

Civil Engineers Land Planners Landscape Architects

Land Surveyors 9220 Wightman Road, Suite 120

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Twee John

RANK C. JOHNSON 05/01/2020

RECOGNIZED AS QUALIFIED PROFESSIONAL BY MD DEPT. OF NATURAL RESOURCES

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

CAROLYN H. O'DELL REVOCABLE TRUST 19115 LIBERTY MILL ROAD GERMANTOWN, MD 20874

FLOURNOY DEVELOPMENT GROUP 1100 BROOKSTONE CENTER PKWY COLUMBUS, GA 31904 (706) 324-4000

CONTACT: CHARLIE SABIN Charlie.Sabin@flournoydev.com

REVISIONS DESCRIPTION

WSSC 226NW13

9TH ELECTION DISTRICT MONTGOMERY COUNTY

PARCEL P515 **CHESTNUT RIDGE**

PROJ. MGR	KDJ
DRAWN BY	FCJ
SCALE	1"= 30'
DATE	4/10/20

FINAL FOREST CONSERVATION PLAN #12017021A

L8.01 PROJECT NO. 2015.244.24 1 of 2 SHEET NO.

The property owner is responsible for ensuring all tree protection measures are performed in accordance with the approved final forest conservation plan or tree save plan, and as modified in the field by a Planning Department Forest Conservation Inspector. The measures must meet or exceed the most recent standards published by the American National Standards Institute (ANSI A300).

Pre-Construction

8' MIN. METAL 'T' FENCE POSTS DRIVEN 2' INTO THE GROUND

- SECURE FENCING TO METAL POSTS

NTS

- 1. An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged and before any land disturbance.
- 2. The property owner must arrange for the meeting and the following people must participate at the preconstruction meeting: the property owner or their representative, construction superintendent, International Society of Arboriculture (ISA) certified arborist/MD Licensed Tree Expert (representing owner) that will implement the tree protection measures, The Planning Department Forest Conservation Inspector, and Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector. The purpose of this meeting is verify the limits of disturbance and discuss specific tree protection and tree care measures shown on the approved plan. No land disturbance shall begin before tree protection and stress-reduction measures have been implemented and approved by the Planning Department's Forest Conservation Inspector.
- a. Typical tree protection devices include:
- i. Chain link fence (four feet high)
- ii. Super silt fence with wire strung between the support poles (minimum 4 feet high) with high visibility flagging.
- iii. 14 gauge 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.
- b. Typical stress reduction measures may include, but are not limited to:
- i. Root pruning with a root cutter or vibratory plow designed for that purpose. Trenchers are not allowed, unless approved by the Forest Conservation Inspector
- ii. Crown Reduction or pruning
- iii. Watering
- iv. Fertilizing
- v. Vertical mulching vi. Root aeration systems

Measures not specified on the Forest Conservation Plan may be required as determined by the Forest Conservation Inspector in coordination with the property owner's arborist.

3. A Maryland Licensed Tree expert must perform, or directly supervise, the implementation of all stress reduction mesasures. Documentation of the process (including photograhs)

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6' HARDWOOD GUYING STAKE (2' INTO GROUND), (1 STAKE PER TREE)

FOREST CONSERVATION PLANTING SCHEDULE

COMMON NAMI

White Oak

Black Gum

Red Maple

Spicebush

Eastern Redhud

American Holly

1. The 0.07 acre planting area will be planted with the above plant material at a rate of 200 1" caliper trees/acre x 0.07 acres = 14 trees

2. The mix of trees planted shall be 70% dominant species (10 trees) and 30% understory species (4 trees) planted 12' to 15' on-center.

3. Shrub species shall be planted at a rate of a third the rate of trees = 5 shrubs. Shrubs are to be evenly distributed over the planting area

may be required by the Forest Conservation Inspector, and will be determined at the preconstruction meeting.

- 4. Temporary protection devices must be installed per the approved Forest Conservation Plan, Exemption Plan, or Tree Save Plan and prior to any land disturbance. 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.
- 5. Tree protection fencing must be installed and maintained by the property owner for the duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. All construction activity within protected tree and forest
- areas is prohibited. This includes the following activities:

a. Parking or driving equipment, machinery, or vehicles of any type.

- b. Storage of any construction materials, equipment, stockpiling, fill, debris, etc. c. Dumping or any chemicals (i.e., paint thinner), mortar or concrete remainder, trash,
- garbage, or debris of any kind. d. Felling of trees into a protected area.
- e. Trenching or grading for utilities, irrigation, drainage, etc.
- 6. Forest and tree protection signs must be installed as required by the Forest Conservation Inspector. The signs must be waterproof and wording provided in both English and Spanish.

During Construction

- 7. Periodic inspections will be made by the Forest Conservation Inspector. Corrections and repairs to all tree protection devices must be completed within the timeframe given by the
- 8. The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the approved plan. Remedial actions, and the relative timeframes to restore these areas, will be determined by the Forest Conservation Inspector.

Post-Construction

- 9. After construction is completed, but before tree protection devices have been removed, the property owner must request a final inspection with the Forest Conservation Inspector. At the final inspection, the Forest Conservation Inspector may require additional corrective measures, which may include:
- a. Removal, and possible replacement, of dead, dying, or hazardous trees
- b. Pruning of dead or declining limbs c. Soil aeration
- d. Fertilization
- e. Watering

Exposed Root Flare

Level w/Final Grade

Saucer Location

3" Soil Well

(2"-3" Saucer Rim)

Above Grade

SIZE (CAL.) HGT ROOT

18-24"

B&B

B&B

B&B

B&B

B&B

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Prune only dead, broken or crossing branches (No

Water @ planting when soil pit is 1/2 back filled.

3" Hardwood Mulch To Cover

Remove Burlap, Twine, Rope, Wire,

etc. from Top 1/2 Of Root Ball

- Root ball to Rest Upon

Entire Planting Area - Except

3" Clear Around Trunk

Finished Grade

If roots are encountered during installation, work should

be performed by hand to shift locations of planting pits.

heading back).

f. Wound repair

- g. Clean up of retention areas, including trash removal
- 10. After the final inspection and completion of all corrective measures the Forest Conservation 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 DPS and the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.
- 11. Long-term protection measures, including permanent signage, must be installed per the approved plan. Installation will occur at the appropriate time during the construction project. Refer to the approved plan drawing for the long-term protection measures to be

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INSPECTIONS:

All field inspections must be requested by the applicant.

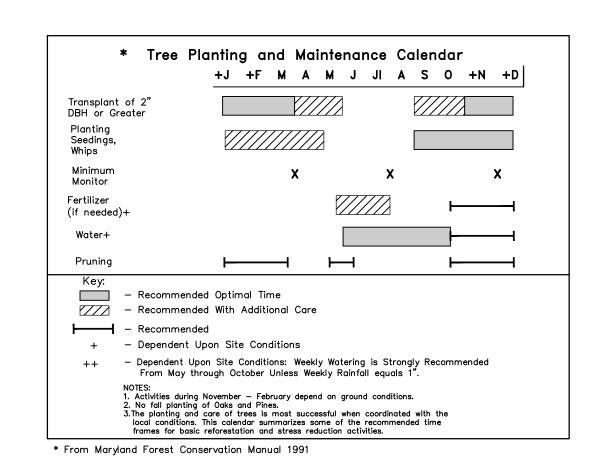
Field Inspections must be conducted as follows:

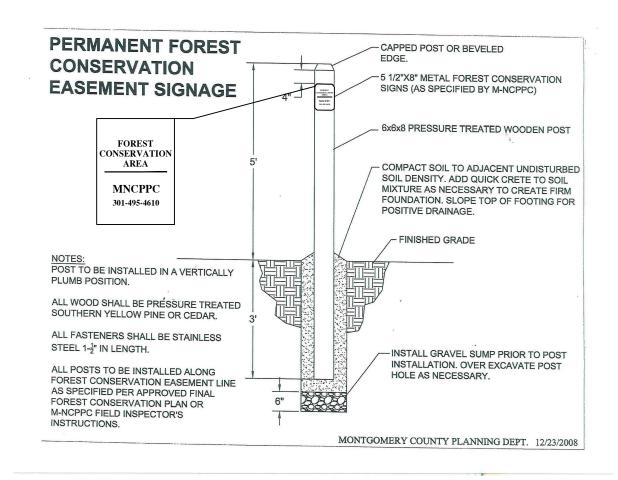
Tree Save Plans and Forest Conservation Plans without Planting Requirements

- 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 begin. 3. 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.

Adiitional 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 of the maintenance
- 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.





Forest Conservation Monument Detail (or approved equivalent)

Note: Monument to be placed in a manner to not disturb existing property markers. If existing property marker exists, proposed FC monument to be offset at a distance needed to ensure that property marker is not disturbed.



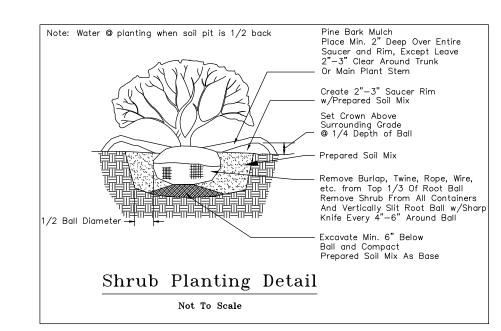
Forest Planting: 1. a. Owner shall contact MC Planning Department staff

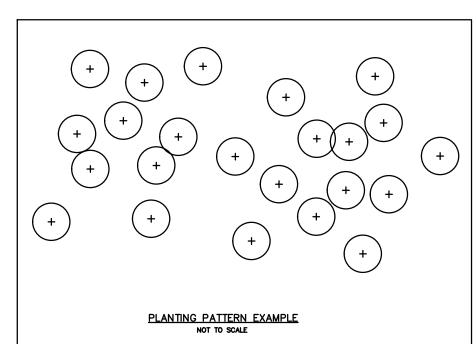
- b. Contractor to mow afforestation area and remove all invasive plants (ie: multiflora rose, mulberry trees) and apply herbicide, only if determined to be needed by MC Planning Department inspector, to eliminate competition
- of weed seed prior to planting. MC Planning Dept. inspector will determine if additional measures are needed 2. All plant material shall be approved by the Owner or duly appointed representative prior to planting. If plant mat-
- erial is not available substitutions may be made with prior approval from the developer and MC Planning Dept. 3. Size and standards of plant materials shall conform to
- latest edition of "USA Standards for Nursery Stock", by the American Association of Nurserymen, Inc. (AAN). 4. All plants shall be placed so as not to obstruct drainage. 5. Plants shall be installed randomly in a triangular or stag-

gered pattern (not in a straight line). Container stock

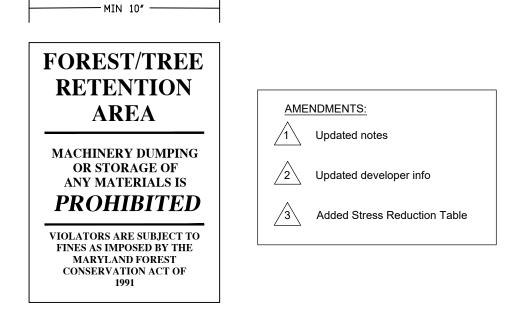
- shall be spaced minimum 8-12 feet on center (See detail) 6. Slow release fertilizer shall be applied at the time of planting 7. Where field conditions exist which would adversely affect plant performance, or interfere with proper planting pro-
- cedures, the contractor shall notify the Owner prior to installation of plant material. 8. All trees are to be located a minimum distance of 5' from
- all utility boxes, 5' from a storm drain inlet or manhole, 10' from a fire hydrant, 15' from any public street light, and 5' from any driveway aprons.
- 9. Remove litter and debris as required during the first growing season and at the beginning of the second growing
- 10. Plants shall be installed only between the months of January and May and between September and December when the ground is not frozen.
- 11. After planting is complete, M-NCPPC inspector must inspect the planted area to determine if planted area is acceptable and required maintenance period may begin or whether additional measures are needed in order for the planted area to be accepted. At the discretion of the M-NCPPC Plan reviewer, up to one-half of the financial security may be released if stock and planted area is in good condition. Plants shall have 2 year maintenance/warranty period from the time of installation with
- M-NCPPC acceptance. Any replacement must be installed as above. 12. Contractor is responsible for soil testing and preparation. Preparation shall include, but not necessarily limited to, the addition of soil amendments, fertilizers and supplemental topsoil.

Maintenance: Refer to Maintenance and Management Agreement (approved as part of plan approval)





Temporary Signage



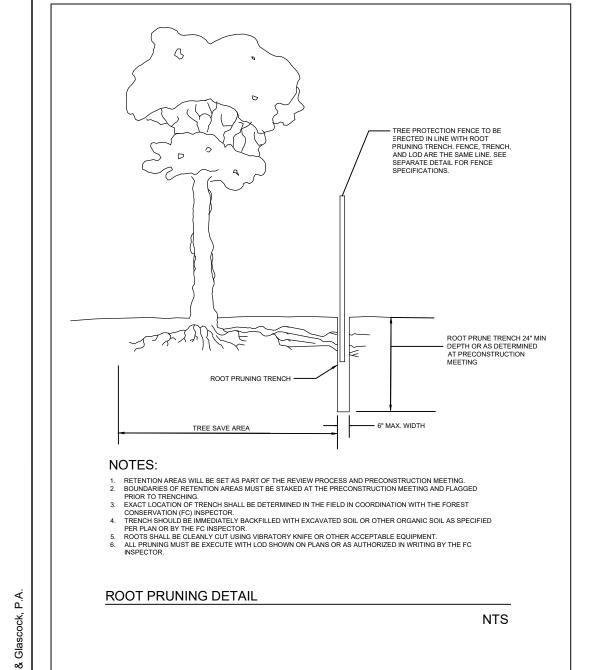
DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. <u>12017021A</u> , including financial bonding, forest planting, maintenance and all other applicable agreements. Charlie Sabin Developer's Name: Flournoy Development Group

Address: 1100 Brookstone Center Pkwy Columbus, GA 31904 Phone: (706) 324-4000

Email: Charlie.Sabin@flournoydev.com

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PRACTICE MAY BE COMBINED WITH SEDIMENT CONTROL FENCING.
LOCATION AND LIMITS OF FENCING SHALL BE COORDINATED IN FIELD WITH ARBORIST.
BOUNDARIES OF PROTECTION AREA SHOULD BE STAKED PRIOR TO INSTALLING PROTECTIVE DEVICE.
ROOT DAMAGE SHOULD BE AVOIDED.
PROTECTIVE SIGNAGE IS REQUIRED.
FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION FENCE DETAIL

WELDED WIRE FENCE -14 GA. WELDED WIRE 2"X4" OPENING

FLAGGING -

NOTES:

TREE PRESERVATION AND STRESS REDUCTION MEASURES ID# PRESERVATION CA SP MB 55" Red Maple X | X | X 30" Red Maple 33" Dawn Redwood

STRESS REDUCTION MEASURES MAY BE CHANGED PER MNCPPC FOREST CONSERVATION INSPECTOR AND ARBORIST/MD LICENSED TREE EXPERT AT PRECONSTRUCTION MEETING.

(RP) ROOT PRUNING IS TO BE PERFORMED OUTSIDE THE TREE PROTECTION FENCE WITHIN THE CRITICAL ROOT ZONE. IT IS TO BE ACCOMPLISHED BY A VIBRATORY PLOW WITH A SERRATED CUTTING EDGE OR A ROOT CUTTER WITH A 36" WHEEL TO A DEPTH OF 18". CHAIN DRIVEN TRENCHERS ARE NOT ACCEPTABLE. (SEE DETAIL)

(TGR) TREE GROWTH REGULATOR: APPLICATION RATE SHALL BE CONSISTENT WITH PRODUCT LABELING AND APPLICABLE LAWS. RECOMMEND USING CAMBISTAT OR EQUIVALENT.

(CA) CORE AERATION IS TO BE DONE WITH A HAND-HELD MANUAL PUNCH CORE AFRATOR AT 2 HOLES PER SOLET, THROUGHOUT ROOT ZONE, INCORPORATE AN ORGANIC PRODUCT (LEAFGROW) AND AN INORGANIC PRODUCT(SAND OR SOLITE) DURING THE AERATION PROCESS.

(SP) SANITATION PRUNE TO REMOVE ALL DEAD OR DYING LIMBS GREATER THAN ONE INCH ON A TREE TO IMPROVE ITS HEALTH AND APPEARANCE. THIN CROWN WHERE NECESSARY TO REDUCE CANOPY DENSITY BY MAXIMUM TWENTY-FIVE PERCENT TO COMPENSATE FOR ROOT

(MB) MULCH BEDS ARE TO BE 2-4" SHREDDED HARDWOOD MULCH. SHREDDED PINE BARK MULCH, OR COMPOSTED WOOD CHIPS. FRESHLY CUT WOODCHIPS ARE NOT ACCEPTABLE.

(MM) MULCH MATTING AS NEEDED TO AVOID COMPACTION



1. HEIGHT OF CAGE SHALL BE 4-FEET (MIN.)

9500 BRUNETT AVENUE SILVER SPRING, MD 20901 DIRECTOR OF PARKS

QTY BOTANICAL NAME

2 Cercis canadensis

Nyssa sylvatica

Lindera benzoii

llex verticillata

4 Quercus alba

3 Acer rubrum

2 llex opaca

2. CAGE SHALL BE FASTENED TO STAKE WITH TWO (MIN.)

11-INCH RELEASABLE CABLE TIES (ONE AT TOP AND ONE

6. OTHER TREE PROTECTION MEASURES MAY BE ALLOWED WITH TH

CHIEF ENGINEER DEER PROTECTION CAGE

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION Department of Park and Planning, Montgomery County, Maryland

> FOR UTILITY LOCATIONS **CONTACT "ONE CALL" AT 811** AT LEAST 48 HOURS PRIOR TO CONSTRUCTION

SEQUENCE OF CONSTRUCTION

. Schedule a pre-construction meeting with the Developer's representative, Construction Superintendent, tree professional, MNCP&PC staff, and sediment control inspector. Call at least 48 hours prior to beginning construction. Contact Miss Utility at 1-800-257-7777 for water and sewer locations at 301-309-3093, 48 hours prior to any land disturbance.

2. Install Tree Protection Fencing and perform Root Pruning operations. Install sediment control devices.

Clear, grub, and begin excavating and grading

MINIMUM DIAMETER

2x Diameter of Rootba

(Up to 5x in Compacted Soil)

Tree Planting Detail

* Minimize the size of planting pits when planting within

CRZ of existing trees to be saved.

Begin building construction.

Begin storm drain construction.

6. Begin utility construction. Begin stormwater management construction

Begin curb & gutter and paving.

9. As various areas are completed, place topsoil and sod/seed on grassed areas in conformance with these plans and the "Standard Erosion and Sediment Control Notes." 10. Upon completion and site stabilization, and with the approval of the sediment control Inspector, all

sediment control structures shall be removed. 11. Upon completion, conduct final inspection with M-NCP&PC staff

12. Remove tree protection fence

Ex. 15 (b)

Land Surveyors

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

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RANK C. JOHNSON 05/01/2020 RECOGNIZED AS QUALIFIED PROFESSIONAL BY MD DEPT. OF NATURAL RESOURCES

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 county forest conservation legislation.

OWNER:

CAROLYN H. O'DELI REVOCABLE TRUST 19115 LIBERTY MILL ROAD GERMANTOWN, MD 20874

APPLICANT:

FLOURNOY DEVELOPMENT GROUP 1100 BROOKSTONE CENTER PKWY COLUMBUS, GA 31904 (706) 324-4000

CONTACT: CHARLIE SABIN Charlie.Sabin@flournoydev.com

REVISIONS DESCRIPTION

WSSC 226NW13

LIBER 36179 FOLIO 283 9TH ELECTION DISTRICT

MONTGOMERY COUNTY

TAX MAP EU34

MARYLAND

PARCEL P515 **CHESTNUT RIDGE**

PROJ. MGR **DRAWN BY** FCJ SCALE 1"= 30' DATE 4/10/20

FINAL FOREST CONSERVATION PLAN #12017021A

L8.02 PROJECT NO. 2015.244.24