MCPB Item No. Date: 7/9/15

Hillandale Local Park, Preliminary Forest Conservation Plan, PP2015001

AVL

Amy Lindsey, Planner Coordinator, Area 2 Division, amy.lindsey@montgomeryplanning.org, 301.495.2189



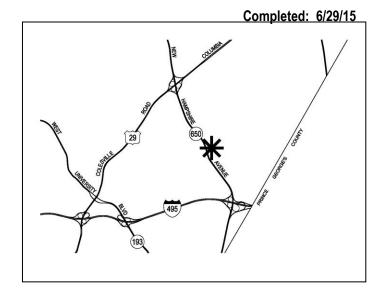
Khalid Afzal, Planning Supervisor, Area 2 Division, khalid.afzal@montgomeryplanning.org, 301.495.4650



Glenn Kreger, Chief, Area 2 Division, glenn.kreger@montgomeryplanning.org, 301.495.4653

Description

- Preliminary Forest Conservation Plan associated with the Park Facility Plan for the complete renovation of Hillandale Local Park;
- 10615 New Hampshire Avenue, Silver Spring, Maryland;
- 23.35 acres zoned R-90 and C-O;
- 2014 White Oak Science Gateway Master Plan;
- Applicant: Montgomery County Department of Parks;
- Filing date: November 24, 2014.



Summary

Staff recommends approval with conditions.

The Applicant proposes to:

- Remove 0.53 acres of forest, retain 12.16 acres of forest, and plant 0.26 acres of forest.
- Remove four trees and impact ten trees that requires a variance, per Section 22A-12(b)(3).

Pursuant to Chapter 22A of the County Code, the Board's actions on Forest Conservation Plans are regulatory and binding.

Conditions of Approval

- 1. Prior to issuance of a Sediment Control Permit from the Department of Permitting Services, the Applicant must obtain approval of a Final Forest Conservation Plan from the Planning Department. The Final Forest Conservation Plan must be consistent with the approved Preliminary Forest Conservation Plan.
- 2. The Final Forest Conservation Plan must show the planting of six 3-inch caliper native shade trees as mitigation plantings for the loss of trees requiring a variance.
- 3. The Applicant must plant 0.26 acres of forest and six 3-inch caliper native shade trees within one year of construction completion.

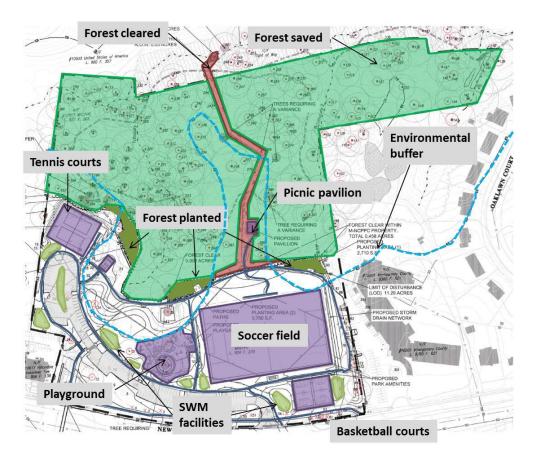
Project Description

Hillandale Local Park is a 23.35-acre existing park located on New Hampshire Avenue in the White Oak Science Gateway Master Plan. The park is adjacent to the Food and Drug Administration (FDA) consolidated headquarters facility to the north and CHI Centers to the south. To the east is an undeveloped County-owned rightof-way (ROW) with a stream in it. The park is currently developed with a playground, softball field, lighted baseball field, two basketball courts, and two lighted tennis courts. The park previously included a park activity building and the Hillandale Park Office Building. These two buildings were demolished in 2014, with Planning Board approval (Attachment 1).



The Applicant proposes to redevelop the site with a full-sized rectangular field, playground, two lighted basketball courts, two lighted tennis courts, restroom facilities, picnic shelters, and a looped trail system with fitness stations. The new park facilities will also include adequate parking and stormwater management facilities.

All of the existing recreational facilities are located on the portion of the park immediately adjacent to New Hampshire Avenue. The rear of the site is an undeveloped, natural area with on-site forest that is part of a larger forest stand extending off-site onto all adjacent properties. Three intermittent streams flow west to east off-site into an unnamed perennial tributary to the Paint Branch, and steep slopes with highly erodible soils. There are areas of steep slopes with highly erodible soils associated with the stream valleys.



ANALYSIS

Environmental Guidelines

Staff approved a **Natural Resource** Inventory/Forest **Stand Delineation** (NRI/FSD #420150350) on November 20, 2013. There are three streams onsite, with an associated 12.09 acres of environmental buffers. There are no wetlands or floodplains on the site. While 10.19 acres of the environmental buffers are forested, the



remaining 1.9 acres of environmental buffer is a combination of programmed recreation areas and mowed lawn.

Currently, the environmental buffer has approximately 0.40 acres of permanent impervious encroachments. Per section V.A.1(b), "no buildings, structures, impervious surfaces, or activities requiring clearing or grading will be permitted in stream buffers, except for infrastructure uses, bikeways, and trails found to be necessary, unavoidable and minimized..". However, section V.A.1(e) does allow for small amounts of clearing and grading within the buffer as long as the modification is consistent with a comprehensive approach to protecting the streams wetlands, and other features. Proposals for buffer encroachment need to follow the following strategy:

- 1. Avoidance of buffer encroachments;
- 2. Minimization of buffer encroachment;
- 3. Compensation for loss of buffer function.

In this case, Hillandale Local Park is an existing park that serves as a valuable recreational resource for the surrounding area. The site is severely limited by high priority forest, stream valley buffers, and steep slopes with highly erodible soils. Of the 23.35 acres of parkland, 12.09 acres is in stream valley buffer and an additional 2.5 acres is forested, though outside the stream valley buffer. This only leaves 8.76 acres completely unencumbered by natural features. Additionally, the shape of the environmental buffer increases the difficulty of developing the site without encroaching into the buffer.

The proposed project reduces the area of permanent impervious encroachments from approximately 0.56 acres to approximately 0.18 acres. All of the ball courts, parking, and stormwater management facilities are located outside of the buffer. The only permanent impervious encroachment is portions of the ADA-accessible HeartSmart trail loop, which was designed to avoid forest and minimize disturbance. Additionally, the redevelopment will add storm water management to the park, for the first time. As mitigation for the proposed 0.18 acres of permanent environmental buffer impacts, the Applicant will protect an additional 2.18 acres of forest outside of the environmental buffer and plant 0.26 acres of forest within the unforested environmental buffer. Staff believes that the proposed project is in compliance with the *Environmental Guidelines* because it avoids impacting the existing natural resources as much as possible, minimizes the proposed impacts, and mitigates for the proposed encroachments.

Forest Conservation

The site is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code) and the Applicant has submitted a Preliminary Forest Conservation Plan (Attachment 2) in conjunction with the Park Plan. There is 12.69 acres of forest on-site, in one stand of mixed hardwoods. The forest is considered a high priority for retention due to the presence of environmental buffers, steep slopes with highly erodible soils and specimen trees, as well as being a part of a contiguous forest that extends off-site. The Applicant proposes to clear 0.53 acres of forest, retain 12.16 acres of forest, and plant 0.26 acres of unforested stream valley buffer, as mitigation for permanent impervious encroachments into the stream valley buffer. The majority of the forest removal is to accommodate the safe conveyance of stormwater management discharges through the extension of a drainage pipe and outfall.

Forest Conservation Variance

Section 22A-12(b) (3) of Forest Conservation Law provides criteria that identify certain individual trees as high priority for retention and protection. The law requires a variance to impact trees that: measure 30 inches or greater diameter at breast height (DBH); are part of a historic site or designated with a historic structure; are designated as national, State, or County champion trees; are at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species. Any impact to these trees, including removal or disturbance within the tree's critical root zone (CRZ), requires a variance. An applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the County Forest Conservation Law.

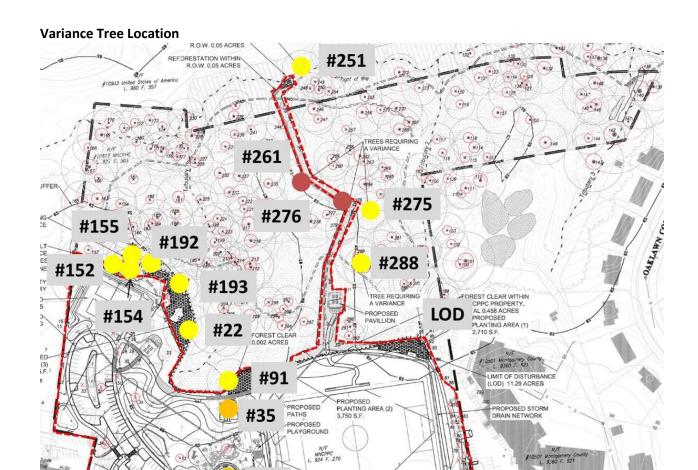
The Applicant submitted a variance request on 11/24/2014 and a revised variance request on 4/21/2015 for the impacts to trees (Attachment 3). The proposed layout will remove four trees and impact but not remove ten trees that are considered high priority for retention under Section 22A-12 (b) (3) of the County Forest Conservation Law.

Unwarranted Hardship for Variance Tree Impacts

Per Section 22A-21, a variance may only be granted if the Planning Board finds that leaving the requested trees in an undisturbed state will result in unwarranted hardship. The requested variance is necessary because of the locations of the trees on a site that is already developed as a park and constrained by environmental features. Development is confined to areas outside of the forest and stream valley buffer, except for installation of a storm drain connection.

Two of the trees proposed for removal, #35, 33" diameter at breast height (DBH) pin oak, and #37, 32" DBH pin oak are within the currently developed areas of the park and will be impacted by the removal of existing features and installation of new features and grading. The Applicant will try to retain these trees but is prophylactically asking for a variance to remove them because they are located in the interior of construction. The other two trees proposed for removal #261, 36" DBH white oak, and #276, 32" DBH red oak, are in poor condition and will be impacted by the stormwater management outfall. The ten trees proposed for impacts are at the edge of the development, within the forest.

Leaving the requested trees in an undisturbed state would result in an unwarranted hardship because the Applicant could not remove the existing features or install any new features or stormwater management facilities.



Variance Tree Tables

TREE REQUIRING

Removals

	7			
ID	Species	Size	Condition	Notes
35	Pin oak	33"	Good	Removal of basketball court and ballfield,
				construction of stormdrain
37	Pin oak	32"	Good	Removal of existing parking lot, grading for
				playground, construction of stormdrain
261	White oak	36"	Poor	Stormwater management outfall
276	Red oak	32"	Poor	Stormwater management outfall

PROPOSED PARK AMENITIES

#37

Impacts

ID	Species	Size	Condition	% impact	Notes
22	American	40"	Good	13%	Removal of existing Park features
	sycamore				
91	Pin oak	36"	Fair	49%	Removal of existing ballfield, grading
152	Tulip poplar	37"	Poor	37%	Grading for tennis court
154	Tulip poplar	30"	Good	31%	Grading for tennis court
155	Tulip poplar	36"	Fair	14%	Grading for tennis court
192	Black cherry	30"	Poor	10%	Removal of playground
193	Tulip poplar	33"	Fair	3%	Removal of playground
251	Tulip poplar	31"	Good	6%	Stormwater management outfall

Variance Findings - Based on the review of the variance request and the proposed Preliminary Forest Conservation Plan, staff makes the following findings:

1. Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.

Granting this variance will not confer a special privilege on the Applicant as disturbance of the specified trees is a result of the need to reconfigure the site while minimizing impacts to the forest and stream valley buffers. All development has been constrained to the previously developed areas of the site, with the exception of the stormwater conveyance and outfall that is necessary to provide safe conveyance of the stormwater. Only 8.35 acres of this 23.35 acre site is developable.

2. The need for the variance is not based on conditions or circumstances which are the result of the actions by the applicant.

The requested variance is not based on conditions or circumstances that are the result of actions by the Applicant. The Applicant has minimized disturbance and designed the site to maximize forest retention and environmental buffer restoration. The stormwater conveyance path was specifically designed to minimize the impacts to both forest and individual trees. Both trees associated with that disturbance and requiring removal are in poor condition. The Applicant is also attempting to save two trees within the interior of the construction activities. While they have requested a variance for removal of these trees, due to the difficult nature of this preservation task, disturbance has been minimized and tree protection measures proposed. All of the other tree impacts are to trees at the edge of the forest or stormwater management conveyance disturbance.

3. The need for the variance is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.

The requested variance is a result of the location of trees and the impacts by the proposed layout of redeveloped park, and not a result of land or building use on a neighboring property.

4. Granting the variance will not violate State water quality standards or cause measurable degradation in water quality.

Staff generally recommends that the Planning Board approve variance requests with mitigation to replace the form and function of the trees proposed for removal, outside of areas of forest removal. The Applicant will plant six 3" caliper native shade trees to replace the form and function of the variance trees proposed for removal. Additionally, the proposed Park development removes permanent impervious encroachments from the environmental buffer and provides forest planting as mitigation for the remaining encroachments, as well as providing stormwater management for a site that previously did not have any. Seven of the trees will be impacted by stormwater management conveyance and outfall. Water quality will improve with the proposed development and State water quality standards will not be violated.

Mitigation for Trees Subject to the Variance Provisions

The Applicant is requesting a variance to remove four trees. Two trees, #261, 36" DBH white oak, and #276, 32" DBH red oak, are within forest and do not require mitigation. Two trees, #35, 33" DBH white oak, and #37, 32" DBH pin oak, are outside of forest and will be mitigated at a rate of 1" caliper per 4" DBH removed, using a minimum 3" caliper native shade tree. The Applicant will plant six, 3-inch caliper trees, which will be shown on the Final Forest Conservation Plan. Additionally, the Park Facility Plan includes a full landscape plan with 125 shade trees and 31 evergreen trees proposed for planting onsite.

County Arborist's Recommendation on the Variance

In accordance with Montgomery County Code Section 22A-21(c), the Planning Department is required to refer a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection for a recommendation prior to acting on the request. The County Arborist has reviewed the variance request and recommended approval with mitigation (Attachment 4).

Variance Recommendation - Staff recommends that the variance be granted.

CONCLUSION

Staff concludes that the proposed Preliminary Forest Conservation Plan meets the requirements of Chapter 22A Forest Conservation Law. Staff therefore recommends that the Planning Board approve the Preliminary Forest Conservation Plan and associated variance, with the above conditions.

Attachments

- 1. Staff report on Park building demolition
- 2. Preliminary Forest Conservation Plan
- 3. Variance request
- 4. Letter from County Arborist

ATTACHMENT 1



MCPB Item #8

October 11, 2012

MEMORANDUM

DATE: October 3, 2012

Montgomery County Planning Board TO:

Mary Bradford, Director of Parks VIA:

Michael F. Riley, Deputy Director of Parks

FROM:

Dr. John E. Hench, Ph.D., Chief, Park Planning and Stewardship Division (PPSD)
Brooke Farquhar, Supervisor, Park & Trail Planning Section, PPSD
Mark Wallis, Planner Coordinator, Park & Trail St. Mark Wallis, Planner Coordinator, Park & Trail Planning Section, PPSD

Hillandale Park Activity Building (PAB) and Adult Education Building Demolition **SUBJECT:**

Recommended Planning Board Action

Staff recommends APPROVAL of a phased closure and ultimate demolition of Hillandale Park Activity Building (PAB) and the former Adult Education Building by February 1, 2014, as follows:

- Closure date to coincide with septic tank agreement expiration February 1, 2014.
- Available to the Public November 2, 2012 to closure date of February 1, 2014, weekends only, maximum 3 events per weekend, maximum 50 people per event.
- Building to be demolished spring of 2014.

Background and Summary of Staff Findings

The Hillandale Local Park is located in the eastern portion of Montgomery County at 10615 New Hampshire Avenue in White Oak adjacent to the Food and Drug Administration (FDA) consolidated Headquarters (Figure 1). The approximately 22.5 acre park consists of (Figure 2):

- 2 tennis courts
- 2 basketball courts
- 2 diamond fields with a soccer overlay
- 1 playground
- a natural wooded area
- 1 Park Activity Building (PAB) attached by breezeway to a now-closed prefabricated structure (formerly the Adult Education Building)
- Hillandale Park Office Building

www.ParkPlanningandStewardship.org

According to park site plans from the period, the PAB started serving the public in the mid 1940's as a summer log cabin. Over the years, use expanded to the spring and fall and finally in the 1950's to year-round activities with the addition of a heating system. Around 1955, a prefabricated World War II-era structure—one of six given to M-NCPPC from the Naval Surface Warfare Center—was connected to the PAB by a breezeway. In the 1980's, the original PAB was suffering from extensive termite damage and was essentially rebuilt (with the exception of the roof structure), according to records and the oral history of the crew that undertook the carpentry.

Around 2008 the Adult Education Building was damaged by fire from faulty equipment and subsequently closed. Cosmetic repairs to the siding have been completed.

Hillandale Local Park is scheduled to undergo Facility Planning by the Department of Parks, Park Development Division beginning in the next few months. Approval of the removal of the pair of joined buildings prior to completion of the Facility Plan is important in order to allow the maximum flexibility in redesigning the park to better meet the needs of the community and to develop the best possible plan for the park.

Prior Approvals

On June 28, 2007, the Planning Board reviewed the *Functional Plan for Recreation and Ancillary Buildings: Preliminary Staff Recommendations* (*Attachment 1*). Given the age and condition of many of the recreational buildings and the operational issues related to the leasing of ancillary buildings, an overall planning and management approach to these buildings was presented. Staff presented recommendations for future operations of the 31 park recreation buildings, including the Hillandale building, and key management changes for the 9 ancillary buildings. Park Activity Buildings were assigned to 4 basic categories and ancillary buildings to 2 basic categories.

The four Park Activity Building management categories were:

- Continue and Improve 7 buildings
- Evaluate and Market 8 buildings
- Transfer or Demolish 5 buildings
- Assess Historical Priority 1 building

The Hillandale PAB was recommended for the Transfer and Demolish management category for two basic reasons – cost of repair and duplication of services (see "Analysis", below).

At the June 28, 2007 Planning Board hearing, the Board directed staff to bring each Park Activity Building recommendation for Transfer or Demolish back to the Board one at a time. Subsequently, Park Planning staff met with community representatives who argued that the facility served an important need for community gatherings, since there would be a lack of this service in the area while the two local schools (Key Middle School and Cresthaven Elementary School) were closed, demolished and re-built. In addition, although the White Oak Recreation Center would eventually provide needed indoor meeting and recreation space, the exact construction and delivery date was uncertain at the time.

Status Since 2007

In response to community concerns, the Department of Parks continued to operate the PAB for community use. In the interim, Parks replaced the septic system to keep the building operational, under an MOU between the Commission and the Montgomery County Health Department. The MOU assigned a five-year term that expires February 1, 2014 (Attachment 2).

Since 2007, the two schools in the area have been re-built and the White Oak Community Recreation Center has opened, providing alternative locations for public indoor meeting spaces nearby.

In May 2012 staff met with the community members to provide the preliminary staff recommendation for a phased closure and building demolition.

Analysis

Staff has analyzed three operational factors that support demolishing the building:

- Existing Condition
- Duplication of Service
- Cultural Resource Evaluation

Existing Condition

The Infrastructure Inventory and Assessment of Park Components (Facility Engineering Associates, March, 2007 (Attachment 3) concluded that the septic system has failed and that a hookup to public sewer would cost approximately \$30,000. The Health Department will not allow connection to either the Hillandale Park Office Building or the Fire Station. Park staff obtained an independent budget estimate for two options to connect the building to the public sewer system. The estimate showed that installing a gravity sewer through forested areas would cost \$123,000. The second option would require tunneling under New Hampshire Avenue and would cost \$222,000 (Attachment 4).

Staff concluded that the costs of septic hookup and fixing the building would exceed the building's current replacement value.

Duplication of Service

In evaluating the future operation of the PAB, staff examined other service providers including Libraries, Montgomery County Public Schools, closed schools, and the Recreation Department (*Figure 3*). In the specific case of Hillandale, the recent provision of public meeting spaces in two nearby facilities at the Cresthaven Elementary School, and the Key Middle School has increased the level of service for rentable indoor meeting space in the vicinity of the Hillandale Local Park. The White Oak Library is slightly over one mile north on New Hampshire Avenue from Hillandale Local Park. The Hillandale Civic Association is currently meeting in the former Hillandale Elementary School which is now leased to Centers for the Handicapped.

The addition of the White Oak Community Recreation Center (CRC) includes a public meeting space with a kitchen and other amenities in a park setting (*Figure 4*). This 33,000 square foot building, located on parkland, opened in June of 2012. The CRC layout includes a community room and kitchen equivalent to the PAB function in addition to the following services: Gymnasium, Exercise Room, Senior/Community Lounge, Arts/Kiln Room, Game room, Conference Room, and Activity Room.

Cultural Resource Evaluation

Cultural Resources Stewardship Section staff within the Department of Parks have an overarching interest in documenting the history of the Commission and the Department of Parks. The Section's Senior Historian has reviewed and begun writing up the history of the Commission. As part of that larger effort, the history of the original Hillandale recreation building and the World War II temporary structures has been evaluated. In addition, Cultural Resources staff understand the laws and principles of historic preservation within the county.

Cultural Resources staff consulted directly with the Historic Preservation Section staff, both in a detailed site visit and in two follow-up meetings, as part of its evaluation, and developed an internal staff-level strategic plan for how to protect the best of these types of buildings. Towards that end, Cultural Resources is now preparing a *Master Plan for Historic Preservation* amendment that will include the history of park activity buildings and the nomination of at least one building from each genre that has the best integrity. Six buildings dating from the 1930s to the 1960s will be nominated in FY 13 or 14. The buildings to be preserved are those that best meet the criteria of Chapter 24-A of the Montgomery County Code, the Historic Preservation Ordinance. Hillandale has lost much of its original building material in recent decades, according to the trades people who actually did the repairs. Therefore, Hillandale is not the best candidate for designation or preservation. A more suitable building to represent the era is its 'twin,' the Pinecrest recreation building, which will be part of the *Master Plan for Historic Preservation* amendment. It is worth noting that the Historic Preservation Section staff of the Planning Department did not recommend the designation of Hillandale within the White Oak Science Gateway Master Plan. (See "Area Master Planning Considerations" below).

Area Master Planning Considerations

The White Oak Science Gateway (WOSG) Master Plan is currently underway. The recommendation in the WOSG Preliminary Draft is as follows:

"Remove the Park Activity Building (upon approval by the Planning Board as part of a Parks Department agenda item), to allow for repurposing of parkland with facilities that are in demand, such as community open space, reconfigured play area, etc. (Final program and park design to be determined through the currently funded Facility Plan)."

As mentioned above, Historic Preservation Section staff did not recommend the designation of the Hillandale PAB (with its attached Adult Education Building) to the *Master Plan for Historic Preservation*, but included the structures in the list titled, "Potential Historic Resources for Future Evaluation." Preservation staff also noted that the Hillandale buildings had "compromised integrity." At the September 20, 2012 presentation to the Planning Board of the Preliminary Recommendations, Parks staff noted the Historic Resources chapter language and voiced Park's opinion that Hillandale's compromised integrity makes Pinecrest, its "twin," a better example of the building type, and the better candidate for preservation.

Repurposing of the Site

The park is undergoing facility planning in the next few months. The facility planning public process will give the community opportunities to suggest alternate uses on the park activity building's footprint among other issues. Community input to date suggests relocation of the playground to make it more visible, and reconfiguration of the disjointed parking and driveway pattern. The facility plan will address these issues in a comprehensive rethinking of the entire park.

PC

John Nissel, Chief, Facilities Management Division, Department of Parks Steve Chandlee, Acting Division Chief, Southern Parks, Department of Parks Antonio Duvall Acting Chief, Park Police Division, Department of Parks MaryEllen Venzke, Chief, Management Servces Division, Department of Parks Mitra Pedoeem, Chief, Park Development Division Kate Stookey, Chief, Public Affairs & Community Partnerships Division, Department of Parks Joey Lampl, Cultural Resources Manager

Figure 1: Location Map

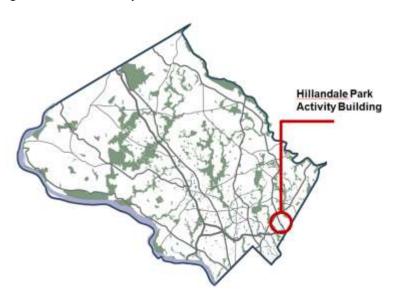
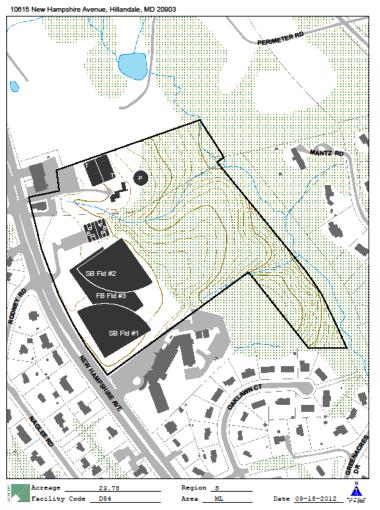


Figure 2: Park Map





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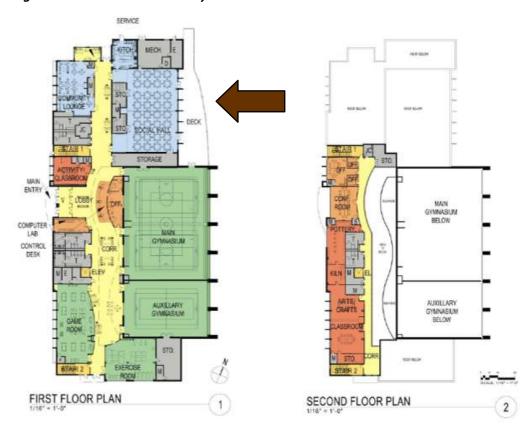
Recreation
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Figure 3: Recreation Buildings and other public meeting spaces near Hillandale Local Park

Figure 4: White Oak Community Recreation Center



Attachments

- **Attachment 1** Planning Board Memo: June 28, 2007. Functional Plan for Recreation and Ancillary Buildings: PRELIMINARY STAFF RECOMMENDATIONS
- Attachment 2 Department of Permitting Services: Sewage Disposal System Permit
- **Attachment 3 -** Facility Engineering Associates (FEA) Final Report Infrastructure Inventory and Assessment of Park Components, March 2, 2007
- Attachment 4 W.F. Wilson & Sons, Inc., Budget Proposal

March Column Co	ee#	Common Name	Botanical Name	DBH (in.)	Condition	Disposition	Notes	Tree #	Common Name Tulip Poplar	Botanical Name Liriodendron tulipifera	DBH (in.)	Condition Good	Disposition	Notes	240	_
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Angle	$\overline{}$	Black Cherry	Prunus serotina					141	Green Ash	Fraxinus pennsylvanica	29	Good			271	1 T
Authors 1965 20 1967	_	Red Maple	Acer rubrum					143	Red Oak	Quercus rubra	48	Good			273	3 1
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Accordance 31	8	Pin Oak Slippery Elm	Ulmus fulva	5	Good	Remove		-								
25		Slippery Elm White Pine	Pinus strobus	21	Good	Remove	Newly planted tree	165	Red Maple					branches	294	94
Street	3	Eastern Red Bud Eastern Red Bud	Cercis canadensis	3	Good	Remove					45	Poor			296	96
Management 3		Eastern Red Bud Eastern Red Bud	Cercis canadensis	3	Good	Remove		-							298	98
March Part		Eastern Red Bud Eastern Red Bud	Cercis canadensis	3	Good	Remove		-							300	00
Tree		Eastern Red Bud						-								
1.00		Green Ash White Pine	Pinus strobus	27	Good	Remove		-				-			100000000000000000000000000000000000000	
17. Tully pepter	_	American Sycamore American Sycamore	Platanus occidentalis	4	Good	Remove										
The content of the	3	American Sycamore American Sycamore	Platanus occidentalis	4	Good	Remove		-						Undercut		
	5	American Sycamore American Sycamore	Platanus occidentalis	4	Good	Remove								Undercut, leaning		
Section Sect		American Sycamore					200									
Process Proc	-	Pin Oak Red Oak	Quercus rubra	5	Good	Remove		-	Tulip Poplar	Liriodendron tulipifera				Twin		
The feature of the content of the	0	Red Oak Red Oak	Quercus rubra	6	Poor	Remove	Broken leader	186	Red Oak					Basal Damage		
recurs anthror 9 9 Fair Remove Basel Comrage 190 Till Popular Chrisdenderon fullyfrer 2 5 Fair Virtus Popular Virtus Popular Virtus Popular Virtus Popular Virtus Virtus		Black Cherry					Dead Branches, Uneven					-				
Part	3	Red Oak Red Oak	Quercus rubra Quercus rubra	29	Fair		Basal Damage	190	Tulip Poplar		-					
194 American Systems 195 February (1970) 28 Good 1970 19	5	Blue Spruce Green Ash	Picea pungens Fraxinus pennsylvanica	6	Good		Suckers	192	Black Cherry	Prunus serotina		-				
	6 7	Green Ash Flowering Cherry	Prunus Sp.	9	Fair	Remove	Root Damage	194	American Sycamore	Platanus occidentalis	-			Heavy vines		
198	8	Green Ash White Pine	Pinus strobus	27	Good	Remove		196	Tulip Poplar	Liriodendron tulipifera				Twin		
	0	Cornelian Dogwood Black Cherry	Cornus mas Prunus serotina	15	Poor	Remove		198	Tulip Poplar	Liriodendron tulipifera	34			Twin, undercut	-	
Procedure Proc	3	Pin Oak White Pine	Quercus palustris Pinus strobus	27	Good	Remove		200	Tulip Poplar	Liriodendron tulipifera	30	Poor				
Miles Mile	5	Red Oak Black Cherry	Quercus rubra Prunus serotina	8	Poor	Remove	Vines	202	Tulip Poplar	Liriodendron tulipifera	28	Poor				
Part	,	Black Cherry Bradford Pear	Prunus serotina Pyrus calleryana	6	Good	Remove		204	Tulip Poplar	Liriodendron tulipifera	32	Fair				
208 American Syzamore		Pin Oak Bradford Pear	Quercus palustris Pyrus calleryana	6	Fair	Remove	Leaning, Trunk Damage	206	Tulip Poplar	Liriodendron tulipifera	31	Fair				
		Black Cherry White Pine	Prunus serotina Pinus strobus	10	Good	Remove		208	American Sycamore	Platanus occidentalis	30	Good			\exists	
200 Femce, vines, proken 210 Femce, vines, proken 211 Tulip Poplar Uriodendron tulipifera 36 Good September 212 Tulip Poplar Uriodendron tulipifera 38 Good September 213 Tulip Poplar Uriodendron tulipifera 24 Fair Slightly undercut 113 Poor Vines 215 Tulip Poplar Uriodendron tulipifera 27 Poor Undercut, leaning 215 Tulip Poplar Uriodendron tulipifera 27 Poor Undercut, leaning 216 Tulip Poplar Uriodendron tulipifera 39 Good 217 Tulip Poplar Uriodendron tulipifera 39 Good 218 Tulip Poplar Uriodendron tulipifera 23 Good 218 Tulip Poplar Uriodendron tulipifera 23 Good 218 Tulip Poplar Uriodendron tulipifera 24 Good Urioes 220 White Oak Quercus alba 29 Good Undercut 220 White Oak Quercus alba 29 Good Undercut 220 Tulip Poplar Uriodendron tulipifera 26 Good Undercut 220 Tulip Poplar Uriodendron tulipifera 28 Good U	_	Black Cherry Bradford Pear	Prunus serotina Pyrus calleryana	8	Good	Remove		210	Tulip Poplar	Liriodendron tulipifera	29	Fair				
In Poor New Years 11 Poor New Years 1214 Tulip Poplar Lindendron tulipifero 24 Fair Slightly underect		Black Cherry	Prunus serotina				Fence, vines, broken	212	Tulip Poplar	Liriodendron tulipifera	36	Good			\exists	
spyros yrighlanda 8 Poor Vines, dead branches 216 Tulip Poplar Unicodendron tulipifera 39 Good Indexerus polustris 36 Fair Vines, Dead branches 217 Tulip Poplar Unicodendron tulipifera 39 Good Vines 218 Tulip Poplar Unicodendron tulipifera 33 Good Vines 218 Tulip Poplar Unicodendron tulipifera 33 Good Vines 219 Tulip Poplar Unicodendron tulipifera 33 Good Vines 210 Vines 211 Tulip Poplar Unicodendron tulipifera 34 Good Unicodendron tulipifera 35 Good Vines 210 Vines 211 Vines 212 Tulip Poplar Unicodendron tulipifera 36 Good Unicodendron tulipifera 36 Good Unicodendron tulipifera 37 Good Unicodendron tulipifera 38 Good Unicodendron tulipifera 39 Good Unicodendron tulipifera 39 Good Unicodendron tulipifera 39 Good Unicodendron tulipifera 39 Good Unicodendron tulipifera 30 Good English Ivy 31 Red Oak Querus rubra 30 Good Indicodendron tulipifera 30 Good Senglish Ivy 32 Red Oak Querus rubra 30 Good Indicodendron tulipifera 30 Good Indicodend	5	Mulberry Black Walnut	Morus Sp. Juglans nigra	3	Poor	Remove	Heavy vines	214	Tulip Poplar	Liriodendron tulipifera	24	Fair				
Influse serotina 1 Poor Heavy Vines 218 Tulip Poplar Liriodendron tulipifera 29 Good Vines Lannus serotina 18 Fair Remove Most impacted by storm Roots impacted by storm drain, leaning 10 Fair Remove drain Roots impacted by storm drain, leaning 11 Poor Mines Poor Vines 221 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Wines 21 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines 221 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines 222 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines 225 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines 226 Good Undercut Vines 227 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines 228 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines 228 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines 228 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines 228 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines Vines 228 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines Vines 228 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines Vines 228 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines Vines 228 Tulip Poplar Liriodendron tulipifera 28 Good Undercut Vines	7	Persimmon Mulberry	Diospyros virginiana Morus sp.	12	Poor		Vines, dead branches	216	Tulip Poplar	Liriodendron tulipifera	39	Good			\exists	
willing part of the polar interest part of the p)	Black Cherry Black Cherry	Prunus serotina Prunus serotina	4	Poor		Heavy Vines	218	Tulip Poplar	Liriodendron tulipifera	29	Good				
tula nigra 10 Fair Remove drain 221 White Oak Quercus alba 26 Fair Crooked Roots impacted by storm drain, leaning 223 Tulip Poplar Liriodendron tulipifera 26 Good undercut rer negundo 11 Poor Vines 224 Tulip Poplar Liriodendron tulipifera 25 Good undercut rer negundo 8 Poor Vines 225 Tulip Poplar Liriodendron tulipifera 27 Good Twin, undercut rer negundo 8 Poor Vines 225 Tulip Poplar Liriodendron tulipifera 27 Good Undercut rer negundo 8 Poor Vines 225 Tulip Poplar Liriodendron tulipifera 28 Good Undercut rer negundo 9 Poor Vines 226 Red Oak Quercus rubra 30 Good Undercut recrus alba 28 Good Vines 229 Tulip Poplar Liriodendron tulipifera 39 Fair Basal damage rer negundo 10 Poor Vines 229 Tulip Poplar Liriodendron tulipifera 25 Good Undercut recrus alba 28 Good Vines 229 Tulip Poplar Liriodendron tulipifera 39 Fair Basal damage recrus alba 28 Good Vines 229 Tulip Poplar Liriodendron tulipifera 25 Good recrus alba 27 Good English Ivy 231 Red Oak Quercus rubra 28 Good recrus alba 28 Good Qood English Ivy 233 Red Oak Quercus rubra 28 Good recrus alba 50 Good Basal damage 236 White Oak Quercus rubra 29 Good recrus alba 50 Good Basal damage 236 White Oak Quercus rubra 29 Good Recrus alba 25 Good Basal damage 236 White Oak Quercus rubra 30 Good Recrus alba 25 Good Basal damage 237 Red Oak Quercus rubra 34 Good Recrus alba 25 Good Basal damage 237 Red Oak Quercus rubra 34 Good Recrus alba 25 Good Basal damage 237 Red Oak Quercus rubra 34 Good Recrus alba 25 Good Basal damage 25 Red Oak Quercus rubra 34 Good Recrus alba 25 Good Basal damage 25 Red Oak Quercus rubra 34 Good Recrus alba 25 Good Basal damage 25 Red Oak Quercus rubra 34 Good Recrus alba 25 Good Basal damage 25 Red Oak Quercus rubra 34 Good Recrus alba 25 Good Basal damage 26 Good Marcus rubra 26 Good	2	Pin Oak Black Cherry	Quercus palustris Prunus serotina			Remove	Undercut							Vines, large fallen tree		
tula nigra 5 Poor drain, leaning 223 Tulip Poplar Liriodendron tulipifera 28 Good undercut er negundo 11 Poor Vines 224 Tulip Poplar Liriodendron tulipifera 25 Good Twin, undercut er negundo 8 Poor Vines 225 Tulip Poplar Liriodendron tulipifera 27 Good Twin, undercut obial pulibrissin 10 Poor Vines 226 Red Oak Quercus rubra 30 Good Undercut atanus occidentalis 24 Good Leaning 227 Tulip Poplar Liriodendron tulipifera 28 Good Undercut atanus occidentalis 26 Good Vines 228 Tulip Poplar Liriodendron tulipifera 39 Fair Basal damage atercus alba 28 Good Vines 229 Tulip Poplar Liriodendron tulipifera 25 Good atercus rubra 46 Good Leaning 220 Tulip Poplar Liriodendron tulipifera 30 Fair Undercut, leaning atercus alba 27 Good English Ivy 21 Red Oak Quercus rubra 28 Good atercus rubra 28 Good English Ivy 21 Red Oak Quercus rubra 28 Good atercus rubra 28 Good English Ivy 21 Red Oak Quercus rubra 29 Good atercus rubra 28 Good English Ivy 21 Red Oak Quercus rubra 30 Good atercus rubra 30 Good English Ivy 31 Red Oak Quercus rubra 30 Good atercus alba 50 Good Basal damage 25 Pignut Hickory Carya alba 27 Good atercus alba 25 Good White Oak Quercus rubra 34 Good atercus alba 25 Good Basal damage 26 White Oak Quercus rubra 34 Good atercus alba 25 Good Basal damage 26 White Oak Quercus rubra 34 Good atercus alba 25 Good Basal damage 26 White Oak Quercus rubra 34 Good atercus alba 25 Good Pood Sasal damage 26 Good Marcus rubra 34 Good	1	Black Walnut	Betula nigra	10	Fair	Remove	drain	221	White Oak	Quercus alba	26	Fair				
renegundo 8 Poor Vines 225 Tulip Poplar Liriodendron tulipifera 27 Good Undercut 226 Red Oak Quercus rubra 30 Good Undercut 227 Tulip Poplar Liriodendron tulipifera 28 Good Undercut 228 Tulip Poplar Liriodendron tulipifera 39 Fair Basal damage 229 Tulip Poplar Liriodendron tulipifera 25 Good 230 Tulip Poplar Liriodendron tulipifera 30 Fair Undercut, leaning 230 Tulip Poplar Liriodendron tulipifera 30 Fair Undercut, leaning 231 Tulip Poplar Liriodendron tulipifera 30 Fair Undercut, leaning 232 Tulip Poplar Liriodendron tulipifera 30 Fair Undercut, leaning 233 Tulip Poplar Liriodendron tulipifera 30 Fair Undercut, leaning 244 Good English Ivy 231 Red Oak Quercus rubra 28 Good English Ivy 255 Good Undercut, leaning 256 Good Undercut, leaning 257 Good English Ivy 231 Red Oak Quercus rubra 28 Good English Ivy 258 Good Undercut, leaning 259 Fair Undercut, leaning 260 Good Undercut, leaning 270 Tulip Poplar Liriodendron tulipifera 30 Fair Undercut, leaning 271 Good English Ivy 231 Red Oak Quercus rubra 28 Good English Ivy 272 White Oak Quercus rubra 30 Good 273 Red Oak Quercus rubra 30 Good 274 Good English Ivy Carya alba 27 Good 275 Good English Ivy Carya alba 277 Good 276 Good English Ivy Carya alba 277 Good 277 Good Engrus alba 277 Good English Ivy Carya alba 277 Good 278 Red Oak Quercus rubra 34 Good 279 Good Engrus alba 25 Good English Quercus rubra 34 Good 270 White Oak Quercus rubra 34 Good 271 Red Oak Quercus rubra 34 Good 272 Good Engrus alba 25 Good English Quercus rubra 34 Good 273 Red Oak Quercus rubra 34 Good		Black Walnut	Betula nigra				drain, leaning	223	Tulip Poplar	Liriodendron tulipifera	28	Good		undercut	\exists	
ntanus occidentalis 24 Good Leaning 227 Tulip Poplar Liriodendron tulipifera 39 Fair Basal damage 228 Tulip Poplar Liriodendron tulipifera 39 Fair Basal damage 229 Tulip Poplar Liriodendron tulipifera 25 Good 229 Tulip Poplar Liriodendron tulipifera 25 Good 230 Tulip Poplar Liriodendron tulipifera 30 Fair Undercut, leaning 231 Red Oak Quercus rubra 28 Good 232 White Oak Quercus rubra 28 Good 233 Red Oak Quercus rubra 30 Good 234 Red Oak Quercus rubra 30 Good 235 Pignut Hickory Carya alba 27 Good 236 White Oak Quercus alba 27 Good 237 Red Oak Quercus alba 27 Good 238 Poor Hole in trunk, twin 231 Red Oak Quercus rubra 29 Good 239 Fignut Hickory Carya alba 25 Good 230 Vilip Poplar Liriodendron tulipifera 30 Fair Undercut, leaning 240 Vindercut, leaning 250 Good 251 Red Oak Quercus rubra 26 Good 252 Pignut Hickory Carya alba 27 Good 253 Pignut Hickory Carya alba 25 Good 254 Red Oak Quercus rubra 35 Good 255 Good 256 Good 257 Red Oak Quercus rubra 36 Good 258 Red Oak Quercus rubra 36 Good 259 Good 250 Good 251 Red Oak Quercus rubra 26 Good	5	Box Elder Box Elder	Acer negundo Acer negundo	8			Vines	225	Tulip Poplar	Liriodendron tulipifera	27	Good				
recrus alba 28 Good Vines 229 Tulip Poplar Liriodendron tulipifera 25 Good Undercut, leaning vercus alba 27 Good English Ivy 231 Red Oak Quercus rubra 28 Good indendron tulipifera 28 Good English Ivy 232 White Oak Quercus alba 34 Good indendron tulipifera 30 Good Indendron tul	-	Silk Tree American Sycamore	Albizia julibrissin Platanus occidentalis	24	Good		Leaning	227	Tulip Poplar	Liriodendron tulipifera	28	Good		Undercut	\exists	
sercus alba 27 Good English Ivy 231 Red Oak Quercus rubra 28 Good Good Godendron tulipifera 28 Poor Hole in trunk,twin 232 White Oak Quercus rubra 30 Good Good Godendron tulipifera 30 Good 234 Red Oak Quercus rubra 29 Good Good Godendron tulipifera 35 Good Good Godendron tulipifera 36 Good Good Godendron tulipifera 37 Good Good Godendron tulipifera 38 Good Good Godendron tulipifera 39 Good Godendron tulipifera 30 Good Godendron tulipifera 30 Good Godendron tulipifera 30 Good Godendron tulipifera 30 Good Godendron tulipifera 27 Good Godendron tulipifera Godendro	9	American Sycamore White Oak	Platanus occidentalis Quercus alba	28	Good			229	Tulip Poplar	Liriodendron tulipifera	25	Good				
iodendron tulipifera 28 Good English Ivy 232 White Oak Quercus alba 34 Good Good Good Good Good Good Good Goo	01	Red Oak White Oak	Quercus rubra Quercus alba					231	Red Oak	Quercus rubra	28	Good		Undercut, leaning		
iodendron tulipifera 30 Good 234 Red Oak Quercus rubra 29 Good 255 Pignut Hickory Carya alba 27 Good 256 Good 257 Good 257 Red Oak Quercus rubra 25 Good 258 Red Oak Quercus rubra 26 Good 258 Red Oak 258 Red Oak Quercus rubra 26 Good 258 Red Oak 258 Red	03	Tulip Poplar Tulip Poplar	Liriodendron tulipifera Liriodendron tulipifera	28	Good		English Ivy	232	White Oak		+					
suercus alba 35 Good Basal damage 236 White Oak Quercus alba 25 Good 277 Red Oak Quercus rubra 34 Good 278 Red Oak Quercus rubra 27 Good 278 Red Oak Quercus rubra 26 Good 278 Red Oak Quercus rubra 279 Good 279 Red Oak Quercus rubra 280 Good 279 Red Oak Quercus rubra 270 Red Oak Quercus rubra 270	05	Tulip Poplar White Oak	Liriodendron tulipifero Quercus alba	30	Good			234	Red Oak	Quercus rubra	29					
iodendron tulipifera 27 Good 238 Red Oak Quercus rubra 26 Good	07 08	White Oak White Oak	Quercus alba Quercus alba	35	Good		Basal damage	236	White Oak	Quercus alba	25					
239 Red Oak Quercus rubra 31 Fair Twin, split	09	Tulip Poplar	Liriodendron tulipifera					238	Red Oak	Quercus rubra				Twin, split		

ree #	Common Name	Botanical Name	DBH (in.)	Condition	Disposition	Notes
240	White Oak	Quercus alba	25	Good		Crooked
241	Red Oak	Quercus rubra	24	Good		
242	Red Oak	Quercus rubra	35	Fair		Dead branches
243	Pignut Hickory	Carya alba	26	Good	Remove	
244	Tulip Poplar	Liriodendron tulipifera	26	Good	Remove	
245	Pignut Hickory	Carya alba	25	Good	Remove	
246	Red Oak	Quercus rubra	36	Good		
247	Red Oak	Quercus rubra	25	Fair		Dead trees leaning on it
248	Tulip Poplar	Liriodendron tulipifera	25	Good		
249	Tulip Poplar	Liriodendron tulipifera	26	Good		
250	Tulip Poplar	Liriodendron tulipifera	24	Good		
	Tulip Poplar	Liriodendron tulipifera	31	Good		Slightly undercut
251		Liriodendron tulipifera	26	Good		Vines
252	Tulip Poplar	Quercus rubra	24	Good		Times
253	Red Oak		25	Good	1	
254	Tulip Poplar	Liriodendron tulipifera		Good	-	
255	Tulip Poplar	Liriodendron tulipifera	27		-	Few broken/dead branche
256	White Oak	Quercus alba	37	Good	-	rew broken/dead branche
257	Red Oak	Quercus rubra	24	Good	-	
258	Red Oak	Quercus rubra	26	Good		Double London
259	Tulip Poplar	Liriodendron tulipifera	28	Good	-	Double leader
260	Tulip Poplar	Liriodendron tulipifera	25	Good		Double leader
261	White Oak	Quercus alba	34	Poor	Remove	Broken leader, suckers
262	Red Oak	Quercus rubra	36	Good		
263	Tulip Poplar	Liriodendron tulipifera	24	Good		
264	Red Oak	Quercus rubra	33	Good		
265	Red Maple	Acer rubrum	29	Good		
266	Tulip Poplar	Liriodendron tulipifera	24	Good		Triple
267	Red Oak	Quercus rubra	25	Good		Broken branches
268	Tulip Poplar	Liriodendron tulipifera	36	Good		Broken branches
269	Red Oak	Quercus rubra	30	Good		Broken branches
270	White Oak	Quercus alba	41	Good		Broken branches, leaning
271	Tulip Poplar	Liriodendron tulipifera	24	Good		
272	White Oak	Quercus alba	30	Good		
273	Tulip Poplar	Liriodendron tulipifera	29	Good	 	Very crooked
274	White Oak	Quercus alba	27	Good	1	
275	Tulip Poplar	Liriodendron tulipifera	30	Good		
		Quercus rubra	32	Poor	Remove	Basal damage, trunk decay
276	Red Oak	Quercus rubra	26	Good	Kemove	basar damage, trank decay
277	Red Oak		42	Good	+	Double leader
278	Red Oak	Quercus rubra	-	Good	Pamaya	
279	White Oak	Quercus alba	25		Remove	Leaning
280	Red Oak	Quercus rubra	29	Good	 	Twin
281	Red Oak	Quercus rubra	30	Good	-	- 11 1 1
282	Tulip Poplar	Liriodendron tulipifera	31	Good	-	Double leader
283	Red Oak	Quercus rubra	25	Fair		Suckers, barb wire in trun
284	White Oak	Quercus alba	26	Fair		Suckers, leaning
285	Tulip Poplar	Liriodendron tulipifera	28	Good	-	
286	American Sycamore	Platanus occidentalis	24	Good		
						Leaning, Broken & Dead
287	White Oak	Quercus alba	34	Fair		Branches
288	Tulip Poplar	Liriodendron tulipifera	38	Fair		Hollow area in base
289	Red Oak	Quercus rubra	28	Poor		Dead branches
290	Pin Oak	Quercus palustris	26	Good		
291	Tulip Poplar	Liriodendron tulipifera	28	Good		
						Double. Trunk 17" DBH
*292	Virginia Pine	Pinus virginiana	17	Poor		Poor. Trunk 7" DBH Dead
202					1	Triple, 1 leader dead, 1 fai
293	Tulip Poplar	Liriodendron tulipifera	24	Fair		1 good
		Liriodendron tulipifera	29	Good		Vines
294	Tulip Poplar		30	Good	-	1.11100
295	Tulip Poplar	Liriodendron tulipifera	-		+	Triple
296	Tulip Poplar	Liriodendron tulipifera	24	Good	+	Titible
297	Tulip Poplar	Liriodendron tulipifera	26	Good	+	Cracked
298	Tulip Poplar	Liriodendron tulipifera	25	Good		Crooked
299	American Holly	llex opaca	10	Good	-	-
300	American Holly	llex opaca	10	Good		
	Norway Spruce	Picea abies	12	Good	f 1	1

es indicate Significant or Specimen trees. *292 is within 75% of the 19"DBH county champion tree.

Tree Variance Request for Removal

192 Black Cherry

193 Tulip Poplar

251 Tulip Poplar

275 Tulip Poplar

Prunus serotina

Liriodendron tulipifera

Liriodendron tulipifera

Liriodendron tulipifera

ID	Common Name	Botanical Name	DBH (in.)	Condition	Impact S.F.	CRZ Impact %	Remove Tree	Remarks
35	Pin Oak	Quercus palustris	33	Good	7,740	75%	Yes	Removal of existing basketball court and ball field appurtenances. Grading fill. Install on grade pedestrian path. Install bio-swale.
37	Pin Oak	Quercus palustris	32	Good	7,206	83%	Yes	Grading for children's playground. Excavation for storm drain pipe.
261	White Oak	Quercus alba	36	Poor	1,995	32%	Yes	This trees roots will be critically impacted by the installation of a proposed storm drain. The storm drain will run from the programmed park areas at the top of the hill down to the stream.
276	Red Oak	Quercus rubra	32	Poor	1,930	100%	Yes	This tree will be impacted directly by the installation of a proposed storm drain. The storm drain will run from the programmed park areas at the top of the hill down to the stream.

Mitigation: Six (6) 3" caliper trees shall be planted on-site to mitigate for variance tree # 35 and 37 removal outside of forest area.

		Tree Variance Rec	uest for CRZ Impacts							
	22	American Sycamore	Platanus occidentalis	40	Good	1,497	13%	1497 S.F. of CRZ within LOD. No CRZ impacts anticipated.	No	No
	91	Pin Oak	Quercus palustris	36	Fair	4,491	49%	Removal of existing ball field appurtenances. Grading fill. Install on grade pedestrian path.	No	Yes
	152	Tulip Poplar	Liriodendron tulipifera	37	Poor	3,607	37%	Grading fill for tennis court.	No	No
	154	Tulip Poplar	Liriodendron tulipifera	30	Good	2,006	31%	Grading fill for tennis court.	No	No
	155	Tulip Poplar	Liriodendron tulipifera	36	Fair	1,357	14%	Grading fill for tennis court.	No	No
,	-	 								

620

238

10% Removal of existing playground.

3% Removal of existing playground.

6% Excavation for storm drain pipe

6,293 5% Excavation for storm drain pipe

Liriodendron tulipifera 38 Fair 37 0.40% Excavation for storm drain pipe (RP) Root pruning is to be performed inside the tree protection fence. It is to be accomplished by a vibratory plow with a serrated cutting edge or a root cutter with a 36" wheel to a depth of 24". Chain driven trenchers are not acceptable. (PL) Tree planking to protect trunk.

Fair

Note: No mitigation is needed if trees removal or CRZ impact within the forest cleared area.

FOREST CONSERVATION WORKSHEET

Hillandale Local Park NET TO A OT A DEA.

2 40
3.40
0.00
0.00
0.00
0.00
3.40

limit to only one entry.

111	int to only c	one ontry.					
	ARA	MDR	IDA	HDR	MPD	CIA	
	0	0	1	0	0	0	
G. Afforestation T	hreshold				15%	x F =	3.51
H. Conservation T	hreshold	•			20%	x F =	4.68
EXISTING FORES	T COVER:						
I. Existing forest	cover			=			12.69
J. Area of forest a							9.18
K. Area of forest		8.01					

BREAK EVEN POINT: L. Forest retention above threshold with no mitigation= 6.41 M. Clearing permitted without mitigation= PROPOSED FOREST CLEARING: N. Total area of forest to be cleared 12.16 O. Total area of forest to be retained .. PLANTING REQUIREMENTS:

Forest Conservation Data Table Number of Acres Remaining in Agricultural Use Road & Utility ROWs1 12.69 **Total Existing Forest**

P. Reforestation for clearing above conservation threshold= Q. Reforestation for clearing below conservation threshold= R. Credit for retention above conservation threshold=

U. Credit for landscaping (may not exceed 20% of "S")= V. Total reforestation and afforestation required=

S. Total reforestation required .. T. Total afforestation required

No

No

No

Yes No

Yes No

No

12.16 Forest Retention Forest Cleared Land Use & Thresholds²

Land Use Category IDA

Conservation Threshold 15% percent Afforestation Threshold 20% percent Average Buffer **Total Channel**

_	Length (ft.)	Width (ft.) ³	
Stream(s)	296	175	
Acres of Forest in	Retained	Cleared	Planted
Wetlands	-	-	-
100-Year Floodplain	-	-	-
Stream Buffers	10.47	0.21	-
Priority Areas	10.47	0.21	-

ARA, MDR, IDA, HDR, MDP, or CIA.

Only Road or Utility ROWs not to be improved as part of development application.

Information from FC Land Use Categories & Thresholds document.

3 Measured from stream edge to buffer edge.

CERTIFICATE OF COMPLIANCE

I do hereby certify, to the best of my knowledge, information, and reasonable belief, that all of the information and data provided with this application is accurate, and all of the features and elements provided on the plans is consistent with the standards of the applicable zone. The certification includes, but is not limited to boundary information, property information and ownership, topography, historic resources, etc. I agree that the submitted plans may be rejected or returned by the Maryland-National Capital Park and Planning Commission if the plans are found to be inaccurate, false or misleading.

Print Name: Linda Komes

SCALE: 1" = 100'

DATE: Apr. 2015

Landscape Architect Architect Date BRIAN DAVILA Charles P. Johnson & Associates, Inc. Engineer 1751 Elton Road, Suite 300, Silver Spring, MD 20903 P. 301-434-7000 F. 301-434-9394 www.cpja.com Drawn by Date Checked By:

Checked By: Regulations. Checked By: Checked By:

James M. Fetchu, RLA Registered Landscape Architect

MD #3241



The Maryland-National Capital Park and Planning Commission Montgomery County Department of Parks 9500 Brunett Avenue Silver Spring, Maryland 20901 (301) 495-2535

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FCP DWG. # _2 of _2 Hillandale Local Park Preliminary Forest Conservation Plan (FCP)

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ATTACHMENT 3



MONTGOMERY COUNTY DEPARTMENT OF PARKS

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

April 13, 2015

Mr. Mark Pfefferle
Acting Chief
Environmental Planning, Community-Based Planning
Maryland – National Capital Park and Planning Commission
8787 Georgia Ave.
Silver Spring, MD 20910

RE: Hillandale Local Park

Forest Conservation Plan

30" Tree Variance

Dear Mr. Pfefferle:

The Park Development Division of the Maryland-National Capital Park and Planning Commission respectfully requests a variance from Section 22A-21 of the Montgomery County Code for the removal of four (4) trees having a diameter at breast height (DBH) of greater than 30" at (4.5' from ground). In addition, ten (10) trees greater than 30" DBH are shown to have impacts within their calculated CRZ's. Park's intends to try and save several of the trees indicated for removal by employing techniques such as above grade trail construction, directional boring, identifying the exact location of roots with an air spade, etc. These impacted trees will be protected using specific measures shown in the table below. This request is being made in concert with design plans being prepared for Hillandale Local Park.

A paper copy of the Preliminary Forest Conservation Plan set and a CD containing a digital copy of this Variance Request letter and Preliminary Forest Conservation Plan are attached for your review and comment. The tables below identify the specimen trees that are part of this Variance Request.

Trees Requiring a Variance for Removal

ID	Common Name	Botanical Name	DBH (in.)	Condition	CRZ Impact S.F.	CRZ Impact %	Remove Tree	Remarks
35	Pin Oak	Quercus palustris	33	Good	6,801	75%	Yes	Removal of existing basketball court and ballfield appurtenances. Install above grade pedestrian path. Storm drain pipe to be installed via directional boring.
37	Pin Oak	Quercus palustris	32	Good	7,474	83%	Yes	Removal of existing parking lot. Grading for children's playground. Storm drain pipe

į								installation.
261	White Oak	Quercus alba	36	Poor	1,995	32%	Yes	This tree's roots will be critically impacted by the installation of a proposed storm drain. The storm drain will run from the programmed park areas at the top of the hill down to the stream.
276	Red Oak	Quercus rubra	32	Poor	1,930	100%	Yes	This tree will be impacted directly by the installation of a proposed storm drain. The storm drain will run from the programmed park areas at the top of the hill down to the stream.

Trees Requiring a Variance for CRZ Impacts

ID	Common Name	Botanical Name	DBH (in.)	Condition	CRZ Impact S.F.	CRZ Impact %	Reason for Impact	RP	PL
22	American Sycamore	Platanus occidentalis	40	Good	1,497	13%	1497 S.F. of CRZ within LOD. No CRZ impacts anticipated.	No	No
91	Pin Oak	Quercus palustris	36	Fair	4,491	49%	Removal of existing ball field appurtenances. Grading fill. Install on grade pedestrian path.	No	Yes
152	Tulip Poplar	Liriodendron tulipifera	37	Poor	3,607	37%	Grading fill for tennis court.	No	No
154	Tulip Poplar	Liriodendron tulipifera	30	Good	2,006	31%	Grading fill for tennis court.	No	No
155	Tulip Poplar	Liriodendron tulipifera	36	Fair	1,357	14%	Grading fill for tennis court.	No	No
192	Black Cherry	Prunus serotina	30	Poor	620	10%	Removal of existing playground.	No	No
193	Tulip Poplar	Liriodendron tulipifera	33	Fair	238	3%	Removal of existing playground.	No	No
251	Tulip Poplar	Liriodendron tulipifera	31	Good	403	6%	Excavation for storm drain pipe	No	No

275	Tulip Poplar	Liriodendron tulipifera	30	Good	6,293	5%	Excavation for storm drain pipe	Yes	No	
288	Tulip Poplar	Liriodendron tulipifera	38	Fair	37	0.40%	Excavation for storm drain pipe	Yes	No	

(RP) Root pruning is to be performed inside the tree protection fence. It is to be accomplished by a vibratory plow with a serrated cutting edge or a root cutter with a 36" wheel to a depth of 24". Chain driven trenchers are not acceptable.

(PL) Tree planking to protect trunk.

It is our understanding that applicants for a variance must demonstrate the following criteria. Our responses follow each point:

1) Describe the special conditions peculiar to the property which would cause unwarranted hardship.

The existing Hillandale Local Park was originally developed in the early 1950's. The park is being renovated to meet the current and future needs of the community. The following program of requirements was developed based on input received from the M-NCPPC staff and the community during public outreach efforts:

- One full size rectangular field
- A unique and innovative playground designed around a theme
- Two lighted basketball courts
- Two lighted tennis courts
- Full restroom facilities
- Picnic shelters
- A looped park trail system with fitness stations and seating
- Adequate parking for all of the park amenities
- Accessible parking spaces and pedestrian circulation in compliance with the Americans with Disabilities Act, including direct trail access to CHI
- Improved park entrances with clear, understandable and safe circulation throughout the parking areas for pedestrians and vehicles
- Low impact development techniques and stormwater best management practices in accordance with environmental site design criteria
- Compliance with Crime Prevention Through Environmental Design (CPTED) principles

In order to accomplish these goals, nine park layout configurations were developed as part of the schematic design phase and two were further developed for further consideration by staff and the community. The preferred alternative was selected as providing the best layout while preserving the existing forest area. Three trees described above will be removed as part of the storm drain installation. The proposed storm drain system collects storm runoff from the programmed park areas and discharges at the existing stream. The runoff from the programmed park areas will receive stormwater management treatment that meets the State's and County's stormwater management requirements, prior to entering the storm drain system, and will not violate any state water quality standards.

Existing Tributaries 1 and 2, as labeled on the Preliminary Forest Conservation Plan, convey runoff from the programmed park area to the stream and both existing tributaries include areas where head cutting is occurring. During design of the park improvements, a goal was set to not cause additional degradation to the tributaries through the conveyance of stormwater to the

stream channel. It was recognized that if the storm drain system discharged at the upstream end or at a point along the tributaries, then additional degradation and head-cutting would almost certainly occur. It was determined that the storm runoff should be conveyed to the stream channel via a storm drain system with a non-erosive outfall. In doing so, the drainage area to the tributaries will be reduced to consist of open space and forest area which aid in slowing and/or stopping the degradation along the tributaries.

A careful evaluation of possible storm drain alignments was performed to determine the alignment with the least environmental impacts. As part of this evaluation, several different storm drain alignments along the tributaries were considered. The proposed storm drain alignment minimizes impacts to the significant and specimen trees within the stream valley buffer. However, all of the specimen trees could not be avoided. The proposed storm drain alignment was deliberately and very carefully chosen because, while it does remove three specimen trees that are in fair or poor condition, it minimizes or eliminates critical root zone impacts to the surrounding significant and specimen trees in good condition.

2) Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas.

Enforcement of these rules would deprive the owner of their right to improve user safety and upgrade a public amenity to meet current and anticipated needs. In addition, enforcement of these rules would not allow the owner to fully implement the tenets of Environmental Site Design to meet sustainability and stormwater management guidelines while preventing additional degradation along the tributaries to the stream channel. The proposed design was configured to avoid impacts to as many existing trees as possible.

3) Verify that State water quality standards will not be avoided or that a measurable degradation in water quality will occur as a result of granting the variance.

Under Section 22A-16(d) of the County Code "The Board or Director may treat any forest clearing in a stream buffer, wetland or special protection area as creating a rebuttable presumption that the clearing had an adverse impact on water quality." In this case, the proposed storm drain alignment will actually prevent additional degradation from occurring along the existing tributaries, while minimizing critical root zone disturbance and tree clearing within the stream buffer. It is also important to point out that the design of the park fully incorporates current Environmental Site Design criteria and includes multiple bioretention areas to treat stormwater on site. Currently these best management practices are not being used within the existing park.

4) Provide any other information appropriate to the request.

Please note that the trees proposed to be removed requiring a variance are currently identified as being in poor or good condition. The trees in poor condition are being removed in order to minimize or eliminate critical root zone impacts to nearby specimen and significant trees in good condition. The trees in good condition are shown as being removed however every effort is being made to preserve these trees including above grade path and direction boring of the deep storm drain pipe.

5) Applicants must apply for and include mitigation in their requests for variances for all trees, and other vegetation, regulated under section 5-1607 that are removed or disturbed by the applicant's activity.

The applicant proposes to mitigate for the removal of the two (2) specimen trees, # 35 and 37, outside of forest area at a rate that approximates the form and function of the trees removed. Mitigation is calculated at a rate of 1" DBH for every 4" DBH removed, using trees that are a minimum of 3" DBH. This means that for the 65 caliper inches of trees removed, they will be mitigated with six (6) 3" caliper trees on the site (65"/4" = 16.25/3" = 5.41 trees).

Additionally, please note that the 30% Facility plan for this project includes one hundred twenty-five (125) shade trees, thirty-one (31) evergreen trees, thirty-one (31) ornamental trees, and one hundred five (105) shrubs. The trees proposed as part of mitigation are included in these quantities.

If you have any other questions or need additional information, please contact me at 301-650-2860 or via email at: <u>Linda.Komes@montgomeryparks.org</u>. Please also copy James Fetchu with Charles P. Johnson and Associates, Inc. at: <u>JFetchu@cpja.com</u>.

Sincerely,

Linda Komes, RLA

Project Manager, Park Development Division

CC: James Fetchu, CPJ

File