SOILS CHART						
MAP UNIT/ SYMBOL	MAP UNIT NAME	K FACTOR/ WHOLE	DRAINAGE CLASS	HIGH ERODIBILITY	HYDRIC INCLUSION	HYDROLOGIC SOIL GROUP
400	URBAN LAND	NO RATING	NO RATING	NO	0	D

NOTES

1. TOTAL SITE AREA = 0.4167 ACRES AND CONSISTS OF PARCEL '2-H' OF ROCKVILLE TOWN CENTER. PROPERTY ADDRESS IS 41 MARYLAND AVE, ROCKVILLE, MD, 20850 WITH TAX ID#04-03198603. PROPERTY IS ZONED PD-RCI.
2. TOPOGRAPHY FROM MONTGOMERY COUNTY 218NW07 WSSC.
3. BOUNDARY INFORMATION FROM DEEDS OF RECORD BY MACRIS, HENDRICKS, & GLASCOCK P.A.
4. NO SLOPES GREATER THAN 25% EXIST ON-SITE. NO SLOPES 15-25% ON HIGHLY ERODIBLE SOILS EXIST ON-SITE.
5. THE SITE DRAINS TO CROYDON PARK TRIBUTARY. THIS PORTION OF THE ROCK CREEK WATERSHED IS DESIGNATED AS CLASS I WATERS BY THE STATE OF MARYLAND.
6. NO STREAM AND STREAM VALLEY BUFFER EXISTS ON SITE. NO WETLANDS PER NATIONAL WETLANDS INVENTORY ONLINE MAPPING TOOL. NO FLOODPLAIN EXISTS PER FEMA PANEL #24031C0334D.
7. UTILITIES (I.E. WATER, SEWER, STORM DRAIN, CULVERTS, ELECTRIC, PHONE) ARE SHOWN IN SURVEYED LOCATIONS.
8. THERE IS NO FOREST AREA ON-SITE.
9. THE PROPERTY IS NOT LISTED AS A HISTORIC SITE BY CITY OF ROCKVILLE. EXISTING BUILDINGS ON THE PROPERTY THAT MAY BE PROPOSED FOR DEMOLITION ARE SUBJECT TO ZONING ORDINANCE SEC. 25.07.02.4, HISTORIC REVIEW.
10. TREE DBH WAS MEASURED USING A DIAMETER TAPE.
11. FIELDWORK FOR THIS INVENTORY WAS CONDUCTED ON 12/17/2024 BY FRANK JOHNSON.
12. NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON-SITE.
13. INVASIVE SPECIES PRESENT INCLUDE NANDINA, ENGLISH IVY, AND BUSH HONEYSUCKLE.
14. THIS INVENTORY IN NO WAY CONSTITUTES A HAZARD TREE SURVEY. TREE CONDITIONS ARE GENERALLY ACCURATE BASED ON VISUAL OBSERVATION PER USUAL AND CUSTOMARY PRACTICE IN ACCORD WITH STATE AND COUNTY FOREST CONSERVATION LEGISLATION. THE EXAMINATION DETAIL REQUIRED TO PROVIDE A COMPREHENSIVE ANALYSIS OF BIOLOGICAL AND STRUCTURAL HEALTH IS BEYOND THE SCOPE OF THIS INVESTIGATION. CONDITION RATINGS ARE THE OPINION OF THE UNDERSIGNED PREPARER AND NOT THE APPROVING AGENCY. MHG ASSUMES NO LIABILITY FOR INJURY OR PROPERTY DAMAGE THAT MAY OCCUR AS A RESULT OF TREE FAILURE ON THIS PROPERTY.

CITY OF ROCKVILLE FOREST CONSERVATION WORKSHEET February 2010

NET TRACT AREA:					
A. Total tract area					11.23
B. Deductions (land dedication not in construction on this plan, other deductions - specify)					0.00
C. Net Tract Area =					11.23
LAND USE CATEGORY:					
ZONING:	R-400, R-200	R-90, R-75, R-60, R-150	RMD10, RMD15, RMD25	I-1, I-R, RPR, RPC, MXT, MXC, MXNC, MXB, MXE, MXCD, MXTD	Park
Place a "1" under the column corresponding to the correct zone of the site					
Zone:	0	0		1	0
(choose only one)					
D. Afforestation Threshold				15% x F =	1.68
E. Conservation Threshold				15% x F =	1.68
EXISTING FOREST COVER:					
F. Existing forest cover (within net tract) =					0.00
G. Area of forest above conservation threshold =					0.00
BREAK EVEN POINT:					
H. Breakeven Point (amount of forest retained so that no mitigation is required) =					0.00
I. Clearing permitted without mitigation =					0.00
PROPOSED FOREST CLEARING:					
J. Total area of forest to be cleared =					0.00
K. Total area of forest to be retained =					0.00
PLANTING REQUIREMENTS:					
L. Reforestation for clearing above conservation threshold =					0.00
M. Reforestation for clearing below conservation threshold =					0.00 1
N. Credit for retention above conservation threshold =					0.00
P. Total reforestation required =					0.00 1
Q. Total afforestation required =					1.68
R. Total planting requirement =					1.68

THIS PLAN AMENDS FTPO 94-2 AND FTP2006-00019. FOREST CONSERVATION PER THIS WORKSHEET WAS MET FOR THIS PROPERTY PER THOSE PLANS. FTPO2006-00019 SHOWS 1.791 ACRES WAS CREDITED NOT INCLUDING CRZ CREDIT PREVIOUSLY DESIGNATED; PROVIDING OVER THE 1.68 ACRE REQUIREMENT.

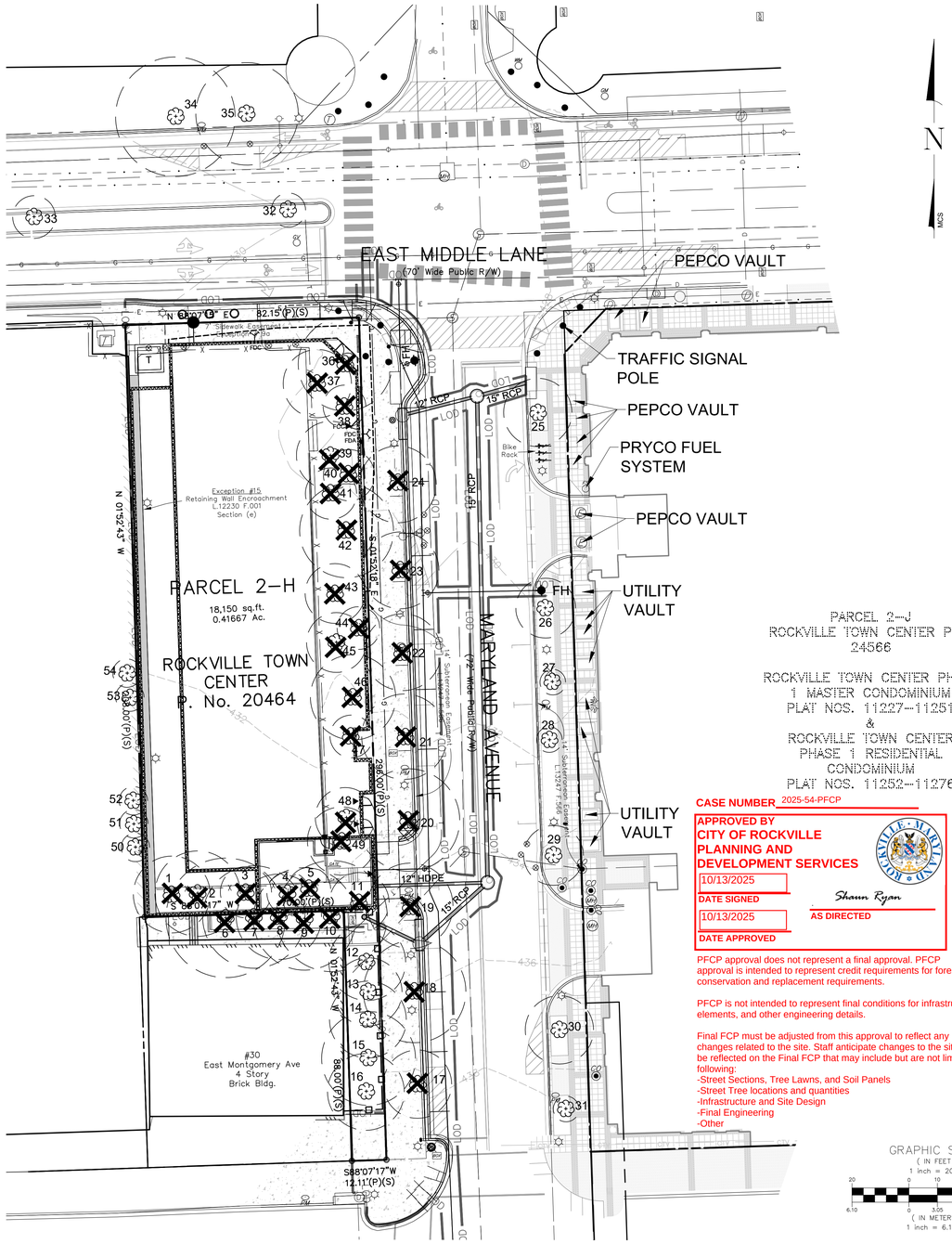
MINIMUM TREE COVER CREDIT WAS NOT REQUIRED AT THE TIME OF THE ORIGINAL FOREST CONSERVATION PLAN FTP2006-00019. TREES PLANTED PER THIS PLAN WERE PLANTED AS ROW TREES AND IN THE COURTHOUSE SQUARE PARK SECTION OF THE PLAN. THIS PLAN PROPOSES TO REPLACE 8 STREET TREES; ALSO SAVES 5 AMERICAN HOLLY AT 400 S.F. PER TREE FOR A TOTAL OF 2000 S.F. OF TREE COVER CREDIT.

SIGNIFICANT TREE SUMMARY CHART

NRI								PFCP/FCP				
#	SCIENTIFIC NAME	COMMON NAME	DBH	Area CRZ	CTLA %	CCR CTLA %	Remarks	PREV. CREDIT	DISPOSITION (SAVE/REMOVE)	% CRZ IMPACT	REPLACEMENT REQD	CREDIT FOR CRZ?	Proposed Credit (1/4 of CRZ area max)
LANDSCAPE SETTING CRZ-1"DBH+1.5'RADIUS ON-SITE								FTPO 2006-00019					
1	Pinus strobus	White Pine	9	572	84				REMOVE	100	N/A	NO	N/A
2	Pinus strobus	White Pine	9	572	66				REMOVE	100	N/A	NO	N/A
3	Crataegus sp	Hawthorn	6	254	84				REMOVE	100	N/A	NO	N/A
4	Crataegus sp	Hawthorn	5	177	81				REMOVE	100	N/A	NO	N/A
5	Crataegus sp	Hawthorn	5	177	81				REMOVE	100	N/A	NO	N/A
11	Cornus Kousa	Kousa Dogwood	8	452	75			200	REMOVE	100	N/A	NO	N/A
12	Ilex opaca	American holly	9	572	91		Multistem	200	SAVE	29	0	NO	200
13	Ilex opaca	American holly	8	452	91			200	SAVE	26	0	NO	200
14	Ilex opaca	American holly	9	572	91			200	SAVE	27	0	NO	200
15	Ilex opaca	American holly	11	855	88			200	SAVE	30	0	NO	200
16	Ilex opaca	American holly	9	572	97			200	SAVE	33	0	NO	200
36	Platanus occidentalis	Sycamore	11	855	91			Replacement	REMOVE	100	1	NO	N/A
37	Prunus sp	Flowering Cherry	8	452	78			200	REMOVE	100	N/A	NO	N/A
38	Cornus Kousa	Kousa Dogwood	5	177	25			200	REMOVE	100	N/A	NO	N/A
39	Pinus sp	Dwarf Pine	8	452	81			200	REMOVE	100	N/A	NO	N/A
40	Cornus Kousa	Kousa Dogwood	6	254	84			200	REMOVE	100	N/A	NO	N/A
41	Pinus sp	Dwarf Pine	7	346	88			200	REMOVE	100	N/A	NO	N/A
42	Platanus occidentalis	Sycamore	11	855	100			400	REMOVE	100	N/A	NO	N/A
43	Pinus sp	Dwarf Pine	8	452	84			200	REMOVE	100	N/A	NO	N/A
44	Crataegus sp	Hawthorn	5	177	53			200	REMOVE	100	N/A	NO	N/A
45	Pinus sp	Dwarf Pine	7	346	84			200	REMOVE	100	N/A	NO	N/A
46	Platanus occidentalis	Sycamore	10	707	100			400	REMOVE	100	N/A	NO	N/A
47	Cornus Kousa	Kousa Dogwood	5	177	88			200	REMOVE	100	N/A	NO	N/A
48	Pinus strobus	White Pine	8	452	75			200	REMOVE	100	N/A	NO	N/A
49	Cornus Kousa	Kousa Dogwood	7	346	78			200	REMOVE	100	N/A	NO	N/A
							TOTAL EX CREDIT:	4200		TOTAL	1		1000
STREET TREES OF ANY SIZE CRZ-1"DBH+1.5'RADIUS STREET TREES MAY HAVE PRIOR FCP CREDIT (Tree number must include F if previous FCP credit was assigned)								PREV. CREDIT					
17	Platanus occidentalis	Sycamore	8	452	91			400		100	1	NO	N/A
18	Platanus occidentalis	Sycamore	12	1017	59			400		100	1	NO	N/A
19	Platanus occidentalis	Sycamore	10	707	63			400		100	1	NO	N/A
20	Platanus occidentalis	Sycamore	12	1017	69			400		100	1	NO	N/A
21	Platanus occidentalis	Sycamore	10	707	75			400		100	1	NO	N/A
22	Platanus occidentalis	Sycamore	9	572	69			400		100	1	NO	N/A
23	Platanus occidentalis	Sycamore	9	572	69			400		100	1	NO	N/A
24	Platanus occidentalis	Sycamore	9	572	63			400		100	1	NO	N/A
25	Platanus occidentalis	Sycamore	8	452	78					0	N/A	NO	N/A
26	Platanus occidentalis	Sycamore	7	346	88					0	N/A	NO	N/A
27	Platanus occidentalis	Sycamore	3	64	100					0	N/A	NO	N/A
28	Platanus occidentalis	Sycamore	3	64	100					0	N/A	NO	N/A
29	Platanus occidentalis	Sycamore	7	346	88					0	N/A	NO	N/A
30	Platanus occidentalis	Sycamore	8	452	50					0	N/A	NO	N/A
31	Platanus occidentalis	Sycamore	3	64	100					0	N/A	NO	N/A
32	Ginkgo biloba	Ginkgo	4	113	97					0	N/A	NO	N/A
33	Ginkgo biloba	Ginkgo	6	254	81					0	N/A	NO	N/A
34	Quercus sp	Columnar White oak	13	1194	88					0	N/A	NO	N/A
35	Quercus sp	Columnar White oak	11	855	81					0	N/A	NO	N/A
							TOTAL EX CREDIT:	3200			8		
OFFSITE													
6	Acer rubrum	Red Maple	15	1590	91					100	1	NO	
7	Acer rubrum	Red Maple	12	1017	91					100	1	NO	
8	Acer rubrum	Red Maple	12	1017	91					100	1	NO	
9	Acer rubrum	Red Maple	13	1194	91					100	1	NO	
10	Acer rubrum	Red Maple	14	1385	91					100	1	NO	
50	Ulmus parvifolia	Chinese Elm	4	113	100					0	N/A	NO	
51	Ulmus parvifolia	Chinese Elm	5	177	100					0	N/A	NO	
52	Ulmus parvifolia	Chinese Elm	5	177	100					0	N/A	NO	
53	Ulmus parvifolia	Chinese Elm	4	113	100					0	N/A	NO	
54	Ulmus parvifolia	Chinese Elm	5	177	100					0	N/A	NO	
									Total offsite replacement:		5		
									MAXIUM CRZ FC CREDIT AVAILABLE				1000
									TOTAL SIG TREE REPACEMENTS REQD				14

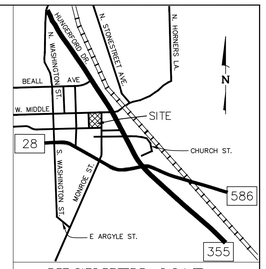
6600 S.F. OF FTPO CREDIT REMOVED (INCLUDING ONE TREE FOR 200 S.F. OF CREDIT NO LONGER EXISTS NOT SHOWN ON TREE LIST). 6600 S.F. TO BE MET VIA FEE IN LIEU.

14 REPLACEMENT TREES REQUIRED TO BE MET: 8 STREET TREES PLANTED FOR CREDIT AND 6 TO BE MET VIA FEE IN LIEU.



JUSTIFICATION FOR FEE-IN-LIEU PAYMENT

The afforestation requirement (6,600 s.f.) and the replacement tree requirement (6 trees) is to be met with the payment of a fee-in-lieu. Currently, the majority of the site is a parking lot and the remainder of the site includes a landscaped strip along the right of way. The project includes the removal of the parking lot and a multi-family residential project is proposed to be constructed. The proposed building meets Code requirements and covers the vast majority of the property. No area remains on-site to meet the forest conservation requirements. There are 14 replacement trees required and a 6,600 s.f. forest conservation requirement. The landscape strip contains a large number of trees that were planted as part of a forest conservation plan for a large section of downtown Rockville. This property is narrow and could not be developed to its allowed zoning and save the existing trees. The site constraints create a scenario where it would be not feasible to meet the needs of the development and meet the forest conservation requirements on-site, creating the need for fee-in-lieu. Street trees are being mitigated in the right of way.



VICINITY MAP
SCALE 1" = 2,000'

PARCEL 2-J
ROCKVILLE TOWN CENTER PLAT
24566

ROCKVILLE TOWN CENTER PHASE
1 MASTER CONDOMINIUM
PLAT NOS. 11227-11251
&
ROCKVILLE TOWN CENTER
PHASE 1 RESIDENTIAL
CONDOMINIUM
PLAT NOS. 11252-11276

CASE NUMBER 2025-54-PFCP

APPROVED BY
CITY OF ROCKVILLE
PLANNING AND
DEVELOPMENT SERVICES

10/13/2025
DATE SIGNED

Shaun Ryan
AS DIRECTED

10/13/2025
DATE APPROVED

PFCP approval does not represent a final approval. PFCP approval is intended to represent credit requirements for forest conservation and replacement requirements.

PFCP is not intended to represent final conditions for infrastructure, built elements, and other engineering details.

Final FCP must be adjusted from this approval to reflect any changes related to the site. Staff anticipate changes to the site that must be reflected on the Final FCP that may include but are not limited to the following:
-Street Sections, Tree Lawns, and Soil Panels
-Street Tree locations and quantities
-Infrastructure and Site Design
-Final Engineering
-Other

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.
20 0 10 20 40
6.10 0 3.05 6.10 12.19
(IN METERS)
1 inch = 6.10 m.

LEGEND

- SIGNIFICANT TREE
- CRITICAL ROOT ZONE
- LIGHT
- SANITARY SEWER
- STORM DRAIN
- WATER LINE
- GAS
- ELECTRIC LINE
- SUBJECT PROPERTY LINE
- PROPERTY LINE
- GUARDRAIL
- CURB & GUTTER
- CONCRETE
- LIMIT OF DISTURBANCE
- TREE CANOPY
- CONTOUR
- SIGN
- FIRE HYDRANT
- WATER METER
- STORM DRAIN STRUCTURE/ MANHOLE
- CLEAN OUT
- FIRE DEPT CONNECTION
- BIKE RACK
- TRASH CAN
- UTILITY BOX
- ELECTRIC VAULT
- BIKE LANE
- PARKING METER

Tree Note

Tree conditions shown here on are generally accurate based on visual observation per usual and customary practice in accord with State forest conservation legislation. The examination detail required to provide a comprehensive analysis of biological and structural health is beyond the scope of this investigation. Every condition that could possibly lead to tree or limb failure cannot always be detected. Trees are living organisms that may fail in many ways we do not fully understand. Conditions are often hidden within the trees and below the ground. It cannot be guaranteed that a tree will be healthy or safe under all circumstances, or for a specified period of time. Sometimes trees may appear "healthy", but may be structurally unsound. Condition ratings of trees are based solely on the opinion of MHG and may be inconsistent with the opinion of the City of Rockville Forestry Staff. MHG assumes no liability for injury or property damage that may occur as a result of tree failure on this property.

MHG
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
LAND PLANNING

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

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FRANK C. JOHNSON
08/15/2025
DATE
RECOGNIZED AS QUALIFIED PROFESSIONAL BY MD DEPT. OF NATURAL RESOURCES
COMAR 08.19.06.01

Qualified Professional Certification
I hereby certify that the information shown hereon is correct and that this plan has been prepared in accordance with the requirements of the existing state and city forest conservation legislation.

Comstock Companies Reston Station
1900 Reston Metro Plaza
10th Floor
Reston, VA 20190

mdaugard@comstock.com

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP GR342 WSSC 218NW07

PLAT 20464

4TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

PARCEL 2-H

ROCKVILLE TOWN CENTER

PROJ. MGR	KJH
DRAWN BY	FCJ
SCALE	1"= 20'
DATE	03/20/2025

MOMENTUM AT ROCKVILLE STATION

PRELIMINARY FOREST CONSERVATION PLAN

L9.01

PROJECT NO. 24.271.11

SHEET NO. 1 OF 2

I:\24271\Dwg\FC_11_01.dwg, 1 of 2, 8/15/2025 4:47:27 PM, jehnsh, ARCH E1 (30.00 x 42.00 Inches), Copyright © 2025 Macris, Hendricks & Glascock, P.A., Copyright © 2025 Macris, Hendricks & Glascock, P.A.

Forest and Tree Preservation Ordinance Notes

NOVEMBER 2019

SEQUENCE OF EVENTS

The permittee is responsible for strict adherence to the sequence and details as outlined. During each stage of the project, forestry staff may provide additional direction based on site conditions, unforeseen circumstances, or approved revisions.

PRE-CONSTRUCTION

1. Permittee shall obtain a Forestry Permit (FTP) for the project and secure copies of the approved Forest Conservation Plan (FCP) for distribution to contractors. The Permittee is responsible for obtaining a Maryland Roadside Tree Permit if applicable. Contact Miss Utility at 1-800 257-7777.
2. The Permittee must coordinate and schedule an onsite preconstruction meeting with the following attendees: Permittee, Construction Superintendent, Maryland LTE/ISA Certified Arborist (if required by Forestry Department), the City Forestry Inspector, City Project Inspector, and City Sediment Control Inspector. The limits of disturbance must be staked and flagged prior to the preconstruction meeting. No land disturbance shall occur prior to this meeting. This includes, but is not limited to, the installation of tree protection fencing, sediment control measures, clearing, grading and tree stress reduction measures. The limits of disturbance will be reviewed, and tree protection and tree care measures will be discussed.
3. No land disturbance shall begin before stress-reduction measures as indicated on the approved FCP, or otherwise directed by the Forestry Inspector have been implemented and approved by Forestry inspector. Measures not specified on the plan may be required as determined by the Forestry Inspector in consultation with the Permittee's MD LTE/ISA Certified Arborist. Appropriate stress-reduction measures may include, but are not limited to:
   a. Root pruning
   b. Crown reduction or pruning
   c. Watering
   d. Fertilizing
   e. Surface mulching
   f. Vertical mulching
   g. Root aeration matting
4. A professional with the dual credentials of Maryland Department of Natural Resources Licensed Tree Expert (LTE) and International Society of Arboriculture Certified Arborist (ISA CA) must perform all stress reduction measures. Documentation of these qualifications may be required. The measures must be done in accordance with *ANSI Standards for Tree Care Operations* (A300) and other industry best management practices. Implementation of the stress reduction measures must be observed by the Forestry Inspector or written documentation, including photographs must be sent via mail or email to the City Forestry Inspector.
5. Temporary tree protection devices, including signage, shall be installed per the approved Forest Conservation Plan, or as otherwise directed by the Forestry Inspector, and prior to any land disturbance. Tree protection fencing locations must be staked and flagged prior to the pre-construction meeting. The Forestry Inspector, in coordination with the City Sediment Control Inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan. The Permittee must contact the Forestry Inspector to schedule a follow-up construction inspection after installing all tree protection measures and performing all stress reduction measures. Upon a satisfactory inspection by the Forestry Inspector and Sediment Control Inspector, a Notice to Proceed will be issued and clearing and grading can commence. Temporary tree protection devices may include:
   a. Chain link fence (four feet high)
   b. Super silt fence with wire strung between the 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.

6. The Permittee and contractor shall maintain the temporary tree protection devices for the duration of the project and the location must not be altered without prior approval of the Forestry Inspector. No equipment, trucks, materials, debris, or any other items may be stored within the tree protection fence areas during the entire construction project. No access beyond the fenced area will be permitted. Tree Protection fencing shall not be removed without prior approval of the Forestry Inspector.
7. Long term tree protection devices/techniques, as shown on the FCP or as directed by the Forestry Inspector may include but are not limited to:
   a. Root aeration systems
   b. Retaining walls
   c. Raised sidewalks
   d. Tunneling of utilities
   e. Pier and panel walls
   f. Porous pavers

DURING CONSTRUCTION

1. Periodic inspections at the discretion of the Forestry Inspector will occur during the construction project. Corrections and repairs to all tree protection devices and other protective measures, as determined by the Forestry Inspector, must be made within the timeframe established by the Forestry Inspector.
2. The Permittee must immediately notify the Forestry Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the plan. Remedial actions to the restore these areas will be determined by the Forestry Inspector and the corrective actions must be made within the timeframe established by the Forestry Inspector.
3. Failure to comply with the approved FCP or any directive of the City Forester's office is a violation of the Forest and Tree Preservation Ordinance (FTPO). Pursuant to Section 10.5-34 of the FTPO, a fine in the amount of $1,000 may be imposed for each violation. Each day a violation continues is a separate violation. In addition, a stop work order may be issued until the violation has been abated and the fine has been paid or an appeal has been filed pursuant to Section 10.5-35 of the FTPO. Additional punitive measures as stated under Section 10.5-34 of the FTPO may be imposed.

POST CONSTRUCTION

1. After construction is completed, the Permittee must request a final inspection in writing with the Forestry Inspector. At the final inspection, the Forestry Inspector may require additional corrective measures, which may include, but is not limited to:
   a. Removal and replacement of dead and dying trees
   b. Pruning of damaged, dead or declining limbs
   c. Surface mulching
   d. Soil aeration
   e. Fertilization
   f. Watering
   g. Wound repair
   h. Clean up of retention areas including trash removal
2. After the final inspection and completion of all corrective measures the Forestry Inspector will request all temporary tree and forest protection devices be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both the City Sediment Control Inspector and the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.

INSTALLATION OF PLANT MATERIAL

1. The Permittee is responsible for obtaining the approved Forest Conservation Plan/Landscape Plan and providing a copy to the Landscape Contractor. The Permittee shall ensure that the Landscape Contractor can secure the plants shown the FCP/Landscape Plan. Plant substitutions are not allowed. It is strongly recommended that plant material be secured from supplier by the project start date.

2. A pre-planting meeting is required before installation of landscaping, afforestation, or reforestation. The applicant must schedule an on-site pre-planting meeting with the City Forestry Inspector. Attendees must include the Permittee, landscape contractor, and Forestry Inspector. Trees and shrubs shall conform to the current edition of the American Standard for Nursery Stock (ANSI Z60.1).
3. Comply with appropriate City Soil Specification:
   i. Soil Specification FOR TREE PLANTING WHERE EXISTING PAVEMENT OR OTHER IMPERVIOUS SURFACES WERE PREVIOUSLY LOCATED OR WHERE EXISTING GREENSPACE HAS BEEN SEVERELY DEGRADED[1]
      1. Site preparation
         a. Demolish existing impervious surface and remove all existing asphalt, concrete, stone and construction materials to expose subsoil free of debris.
         b. Excavate so that final planting bed will provide quality soil to a depth of forty-eight (48) inches, and to a radius of 10' minimum or to new hard edge of planting bed, whichever is less.
         c. Loosen exposed subsoil below 48" by ripping 18" into the sub grade elevation.
         d. Test to ensure that planting bed drains at a rate of at least 1 inch/per hour.
         e. Install imported soil to fill excavated planting bed. Imported soil shall have a texture of LOAM, per the USDA soil classification system and a chemical composition compatible with healthy tree growth. When installing the soil, it should be installed in lifts or layers of < 12 inches (30 cm), tamping or watering (not both) between lifts to minimize potential settling.
      2. Immediately prior to installation of plant material, the soil must be tested and must have a pH range between 5.5 and 7 and a nutrient content which corresponds to an adequate rating, per current industry standards. Amend soil, if necessary, to achieve the current industry standard.
      3. The Forestry Inspector may require additional soil specifications, based on site conditions.
   ii. Soil Specification FOR PLANTING WHERE EXISTING GREEN SPACE HAS NOT BEEN PROTECTED FROM CONSTRUCTION IMPACTS BUT IS NOT SEVERELY DEGRADED.
      1. Site Preparation:
         a. Remove all construction debris and top four to six inches of existing soil.
         b. Test remaining existing soil to verify a pH range between 5.5 and 7, and has a nutrient content which corresponds to an adequate rating, per current industry standards.
         c. Apply four (4) inches of mature compost evenly over the entire planting surface. (4" = 12 Cubic Yard/1,000 s.f.). Provide compost supplier information and specifications to the City Forestry Inspector for approval prior to install.
         d. Till the compost into the existing soil to a minimum depth of thirty-six (36) inches using the city's soil profile rebuilding specification.
         e. If soil does not meet nutrient standards, mitigate soil chemistry to meet the chemical parameters.
      2. The Forestry Inspector may require additional soil specifications, based on site conditions.
   iii. Soil Specification FOR PLANTING WITHIN EXISTING GREEN SPACE AREAS WHICH HAVE BEEN PROTECTED FROM CONSTRUCTION IMPACTS (One of two options, as determined by Forestry Inspector) Refer to approved City of Rockville Detail A-7
      1. Test existing soil to verify it has a pH range between 5.5 and 7, and a nutrient content which corresponds to an adequate rating, per current industry standards. If soil does not meet nutrient standards, one of two options will be performed to mitigate the soil.
         a. Option 1- Till Method- Depth of tilling for planting must be at least twenty-four (24) inches:
            i. Apply four (4) inches of mature compost evenly over the entire planting surface (4" = 12 cubic yards/1,000 s.f.). Provide compost supplier information and specifications to the City Forestry Inspector for approval prior to install.
            ii. Till the compost into the existing soil to a minimum depth of twenty-four (24") inches.
         b. Option 2— Aeration and Vertical Mulching
            i. Using a 2- 3" Auger, drill a series of holes in the soil to a depth of twenty-four (24) inches.
            ii. Begin at the edge of the hole dug for the root ball and continue drilling at one-foot intervals (maximum), in concentric rings around the tree out to ten (10) feet from the tree.
            iii. Each hole must be refilled with mature compost.
         c. The Forestry Inspector may require additional soil specifications, based on site conditions.

[1] See definitions section #9

iv. Soil testing of the existing soil may be conducted with PRIOR approval from the City's Forestry Inspector to determine the number and location of the samples. The above requirements may be reduced if soil testing shows the following:
   1. Soil pH is between 5.5 and 7
   2. The top 24" of existing soil contains a minimum of 4-6% organic matter by weight
   3. The soil is free of contaminants
   4. The soil texture is sandy loam or loam
   5. The soil has an infiltration rate not less than 1" per hour
   6. The soil does not contain debris or stones greater than one inch
   7. The soluble salt content is less than 3 dS/m
   8. Consult the University of Maryland Extension website: http://extension.umd.edu/ for a listing of commercial soil testing facilities.

v. Soil preparation is required for street trees planted within the city's rights-of-way and private street trees, if they are part of the approved plan.

4. The depths and grades shown on plan drawings are final grades after settlement and shrinkage of the organic material. The contractor shall install the soil mix at a higher level to anticipate this reduction of volume. All grades are assumed to be 'as measured" to be prior to the addition of any surface compost till layer or mulch or sod.
5. All details of the planting plans regarding plant quality and proper planting will be discussed including but not limited to:
   a. Plant quality.
   b. Proper form for species.
   c. Proper ratio of caliper size/height to container size/root ball size.
   d. Proper pruning cuts if applicable in accordance with current ANSI A300 pruning standards (generally there should be no recent pruning).
   e. No co-dominant stems or multiple trunks (unless approved by FCP or by The Forestry Inspector).
   f. Sound graft union.
   g. Free of girdling roots, or the ability to remove girdling roots without damaging the tree.
   h. Trees shall be healthy, vigorous, insect/disease free, and without cankers/cracks or trunk damage.
6. Proper Installation
   a. Root flare no higher than 3 inches from existing grade.
   b. Exposed root flare (not graft); removing more than several inches of soil to expose the root flare may result in the rejection of the plant material.
   c. Wire baskets/twine/burlap removed from at least the top half of root ball, or as directed by Forestry Inspector.
   d. All burlap or twine removed completely.
   e. No hose and wire; staking and strapping per City planting detail.
   f. Planting Hole a minimum of twice the width of the root ball; could be greater. Planting detail assumes soil has been prepared per the city's specifications (Planting, #3).
   g. Mulched properly, per City planting detail.
   h. Wildlife protection installed, if required, type approved by the Forestry Inspector.
7. Trees not complying with the above requirements may be rejected at the discretion of the City Forestry Inspector.
8. Tree planting will generally not be permitted between the dates of June 1 and September 1, or when the ground is frozen.
9. DEFINITIONS
   a. Topsoil
      i. Soil can be considered topsoil if it originates from an A horizon of a natural soil or is a mineral soil with 4-6%N organic matter content, and a NRCS textural class similar to pre-development conditions A horizon soils for the site, or as specified by the City Forestry Division. The city Forestry Division will specify a LOAM texture in the absence of native conditions listed above. Blended soils shall not be used unless specified by the City Forestry Division. In addition, topsoil shall:
         1. Be friable and well drained
         2. Have a pH between 5.5-7.

3. Have an organic matter content between 4-6%.
4. Have low salinity as indicated by a soluble salt content which is less than 3 dS/m
5. Be free of debris, stone, gravel, trash, large sticks, heavy metals, and other deleterious contaminants, (if screening is used to remove debris, screen size must be ¼ inch or larger).
6. Have a nutrient profile such that it has an adequate rating, per current industry standards.
7. Be free of noxious weed seeds

   b. Compost
      i. Compost shall be composed of leaves, yard waste, or food waste. Biosolid-based composts shall not be used. A compost sample with analysis shall be submitted for approval to the City Forestry Division before application.
      ii. Stability refers to the rate of biological breakdown, measured by carbon dioxide release. Maturity refers to completeness of the aerobic composting process and suitability (lack of plant toxicity) as a plant growth media, often measured by ammonia release and by plant growth tests. Compost manufacturers that subscribe to the US Composting Council's testing program may document stability as compost testing 7 or below in accordance with TMECC 05.08-B, "Carbon Dioxide Evolution Rate". Maturity (suitability for plant growth) may be documented as compost testing greater than 80% in accordance with TMECC 05.05-A, "Germination and Vigor". Compost is considered mature and stable if it tests at 6.0 or higher on the Solvita Compost Maturity Index Rating, which is a combination of Carbon Dioxide and Ammonia Maturity Tests (test information and equipment available at www.solvita.com).
      iii. Compost shall also be:
         1. Free of weed seeds.
         2. Free of heavy metals or other deleterious contaminants.
         3. Have a soluble salt content which is less than 3 dS/m.
   c. Severely Degraded Soil
      i. Soil shall be considered severely degraded if grade was lowered or raised more than 14 inches OR soil was compacted in lifts regardless of the final grade OR was used as a staging area for construction materials, equipment or processes.
      ii.

POST INSTALLATION

1. The Permittee shall notify the City Forestry Inspector IN WRITING when the planting is complete and request a post planting inspection. The inspection must include the Permittee, landscape contractor and Forestry Inspector. The maintenance and warranty period will not begin until the City Forestry Inspector has accepted ALL plantings.
2. Trees will be inspected for plant quality and proper planting in accordance with City specifications and nursery standards. Once the maintenance period has begun, the applicant is responsible for maintaining plant health in accordance with the signed Warranty and Maintenance Agreement.
3. Routine inspections will be conducted throughout the warranty period and the applicant will be notified in writing when corrective measures are required. Failure to complete the corrective measures by the given date may result in fines being issued, permits revoked, extension of warranty period or other punitive measures.
4. Such maintenance shall include when appropriate, but not necessarily be limited to:
   a. Weekly watering equal to 10 gallons per caliper measure of tree diameter. (ex: 2.5" caliper tree =25 gallons/week.) Documented drenching natural rainfall may substitute for weekly watering.
   b. Control of competing vegetation throughout the maintenance period as necessary.
   c. Fertilizing, as required by soil analysis.
   d. Pruning, mulching, tightening of strapping, resetting of plants to proper grades or upright position.
   e. Furnishing and applying pesticides or other items necessary to thwart damage from insects and disease.
   f. Providing protection measures such as fencing and interpretive signs as necessary, to prevent destruction or degradation of the planting site.
   g. Replacement of dead and dying trees. Survival standards contained in the State Forest Conservation Manual shall be followed for the protection and satisfactory establishment of forest where applicable.

   h. Eradicate, suppress and control non-native and invasive plant species during the maintenance period to the satisfaction of the City Forestry Inspector.
   i. Installing and maintaining devices to protect against wildlife damage.
   j. Removal of staking and strapping after six months, or as directed by the Forestry Inspector.

NON-NATIVE INVASIVE PLANT CONTROL:

1. The City of Rockville maintains a list of non-native and invasive plants for certain available on the City's website. The State of Maryland maintains a noxious weed list. The Permittee shall submit a Non-Native and Invasive Management Plan to the City Forestry Inspector for review and approval prior to the pre-planting meeting. Details to be included in the management plan are:
   a. Narrative and/or plan stating the location, type and amount of non-native and invasive plants present on the site.
   b. Proposed treatment measures and methods of control by plant type.
   c. Timing and frequency of treatments by plant type.
   d. Plan for seeding and/or re-planting following management/eradication treatment.
   e. Proposed signage type and locations for installing herbicide application notification signs.
   f. Copies of contractor certifications/pesticide licenses.
2. Contractor is responsible for complying with MDE, EPA and other government agency regulations as well as obtaining proper permits from these agencies as applicable. The Forestry inspector must be notified 48 hours in advance prior to commencing any and all treatments.
3. The Forestry Inspector will perform periodic inspections of the non-native and invasive treatments throughout the warranty and maintenance period. The applicant may be required to submit proof of treatment.

Soil Profile Rebuilding Specification

NOVEMBER 2019

Specification for Restoration of Graded and Compacted Soils that will be Vegetated

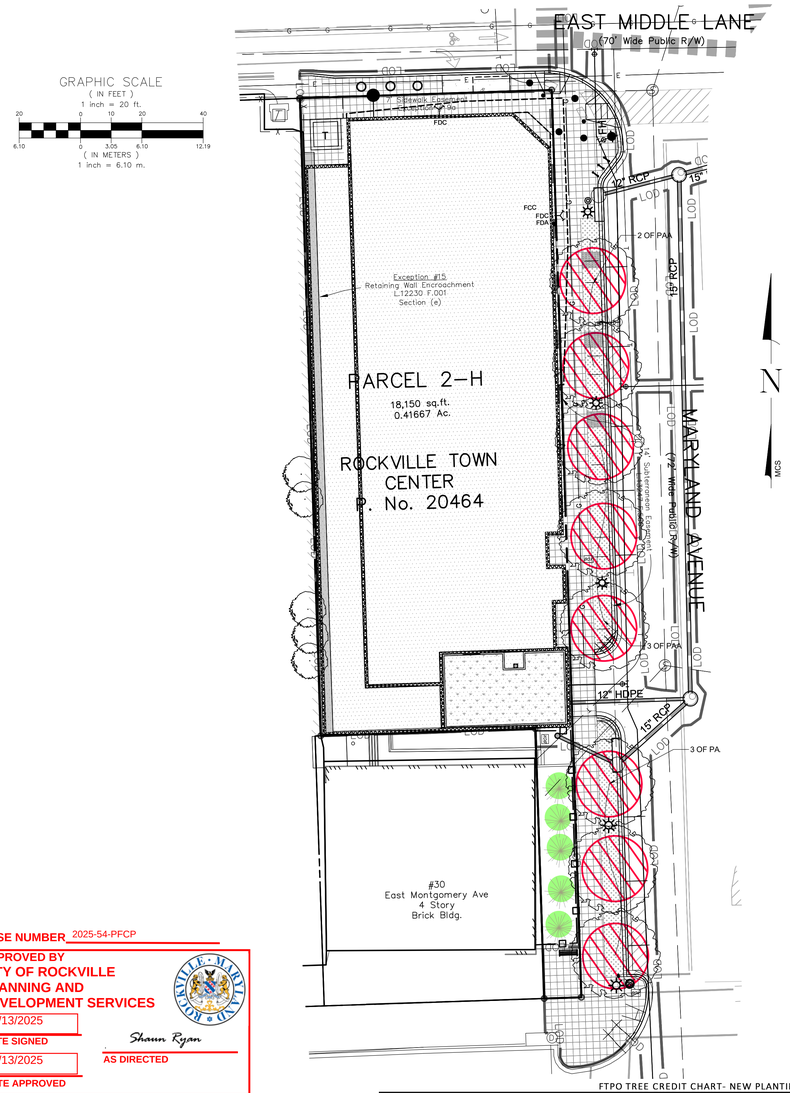
Based on Specifications developed At Virginia Polytechnic Institute- Department of Horticulture

1. PURPOSE AND DESCRIPTION
   1.1 Purpose
   Soil Profile Rebuilding is an appropriate soil restoration technique for sites where topsoil has been completely or partially removed and subsoil layers have been compacted (graded and/or trafficked by equipment). It may also be used with some modifications if topsoil is present. This is not an appropriate technique in sites with surface compaction only (6 inches or less), although this situation is rare on construction sites. This technique is not appropriate within the root zones of trees that are to be protected. Soil Profile Rebuilding can improve physical and biological characteristics of soil to allow for revegetation. Soil chemical problems, soil contamination from heavy metals, pathogens, or excessive debris or gravel shall be addressed separately.
   1.2 Description of Procedure
   The procedure includes a subsoiling procedure, addition of organic matter in the form of compost, replacement or addition of topsoil, and subsequent planting with seedings. The preparation portion of Soil Profile Rebuilding puts the components in place for restoration to characteristics similar to undisturbed soils, however, the complete restoration process requires root activity and occurs over many years. This technique may be appropriate for restoration of disturbed soils as defined by SITES**.
   1.3 Expected Outcomes
   Soil Profile Rebuilding may improve vegetation establishment, increase tree growth rates, increase soil permeability, enhance formation of aggregates in the subsoil, and enhance long-term soil carbon storage.
2. PROCEDURE
   2.1 Location:
   Profile Rebuilding shall occur on all soil areas that are to be vegetated that have been disturbed by trafficking or grading during construction or prior to construction. Soil areas that are not to be treated should be protected by permanent fencing during the construction period, and all access to these areas prohibited. A soil map delineating protected areas and areas to be treated shall be approved by the Forestry Inspector before grading or construction begins.
   2.2 Sequencing
   Profile Rebuilding shall occur after site disturbance is complete, including all vehicle and equipment trafficking, but before replacement of topsoil. Once profile rebuilding is complete, all traffic and equipment or materials storage on treated areas is prohibited, with the exception of foot traffic, for the purposes of planting or mulching.If topsoil is already present and is 4 inches or greater in depth, use the "modifications for pre-existing topsoil (2.6)."
   2.3 Remove foreign materials
   Remove all foreign materials resulting from construction operations, including oil drippings, stone, gravel, and other construction materials from the existing soil surface.
   2.4 Application of Compost
   Spread mature, stable compost to a 4 inch depth over compacted subsoil (see Section 3. Definitions for definition of compost).
   2.5 Subsoiling
   Subsoiling may be performed when soil is neither wet nor dry. If a shovel cannot be forced into the soil, it is too dry. If the surface is sticky or muddy, it is too wet. Use a mini-backhoe or similar equipment with a narrow (less than 24"), tined bucket to break up the compacted soil and incorporate the compost. Work backwards away from excavated soils so that treated soil is not trafficked by the equipment. Insert the bucket through the compost layer and into the subsoil to a depth of thirty-inches (36"), and raise a bucket of soil at least twenty-four inches above the soil surface.

Tip the bucket and allow soil to fall. *Repeat this procedure* until no clumps of compacted soil larger than 12 inches in diameter remain. The tines of the bucket can be used to break apart larger clumps if necessary. 50% of the soil shall be in clumps 6 inches or smaller. No clumps shall be greater than 18" in diameter. The subsoiling is not intended to homogenize the compost and soil, but rather loosen the soil to a thirty-six inch depth and create veins of compost down to that depth as well. To ensure that subsoiling reached the appropriate depth, a push tube soil sampler shall be used to verify compost is present at thirty-six inch depth.

   2.6 Replacement of topsoil
   2.6.1 Standard procedure
   Stockpiled topsoil, or additional topsoil if none is available from the site, shall be returned to the site to a four (4) inch minimum depth (see *Section 3.3 Definitions* for definition of topsoil). If soil was severely disturbed (see definitions), a six (6) to eight (8) inch minimum shall be replaced with topsoil that meets city standards.
   2.6.2 Modification if significant topsoil is already present before Profile Rebuilding is initiated
   Case 1:
   At least four inches of topsoil is present on the site after construction activities are completed AND soil is not severely disturbed (see *Section 3.3 Definitions* for description of severely disturbed).
   Case 2:
   Less than four inches of topsoil is present on site after construction activities were completed but before Profile Rebuilding is initiated, OR soil is severely disturbed (see *Section 3.3 Definitions* for description of severely disturbed).
   For Case 1: A minimum of three inches additional topsoil shall be placed over the subsoiled layer before tilling.
   For Case 2: Follow *Section 2.6.1 Standard procedure*, as if no topsoil had been present.
   2.7 Tilling
   Rototill topsoil to a depth of six to eight inches when soil is neither dry nor very moist. Rototilling depth should cross the interface with the subsoiled layer by a minimum of one (1) inch and can be verified with a random sampling with a push tube soil sampler.
   2.8 Planting
   Plant the site with woody plants, trees or shrubs, at a density that insure a minimum of 50% of the site will be occupied with roots within 10 years. Planting of at least one large stature tree (e.g., one that will mature at approximately 60-70 feet in height) or 20 medium stature shrubs per 5,000 sq. ft. shall be considered to achieve this.
3. DEFINITIONS
   3.1 Topsoil
   Soil can be considered topsoil if it originates from an A horizon of a natural soil or is a mineral soil with 4-6%N organic matter content, and a NRCS textural class similar to pre-development conditions A horizon soils for the site, or as specified by the City Forestry Division. The city Forestry Division will specify a LOAM texture in the absence of native conditions listed above. Blended soils shall not be used unless specified by the City Forestry Division. In addition, topsoil shall:
   1. Be friable and well drained
   2. Have a pH between 5.5-7.
   3. Have an organic matter content between 4-6%.
   4. Have low salinity as indicated by a soluble salt content which is less than 3 dS/m
   5. Be free of debris, stone, gravel, trash, large sticks, heavy metals, and other deleterious contaminants, (if screening is used to remove debris, screen size must be ¼ inch or larger).
   6. Have a nutrient profile such that it has an adequate rating, per current industry standards.
   7. Be free of noxious weed seeds

   3.2 Compost
   Compost shall be composed of leaves, yard waste, or food waste. Biosolid-based composts shall not be used. A compost sample with analysis shall be submitted for approval to the City Forestry Division before application. Stability refers to the rate of biological breakdown, measured by carbon dioxide release. Maturity refers to completeness of the aerobic composting process and suitability (lack of plant toxicity) as a plant growth media, often measured by ammonia release and by plant growth tests. Compost manufacturers that subscribe to the US Composting Council's testing program may document stability as compost testing 7 or below in accordance with TMECC 05.08-B, "Carbon Dioxide Evolution Rate". Maturity (suitability for plant growth) may be documented as compost testing greater than 80% in accordance with TMECC 05.05-A, "Germination and Vigor". Compost is considered mature and stable if it tests at 6.0 or higher on the Solvita Compost Maturity Index Rating, which is a combination of Carbon Dioxide and Ammonia Maturity Tests (test information and equipment available at www.solvita.com).
   Compost shall also:
   1. Free of weed seeds.
   2. Free of heavy metals or other deleterious contaminants.
   3. Have a soluble salt content which is less than 3 dS/m.
   3.3 Severely Degraded Soil
   Soil shall be considered severely degraded if grade was lowered or raised more than 14 inches OR soil was compacted in lifts regardless of the final grade OR was used as a staging area for construction materials, equipment or processes.
4. SUBMITTALS
   4.1 Soil Map
   A soil map indicating soil areas to be treated and those that do not need to be restored via Soil Profile Rebuilding shall be submitted by the contractor for approval to the City Forestry Division before construction begins.
   4.2 Compost
   A compost sample with analysis certifying it is stable, mature, from acceptable feedstocks and free of contaminants and weed seeds shall be submitted for approval to the City Forestry Division before compost is applied to the soil.
   4.3 Topsoil
   A topsoil sample with analysis from a certified testing laboratory and verification of source shall be submitted for approval to by the City Forestry Division before application. Separate documentation is required for each 100 cubic yards of topsoil unless otherwise approved by the City Forestry Division.
5. REFERENCES & PERMISSIONS
   Use of this specification has been documented to increase tree canopy and soil carbon stores compared with typical practices. See www.urbanforestry.frec.vt.edu/SRES for more information.
   Soil Profile Rebuilding Specification by Susan Day et al. is licensed under a Creative Commons Attribution-NonCommercial 3.0 United States License. It may be used freely as is, or modified. However, use of the term "Soil Profile Rebuilding" should only be used when soil restoration is performed as described in this specification. See www.urbanforestry.frec.vt.edu/SRES/specification.html for full details.



LEGEND

- LIGHT
- SANITARY SEWER
- STORM DRAIN
- WATER LINE
- GAS
- ELECTRIC LINE
- SUBJECT PROPERTY LINE
- PROPERTY LINE
- GUARDRAIL
- CURB & GUTTER
- LIMIT OF DISTURBANCE
- SIGN
- FIRE HYDRANT
- WATER METER
- STORM DRAIN STRUCTURE/ MANHOLE
- CLEAN OUT
- FIRE DEPT CONNECTION
- BIKE RACK
- TRASH CAN
- UTILITY BOX
- ELECTRIC VAULT
- BIKE LANE
- PARKING METER
- EX. FTPO CREDIT TO REMAIN
- PROPOSED STREET TREE FOR REPLACEMENT TREE CREDIT
- EXISTING TREE TO REMAIN

CASE NUMBER 2025-54-PFCP

APPROVED BY CITY OF ROCKVILLE PLANNING AND DEVELOPMENT SERVICES

10/13/2025
DATE SIGNED

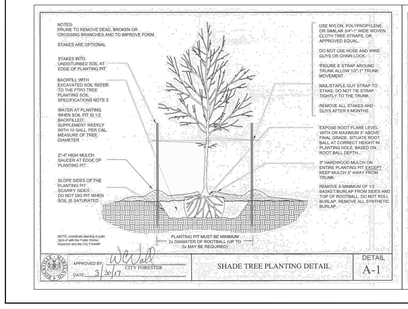
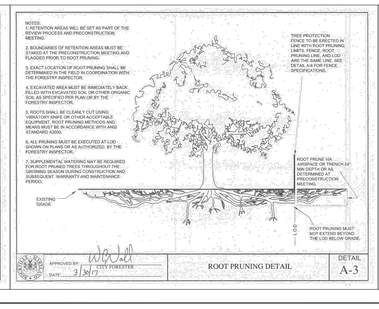
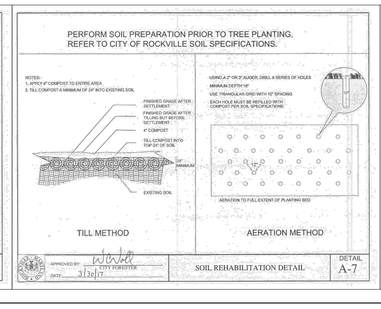
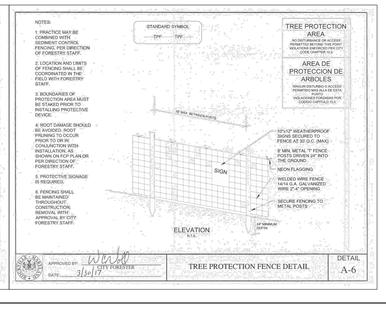
Shaun Ryan
AS DIRECTED

10/13/2025
DATE APPROVED

PFCP approval does not represent a final approval. PFCP approval is intended to represent credit requirements for forest conservation and replacement requirements.

PFCP is not intended to represent final conditions for infrastructure, built elements, and other engineering details.

Final FCP must be adjusted from this approval to reflect any changes related to the site. Staff anticipate changes to the site that must be reflected on the Final FCP that may include but are not limited to the following:
-Street Sections, Tree Lawns, and Soil Panels
-Street Tree locations and quantities
-Infrastructure and Site Design
-Final Engineering
-Other

FTPO TREE CREDIT CHART- NEW PLANTINGS

QUANTITY	Key	BOTANICAL NAME	COMMON NAME	SIZE (LG SHADE, MED LG (AM SHADE), SM EG)	ROOT BALL TYPE	SIZE- CAL/HT	LANDSCAPE ONLY- NO FTO CREDIT	QUANTITY SIG. TREE REPLACEMENT CREDIT TYPE	FC CREDIT (200 OR 400 SF)	FTPO TREE REPLACEMENT CREDIT (QUANTITY) (200 OR 400 SF x TOTAL QUANTITY)
8	PAA	*Plantanus x acerifolia*	London plane tree	LG SHADE	B&B	2.5"	0	8	0	3200
					TOTALS		0	8	0	3200
FEE IN LIEU OPTION									5F