



Executive Director's Recommendation

Commission Meeting: February 1, 2018

PROJECT Purple Line Light Rail Transit Facility Northwest Branch Stream Valley Park Northeast Branch Stream Valley Park Prince George's County, Maryland	NCPC FILE NUMBER 6884
	NCPC MAP FILE NUMBER 00.00(41.14)44601
SUBMITTED BY Maryland-National Capital Park & Planning Commission	APPLICANT'S REQUEST Approval of preliminary and final site development plans
	PROPOSED ACTION Approve as requested
REVIEW AUTHORITY Capper Cramton Act Review per 46 Stat. 482	ACTION ITEM TYPE Consent Calendar

PROJECT SUMMARY

On behalf of the Maryland Transit Authority, the Maryland-National Capital Park & Planning Commission has requested preliminary and final review of site development plans for the Northwest Branch and Northeast Branch Stream Valley Parks to accommodate the new Purple Line light rail transit facility. The alignment will cross along the median of University Boulevard through the Northwest Branch Stream Valley Park and cross through Northeast Branch Stream Valley Park on a separate bridge span south of River Road. The Purple Line is planned as a 16-mile, regionally-significant, transit facility between Bethesda, Maryland (Montgomery County) and New Carrollton, Maryland (Prince George's County), providing east-west connectivity between the Metrorail's Red, Orange, and Green Lines. Construction will occur between 2018-2021 within the Northwest and Northeast Branch Stream Valley Parks.

KEY INFORMATION

- NCPC has approval authority of the project since the two sites are located on property acquired with federal funding appropriated under the 1930 Capper Cramton Act. The Act was intended to provide for the acquisition of lands in Maryland and Virginia to develop a comprehensive park, parkway, and playground system in the National Capital.
- The Purple Line project evolved from several prior transportation planning activities in the study area, which informed the consideration of alternatives in the NEPA process. These included The Potential for Circumferential Transit in the Washington Region (MwCOG Transportation Planning Board, 1993) and the Capital Beltway High Occupancy Vehicle (HOV) Lane Study (initiated by the State Highway Authority in 1993), which in 1998 became the Capital Beltway Corridor Transportation Study. The "Georgetown Branch Trolley," a proposed transit line between Bethesda and Silver Spring, was first included as a project in the 2000 update to the region's Constrained Long Range Transportation Plan (CLRP).

- A group of companies known as the Purple Line Transit Partners will construct, maintain, and operate the Purple Line on behalf of the Maryland Transit Administration as part of a public-private “P3” partnership. The Maryland Transit Administration will own the future Purple Line facility, which is scheduled to start service in 2022.
- The project underwent an Alternatives Analysis/Draft Environmental Impact Statement analysis (2003-2009) and Final Environmental Impact Statement analysis (2010-2014), jointly led by the Maryland Transit Administration and Federal Transit Administration.
- NCPC approved the Purple Line crossing under Baltimore-Washington Parkway along Riverdale Road (Maryland State Route 410) in October 2017. The National Park Service submitted the project to NCPC for review on behalf of the Maryland-National Capital Park & Planning Commission.

RECOMMENDATION

The Commission:

Approves the preliminary and final site development plans for improvements to Northwest Branch Stream Valley Park to accommodate the Purple Line light rail transit facility within the median of University Boulevard (Maryland State Route 193) in Prince George’s County, Maryland.

Approves the preliminary and final site development plans for improvements to Northeast Branch Stream Valley Park to accommodate the Purple Line light rail transit facility, with a new bridge, along the southside of River Road in Prince George’s County, Maryland.

PROJECT REVIEW TIMELINE

Previous actions	None.
Remaining actions (anticipated)	None.

PROJECT ANALYSIS

Executive Summary

The Maryland-National Capital Park & Planning Commission (MNCPPC) has submitted preliminary and final site development plans for the Purple Line light rail transit facility across Northwest Branch Stream Valley Park and Northeast Branch Stream Valley Park in Prince George’s County. NCPC staff analyzed proposed park property improvements to accommodate the new facility crossing in accordance with the 1930 Capper-Cramton Act and the subsequent 1931 agreement between NCPC and MNCPPC, which grants NCPC approval over development

plans for park-related development. NCPC's review focuses on protecting the character and setting of the parks and ensuring that any improvements are for park purposes.

Based on the project submission, staff finds that the new Purple Line facility is a park purpose as it provides access to the park and utilizes existing transportation routes to minimize its impacts to surrounding parkland. It also improves stormwater management. Therefore, staff recommends that the Commission **approve the preliminary and final site development plans for improvements to Northwest Branch Stream Valley Park and Northeast Branch Stream Valley Park to accommodate the Purple Line light rail transit facility in Prince George's County, Maryland.**

Background

Land for the Northwest Branch Stream Valley Park and Northeast Branch Stream Valley Park (where the two project sites are located) was acquired with federal funding appropriated under the 1930 Capper-Crampton Act, which gives NCPC approval authority over park projects. Although the Act vested property ownership to the State of Maryland, with administrative jurisdiction granted to the County through the Maryland-National Capital Park & Planning Commission. Congress enacted the 1930 Act to provide for the acquisition of lands in Maryland and Virginia for development of a comprehensive park, parkway, and playground system in the National Capital. A subsequent 1931 Agreement between NCPC and the Maryland-National Capital Park and Planning Commission prohibits "in whole or in part, conveyance, sale, lease, exchange or use or development of lands acquired with Capper Crampton funds for other than park purposes; and requires Capper-Crampton lands to be developed in accordance with plans approved by the NCPC."

The State of Maryland has been planning and developing the Purple Line light rail transit project over the last 17 years as a much-needed, east-west link in the region's transportation system, connecting several major activity centers and four Metrorail lines. The project is also reflected in the Montgomery County and Prince George's County Comprehensive Plans, as well as the Metropolitan Washington Council of Governments *Region Forward Vision Plan*. Purple Line funding is from the State, federal government (Federal Transit Administration), and a consortium of companies known as the Purple Line Transit Partners through a Public Private Partnership (P3). The project design has been refined during three previous planning and development phases – an Alternatives Analysis/Draft Environmental Impact Statement, Final Environmental Impact Statement, and final concessionaire (Purple Line Transit Partners) development. The State will own the new service, with final design/development, construction, operation, and maintenance done by the Purple Line Transit Partners under a formal, 36-year agreement.

The Project

Northwest Branch Stream Valley Park

The new light rail facility will cross through the Northwest Branch Stream Valley Park along the center median of University Boulevard (Maryland State Route 193), which is slightly elevated (2-3 feet) above adjacent parkland. University Boulevard is buffered by varying widths of mature forest along its entire north-side and part of its south-side within the Park. The Purple Line will

cross through Northwest Branch Stream Valley Park within a widened University Boulevard right-of-way, across a widened bridge (over Northwest Branch), designed with a single concrete pier located in the floodplain along the western bank of Northwest Branch. The current bridge is 131-foot long and 100-foot wide, and the new bridge will be 131-foot long and 107-foot wide.

The new bridge will accommodate a 26-foot wide (2-track) light rail facility; four 12-foot-wide travel lanes (two westbound and two eastbound); two 5-foot wide bicycle lanes; widened (5-foot) sidewalks; landscaping; and lighting/overhead catenary wire support poles. The new bridge will be a steel two-span bridge, treated with rustic ashlar form liner across the length of the bridge and random cut stone form liner along the bridge abutments and piers. The new bridge design will use one less pier than the current bridge, which has two piers.

Project mitigation will include the following measures to mitigate the corridor widening across the park:

- New native trees (202 over-story trees, 22 evergreens, 95 flowering trees) planted on-site and additional off-site trees planted in State-designated replenishment areas;
- New vegetation (208 shrubs) planted on-site; and
- Stream restoration (resulting in slower water velocity and reduced sedimentation).

The project will require temporary use of 3.5 acres of parkland along University Boulevard to widen the roadway and construct the new bridge, and permanent use of 0.8 acres of park property. The land will transfer from Maryland-National Capital Park & Planning Commission control to the State via various perpetual easements and fee-simple transactions.

Northeast Branch Stream Valley Park

The new light rail line will cross through the Northeast Branch Stream Valley Park along the south side of River Road, spanning over the Northeast Branch Trail and Northeast Branch stream on a separate double-span concrete bridge. River Road is currently buffered by intermittent sections of mature forest along each side, with breaks for the Trail and stream crossing, stormwater management pond area (south side), and a developed property (north side).

The transit line will require a 55-foot right-of-way width through the park to accommodate both light rail line tracks, overhead catenary wire poles, and track bed. The new bridge, situated 30 feet to the south of the existing River Road bridge, will be 30-foot wide and 452-foot long, with bridge abutments treated with a form liner pattern and painted steel to match the existing River Road bridge. The new bridge design will have one pier.

Project mitigation will include the following measures to mitigate the corridor widening across the park:

- New native trees (589 over-story trees, 69 evergreens, 284 flowering trees) planted on-site and additional off-site trees planted in State-designated replenishment areas;
- New vegetation (40 shrubs) planted on-site; and
- Stream restoration (resulting in slower water velocity and reduced sedimentation).

The project will require temporary use of 2.7 acres of parkland to construct the new facility and bridge, and permanent use of 1.2 acres of park property, primarily to the south of River Road. The land will transfer from Maryland-National Capital Park & Planning Commission control to the State via various perpetual easements and fee-simple transactions.

Analysis

Pursuant to the 1930 Capper-Cramton Act, NCPC's review focuses on protecting the character and setting of the parks and ensuring that any improvements are for park related purposes. Projects that provide public benefits such as improving the water quality of streams along with improving park accessibility and park resources are encouraged. Examples of park related improvements include adding wetlands & meadow areas to a steam valley park, adding a hiker-biker trail section to improve the regional trail network, or adding a foot-bridge and connector trail to improve access to an existing park.

The new Purple Line facility will improve access to Northwest Branch Stream Valley Park through construction of a new nearby station, and new bicycle lanes, widened sidewalks, and streetscapes along University Boulevard. Currently, there is a narrow, 4-foot sidewalk along the south side of University Boulevard, and a discontinuous narrow sidewalk along the north side, with no bicycle lanes. The new Purple Line will supplement existing bus transit service along University Boulevard as well. The project will improve access to Northeast Branch Stream Valley Park with a new nearby station and completion of the south side sidewalk along River Road to its intersection with Kenilworth Avenue. The new Purple Line will supplement existing bus transit service along River Road.

Within the Northwest Branch Stream Valley Park, the new bridge design will improve local water quality by eliminating one of the piers within the streambed (compared to the current bridge), increasing pervious area within the corridor right-of-way (via planter boxes), and stream restoration. The Purple Line project will improve water quality within the Northeast Branch Stream Valley Park through stream restoration and drainage system improvements.

From a larger perspective, the new Purple Line will serve an important need for east-west mobility across the Maryland suburbs, with connections between three Metrorail lines and several employment centers. The project will support Montgomery and Prince George's County planning goals for more efficient development patterns concentrated along major transportation corridors and preservation of open space, agricultural, and park within the jurisdictions. The proposed improvements to the Northwest and Northeast Branch Stream Valley Parks will enable the Purple Line to cross through the parks along existing transportation routes, which have gradually expanded over time to accommodate local and regional travel needs.

CONFORMANCE TO EXISTING PLANS, POLICIES AND RELATED GUIDANCE

Comprehensive Plan for the National Capital

The Purple Line's Purpose and Need Statement describes the intent of the new facility as follows:

- Provide faster, more direct, and more reliable east-west transit service connecting the major activity centers in the Purple Line corridor at Bethesda, Silver Spring, Takoma/Langley Park, College Park, and New Carrollton;
- Provide better connections to Metrorail services located in the corridor; and
- Improve connectivity to the communities in the corridor located between the Metrorail lines.

In addition, earlier planning efforts developed technical studies to assess future ridership, social effects and land use planning, and economic effects. The studies support the Purple Line as a higher-quality link in the regional transit system compared to local east-west bus service, which is often slow and unreliable due to existing roadway congestion. As links in the future Purple Line, this project is consistent with the following NCPC planning policies from the Transportation Element:

- Capacity and service expansion of the regional Metrorail and Metrobus systems and other regional and local transit services, particularly where these services will support existing or planned federal facilities;
- Encourage ridesharing, biking, walking, transit, and other non-SOV modes of transportation for federal commuters and visitors;
- Support multimodal connections and transportation alternatives in the regional system;
- Extend the transit system's reach into developed, but underserved areas of the region.

National Historic Preservation Act

In compliance with Section 106 of the National Historic Preservation Act, NCPC designated the Federal Transit Agency as lead federal agency pursuant to 36 CFR 800.2(a)(2) to fulfill its Section 106 responsibilities for the design and construction of the Purple Line project via letter dated January 6, 2014. There were no identified historic features identified within either the Northwest Branch Stream Valley Park or Northeast Branch Stream Valley Park.

National Environmental Policy Act

The FTA developed an Alternatives Analysis/Draft Environmental Impact Statement and Final Environmental Impact Statement for the project, issuing a Record of Decision on March 19, 2014 to conclude its review responsibilities under the National Environmental Policy Act. Based on the FTA EIS and additional supplementary information provided by the Maryland-National Capital Park & Planning Commission, NCPC has issued its own Record of Decision for project improvements to the Northwest Branch and Northeast Branch Stream Valley Parks, which were acquired with federal funding appropriated through the 1930 Capper-Cramton Act. Mitigation and minimization measures specified in the NCPC Record of Decision pertain to park access and stormwater management/water quality.

CONSULTATION

The project underwent extensive consultation with multiple neighborhood groups, federal agencies, state agencies, county agencies, and interest groups as part of the project's Alternatives Analysis/Draft Environmental Impact Statement, Final Environmental Impact Statement, Section 106, and Section 4(f) reviews. From the initiation of the Alternatives Analysis/Draft Environmental Impact Statement process through the Final Environmental Impact Statement, which culminated in a Federal Transit Administration Record of Decision, public involvement had an essential role in the design and planning of the Purple Line. NCPC actively participated as a cooperating agency during the Final Environmental Impact Statement process in accordance with its agency implementing procedures in accordance with Council on Environmental Quality (CEQ) regulations (40 CFR 1501.6).

ONLINE REFERENCE

The following supporting documents for this project are available online:

- Submission Letter for the Northwest Stream Valley Park segment
- Submission Letter for the Northeast Stream Valley Park segment
- NCPC Project Synopsis

Prepared by Michael Weil
01/19/2018

POWERPOINT (ATTACHED)

Project # 6884

Purple Line Light Rail Transit Facility

College Park, Prince George's County, Maryland

Submitted by the Maryland-National Capital Park & Planning Commission

Preliminary and Final Development Plans

Project Synopsis

Commission meeting date: February 1, 2018

NCPCC review authority: Approval – Modification to General Development Plans for NW Branch and NE Branch (per the 1930 Capper-Cramton Act)

Applicant request: Preliminary and final approval of site development plans

Delegated / consent / open / executive session: Consent Calendar

NCPCC Review Officer: Michael Weil

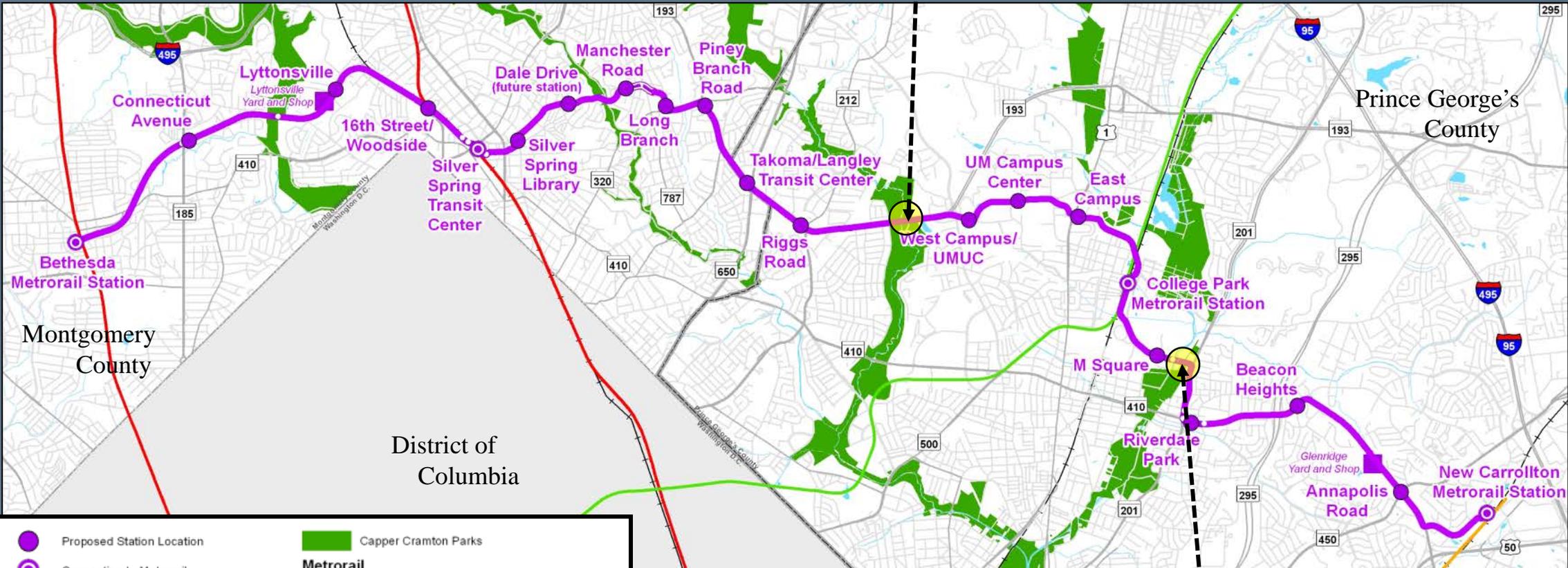
NCPCC File number: 6884

Project Summary:

On behalf of the Maryland Transit Authority (MTA), the Maryland-National Capital Park & Planning Commission (Prince George's County) has requested modification approval to the General Development Plans for Northwest Branch and Northeast Branch Stream Valley Parks to reflect the preliminary and final site plans for the new Purple Line light rail transit (LRT) facility. The new facility will cross through Northwest Branch Stream Valley Park on a reconstructed widened bridge, within an exclusive median-located transit-way, between the general traffic lanes on University Boulevard in College Park, Maryland. The facility will cross through Northeast Branch Stream Valley Park on a new, fully separate bridge span, situated approximately 15 feet to the south of River Road in College Park, Maryland.

The overall project a 16-mile, regionally-significant, transit facility between Bethesda, Maryland (Montgomery County) and New Carrollton (Prince George's County), providing needed east-west connectivity between the Metrorail's Red, Orange, and Green Lines. On behalf of the MTA, the Purple Line Project Team, a public-private partnership, is managing the construction, maintenance, and operation of the system, in coordination with the Washington Metropolitan Area Transit Authority (WMATA), Maryland-National Capital Park and Planning Commission (M-NCPPC), Maryland State Highway Administration, the National Park Service, Montgomery County, and Prince George's County. Project construction is scheduled for 2017-2022, with start of service anticipated in 2022.

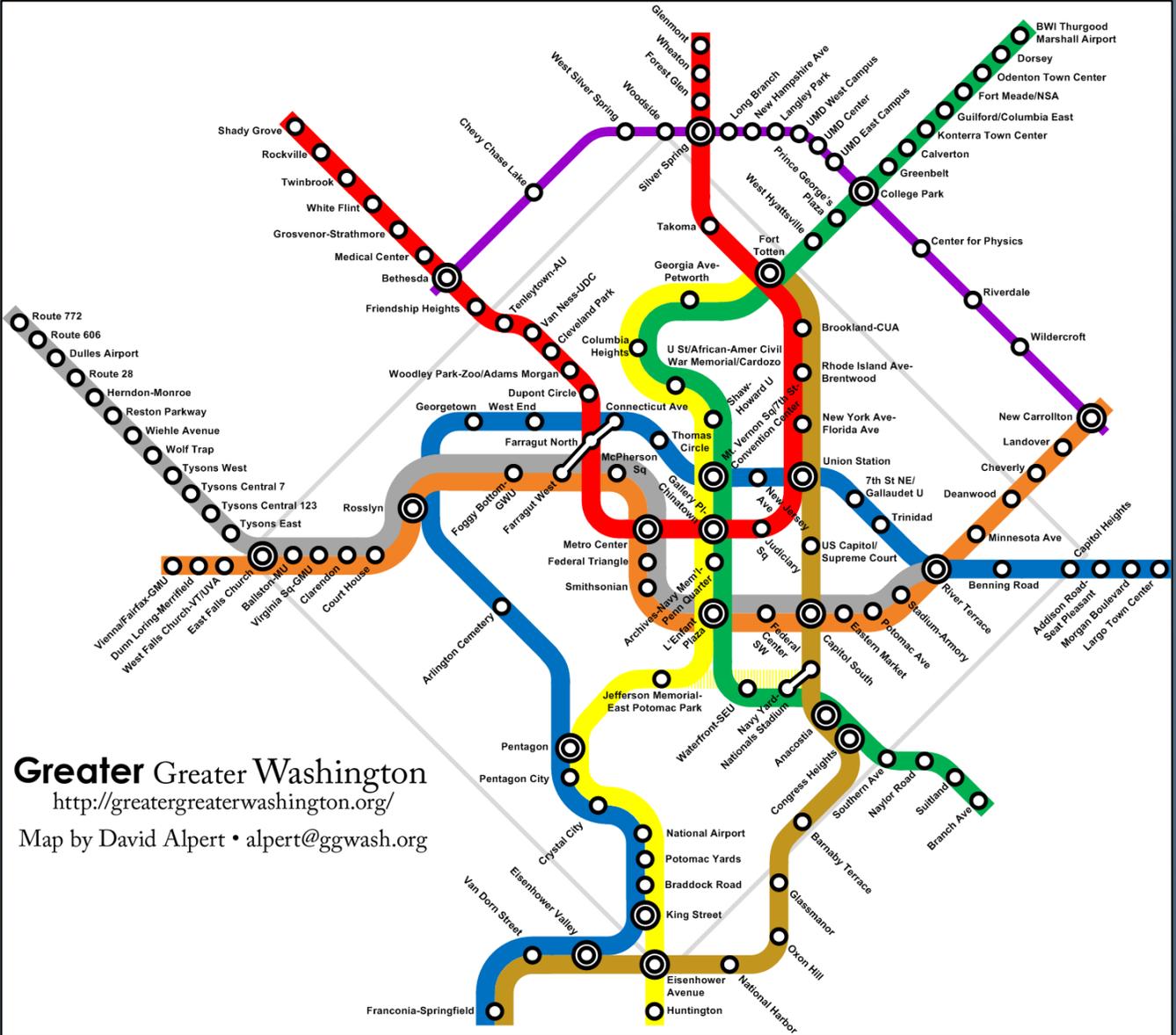
NW Branch SVP crossing



NE Branch SVP crossing

	Proposed Station Location		Capper Cramton Parks
	Connection to Metrorail	Metrorail	
	Proposed Maintenance Yard & Shop		Red Line
	Preferred Alternative		Orange Line
	Preferred Alternative in Tunnel		Green Line
	Preferred Alternative on Aerial Structure		MARC Commuter Rail

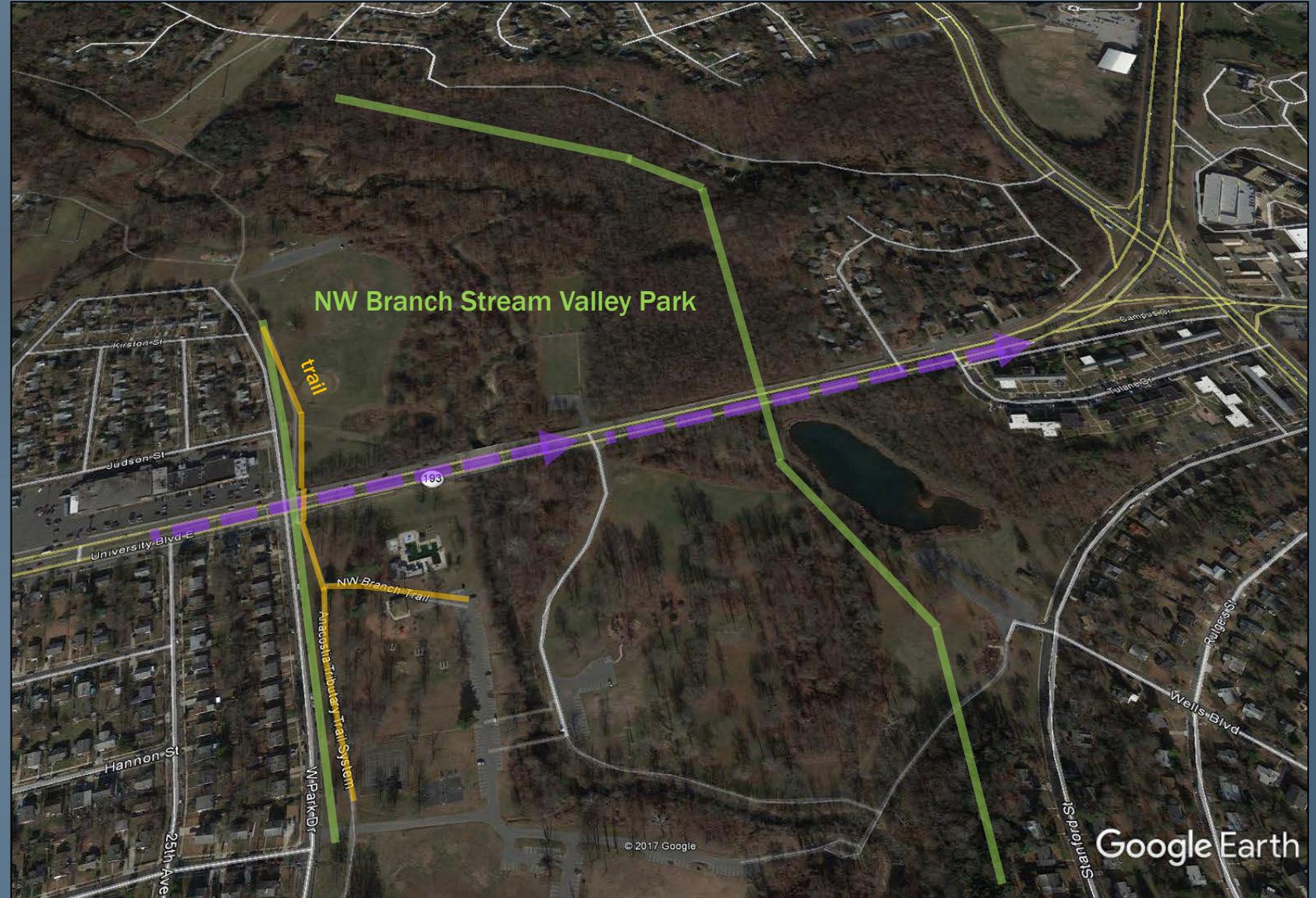
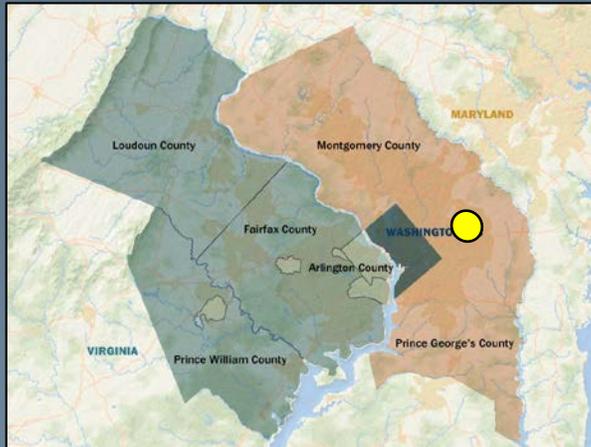
1 in = 5,000 ft

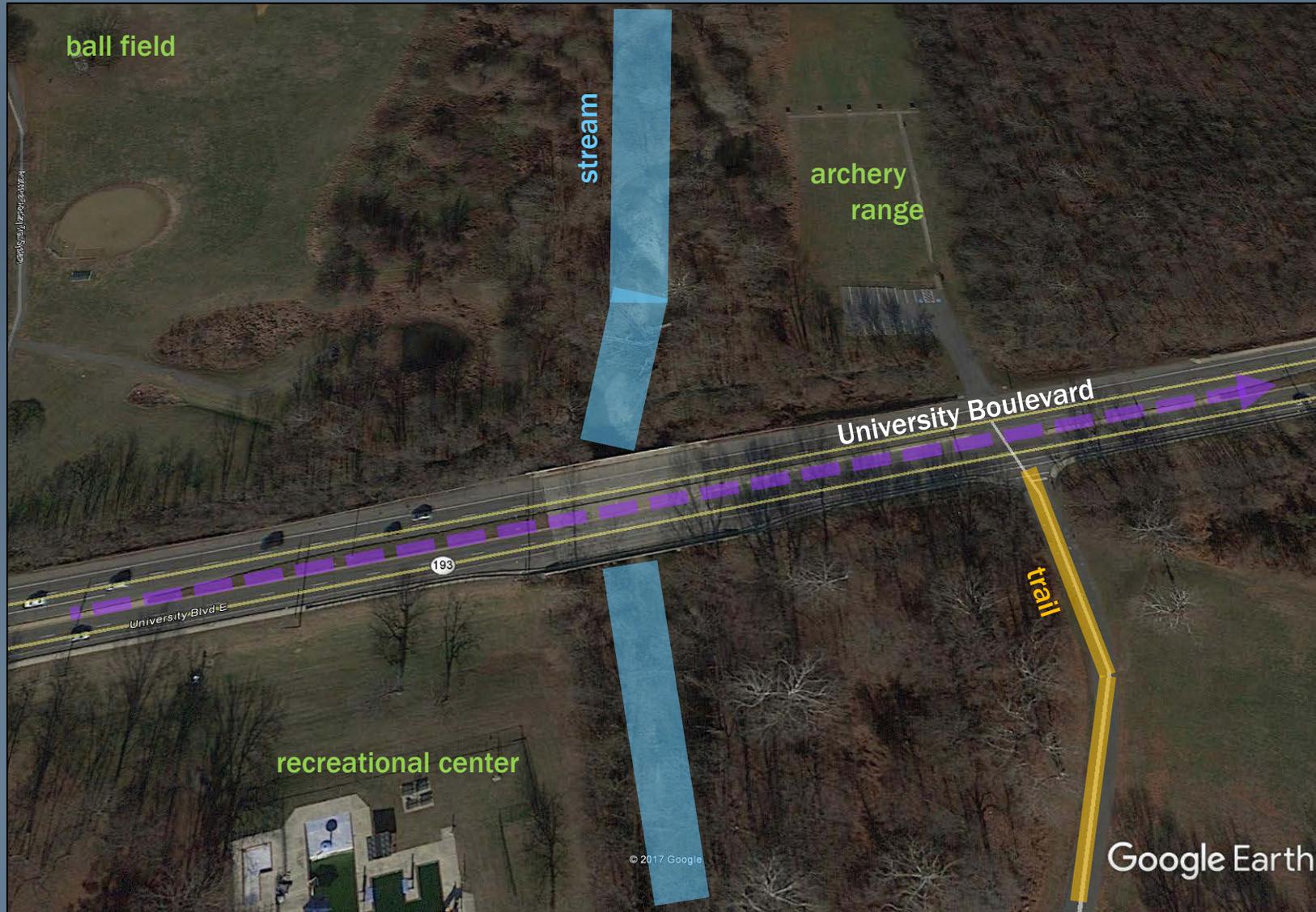


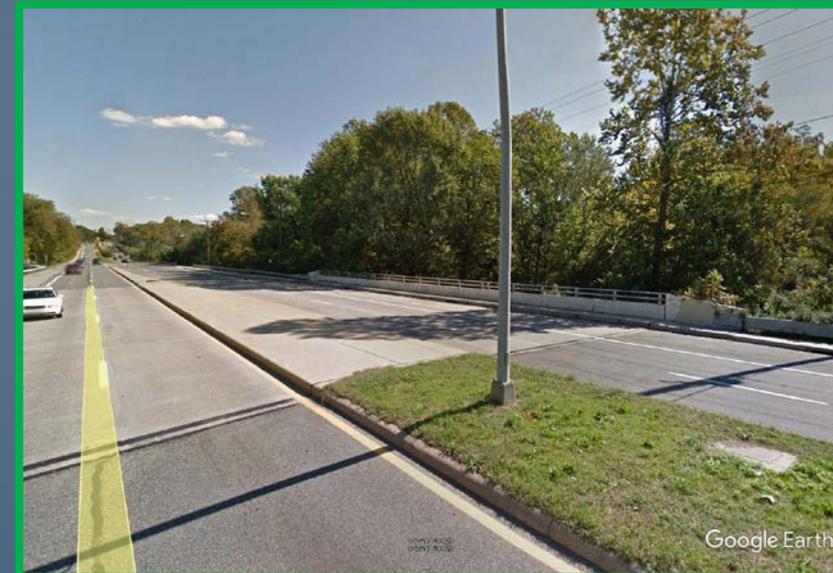


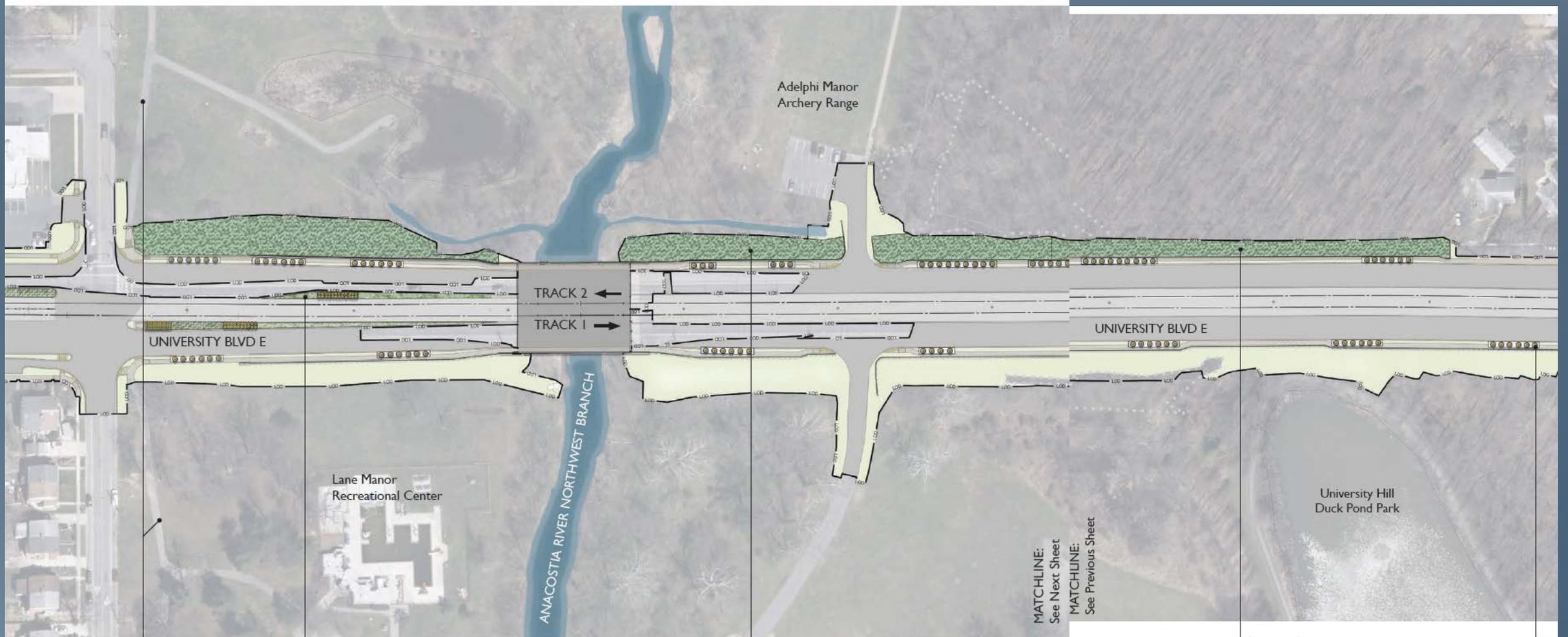
Selected Purple Line Renderings (*not related to NCPC review*)











Northwest Branch Trail

Groundcover Plantings

Revegetation

1" = 100'

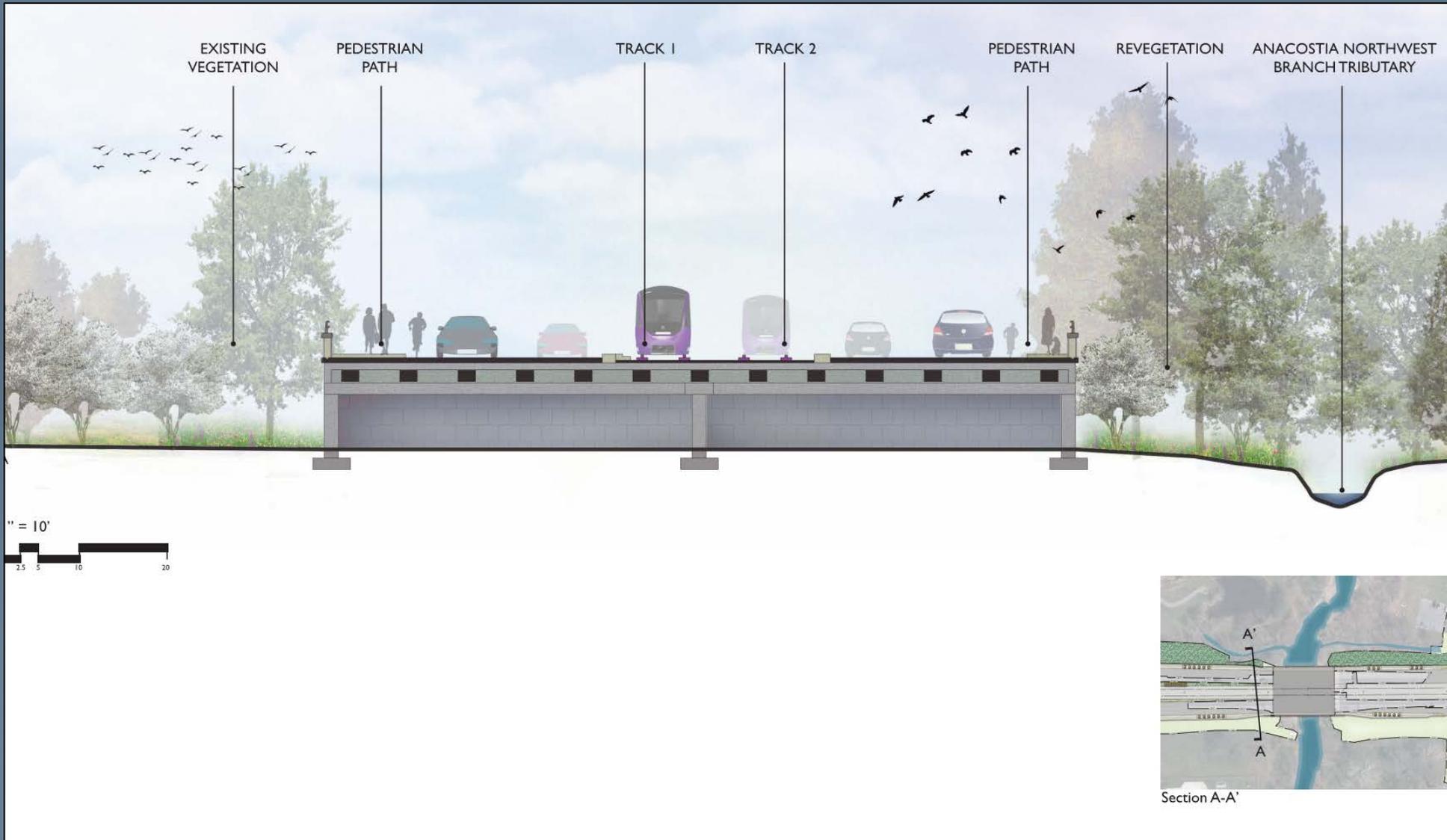


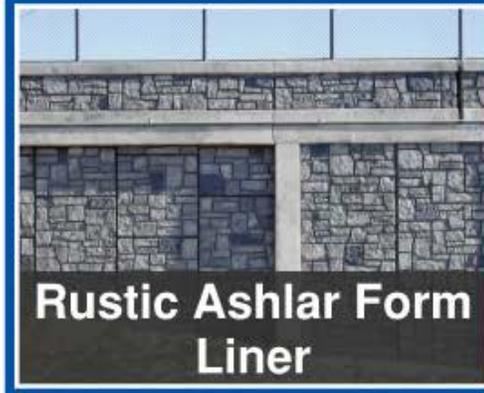
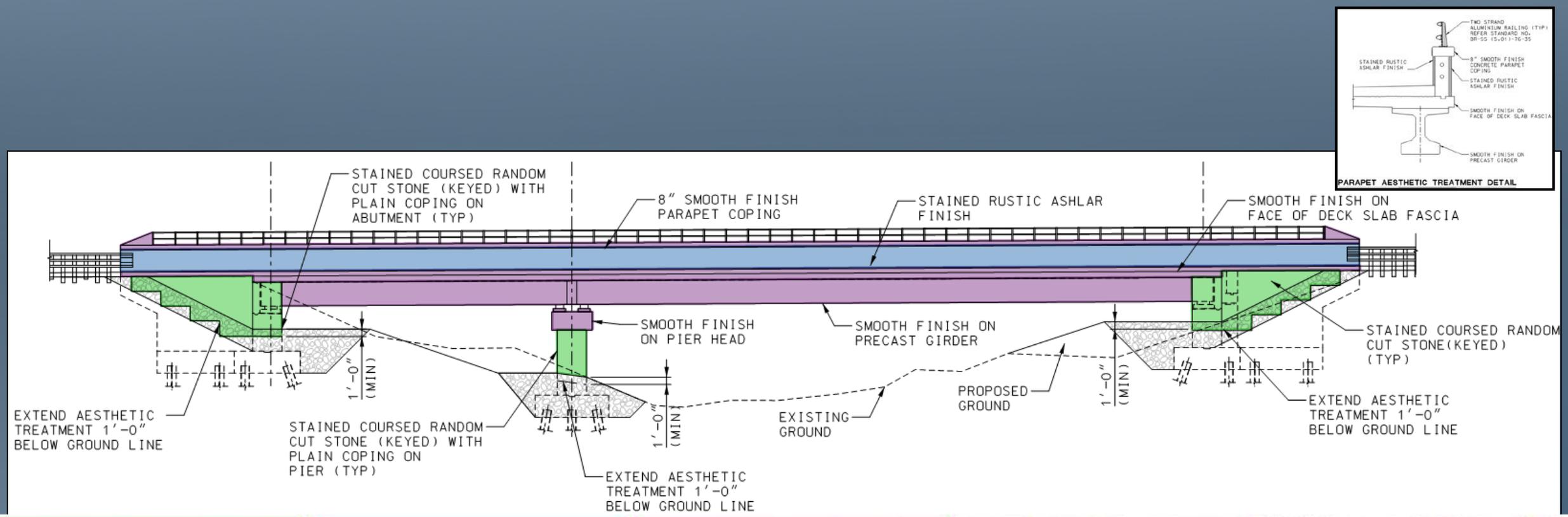
Revegetation

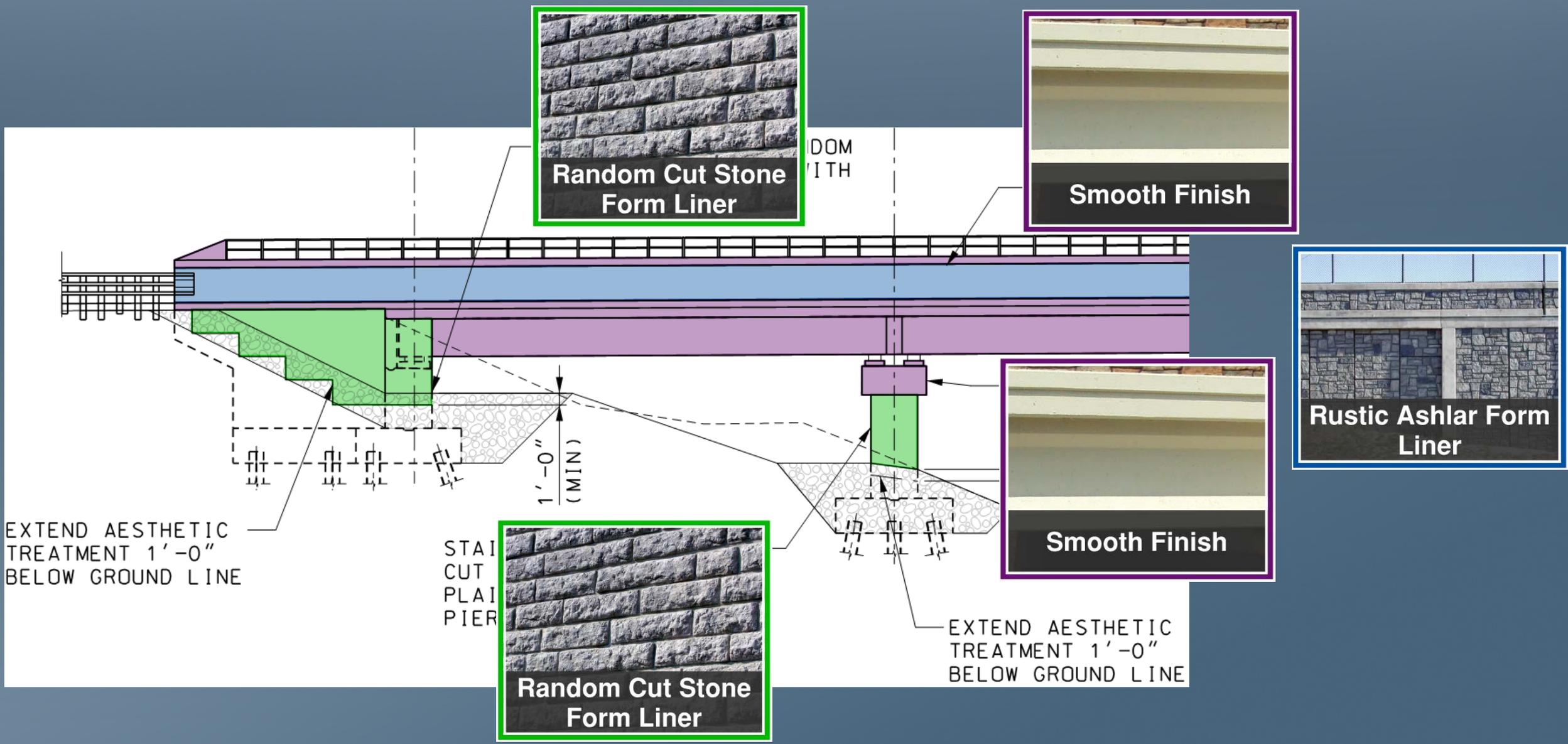
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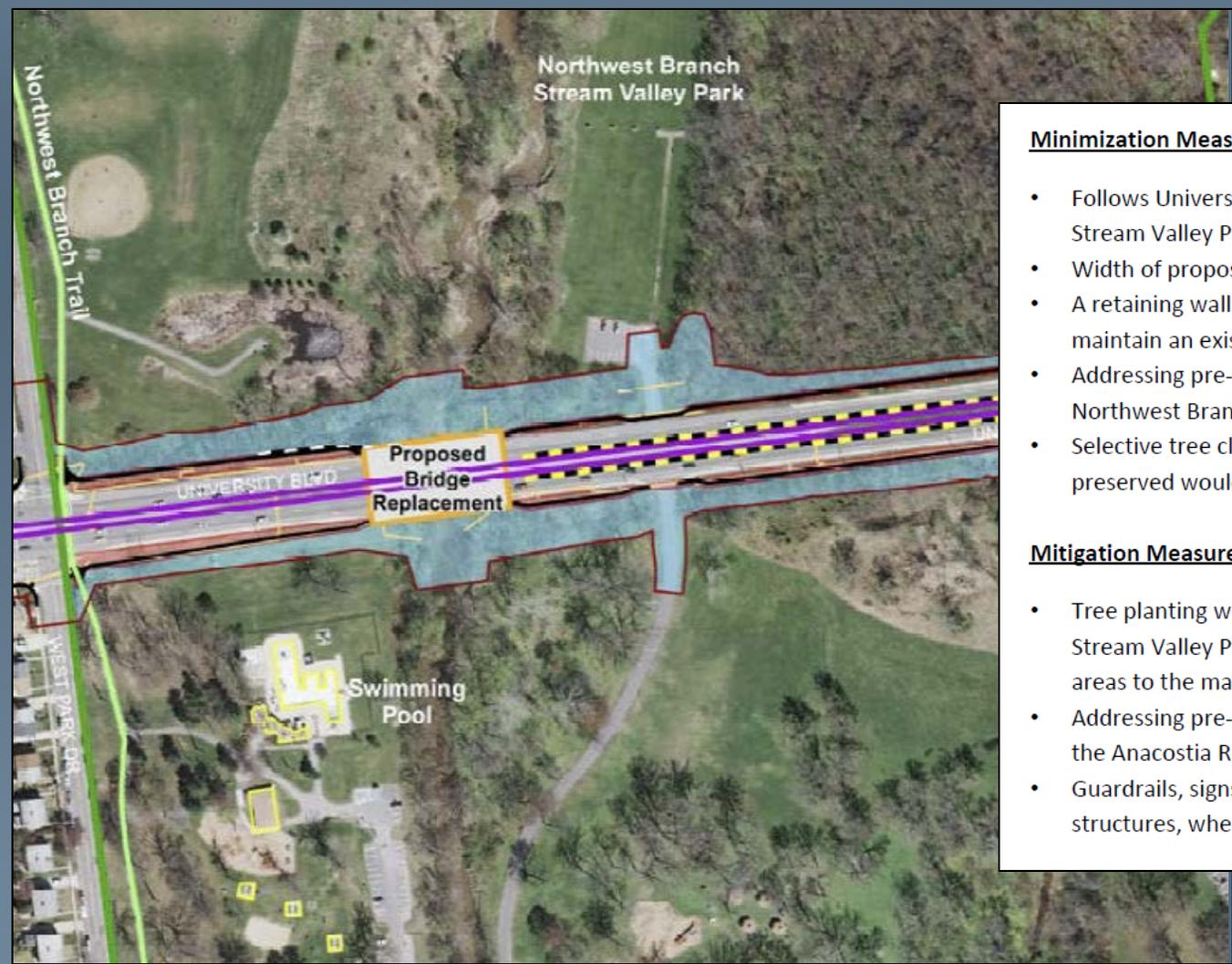




• Existing Park Size:	510 acres
• Temporary Impacts:	3.45 acres
• Permanent Impacts:	0.80 acre
• Percentage of Park Permanently Impacted:	0.16%

Anticipated Park Impacts

- A total of 3.45 acres and 0.8 acre of parkland would be temporarily and permanently impacted, respectively.
- Permanent impacts would be a result of roadway widening along University Boulevard to accommodate the proposed transitway through the median. The bridge carrying University Boulevard over the Northwest Branch of the Anacostia River would be replaced. Access to the park would be modified to right in/right out between West Park Drive and Temple Street. Patrons accessing the playground to the south of University Boulevard from the west would need to complete a u-turn at West Park Drive, then turn right into the facility. Patrons accessing the archery range located to the north of University Boulevard from the west would need to do a u-turn at Temple Street, then turn right into the facility.
- Northwest Branch Trail would be temporarily detoured from the east side of West Park Drive to the west side of West Park Drive during construction in the immediate project area. Upon completion of construction in the immediate vicinity of the park, the trail would move back to the east side of West Park Drive. The park and trail would remain open throughout construction.
- Tree removal would be required.
- Temporary impacts would result from stormwater and drainage upgrades, bridge reconstruction

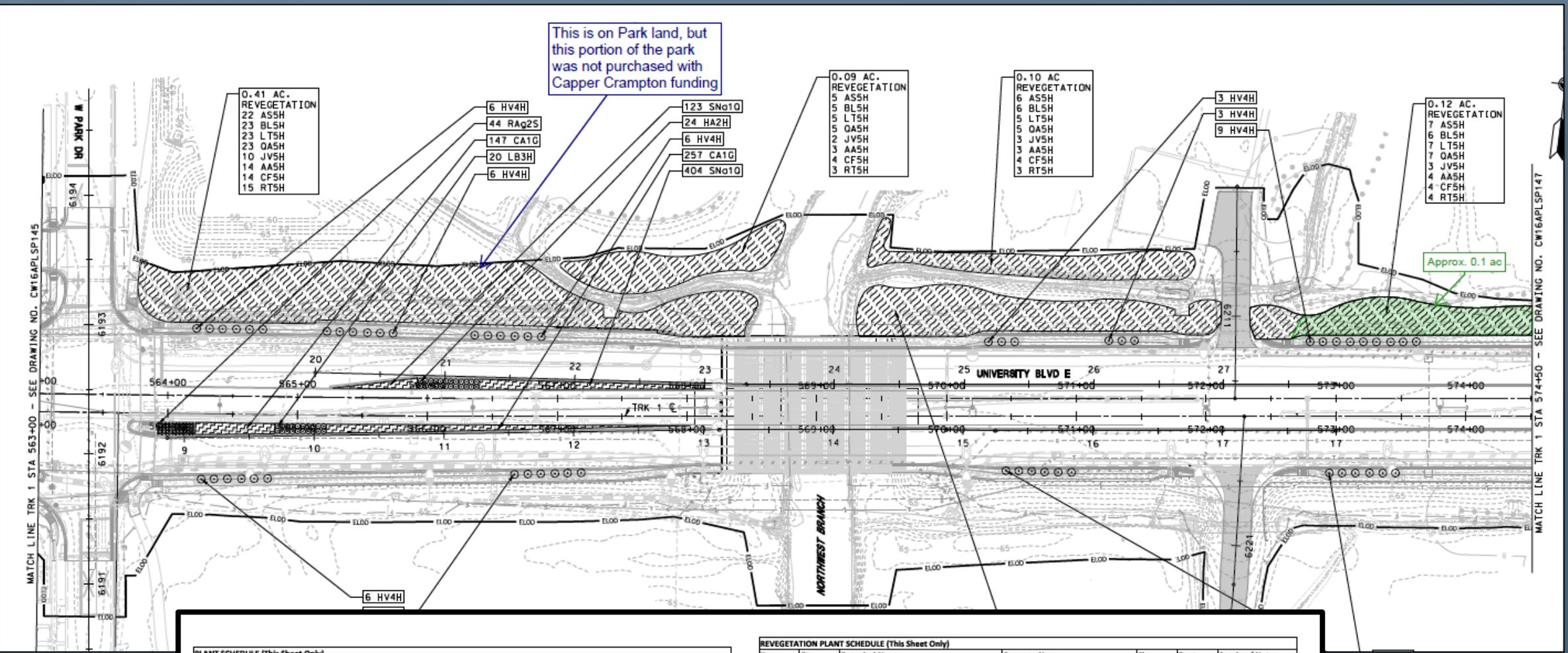


Minimization Measures

- Follows University Boulevard along existing roadway and bridge crossing through Northwest Branch Stream Valley Park
- Width of proposed roadway widening minimized
- A retaining wall would be constructed directly east of West Park Drive, north of University Boulevard, to maintain an existing drainage ditch and avoid impacts to a pond located directly to the north.
- Addressing pre-existing drainage issues and water quality issues in the immediate vicinity of the Northwest Branch of the Anacostia River
- Selective tree clearing and identification of significant or champion trees, where applicable. Trees to be preserved would be marked with protective fencing to avoid impacts or removal during construction.

Mitigation Measures

- Tree planting would occur within the immediate vicinity of the proposed project within Northwest Branch Stream Valley Park to mitigate for tree removal. Replanting and restoration would occur within cleared areas to the maximum extent practicable.
- Addressing pre-existing drainage and water quality issues to and in the vicinity of the Northwest Branch of the Anacostia River.
- Guardrails, signs, and other existing structures on University Boulevard would be replaced with new structures, where appropriate. Any new structures would match existing elements throughout the park.



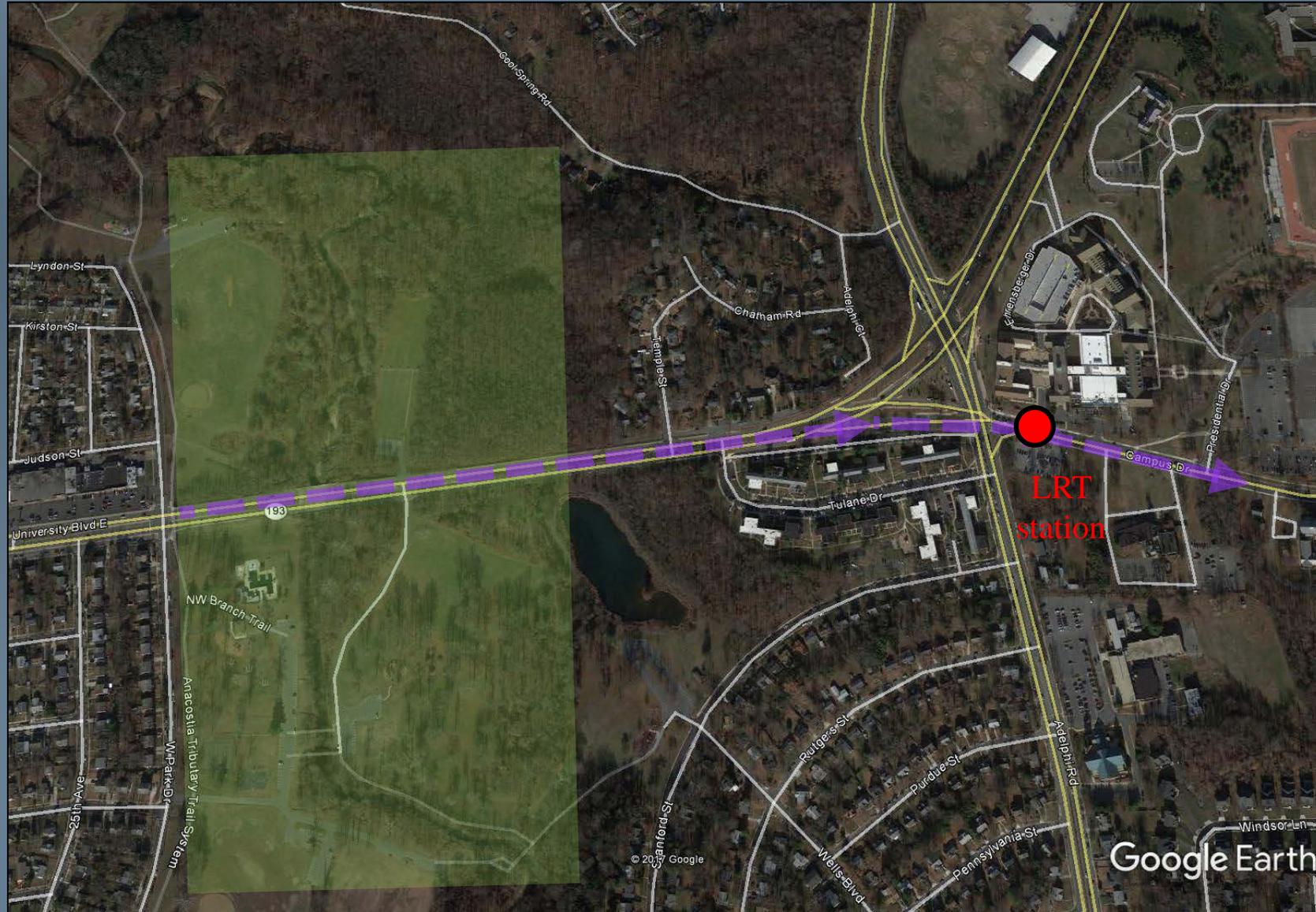
PLANT SCHEDULE (This Sheet Only)

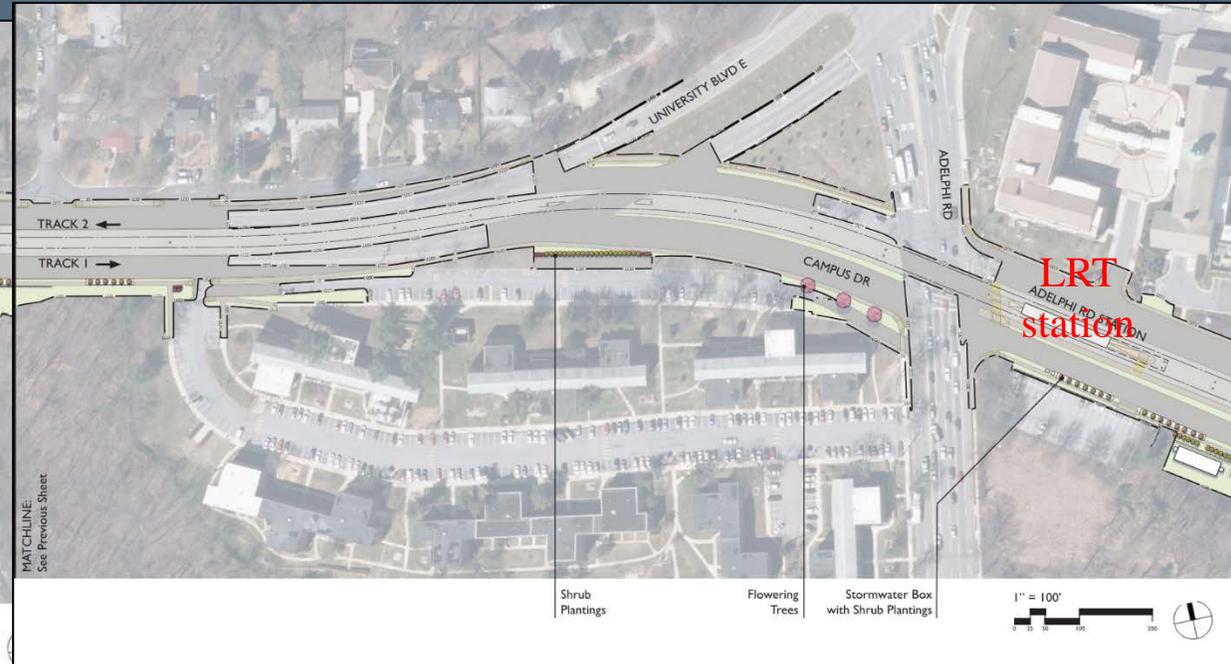
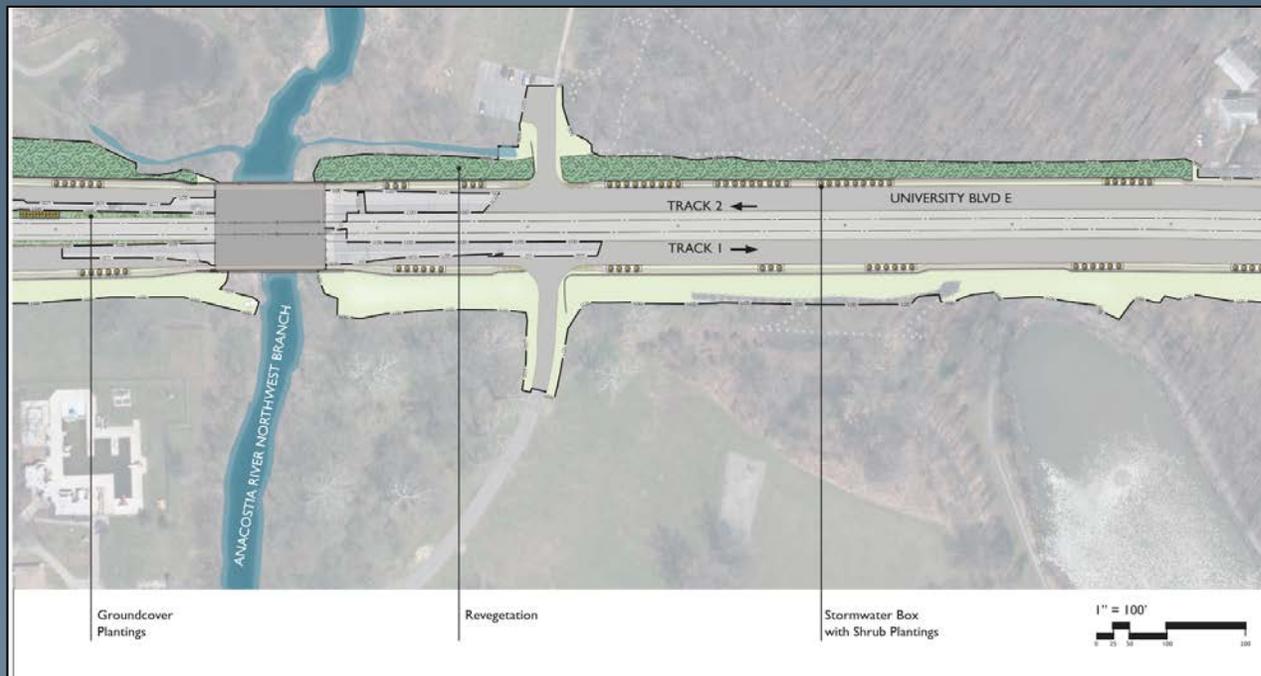
Key	Qty.	Botanical Name	Common Name	Size	Root	Spacing / Notes
SHRUBS						
HV4H	57	<i>Hamamelis virginiana</i>	American Witch Hazel	4' ht.	CG / B&B	
HA2H	24	<i>Hydrangea arborescens 'Annabelle'</i>	Annabelle Hydrangea	2' ht.	CG / B&B	
LB3H	20	<i>Lindera benzoin</i>	Spicebush	3' ht.	CG / B&B	
RAg2S	44	<i>Rhus aromatica 'Gro-Low'</i>	Gro-Low Fragrant Sumac	2' spr.	CG / B&B	
GROUNDCOVER / PERENNIALS / ORNAMENTAL GRASSES						
CA1G	404	<i>Calamagrostis x acutiflora 'Karl Foerster'</i>	Karl Foerster Feather Reed Grass	#1	CG	2' on center
SNa1Q	527	<i>Symphoricarpos novae-angliae</i>	New England Aster	#SP4	CG	18" on center
MISC. ITEMS						
	0.9	Revegetation (Acres)				

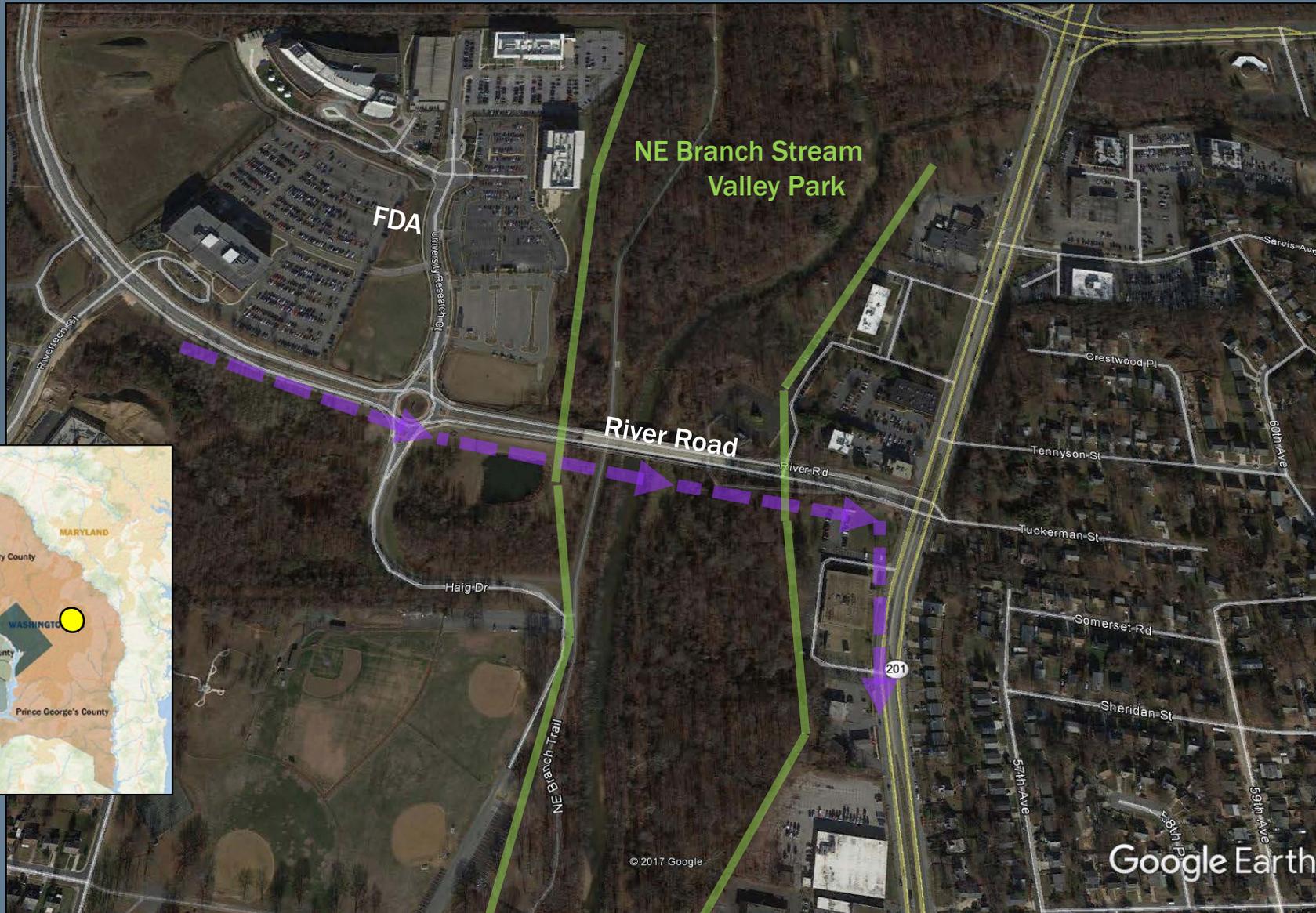
REVEGETATION PLANT SCHEDULE (This Sheet Only)

Key	Qty.	Botanical Name	Common Name	Size	Root	Spacing / Notes
OVERSTORY TREES						
ASSH	50	<i>Acer saccharum</i>	Sugar Maple	5' ht.	CG	
BLSH	50	<i>Betula lenta</i>	Sweet Birch	5' ht.	CG	
LTSH	50	<i>Liriodendron tulipifera</i>	Tuliptree	5' ht.	CG	
QASH	50	<i>Quercus alba</i>	White Oak	5' ht.	CG	
EVERGREEN TREES						
JV5H	22	<i>Juniperus virginiana</i>	Eastern Redcedar	5' ht.	CG	
FLOWERING TREES						
AA5H	30	<i>Amelanchier arborea</i>	Common Serviceberry	5' ht.	CG	multi-stem min. 3
CF5H	33	<i>Cornus florida 'Appalachian Spring'</i>	Appalachian Spring Flowering	5' ht.	CG	
RT5H	31	<i>Rhus typhina</i>	Staghorn Sumac	5' ht.	CG	multi-stem min. 3

REFER TO DRAWING NUMBER CW16APLSP-601 FOR MASTER PLANT SCHEDULE FOR CW-16A LANDSCAPE AND STREETScape CIVIL.

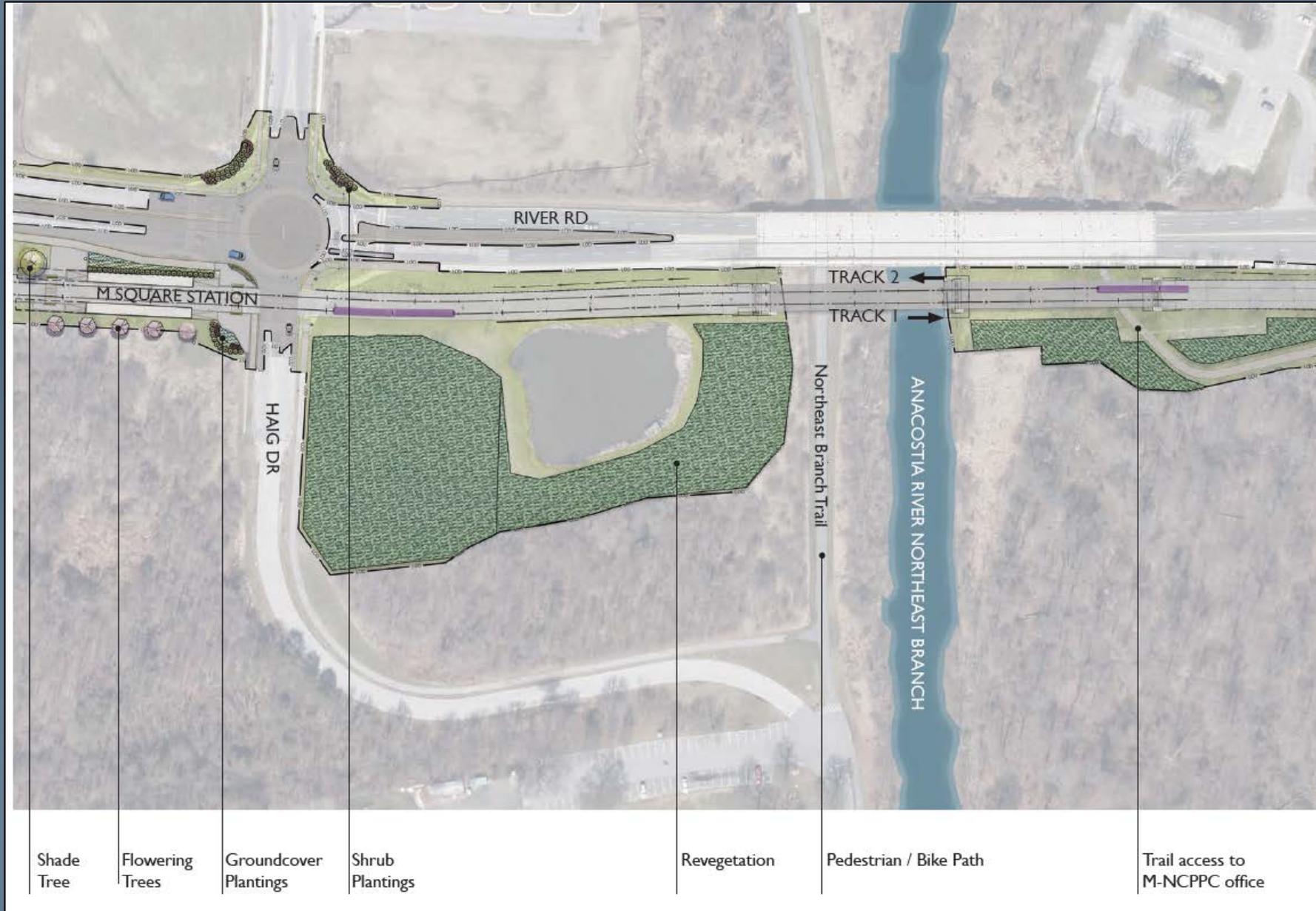


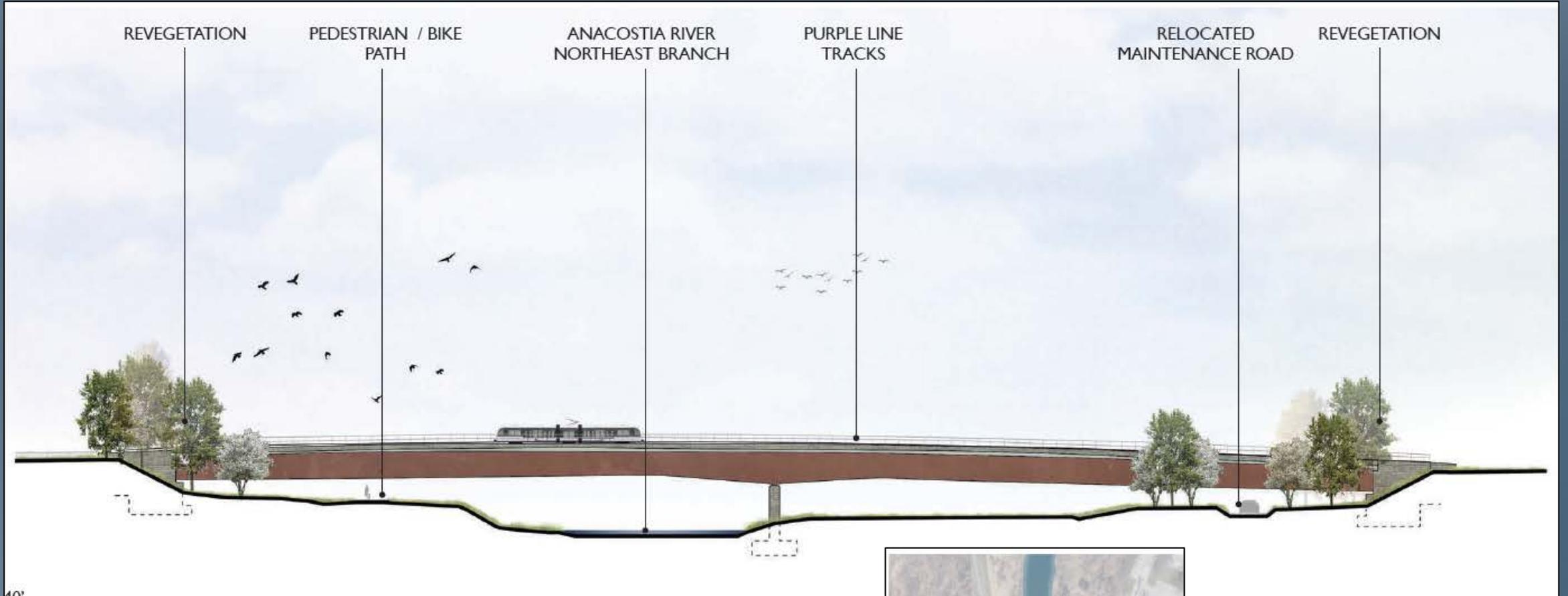


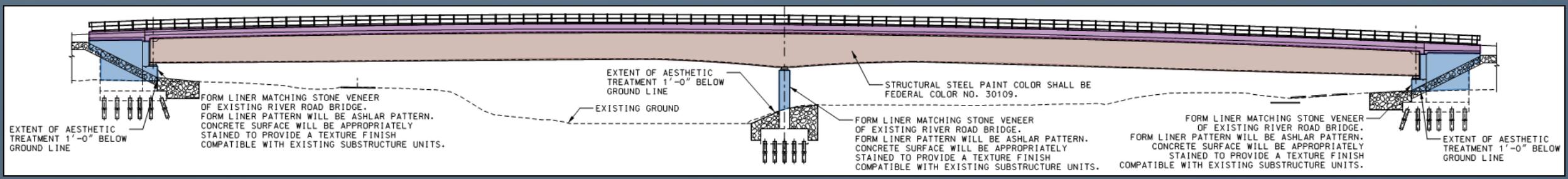












Ashlar Form Liner



Federal Color No. 30109



Smooth Finish

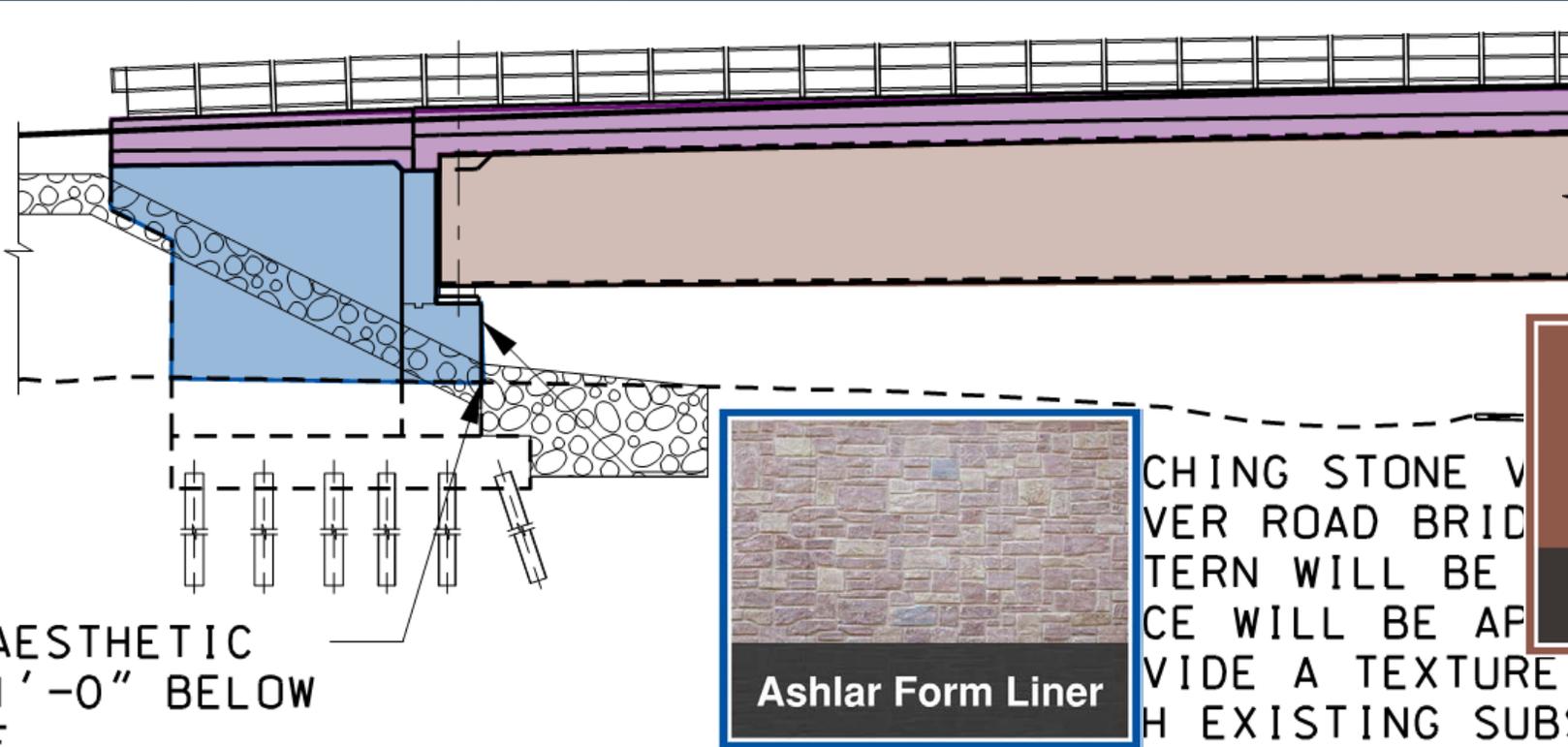


Existing treatment (ashlar form liner)

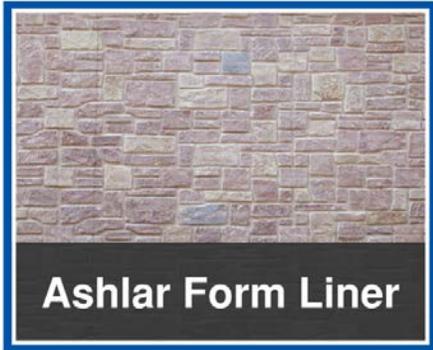
Existing River Road Bridge



Existing River Road Bridge



STRUCTURAL STEEL



CHING STONE V
VER ROAD BRID
TERN WILL BE
CE WILL BE AP
VIDE A TEXTURE
H EXISTING SUBS

EXTENT OF AESTHETIC
TREATMENT 1'-0" BELOW
GROUND LINE







• Existing Park Size:	794 acres
• Temporary Impacts:	2.76 acres
• Permanent Impacts:	1.20 acre
• Percentage of Park Permanently Impacted:	0.15%

Anticipated Park Impacts

- A total of 2.76 acres and 1.20 acre of parkland would be temporarily and permanently impacted, respectively.
- Permanent impacts would result from the construction of the proposed transitway on a permanent embankment to the south of River Road, as well as the realignment of the unnamed trail that runs parallel to then under River Road.
- Temporary impacts would result from the stream realignment, bridge reconstruction, and utility relocation.
- Land to the southeast of the River Road-Haig Drive/University Research Court intersection would be cleared for use as a staging area for the construction of the proposed transitway bridge over the Northeast Branch of the Anacostia River.
- Northeast Branch Trail would be temporarily detoured during construction of the proposed transitway bridge. The trail would return to its present alignment upon completion of the proposed transitway construction in the immediate vicinity of the park.

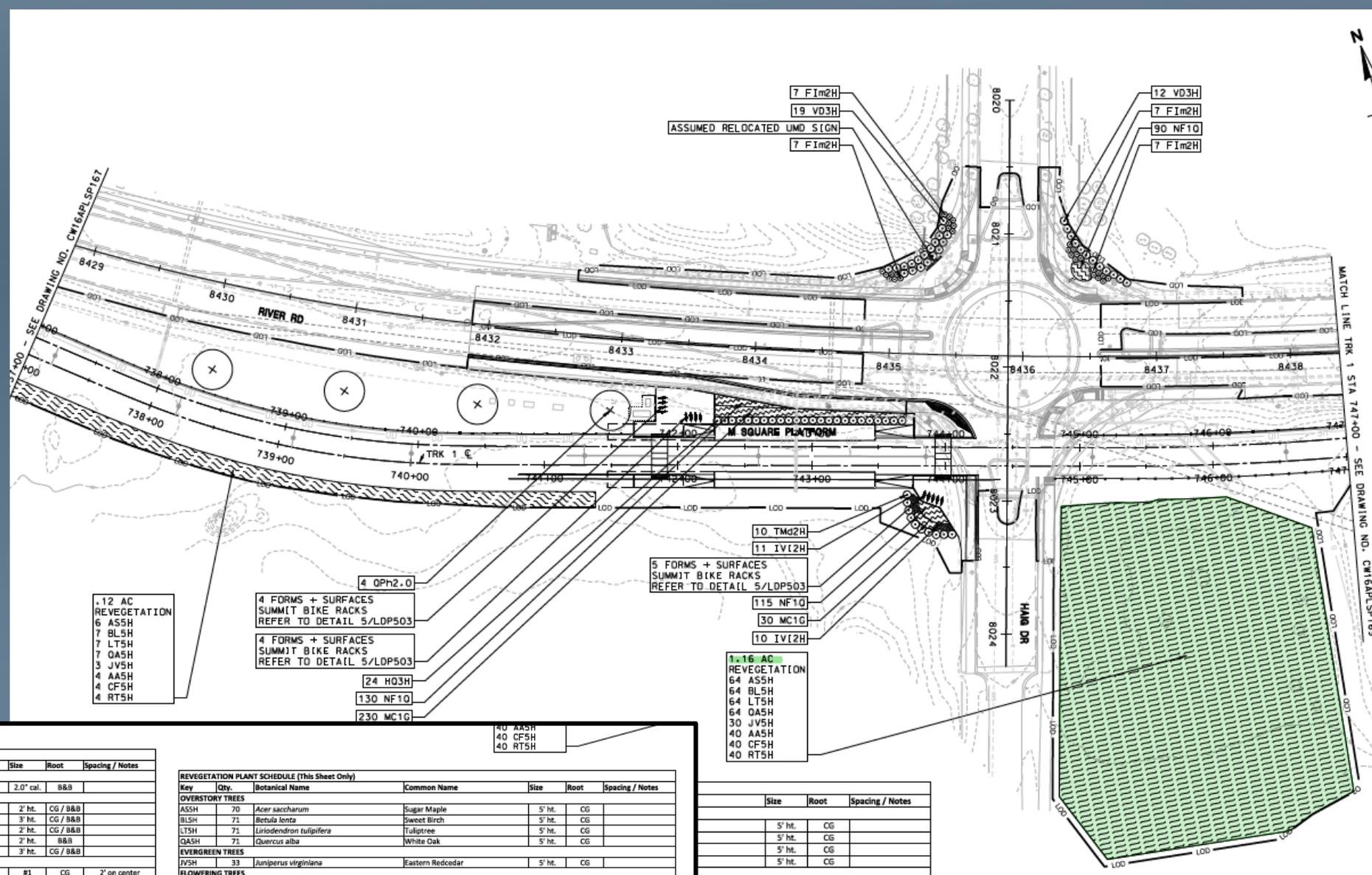


Minimization Measures

- Parallels River Road through Anacostia River Stream Valley Park to minimize park impacts
- Width of proposed transitway minimized
- The separation between the existing River Road bridge and the proposed transitway bridge would be approximately 15 feet, which would allow adequate ambient lighting for park patrons utilizing the Northeast Branch Trail.
- Selective tree clearing and identification of significant or champion trees, where applicable. Trees to be preserved would be marked with protective fencing to avoid impacts or removal during construction.

Mitigation Measures

- Tree planting would occur within the immediate vicinity of the proposed project within Anacostia River Stream Valley Park to mitigate for tree removal. Replanting and restoration would occur within cleared areas to the maximum extent practicable.
- Upon completion of the proposed transitway bridge construction over the Northeast Branch of the Anacostia River, the proposed staging area would be cleared, graded, and returned to M-NCPPC for use as a future futsal court.
- Potential landscaping and park amenities around existing pond to the south of River Road.
- Guardrails, signs, and other existing structures on River Road would be replaced with new structures, where appropriate. Any new structures would match existing elements throughout the park.



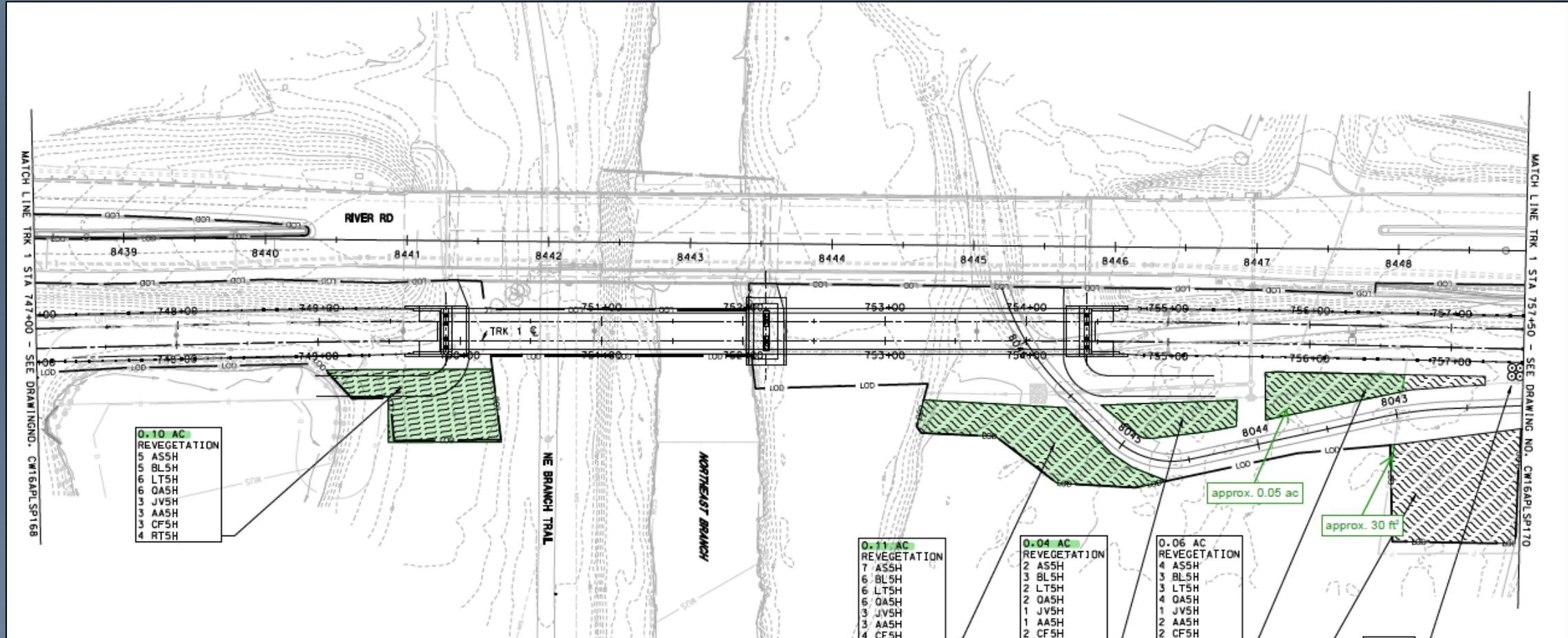
PLANT SCHEDULE (This Sheet Only)

Key	Qty.	Botanical Name	Common Name	Size	Root	Spacing / Notes
OVERSTORY TREES						
QPH2.0	4	<i>Quercus phellos</i>	Willow Oak	2.0' cal.	B&B	
SHRUBS						
Fm2H	28	<i>Fothergilla x intermedia</i> 'Mt. Airy'	Mount Airy Dwarf Fothergilla	2' ht.	CG / B&B	
HQ3H	24	<i>Hydrangea quercifolia</i>	Oakleaf Hydrangea	3' ht.	CG / B&B	
VD3H	21	<i>Itea virginica</i> 'Little Henry'	Little Henry Sweetgum	2' ht.	CG / B&B	
Tm2H	10	<i>Taxus x media</i> 'Densaformis'	Dense Spreading Yew	2' ht.	B&B	
VD3H	31	<i>Viburnum dentatum</i>	Arrowwood Viburnum	3' ht.	CG / B&B	
GROUNDCOVER / PERENNIALS / ORNAMENTAL GRASSES						
MC1G	260	<i>Muhlenbergia capillaris</i> 'Lenca'	Pink Muhly Grass	#1	CG	2' on center
NF1Q	335	<i>Nepeta x faassenii</i> 'Walker's Low'	Walker's Low Catmint	#SP4	CG	18" on center
MISC. ITEMS						
	1.28	Revegetation (Acres)				

REVEGETATION PLANT SCHEDULE (This Sheet Only)

Key	Qty.	Botanical Name	Common Name	Size	Root	Spacing / Notes
OVERSTORY TREES						
AASH	70	<i>Acer saccharum</i>	Sugar Maple	5' ht.	CG	
BLSH	71	<i>Betula lenta</i>	Sweet Birch	5' ht.	CG	
LTSH	71	<i>Liriodendron tulipifera</i>	Tuliptree	5' ht.	CG	
QASH	71	<i>Quercus alba</i>	White Oak	5' ht.	CG	
EVERGREEN TREES						
JVSH	33	<i>Juniperus virginiana</i>	Eastern Redcedar	5' ht.	CG	
FLOWERING TREES						
AASH	44	<i>Amelanchier arborea</i>	Common Serviceberry	5' ht.	CG	multi-stem min. 3
CFSH	44	<i>Cornus florida</i> 'Appalachian Spring'	Appalachian Spring Flowering	5' ht.	CG	
RTSH	44	<i>Rhus typhina</i>	Staghorn Sumac	5' ht.	CG	multi-stem min. 3

Key	Qty.	Botanical Name	Common Name	Size	Root	Spacing / Notes
10		Tm2H				
11		IV12H				
5		FORMS + SURFACES	SUMMIT BIKE RACKS			REFER TO DETAIL 5/LDP503
115		NF1Q				
30		MC1G				
10		IV12H				



- 0.10 AC REVEGETATION**
- 5 ASSH
 - 5 BLSH
 - 6 LTSH
 - 6 QASH
 - 3 JVSH
 - 3 AASH
 - 3 CFSH
 - 4 RTSH

- 0.11 AC REVEGETATION**
- 7 ASSH
 - 6 BLSH
 - 6 LTSH
 - 6 QASH
 - 3 JVSH
 - 3 AASH
 - 4 CFSH

- 0.04 AC REVEGETATION**
- 2 ASSH
 - 3 BLSH
 - 2 LTSH
 - 2 QASH
 - 1 JVSH
 - 1 AASH
 - 2 CFSH
 - 1 RTSH

- 0.06 AC REVEGETATION**
- 4 ASSH
 - 3 BLSH
 - 3 LTSH
 - 4 QASH
 - 1 JVSH
 - 2 AASH
 - 2 CFSH
 - 2 RTSH

- 0.15 AC REVEGETATION**
- 8 ASSH
 - 8 BLSH
 - 8 LTSH
 - 8 QASH

PLANT SCHEDULE (This Sheet Only)

Key	Qty.	Botanical Name	Common Name	Size	Root	Spacing / Notes
SHRUBS						
TMdZH	4	<i>Taxus x media 'Densiformis'</i>	Dense Spreading Yew	2' ht.	B&B	
MISC. ITEMS						
	0.46	Revegetation (Acres)				

REVEGETATION PLANT SCHEDULE (This Sheet Only)

Key	Qty.	Botanical Name	Common Name	Size	Root	Spacing / Notes
OVERSTORY TREES						
ASSH	26	<i>Acer saccharum</i>	Sugar Maple	5' ht.	CG	
BLSH	25	<i>Betula lenta</i>	Sweet Birch	5' ht.	CG	
LTSH	25	<i>Liriodendron tulipifera</i>	Tuliptree	5' ht.	CG	
QASH	26	<i>Quercus alba</i>	White Oak	5' ht.	CG	
EVERGREEN TREES						
JVSH	12	<i>Juniperus virginiana</i>	Eastern Redcedar	5' ht.	CG	
FLOWERING TREES						
AASH	14	<i>Amelanchier arborea</i>	Common Serviceberry	5' ht.	CG	multi-stem min. 3
CFSH	17	<i>Cornus florida 'Appalachian Spring'</i>	Appalachian Spring Flowering	5' ht.	CG	
RTSH	16	<i>Rhus typhina</i>	Staghorn Sumac	5' ht.	CG	multi-stem min. 3