



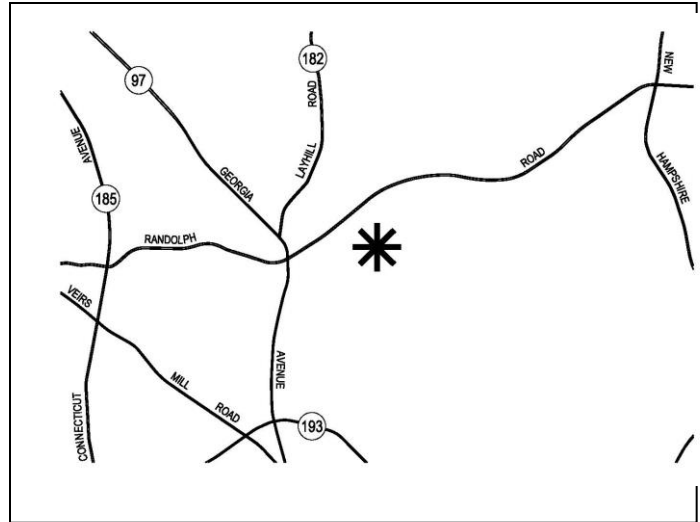
**Brookside Gardens Greenhouse, Amended Forest Conservation Plan, PP1995001**

- ALV Amy Lindsey, Planner Coordinator, Area 2 Division, [amy.lindsey@montgomeryplanning.org](mailto:amy.lindsey@montgomeryplanning.org), 301.495.2189
- KA Khalid Afzal, Supervisor, Area 2 Division, [khalid.afzal@montgomeryplanning.org](mailto:khalid.afzal@montgomeryplanning.org), 301.495.4650
- JK Glenn Kreger, Chief, Area 2 Division, [glenn.kreger@montgomeryplanning.org](mailto:glenn.kreger@montgomeryplanning.org), 301.495.4653

**Completed: 3/11/16**

**Description**

- Request to Amend Final Forest Conservation Plan to allow the replacement of the existing greenhouse with a new greenhouse and associated infrastructure;
- 1800 Glenallan Avenue;
- 60 acres, R-90 Zone;
- *1989 Master Plan for the Communities of Kensington-Wheaton*;
- Applicant: Montgomery County Department of Parks;
- Filing date: 9/3/2015.



**Summary**

- Staff recommends **approval with conditions**.
- The Final Forest Conservation Plan (FFCP) covers a portion of Wheaton Regional Park. Staff is working with the Department of Parks to develop a Forest Conservation Plan for the entire park, in conjunction with the ongoing Master Plan for Wheaton Regional Park.

## Conditions

1. The Applicant must prepare a Forest Conservation Plan for the entire Wheaton Regional Park in conjunction with the Master Plan for Wheaton Regional Park, and compensate for the removal of 0.06 acres of forest associated with the proposed improvements.
2. The Applicant must mitigate for the removal of trees #34, 55" beech, and #46", 30" black gum, if field investigation determines it to be necessary to remove either or both of these trees. Mitigation must be at the rate of 1 caliper inch planted per 4" inch DBH lost, using a minimum 3" caliper native canopy tree.

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

## OVERVIEW

The 60-acre Property is located within Wheaton Regional Park and developed with Brookside Gardens Visitors Center, Brookside Gardens Conservatory, Brookside Gardens Plant Propagation Area, maintenance and storage area, the Gude Gardens stormwater management facilities, and numerous trails. The Property is delineated and enclosed by a deer fence. The Planning Board approved the Brookside Gardens Master Plan on March 3, 2005 and the Facility Plan for Brookside Gardens Parking and Access Improvements on February 25, 2010. The associated Preliminary Forest Conservation Plan was approved on June 16, 2011. An amended Final Forest Conservation Plan (FFCP) for a refinement to the planned parking renovation and entrance and Americans with Disabilities Act (ADA) compliant access and stormwater management was approved on December 5, 2013 (Attachment 1).



## ANALYSIS

### Forest Conservation

This Property is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code). The submitted FFCP amendment (Attachment 2) allows for replacing the existing greenhouse with a new greenhouse in its place and construction of associated facilities. It will require the clearing of 0.06 acres of forest that was previously shown as retained. While the Property will still have 7.2 acres of forest retention above the break-even point (a level of forest retention that does not require the need for reforestation), the Planning Board has consistently required mitigation plantings for the loss of forest

shown as retained or within easements. In order to be consistent with this policy, the Applicant will either need to plant 0.06 acres of forest within the 60.0-acre area covered by the Amended FFCP, or plant a minimum of 0.12 acres of forest off-site.

With the 2013 FFCP amendment, Staff recommended a more comprehensive approach to Forest Conservation Plans on Regional Park facilities. Staff members from the Department of Parks and the Planning Department are working on a methodology for developing an FCP covering an entire regional park, thus creating an appropriate balance between the developed and the preserved areas. The Department of Parks has begun to update the Wheaton Regional Park Master Plan, and this park will be used as a pilot project for this approach to forest conservation in regional parks. Staff will coordinate the Forest Conservation Plan with the Master Plan currently underway for Planning Board review and approval. Therefore, Staff is recommending that the Planning Board not require additional forest planting/protection at this time, but allow compensation to be shown on the FCP for the entire Regional Park. The Applicant will be required to plant trees as mitigation for removing variance trees as discussed later in this report.

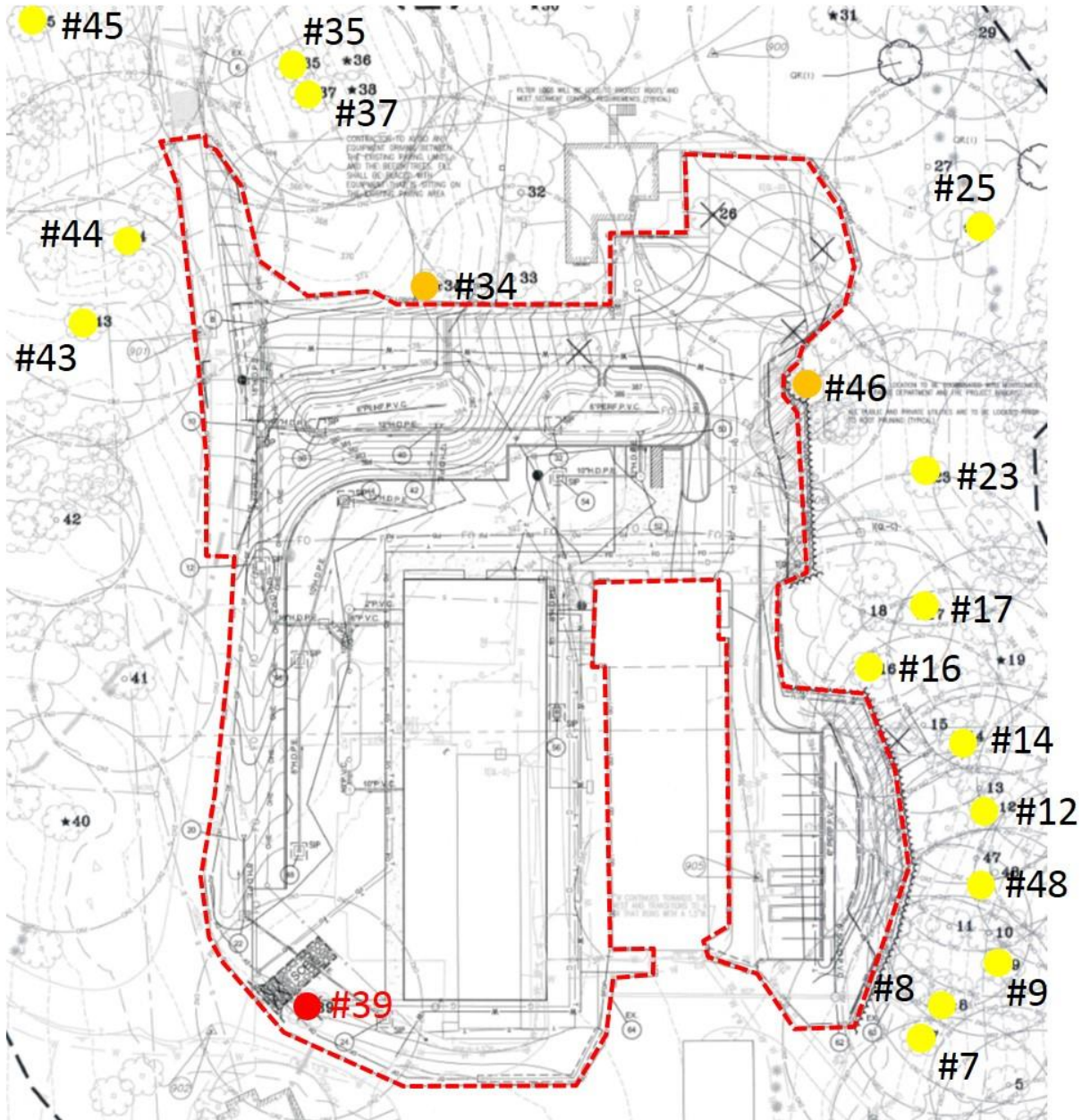
### **Forest Conservation Variance**

Section 22A-12(b) (3) of the County Code provides criteria that identify certain individual trees as high priority for retention and protection. The law requires a variance for any impact, including removal or disturbance within the tree's critical root zone (CRZ), to trees that are: 30 inches or greater Diameter at Breast Height (DBH); part of a historic site or designated with a historic structure; designated as national, State, or County champion trees; at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs and plants that are designated as Federal or State rare, threatened, or endangered species. 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 for the increased impacts to high priority trees on September 3, 2015, and a revised variance request on February 12, 2016, to remove one tree, and impact, but retain, 17 trees that are considered high priority for retention under Section 22A-12 (b) (3) of the County Forest Conservation Law (Attachment 3). Two of the trees proposed for retention, #34, 55" beech, and #46, 30" black gum, may have significant impacts. The Applicant has researched the locations of major roots and believes that these trees can be retained. Staff agrees that these trees can probably be retained but has included a condition of approval that requires mitigation at the rate of 1 caliper inch planted per 4" inch DBH lost, using a minimum 3" caliper native canopy tree if either of these trees must be removed on further inspection.

**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 would result in unwarranted hardship. In this case, the unwarranted hardship is caused by the need for the demolition of an existing greenhouse and construction of a new greenhouse. The new greenhouse will be built on the footprint of the old greenhouse, to minimize impacts. However, the new greenhouse will require associated site development and stormwater management. This development cannot be implemented without impacting these trees.

**Variance Tree Locations**



**Variance Tree Tables**

Removals

ID	Species	Size	Condition	Notes
39	Red maple	33"	Good	Grading and paving.

Impacts

ID	Species	Size	Condition	Notes
7	Tulip poplar	41"	Good	Stormwater management facility.
8	Tulip poplar	32"	Good	Stormwater management facility.
9	Tulip poplar	40"	Good	Minor grading.



ID	Species	Size	Condition	Notes
12	Tulip poplar	36"	Good	Grading.
14	Tulip poplar	43"	Good	Stormwater management facility.
16	Tulip poplar	37"	Good	Stormwater management facility.
17	Tulip poplar	37"	Good	Minor grading and paving.
23	Tulip poplar	43"	Good	Grading.
25	Tulip poplar	46"	Poor	Grading.
34	Beech	55"	Good	Paving.
35	Tulip poplar	43"	Good	Paving.
37	Tulip poplar	33"	Good	Removal of paving.
43	Black gum	36"	Good	Minor grading.
44	Tulip poplar	48"	Good	Grading and paving.
45	Tulip poplar	55"	Good	Paving.
46	Black gum	30"	Good	Grading.
48	Tulip poplar	36"	Good	Grading.

**Variance Findings** - Based on the review of the variance request and the proposed Amended 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.*

The disturbance to the specified trees is a result of the need to demolish the existing greenhouse and build a much needed new one. Granting this variance request is not a special privilege that would be denied to other applicants.

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 which are the result of actions by the Applicant. The disturbance of the specified trees is minimized because the new greenhouse will be built on the footprint of the old greenhouse.

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 greenhouse demolition and construction, 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.*

The proposed project should improve water quality by adding modern stormwater management facilities. Additionally, the new trees proposed as mitigation for the loss of specimen trees will enhance the form and function of the existing tree canopy. Trees protect water quality by reducing runoff through rainfall interception and water uptake. Additionally, trees provide

shade for impervious areas and improve soil texture, which also results in improved water quality.

**Mitigation for Trees Subject to the Variance Provisions** – The proposed removal of one tree will be mitigated by additional plantings. Generally, mitigation is not recommended for trees impacted but retained. Mitigation planting is calculated at the rate of 1 caliper inch planted per 4” inch DBH lost, using a minimum 3” caliper native canopy tree. Using this ratio, the Applicant will be required to plant three trees.

**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. Staff forwarded the request to the County Arborist on 2/18/2016. A letter from the County Arborist has not been received prior to staff report posting.

**Variance Recommendation** – Staff recommends the variance be granted.

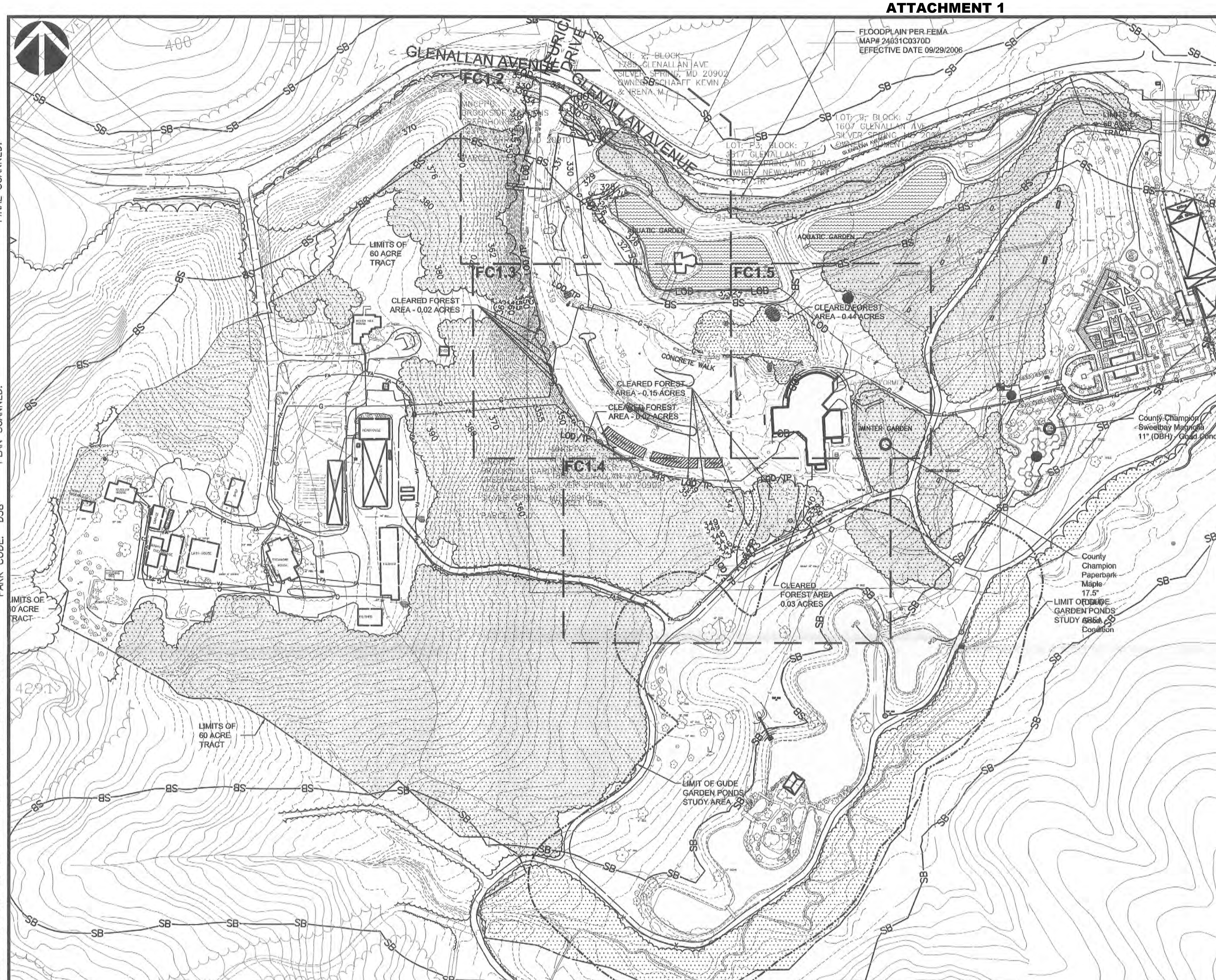
### **Conclusion**

Staff recommends that the Planning Board approve the Amended Final Forest Conservation Plan with the condition that the Applicant submits a comprehensive Forest Conservation Plan covering the entire Wheaton Regional Park concurrently with the Wheaton Regional Park Master Plan update. The variance approval is assumed into the Planning Board’s approval of the Final Forest Conservation Plan.

### **ATTACHMENTS:**

1. 2013 Amended Final Forest Conservation Plan
2. Proposed Amended Final Forest Conservation Plan
3. Variance Request





FOREST CONSERVATION WORKSHEET  
Brookside Gardens  
5 Aug 02

NET TRACT AREA:

A. Total tract area ...	60.00
B. Land dedication acres (parks, county facility, etc.) ...	0.00
C. Land dedication for roads or utilities (not being constructed by this plan) ...	0.00
D. Area to remain in commercial agricultural production/use ...	0.00
E. Other deductions (specify) ...	0.00
F. Net Tract Area	60.00

LAND USE CATEGORY: (from Trees Technical Manual)  
Input the number "1" under the appropriate land use, limit to only one entry.

ARA	MDR	IDA	HDR	MPD	CIA
0	0	1	0	0	0

G. Afforestation Threshold ... 15% x F = 9.00  
H. Conservation Threshold ... 20% x F = 12.00

EXISTING FOREST COVER:

I. Existing forest cover	27.40
J. Area of forest above afforestation threshold	18.40
K. Area of forest above conservation threshold	15.40

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation	15.08
M. Clearing permitted without mitigation	12.32

PROPOSED FOREST CLEARING:

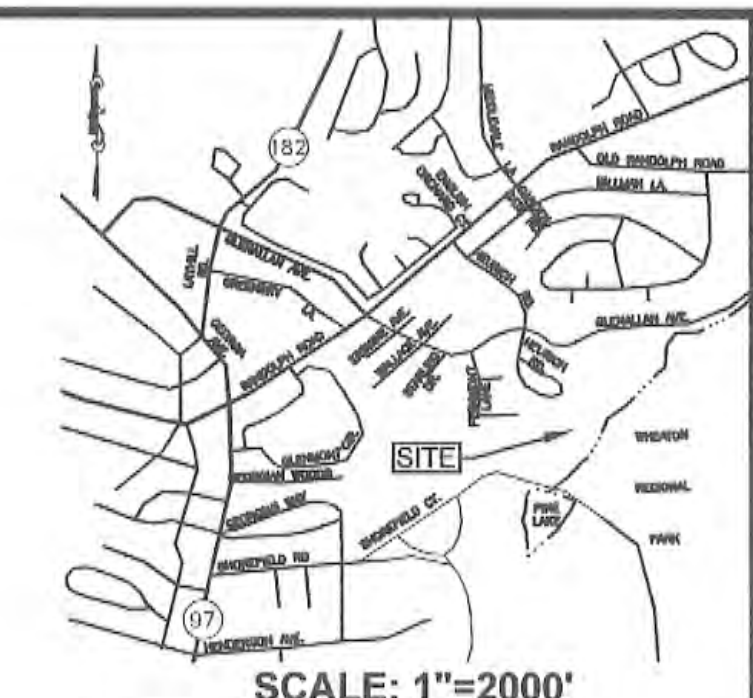
N. Total area of forest to be cleared	5.06
O. Total area of forest to be retained	22.34

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold	1.27
Q. Reforestation for clearing below conservation threshold	0.00
R. Credit for retention above conservation threshold	10.34
S. Total reforestation required	0.00
T. Total afforestation required	0.00
U. Credit for landscaping (may not exceed 20% of "S")	0.00
V. Total reforestation and afforestation required	0.00

SUMMARY TABLE (all values in acres, unless noted otherwise)

Total area of tract	60.00
Acres of tract remaining in agriculture	0.00
Acres of road and utility ROW which will not be improved	0.00
Acres of stream valley buffer	15.69
Total acres of existing forest:	27.40
Forest retained	22.34
Forest cleared	5.06
Land use category: IDA	Afforestation threshold (15%) 9.00 Conservation threshold (20%) 12.00
Acres of forest within wetlands:	Retained 0.00 Cleared 0.00 Planted 0.00
Acres of forest within 100 year floodplains:	Retained 2.918 Cleared 0.002 Planted 0.00
Acres within stream buffers:	Retained 9.456 Cleared 0.004 Planted 0.00
Acres within priority areas:	Retained 8.666 Cleared 0.004 Planted 0.00
Stream buffer:	Length = 5084 feet Average width = 125 feet



PROPERTY INFORMATION:  
(FOR SUBJECT PARCELS)

PARCEL NUMBER: P59; P658; P815; P982  
ACCOUNT NUMBER: 00967788; 00972001; 00971963; 00971735  
502; 0001  
SUBDIVISION NUMBER: MAP 34 / GRID J11  
ADC MAP/GRID: L04431, F.04025  
LIBER/FOLIO: L.02762, F.0338  
L.02749, F.00337  
L.02626, F.00314  
JQ123; JQ122  
TAX MAP: 216NW02  
WSSC GRID: 60.00 AC  
TOTAL TRACT AREA: 60.00 AC

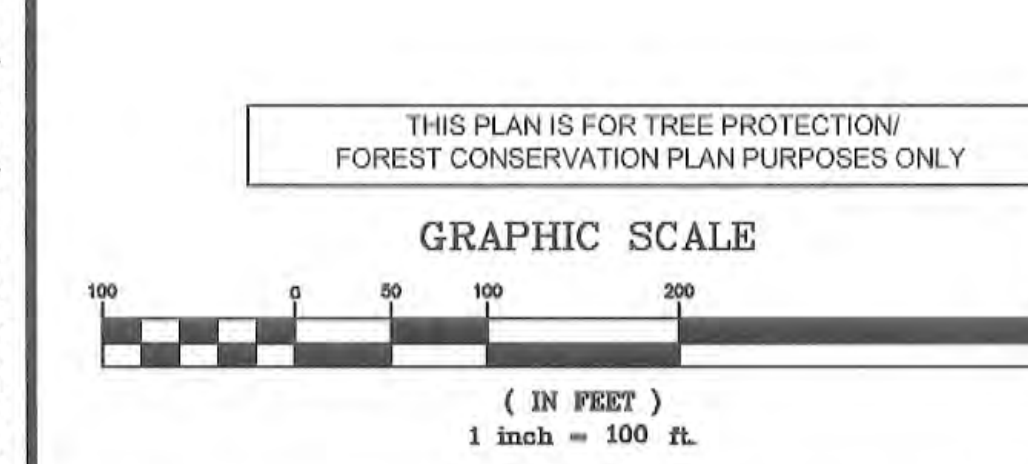
- GENERAL NOTES
- THE LIMIT OF 60 ACRE TRACT SHOWN ON THIS PLAN IS FROM INFORMATION PROVIDED BY CPJ ASSOCIATES.
  - ZONING FOR THESE PARCELS IS R-90.
  - THE TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN IS FROM A FIELD SURVEY COMPLETED BY A. MORTON THOMAS & ASSOCIATES, INC. IN MAY, 2012, MONTGOMERY COUNTY GIS TOPOGRAPHIC INFORMATION, AND M-NCPPC TOPOGRAPHIC INFORMATION.
  - THE SITE IS LOCATED WITHIN THE NORTHWEST BRANCH WATERSHED WHICH IS DESIGNATED USE-IV/IV-P.
  - THE 100-YEAR FLOODPLAIN ON THIS SITE IS SHOWN AS DETERMINED FROM FEMA FLOOD MAP 24031C03700.
  - WETLANDS ONSITE ARE SHOWN ON THE PLAN.
  - THE SITE IS NOT WITHIN A SPECIAL PROTECTION AREA.
  - THERE ARE NO KNOWN RECORDS OR READILY OBSERVABLE ARCHAEOLOGICAL, HISTORICAL OR CULTURAL FEATURES ON THIS SITE.
  - FIELD WORK WAS CONDUCTED BY STEVEN TORGERSON, RLA OF A. MORTON THOMAS & ASSOCIATES, INC. IN MAY AND OCTOBER, 2012. TREES WERE MEASURED USING A D-TAPE. A PREVIOUS TREE SURVEY WAS CONDUCTED BY CPG ASSOCIATES IN MARCH 2011.
  - THERE ARE NO KNOWN RECORDS OR READILY OBSERVABLE RARE, THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITATS ON THE SITE.
  - THE SIGNIFICANT AND SPECIMEN TREES ON THE SUBJECT PROPERTY ARE SHOWN ON THE PLANS.
  - THE MONTGOMERY COUNTY CHAMPION TREES ON THIS PARCEL ARE SHOWN ON THE PLAN.

NRIF/SD NUMBER  
#4-94149  
APPROVED: 1994-10-03  
UPDATED: 2007-05-04

FCP NUMBERS  
#P-95001  
APPROVED: 1995-10-05  
#PP1995001  
APPROVED: 2011-06-01

SPECIMEN (30" & GREATER) TREE REPLACEMENT MITIGATION REQUIREMENTS

TREE ID	NAME	DBH	REPLACE RATE	# INCHES REPLACEMENT	TOTAL # OF 3" CAL. TREES REQUIRED
T-127	Liriodendron tulipifera	32	1" for 4" REMOVED	8" REPLACEMENT	3 TREES
T-106	Acer Rubrum	41	1" for 4" REMOVED	10.25" REPLACEMENT	4 TREES
T-79	Liriodendron tulipifera	32	1" for 4" REMOVED	8" REPLACEMENT	3 TREES
T-130	Liriodendron tulipifera	30	1" for 4" REMOVED	7.5" REPLACEMENT	3 TREES



LEGEND

---	PROPERTY LINE	[Pattern]	FOREST TO REMAIN
SB	STREAM BUFFER	[Pattern]	FOREST TO BE REMOVED
FP	FLOODPLAIN	[Pattern]	EDGE OF CANOPY
LOD	LIMIT OF DISTURBANCE	[Pattern]	POND
LOD/FP	LIMIT OF DISTURBANCE AND TREE PROTECTION FENCING		
---	STREAM		

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Final Forest Conservation Plan APPROVAL

Plan No. PP1995001-1995001

Signature: [Signature] Date: 2/7/14

CERTIFIED ARBORIST

TREE ASSESSMENT AND TREE SAVE RECOMMENDATIONS PREPARED UNDER MY SUPERVISION

2014-07-03

Signature: [Signature] Date: 2/7/14

ANDREW E. STREAGLE  
ISA CERTIFIED ARBORIST #MA-4826A

DEVELOPER'S CERTIFICATE

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF THE APPROVED FINAL FOREST CONSERVATION PLAN NO. PP1995001 INCLUDING FINANCIAL BONDING, FOREST PLANTING, MAINTENANCE, AND ALL OTHER APPLICABLE AGREEMENTS.

DEVELOPER'S NAME: M-NCPPC PARK DEVELOPMENT DIVISION  
PRINTED COMPANY NAME

CONTACT PERSON OR OWNER: CHING-FANG CHEN  
PRINTED NAME

ADDRESS: 9500 BRUNETT AVENUE, SILVER SPRING, MD 20901

PHONE AND EMAIL: 301-495-2567 ching-fang.chen@montgomeryparks.org

SIGNATURE: [Signature]

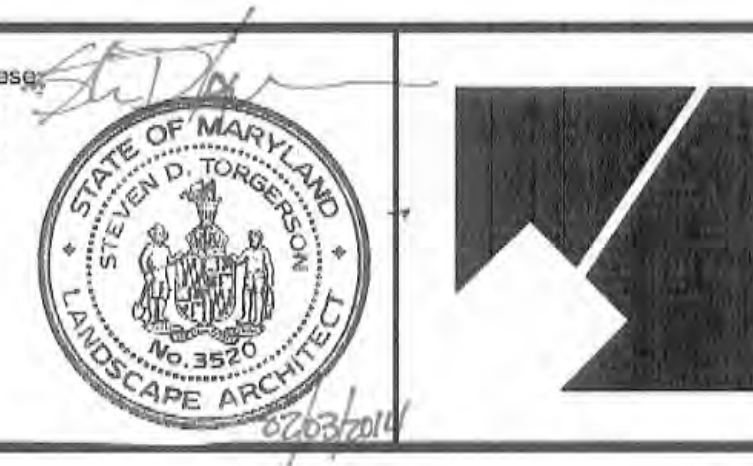
A. MORTON THOMAS AND ASSOCIATES, INC.  
Designer's Name  
12750 TWINBROOK PARKWAY  
Address  
ROCKVILLE, MD 20852  
City/State/Zip  
301-881-2545  
Telephone Number

DESIGN CONSULTANT

AMT/SYMBIOSIS-SIRI	10/14/13	MXX
WALDON STUDIOS	10/14/13	MM
SAJ	10/14/13	WJM
AMT	10/14/13	AMT

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland.

License No. 3520  
Expiration Date 03/19/2015  
STEVEN TORGERSON



The Maryland-National Capital Park and Planning Commission

Montgomery County Department of Parks  
9500 Brunnett Avenue  
Silver Spring, Maryland 20901  
(301) 495-2535

M-NCPPC REVIEW AND APPROVAL

Project Manager	10-4-13
Engineer	10-4-13
Construction Manager	10/4/13

ISSUED FOR PROCUREMENT ON

Rev. No.	Date	Description

FOREST CONSERVATION PLAN

Brookside Gardens: Entrance & Parking Renovations

1800 Glenallan Ave,  
Wheaton, MD 20902

SCALE: 1" = 100'

Liber 7099 Folio 519

SHEET 118 of 141

FINAL SCANNED: PLAN SCANNED: D38 PARK CODE: D38

Plotted By: Romano, Andrea, 10/14/2013 8:42 AM

X:\Reckville\111-755.001 - MNCPPC Brookside Gardens E\05-CAD\FC-01-11755001 Forest conservation.dwg Layout1

AMT/SYMBIOSIS-SIRI  
12750 TWINBROOK PARKWAY  
ROCKVILLE, MD 20852  
301-881-2545

WALDON STUDIOS  
3020 Rockville Pike  
Rockville, MD 20852  
301-881-2545

A. MORTON THOMAS ARCHITECTS & PLANNERS  
7935 Rockville Avenue, Suite 310  
Rockville, MD 20854  
301-881-2545

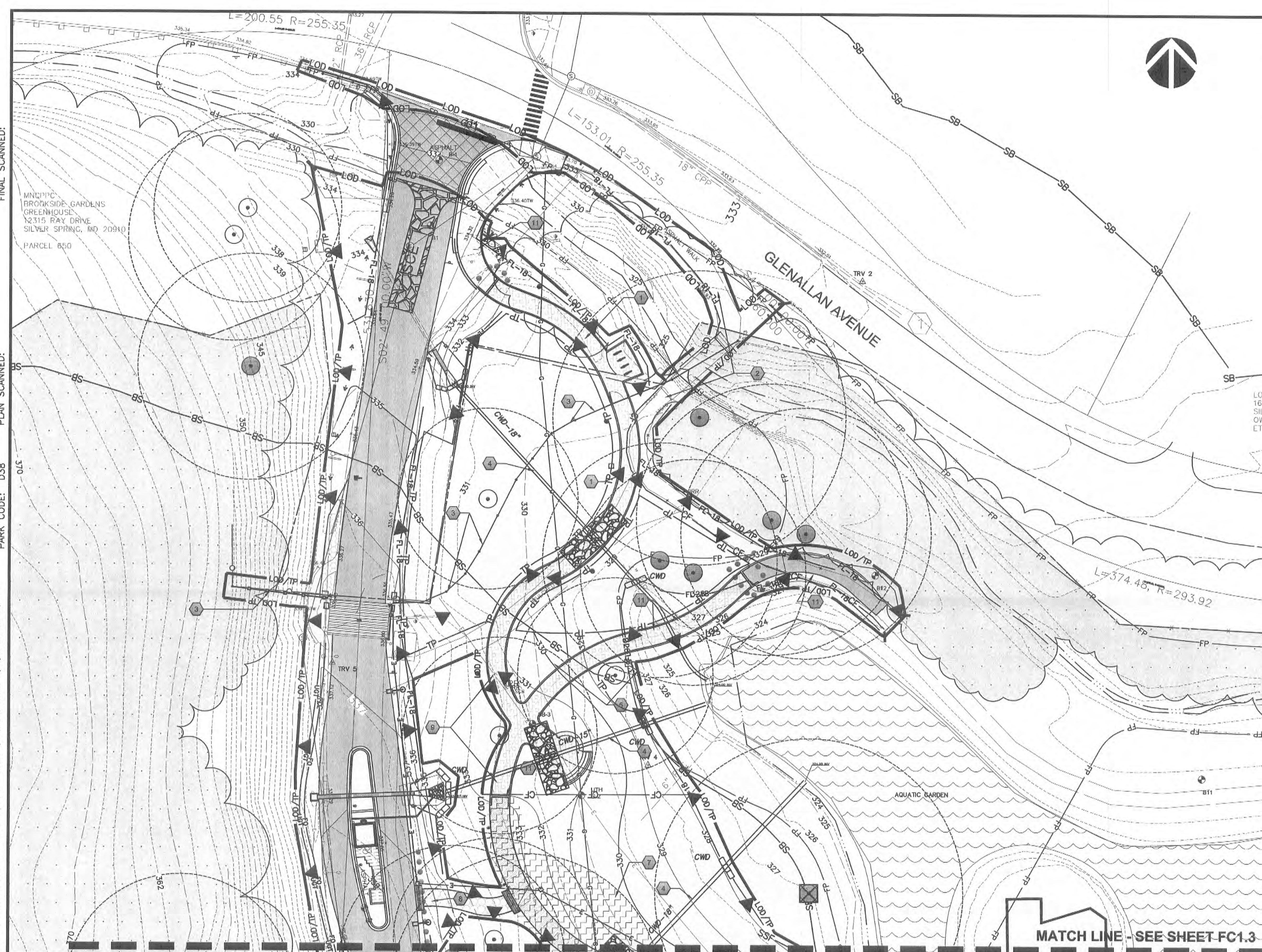
GILMORE LIGHTING DESIGN  
7935 Rockville Avenue, Suite 400  
Rockville, MD 20854  
301-881-2545

THE WILDING PARTNERSHIP, INC.  
3020 Rockville Pike, Suite 400  
Rockville, MD 20852  
301-754-2882

Kim Engineering  
3020 Rockville Pike, Suite 400  
Rockville, MD 20852  
301-754-2882

Steve & Swallow  
2138 S. Ridge Court #4,  
Garden, MD 21114  
410-774-0024  
978-448-0511





**LEGEND**

- SB — PROPERTY LINE
- SB — STREAM BUFFER
- FP — FLOODPLAIN
- LOD — EDGE OF CANOPY
- LOD — LIMIT OF DISTURBANCE
- LOD — LIMIT OF DISTURBANCE AND TREE PROTECTION FENCING
- S — STREAM
- ROOT PRUNING
- TP — TREE PROTECTION FENCING
- FL-15 — FILTER LOG
- 330 — PROPOSED CONTOUR
- F — FOREST TO REMAIN
- P — POND
- DF — DIVERSION FENCE
- [Symbol] ROOT AERATION MATTING
- [Symbol] STABILIZED CONSTRUCTION ENTRANCE
- [Symbol] TREE PROTECTION SIGNAGE
- [Symbol] SIGNIFICANT TREE
- [Symbol] SPECIMEN TREE
- [Symbol] TREE TO BE REMOVED
- [Symbol] TREE TO BE REMOVED BY ARBORIST
- [Symbol] ABOVE-GRADE CLEAR WATER DIVERSION

**MATERIALS LEGEND**

- [Symbol] SAND BLASTED PEDESTRIAN CONCRETE
- [Symbol] BROOM FINISH PEDESTRIAN CONCRETE
- [Symbol] GRASS PAVERS FOR CUSHMAN PARKING
- [Symbol] BOARDWALK
- [Symbol] ASPHALT

**REFERENCE NOTES SCHEDULE**

- | SYMBOL | DESCRIPTION   |
|--------|---|
| 1      | BOARDWALK ON HELICAL PIERS. CONSTRUCTION ACCESS TO PROTECT TREE ROOTS TO HELP PREVENT ROTTING AND DISTURBANCE AS REQUIRED BY MNCPPC INSPECTOR.  |
| 2      | CONTRACTOR TO USE EXISTING ASPHALT PATH FOR ACCESS TO DEMO BRIDGE STRUCTURE. BRIDGE ABUTMENTS TO REMAIN IN PLACE. SPECIAL DEMO PROCEDURES FOR ASPHALT AND TOPSOIL BACKFILL REMOVE WITHOUT DISTURBING FOREST |
| 3      | FENCE AND POST INSTALLATION BY HAND. NO MECHANIZED EQUIPMENT WITHIN TREE PROTECTION AREA. NO EXISTING TREES TO BE DISTURBED.  |
| 4      | INSTALL ABOVE-GRADE CLEAR WATER DIVERSION WITHIN TREE PROTECTION AREA BY HAND IN ONE DAY. NO EQUIPMENT TO ENTER TREE PROTECTION AREA. NO EXISTING TREES OR GRADES TO BE DISTURBED.                          |
| 5      | EXACT FIELD LOCATION OF TREE PROTECTION FENCE AND LIMIT OF DISTURBANCE TO BE DETERMINED AT OR PRIOR TO THE PRE-CONSTRUCTION MEETING UPON REVIEW OF BOARDWALK LAYOUT BY MNCPPC INSPECTOR.                    |
| 6      | ROOT AERATION MATTING UNDER GRADE FILL/WALK. NO EQUIPMENT USED FOR SITE PREPARATION IN THIS LOCATION. SEE SYMBOL FOR FULL EXTENTS.  |
| 7      | HAND TOOLS ONLY FOR MULCH & GEGRID PATH CONSTRUCTION. NO ACCESS FOR EQUIPMENT.  |
| 8      | PROPOSED ELECTRIC TO BE SUSPENDED UNDER BOARDWALK OR INSTALLED WITH SSI EXCAVATION THROUGH PROTECTED CRITICAL ROOT ZONES.   |
| 9      | MULCH MAT INSTALLED UNDERNEATH BOARDWALK FOR HELICAL PIER INSTALLATION. SEE DETAIL.   |

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Final Forest Conservation Plan  
**APPROVAL 1995001**  
 Plan No. PP4006001  
 Signature: [Signature] Date: 2/7/14

**DEVELOPER'S CERTIFICATE**

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF THE APPROVED FINAL FOREST CONSERVATION PLAN NO. PP1995001 INCLUDING FINANCIAL BONDING, FOREST PLANTING, MAINTENANCE, AND ALL OTHER APPLICABLE AGREEMENTS.

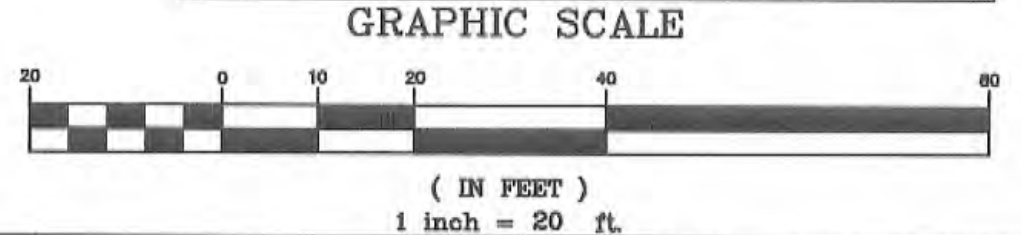
DEVELOPER'S NAME: M-NCPDC PARK DEVELOPMENT DIVISION  
 PRINTED COMPANY NAME  
 CONTACT PERSON OR OWNER: CHING-FANG CHEN  
 PRINTED NAME  
 ADDRESS: 9500 BRUNETT AVENUE, SILVER SPRING, MD 20901  
 PHONE AND EMAIL: 301-495-2557 ching-fang.chen@montgomeryparks.org  
 SIGNATURE: [Signature]



TREE ASSESSMENT AND TREE SAVE RECOMMENDATIONS PREPARED UNDER MY SUPERVISION  
 ANDREW E. STREAGLE  
 ISA CERTIFIED ARBORIST #MA-4826A

MATCH LINE - SEE SHEET FC1.3

THIS PLAN IS FOR TREE PROTECTION/FOREST CONSERVATION PLAN PURPOSES ONLY



NOTE: GENERALLY, ROOT PRUNING AND TREE PROTECTION FENCE ARE LOCATED AT THE LIMIT OF DISTURBANCE. THEREFORE, THE LAYOUT OF LINES DEPICTING TREE PROTECTION FENCE AND ROOT PRUNING IS DIAGRAMMATIC, AND FOR REFERENCE ONLY. PLEASE REFER TO THE STRESS REDUCTION DETAIL FOR MORE INFORMATION.

A. MORTON THOMAS AND ASSOCIATES, INC.  
 Designer's Name  
 12750 TWINBROOK PARKWAY  
 Address  
 ROCKVILLE, MD 20852  
 City/State/Zip  
 301-981-2645  
 Telephone Number

DESIGN CONSULTANT			
AMT/SYMBIOSIS-SIRI	10/14/13	MMK	Checked By:
Landscape Architect	Date	MMK	
WALDON STUDIOS	10/14/13	MM	Checked By:
Architect	Date	MM	
SAJ	10/14/13	WJM	Checked By:
Engineer	Date	WJM	
AMT	10/14/13	AMT	Checked By:
Drawn by	Date	AMT	

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland.  
 License No. 3520  
 Expiration Date 03/19/2015  
 SILVÉN TORGÉRSÖN



The Maryland-National Capital Park and Planning Commission  
 Montgomery County Department of Parks  
 9500 Brunnett Avenue  
 Silver Spring, Maryland 20901  
 (301) 495-2555

M-NCPDC REVIEW AND APPROVAL	
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Engineer	10-4-13
Construction Manager	10/4/13
Park Manager	Date

ISSUED FOR PROCUREMENT ON		
Rev. No.	Date	Description

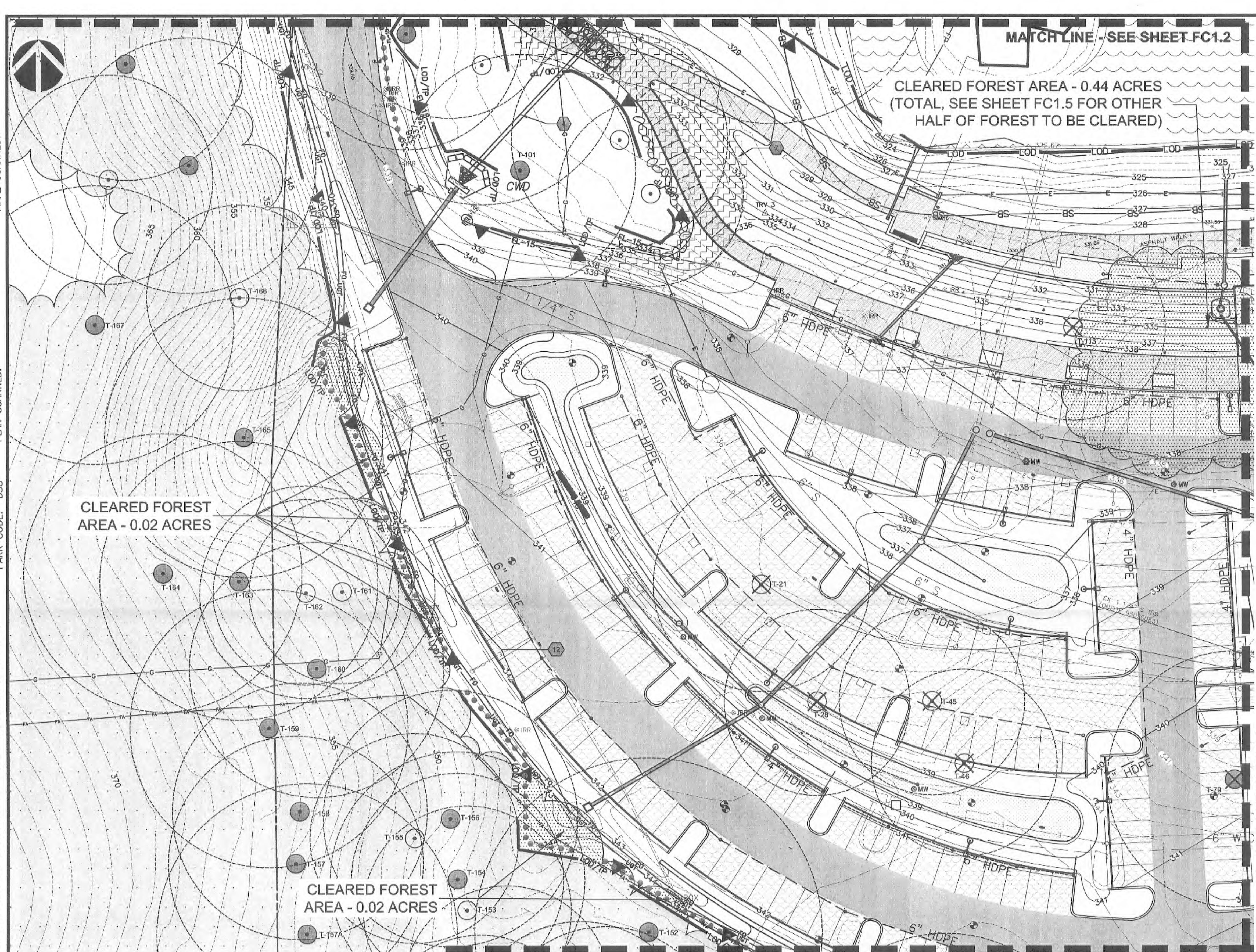
FOREST CONSERVATION PLAN  
 Brookside Gardens: Entrance & Parking Renovations  
 1800 Glenallan Ave,  
 Wheaton, MD 20902  
 SCALE: 1" = 20'  
 Liber 7099 Folio 519

RECEIVED  
 MNCPPC  
 FEB - 4 2014  
 MONTGOMERY COUNTY  
 PLANNING DEPARTMENT  
 FC1.2  
 SHEET 119 of 141

FINAL SCANNED: PLAN SCANNED: D38 PARK CODE: D38

Pin & Swallow  
 Davey Trees  
 Kim Engineering  
 The Walden Partnership, Inc.  
 Henry Adams  
 Gilmore Lighting Design  
 Walden Studio Architects & Planners  
 A. Morton Thomas  
 Symbiosis/Siri  
 978-448-9511  
 301-754-2882  
 301-754-2882  
 301-754-2882  
 410-296-6500  
 301-907-7925  
 410-290-9680  
 301-881-2545  
 202-595-1999





MATCH LINE - SEE SHEET FC1.2

CLEARED FOREST AREA - 0.44 ACRES  
(TOTAL, SEE SHEET FC1.5 FOR OTHER  
HALF OF FOREST TO BE CLEARED)

CLEARED FOREST  
AREA - 0.02 ACRES

CLEARED FOREST  
AREA - 0.02 ACRES

MATCH LINE - SEE SHEET FC1.4

**LEGEND**

	PROPERTY LINE		ROOT AERATION MATTING
	STREAM BUFFER		TREE PROTECTION SIGNAGE
	EDGE OF CANOPY		SIGNIFICANT TREE
	LIMIT OF DISTURBANCE		SPECIMEN TREE
	LIMIT OF DISTURBANCE AND TREE PROTECTION FENCING		TREE TO BE REMOVED
	STREAM		TREE TO BE REMOVED BY ARBORIST
	ROOT PRUNING		ABOVE-GRADE CLEAR WATER DIVERSION
	FILTER LOG		DIVERSION FENCE
	PROPOSED CONTOUR		
	FOREST TO REMAIN		
	FOREST TO BE REMOVED		
	POND		

**MATERIALS LEGEND**

	PAVEDRAIN		BROOM FINISH
	ASPHALT		PEDESTRIAN CONCRETE
	GRASS PAVERS FOR CUSHMAN PARKING		MICROBIORETENTION
			SAND BLASTED STRUCTURAL SLAB, SEE STRUCTURAL DRAWINGS

**REFERENCE NOTES SCHEDULE**

SYMBOL	DESCRIPTION
	INSTALL ABOVE-GRADE CLEAR WATER DIVERSION WITHIN TREE PROTECTION AREA BY HAND IN ONE DAY. NO EQUIPMENT TO ENTER TREE PROTECTION AREA. NO EXISTING TREES OR GRADES TO BE DISTURBED.
	ROOT AERATION MATTING UNDER GRADE FILL/WALK. NO EQUIPMENT USED FOR SITE PREPARATION IN THIS LOCATION. SEE SYMBOL FOR FULL EXTENTS.
	ROOT PRUNE WITH MECHANICAL MEANS IF POSSIBLE OR BY SSAT AND HAND TOOLS IF NECESSARY AFTER VERIFICATION OF UNDERGROUND UTILITIES AND PROPOSED GRADING. EXACT LAYOUT TO BE DETERMINED PRIOR TO OR DURING PRE-CONSTRUCTION REVIEW BY MNCPPC INSPECTOR.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Final Forest Conservation Plan  
APPROVAL 1195001

Plan No. PP2000001  
Signature: *Andrew E. Stregale* Date: 2/7/14

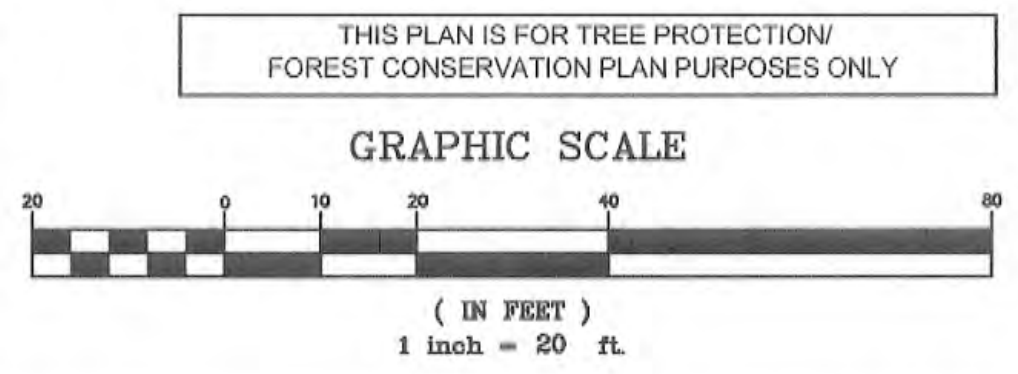
**DEVELOPER'S CERTIFICATE**

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF THE APPROVED FINAL FOREST CONSERVATION PLAN NO. PP195001 INCLUDING FINANCIAL BONDING, FOREST PLANTING, MAINTENANCE, AND ALL OTHER APPLICABLE AGREEMENTS.

DEVELOPER'S NAME: M-NCPPC PARK DEVELOPMENT DIVISION  
PRINTED COMPANY NAME  
CONTACT PERSON OR OWNER: CHING-FANG CHEN  
PRINTED NAME  
ADDRESS: 9500 BRUNETT AVENUE, SILVER SPRING, MD 20901  
PHONE AND EMAIL: 301-495-2557 ching-fang.chen@montgomeryparks.org  
SIGNATURE: *Andrew E. Stregale*



TREE ASSESSMENT AND TREE SAVE RECOMMENDATIONS PREPARED UNDER MY SUPERVISION  
ANDREW E. STREGALE  
ISA CERTIFIED ARBORIST #MA-4826A



**NOTE:** GENERALLY, ROOT PRUNING AND TREE PROTECTION FENCE ARE LOCATED AT THE LIMIT OF DISTURBANCE. THEREFORE, THE LAYOUT OF LINES DEPICTING TREE PROTECTION FENCE AND ROOT PRUNING IS DIAGRAMMATIC, AND FOR REFERENCE ONLY. PLEASE REFER TO THE STRESS REDUCTION DETAIL FOR MORE INFORMATION.

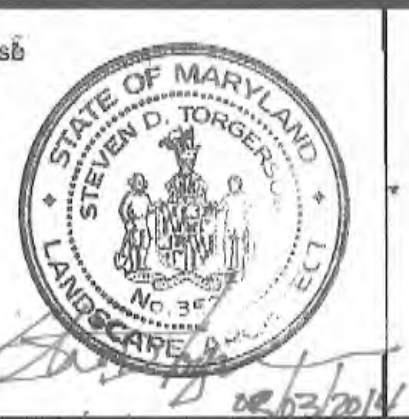
A. MORTON THOMAS AND ASSOCIATES, INC.

Designer's Name	AMT/SYMBIOSIS-SIRI	10/14/13	MXK
Address	12750 TWINBROOK PARKWAY		
City/State/Zip	ROCKVILLE, MD 20852		
Telephone Number	301-881-2545		

DESIGN CONSULTANT			
Architect	WALDON STUDIOS	10/14/13	MM
Engineer	SAJ	10/14/13	WJM
Drawn by	AMT	10/14/13	AMT

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland.

License No. 3520  
Expiration Date 03/19/2015  
STEVEN TORGERSON



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

M-NCPPC REVIEW AND APPROVAL

Project Manager	<i>[Signature]</i>	10-4-13
Engineer	<i>[Signature]</i>	10-4-13
Construction Manager	<i>[Signature]</i>	10/4/13
Park Manager		

ISSUED FOR PROCUREMENT ON

Rev. No.	Date	Description

FOREST CONSERVATION PLAN  
Brookside Gardens: Entrance & Parking Renovations  
1800 Glenallan Ave,  
Wheaton, MD 20902  
SCALE: 1" = 20'  
Liber 7099 Folio 519

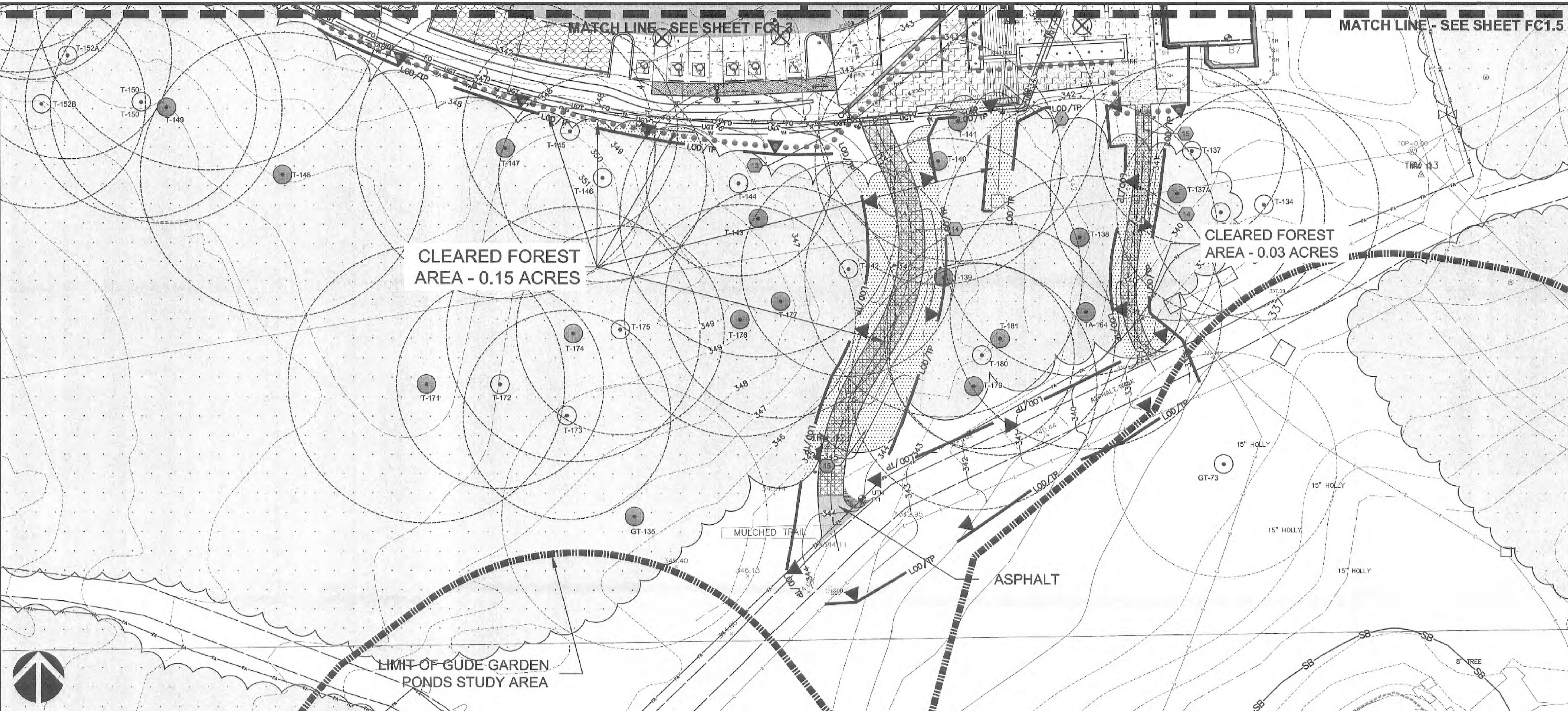
RECEIVED  
M-NCPPC  
FEB - 4 2014  
MONTGOMERY COUNTY PLANNING DEPARTMENT  
FC1.3  
SHEET 120 of 141

X:\Rockville\111-755.001 - MNCPPC Brookside Gardens E:\05-CAD\FC-03-111755001 Forest conservation.dwg FC1.3 Plotted By: Ramona, Andrea, 10/11/2013 12:45 PM. PARK CODE: D338 PLAN SCANNED: FINAL SCANNED:

Pin & Swallow DaveFrees Maryland 410.774.0024 978.448.9511  
The Watkins Partnership, Inc. 3032 Intercolle Road, 410.295.2832 301.754.2832  
Henry Adams 7833 Torville Avenue, Suite 400, 410.295.6500 410.295.6500  
Glimore Lighting Design 7833 Torville Avenue, Suite 300, 410.295.6500 410.295.6500  
Walton Studio Architects & Planners 7833 Torville Avenue, Suite 210, 410.295.6500 410.295.6500  
A. Morton Thomas 7833 Torville Avenue, Suite 200, 301.881.2545 301.881.2545  
Symbiosis/SIRI 1800 Glenallan Ave, 202.595.1939 202.595.1939



X:\Rockville\111-755.001 - MNCPPC Brookside Gardens E\05-CAD\F0-04-111755001 Forest conservation.dwg FC1.4 Plotted By: Romano, Andrea, 10/11/2013 12:41 PM, FINAL SCANNED: PLAN SCANNED: D38 PARK CODE: D38



**CLEARED FOREST AREA - 0.15 ACRES**

**CLEARED FOREST AREA - 0.03 ACRES**

**LIMIT OF GUDE GARDEN PONDS STUDY AREA**

**REFERENCE NOTES SCHEDULE**

SYMBOL	DESCRIPTION
	ROOT AERATION MATTING UNDER GRADE FILL/WALK. NO EQUIPMENT USED FOR SITE PREPARATION IN THIS LOCATION. SEE SYMBOL FOR FULL EXTENTS.
	CONTRACTOR TO PROVIDE PIPE LAYOUT FOR ROOT PRUNING AND RAM INSTALLATION AFTER DEMOLITION.
	HAND CLEARING OF TREES, SAPLINGS, VINES AND SHRUBS FOR ACCESS DRIVE BY ARBORIST ONLY. EQUIPMENT ACCESS ONLY OVER ROOT PROTECTION MATTING OR ALTERNAMATS (OR APPROVED EQUAL).
	GRADE PREPARATION FOR ACCESS DRIVE INSTALLATION TO INCLUDE HAND TOOLS ONLY. REFER TO SPECIFICATIONS AND DETAILS.

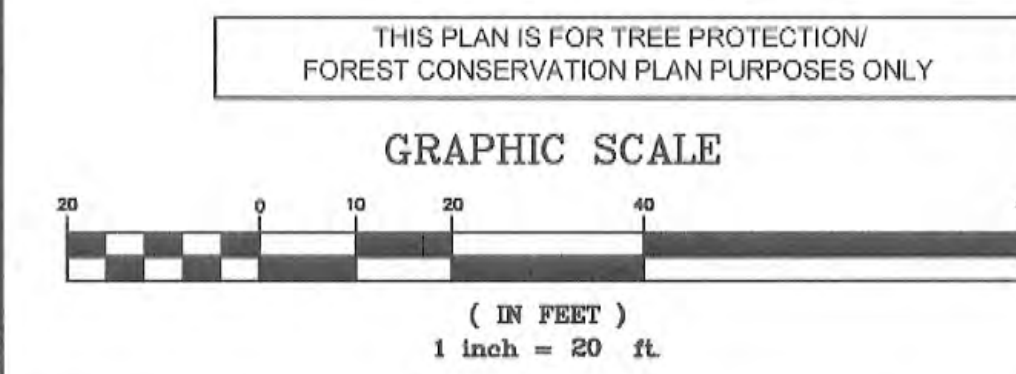
**LEGEND**

	PROPERTY LINE
	STREAM BUFFER
	EDGE OF CANOPY
	LIMIT OF DISTURBANCE
	LIMIT OF DISTURBANCE AND TREE PROTECTION FENCING
	ROOT PRUNING
	PROPOSED CONTOUR

**MATERIALS LEGEND**

	FLEXIPAWE
	PAVEDRAIN
	ASPHALT
	SAND BLASTED FINISH PEDESTRIAN CONCRETE
	BROOM FINISH PEDESTRIAN CONCRETE
	SAND BLASTED FINISH VEHICULAR CONCRETE
	PAVER BANDS

FOREST TO REMAIN  
 FOREST TO BE REMOVED  
 ROOT AERATION MATTING  
 TREE PROTECTION SIGNAGE  
 SIGNIFICANT TREE  
 SPECIMEN TREE  
 TREE TO BE REMOVED  
 TREE TO BE REMOVED BY ARBORIST



**NOTE:** GENERALLY, ROOT PRUNING AND TREE PROTECTION FENCE ARE LOCATED AT THE LIMIT OF DISTURBANCE. THEREFORE, THE LAYOUT OF LINES DEPICTING TREE PROTECTION FENCE AND ROOT PRUNING IS DIAGRAMMATIC, AND FOR REFERENCE ONLY. PLEASE REFER TO THE STRESS REDUCTION DETAIL FOR MORE INFORMATION.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Final Forest Conservation Plan APPROVAL 1/25/2014

Plan No. PP1995001  
 Signature: *Ching-Fang Chen* Date: 2/7/14

**DEVELOPER'S CERTIFICATE**

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF THE APPROVED FINAL FOREST CONSERVATION PLAN NO. PP1995001 INCLUDING FINANCIAL BONDING, FOREST PLANTING, MAINTENANCE, AND ALL OTHER APPLICABLE AGREEMENTS.

DEVELOPER'S NAME: M-NCPPC PARK DEVELOPMENT DIVISION  
 PRINTED COMPANY NAME  
 CONTACT PERSON OR OWNER: CHING-FANG CHEN  
 PRINTED NAME  
 ADDRESS: 9500 BRUNETT AVENUE, SILVER SPRING, MD 20901  
 PHONE AND EMAIL: 301-495-2557 ching-fang.chen@montgomeryparks.org  
 SIGNATURE: *Andrew E. Streaqle*



TREE ASSESSMENT AND TREE SAVE RECOMMENDATIONS PREPARED UNDER MY SUPERVISION  
 2014-02-03  
 ANDREW E. STREAQLE  
 ISA CERTIFIED ARBORIST #MA-4826A

DESIGN CONSULTANT			
A. MORTON THOMAS AND ASSOCIATES, INC.	AMT/SYMBIOSIS-SIRI	10/14/13	MXK
Designer's Name	Landscape Architect	Date	Checked By
12750 TWINBROOK PARKWAY	WALDON STUDIOS	10/14/13	MM
Address	Architect	Date	Checked By
ROCKVILLE, MD 20852	SAJ	10/14/13	WJM
City/State/Zip	Engineer	Date	Checked By
301-881-2545	AMT	10/14/13	AMT
Telephone Number	Drawn by	Date	Checked By

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland.	 Steven TorgerSON LANDSCAPE ARCHITECT License No. 3520 Expiration Date 03/19/2015
---	---

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

M-NCPPC REVIEW AND APPROVAL	
Project Manager: <i>[Signature]</i>	Date: 10-4-13
Engineer: <i>[Signature]</i>	Date: 10-4-13
Construction Manager: <i>[Signature]</i>	Date: 10/4/13
Park Manager: <i>[Signature]</i>	Date: <i>[Signature]</i>

ISSUED FOR PROCUREMENT ON		
Rev. No.	Date	Description

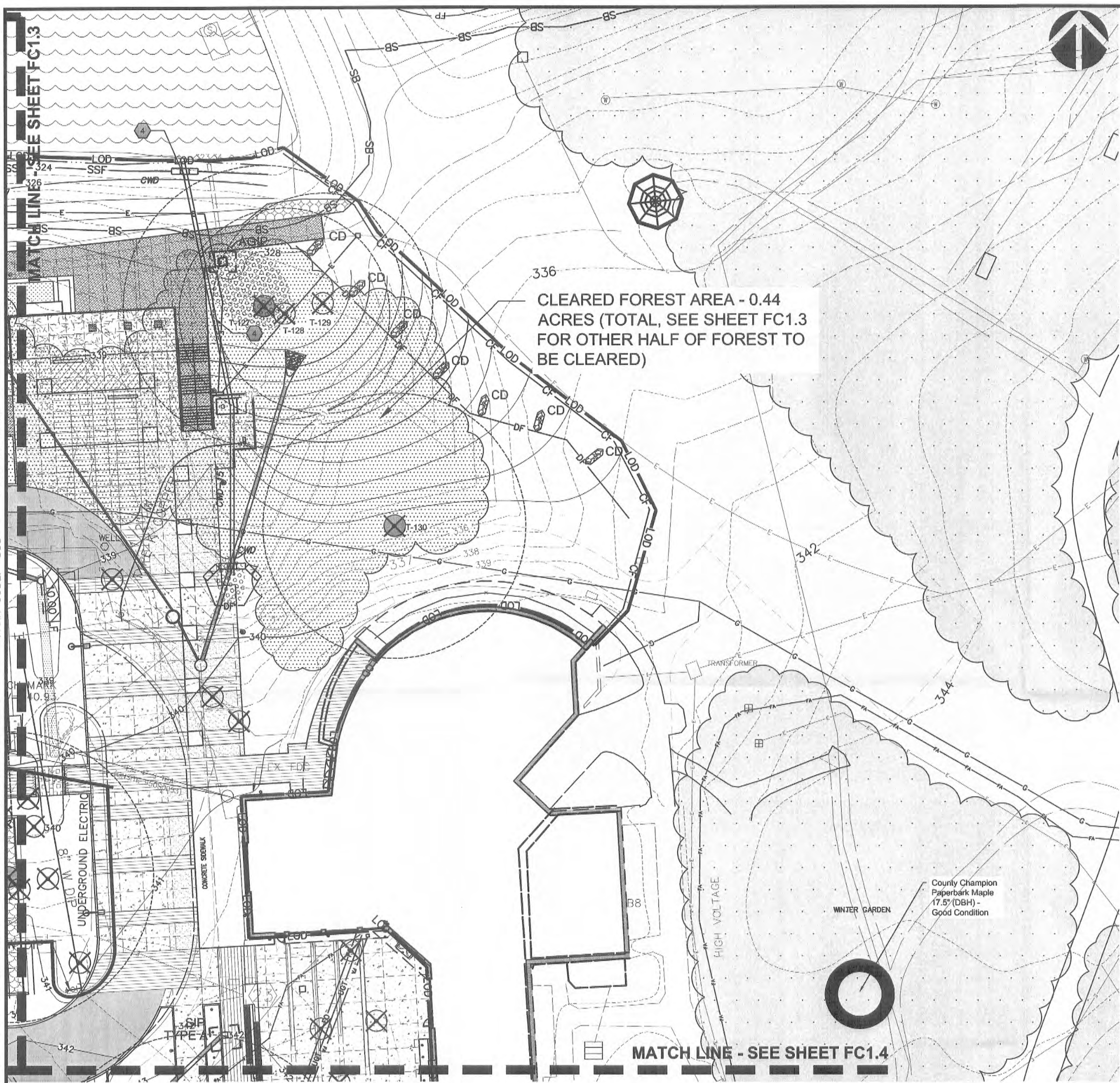
**FOREST CONSERVATION PLAN**  
 Brookside Gardens: Entrance & Parking Renovations  
 1800 Glenallan Ave,  
 Wheaton, MD 20902  
 SCALE: 1" = 20'  
 Liber 7099 Folio 519

M-NCPPC  
 FEB - 4 2014  
 MONTGOMERY COUNTY  
 PLANNING DEPARTMENT  
**FC1.4**  
 SHEET 121 of 141

Pine & Swallow: 867 Boston Road, Silver Spring, Maryland 301-754-3582, 301-754-1114, 410-774-0029, 978-448-9511  
 Davey Tree: 2138 Fleet Bridge Court #4, Silver Spring, Maryland 301-754-3582, 301-754-1114, 410-774-0029, 978-448-9511  
 Kim Engineering: 3032 Mitchellville Road, Bowie, MD 20716 410-296-6500  
 The Watkins Partnership, Inc.: 3032 Mitchellville Road, Bowie, MD 20716 410-296-6500  
 Henry Adams: 600 Baltimore Avenue, Suite 400, Bethesda, MD 20814 410-296-6500  
 Gilmore Lighting Design: 7939 Hancock Avenue, Suite 200, Bethesda, MD 20814 301-507-2575  
 Waldon Studio Architects & Planners: 625 Woodrow Court, Suite 210, Bethesda, MD 20814 410-290-9680  
 A. Morton Thomas: 2750 Twinbrook Parkway, Rockville, MD 20852 301-881-2545



FINAL SCANNED: PLAN SCANNED: D38 PARK CODE: D38 Plotted By: Romano, Andrea, 10/11/2013 12:34 PM. X:\Rockville\111-755-001 - MNCPPC Brookside Gardens E\05-CAD\FC-05-111755001 Forest conservation.dwg FC1.5



CLEARED FOREST AREA - 0.44 ACRES (TOTAL, SEE SHEET FC1.3 FOR OTHER HALF OF FOREST TO BE CLEARED)

County Champion Paperbark Maple 17.5" (DBH) - Good Condition  
WINTER GARDEN  
HIGH VOLTAGE

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
4	INSTALL ABOVE-GRADE CLEAR WATER DIVERSION WITHIN TPA BY HAND IN ONE DAY. NO EQUIPMENT TO ENTER TPA. NO EXISTING TREES OR GRADES TO BE DISTURBED.

LEGEND

SB	STREAM BUFFER	[Symbol]	FOREST TO REMAIN
FP	FLOODPLAIN	[Symbol]	FOREST TO BE REMOVED
LOD	EDGE OF CANOPY	[Symbol]	SIGNIFICANT TREE
[Symbol]	LIMIT OF DISTURBANCE	[Symbol]	SPECIMEN TREE
[Symbol]	STREAM	[Symbol]	TREE TO BE REMOVED
DF	DIVISION FENCE	[Symbol]	POND
SSF	SUPER SILT FENCE	[Symbol]	ABOVE-GRADE CLEAR WATER DIVERSION
CF	CONSTRUCTION FENCE		
330	PROPOSED CONTOUR		
CD	CHECK DAM		
DF	DIVERSION FENCE		

MATERIALS LEGEND

[Symbol]	SAND BLASTED FINISH PEDESTRIAN CONCRETE	[Symbol]	BROOM FINISH PEDESTRIAN CONCRETE
[Symbol]	SAND BLASTED FINISH VEHICULAR CONCRETE	[Symbol]	BROOM FINISH VEHICULAR CONCRETE
[Symbol]	PAVEDRAIN	[Symbol]	PAVER BANDS
[Symbol]	ASPHALT	[Symbol]	BOARDWALK
[Symbol]	MICROBIORETENTION	[Symbol]	BIOSWALE
[Symbol]	SAND BLASTED STRUCTURAL SLAB, SEE STRUCTURAL DRAWINGS	[Symbol]	BROOM FINISH STRUCTURAL SLAB, SEE STRUCTURAL DRAWINGS

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION  
Final Forest Conservation Plan  
APPROVAL

Plan No. PP1995001-1975001  
Signature: *Henry Adams* Date: 2/7/14

DEVELOPER'S CERTIFICATE

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF THE APPROVED FINAL FOREST CONSERVATION PLAN NO. PP1995001 INCLUDING FINANCIAL BONDING, FOREST PLANTING, MAINTENANCE, AND ALL OTHER APPLICABLE AGREEMENTS.

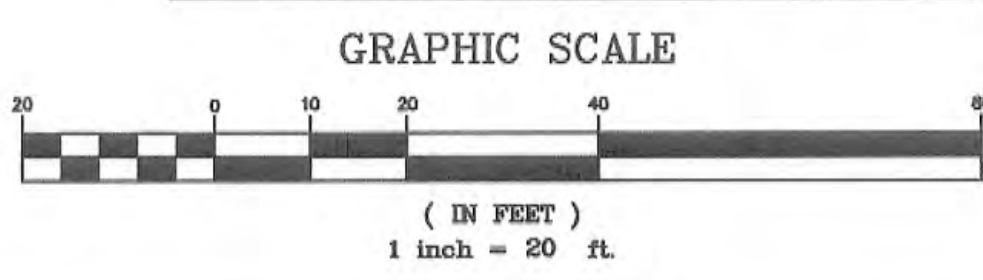
DEVELOPER'S NAME: M-NCPPC PARK DEVELOPMENT DIVISION  
PRINTED COMPANY NAME  
CONTACT PERSON OR OWNER: CHING-FANG CHEN  
PRINTED NAME  
ADDRESS: 9500 BRUNETT AVENUE, SILVER SPRING, MD 20901  
PHONE AND EMAIL: 301-495-2557 ching-fang.chen@montgomeryparks.org  
SIGNATURE: *[Signature]*



TREE ASSESSMENT AND TREE SAVE RECOMMENDATIONS PREPARED UNDER MY SUPERVISION  
*Andrew E. Streagle*  
ANDREW E. STREAGLE  
ISA CERTIFIED ARBORIST #MA-4826A

THIS PLAN IS FOR TREE PROTECTION/ FOREST CONSERVATION PLAN PURPOSES ONLY

NOTE: GENERALLY, ROOT PRUNING AND TREE PROTECTION FENCE ARE LOCATED AT THE LIMIT OF DISTURBANCE. THEREFORE, THE LAYOUT OF LINES DEPICTING TREE PROTECTION FENCE AND ROOT PRUNING IS DIAGRAMMATIC, AND FOR REFERENCE ONLY. PLEASE REFER TO THE STRESS REDUCTION DETAIL FOR MORE INFORMATION.



DESIGN CONSULTANT  
A. MORTON THOMAS AND ASSOCIATES, INC.  
Designer's Name  
12750 TWINBROOK PARKWAY  
Address  
ROCKVILLE, MD 20852  
City/State/Zip  
301-981-2545  
Telephone Number

NAME	DATE	CHECKED BY
AMT/SYMBIOSIS-SIRI	10/14/13	MXK
WALDON STUDIOS	10/14/13	MM
SAJ	10/14/13	WJM
AMT	10/14/13	AMT

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland.  
License No. 3520  
Expiration Date: 3/19/2015  
SILVEN TORGERSON



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

M-NCPPC REVIEW AND APPROVAL

Project Manager	Date
Engineer	Date
Construction Manager	Date
Park Manager	Date

ISSUED FOR PROCUREMENT ON

REV. NO.	DATE	DESCRIPTION
10-4-13		
10-4-13		
10-4-13		

FOREST CONSERVATION PLAN  
Brookside Gardens: Entrance & Parking Renovations  
1800 Glenallan Ave,  
Wheaton, MD 20902  
SCALE: 1" = 20'  
Liber 7099 Folio 519

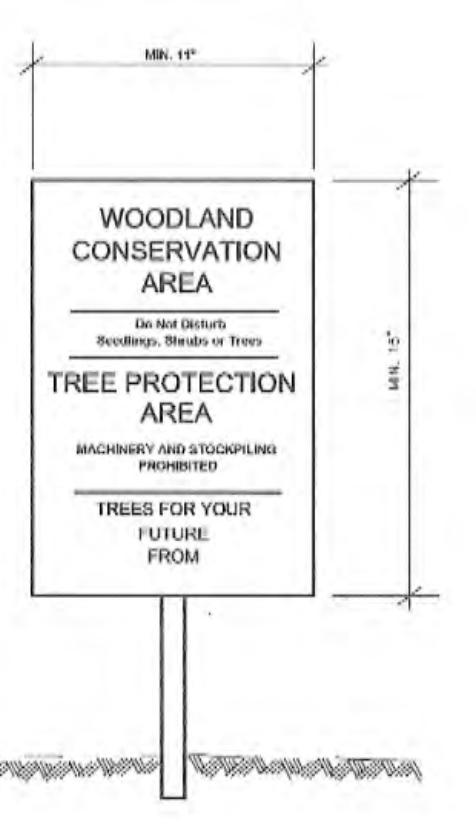
RECEIVED M-NCPPC  
FEB - 4 2014  
MONTGOMERY COUNTY PLANNING DEPARTMENT  
FC1.5  
SHEET 122 of 141

Pine & Swallow 867 Boston Road, Groton, MA 01450 978-446-9511  
 Davey Trees 2138 Priest Bridge Court #4, Crofton, MD 21114 410-774-0024  
 Kim Engineering Silver Spring, Maryland 301.754.2882  
 The Watkins Partnership, Inc. 3032 Michelle Lane, Bowie, MD 20716 301.246.0976  
 Henry Adams 600 Baltimore Avenue, Suite 400, Baltimore, MD 21204 410.256.6900  
 Gilmore Lighting Design 7939 Norfolk Avenue, Suite 200, Bethesda, MD 20814 301.907.7975  
 Waldon Studio Architects & Planners 6335 Woodside Court, Suite 310, Columbia, MD 21046 410.290.8680  
 A. Morton Thomas 12750 Twinbrook Parkway, Rockville, MD 20852 301.861.2545  
 Symbiosis/SIRI 9008 Bree Brook Drive, Lanham, MD 20706 202.395.1999



FINAL SCANNED: PLAN SCANNED: D38 PARK CODE: D38 Plotted By: Romano, Andrea, 10/11/2013 12:28 PM

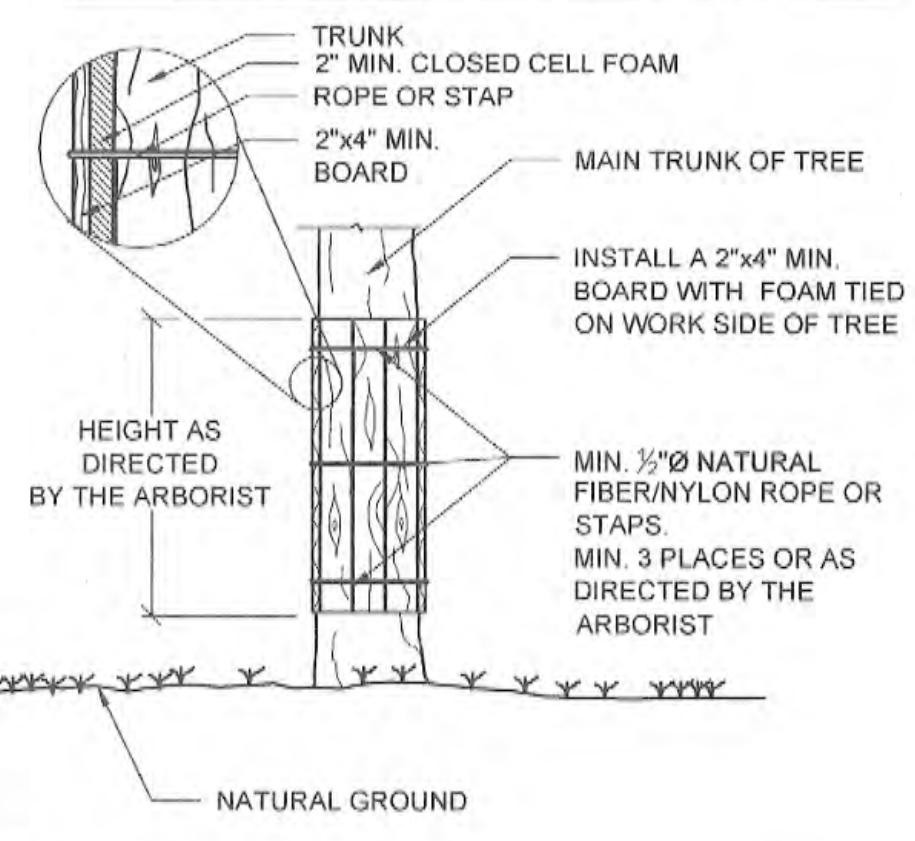
**SIGNAGE**



- NOTES:
- ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.
  - SIGNS SHOULD BE PROPERLY MAINTAINED.
  - AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR THE SIGNS.
  - SIGNS SHOULD BE POSTED TO BE VISIBLE TO ALL CONSTRUCTION PERSONNEL FROM ALL DIRECTIONS.

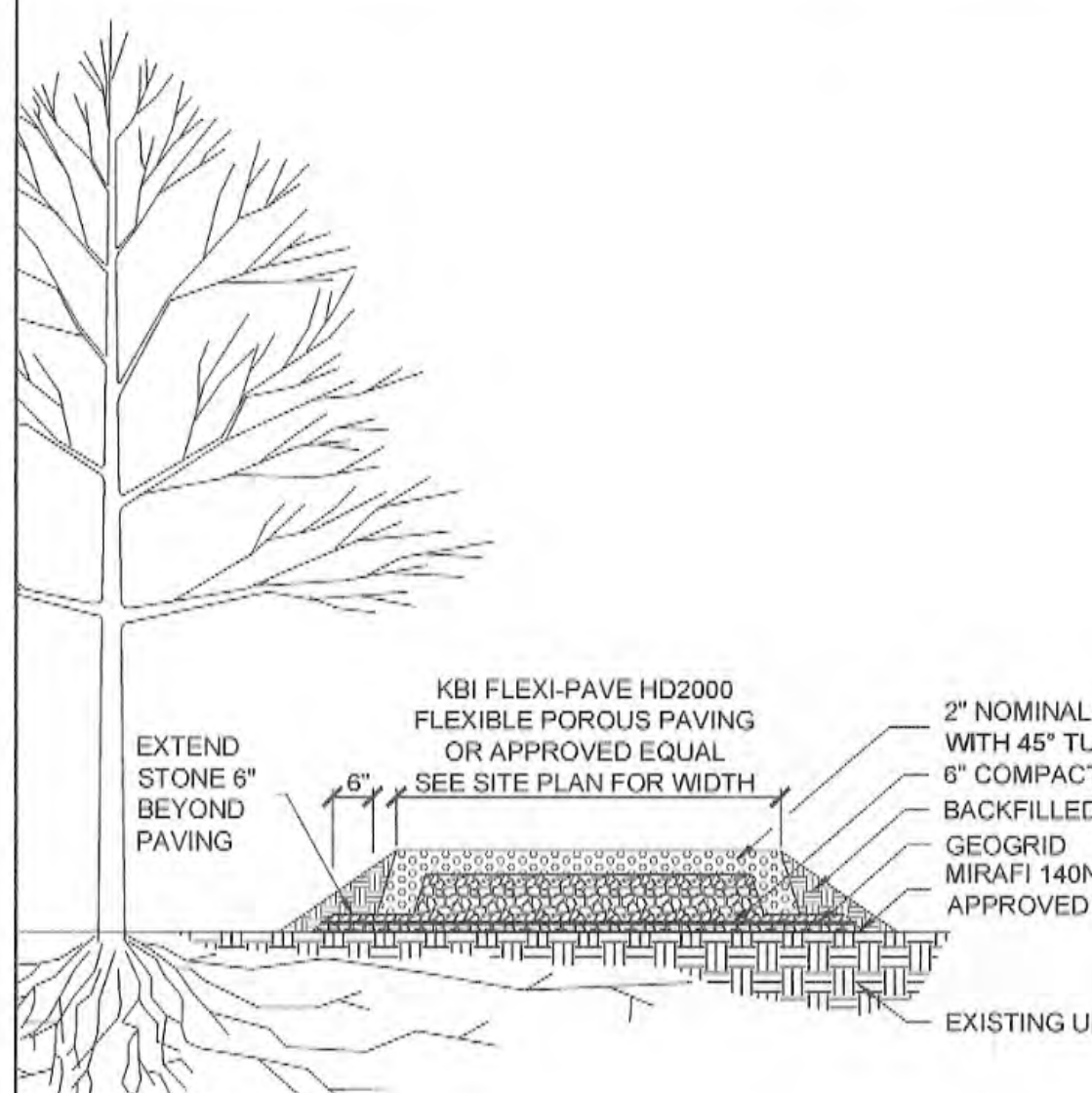
NOT TO SCALE

**TRUNK PROTECTION DETAIL**



- NOTES:
- COMPLETE ALL INSTALLATION UNDER THE DIRECTION OF A CERTIFIED ARBORIST
  - THE BOARDS WITH WITH 1/2" DIAMETER ROPE OR STRAPS SUFFICIENT TO PROTECT ALL AREAS OF THE TREE EXPOSED TO CONSTRUCTION
  - PROTECT THE TRUNK FROM DAMAGE DUE TO THE STRAPS WITH ADDITIONAL FOAM AND BOARDS AS NEEDED

NOT TO SCALE



**FLEXI-PAVE ABOVE GRADE**

3/4" = 1'-0" 329495-10

**SEQUENCE OF CONSTRUCTION**

- CONDUCT AN ON-SITE PRECONSTRUCTION MEETING WITH THE CONTRACTOR, PROJECT ARBORIST, M-NCPPC ARBORIST, AND PARKS ARBORIST TO VERIFY THE PRACTICES THAT WILL BE USED TO MITIGATE THE DISTURBANCE OF THE CRITICAL ROOT ZONES AND TREES
- MARK ALL TREES TO BE REMOVED
- VERIFY ALL TREES WITH THE ARBORIST AND M-NCPPC BEFORE REMOVAL
- INSTALL TREE PROTECTION AS DIRECTED BY THE ARBORIST AND AS SHOWN IN THE TREE PROTECTION MEASURES ON FC-5.2
- INSTALL EROSION CONTROL MEASURES AS REQUIRED. IN SITUATION WHERE ROOT PRUNING WILL NOT BE REQUIRED INSTALL SILT OR SUPER SILT FENCE WITHOUT TRENCHING
- REMOVE ALL EXISTING ASPHALT TRAIL THAT IS IN CLOSE PROXIMITY TO TREES THAT ARE TO REMAIN BY PEELING IT AND NOT DRIVING OVER THE NEWLY EXPOSED SUBGRADE. ONLY DRIVE OVER PAVEMENT AND NOT ON AREAS THAT HAVE BEEN EXPOSED
- RELOCATE THE TEMPORARY TREE PROTECTION MEASURES TO ALLOW FOR THE INSTALLATION OF ROOT AERATION MAT (RAM) AS DIRECTED BY THE ARBORIST AND M-NCPPC
- BACKFILL OVER THE TOP OF THE RAM TO ACHIEVE THE ELEVATIONS AS SHOWN ON THE GRADING PLAN
- REMOVE THE TREE PROTECTION ONLY AFTER THE PROJECT IS COMPLETED AND AS DIRECTED BY THE M-NCPPC INSPECTOR AND THE ARBORIST

**MONTGOMERY COUNTY STANDARD FOREST CONSERVATION NOTES**

**PRE-CONSTRUCTION:**

- AN ON-SITE PRE-CONSTRUCTION MEETING IS REQUIRED AFTER THE LIMITS OF DISTURBANCE HAVE BEEN STAKED AND FLAGGED, BUT BEFORE ANY CLEARING OR GRADING BEGINS. THE PROPERTY OWNER SHOULD CONTACT THE MONTGOMERY COUNTY PLANNING DEPARTMENT INSPECTION STAFF BEFORE CONSTRUCTION TO VERIFY THE LIMITS OF DISTURBANCE AND DISCUSS TREE PROTECTION AND TREE CARE MEASURES. THE DEVELOPER'S REPRESENTATIVE, CONSTRUCTION SUPERINTENDENT, ISA CERTIFIED ARBORIST OR MARYLAND-LICENSED TREE EXPERT THAT WILL IMPLEMENT THE TREE PROTECTION MEASURES, FOREST CONSERVATION INSPECTOR, AND DEPARTMENT OF PERMITTING SERVICES (DPS) SEDIMENT CONTROL INSPECTOR SHOULD ATTEND THIS PRE-CONSTRUCTION MEETING.
- NO CLEARING OR GRADING SHALL BEGIN BEFORE STRESS-REDUCTION MEASURES HAVE BEEN IMPLEMENTED. APPROPRIATE MEASURES MAY INCLUDE, BUT ARE NOT LIMITED TO:
  - ROOT PRUNING
  - CROWN REDUCTION OR PRUNING
  - WATERING
  - FERTILIZING
  - VERTICAL MULCHING
  - ROOT AERATION MATTING

MEASURES NOT SPECIFIED ON THE FOREST CONSERVATION PLAN MAY BE REQUIRED AS DETERMINED BY THE FOREST CONSERVATION INSPECTOR IN COORDINATION WITH THE ARBORIST.

- A MARYLAND-LICENSED TREE EXPERT OR AN INTERNATIONAL SOCIETY OF ARBORICULTURE-CERTIFIED ARBORIST MUST PERFORM ALL STRESS REDUCTION MEASURES. DOCUMENTATION OF STRESS REDUCTION MEASURES MUST BE EITHER OBSERVED BY THE FOREST CONSERVATION INSPECTOR OR SENT TO THE INSPECTOR AT 8787 GEORGIA AVENUE, SILVER SPRING, MD 20910. THE FOREST CONSERVATION INSPECTOR WILL DETERMINE THE EXACT METHOD TO CONVEY THE STRESS REDUCTIONS MEASURES DURING THE PRE-CONSTRUCTION MEETING.
- TEMPORARY TREE PROTECTION DEVICES SHALL BE INSTALLED PER THE FOREST CONSERVATION PLAN/TREE SAVE PLAN AND PRIOR TO ANY CONSTRUCTION ACTIVITIES. TREE PROTECTION FENCING LOCATIONS SHOULD BE STAKED PRIOR TO THE PRE-CONSTRUCTION MEETING. THE FOREST CONSERVATION INSPECTOR, IN COORDINATION WITH THE DPS SEDIMENT CONTROL INSPECTOR, MAY MAKE FIELD ADJUSTMENTS TO INCREASE THE SURVIVABILITY OF TREES AND FOREST SHOWN AS SAVED ON THE APPROVED PLAN. TEMPORARY TREE PROTECT DEVICES MAY INCLUDE:
  - CHAIN LINK FENCE (FOUR FEET HIGH)
  - SUPER SILT FENCE WITH WIRE STRUNG BETWEEN SUPPORT POLES (MINIMUM 4 FEET HIGH) WITH HIGH VISIBILITY FLAGGING.
  - 14 GAUGE 2 INCH X 4 INCH WELDED WIRE FENCING SUPPORTED BY STEEL T-BAR POSTS (MINIMUM 4 FEET HIGH) WITH HIGH VISIBILITY FLAGGING.

TEMPORARY PROTECTION DEVICES SHALL BE MAINTAINED AND INSTALLED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION PROJECT AND MUST NOT BE ALTERED WITHOUT PRIOR APPROVAL FROM THE FOREST CONSERVATION INSPECTOR. NO EQUIPMENT, TRUCKS, MATERIALS, OR DEBRIS MAY BE STORED WITHIN THE TREE PROTECTION FENCE AREAS DURING THE ENTIRE CONSTRUCTION PROJECT. NO VEHICLE OR EQUIPMENT ACCESS TO THE FENCED AREA WILL BE PERMITTED. TREE PROTECTION SHALL NOT BE REMOVED WITHOUT PRIOR APPROVAL OF FOREST CONSERVATION INSPECTOR.

FOREST RETENTION AREA SIGNS SHALL BE INSTALLED AS REQUIRED BY THE FOREST CONSERVATION INSPECTOR, OR AS SHOWN ON THE APPROVED PLAN.

LONG-TERM PROTECTION DEVICES SHALL BE INSTALLED PER THE FOREST CONSERVATION PLAN/TREE SAVE PLAN AND ATTACHED DETAILS. INSTALLATION WILL OCCUR AT THE APPROPRIATE TIME DURING THE CONSTRUCTION PROJECT. REFER TO THE PLAN DRAWING FOR LONG-TERM PROTECTION MEASURES TO BE INSTALLED.

**DURING CONSTRUCTION:**

- PERIODIC INSPECTIONS BY THE FOREST CONSERVATION INSPECTOR WILL OCCUR DURING THE CONSTRUCTION PROJECT. CORRECTIONS AND REPAIRS TO ALL TREE PROTECTION DEVICES, AS DETERMINED BY THE FOREST CONSERVATION INSPECTOR, MUST BE MADE WITHIN THE TIMEFRAME ESTABLISHED BY THE INSPECTOR.

**POST-CONSTRUCTION:**

- AFTER CONSTRUCTION IS COMPLETED, AN INSPECTION SHALL BE REQUESTED. CORRECTIVE MEASURES MAY INCLUDE:
  - REMOVAL AND REPLACEMENT OF DEAD AND DYING TREES
  - PRUNING OF DEAD OR DECLINING LIMBS
  - SOIL AERATION
  - FERTILIZATION
  - WATERING
  - WOUND REPAIR
  - CLEAN UP OF RETENTION AREAS

AFTER INSPECTION AND COMPLETION OF CORRECTIVE MEASURES HAVE BEEN UNDERTAKEN, ALL TEMPORARY PROTECTION DEVICES SHALL BE REMOVED FROM THE SITE. REMOVAL OF TREE PROTECTION DEVICES THAT ALSO OPERATE FOR EROSION AND SEDIMENT CONTROL MUST BE COORDINATED WITH BOTH THE DEPARTMENT OF PERMITTING SERVICES AND THE FOREST CONSERVATION INSPECTOR. NO ADDITIONAL GRADING, SODDING, OR BURIAL MAY TAKE PLACE AFTER THE TREE PROTECTION FENCING IS REMOVED.

**INSPECTION:**

ALL FIELD INSPECTIONS MUST BE REQUESTED BY THE APPLICANT. INSPECTIONS MUST BE CONDUCTED AS FOLLOWS:

**TREE SAVE PLANS AND FOREST CONSERVATION PLANS WITHOUT PLANTING REQUIREMENTS**

- AFTER THE LIMITS OF DISTURBANCE HAVE BEEN STAKED AND FLAGGED, BUT BEFORE ANY CLEARING OR GRADING BEGINS.
- AFTER NECESSARY STRESS REDUCTION MEASURES HAVE BEEN COMPLETED AND PROTECTION MEASURES HAVE BEEN INSTALLED, BUT BEFORE ANY CLEARING AND GRADING BEGINS.
- AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITIES, BUT BEFORE REMOVAL OF TREE PROTECTION FENCING, TO DETERMINE THE LEVEL OF COMPLIANCE WITH THE PROVISIONS OF THE FOREST CONSERVATION.

**ADDITIONAL REQUIREMENTS FOR PLANS WITH PLANTING REQUIREMENTS**

- BEFORE THE START OF ANY REQUIRED REFORESTATION AND AFFORESTATION PLANTING
- AFTER THE REQUIRED REFORESTATION AND AFFORESTATION PLANTING HAS BEEN COMPLETED TO VERIFY THAT THE PLANTING IS ACCEPTABLE AND PRIOR TO THE START THE MAINTENANCE PERIOD.
- AT THE END OF THE MAINTENANCE PERIOD TO DETERMINE THE LEVEL OF COMPLIANCE WITH THE PROVISIONS OF THE PLANTING PLAN, AND IF APPROPRIATE, RELEASE OF THE PERFORMANCE BOND.

**NOTE:**

GENERALLY, ROOT PRUNING AND TREE PROTECTION FENCE ARE LOCATED AT THE LIMIT OF DISTURBANCE. THEREFORE, THE LAYOUT OF LINES DEPICTING TREE PROTECTION FENCE AND ROOT PRUNING IS DIAGNOSTIC, AND FOR REFERENCE ONLY. PLEASE REFER TO THE STRESS REDUCTION DETAIL FOR MORE INFORMATION.

**DEVELOPER'S CERTIFICATE**

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF THE APPROVED FINAL FOREST CONSERVATION PLAN NO. PP1995001 INCLUDING FINANCIAL BONDING, FOREST PLANTING, MAINTENANCE, AND ALL OTHER APPLICABLE AGREEMENTS.

DEVELOPER'S NAME: M-NCPPC PARK DEVELOPMENT DIVISION  
 PRINTED COMPANY NAME: \_\_\_\_\_

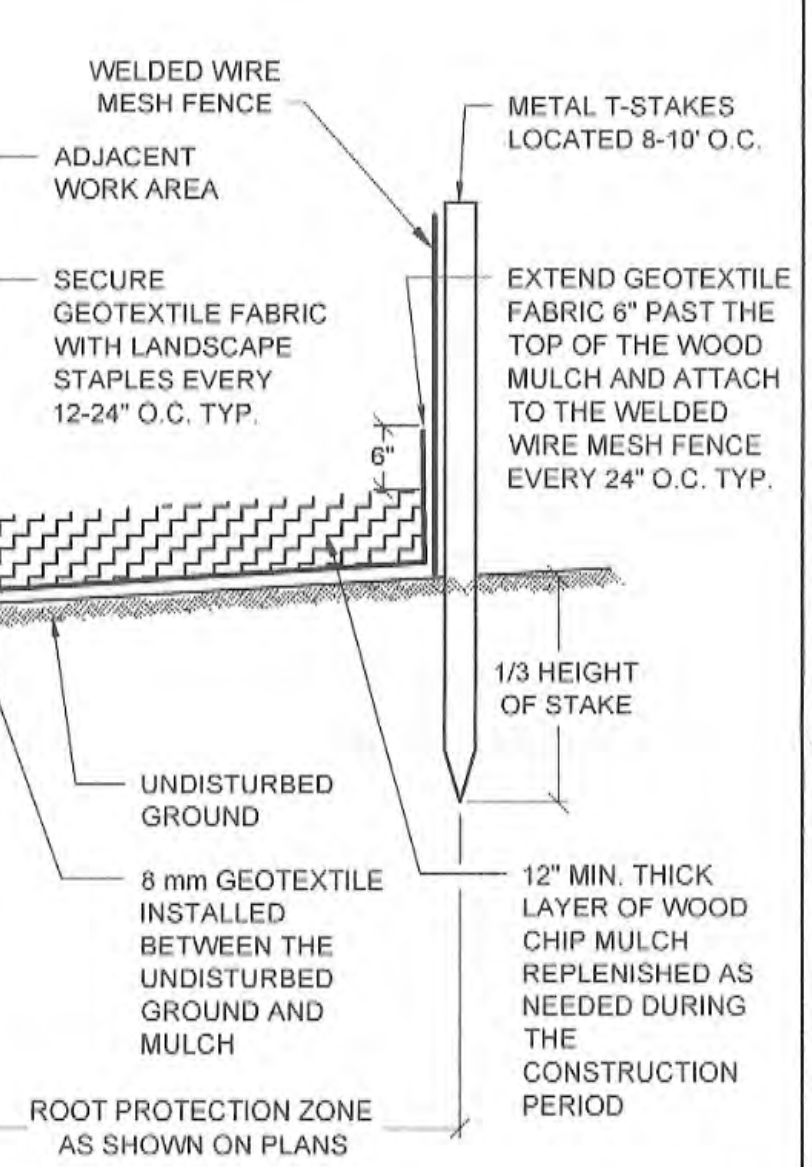
CONTACT PERSON OR OWNER: CHING-FANG CHEN  
 PRINTED NAME: \_\_\_\_\_

ADDRESS: 9500 BRUNETT AVENUE, SILVER SPRING, MD 20901

PHONE AND EMAIL: 301-495-2557 ching-fang.chen@montgomeryparks.org

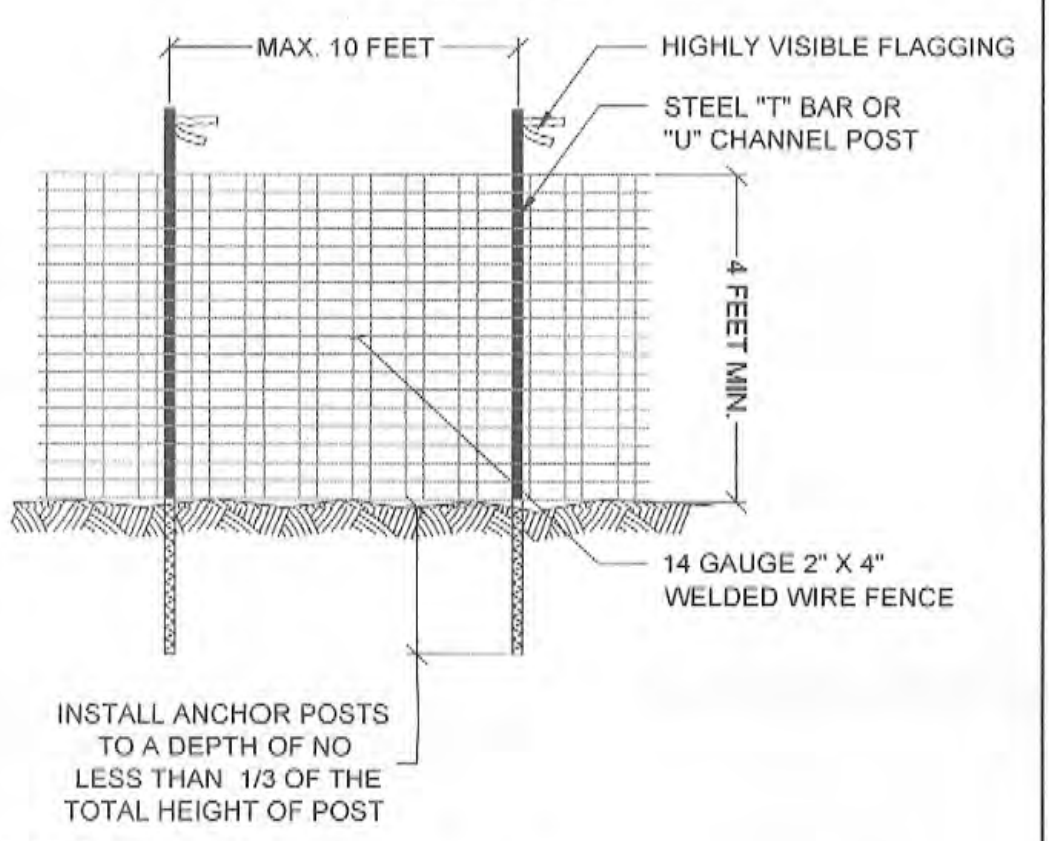
SIGNATURE: \_\_\_\_\_

**MULCH MAT**



NOT TO SCALE

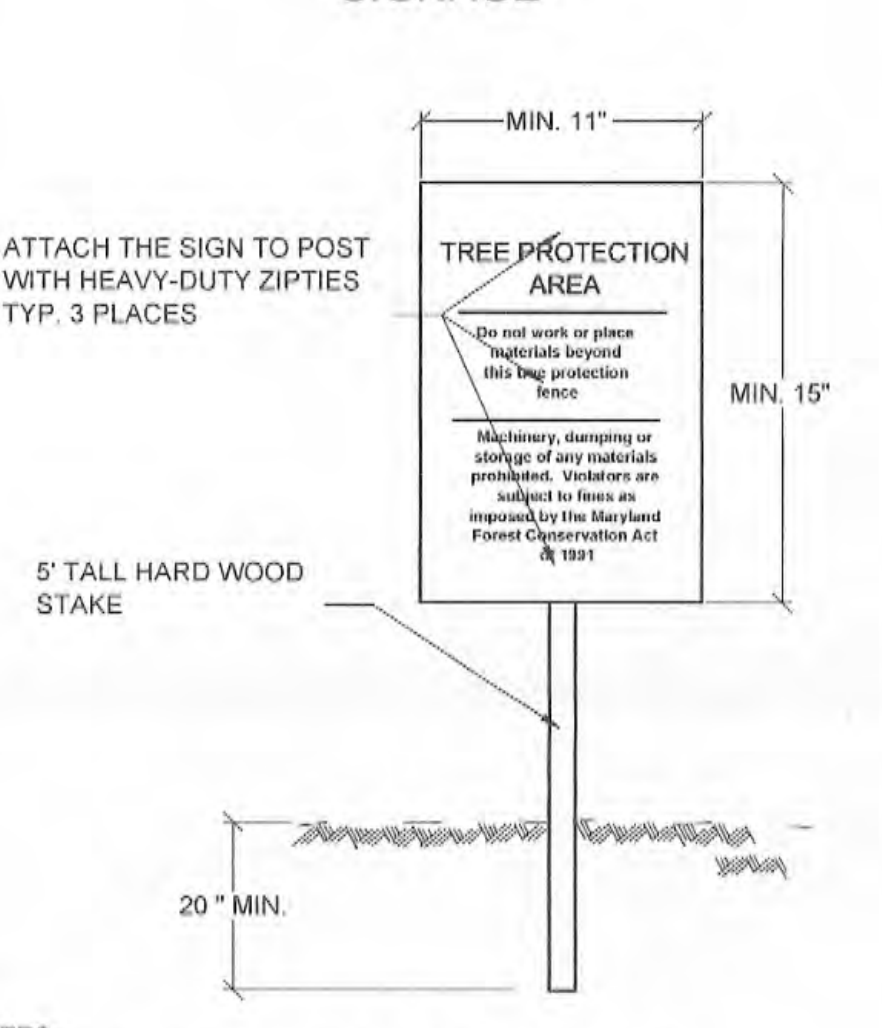
**TREE PROTECTION FENCING WIRE MESH**



- NOTES:
- FOREST PROTECTION DEVICE ONLY
  - SET RETENTION AREA AS PART OF THE REVIEW PROCESS
  - STAKE & FLAG THE BOUNDARIES OF RETENTION AREA PRIOR TO INSTALLATION OF DEVICE
  - AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR THE SIGNS.
  - PROTECTIVE SIGNAGE IS REQUIRED
  - MAINTAIN THE DEVICE THROUGHOUT CONSTRUCTION.
  - ALTERNATIVE TREE PROTECTION DEVICES (IN LIEU OF WIRE MESH): SUPER SILT FENCE OR 3 STRANDS OF SMOOTH 12 GAUGE WIRE. ATTACH HIGHLY VISIBLE FLAGGING TO WIRES @ 12" O.C.

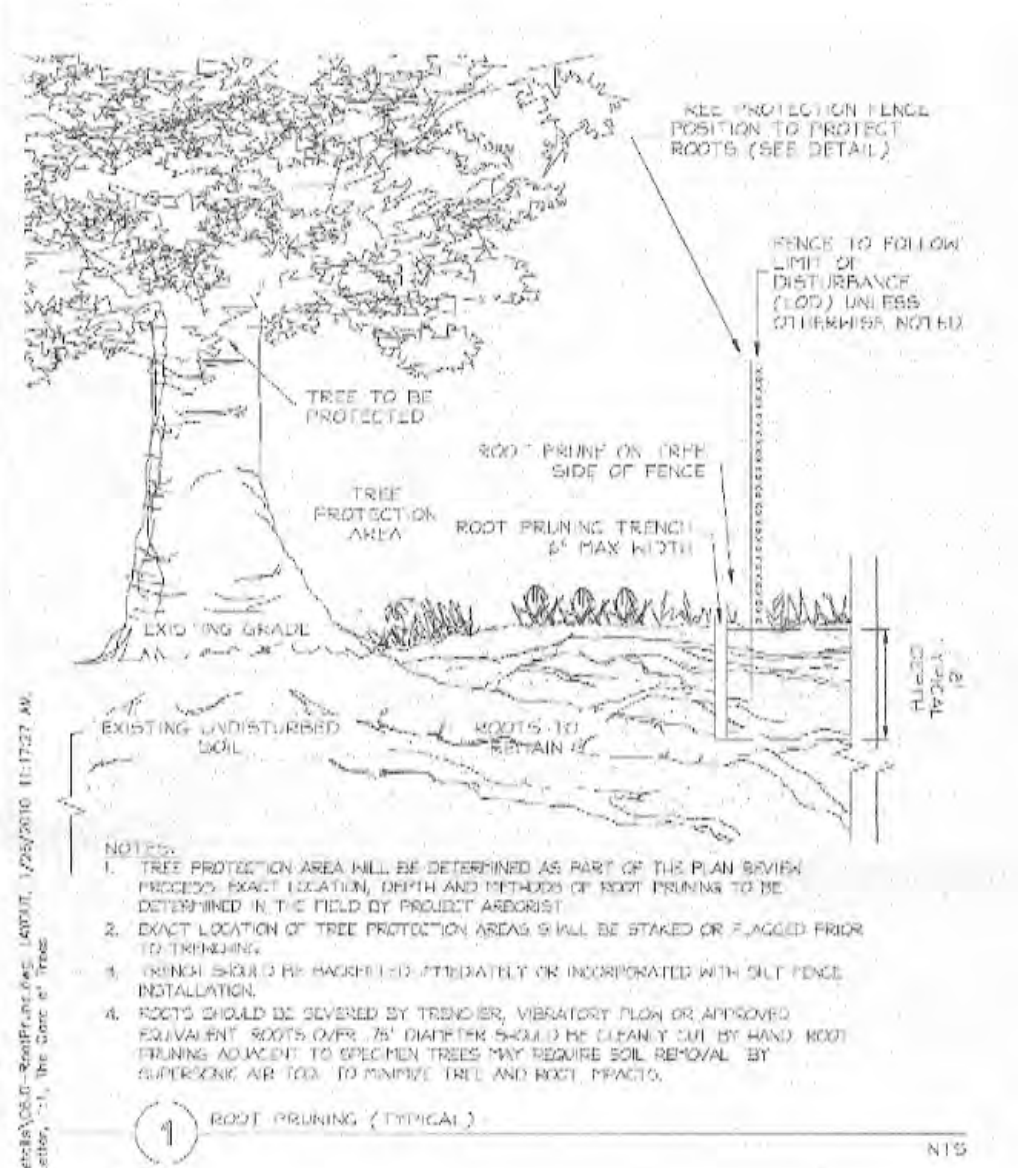
NOT TO SCALE

**TEMPORARY TREE PROTECTION SIGNAGE**



- NOTES:
- ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.
  - SIGNS SHOULD BE PROPERLY MAINTAINED.
  - AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR THE SIGNS.

NOT TO SCALE



NOTES:

- TREE PROTECT ON AREA WILL BE DETERMINED AS PART OF THE PLAN REVIEW PROCESS. EXACT LOCATION, DEPTH AND HEIGHT OF ROOT PRUNING TO BE DETERMINED IN THE FIELD BY PROJECT ARBORIST.
- EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO INSTALLATION.
- WORK SHALL BE PROCEEDED TEMPORARILY ON UNDISTURBED WITH SILT FENCE INSTALLATION.
- ROOTS SHOULD BE PROTECTED BY TRENCHING, WIRE MESH OR APPROVED EQUIVALENT. ROOTS OVER AN EXISTING ROAD OR DRIVE SHALL BE CUT BY HAND ROOT TRAINING ADJACENT TO EXISTING TREES THAT REQUIRE SOIL REMOVAL BY EXISTING ROAD TO EXPOSE THE TREE AND ROOT PRUNING.

**THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION**

Final Forest Conservation Plan APPROVAL 1995001

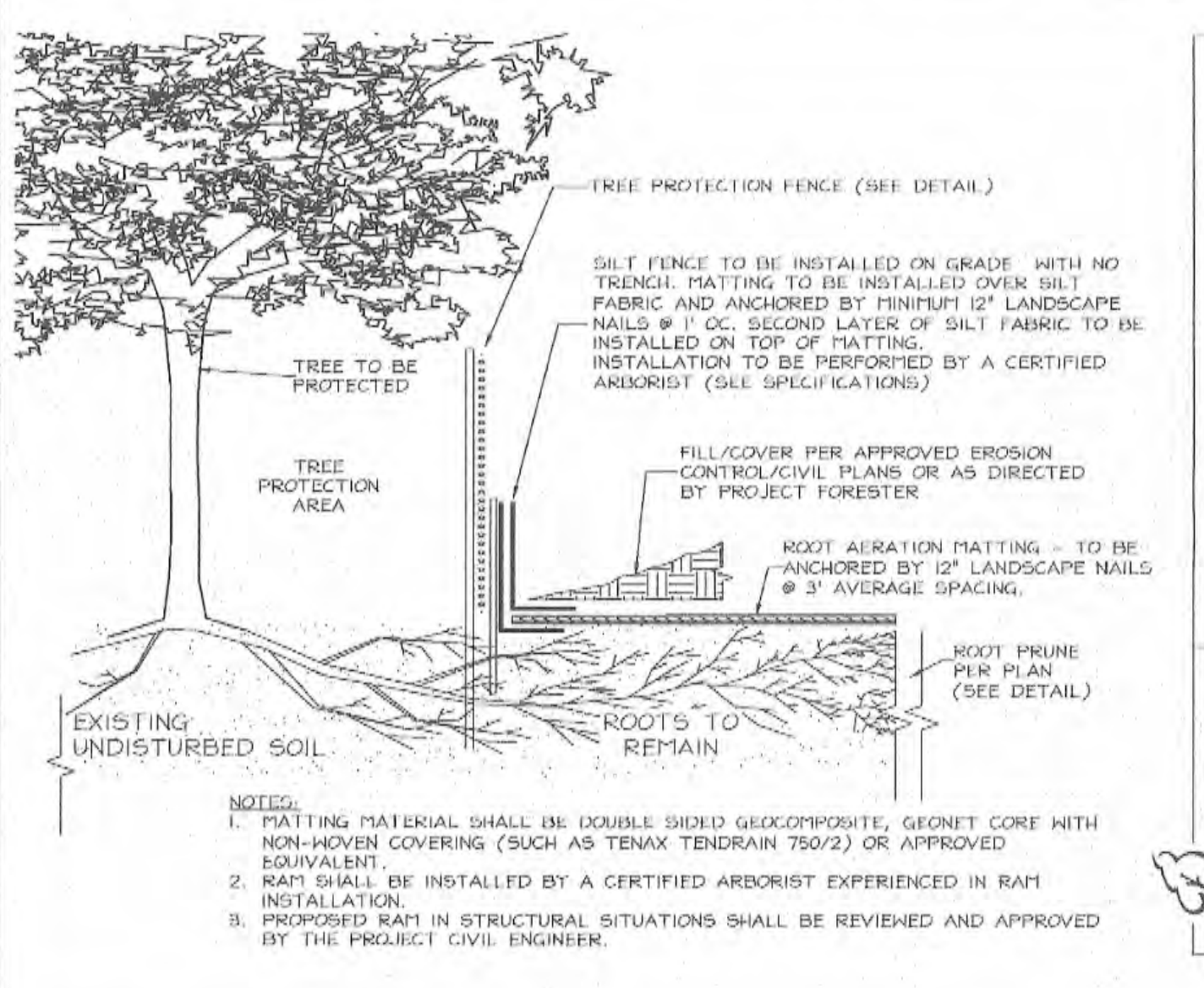
Plan No. PP1995001  
 Signature: *Andrew E. Streagle* Date: 2/11/14



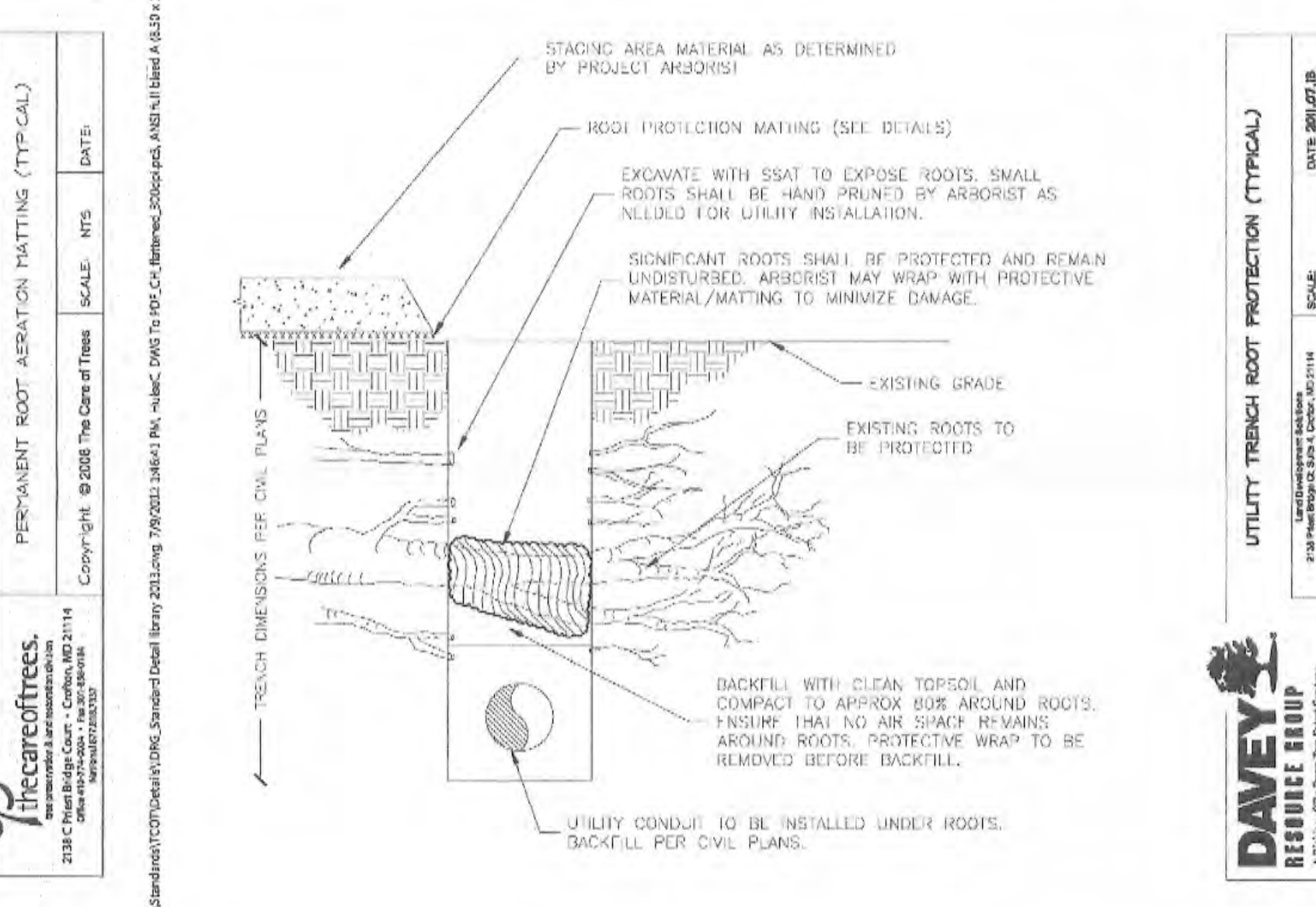
TREE ASSESSMENT AND TREE SAVE RECOMMENDATIONS PREPARED UNDER MY SUPERVISION

ANDREW E. STREAGLE  
 ISA CERTIFIED ARBORIST #MA-4826A

THIS PLAN IS FOR TREE PROTECTION/ FOREST CONSERVATION PLAN PURPOSES ONLY



- NOTES:
- PLANTING MATERIAL SHALL BE DOUBLE SHIELD GEOTEKCOMPRIE, GEONET CORE WITH NON-HOVEN COVERING (SUCH AS TENAX TENDRAIN 750/2) OR APPROVED EQUIVALENT.
  - RAM SHALL BE INSTALLED BY A CERTIFIED ARBORIST EXPERIENCED IN RAM INSTALLATION.
  - PROPOSED RAM IN STRUCTURAL SITUATIONS SHALL BE REVIEWED AND APPROVED BY THE PROJECT CIVIL ENGINEER.



PERMANENT ROOT AERATION MATTING (TTP-CAL)

DATE: \_\_\_\_\_

SCALE: NTS

Copyright © 2008 The Care of Trees

23182 Fleet Bridge Court • Columbia, MD 21114

www.thecareoftrees.com

DESIGN CONSULTANT	
A. MORTON THOMAS AND ASSOCIATES, INC.	AMT/SYMBIOSIS-SIRI
Designer's Name	10/14/13
12750 TWINBROOK PARKWAY	Date
Architect	MM
Address	10/14/13
ROCKVILLE, MD 20852	Date
City/State/Zip	WJM
301-891-2545	Date
Telephone Number	AMT
	10/14/13
	Date

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland.

License No. 3520

Expiration Date 03/19/2015

STEVEN TORGERSON

The Maryland-National Capital Park and Planning Commission

Montgomery County Department of Parks  
 9500 Brunnett Avenue  
 Silver Spring, Maryland 20901  
 (301) 495-2535

M-NCPPC REVIEW AND APPROVAL	
Project Manager	10-4-13
Engineer	10-4-13
Construction Manager	10/4/13
Park Manager	Date

ISSUED FOR PROCUREMENT ON	
Rev. No.	Date

FOREST CONSERVATION DETAILS	
Brookside Gardens: Entrance & Parking Renovations	
1800 Glenallan Ave, Wheaton, MD 20902	
SCALE: NTS	Liber 7099 Folio 519

RECEIVED M-NCPPC FEB 4 2014 MONTGOMERY COUNTY PLANNING DEPARTMENT FC5.1 SHEET 123 of 141



FINAL SCANNED: PLAN SCANNED: D3B PARK CODE: 038

Table with columns: Tree #, DBH, Common Name, Botanical Name, Condition Rating, Approx Canopy Radius (FT), CRZ, Priority (1-4), Removal by Site Work Contractor, Removal by Arborist, Recommended Preservation Measures (Root Prune, Tree Protection, etc.), Coordination Notes, Additional Site Assessment Notes, Condition Notes.

Table with columns: Tree #, DBH, Common Name, Botanical Name, Condition Rating, Approx Canopy Radius (FT), CRZ, Priority (1-4), Removal by Site Work Contractor, Removal by Arborist, Recommended Preservation Measures (Root Prune, Tree Protection, etc.), Coordination Notes, Additional Site Assessment Notes, Condition Notes.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Final Forest Conservation Plan APPROVAL 1995001  
Plan No. PP2006001  
Signature: [Signature] Date: 2/7/10

DEVELOPER'S CERTIFICATE

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF THE APPROVED FINAL FOREST CONSERVATION PLAN NO. PP1995001 INCLUDING, FINANCIAL BONDING, FOREST PLANTING, MAINTENANCE, AND ALL OTHER APPLICABLE AGREEMENTS.

DEVELOPER'S NAME: M-NCPDC PARK DEVELOPMENT DIVISION  
CONTACT PERSON OR OWNER: CHING-FANG CHEN  
ADDRESS: 9500 BRUNETT AVENUE, SILVER SPRING, MD 20901  
PHONE AND EMAIL: 301-495-2557 / ching-fang.chen@montgomeryparks.org

THIS PLAN IS FOR TREE PROTECTION/ FOREST CONSERVATION PLAN PURPOSES ONLY  
ISA CERTIFIED ARBORIST  
TREE ASSESSMENT AND TREE SAVE RECOMMENDATIONS PREPARED UNDER MY SUPERVISION  
Signature: [Signature] 2014-9-03  
ANDREW E. STREAGLE  
ISA CERTIFIED ARBORIST #MA-4826A

A. MORTON THOMAS AND ASSOCIATES, INC.  
12750 TWAINBROOK PARKWAY  
ROCKVILLE, MD 20852  
301-881-2545

DESIGN CONSULTANT  
AMT/SYMBIOSIS-SIRI 10/14/13  
WALDON STUDIOS 10/14/13  
SAJ 10/14/13  
AMT 10/14/13

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland.  
License No. 3520  
Expiration Date: 03/19/15  
STEVEN TORGERSON

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

M-NCPDC REVIEW AND APPROVAL  
Project Manager: [Signature] 10-4-13  
Engineer: [Signature] 10-4-13  
Construction Manager: [Signature] 10/4/13

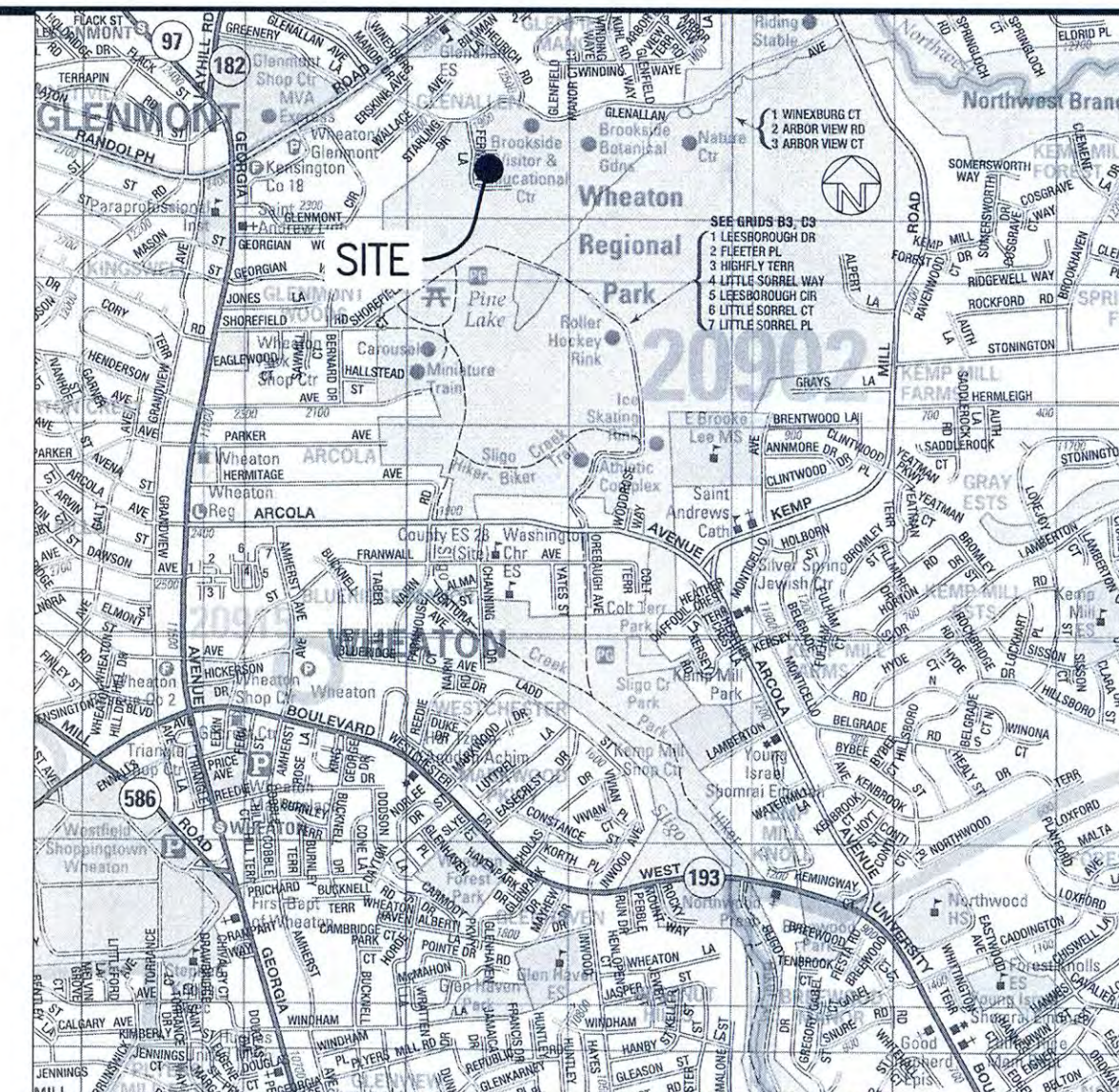
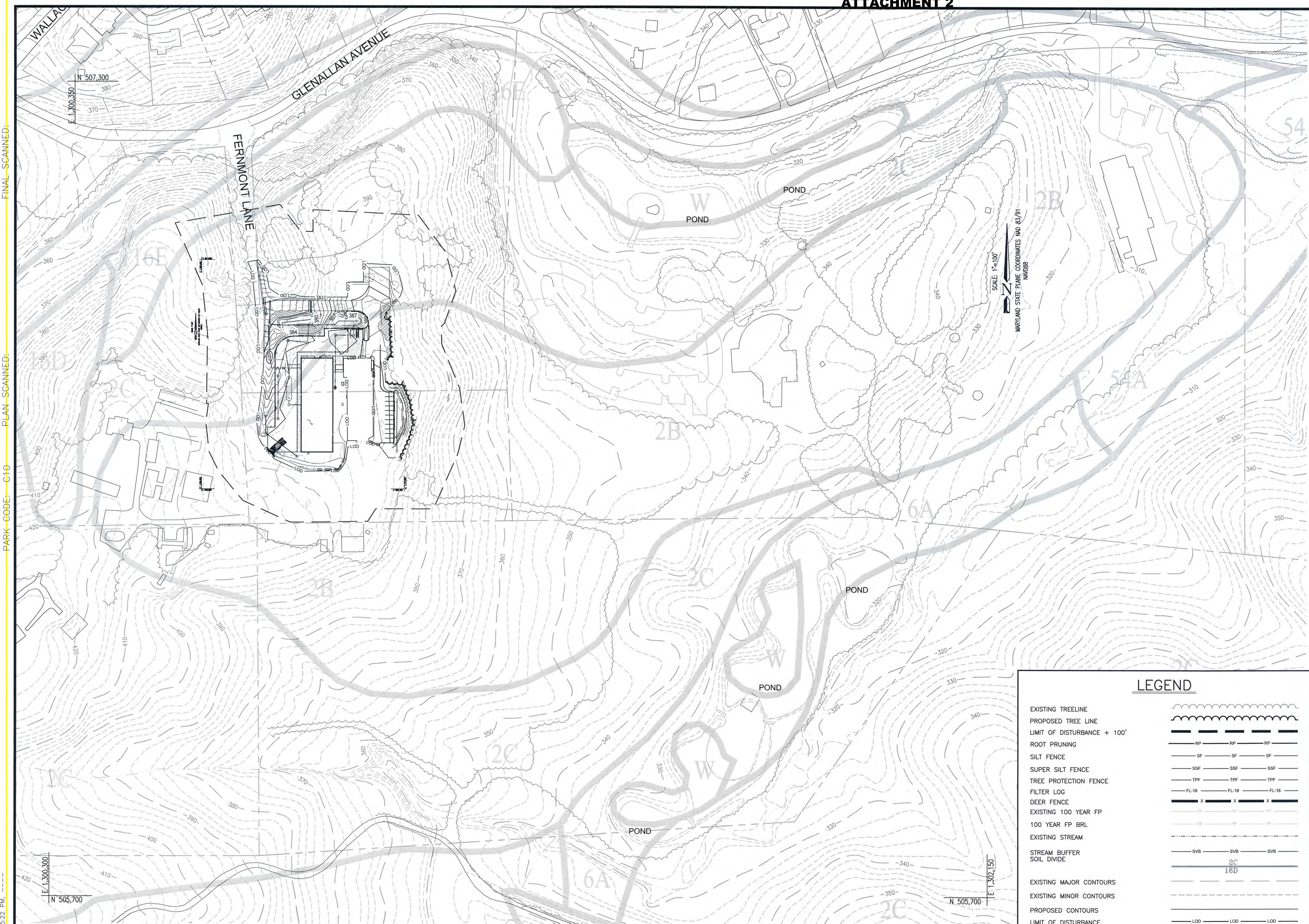
ISSUED FOR PROCUREMENT ON  
REVISIONS table with columns: Rev. No., Date, Description

FOREST CONSERVATION DETAILS  
Brookside Gardens: Entrance & Parking Renovations  
1800 Glenallan Ave, Wheaton, MD 20902  
SCALE: N7S  
Liber 7099 Folio 519

RECEIVED M-NCPDC  
FEB - 4 2014  
MONTGOMERY COUNTY PLANNING DEPARTMENT  
FCS.2  
SHEET 124 of 141

Vertical text on the right edge: Final Scanned: Plan Scanned: D3B Park Code: 038





**VICINITY MAP**  
 SCALE: 1"=2000' Map 5286, Grid D1  
 Map Copyright © Kappa LLC  
 (800)-829-6277 Used with Permission

**PROPERTY INFORMATION**  
 (FOR SUBJECT PARCELS)  
 PARCEL NUMBER: P59; P658; P815; P982  
 ACCOUNT NUMBER: 00967788; 00972001; 00971963; 00971735  
 SUBDIVISION NUMBER: 502; 0001  
 ADC MAP/GRID: MAP 5286 / GRID D1  
 LIBER/FOLIO: L.04431/F.04025; L.02762/F.0338;  
 L.02749/F.0337; L.02626/F.0314  
 TAX MAP: JQ123; JQ122  
 WSSC GRID: 216NW02  
 TOTAL TRACT AREA: 60.00 Ac.

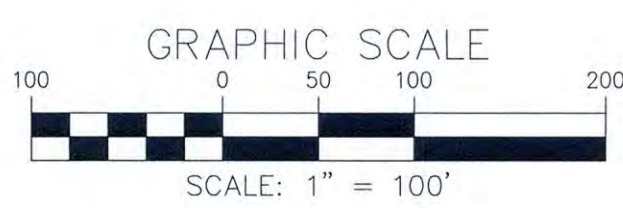
- GENERAL NOTES**
1. THE LIMIT OF 60 ACRE TRACT SHOWN ON THIS PLAN IS FROM INFORMATION PROVIDED BY CPJ ASSOCIATES.
  2. ZONING FOR THESE PARCELS IS R-90.
  3. THE TOPOGRAPHIC INFORMATION ON THIS PLAN IS FROM LIDAR PROVIDED BY MONTGOMERY COUNTY, AND FROM FIELD SURVEYS FROM SNIDER & ASSOCIATES AND CPJ ASSOCIATES.
  4. THE SITE IS LOCATED WITHIN THE NORTHWEST BRANCH WATERSHED WHICH IS DESIGNATED USE-IV/IV-P.
  5. THE 100 YEAR FLOODPLAIN ON THIS SITE IS SHOWN AS DETERMINED FROM FEMA FLOOD MAP 24031C0370D.
  6. WETLANDS ONSITE ARE SHOWN ON THE PLAN.
  7. THE SITE IS NOT WITHIN A SPECIAL PROTECTION AREA.
  8. THERE ARE NO KNOWN RECORDS OR READILY OBSERVABLE ARCHAEOLOGICAL, HISTORICAL, OR CULTURAL FEATURES ON THIS SITE.
  9. FIELD WORK WAS CONDUCTED BY ERIC J. STURM, RLA OF CPJ ASSOCIATES IN APRIL, 2015. TREES WERE MEASURED USING A D-TAPE. A PREVIOUS TREE SURVEY WAS CONDUCTED BY A. MORTON THOMAS & ASSOCIATES IN MAY AND OCTOBER, 2012.
  10. THERE ARE NO KNOWN RECORDS OR READILY OBSERVABLE RARE, THREATENED, OR ENDANGERED SPECIES OR CRITICAL HABITATS ON THE SITE.
  11. THE SIGNIFICANT AND SPECIMEN TREES ON THE SUBJECT PROPERTY ARE SHOWN ON THE PLANS.
  12. THE MONTGOMERY COUNTY CHAMPION TREES ON THIS PARCEL ARE SHOWN ON THE PLAN.

**LEGEND**

EXISTING TREELINE	
PROPOSED TREE LINE	
LIMIT OF DISTURBANCE + 100'	
ROOT PRUNING	
SILT FENCE	
SUPER SILT FENCE	
TREE PROTECTION FENCE	
FILTER LOG	
DEER FENCE	
EXISTING 100 YEAR FP	
100 YEAR FP BRL	
EXISTING STREAM	
STREAM BUFFER	
SOIL DIVIDE	
EXISTING MAJOR CONTOURS	
EXISTING MINOR CONTOURS	
PROPOSED CONTOURS	
LIMIT OF DISTURBANCE	
EXISTING WETLANDS	
EXISTING 25' WETLANDS BUFFER	
FOREST STAND	
REFORESTATION AREA	
SANITARY SEWER EASEMENT LIMITS	
FOREST CLEARING AREA	

**NR/IFSD NUMBER**  
 #4-94149  
 APPROVED: 1997-10-03  
 UPDATED: 2007-05-04

**FCP NUMBERS**  
 #P-95001  
 APPROVED: 1995-10-05  
 #PP1995001  
 APPROVED: 2014-02-07



**DEVELOPER'S CERTIFICATE**  
 The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. \_\_\_\_\_ including financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: MANPCPC Park Development Division  
 Printed Company Name

Contact Person or Owner: Mark Buenavista  
 Printed Name

Address: 9500 Brunnet Avenue, Silver Spring, MD 20901

Phone & Email: 301-495-2522 mark.buenavista@montgomeryparks.org

Signature: \_\_\_\_\_

**PROFESSIONAL CERTIFICATION**  
 I hereby certify that this plan is prepared in accordance with Maryland Forest Conservation Regulations.

KEVIN T. GARVEY, RLA  
 DATE: 2/12/2016  
 REGISTERED LANDSCAPE ARCHITECT # MD 3801

**CIVIL ENGINEERING CONSULTANT:**  
**CPJ Charles P. Johnson & Associates, Inc.**  
 Civil and Environmental Engineers • Planners • Landscape • Architects • Surveyors  
 1751 Elton Rd., Ste 300 Silver Spring, MD 20903 301-434-7000 Fax: 301-434-9394  
 www.cpja.com • Silver Spring, MD • Gaithersburg, MD • Annapolis, MD • College Park, MD • Frederick, MD • Fairfax, VA

**NOTE:**  
 THIS PLAN IS FOR TREE PROTECTION / FOREST CONSERVATION PLAN PURPOSES ONLY

DESIGN TEAM	Checked By:	DESIGN	Checked By:
Structural Engineer	Checked By:	QA/QC Reviewer	Checked By:
Structural Engineering Group	Checked By:	Avanturs LLC	Checked By:
Landscape Architect	Checked By:	Civil Engineer	Checked By:
Annapolis Landscape Architects	Checked By:	Charles P. Johnson & Assoc.	Checked By:
Architect	Checked By:	Geotechnical Engineer	Checked By:
Greenhouse Designer	Checked By:	GeoConcepts Engineering, Inc	Checked By:
Van Wingerden Greenhouse Co.	Checked By:	MEP Engineer	Checked By:
	Checked By:	Setty & Associates	Checked By:
	Checked By:	Arborist	Checked By:
	Checked By:	Pitchford Associates	Checked By:

**Professional Certification** I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 19908

Expiration Date 1/6/2017



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

**REVIEW AND APPROVAL**

Daryl Starks Project Manager	Date
Todd Dinkins Construction Manager	Date
Mark Buenavista Park Manager	Date

**ISSUED FOR PROCUREMENT ON**

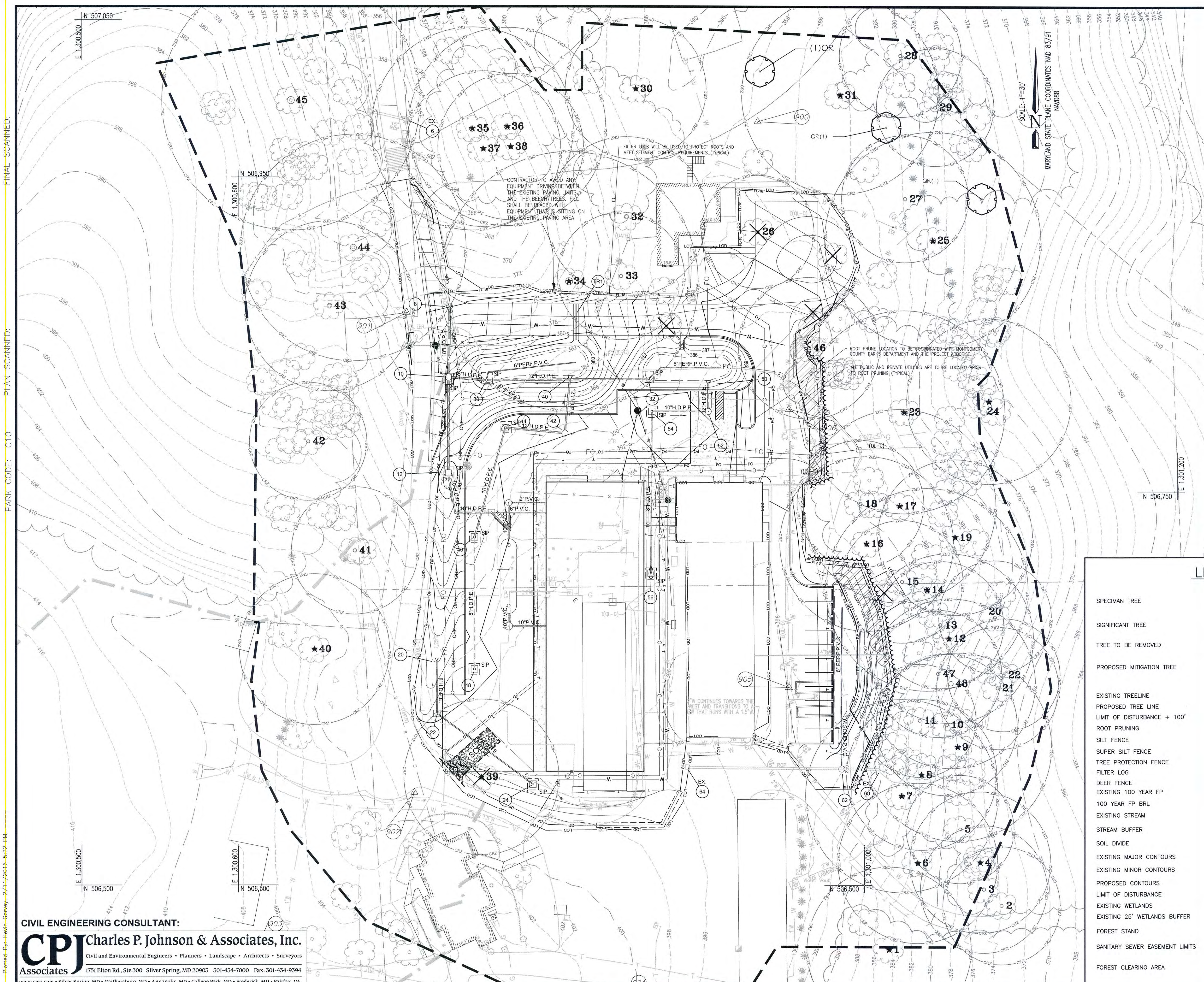
REVISIONS		
Rev. No.	Date	Description

**FOREST CONSERVATION PLAN OVERALL PLAN VIEW**  
**Brookside Gardens Greenhouse and Site Work**  
 SCALE: 1" = 100' Liber 4428 Folio 388  
 4430 188

**FCP DWG. # 1 of 3**  
**FC-1**  
 SHT. # 26 of 69

FINAL SCANNED: PLAN SCANNED: C10 PARK CODE: C10  
 Plotted By: Kevin Garvey, 2/11/2016 5:22 PM  
 N:\4593A\DWG\22-01.dwg Layout1





FOREST CONSERVATION WORKSHEET  
BROOKSIDE GARDENS GREENHOUSE  
WORKSHEET FROM APPROVED FOREST CONSERVATION PLAN PP-1995001

NET TRACT AREA:

A. Total tract area ...	60.00
B. Land dedication acres (parks, county facility, etc.) ...	0.00
C. Land dedication for roads or utilities (not being constructed by this plan) ...	0.00
D. Area to remain in commercial agricultural production/use ...	0.00
E. Other deductions (specify) .....	0.00
F. Net Tract Area .....	60.00

LAND USE CATEGORY: (from Trees Technical Manual)  
Input the number "1" under the appropriate land use, limit to only one entry.

ARA	MDR	IDA	HDR	MPD	CIA
0	0	1	0	0	0

G. Afforestation Threshold ... 15% x F = 9.00  
H. Conservation Threshold ... 20% x F = 12.00

EXISTING FOREST COVER:

I. Existing forest cover .....	27.40
J. Area of forest above afforestation threshold .....	18.40
K. Area of forest above conservation threshold .....	15.40

BREAK EVEN POINT:

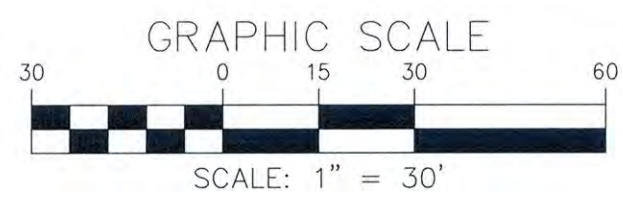
L. Forest retention above threshold with no mitigation .....	15.08
M. Clearing permitted without mitigation .....	12.32

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared .....	5.06
O. Total area of forest to be retained .....	22.34
<b>ADDITIONAL FOREST CLEARING</b>	<b>0.06</b>

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold .....	1.27
Q. Reforestation for clearing below conservation threshold .....	0.00
R. Credit for retention above conservation threshold .....	10.34
S. Total reforestation required .....	0.00
T. Total afforestation required .....	0.00
U. Credit for landscaping (may not exceed 20% of "S") .....	0.00
V. Total reforestation and afforestation required .....	0.00
Afforestation Provided .....	0.00
<b>FOREST MITIGATION REQUIRED</b>	<b>0.06</b>



**LEGEND**

SPECIMEN TREE	★1
SIGNIFICANT TREE	★1
TREE TO BE REMOVED	✕
PROPOSED MITIGATION TREE	○
EXISTING TREELINE	—
PROPOSED TREE LINE	—
LIMIT OF DISTURBANCE + 100'	—
ROOT PRUNING	RP RP RP
SILT FENCE	SF SF SF
SUPER SILT FENCE	SSF SSF SSF
TREE PROTECTION FENCE	TPF TPF TPF
FILTER LOG	FL-18 FL-18 FL-18
DEER FENCE	X X X
100 YEAR FP BRL	FP FP FP
EXISTING STREAM	—
STREAM BUFFER	SVB SVB SVB
SOIL DIVIDE	2C
EXISTING MAJOR CONTOURS	18D
EXISTING MINOR CONTOURS	—
PROPOSED CONTOURS	—
LIMIT OF DISTURBANCE	LOD LOD LOD
EXISTING WETLANDS	W W W
EXISTING 25' WETLANDS BUFFER	WB WB WB
FOREST STAND	FC FC FC
SANITARY SEWER EASEMENT LIMITS	—
FOREST CLEARING AREA	—

**Tract Information**

Acres of Tract	60.00 Acres
Acres of Tract remaining as part of Agricultural Use	0.00 Acres
Acres of Road and Utility R/W not improved on	0.00 Acres
Acres of total existing forest	22.34 Acres
Acres of total forest retention	22.28 Acres
Acres of total forest cleared	0.06 Acres
Land Use Category	Institutional
Conservation Threshold	20 %
Afforestation Threshold	15 %

**Wetlands**

Acres of Forest Retained	0.00 Acres
Acres of Forest Cleared	0.00 Acres
Acres of Forest Planted	0.00 Acres

**100 Year Floodplain**

Acres of Forest Retained	2.92 Acres
Acres of Forest Cleared	0.002 Acres
Acres of Forest Planted	0.00 Acres

**Stream Buffers**

Acres of Forest Retained	9.46 Acres
Acres of Forest Cleared	0.004 Acres
Acres of Forest Planted	0.00 Acres

**Priority Areas**

Acres of Forest Retained	8.66 Acres
Acres of Forest Cleared	0.004 Acres
Acres of Forest Planted	0.00 Acres

**Stream Buffers (Seq. 826)**

Length	5084 LF
Average Width	125 LF

**PROFESSIONAL CERTIFICATION**  
I hereby certify that this plan is prepared in accordance with Maryland Forest Conservation Regulations.

3/13/2016  
DATE

KEVIN T. GARVEY, RLA  
REGISTERED LANDSCAPE ARCHITECT # MD 3801

**DEVELOPER'S CERTIFICATE**  
The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. \_\_\_\_\_ including financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: M-NCPPC Park Development Division  
Printed Company Name

Contact Person or Owner: Mark Buenavista  
Printed Name

Address: 9500 Brunnet Avenue, Silver Spring, MD 20901

Phone & Email: 301-495-2522 mark.buenavista@montgomeryparks.org

Signature: \_\_\_\_\_

**CIVIL ENGINEERING CONSULTANT:**  
**CPJ Charles P. Johnson & Associates, Inc.**  
Civil and Environmental Engineers • Planners • Landscape • Architects • Surveyors  
1751 Elton Rd., Ste 300 Silver Spring, MD 20903 301-434-7000 Fax: 301-434-9394  
www.cpja.com • Silver Spring, MD • Gaithersburg, MD • Annapolis, MD • College Park, MD • Frederick, MD • Fairfax, VA

DESIGN TEAM	DESIGN	Checked By:
Structural Engineer Structural Engineering Group	Checked By: Avanturs, LLC	Checked By: Avanturs, LLC
Landscape Architect Annapolis Landscape Architects	Checked By: Charles P. Johnson & Assoc. Geotechnical Engineer GeoConcepts Engineering, Inc	Checked By: Charles P. Johnson & Assoc. GeoConcepts Engineering, Inc
Greenhouse Designer Van Wingerden Greenhouse Co.	Checked By: MEP Engineer Setty & Associates Arborist Pitchford Associates	Checked By: MEP Engineer Setty & Associates Arborist Pitchford Associates

**Professional Certification.** I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 19908  
Expiration Date 1/6/2017

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

**REVIEW AND APPROVAL**

Daryl Starks Project Manager	Date
Todd Dinkins Construction Manager	Date
Mark Buenavista Park Manager	Date

**ISSUED FOR PROCUREMENT ON**

Rev. No.	Date	Description

**FOREST CONSERVATION PLAN  
PLAN VIEW**  
**Brookside Gardens Greenhouse and  
Site Work**  
SCALE: 1" = 30'

Liber 4428  
4430

Folio 388  
188

**FCP  
DWG. # 2 of 3**  
**FC-2**  
**SHT. # 27 of 69**

FINAL SCANNED: PARK CODE: C10 PLAN SCANNED: N:\4902A\DWG\22-01.dwg - Layout2 - Plotted By: Kevin Garvey - 2/11/2016 5:32 PM



FINAL SCANNED: PLAN CODE: C10 PARK CODE: 110

**Sequence of Events for Property Owners Required to Comply with Forest Conservation and/or Tree-Save Plans**

**Pre-Construction**

- An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged, but before any clearing or grading begins. The property owner should contact the Montgomery County Planning Department inspection staff before construction to verify the limits of disturbance and discuss tree protection and tree care measures. The developer's representative, construction superintendent, ISA certified arborist or Maryland-licensed tree expert that will implement the tree protection measures, forest conservation inspector, and Department of Permitting Services (DPS) sediment control inspector should attend this pre-construction meeting.
- No clearing or grading shall begin before stress-reduction measures have been implemented. Appropriate measures may include, but are not limited to:
  - Root pruning
  - Crown reduction or pruning
  - Watering
  - Fertilizing
  - Vertical mulching
  - Root aeration matting
 Measures not specified on the forest conservation plan may be required as determined by the forest conservation inspector in coordination with the arborist.
- A Maryland-licensed tree expert or an International Society of Arboriculture-certified arborist must perform all stress reduction measures. Documentation of stress reduction measures must be either observed by the forest conservation inspector or sent to the inspector at 8787 Georgia Avenue, Silver Spring, MD 20910. The forest conservation inspector will determine the exact method to convey the stress reduction measures during the pre-construction meeting.
- Temporary tree protection devices shall be installed per the Forest Conservation Plan/Tree Save Plan and prior to any construction activities. Tree protection fencing locations should be staked prior to the pre-construction meeting. The forest conservation inspector, in coordination with the DPS sediment control inspector, may make field adjustments to increase the survivability of trees and forest shows as saved on the approved plan. Temporary tree protect devices may include:
  - Chain link fence (four feet high)

CONSTRUCTION FOR THE DISTURBANCE OF CONSTRUCTION PROJECTS AND THROUGH THE DISTURBANCE without prior approval from the forest conservation inspector. No equipment, trucks, materials, or debris may be stored within the tree protection fence areas during the entire construction project. No vehicle or equipment access to the fenced area will be permitted. Tree protection shall not be removed without prior approval of forest conservation inspector.

- Forest retention area signs shall be installed as required by the forest conservation inspector, or as shown on the approved plan.
- Long-term protection devices will be installed per the Forest Conservation Plan/Tree Save Plan and attached details. Installation will occur at the appropriate time during the construction project. Refer to the plan drawing for long-term protection measures to be installed.

**During Construction**

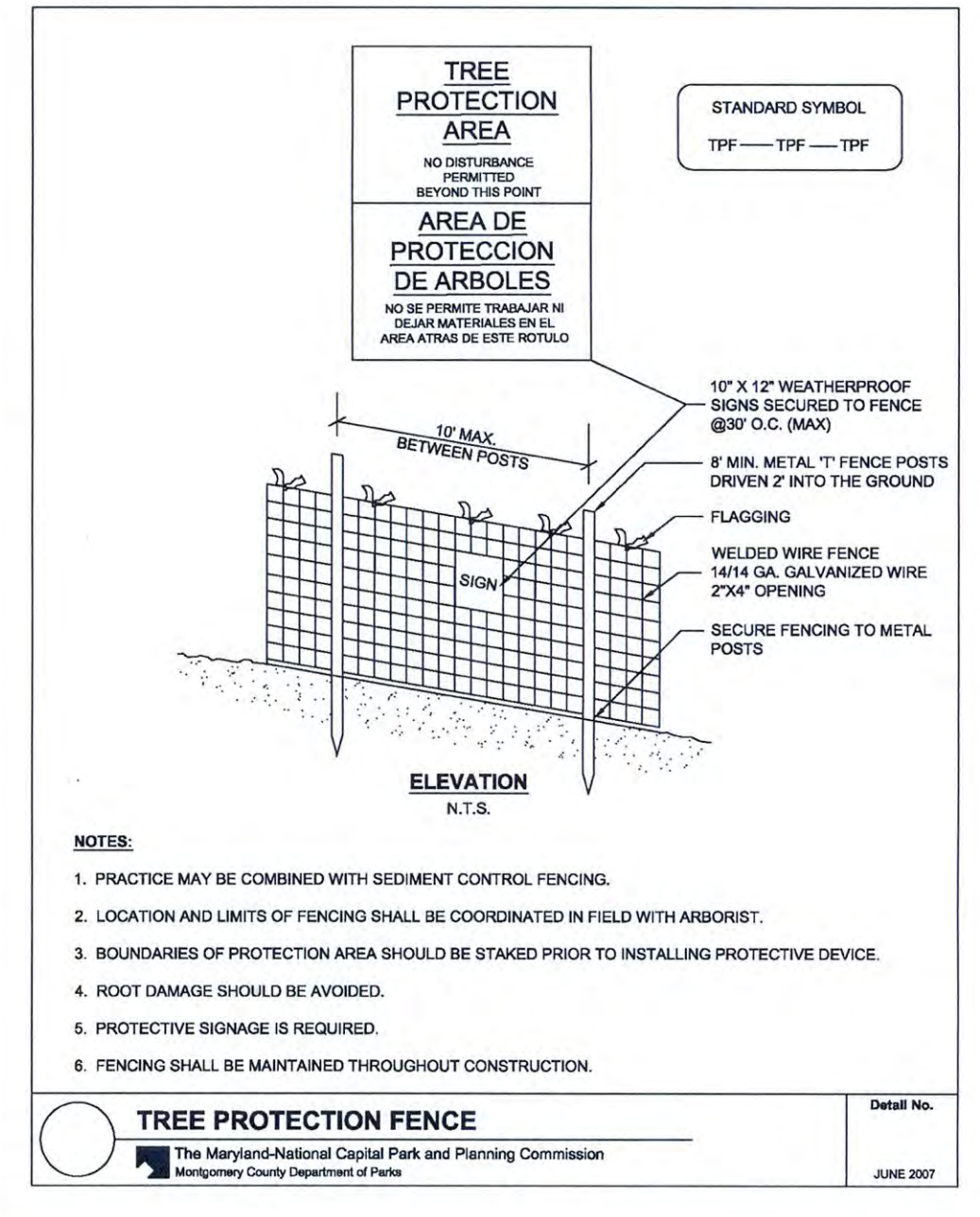
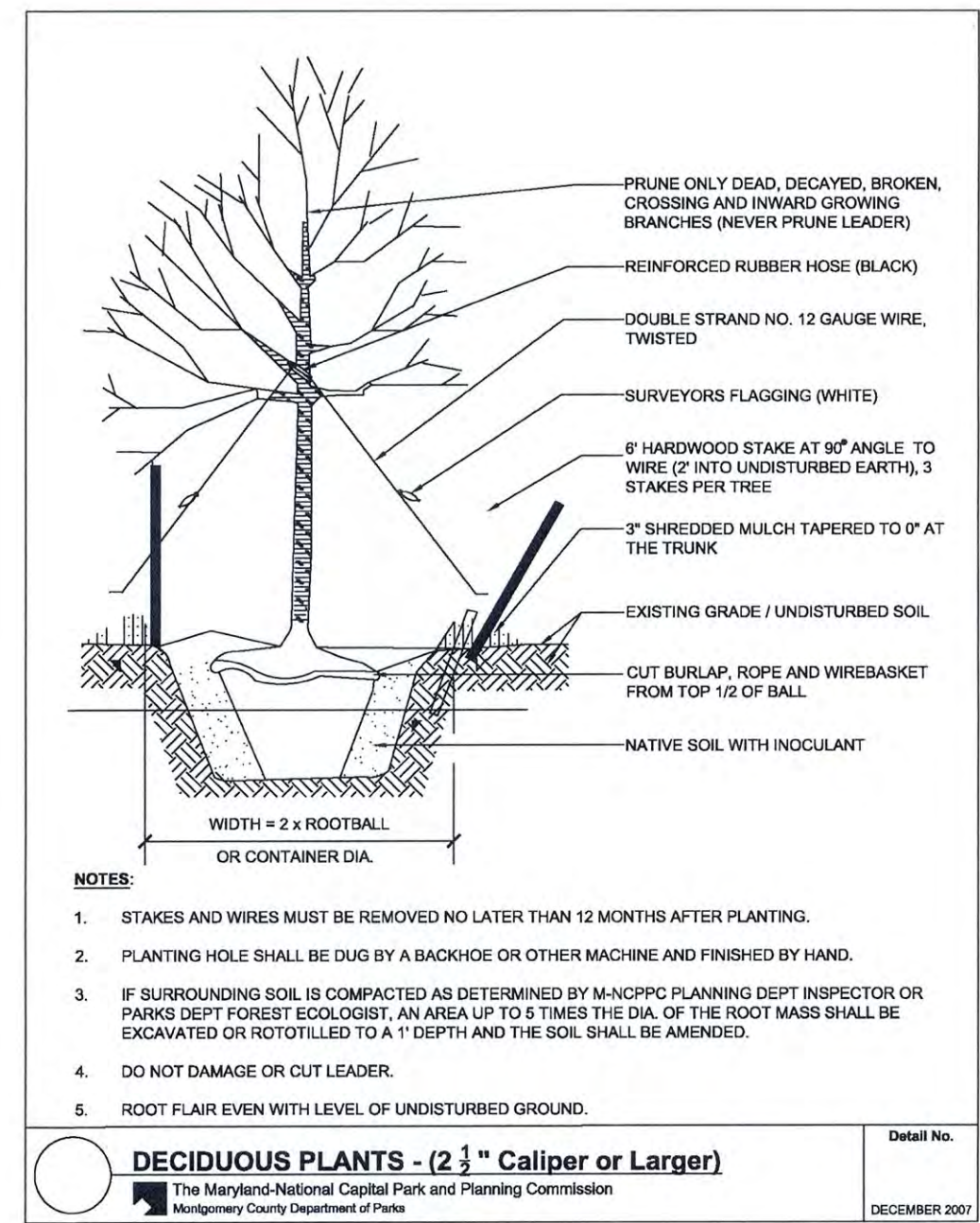
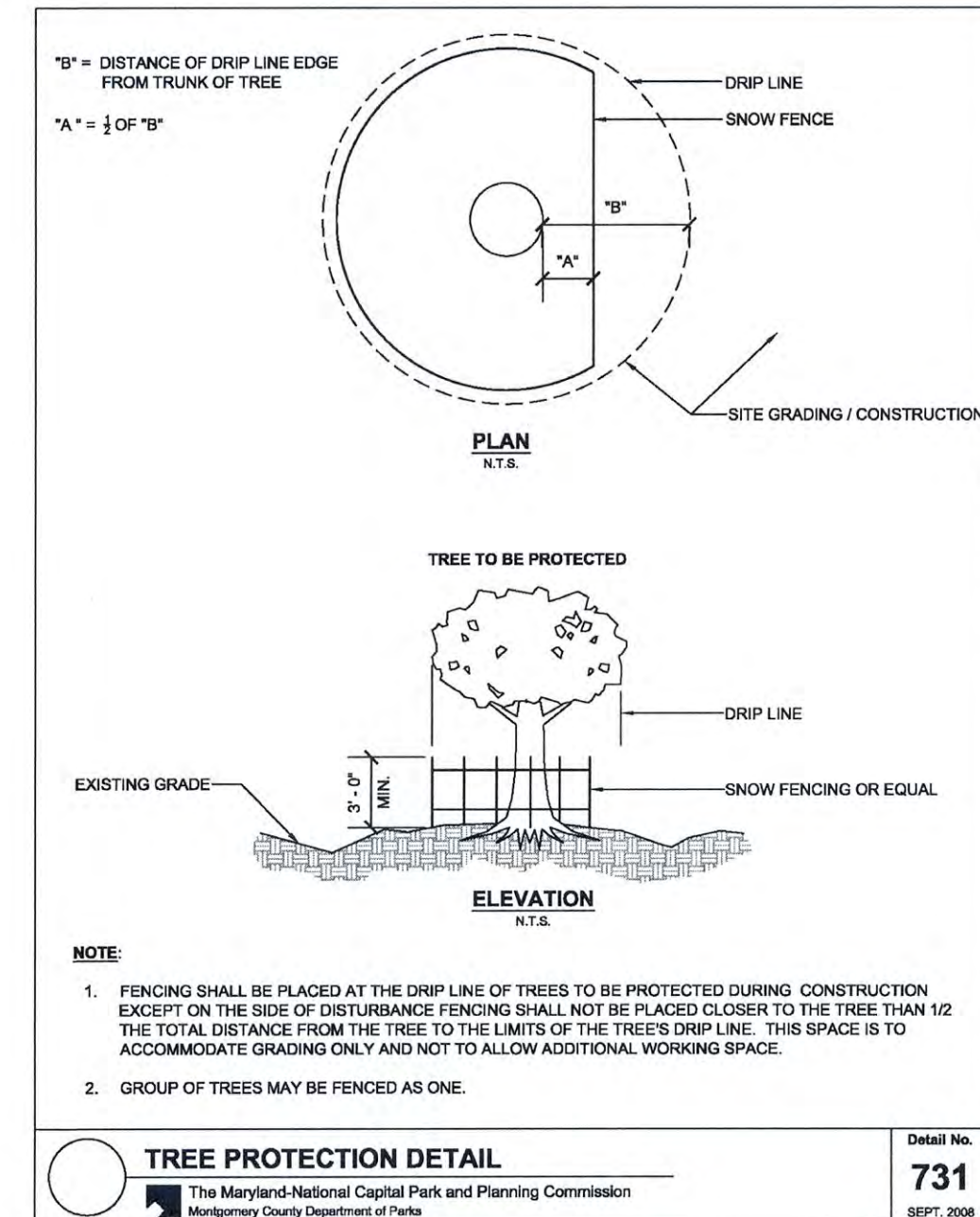
- Periodic inspections by the forest conservation inspector will occur during the construction project. Corrections and repairs to all tree protection devices, as determined by the forest conservation inspector, must be made within the timeframe established by the inspector.

**Post-Construction**

- After construction is completed, an inspection shall be requested. Corrective measures may include:
  - Removal and replacement of dead and dying trees
  - Pruning of dead or declining limbs
  - Soil aeration
  - Fertilization
  - Watering
  - Wound repair
  - Clean up of retention areas
- After inspection and completion of corrective measures have been undertaken, all temporary protection devices shall be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both the Department of Permitting Services and the forest conservation inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.

SIGNIFICANT AND SPECIMEN TREE TABLE									
Number	Latin Name	Common Name	Size	Condition	# of Multiple Leaders (# of Leaders >30")	Specimen Tree	CRZ Impact	Action	
1	Liriodendron tulipifera	Tulip Poplar	35" cal.	Good		Y		None	
2	Liriodendron tulipifera	Tulip Poplar	25" cal.	Good		N		None	
3	Liriodendron tulipifera	Tulip Poplar	27" cal.	Good		N		None	
4	Liriodendron tulipifera	Tulip Poplar	30" cal.	Good		Y		None	
5	Liriodendron tulipifera	Tulip Poplar	24" cal.	Good		N		None	
6	Liriodendron tulipifera	Tulip Poplar	34" cal.	Good		Y		None	
7	Liriodendron tulipifera	Tulip Poplar	41" cal.	Good		Y	13%	Filter Logs, Root Prune, SWM construction	
8	Liriodendron tulipifera	Tulip Poplar	32" cal.	Good		Y	6%	Filter Logs, Root Prune, SWM construction	
9	Liriodendron tulipifera	Tulip Poplar	40" cal.	Good Split twin	I	Y	2%	Filter Logs, Root Prune, SWM construction	
10	Liriodendron tulipifera	Tulip Poplar	28" cal.	Good		N	1%	Filter Logs, Minor Fill	
11	Liriodendron tulipifera	Tulip Poplar	24" cal.	Good		N	11%	Filter Logs, Minor Fill	
12	Liriodendron tulipifera	Tulip Poplar	36" cal.	Good		Y	7%	Filter Logs, Minor Fill	
13	Quercus rubra	Red Oak	27" cal.	Good		N	2%	Filter Logs, Minor Fill	
14	Liriodendron tulipifera	Tulip Poplar	43" cal.	Good split twin	I	Y	15%	Filter Logs, Root Prune, SWM construction	
15	Liriodendron tulipifera	Tulip Poplar	26" cal.	Good		N	16%	Filter Logs, Root Prune, SWM construction	
16	Liriodendron tulipifera	Tulip Poplar	37" cal.	Good		Y	27%	Filter Logs, Root Prune, SWM construction	
17	Liriodendron tulipifera	Tulip Poplar	41" cal.	Good		Y	4%	Filter Logs, Root Prune, SWM construction	
18	Liriodendron tulipifera	Tulip Poplar	27" cal.	Good		N	6%	Filter Logs, Root Prune, Minor Grading	
19	Liriodendron tulipifera	Tulip Poplar	33" cal.	Good		Y		None	
20	Liriodendron tulipifera	Tulip Poplar	24" cal.	Good		N		None	
21	Liriodendron tulipifera	Tulip Poplar	26" cal.	Poor		N		None	
22	Liriodendron tulipifera	Tulip Poplar	24" cal.	Good		N		None	
23	Liriodendron tulipifera	Tulip Poplar	43" cal.	Good		Y	4%	Filter Logs, Root Prune, Grading/Fill	
24	Liriodendron tulipifera	Tulip Poplar	35" cal.	Good		Y		None	
25	Liriodendron tulipifera	Tulip Poplar	46" cal.	Poor		Y	5%	Filter Logs, Root Prune, Ex. Pavement Improv.	
26	Prunus subhirtella 'Pendula'	Weeping Higan Cherry	24" cal.	Good		N	100%	To be Removed	
27	Platanus occidentalis	American Sycamore	27" cal.	Good		N	0%	Filter Logs	
28	Liriodendron tulipifera	Tulip Poplar	26" cal.	Good		N		None	
29	Liriodendron tulipifera	Tulip Poplar	25" cal.	Good		N		None	
30	Nyssa sylvatica	Black Gum	30" cal.	Good		Y		None	
31	Acer rubrum	Red Maple	42" cal.	Good		Y		None	
32	Fagus grandiflora	American Beech	24" cal.	Good		N	0%	Filter Logs	
33	Acer rubrum	Red Maple	27" cal.	Good		N	33%	Filter Logs, Ex. Pavement Improv. See Note 1	
34	Fagus grandiflora	American Beech	55" cal.	Good		Y	47%	Filter Logs, Ex. Pavement Improv. See Note 1	
35	Liriodendron tulipifera	Tulip Poplar	43" cal.	Good		Y	3%	Filter Logs, Root Prune, Ex. Pavement Improv.	
36	Liriodendron tulipifera	Tulip Poplar	42" cal.	Good		Y		None	
37	Liriodendron tulipifera	Tulip Poplar	33" cal.	Good		Y	0%	Filter Logs, Root Prune, Ex. Pavement Improv.	
38	Liriodendron tulipifera	Tulip Poplar	31" cal.	Good		Y		None	
39	Acer rubrum	Red Maple	33" cal.	Good		Y		To be Removed	
40	Liriodendron tulipifera	Tulip Poplar	32" cal.	Good		Y		None	
41	Acer rubrum	Red Maple	27" cal.	Good		N		None	
42	Liriodendron tulipifera	Tulip Poplar	25" cal.	Good		N		None	
43	Nyssa sylvatica	Black Gum	36" cal.	Good		Y	2%	Root Prune, Minor	
44	Liriodendron tulipifera	Tulip Poplar	46" cal.	Good		Y	17%	None	
45	Liriodendron tulipifera	Tulip Poplar	55" cal.	Good		Y		None	
46	Nyssa sylvatica	Black Gum	30" cal.	Good		Y	65%	See Note 2	
47	Quercus rubra	Red Oak	27" cal.	Good		N	5%	None	
48	Liriodendron tulipifera	Tulip Poplar	36" cal.	Good		Y	6%	None	

- Notes:
- MNCPPC staff conducted an investigation of the actual location of roots from this tree with an air spade and has determined that there are no roots from this tree within the project limits of disturbance.
  - Tree protection measures to be coordinated with MNCPPC arborist in field.



PLANT SCHEDULE

CANOPY TREE OR	QTY	COMMON NAME / BOTANICAL NAME	CONT	CAL	SIZE
	3	RED OAK / QUERCUS RUBRA	B 4 B	3\"/>	

**INSPECTIONS**

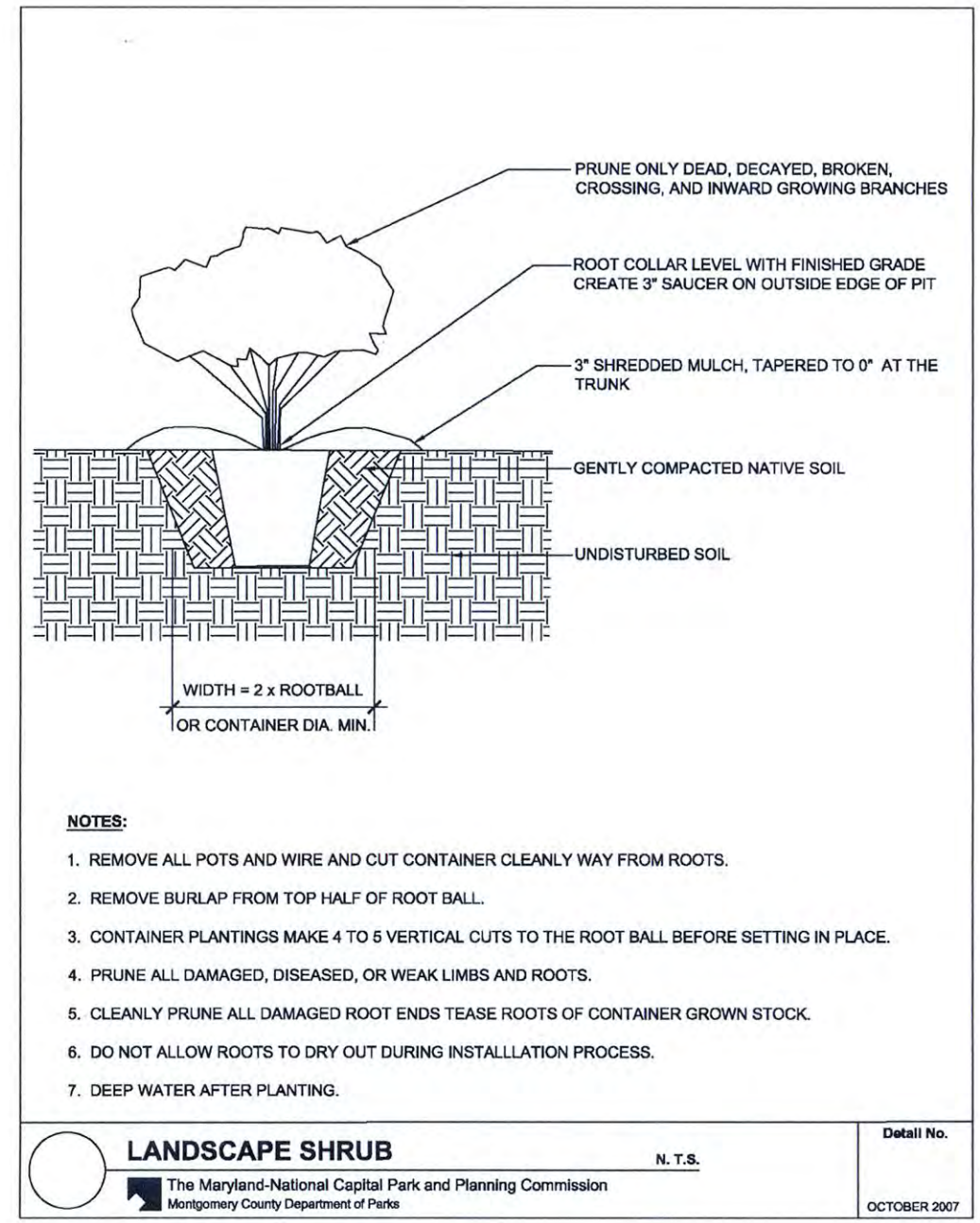
All field inspections must be requested by the applicant. Inspections must be conducted as follows:

**Tree Save Plans and Forest Conservation Plans without Planting Requirements**

- After the limits of disturbance have been staked and flagged, but before any clearing or grading begins
- After necessary stress reduction measures have been completed and protection measures have been installed, but before any clearing and grading begins.
- After completion of all construction activities, but before removal of tree protection fencing, to determine the level of compliance with the provision of the forest conservation.

**Additional Requirements for Plans with Planting Requirements**

- Before the start of any required reforestation and afforestation planting
- After the required reforestation and afforestation planting has been completed to verify that the planting is acceptable and prior to the start the maintenance period.
- At the end of the maintenance period to determine the level of compliance with the provisions of the planting plan, and if appropriate, release of the performance bond.



**PROFESSIONAL CERTIFICATION**

I hereby certify that this plan is prepared in accordance with Maryland Forest Conservation Regulations.

DATE: 3/13/2016  
 KEVIN T. GARVEY, RLA  
 REGISTERED LANDSCAPE ARCHITECT # MD 3801

**DEVELOPER'S CERTIFICATE**

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. \_\_\_\_\_ including financial bonding, forest planning, maintenance, and all other applicable agreements.

Developer's Name: MNCPPC Park Development Division  
 Contact Person or Owner: Mark Buenavista  
 Address: 9500 Brunnet Avenue, Silver Spring, MD 20901  
 Phone & Email: 301-495-2522 mark.buenavista@montgomerycountyparks.org

**CIVIL ENGINEERING CONSULTANT:**

**CPJ Charles P. Johnson & Associates, Inc.**  
 Civil and Environmental Engineers • Planners • Landscape • Architects • Surveyors  
 1751 Elton Rd., Ste 300 Silver Spring, MD 20903 301-434-7000 Fax: 301-434-9394  
 www.cjpa.com • Silver Spring, MD • Gaithersburg, MD • Annapolis, MD • College Park, MD • Frederick, MD • Fairfax, VA

DESIGN TEAM	Checked By:	DESIGN	Checked By:
Structural Engineer Structural Engineering Group	Checked By:	QA/QC Reviewer Avanturs, LLC	Checked By:
Landscape Architect Annapolis Landscape Architects	Checked By:	Civil Engineer Charles P. Johnson & Assoc.	Checked By:
Architect	Checked By:	Geotechnical Engineer GeoConcepts Engineering, Inc	Checked By:
Greenhouse Designer Van Wingerden Greenhouse Co.	Checked By:	MEP Engineer Setty & Associates	Checked By:
	Checked By:	Arborist Pitchford Associates	Checked By:

**Professional Certification.** I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 19908  
 Expiration Date 1/6/2017

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

REVIEW AND APPROVAL		ISSUED FOR PROCUREMENT ON	
Rev. No.	Date	REVISIONS	
Rev. No.	Date	Description	
Daryl Starks Project Manager	Date		
Todd Dinkins Construction Manager	Date		
Mark Buenavista Park Manager	Date		

**FOREST CONSERVATION PLAN NOTES AND DETAILS**

**Brookside Gardens Greenhouse and Site Work**

SCALE: AS-SHOWN

Liber 4428 Folio 388  
 4430 188

**FCP DWG. # 3 of 3**  
**FC-3**  
 SHT. # 28 of 69



### ATTACHMENT 3

February 12, 2016

Ms. Amy Lindsey  
Montgomery County Planning Department  
8787 Georgia Avenue  
Silver Spring, Maryland 20910

RE: Brookside Gardens Greenhouse and Site Work  
Variance Request  
NRI/FSD # 4-94149 Approved: 1997-10-03 Updated: 2007-05-04  
FCP #P-95001 Approved: 1995-10-05  
FCP #PP1995001 Approved 2014-02-07

Dear Ms. Lindsey,

Our client, the Park Development Division of the Maryland – National Capital Park and Planning Commission (M-NCPPC), requests a variance from Section 22A-21 of the Montgomery County Code for the removal of one (1) specimen tree (>30" DBH at 4.5' from ground). In addition, grading and land disturbance activities/impacts will affect seventeen (17) specimen trees as shown in the table below with associated % of CRZ impact for each tree. As proposed, this project intends to save each of the seventeen (17) trees that will have their CRZ impacted as noted in the remarks column in the table below.

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. This request is being made in conjunction with design plans being prepared for Brookside Gardens Greenhouse and Site Work.

#### Trees Requiring a Variance for Removal and CRZ Impacts

Tree ID No.	DBH (in)	Common Name	Botanical Name	Condition	CRZ Impact %	Remove Tree	Remarks
7	41"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	13.5%	No	Root Prune(minor) SWM construction
8	32"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	6.6%	No	Root Prune (minor) SWM construction
9	40"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	2.9%	No	Grading / (minor) Fill
12	36"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	7.0%	No	Grading / (minor) Fill
14	43"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	15.3%	No	Root Prune SWM construction
16	37"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	27.8%	No	Root Prune SWM construction mostly fill
17	41"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	4.8%	No	Root Prune (minor) SWM construction mostly fill
23	43"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	4.9%	No	Grading / Fill Root Prune



25	46"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Poor	5.7%	No	Root Prune (minor) existing pavement improvements
34	55"	American Beech	<i>Fagus grandiflora</i>	Good	47.1%	No	No Action Required see Note 1 below
35	43"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	3.4%	No	Root Prune (minor)
37	33"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	0.9%	No	Root Prune(minor) Removal of ex. paving
39	33"	Red Maple	<i>Acer rubrum</i>	Good	TBR	Yes	Removal-Grading and paving
43	36"	Black Gum	<i>Nyssa sylvatica</i>	Good	2.8%	No	Root Prune (minor)
44	48"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	23.3%	No	Grading, root prune as roots are discovered, some CRZ Impacts beyond immediate ex paving constraints therefore may be minimal roots in some areas
45	55"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	0.07%	No	No measurable impact to the CRZ
46	30"	Black Gum	<i>Nyssa sylvatica</i>	Good	65.3%	No	Grading, root prune as roots are discovered, some CRZ Impacts beyond immediate ex paving constraints therefore may be minimal roots in some areas
48	36"	Tulip Poplar	<i>Liriodendron tulipifera</i>	Good	6.8%	No	Root Prune (minor)

TBR = To be removed.

Note 1: MNCPPC staff conducted an investigation of the actual location of roots from this tree with an air spade and has determined that there are no roots from this tree within the project limits of disturbance.

In addition to the above summary, we submit herewith the following "Narrative Discussion" as required by the Montgomery County Forest Conservation Plan Submission Requirements for the five items below (discussion questions in italics, responses in regular type):

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

1. This proposed project involves the demolition of an existing greenhouse and the construction of a new, larger greenhouse in and around the footprint of the existing greenhouse that will be demolished. Associated sitework (access and parking) is also proposed. The existing grounds and facilities include greenhouses, residence-type buildings, garages, maintenance facilities and other site improvements etc. located throughout the property. Mature trees and woodland surround the existing buildings and site improvements with clearings and canopy openings. The proposed improvements require stormwater management facilities and associated ESD (environmental site design) improvements. The plan proposes strategically located SWM and ESD facilities in order to achieve less than 5000 SF of forest clearing in this dense tree environment. Working around each tree and CRZ would not allow for simple, reasonable site improvements proposed.

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

2. Without granting a variance for the minimal impacts, the landowner will be penalized for improving and enhancing a facility that provides valuable resources to the public, hence, would be uncommon for a resource of this type.


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

3. The proposed design provides for State required water quality through three ESD facilities (micro-bioretenion basins), thus handling the concern of this narrative discussion requirement.
4. *Provide any other information appropriate to the request.*
4. Other Information – Please refer to the site design plans for the scrutiny given to the site design relative minimizing impacts and substantiating this request.
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 activities.*
5. The applicant proposes to mitigate for the removal of the one (1) specimen tree (#39) outside of the existing forest area, on-site as required using the formula 1" DBH mitigation for every 4" DBH removed (in this case 33" DBH removed / 4" = 8.25 inches DBH required divided by 3" caliper tree yields 2.75 trees (say 3) trees required for mitigation).

Both the **Montgomery County Forest Conservation Law Chapter 22-A 2014** and **Planting requirements for Land-Disturbing Activities and Related Mitigation on M-NCPPC Montgomery County Parkland, revised January 2008** were utilized to complete the referenced Forest Conservation Plan.

If you have any questions on the details of this application please do not hesitate to contact me at (301) 434-7000 X155.

Sincerely,



**Kevin Garvey, RLA**  
Public Sector  
Charles P. Johnson & Associates, Inc.

cc: MCPPC – Mark Buenavista