

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:

L. 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

SCALE: 1"=2000'

PROPERTY INFORMATION:
(FOR SUBJECT PARCELS)

PARCEL NUMBER: P59; P658; P815; P982
ACCOUNT NUMBER: 00967788; 00972001; 00971953; 00971735
SUBDIVISION NUMBER: 502; 0001
ADC MAP/GRID: MAP 34 / GRID J11
LIBER/FOLIO: L.04431, F.04025; L.02762, F.0338; L.02749, F.00337; L.02626, F.00314; JQ123; JQ122

TAX MAP: 216NW02
WSSC GRID: 216NW02
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/P.
- THE 100-YEAR FLOODPLAIN ON THIS SITE IS SHOWN AS DETERMINED FROM FEMA FLOOD MAP 24031C0370D.
- 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 PLANS.

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:	
Forest retained	27.40
Forest cleared	22.34
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	

SPECIMAN (30" & GRATER) 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

DESIGN CONSULTANT

A. MORTON THOMAS AND ASSOCIATES, INC.	AMT/SYMBIOSIS-SIRI	09/04/13	MXK
Designer's Name	Landscape Architect	Date	Checked By:
12750 TWINBROOK PARKWAY	WALDON STUDIOS	N/A	MM
Address	Architect	Date	Checked By:
ROCKVILLE, MD 20852	SAJ	09/04/13	WJM
City/State/Zip	Engineer	Date	Checked By:
301-881-2545	AMT	09/04/13	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.

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	Date
Engineer	Date
Construction Manager	Date
Park Manager	Date

ISSUED FOR PROCUREMENT ON _____

Rev. No.	Date	Description

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@morgontgomeryparks.org

SIGNATURE: _____

DESCRIPTION: 100% Construction Documents

FOREST CONSERVATION PLAN
Brookside Gardens: Entrance & Parking Renovations
1800 Glenallan Ave,
Wheaton, MD 20902

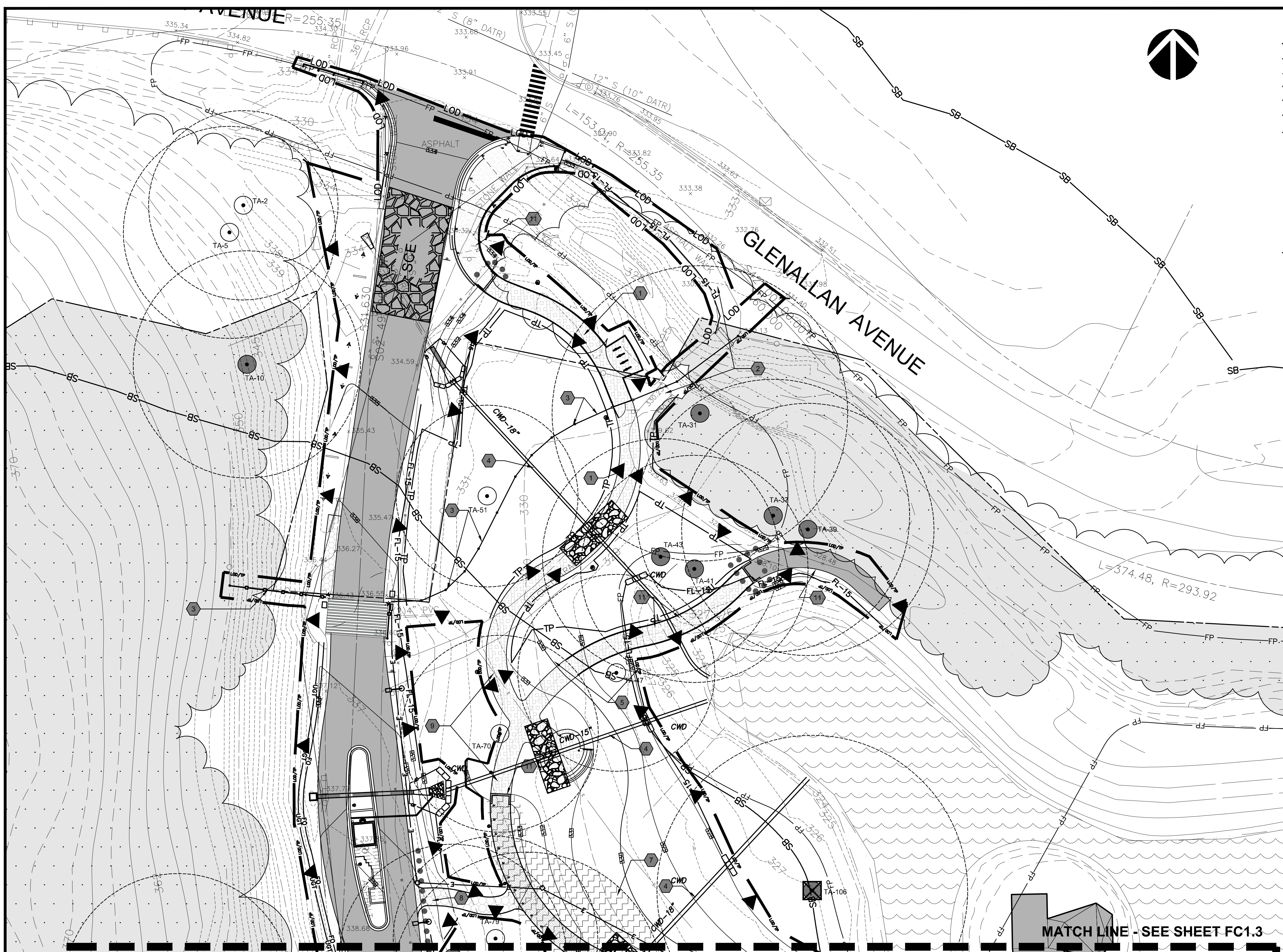
SCALE: 1" = 100'
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FC1.1
SHEET 1 of 7

FINAL SCANNED: PLAN SCANNED: PARK CODE: D38 Plotted By: Romano, Andrea, 9/16/2013 4:29 PM. X:\Rockville\111-755-001 - MNCPPC Brookside Gardens E:\05-CAD\FC-01-11755001 Forest conservation.dwg Layout1

Pine & Swallow 867 Boston Road, 01460 978-648-9511
Davy Trees 2138 Priest Bridge Court #4, Silver Spring, Maryland 301-774-2852 410-774-0024
Kim Engineering 3032 Mitchellville Road, Bowie, MD 20716 301-269-0976
The Watkins Partnership, Inc. 600 Baltimore Avenue, Suite 400, Baltimore, MD 21204 410-256-6500
Henry Adams 7939 Norfolk Avenue, Suite 200, Bethesda, MD 20814 301-507-7975
Gimore Lighting Design 6325 Woodside Court, Suite 310, Bethesda, MD 20814 410-290-9680
Waldon Studio Architects & Planners 12750 Twinbrook Parkway, Rockville, MD 20852 301-881-2556
A. Morton Thomas 9088 Brae Brook Drive, Rockville, MD 20850 301-881-2556
Symbiosis/SIRI 9088 Brae Brook Drive, Rockville, MD 20850 301-881-2556
AMT

FINAL SCANNED: PLAN SCANNED: D38 PARK CODE: D38 PLOTTED BY: TORGERSON, STEVEN, 9/6/2013 4:36 PM



LEGEND

	PROPERTY LINE		ROOT AERATION MATTING
	STREAM BUFFER		STABILIZED CONSTRUCTION ENTRANCE
	FLOODPLAIN		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
	TREE PROTECTION FENCING		
	FILTER LOG		
	PROPOSED CONTOUR		
	FOREST TO REMAIN		
	POND		
	DIVERSION FENCE		

MATERIALS LEGEND

	SAND BLASTED PEDESTRIAN CONCRETE		BOARDWALK
	BROOM FINISH PEDESTRIAN CONCRETE		ASPHALT
	GRASS PAVERS FOR CUSHMAN PARKING		

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
	BOARDWALK ON HELICAL PIERS. CONSTRUCTION ACCESS TO PROTECT TREE ROOTS TO HELP PREVENT RUTTING AND DISTURBANCE AS REQUIRED BY MNCPPC INSPECTOR.
	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.
	FENCE AND POST INSTALLATION BY HAND. NO MECHANIZED EQUIPMENT WITHIN TREE PROTECTION AREA. NO EXISTING TREES TO BE DISTURBED.
	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.
	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.
	ROOT AERATION MATTING UNDER GRADE FILL/WALK. NO EQUIPMENT USED FOR SITE PREPARATION IN THIS LOCATION. SEE SYMBOL FOR FULL EXTENTS.
	HAND TOOLS ONLY FOR MULCH & GEOGRID PATH CONSTRUCTION. NO ACCESS FOR EQUIPMENT.
	PROPOSED ELECTRIC TO BE SUSPENDED UNDER BOARDWALK OR INSTALLED WITH SSAT EXCAVATION THOROUGH PROTECTED CRITICAL ROOT ZONES.
	MULCH MAT INSTALLED UNDERNEATH BOARDWALK FOR HELICAL PIER INSTALLATION. SEE DETAIL.

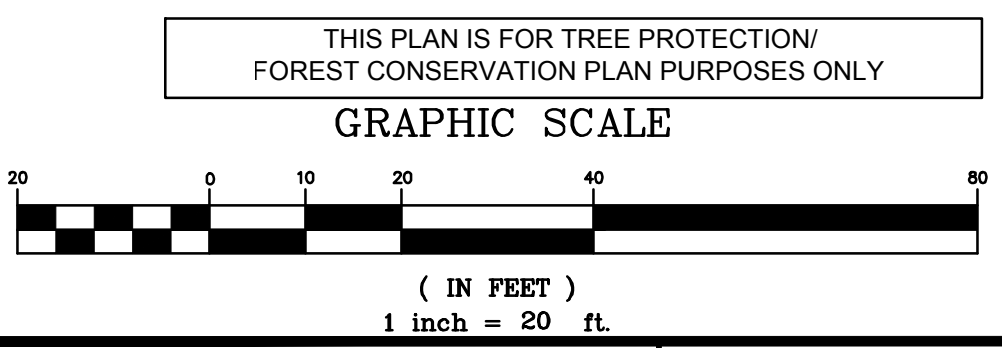
DEVELOPER'S CERTIFICATE

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: _____

TREE ASSESSMENT AND TREE SAVE RECOMMENDATIONS PREPARED UNDER MY SUPERVISION

 ANDREW E. STREAGLE
 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	12750 TWINBROOK PARKWAY
Address	ROCKVILLE, MD 20852
City/State/Zip	301-881-2545
Telephone Number	

DESIGN CONSULTANT			
AMT/SYMBIOSIS-SIRI	09/04/13	MXK	
WALDON STUDIOS	N/A	MM	
SAJ	09/04/13	WJM	
AMT	09/04/13	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

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 Montgomery County Department of Parks
 9500 Brunnett 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		
REVISIONS		
Rev. No.	Date	Description

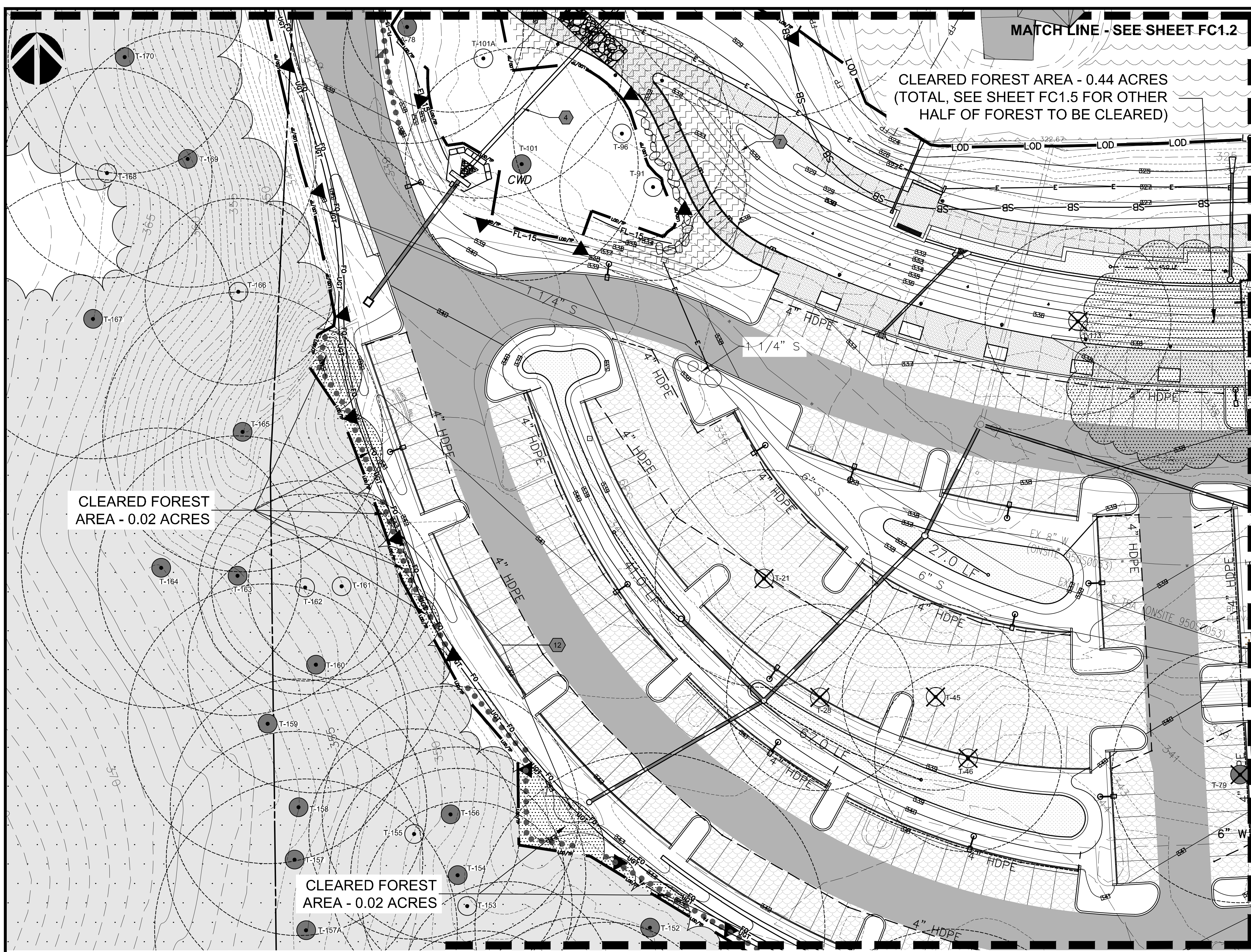
Description: 100% Construction Documents

FOREST CONSERVATION PLAN
 Brookside Gardens: Entrance & Parking Renovations
 1800 Glenallan Ave,
 Wheaton, MD 20902

SCALE: 1" = 20'

AMT
 SYMBIOSIS SIRI
 A. MORTON THOMAS
 WALDON STUDIOS
 GILMORE LIGHTING DESIGN
 HENRY ADAMS
 KIM ENGINEERING
 DAVEY TREES
 PINE & SWALLOW

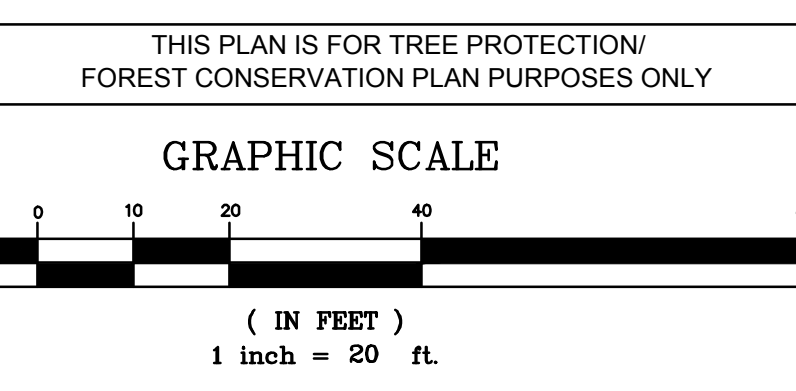
FINAL SCANNED: PLAN SCANNED: D38 PARK CODE: D38 PLOTTED BY: ROMANO, ANDREA, 9/16/2013 4:16 PM



CLEARED FOREST AREA - 0.02 ACRES

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



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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 PEDESTRIAN CONCRETE
	ASPHALT		MICROBIORETENTION
	GRASS PAVERS FOR CUSHMAN PARKING		

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.

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DEVELOPER'S NAME: M-NCCPC 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: _____

TREE ASSESSMENT AND TREE SAVE RECOMMENDATIONS PREPARED UNDER MY SUPERVISION



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

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	09/04/13	MXK	Checked By:
WALDON STUDIOS	N/A	MM	Checked By:
SAJ	09/04/13	WJM	Checked By:
AMT	09/04/13	AMT	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.

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Project Manager	Date
Engineer	Date
Construction Manager	Date
Park Manager	Date

ISSUED FOR PROCUREMENT ON _____		
REVISIONS		
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Brookside Gardens: Entrance & Parking Renovations
1800 Glenallan Ave,
Wheaton, MD 20902

SCALE: 1" = 20'
Liber 7099 Folio 519

AMT SYMBIOSIS SIRI
9088 Brae Brook Drive, Rockville, MD 20850
202.955.1999

WALDON STUDIOS
6325 Woodside Court, Suite 310, Bethesda, MD 20814
410.290.9680

SAJ
7939 Norfolk Avenue, Suite 200, Bethesda, MD 20814
301.907.7975

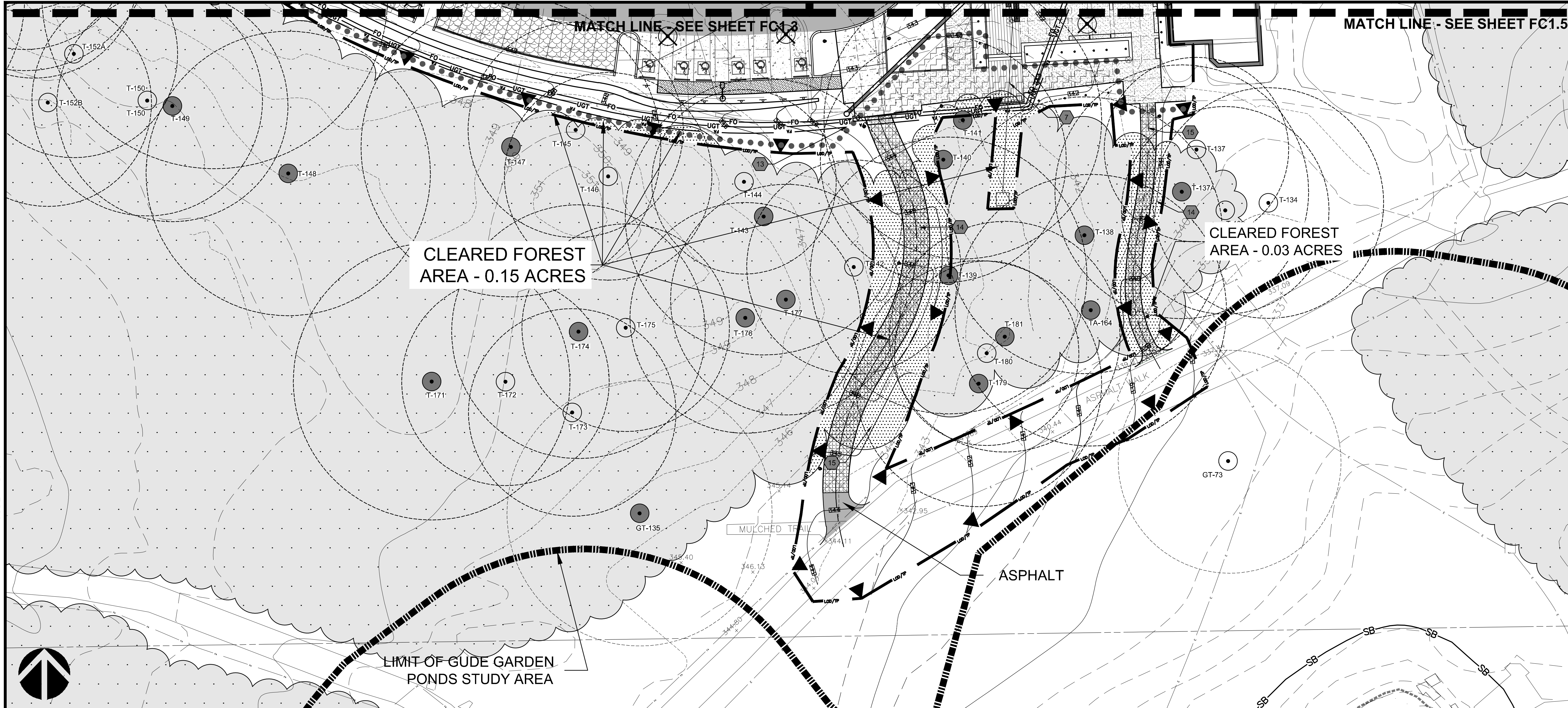
Henry Adams
600 Baltimore Avenue, Suite 400, Baltimore, MD 21204
410.256.6300

Kim Engineering
Silver Spring, Maryland
301.774.2852

The Watkins Partnership, Inc.
3032 Mitchellville Road, Bowie, MD 20716
301.249.0976

Pine & Swallow
867 Boston Road, Silver Spring, MD 20910
978.468.9511

FINAL SCANNED: PLAN SCANNED: D38 PARK CODE: D38 PLOTTED BY: ROMANO, ANDREA, 9/6/2013 4:27 PM



CLEARED FOREST AREA - 0.15 ACRES

CLEARED FOREST AREA - 0.03 ACRES

LIMIT OF GUDE GARDEN PONDS STUDY AREA

ASPHALT

REFERENCE NOTES SCHEDULE

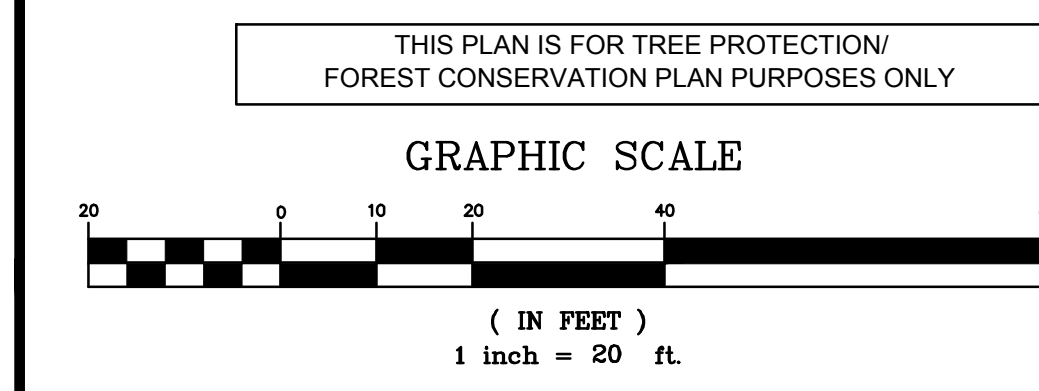
SYMBOL	DESCRIPTION
	ROOT AERATION MATTING UNDER GRADE FILL/WALK. NO EQUIPMENT USED FOR SITE PREPARATION IN THIS LOCATION. SEE SYMBOL FOR FULL EXTENTS.
	CONTRACTOR TO PROVIDE PIPE LAYOUT FOR ROOT PRUNING AND RAM INSTALLATION AFTER DEMOLITION.
	HAND CLEARING OF TREES, SAPLINGS, VINES AND SHRUBS FOR ACCESS 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
	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

MATERIALS LEGEND

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



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PRINTED COMPANY NAME

CONTACT PERSON OR OWNER: CHING-FANG CHEN
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PHONE AND EMAIL: 301-495-2557 ching-fang.chen@montgomeryparks.org

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Address	SAJ	09/04/13	WJM
ROCKVILLE, MD 20852	Engineer	Date	Checked By:
City/State/Zip	AMT	09/04/13	AMT
301-881-2545	Drawn by	Date	Checked By:
Telephone Number			

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1800 Glenallan Ave,
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SCALE: 1" = 20'

Liber 7099 Folio 519

SYMBIOSIS/SIRI
 9088 Bree Brook Drive, Silver Spring, MD 20906
 301.995.1999
AMT
 WALDON STUDIOS
 3032 MITCHELLEVILLE ROAD, BOWIE, MD 20716
 410.296.6300
Henry Adams
 600 BALTIMORE AVENUE, SUITE 400, BALTIMORE, MD 21204
 410.296.6300
Gilmore Lighting Design
 7939 NORFOLK AVENUE, SUITE 200, BETHESDA, MD 20814
 301.907.7975
The Watkins Partnership, Inc.
 3032 MITCHELLEVILLE ROAD, BOWIE, MD 20716
 301.296.6300
Kim Engineering
 SILVER SPRING, MARYLAND
 301.774.2852
Davey Trees
 2138 PRIEST BRIDGE COURT #4, SILVER SPRING, MD 20914
 410.774.0024
Pine & Swallow
 867 BOSTON ROAD, SILVER SPRING, MD 20910
 978.648.9511

FINAL SCANNED:

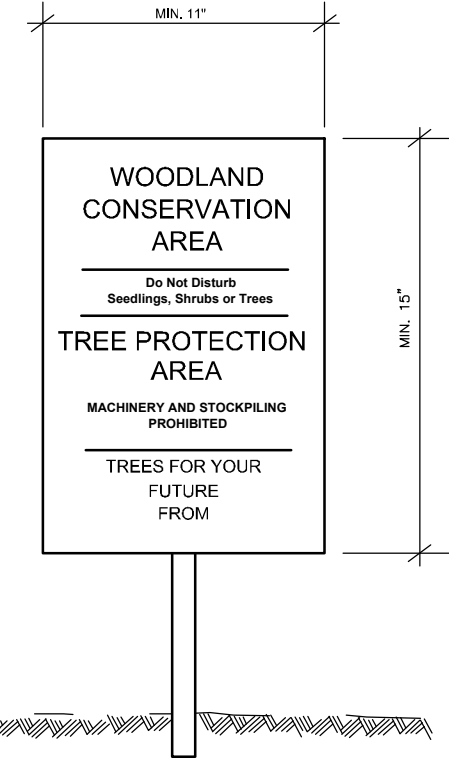
PLAN SCANNED:

PARK CODE: D38

Plotted By: Romano, Andrea, 9/6/2013 4:34 PM

X:\Rockville\1111-755001 - M-NCPPC Brookside Gardens EV05-CAD\F06-06-111755001 Forest conservation.dwg FCS.1

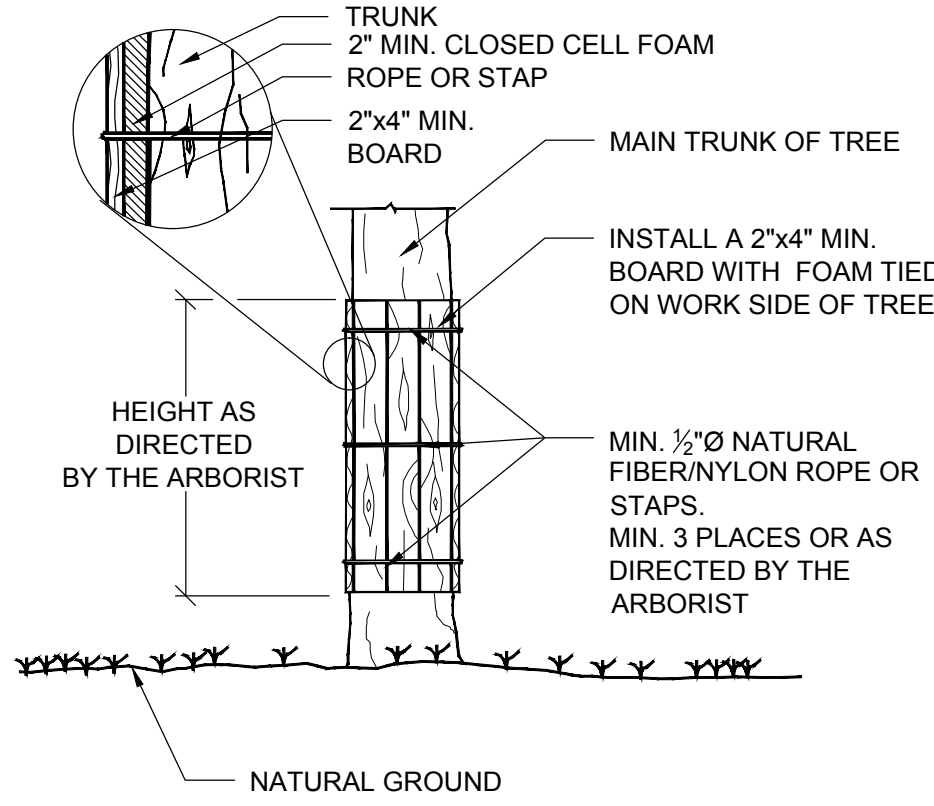
SIGNAGE



- NOTES: 1. ATTACHMENT OF SIGNS TO TREES IS PROHIBITED. 2. SIGNS SHOULD BE PROPERLY MAINTAINED. 3. AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR THE SIGNS. 4. SIGNS SHOULD BE POSTED TO BE VISIBLE TO ALL CONSTRUCTION PERSONNEL FROM ALL DIRECTIONS.

NOT TO SCALE

TRUNK PROTECTION DETAIL

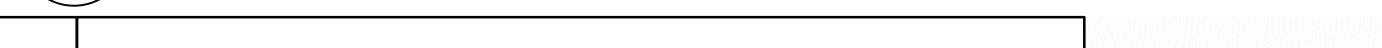


- NOTES: 1. COMPLETE ALL INSTALLATION UNDER THE DIRECTION OF A CERTIFIED ARBORIST. 2. TIE BOARDS WITH WITH 1/2" DIAMETER ROPE OR STAPS SUFFICIENT TO PROTECT ALL AREAS OF THE TREE EXPOSED TO CONSTRUCTION. 3. PROTECT THE TRUNK FROM DAMAGE DUE TO THE STRAPS WITH ADDITIONAL FOAM AND BOARDS AS NEEDED

NOT TO SCALE

FLEXI-PAVE ABOVE GRADE

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



SEQUENCE OF CONSTRUCTION

- 1. 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. 2. MARK ALL TREES TO BE REMOVED. 3. VERIFY ALL TREES WITH THE ARBORIST AND M-NCPPC BEFORE REMOVAL. 4. INSTALL TREE PROTECTION AS DIRECTED BY THE ARBORIST AND AS SHOWN IN THE TREE PROTECTION MEASURES ON FC-5.2. 5. INSTALL EROSION CONTROL MEASURES AS REQUIRED. IN SITUATION WHERE ROOT PRUNING WILL NOT BE REQUIRED INSTALL SILT OR SUPER SILT FENCE WITHOUT TRENCHING. 6. 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. 7. RELOCATE THE TEMPORARY TREE PROTECTION MEASURES TO ALLOW FOR THE INSTALLATION OF ROOT AERATION MAT (RAM) AS DIRECTED BY THE ARBORIST AND M-NCPPC. 8. BACKFILL OVER THE TOP OF THE RAM TO ACHIEVE THE ELEVATIONS AS SHOWN ON THE GRADING PLAN. 9. 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.

- 2. NO CLEARING OR GRADING SHALL BEGIN BEFORE STRESS-REDUCTION MEASURES HAVE BEEN IMPLEMENTED. APPROPRIATE MEASURES MAY INCLUDE, BUT ARE NOT LIMITED TO: A. ROOT PRUNING B. CROWN REDUCTION OR PRUNING C. WATERING D. FERTILIZING E. VERTICAL MULCHING F. 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.

3. 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 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.

4. 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: A. CHAIN LINK FENCE (FOUR FEET HIGH) B. SUPER SILT FENCE WITH WIRE STRUNG BETWEEN SUPPORT POLES (MINIMUM 4 FEET HIGH) WITH HIGH VISIBILITY FLAGGING. C. 14 GAUGE 2 INCH X 4 INCH WELDED WIRE FENCING SUPPORTED BY STEEL T-BAR POSTS (MINIMUM 4 FEET HIGH) WITH HIGH VISIBILITY FLAGGING.

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

7. 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. REFERENCE TO THE PLAN DRAWING FOR LONG-TERM PROTECTION MEASURES TO BE INSTALLED.

DURING CONSTRUCTION: 8. 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: 9. AFTER CONSTRUCTION IS COMPLETED, AN INSPECTION SHALL BE REQUESTED. CORRECTIVE MEASURES MAY INCLUDE: A. REMOVAL AND REPLACEMENT OF DEAD AND DYING TREES B. PRUNING OF DEAD OR DECLINING LIMBS C. SOIL AERATION D. FERTILIZATION E. WATERING F. WOUND REPAIR G. CLEAN UP OF RETENTION AREAS

10. 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 1. AFTER THE LIMITS OF DISTURBANCE HAVE BEEN STAKED AND FLAGGED, BUT BEFORE ANY CLEARING OR GRADING BEGINS 2. AFTER NECESSARY STRESS REDUCTION MEASURES HAVE BEEN COMPLETED AND PROTECTION MEASURES HAVE BEEN INSTALLED, BUT BEFORE ANY CLEARING AND GRADING BEGINS. 3. 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 4. BEFORE THE START OF ANY REQUIRED REFORESTATION AND AFFORESTATION PLANTING 5. 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. 6. 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.

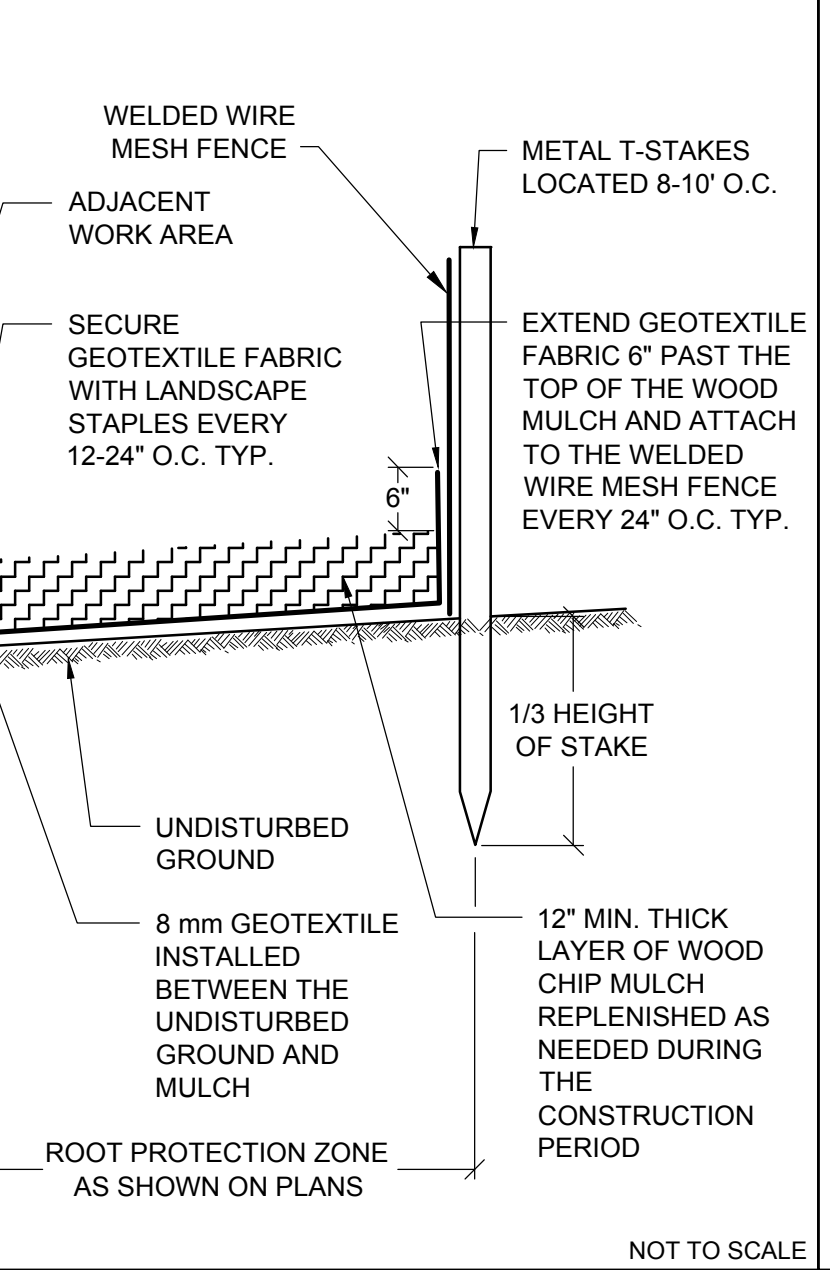
NOTE: GENERALLY, ROOT PRUNING AND TREE PROTECTION FENCE ARE LOCATED AT THE LIMIT OF DISTURBANCE. THEREFORE, THE LAYOUT OF LINES DEPICTING TREE PROTECTION FENCE AND ROOT PRUNING IS DIAGRAMMATIC, AND FOR REFERENCE ONLY. PLEASE REFER TO THE STRESS REDUCTION DETAIL FOR MORE INFORMATION.

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 INCLUDING 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:

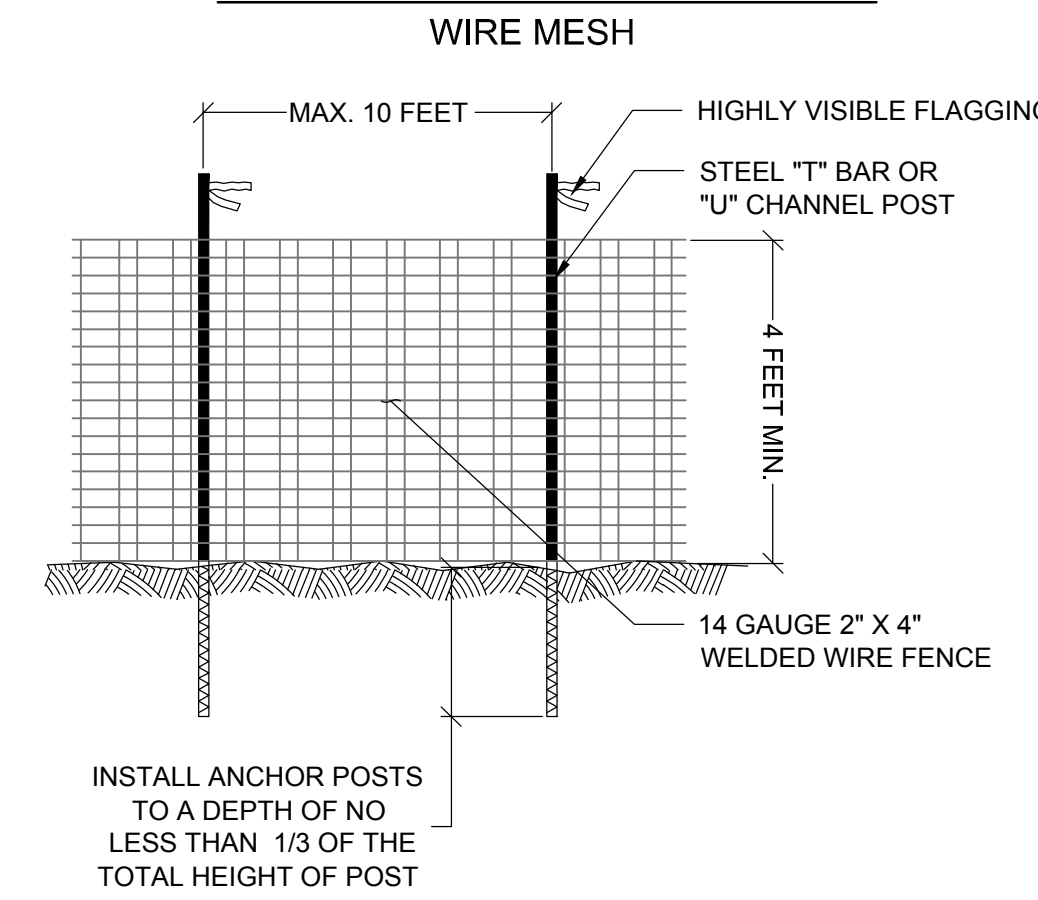
ANDREW E. STREAGLE ISA CERTIFIED ARBORIST #MA-48264

MULCH MAT



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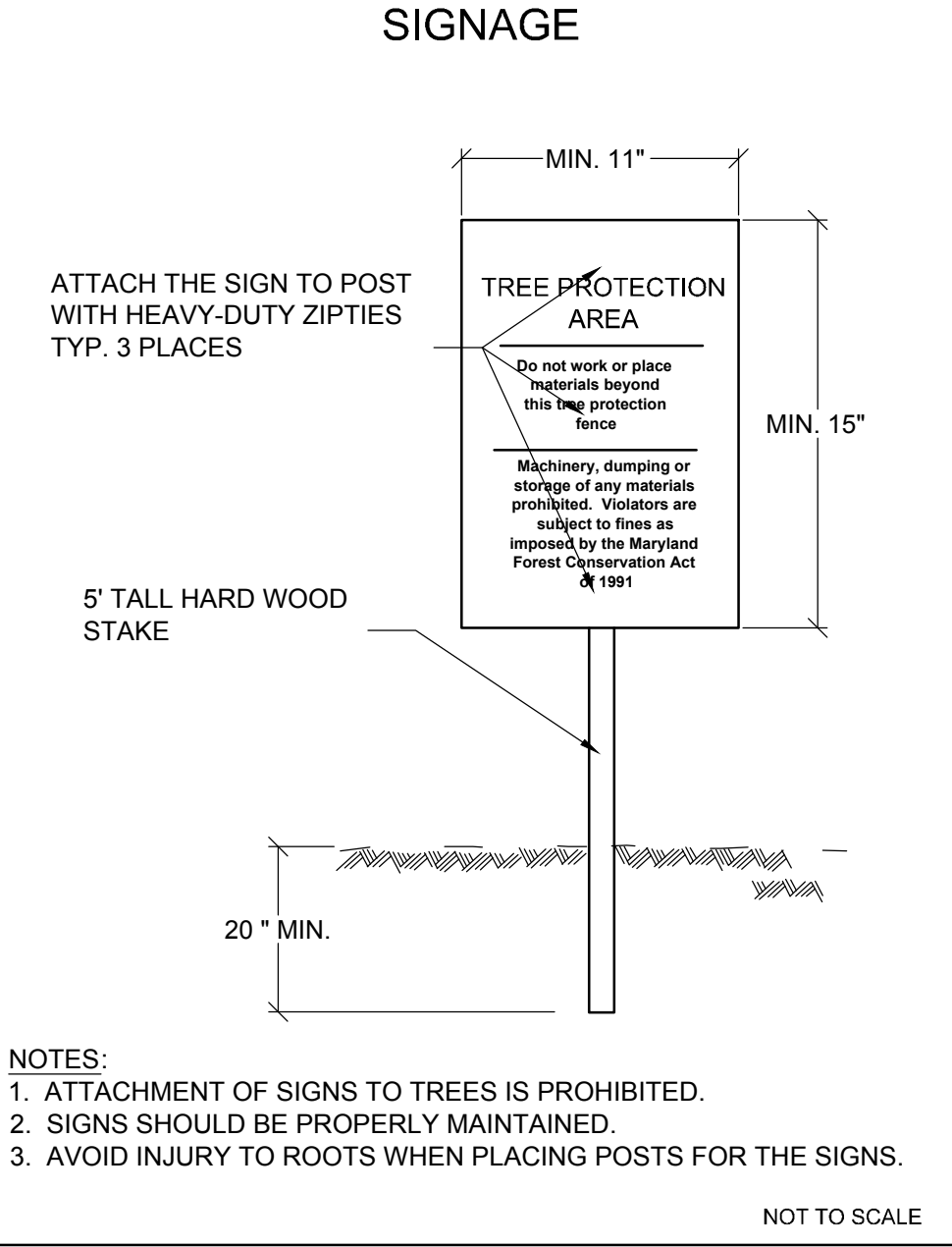
TREE PROTECTION FENCING



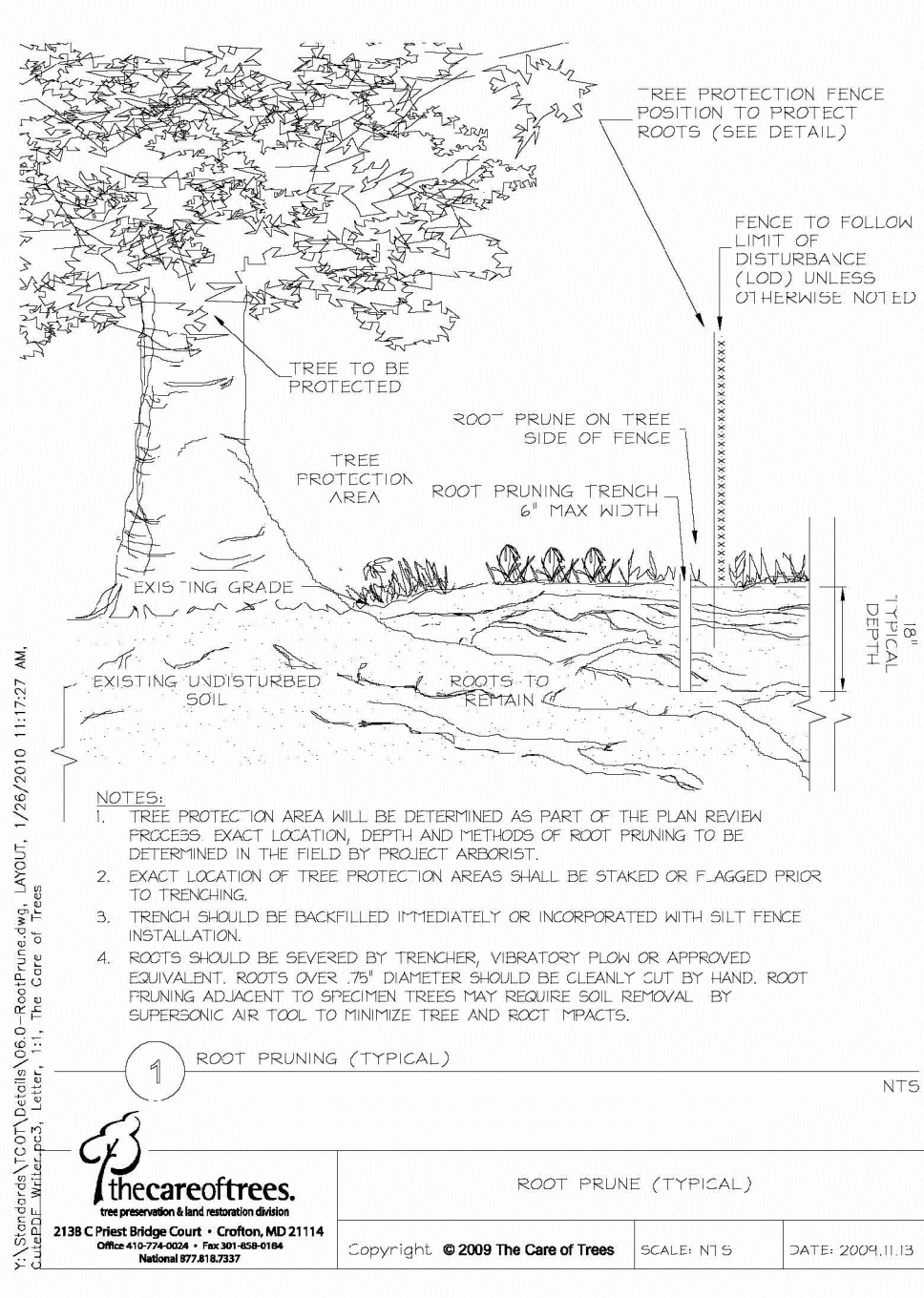
- NOTES: 1. FOREST PROTECTION DEVICE ONLY 2. SET RETENTION AREA AS PART OF THE REVIEW PROCESS 3. STAKE & FLAG THE BOUNDARIES OF RETENTION AREA PRIOR TO INSTALLATION OF DEVICE 4. AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR THE SIGNS. 5. PROTECTIVE SIGNAGE IS REQUIRED 6. MAINTAIN THE DEVICE THROUGHOUT CONSTRUCTION. 7. 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

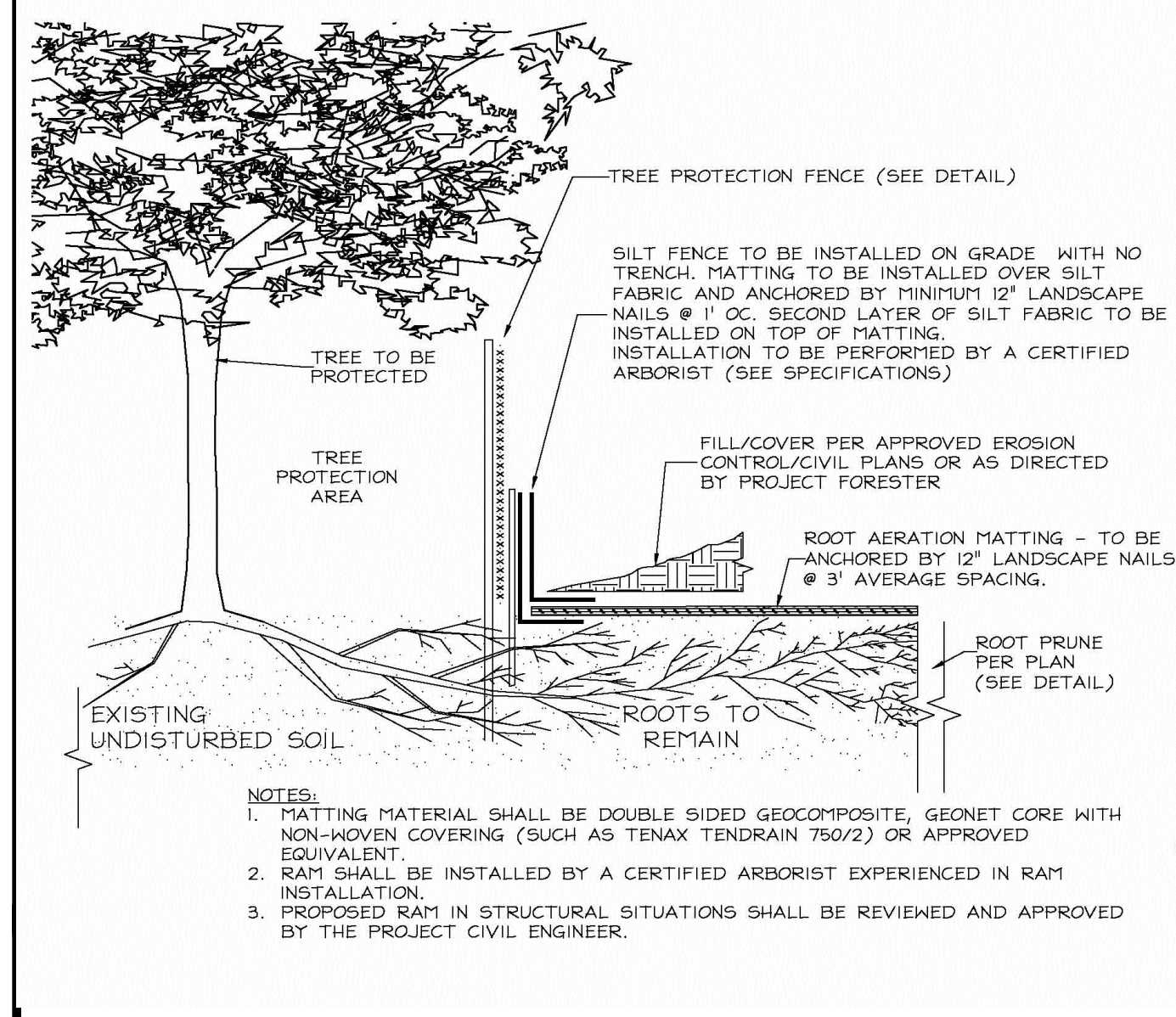


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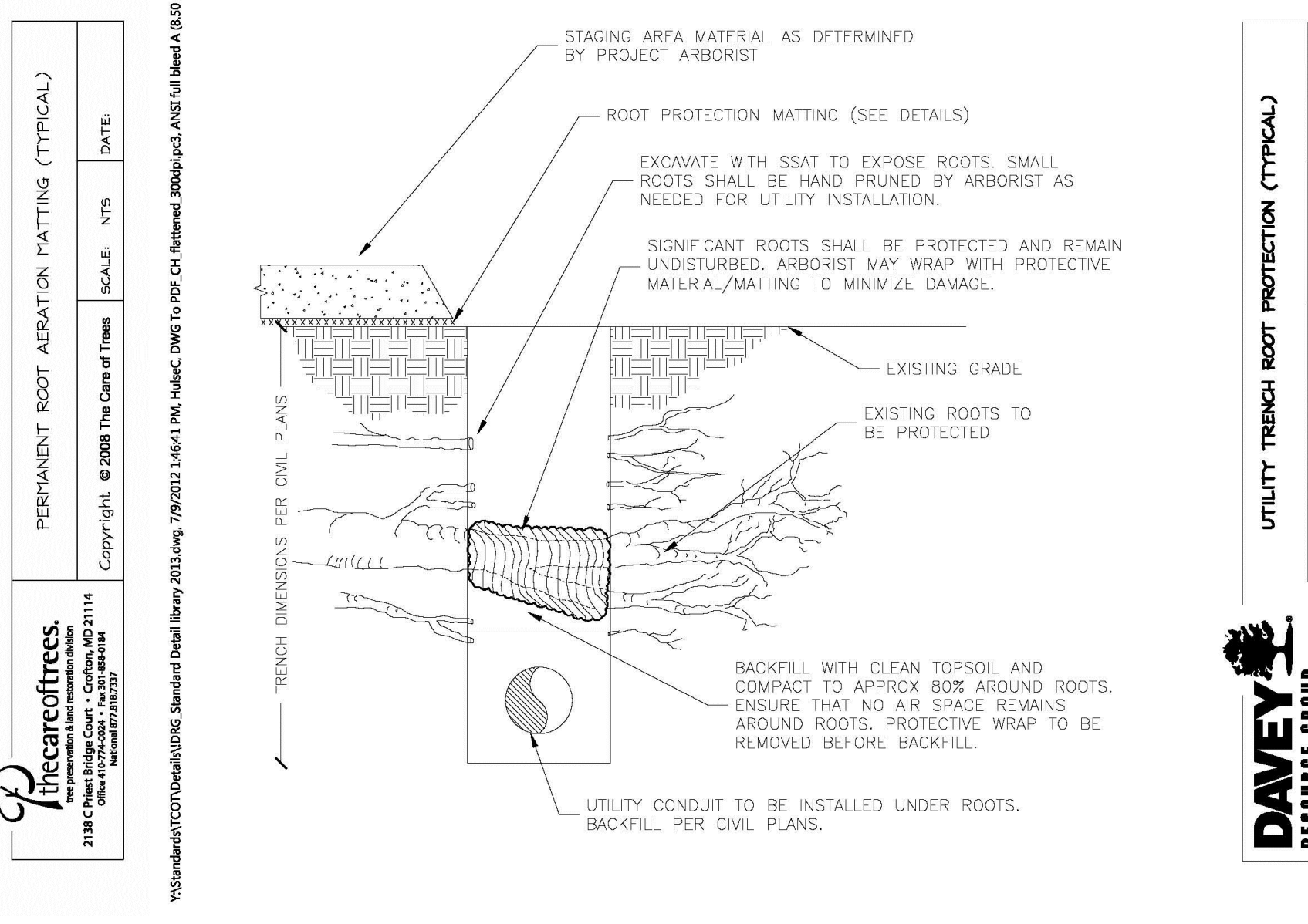


- NOTES: TREE PROTECTION AREA WILL BE DETERMINED AS PART OF THE PLAN REVIEW PROCESS. EXACT LOCATION, DEPTH AND METHODS OF ROOT PRUNING TO BE DETERMINED IN THE FIELD BY PROJECT ARBORIST. 2. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING. 3. TRENCH SHOULD BE BACKFILLED IMMEDIATELY OR INCORPORATED WITH SILT FENCE INSTALLATION. 4. ROOTS SHOULD BE SEVERED BY TRENCHER, VIBRATORY PLOUGH OR APPROVED EQUIVALENT. ROOTS OVER 75" DIAMETER SHOULD BE CLEANLY CUT BY HAND. ROOT PRUNING ADJACENT TO SPOKEN TREES MAY REQUIRE SOIL REMOVAL BY SUPERSONIC AIR TOOL TO MINIMIZE TREE AND ROOT DAMAGE.

1. ROOT PRUNING (TYPICAL) NTS 2. ROOT PRUNING (TYPICAL) SCALE: NTS DATE: 2009.11.13

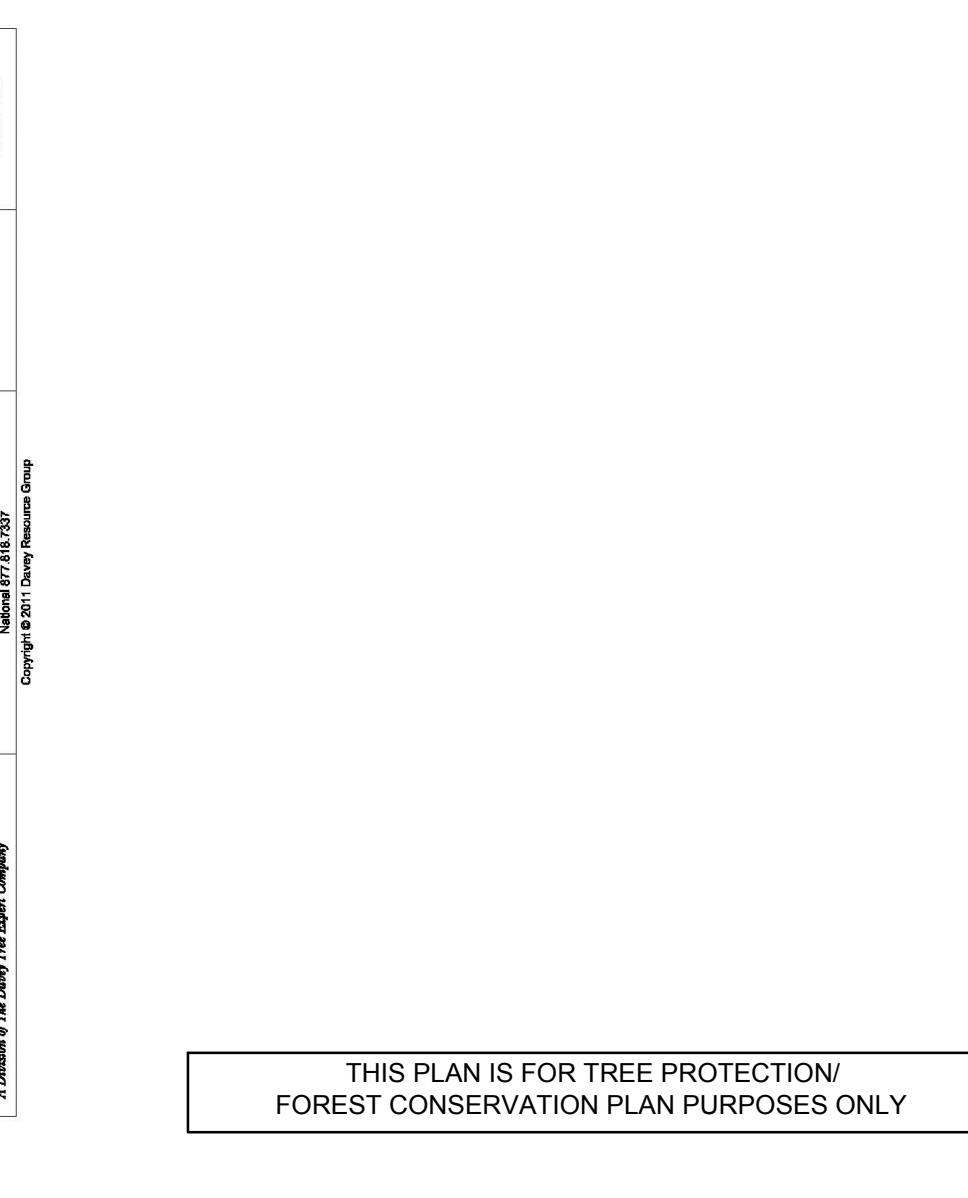


- NOTES: 1. MATTING MATERIAL SHALL BE DOUBLE SIDED GEOTEXTILE, GEONET CORE WITH NON-WOVEN COVERING (SUCH AS TENAX TENDRAIN 750/2) OR APPROVED EQUIVALENT. 2. RAM SHALL BE INSTALLED BY A CERTIFIED ARBORIST EXPERIENCED IN RAM INSTALLATION. 3. PROPOSED RAM IN STRUCTURAL SITUATIONS SHALL BE REVIEWED AND APPROVED BY THE PROJECT CIVIL ENGINEER.



PERMANENT ROOT AERATION MATTING (TYPICAL) SCALE: NTS DATE: 318 C THE CARE OF TREES Copyright © 2008 The Care of Trees

UTILITY TRENCH ROOT PROTECTION (TYPICAL) SCALE: NTS DATE: 2007.07.28



PERMANENT ROOT AERATION MATTING (TYPICAL) SCALE: NTS DATE: 318 C THE CARE OF TREES Copyright © 2008 The Care of Trees

UTILITY TRENCH ROOT PROTECTION (TYPICAL) SCALE: NTS DATE: 2007.07.28

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

Table with columns for Designer's Name, Address, City/State/Zip, Telephone Number.

Table with columns for Design Consultant, Date, Checked By, Drawn 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. 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

Table for M-NCPPC REVIEW AND APPROVAL with columns for Project Manager, Engineer, Construction Manager, Park Manager.

Table for ISSUED FOR PROCUREMENT ON with columns for Rev. No., Date, Description.

FOREST CONSERVATION DETAILS Brookside Gardens: Entrance & Parking Renovations 1800 Glenallan Ave, Wheaton, MD 20902 SCALE: NTS Liber 7099 Folio 519 SHEET 6 of 7

SYMBIOSIS SIRI logo and contact information.

Vertical list of project partners and consultants including Pine & Swallow, Davey Tree Resource Group, Kin Engineering, The Watkins Partnership, Inc., Henry Adams, Gilmore Lighting Design, Walden Studio Architects & Planners, A. Morton Thomas, Symbiosis/SIRI.

