



MONTGOMERY COUNTY DEPARTMENT OF PARKS
THE MARYLAND - NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MEMORANDUM

April 22, 2015

TO: Larry Cole

FROM: Jai Cole, Natural Resource Manager, Park Planning and Stewardship Division *Jai Cole*

Via: Mike Riley, Director, Department of Parks *MGR*
Mitra Pedoeem, Acting Deputy Director, Department of Parks *MP*
John E. Hench, PhD., Chief, Park Planning and Stewardship Division *Jehench*

SUBJECT: Brookeville Bypass Briefing to the Planning Board

Section 4(f)

Section 4(f) is a provision of the Department of Transportation (DOT) Act of 1966 which stipulates that the Federal Highway Administration (FHWA) or other DOT agencies cannot approve the use of land from publicly owned parks, recreational area, wildlife and waterfowl refuges, or public and private historical sites unless the following provisions apply:

- There is no feasible and prudent avoidance alternative to the use of land; and
- The action includes all possible planning to minimize harm to the property resulting from such use;

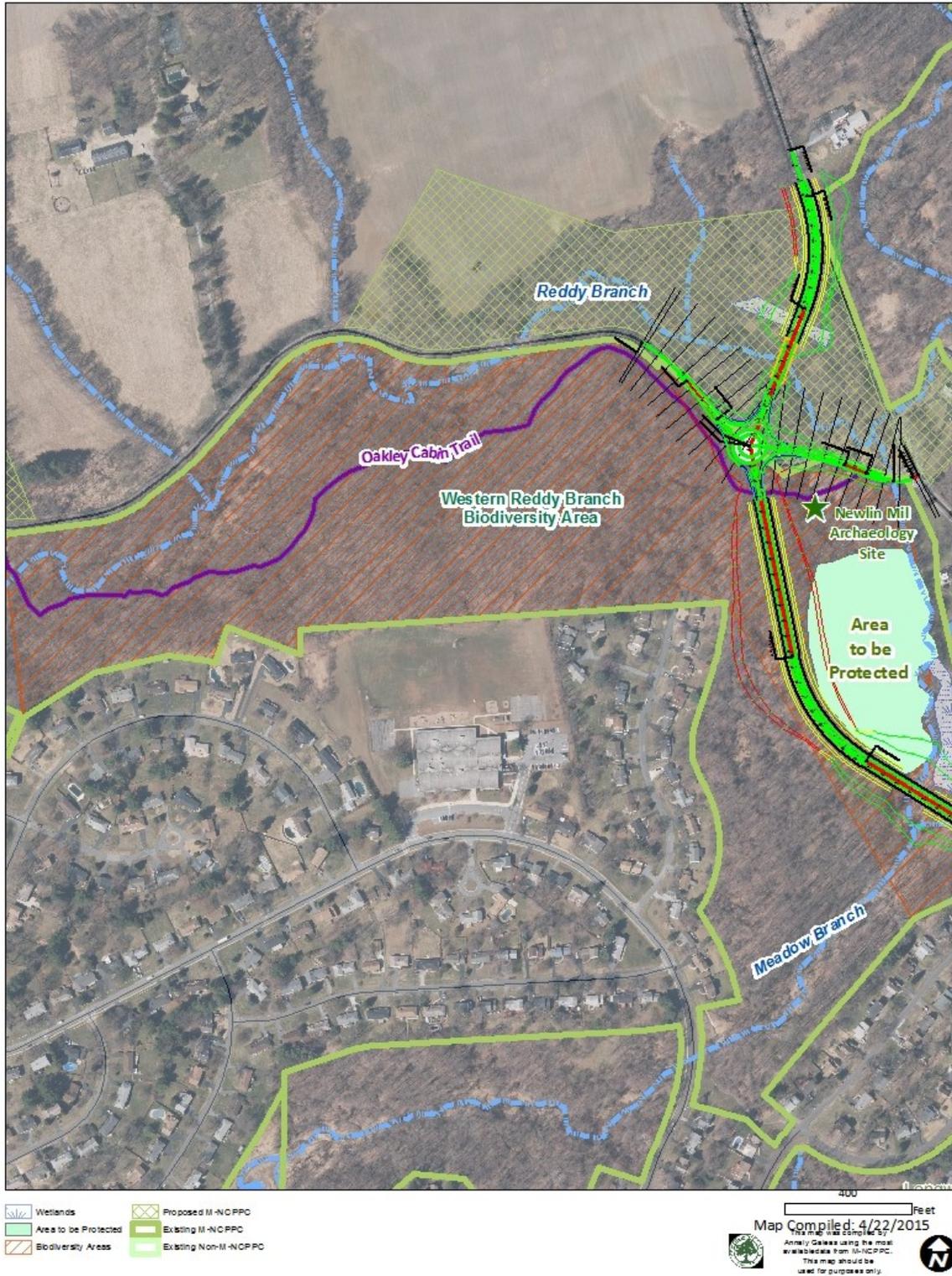
Or

- The FHWA determines that the use of the property will have a *de minimis* impact

In order to determine whether the impact to parkland is *de minimis*, the FHWA requires an agreement letter from the jurisdiction, department or owner of the affected property that states that they believe that the impacts are *de minimis*. Section 4(f) states that, "For publicly owned public parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that will not adversely affect the activities, features, or attributes of the property. For historic sites, a *de minimis* impact means that FHWA has determined (in accordance with 36 CFR Part 800) that either no historic property is affected by the project or that the project will have 'no adverse effect' on the historic property'. A *de minimis* impact determination does not require analysis to determine if avoidance alternatives are feasible and prudent, but consideration of avoidance, minimization, mitigation or enhancement measures should occur." Minimization measures as well as the mitigation package for impacts that fall under the 4(f) designation are important issues that need to be agreed upon prior to the Department of Parks signing a *de minimis* letter.

With the more detailed information that has been provided, Park and Planning staff has determined that Alternate 7 is no longer the least impactful of the westerly alignments due in large part to the significant amount of cut required. Using the recent shift west of the road SHA has proposed coupled with bridging both Brookeville Road and Reddy Branch would result in significantly minimizing the impacts to the

Figure 1. Western Reddy Branch Biodiversity Area, Newlin Mill Archaeology Site and Oakley Cabin Trail



Western Reddy Branch Biodiversity area and eliminating impacts to the Newlin Mill race and Oakley Cabin trail.

While M-NCPPC continues to support the Brookeville Bypass project, many issues and impacts to parkland have changed in the 12 years since M-NCPPC concurred with the assessment of impacts to Park Property. Because of the impacts the current design has on park natural resources, M-NCPPC believes that the 4F designation is now incomplete because it does not reflect current conditions, and will be working with SHA to minimize the impacts and develop a mitigation package prior to signing a new *De minimus* letter.

Mitigation

In 2002, the Planning Board stated that SHA needs to work with M-NCPPC to develop a mitigation strategy for parkland and wetland impacts. As was the case then, Parks still require that SHA replace land taken for this project at equal or greater natural, cultural and/or recreational value. Following the 2002 Planning Board item, SHA sent a letter to M-NCPPC requesting concurrence of the assessment of impacts to park property and associated mitigation. In it, SHA stated, "SHA will coordinate with M-NCPPC and the Maryland Department of Natural Resources to identify suitable replacement land of equal or greater natural resource and economic value for the [then] estimated 5.62 acres of public parklandSHA will acquire all replacement park properties during the design phase of the project and will complete the transfer prior to construction." Identification of parkland mitigation sites was not finalized at that time because the project went dormant soon after. After analyzing the exact impacts to parkland from this project, including the associated stormwater management plan, Parks will work with SHA to determine sites that meet this directive. The agreed upon parkland mitigation will be brought before the Planning Board for approval at the same time as the Mandatory Referral for the project.

Western Reddy Branch Biodiversity Area Impacts

Brookeville Bypass will cut through the Western Reddy Branch Biodiversity Area (Figure 1). Park Biodiversity Areas are classified as areas of parkland which contain any one of the following; Areas of contiguous, high quality forest and/or wetland which show little evidence of past land-use disturbance; Rare, threatened, endangered, or watch-list species; Exceptional examples of notable plant community types found in Montgomery County; and/or Areas of exceptional scenic beauty.

This area is dominated by tulip trees (*Liriodendron tulipifera*) ranging from 18 to 28" diameter at breast height (dbh), with scattered individuals over 30" dbh. While tulip trees of various size classes dominate this forest, additional species of importance include red oak (*Quercus rubra*), pin oak (*Quercus palustris*), red maple (*Acer rubrum*), black cherry (*Prunus serotina*), American holly (*Ilex opaca*), with spicebush (*Lindera benzoin*) and young American beech (*Fagus Americana*) in the understory shrub layer. Other native tree/shrub species noted include American grape (*Vitis spp.*) and shingle oak (*Quercus imbricaria*), and native ferns include Christmas fern (*Polystichum acrostichoides*) and ebony spleenwort (*Asplenium platyneuron*).

Because the road is proposed to cut through a forested area, impacts do not only result from actual forest loss, but also from 'edge effect' resulting from forest fragmentation that creates isolated patches with deleterious impacts on the remaining forest fragment. These impacts can be abiotic (i.e. changes in the environment), direct biological effects (i.e. changes to the abundance and distribution and survival of species due to direct physical conditions near the edge such as desiccation, wind throw and non-native invasive plant species), or indirect biological effects (i.e. changes in species interactions such as brood parasitism, predation, and seed dispersal).

Figure 2. Longwood Local Park



Parkland Outlines
Status & Owner
 Existing M-NCPPC

200 Feet
 Map Compiled: 4/22/2015



This map was compiled by JIM DUBRE
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 This map is for general planning purposes only.



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Although the Department of Parks understands that a western alignment has been approved to go through this area, we are committed to minimizing the impacts to this sensitive park as much as possible. Traveling north, after crossing Meadow Branch, the road is proposed to go up and through a significant hillslope and banking east before cutting through and down the slope to Brookeville Road. On the east side of the road and down to the stream is the highest quality forest within the Biodiversity Area. While the entire 52 acre biodiversity area is a valuable natural resource, the Department of Parks has provided SHA with a polygon of the highest quality 5 acres which we will be making every effort to protect (Figure 1). SHA has already shifted the alignment west, but the current LOD still impacts this area.

Newlin Mill Archaeology Site and Oakley Cabin Trail Impacts

There is currently a trail that runs from Oakley Cabin to the Newlin Mill Archaeology site and the bypass will impact both (Figure 1). The Newlin's Mill archaeological site (18MO368) is a National Register-eligible archaeological site, considered eligible under Criteria A, C, and D and is also a contributing element to the Brookeville Historic District. The site lies within the LOD for this project and will be adversely affected by the proposed alignment. Section 4(f) regulations require avoidance (preservation in place) unless there is no other feasible alternative. If the adverse effect is unavoidable – including impacts to the headraces – SHA is required to mitigate the effects of their project, and develop an MOA. The approximate cost of the Newlin's Mill archaeological site mitigation should be included in the budget to have an understanding of the true cost of this project. Mitigation will include data recovery (excavation and analysis) of the affected areas, reporting, and appropriate-level public outreach efforts.

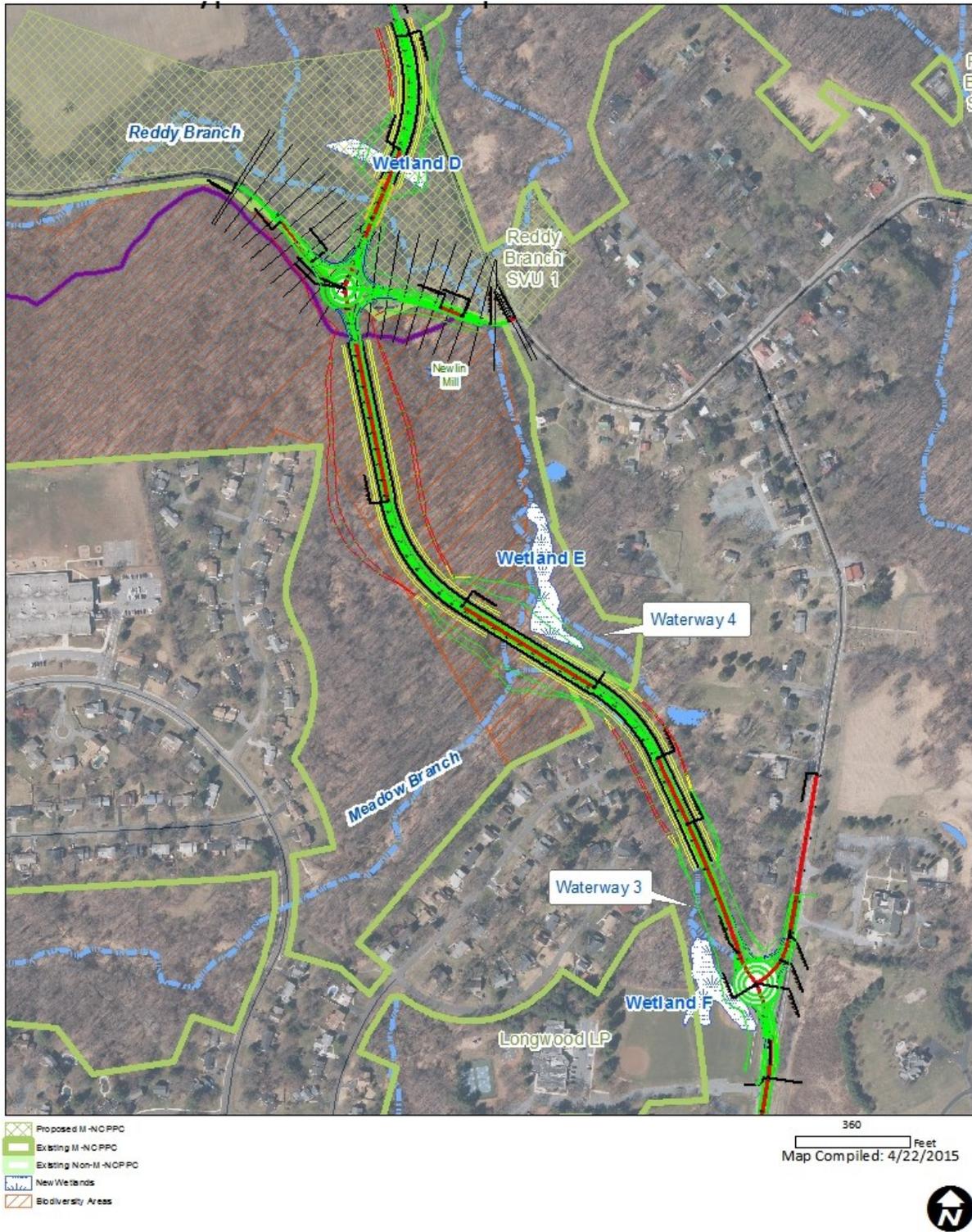
In 2002 the Planning Board directed SHA to include, "Accommodation of safe pedestrian and bicycle crossings for the existing Oakley Cabin Trail and a potential future natural surface trail as described in the County-wide Park Trails Plan". The Maryland Historic Trust (MHT) determined that if the Newlin Mill site was adversely affected, a mitigation strategy would need to be established in consultation with SHA and MHT. Due to the potential of the site being eliminated by construction of the road, discussions regarding where the trail will be rebuilt were put on hold until an alignment was chosen. Now that it appears that the alignment will avoid major impacts to the mill site – although it will likely still impact the mill race - Parks will be working with SHA to determine how to still provide a trail from Oakley Cabin to Newlin Mill, and what mitigation will occur as a result of impacts to the mill race.

Longwood Local Park Impacts

Longwood Local Park is a 10 acre park acquired by M-NCPPC in 1975 and built in 1981. Amenities within the park include; a playground, two diamond fields, one soccer overlay field, two tennis courts, a basketball court and Longwood Community Recreational Center (Figure 2). Prior to acquiring the park, Montgomery County acquired a right of way (ROW) on the east side of the park along Georgia Avenue in preparation for the future Brookeville Bypass. The large diamond field #2, a portion of the soccer overlay field, portions of the entrance road and a large gravel parking area lie within this ROW. The current LOD for construction of the southern roundabout will eliminate the adult diamond field (#2), the large gravel parking lot and potentially the soccer overlay.

This estimated 3.5 acres parcel is not subject to protection under Section 4(f) due to its previous reservation for transportation use. The Department of Parks and the Department of Recreation will be working with SHA to determine which portions of the field will be closed during construction, how SHA will utilize the area for staging while not conflicting with park and recreation center users, and any mitigation strategies required for those impacts.

Figure 3. Stream and Wetland Impacts



Stream and Wetland Impacts

There are four (4) streams and tributaries that will be impacted or crossed by this project (Figure 3). The first is an intermittent unnamed tributary (waterway 3) that originates near Longwood Local Park flows within the existing Montgomery County ROW and into Meadow Branch on parkland. Sections of his tributary will likely have to be piped due to its location directly under the proposed alignment. The second is a perennial unnamed tributary (waterway 4) that flows from the vicinity of an old farm pond and into Meadow Branch. The recent slight shift of the alignment within the existing ROW will result in the piping of significant portions of waterway 3, a degraded intermittent tributary, but will allow SHA to eliminate impacts to waterway 4 a higher quality perennial stream.

Brookeville Bypass will cross over Meadow Branch, a larger tributary to Reddy Branch. Originally in 2002, SHA proposed crossing Meadow Branch utilizing a concrete box culvert. At that time, M-NCPPC requested that they utilize a single span bridge crossing. When the project was reinitiated in 2013, SHA again proposed a culvert for this crossing. Since that time, due to comments by M-NCPPC, the Army Corps of Engineers (ACOE) and Maryland Department of the Environment (MDE), SHA has since revised their scope to include bridging both Meadow Branch and Reddy Branch including portions of the floodplain.

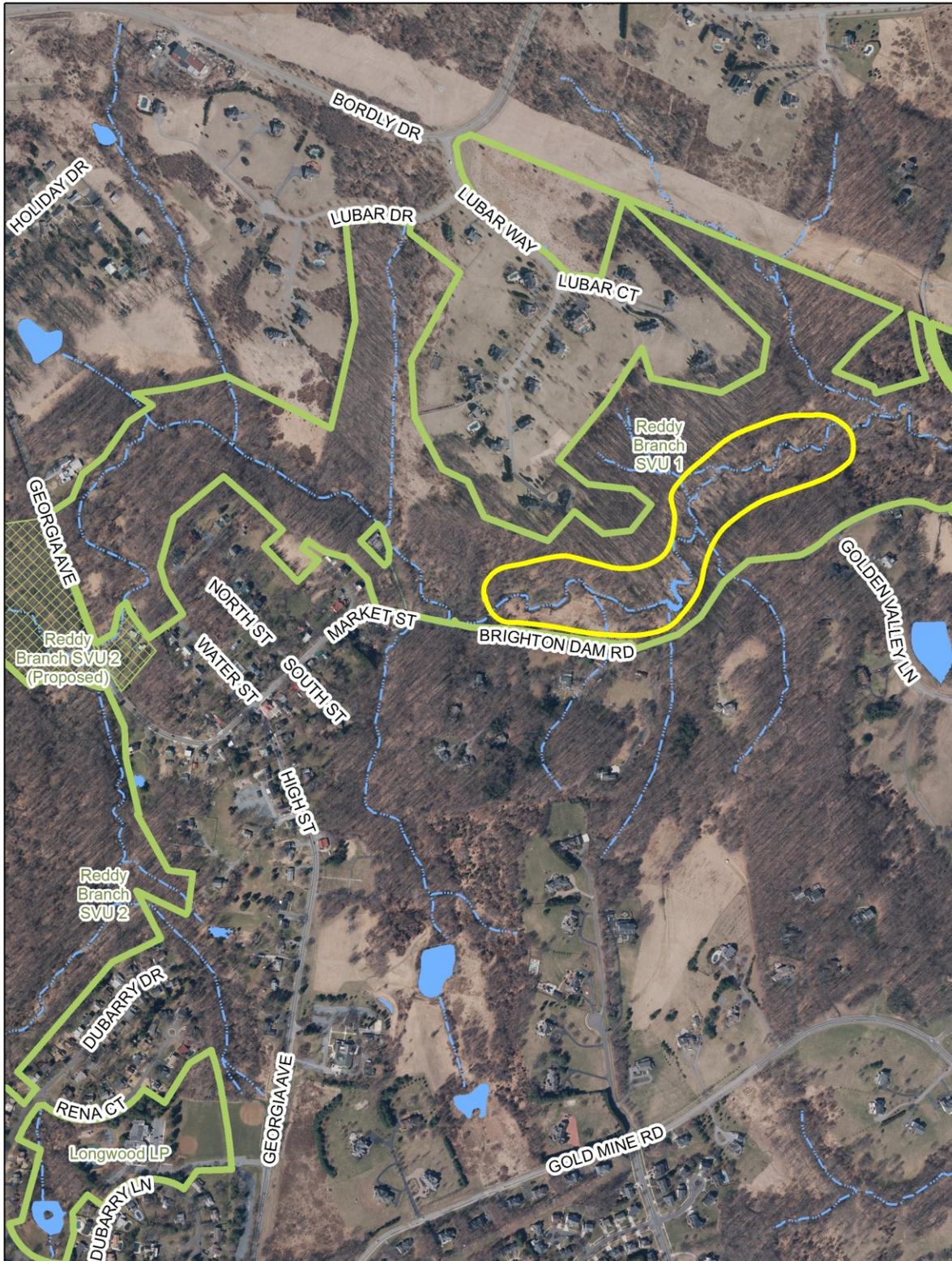
There are three (3) jurisdictional wetlands potentially impacted by the project (Figure 3). The southernmost wetland F is a forested wetland entirely within the existing ROW for the road adjacent to Longwood LP. Impacts to this wetland will likely to be unavoidable due to the narrowness of the alignment in this area. When comparing the 3 wetlands, this wetland is of lesser quality than the other two. Wetland E is near the right bank of Meadow Branch. This wetland is of higher quality and is both groundwater and stream overflow fed. This wetland is very close to the proposed bridge abutments for the bridge crossing and as such, Parks believe that the impacts to this wetland can be avoided or minimized by either a) expanding the span of the bridge to include the wetland or b) implementing retaining walls along the wetland to avoid impacts. Wetland D is located to the north of Reddy Branch near the road crossing. SHA is currently working on bridge span lengths for this crossing and are modeling a span that crosses just the stream and one that crosses both the stream and wetland. If the road crosses at this location, the bridge length should be sufficient to cross both the stream and wetland D. If staff's proposed new alignment is chosen however, impacts to this wetland would be completely eliminated.

Clean Water Act Section 404 Compensatory Mitigation Requirements

The Clean Water Act prohibits the discharge of dredged or fill material into waters of the United States (e.g. streams and wetlands) unless a permit issued by the Army Corps of Engineers and Maryland Department of the Environment. Through this joint permit, impacts to wetlands, streams and other aquatic resources must be avoided and minimized to the extent practicable. For unavoidable impacts, compensatory mitigation is required to replace the loss of, and impact to, streams and wetlands. The Brookeville Bypass will require approximately 3.44 acres of wetland mitigation and approximately 485 linear feet of stream restoration to fulfill Section 404 requirements. In 2002, SHA identified a site on M-NCPPC parkland (Reddy Branch SVU I) to fulfill both wetland and stream restoration requirements (Figure 4).

When the project was reinitiated, Parks met with SHA onsite to determine if this site is still feasible. Parks agrees that this site is still a good candidate for stream restoration and wetland creation. Because the wetlands that the Brookeville Bypass project will impact are forested wetlands, SHA will be required to create forested wetlands in their mitigation site. At this site, there is a large meadow dominated by

Figure 4. Reddy Branch SVUI: Wetland and Stream Compensating Mitigation Site



reed canary grass (a non-native invasive plant). This area likely used to be a wetland but through time the meadow has filled with sediment resulting in it being perched above the groundwater table with sporadic wetlands occurring that are fed through overland flow. While Parks is amenable to removing some of this historic sediment (legacy sediment) and converting this area to a wetland, we will work with SHA's consultants to ensure that the project retains some open scrub-shrub wetland habitat features. The site does offer other opportunities for forested wetlands.

The use of this park for SHA's Section 404 mitigation requirements is considered, "Non-park use of parkland" under M-NCPPC's 'Policy for Parks' and therefore use of this site by SHA needs to be approved by the Planning Board.

Stormwater Management

Stormwater Management (SWM) facilities should be designed to provide adequate treatment of runoff while not unduly increasing impacts to natural resources (i.e. the fundamental purpose of SWM). SHA is currently working on developing a SWM concept plan and therefore have not provided Parks a concept to review. A comprehensive SWM plan should accompany the mandatory referral so staff will be able to accurately determine impacts to ensure adequate mitigation occurs.

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