulders. Platted right-of-way in Mount Air (Sharon Township) are 36' wide. Plum Tree Drive and Edgecliff Drive are 12' wide streets, with no curb/gutter or sidewalks.
- g. Other Barriers/Impacts: There are eleven (11) locations where the trail would cross residential and/or commercial driveways along SR 315. Also, the Olentangy River Road is a State Scenic Byway and adding a trail within this narrow corridor may negatively impact its visual character.

2. **Property Ownership/Adjacent Landowner Impacts**

- a. Easements: This alignment utilizes existing trail easements on the Mt. Air Condominium site and existing SR 315 Right-of-Way. Along SR 315 there is limited right-of-way to install a trail with buffer lawn. This route would likely need additional right-of-way and grading and construction easements in order to construct the trail. Where the trail intersects Plum Tree Drive, the trail would utilize this low volume/low speed road. At the end of Plum Tree Drive the trail would be on recently acquired Metro Parks property. Continuing north the trail enters the Water Treatment Facility so approval from the County will be needed.
- b. Visitor controls: Keeping users on the trail may be difficult to control due to limited space between the trail and numerous residential homes/driveways. A five-foot lawn is recommended to buffer the road from the edge of the trail. This would leave minimal space between the trail and adjacent property owners. Utilizing Plum Tree Drive in Mount Air will require trail directional signs and pavement marking. No parking signs, decorative fencing and increased law enforcement patrol may be desirable to discourage unauthorized parking. Fencing may also be needed along the Water Treatment Facility to control unauthorized access to that site.
- c. Trail connectivity: This route would be well connected to Worthington Hills Park, Hills Market, and adjacent homes, offices and condominiums along Olentangy River Road. Other than on Hard Road, the streets to the west of this route do not have sidewalks, so connectivity to the trail would be on-road.
- d. Other: North of Edgecliff Drive, there is a garage encroaching onto Metro Parks property that would need to be removed or relocated in order for the trail to continue north. In addition, the adjacent property owner appears to be utilizing Metro Park's property for parking and storage.

3. **Environmental & Cultural Impacts**

This alignment would have relatively minimal environmental impact. There are no wetlands impacted by the route and the majority of the trail would be outside of the Olentangy River floodway. However, the trail does cross the Olentangy River on the north end, and there is one stream crossing needed just north of Highview Drive. The project also lies within

the 1,000 feet of a State Scenic River so coordination with ODNR would be needed. Along SR 315 there are mature trees and landscaping that would need to be removed. Care should be taken that large mature sycamore trees along the route are protected. On the Water Treatment Facility site, there are several previously recorded archaeological sites. An additional archaeological survey will likely be required and the trail alignment may need to be adjusted slightly to avoid sensitive resources. There is also a bald eagle nest in the vicinity so coordination with US Fish and Wildlife will be needed. Much of this trail would be in the floodplain so the trail should be designed at or near existing grade so no changes to the river hydrology would occur. During major storm events, the trail may be closed due to flooding.

4. Bridges and Stormwater Management

One large pedestrian bridge over the Olentangy River would be required on this route. Its length would be approximately 225 feet. In addition, two minor pedestrian bridges along SR 315 will be required to cross streams carrying runoff from the west. Stormwater management along SR 315 would likely require enclosing ditches and adding storm inlet structures and culverts in the right-of-way. The majority of this route is outside the floodway, however the trail and bridge at the Olentangy River and a short section at Plum Tree Drive are within the floodway so approval by regulating agencies would be required.

5. Safety and Security

From a security standpoint, this route is mostly open in character so trail users will probably feel safe from violence and crime. However, from a safety perspective, they will likely have some concern about the high volume of traffic and close proximity to SR 315. Buffer lawns, guardrails and fencing may be needed to prevent trail users from entering this busy roadway. It should be noted that these types of barriers are designed to protect trail users but can have a negative impact by impairing visibility between road and path users and can complicate path maintenance. In addition, this short section has numerous driveway crossings and has the potential for increased conflicts with motorists, such as:

1. Motorists waiting to enter the roadway may block the trail
2. Motorists often don't notice quickly approaching trail users
3. Trail users often do not yield or stop at driveways
4. Where the sidepath ends, roadway traffic may block the on-road bike route

6. Aesthetics

A sidepath along SR 315 would not add to the existing aesthetic quality of the Olentangy Trail or roadway corridor. Mature landscaping would need to be removed, causing a negative visual impact to this State scenic byway. On Plum Tree Drive, the addition of pavement markings and signage would have minimal impact to the aesthetic quality of the roadway corridor. The section within the Water Treatment Facility and on Highbanks property would be an attractive section and be of similar character to much of the existing trail.

7. Trail User Preferences

Due to the high vehicular traffic volume and speed along SR 315 and numerous driveway crossings, the southern section of this route would not be a desirable location for many trail users. Plum Tree Drive, with its low volume, low operating speed, would be suitable for an on-road bicycle route, but could be a deterrent for walkers, runners and other slower moving users. This route north of Plum Tree Drive, has a wide buffer and minimal vehicular conflicts so this section would be a popular section.



8. Constructability

Construction access to the site is good due to the proximity to Olentangy River Road/ SR 315. Primary challenges would be utility relocation, maintenance of traffic; working within the limits of the SR 315 Right-of-Way; and constructing a bridge over the Olentangy River.

9. Construction Cost

This route has an estimated construction cost of approximately \$2.0 million dollars.

Proposed Trail Alignment "A" Site Photos



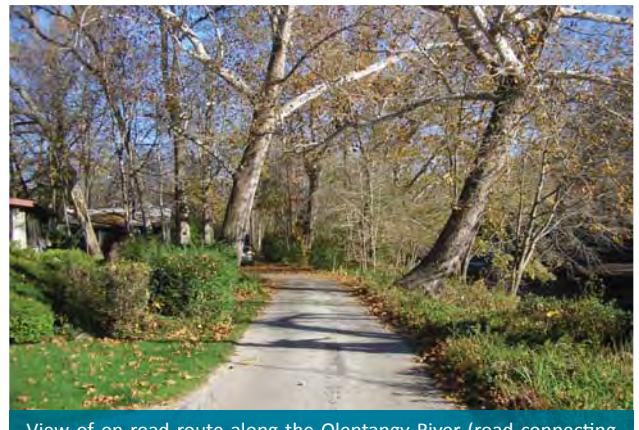
View of the existing Right-of-Way along SR 315



View of the existing Right-of-Way along SR 315



View of the existing Right-of-Way along SR 315



View of on-road route along the Olentangy River (road connecting Plum Tree Drive with Edge Cliff Drive)



View of garage and materials stored on Metro Park's property



View of woodlot near Edgecliff Drive

Proposed Trail Alignment "A" Site Photos (continued)



View of Highbanks Metro Park south of the Water Treatment Plant



View of the south side of the Water Treatment Plant



View of the existing Right-of-Way along SR 315



View of the route north of the Water Treatment Plant



View of the route north of the Water Treatment Plant



View of the Olentangy River at the proposed northern bridge crossing



LEGEND

- EX. OLENTANGY TRAIL
- - - ALTERNATIVE TRAIL A
- - - CITY OF COLUMBUS STUDY AREA
- HIGHBANKS METRO PARK
- NATURE PRESERVE
- * BRIDGE LOCATION

CT Consultants
engineers | architects | planners

SCALE: 1" = 300'
2' CONTOUR INTERVAL

- + ONLY ONE RIVER CROSSING REQUIRED
- + PROVIDES DIRECT ACCESS FOR SURROUNDING RESIDENTS
- + LOW ENVIRONMENTAL IMPACTS
- + SHORTEST, MOST DIRECT ROUTE
- + MOST COST EFFECTIVE ROUTE

- REQUIRES TRAVEL ALONG SR 315 (AVERAGE DAILY TRIPS: 15-18,000)
- DIRECTLY IMPACTS RESIDENTS IN MT. AIR
- REMOVAL OF MATURE LANDSCAPING ALONG SR 315 (SCENIC BYWAY)
- PEDESTRIAN & VEHICULAR CONFLICTS

OLENTANGY GREENWAY TRAIL ALIGNMENT 'A'

Proposed Trail Alignment “B” - 2.2 miles

This alignment crosses to the eastern bank of the river from the existing trail terminus at Hills Market. It then travels along the edge of the high bluffs until reaching the “pinch point” in the floodway (about 2/3 mile), where it crosses the river again to the western bank and onto Metro Park’s property. From the west side of the Olentangy River the route meanders along the Water Treatment Facility until it crosses the Olentangy River again onto Metro Parks property near the Big Meadows recreation area.

1. Physical Conditions

- a. Slopes and drainage: Most of the area is relatively flat with gently rolling topography. Three portions of this route are located within the mapped floodway and all of the route is within 1000 feet of the State Scenic Olentangy River. Along the southern portion, there are large bluffs adjacent to the route that rise over 150’ above the river. There are approximately eleven (11) deep ravines that channel water down to the river in this area. These ravines range in size from approximately 50’ wide by 10’ deep to 160’ wide by 30’ deep. Most of the ravines dissipate to small channels at the base of the bluffs where the multi-use trail would be located. The appropriate size culvert would be needed to bridge storm events. On the west side of the Olentangy River the route follows gently sloping topography until it connects to existing trails at Highbanks.
- b. Soils: Soils are primarily Genesee silt loam and are occasionally flooded (not hydric). Other soils include Ockley silt loam. Both are suitable for the development of multi-use trails. The adjacent bluffs consist of Ohio Black and Olentangy shale. There is likely considerable depth of topsoil, so the trail base material may need to be enhanced with suitable subgrade material or a geotechnical grid to support the trail.
- c. Vegetation type: This area is a mature woodland with interspersed younger forest growth. There are pockets of wooded wetlands in the area as well. Common species include sycamore, hackberry, maples, oaks, and common pawpaw. Due to the openness of this area, most wetlands and large trees could be avoided.
- d. Vehicular traffic speed and volume along the route: There are minimal vehicular conflicts along this route. Trail users would only cross two driveways at the entrance to the Water Treatment Facility.
- e. Utility conflicts: There are minimal utility conflicts existing along this route. One exposed steel pipe was observed that would need to be avoided (across from Mt Air neighborhood near the river). At the SW corner of the Water Treatment Facility there are electric poles and services to be avoided.
- f. Right-of-Way: None.
- g. Other Barriers/impacts: At the top of the bluffs, Camp Mary Orton has zip lining and other adventure activities. This trail may be visible from these facilities and vice-versa.

2. Property Ownership/Adjacent Land Owner Impacts

- a. Easements necessary: There are three adjacent land owners impacted. They include the Hills Market, Camp Mary Orton property and the Water Treatment Facility. Easement currently exists allowing the development of trails on all of these properties. A portion of this route is located on the Edward F. Hutchins State Nature Preserve. It prohibits park facilities with the exception of allowing for visitor access, nature trails, nature interpretation features and possibly a park roadway. It does not allow multi-use asphalt trails so approval from ODNR would need to be obtained.
- b. Visitor controls: There may need to be signage, fencing or other controls to limit visitor access to Camp Mary Orton. The steep terrain will likely deter visitors from exiting the trail and going up the bluffs. Along the Water Treatment Facility, fencing may also be needed to control unauthorized access to that site.
- c. Trail connectivity: This route provides minimal connectivity to surrounding neighborhoods. There is a potential to provide a connector trail to the Camp Mary Orton facilities and the adjacent Northwoods neighborhood. These links



would provide new trail access to residents of Northwoods and could be a positive benefit to Camp Mary Orton by increasing exposure and providing an additional program activity for campers. West of the river, streets do not have sidewalks so connectivity to the trail would be on-road.

3. Environmental & Cultural Impacts

This route would potentially impact sensitive ecological and cultural resources. The three river crossings and one stream crossing would need to be coordinated with the local Floodplain Administrator, Scenic River Program, Army Corps of Engineers and other reviewing agencies.

There are also six forested wetlands and one riverine wetland located in or near the southern portion of the proposed trail alignment. Care should be taken to avoid these resources as much as possible.

1. There is a ±2.5 acres of potential wetlands in this area. Care should be taken to avoid or bridge this wetland.
2. 3 river crossings and 1 stream crossing.
3. Bald eagles, Mussel beds, Concretion Deposit and Cliffs (Natural Heritage database).
4. The project lies within 1,000 feet of the State Scenic Olentangy River.
5. Excavation may generate cultural materials in the Olentangy River floodplain.

On the Water Treatment Facility site, there are several previously recorded archaeological sites. The trail alignment may need to be adjusted slightly to avoid sensitive resources. There is also a bald eagle nest in the vicinity so coordination with US Fish and Wildlife will be needed. Much of this trail would be in the floodplain so the trail should be designed at or near existing grade so no changes to the river hydrology would occur. During major storm events, the trail may be closed due to flooding.

4. Bridges and Stormwater Management

Three large pedestrian bridges over the Olentangy River would be required on this route. Their length would be approximately 210 feet at the southern bridge, 260 feet at the central bridge and 225 feet at the northern bridge. 210 feet is approaching the normal design limits for pre-engineered, prefabricated bridges. The 260-foot span may need a center support. There are also approximately eleven (11) small culverts needed to allow ravine drainage to flow under the trail and one short bridge crossing near the Water Treatment Facility. Any fill needed to construct the trail in Olentangy floodway would need to be mitigated and approved by the local Floodplain Administrator. In addition, boardwalks may be needed to span existing wetlands impacted by trail development.

5. Safety and Security

This section of trail is relatively open in character so users can see their immediate surroundings. However, some of this route is not visible from roads or buildings so enhanced security measures like emergency phone boxes and increased law enforcement patrols may be desirable.

6. Aesthetics

This route is very scenic with large mature trees, dramatic views of the bluffs, and long views down the Olentangy River.

7. Trail User Preferences

Due to the relatively flat terrain, scenic views, and direct route, this would likely be a very popular section of the Olentangy Trail.

8. Constructibility

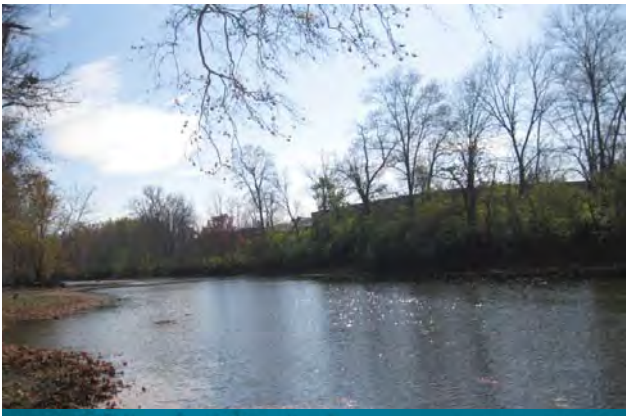
Construction access to the southern portion of this site would be difficult due to the Olentangy River on the west side and the high bluffs to the east. Bridges may need to be designed to support light construction equipment (dump truck, excavators, asphalt equipment). It is also likely that one temporary construction road be built over the river to gain access to the east side. The remaining northern portion of the route would be relatively easy to construct.

9. Construction Cost

This route has an estimated construction cost of approximately \$3.2 million dollars.



Proposed Trail Alignment “B” Site Photos



View of the Olentangy River at the proposed southern bridge crossing at Hills Market



View of the Olentangy River floodplain



View of the Olentangy River floodplain



View of the Olentangy River floodplain and bottom of bluffs



View of a large ravine east of the Olentangy River



View of the Olentangy River at the proposed central bridge crossing

Proposed Trail Alignment "B" Site Photos (continued)



View of Highbanks Metro Park south of the Water Treatment Plant



View of the south side of the Water Treatment Plant



View of the existing Right-of-Way along SR 315



View of the route north of the Water Treatment Plant



View of the route north of the Water Treatment Plant



View of the Olentangy River at the proposed northern bridge crossing



- LEGEND**
- EX. OLENTANGY TRAIL
 - ALTERNATIVE TRAIL B
 - HIGHBANKS METRO PARK
 - NATURE PRESERVE
 - BRIDGE LOCATION



0' 500' 1000'
SCALE: 1" = 500'
2' CONTOUR INTERVAL

CT Consultants
engineers | architects | planners

- + MINIMAL NEGATIVE IMPACTS TO SURROUNDING RESIDENTS
- + MAINTAINS GOOD CONNECTIVITY TO LOCAL NEIGHBORHOODS
- + VERY SCENIC ROUTE
- + VERY USER FRIENDLY ROUTE
(GRADIENT, VEHICULAR CONFLICTS)

- THREE RIVER CROSSINGS REQUIRED
- TRAIL DOES NOT FIT RESTRICTIONS OF NATURE PRESERVE EASEMENT
- MOST ENVIRONMENTAL IMPACTS
- DIFFICULT CONSTRUCTION ACCESS
- MOST EXPENSIVE ROUTE

OLENTANGY GREENWAY TRAIL ALIGNMENT 'B'

Proposed Trail Alignment “C” - 2.8 miles

This alignment is the eastern most route and crosses the Olentangy River from the existing trail terminus at Hills Market. It then winds uphill with switchbacks, gaining approximately 150’ before reaching the ridge, where it continues traveling north towards Highbanks Metro Park. Once at Highbanks the route utilizes upland areas and some of the existing Overlook and Wetland Spur Nature Trails.

1. Physical Conditions

- a. Slopes and drainage: The majority of this route has topography ranging from gently rolling 3% grades to steep 30% slopes. After crossing the river from Hill’s market, this route will climb approximately 150 vertical feet in less than 0.6 miles. Due to the steep hillside, trail grades will exceed recommended ADA slopes. Since physical constraints prevent full compliance with the 5% maximum grade, additional safety measures like increased curvature, hill warning signs and increased clearances may be needed. This route also crosses nine (9) significant ravines that range in size from just a few feet in depth to over 30-feet deep and 160-feet wide.
- b. Soils: There are 10 different soil types along this route. These include Genesee (0-2%), Alexandria (18-25%), Cardington (2-12%), Bennington (2-6%), Udorthents (0-6%) and Glynwood (2-12%). None of these are hydric, and are suitable for the development of multi-use trails. There is likely to be considerable depth of topsoil in areas, so trail base material may need to be enhanced with suitable subgrade material or a geotechnical grid to support the trail. The bluffs consist of Ohio Black and Olentangy shale.
- c. Vegetation type: This area is primarily mature oak-hickory-beech woodland with interspersed with younger forest growth. A portion of the trail bisects an existing wetland near the Olentangy River and another trail section borders an existing wetland near Bluejay Drive.
- d. Vehicular traffic speed and volume along the route: There are minimal conflicts with motor vehicles. Only one conflict occurs where the trail crosses the park entrance drive near the Nature Center.
- e. Utility conflicts: Minimal utility conflicts exist along this route. The trail would cross under an overhead utility line near Bluejay Drive.
- f. Right-of-way: None.
- g. Other Barriers/impacts: Highbanks Metro Park hiking trails in this area would be impacted and may need to be relocated or combined with the multi-use trail. In addition, Camp Mary Orton has nature trails, zip lining and other adventure activities that would be in close proximity and within view of the proposed trail.

2. Property Ownership/Adjacent Land Owner Impacts

- a. Easements: There are two adjacent land owners impacted. One is the Hills Market and the other is the Camp Mary Orton property. Easement currently exists allowing the development of trails on both of these properties.
- b. Visitor controls: Signage will be important to keep bicyclist off natures trails and to alert visitors using the nature trails that they are crossing a heavily used multi-use trail. There may also be a need for fencing, signage or other visitor controls to limit/prevent access to Camp Mary Orton.
- c. Trail connectivity: There are two subdivisions (Olentangy High Bluffs & Northwoods) that could be connected to this route; however, an easement would be needed (most likely via Worthington Christian Congregate Care on Highbluffs Boulevard). Also, Camp Mary Orton could be connected, increasing their exposure and providing another activity for campers.

3. Environmental & Cultural Impacts

This route would potentially impact sensitive ecological resources. One river crossing would need to be coordinated with the Floodplain Administrator, Scenic River Program, Army Corps of Engineers and other reviewing agencies.

There are also six forested wetlands and one riverine wetland located in or near the proposed trail. Care should be taken to avoid these resources as much as possible.

1. ±2 acres of potential wetlands
2. 1 river crossing and potentially 10 stream crossings
3. Mussel beds (Natural Heritage Database)
4. Excavation may generate cultural materials in the Olentangy River floodplain
5. Archaeological deposits likely; Orchard Mound (can be avoided)

4. Bridges and Stormwater Management

One large bridge over the Olentangy River is required (from Hill's Market). Its length would be approximately 210 feet in length; this is approaching the normal design limits for a pre-engineered, prefabricated bridge. There are also nine (9) other pedestrian bridges required to complete this route. These bridges would likely range in length from 30 feet to 120 feet in length. Due to the difficulty of construction access, timber framed bridges would likely be the most feasible alternative. To cross minor drainage swales numerous small culverts would be needed to allow stormwater to flow under the trail.

5. Safety and Security

This route is relatively open in character so trail users can view their immediate surroundings. This alignment has limited visibility from roads and buildings so enhanced security measures (emergency phone boxes, increasing law enforcement patrols, etc) may be desirable.

6. Aesthetics

This area is very scenic with large mature trees, wetlands and long dramatic views down the ravines. Since several sections of the existing nature trails are proposed to be converted to multi-use trails, care should be taken that trail and bridge upgrades match the rustic, heavy timber construction seen throughout the park. During design, minimizing earthwork and vegetation disturbance to this area should be a priority.

7. Trail User Preferences

Casual trail users who are visiting the route for moderate exercise, commuting to work, running errands or nature observation will likely find this route very challenging and undesirable. This is mainly due to the steep climb necessary near the Olentangy River and continuously rolling topography further into the park. Visitors with mobility challenges/disabilities would likely not be able to use this route due to the long extended climbs. Conversely, experienced cyclist, runners and other exercise enthusiasts who have a high fitness level would likely enjoy this challenging alignment.

8. Constructibility

Construction access to this site would be difficult due to the Olentangy River on the west side and the high bluffs to the east. The Olentangy River bridge is likely to be prefabricated steel and other bridges crossing ravines are likely to be timber. Temporary construction access drives for dump trucks, asphalt pavers and other heavy machinery may be needed. Due to the sensitive nature of the park, constructing the ravine bridges using deck level construction techniques could be an environmentally sensitive alternative.

9. Construction Cost

This route has an estimated construction cost of approximately \$3.1 million dollars.



Proposed Trail Alignment “C” Site Photos



View of the Olentangy River across from Hills Market



View of the Olentangy River floodplain



View of the upland areas in the floodplain



View of Camp Mary Orton nature trails and zip line area



View of the undeveloped upland area in Highbanks Metro Park



View of a deep ravine in Highbanks Metro Park

Proposed Trail Alignment “C” Site Photos (continued)



View of the undeveloped upland area in Highbanks Metro Park



View of a deep ravine in Highbanks Metro Park



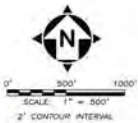
View of an existing nature trail and bridge in Highbanks Metro Park



View of an existing nature trail in Highbanks Metro Park



- LEGEND**
- EX. OLENTANGY TRAIL
 - ALTERNATIVE TRAIL C
 - HIGHBANKS METRO PARK
 - NATURE PRESERVE
 - BRIDGE LOCATION



CT Consultants
engineers | architects | planners

- + ONLY ONE RIVER CROSSING REQUIRED
- + MINIMAL NEGATIVE IMPACTS TO SURROUNDING RESIDENTS
- + PROBABLY THE MOST SCENIC ROUTE
- + POPULAR WITH ADVANCED ATHLETES & EXERCISE ENTHUSIASTS

- CONNECTIVITY TO SURROUNDING NEIGHBORHOODS WEAK
- REQUIRES STEEP ASCENT/DESCENTS
- DIRECT IMPACTS TO EX. NATURE TRAILS
- EXPENSIVE & DIFFICULT TO BUILD
- REQUIRES 9 RAVINE CROSSINGS
- LONGEST & LEAST DIRECT ROUTE

OLENTANGY GREENWAY TRAIL ALIGNMENT 'C'

Summary and Conclusions

The connection of the Olentangy Greenway Trail to and through Highbanks Metro Park has been a long term goal of Metro Parks and the Central Ohio Greenway Initiative. This trail connection would provide an important and highly desirable link for transportation to and from work locations, residential neighborhoods, shopping areas, and the Metro Park. Accomplishing this task is not easy. The following is a brief summary of each route that highlights the opportunities and constraints imposed by each alternative.

Alignment A

This route is 1.8 miles in length and requires one (1) significant bridge over the Olentangy River, (State Scenic River). It's the least disruptive environmentally, as it utilizes potential right-of-way of State Route 315, potential trail easements, township roads, floodplain and only crossing the river once. The most significant challenge with this route is the limited space for a 10 wide side path along State Route 315 and township roads where additional land will be needed to facilitate the trail. This section would also require enclosing ditches, relocation utilities along the roadway and crossing several residential drives. Many of these challenges could be avoided by working with adjacent land owners along this route to obtain additional easements and or purchasing property to move the route away from State Route 315 and onto the floodplain. The northern section utilizes a potential trail easement from the Delaware County Commissioners. This route also provides for the connections and access from neighboring communities and takes into consideration for a future trail connection from the Village of Powell along Jewett Road.

This route has an estimated construction cost of approximately \$2.0 million dollars.

Alignment B

This route is 2.2 miles in length and requires three (3) different bridges over the Olentangy River, (State Scenic River). Early coordination with Ohio Department of Natural Resources, Scenic Rivers, has indicated they prefer minimal crossings and impacts to the stream corridor. The southern bridge crossings utilize land dedicated as the Hutchins State Nature Preserve, which currently does not allow multi-use trails. The trail design and layout will need to ensure that the river bank is stable, sensitive areas avoided and the floodway is not impacted. Construction access of the southern end will be limited due to the river and high bluffs. This route has the least amount of conflicts with adjacent properties and roadways. This alignment also utilizes the same northern route as Alignment A.

This route has an estimated construction cost of approximately \$3.2 million dollars.

Alignment C

This is eastern most route is viewed by some to be an easy choice due to the amount of available parkland owned by Metro Parks. While this route may look simple, it has some serious challenges. This route is 2.8 miles in length and would require one (1) bridge over the Olentangy River (State Scenic River). It also has the challenge of traversing the 150' high bluffs. The trail would use a series of switchbacks at slopes ranging from 3% to 10% for 3,200 feet. This would be a significant challenge for many trail users. Construction of this section would be challenging as approximately nine (9) bridges ranging from 30 feet to 160 feet in length would be needed to cross the many ravines. Access for construction would also be difficult with limited points of entry. The northern section of the alignment utilizes existing nature trails and bridges that would need upgraded for a multi-use trail. This trail would be the most scenic of the three options, but has limitations for community access.

This route has an estimated construction cost of approximately \$3.1 million dollars.