

**Forest Conservation Plan Amendment No. CBA-1855, Sandy Spring Friends House**

JP  
EAW  
KER

Joshua Penn, Planner Coordinator, Area 3 [joshua.penn@montgomeryplanning.org](mailto:joshua.penn@montgomeryplanning.org), 301.495.4546

Richard A. Weaver, Supervisor, Area 3, [richard.weaver@montgomeryplanning.org](mailto:richard.weaver@montgomeryplanning.org), 301.495.4544

Kipling Reynolds, Chief, Area 3, [kipling.reynolds@montgomeryplanning.org](mailto:kipling.reynolds@montgomeryplanning.org), 301.495.4575

Completed 11/23/16

**Description**

**A. Forest Conservation Plan Amendment No. CBA-1855: Sandy Spring Friends House -**  
Request for approval of an amended Forest Conservation Plan as part of a Special Exception application for an assisted living facility. Located on Parcels N214 and N-225, 62.18 acre 17340 Quaker Lane (along Norwood Road), Sandy Spring approximately 550 feet north of the intersection of Norwood Road and Dr. Bird Road RE-2 Zone, 1998 Sandy Spring Master Plan.

**Staff Recommendation:** Approval with conditions

**Application Filed:** January 6, 2016

**Applicant:** Friends House, Inc.

**Reviewing Authority:** Chapter 22A



- Staff Recommendation: Approval with Conditions
- The Planning Board must act on the Forest Conservation Plan Amendment (CBA-1855) for Conditional Use Application S-856-B & S-452.
- The development proposed under this application fully complies with Chapter 22A, the Forest Conservation Law.

## **FOREST CONSERVATION PLAN RECOMMENDATION AND CONDITIONS:**

Approval of Revised Final Forest Conservation Plan, subject to the following conditions:

1. The Applicant must record a Category I Conservation Easement over all areas of forest retention, forest planting and environmental buffers as specified on the approved Forest Conservation Plan. The Category I Conservation Easement approved by the M-NCPPC Office of the General Counsel must be recorded in the Montgomery County Land Records by deed prior to the start of any demolition, clearing, or grading on the Subject Property.
2. The Applicant must record an M-NCPPC approved Certificate of Compliance in an M-NCPPC approved forest bank for the 1.15 acres of offsite planting prior to any clearing, grading or demolition on the project site.
3. The Applicant must provide financial surety to the M-NCPPC Planning Department for the 3.36 acres of new forest planting prior to the start of any demolition, clearing, or grading on the Property.
4. The Applicant must submit a two-year Maintenance and Management Agreement approved by the M-NCPPC Office of General Counsel prior to the start of any demolition, clearing or grading on the Property. The maintenance and management agreement is required for all forest planting areas credited toward meeting the requirements of the Forest Conservation Plan, including the reforestation of environmental buffers.
5. The Applicant must install permanent Category I Conservation Easement signage along the perimeter of the conservation easements.
6. Afforestation plantings that are located outside the limits of disturbance must occur within the first planting season following release of the first building permit after approval of the conditional use application. Plantings within areas of future disturbance must occur in the first planting season following the stabilization of the applicable disturbed area.
7. The Final Sediment Control Plan must be consistent with the final limits of disturbance shown on the approved Final Forest Conservation Plan.
8. The Applicant must comply with all tree protection and tree save measures shown on the approved Final Forest Conservation Plan. Tree save measures not specified on the Final Forest Conservation Plan may be required by the M-NCPPC forest conservation inspector at the pre-construction meeting.

## **SITE DESCRIPTION**

The Friends House Retirement community is located at 17340 Quaker Lane approximately 2,000 feet south of Olney Sandy Spring Road (MD 108), located generally east of the intersection of Norwood Road

and Doctor Bird Road (“Subject Property” or “Property”) (Figure 1). It is an irregular inverted L-shaped property with interrupted frontages on Norwood Road. Quaker Lane is an internal lane that starts and ends within the 62.2-acre property and connects the various residential areas on the Retirement Community’s campus.

The property is improved with various buildings including assisted living facilities, and independent living facilities, Alzheimer care unit, and a number of independent living cottages. The existing developments on the site are connected by a network of small internal roads.

The Northwest Branch mainstem crosses the property from northwest to southeast. The north side of the stream is undeveloped and mostly forested. There are smaller tributary streams within the forest. A pond and tributary to Northwest Branch exist on the developed side of the stream. There is a 100-year floodplain associated with Northwest Branch.

The subject property abuts three single-family detached homes located within the Sandy Spring Village and zoned R-200 to the north. To the west, northeast, and east, the property abuts four additional single-family detached residences homes and several large and heavily wooded parcels of land all in the Rural Neighborhood Cluster (RNC) Zone. To the south, the property abuts the 139-acre Sandy Spring Friends School, which is zoned RE-2. A historic site known as “Norwood”, a circa 1751 house listed in the Master Plan for Historic Preservation (#28/13), is located at 17201 Norwood Road adjacent to the southwestern portion of the property. To the west across Norwood Road, are single-family developments in the RNC Zone.



Figure 1: 2015 Aerial Photograph

## **PROJECT DESCRIPTION**

The Applicant requests a Major Modification of the last approved Special Exception to allow removal, retention, expansion, and new construction of buildings and living units, to continue the existing assisted and independent living uses for seniors with various care needs, as well as a wide range of income levels. Upon completion of all phases of the development, the total units on site will be 446 living units that includes 126 independent living apartments; a maximum of 158 lodge apartments; 32 cottage duplex units; 48 assisted living units; and 82 beds in the skilled nursing hall.

## **ANALYSIS AND FINDINGS**

### **Environmental Guidelines**

The Natural Resources Inventory/Forest Stand Delineation (“NRI/FSD”) 419970710 for this Property was approved on November 21, 1996 and recertified on October 24, 2003. The NRI/FSD identifies the environmental constraints and forest resources on the Subject Property. The NRI/FSD calls out the site to be a total of 62.18 acres of which 20.14 acres are existing forest separated into four (4) distinct forest stands. The site also contains multiple perennial streams, a farm pond, and several wetland areas. The site is located within the Northwest Branch watershed, which is classified by the State of Maryland as Use IV waters. The Property is not located within a Special Protection Area (SPA), nor is it located within the Patuxent River Primary Management Area (PMA).

### **Forest Conservation**

The FCP for the Subject Property (CBA-1855) was originally approved as a phased FCP. This means the entire Property was approved as a Preliminary FCP and part of the Property was approved as a Final FFCP. The overall 62.18-acre site has a PFCP approval dated October 24, 2003. The area of the Property west of the stream also had FFCP approval dated October 24, 2003. The area of the Property east of the stream never obtained FFCP approval. This application is asking to amend the previously approved FFCP for west of the stream and create a new FFCP for the area east of the stream, effectively creating one FFCP for the entire Property.

The original plan that was subject to Chapter 22A was #CBA-1855, entitled Friends House (Parcel C), created the FCP for the Property and is the reason the Special Exception application has different numbers (S-856 & S-452) than the underlying FCP.

This site is zoned RE-2 which is assigned a Land Use Category of Medium Density Residential (MDR) in the Land Use Table of the Trees Technical Manual. Development of the site as proposed yields an afforestation requirement of 20% of the net tract and a conservation threshold of 25%.

The NRI/FSD shows a net tract area of 62.18 acres with a total of 20.30 acres of forest on the project site. The FFCP amendment shows a net tract area of 58.70 with 16.59 acres of Forest. The difference in the net tract areas is due to a previously recorded sewer and storm drain easement that was deducted out of the net tract area on the FFCP. The FFCP will remove 3.93 acres and retain 12.66 acres of forest. The Forest Conservation Worksheet calculations result in a total afforestation/reforestation requirement of 4.51 acres.

The Applicant will meet the 4.51 acres planting requirement through 3.36 acres of onsite planting and 1.15 acres of mitigation credit in an offsite forest conservation bank. With the reduction of the area within the storm drain and sewer easement, the revised plan reduces forest clearing by 0.49 acre acres and increases forest retention by .22 acres. The total amount of Category I conservation onsite has increased by 1.87 acres. All the retained forest and the environmental buffer areas, except specific areas excluded due to existing conditions from the previous approval, will be protected by a Category I Conservation Easement.

The Application satisfies all the applicable requirements of the Forest Conservation Law, Montgomery County Code, Chapter 22A and is in compliance with the Environmental Guidelines and the Forest Conservation Law.

**Forest Conservation Variance**

Section 22A-12(b) (3) of Montgomery County Forest Conservation Law provides criteria that identify certain individual trees as high priority for retention and protection. The law requires no impact to trees that: measure 30 inches or greater, diameter at breast height (DBH); are part of an historic site or designated with an historic structure; are designated as national, State, or County champion trees; are at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species (“Protected Trees”). Any impact to a Protected Tree, including removal or disturbance within the Tree’s critical root zone (“CRZ”) requires a variance. An application for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the County Forest Conservation Law.

Variance Request - The Applicant submitted a revised Variance Request dated November 8, 2016 (Attachments B) and replaced all previous versions. The Applicant proposes to remove nineteen (19) trees that are either 30 inches and greater, DBH. In addition, the Applicant proposes and to impact, but not remove, twenty-one (21) others that are considered high priority for retention under Section 22A-12(b) (3) of the County Forest Conservation Law.

**Table 1: Variance Trees to be removed**

ID		COMMON NAME	SIZE	BOTANICAL NAME	CONDITIO N	REMARKS	Impact
11	*	Oriental Plane	22"-26"-32"	Plantanus orientalis	Good		TBR

13	*	Oriental Plane	40"	Plantanus orientalis	Good		TBR
67	*	White Oak	42"	Quercus alba	Good		TBR/ See note below
75	*	Honey Locust	32"	Gleditsia tricanthos	Good		TBR
76	*	Honey Locust	32"	Gleditsia tricanthos	Good		TBR
77	*	Willow Oak	41"	Quercus phellos	Good		TBR/ See note below
97	*	Pin Oak	44"	Quercus palustris	Good		TBR
120	*	Red Maple	17"-26"-32"	Acer rubrum	Good	Splits @ 2'	TBR
122	*	Sugar Maple	30"	Acer saccharum	Good		TBR
125	*	Red Maple	32"-32"-26"	Acer rubrum	Poor	Heavily pruned; splits @ 3'; off-site	TBR
149	*	Red oak	35"	Quercus sp.	Good		TBR/ See note below
150	*	Red Maple	30"	Acer rubrum	Good		TBR
158	*	Red Maple	35"	Quercus sp.	Good		TBR
168	*	Sugar Maple	32"	Acer saccharum	Good		TBR
169	*	White Pine	42"	Pinus strobus	Good		TBR
170	*	Red Maple	32"	Acer rubrum	Good		TBR
181	*	Dawn Redwood	34"	Metasequoia glyptostroboides	Good		TBR
182	*	White Pine	39"	Pinus strobus	Good		TBR
214	*	White Ash	31"	White Ash	Good		TBR/ See note below

**Table 2: Variance Trees (onsite) to be Impacted**

ID		COMMON NAME	SIZE	BOTANICAL NAME	CONDITION	REMARKS	Impact
10	*	Oriental Plane	38"	Plantanus orientalis	Good		26% of CRZ Impacted
17	*	Oriental Plane	38"	Plantanus orientalis	Good		13% of CRZ Impacted
19	*	White Pine	40"	Pinus strobus	Good		30% of CRZ Impacted
35	*	Tulip Poplar	34"	Liriodendron tulipifera	Good		15% of CRZ Impacted
37	*	Tulip Poplar	32"	Liriodendron tulipifera	Good		26% of CRZ Impacted
60	*	White Oak	33"	Quercus alba	Good		7% of CRZ impacted
61	*	Pin Oak	39"	Quercus palustris	Good		17% of CRZ Impacted
72	*	White Pine	38"	Pinus strobus	Good		11% of CRZ Impacted
73	*	White Pine	32"	Pinus strobus	Good		5% of CRZ Impacted
74	*	White Pine	32"	Pinus strobus	Good		8% of CRZ Impacted
92	*	Black Walnut	44"	Juglans nigra	Good		33% of CRZ Impacted
93	*	Black Walnut	43"	Juglans nigra	Good		4% of CRZ Impacted
98	*	Slippery Elm	30"	Ulmus rubra	Good		4% of CRZ Impacted
108	*	Black Walnut	30"	Juglans nigra	Good		22% of CRZ impacted
110	*	Sycamore	30"	Platanus occidentalis	Good		2% of CRZ Impacted
218	*	Slippery Elm	32"	Ulmus rubra	Good		4% of CRZ impacted

**Table 3: Variance Trees (offsite) to be Impacted**

ID		COMMON NAME	SIZE	BOTANICAL NAME	CONDITIO N	REMARKS	Impact
219		Norway Maple	27"	Acer platanoides	Good		12% CRZ impacted
244		Ash	17"	Fraxinus sp.	Good		8% CRZ impacted
245		Ash	14"	Fraxinus sp.	Good		14% CRZ impacted

259	Oak	18"	Quercus sp.	Good	5% CRZ impacted
354	Catalpa	22"	Catalpa bignonioides	Good	20% CRZ impacted

Unwarranted Hardship Basis

Per Section 22A-21(a), an applicant may request a variance from Chapter 22A if the applicant can demonstrate that enforcement of Chapter 22A would result in an unwarranted hardship.

The development program proposed by the Applicant entails some demolition of existing buildings. Specifically tree #125 which is already in poor condition is adjacent to an existing building slated for removal. The building is already in the CRZ of tree #125 and the tree would not be able to survive the impacts required for building demolition. It is also critical to remove tree #158 in order to implement any proposed improvements to the main building. If a variance is not provided for the removal of the trees referenced above then the Applicant would not be able to implement its requested program and this would be considered an “unwarranted hardship” to the property owner. Specific impacts can be viewed in the Tree Variance Exhibit included in Attachment D with the Applicants full Variance Request.

Based on the above information, Staff concludes that the Applicant has a sufficient unwarranted hardship to justify a variance request.

Variance Findings - Section 22A-21 of the County Forest Conservation Law sets forth the findings that must be made by the Planning Board or Planning Director, as appropriate, in order for a variance to be granted. Staff has made the following determinations in the review of the variance request and the proposed Forest Conservation Plan:

1. *Will not confer on the applicant a special privilege that would be denied to other applicants.*

Granting the variance will not confer a special privilege on the Applicant as the impact or removals of the requested trees is due to the location of the trees and necessary site design requirements. Through the planning process the impacts have been minimized as much as possible. Therefore, Staff believes that the granting of this variance is not a special privilege that would be denied to other applicants.

2. *Is not based on conditions or circumstances which are the result of the actions by the applicant.*

The requested variance is not based on conditions or circumstances which are the result of actions by the Applicant. The requested variance is based upon the existing site conditions and necessary design requirements.

3. *Is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.*

The requested variance is a result of the existing conditions and not a result of land or building use on a neighboring property.

4. *Will not violate State water quality standards or cause measurable degradation in water quality.*

The plan has a forest conservation planting requirement of which 3.36 acres of forest plantings will be done onsite within the stream valley buffer.

Additionally, this Property will be developed in accordance with the latest Maryland Department of the Environment criteria for stormwater management. This includes Environmental Site Design to provide for protecting natural resources to the maximum extent practical. This includes limiting the impervious areas and providing on-site stormwater management systems. A Stormwater Management Concept has been approved by the Montgomery County Department of Permitting Services to ensure that this criterion is enforced.

In addition to the SWM and FCP mitigation requirements, new trees are being proposed to offset the proposed Variance Trees to be removed. At a rate of ¼":1" removed, the Applicant will be providing a minimum of 53 (3") trees as mitigation which will help to offset the loss of the variance trees being removed as part of this project. Therefore, Staff concurs that the project will not violate State water quality standards or cause measurable degradation in water quality.

Mitigation for Trees Subject to the Variance Provision - There are nineteen (19) variance trees proposed for removal in this variance request. Of the nineteen trees, one is located within existing forest and its loss is accounted for in the forest conservation worksheet and mitigation for its loss is included in the reforestation requirement as determined by the worksheet. Mitigation for the removal of the remaining eighteen (18) freestanding trees located outside of the existing forest is recommended. Mitigation should be at a rate that approximates the form and function of the trees removed. Therefore, Staff recommends that replacement occur at a ratio of approximately 1" Diameter at Breast Height (DBH) for every 4" DBH removed, using trees that are a minimum of 3" DBH. This means that for the 627 caliper inches of trees removed, they will be mitigated by planting 53 native, canopy trees with a minimum size of 3" DBH on the site. While these trees will not be as large as the trees lost, they will provide some immediate canopy and ultimately replace the canopy lost by the removal of these trees.

There are twenty-one (21) other variance trees with some disturbance within their critical root zones, but they are candidates for safe retention and will receive adequate tree protection measures during construction. No mitigation is recommended for trees impacted but retained.

County Arborist's Recommendation on the Variance - In accordance with Montgomery County Code Section 22A-21(c), the Planning Department is required to refer a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection for a recommendation prior to acting on the request. The request was forwarded to the County Arborist on October 18, 2016. A revised variance request was forwarded on November 9, 2016. On November 18, 2016, the County Arborist issued recommendations on the variance request and recommended the variance be approved with mitigation (Attachment E).

Variance Recommendation - Staff recommends that the variance be granted with the mitigation recommended above.



## **CONCLUSION**

Forest Conservation Plan revision CBA-1855 meets all applicable requirements of Chapter 22A of the County Code. Therefore, Staff recommends that the Planning Board approve the Forest Conservation Plan revision with the conditions cited in this staff report. The variance approval is included in the Planning Board's approval of the Preliminary Forest Conservation Plan.

## **Attachments**

Attachment A – Previously Approved PFCP/FFCP

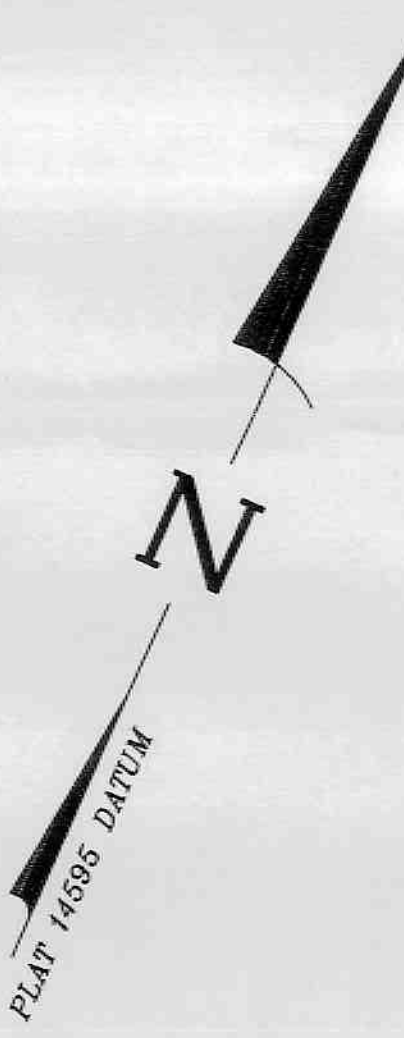
Attachment B – Proposed Final Forest Conservation Plan

Attachment C- Conservation Easement Comparison Exhibit

Attachment D- Applicant's Variance Request dated November 8, 2016

Attachment E- County Arborist Letter dated November 18, 2016

NOTE:  
THE ROOT PRUNING AND TREE PROTECTION FENCING LINE IS A GRAPHICAL REPRESENTATION ONLY, AND SHOULD BE INSTALLED IN RELATIONSHIP TO THE L.O.D. AS DEPICTED ON THE DETAIL SHEET.



**LEGEND**

- SIGNIFICANT TREE & CRITICAL ROOT ZONE (CRZ=0.8H x 3')
- SPECIMEN TREE
- SIGNIFICANT TREE TO BE REMOVED
- TREE PROTECTION FENCE
- ROOT PRUNING
- EXISTING FOREST BOUNDARY
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED FOREST SAVED (15.88 ACRES)
- PROPOSED CATEGORY 1 FOREST CONSERVATION EASEMENT
- PROPOSED REFORESTATION (0.77 ACRES)

**VICINITY MAP**  
SCALE 1" = 2,000'  
COPYRIGHT ADC THE MAP PEOPLE, APRIL 2000  
PERMITTED USE NO. 20399666

**FOREST CONSERVATION TABLE**

DESCRIPTION	SIZE
Total Tract Area	62.18 Acres
Tract remaining in Agricultural Use	0.00 Acres
Road & utility ROW (unimproved)	0.00 Acres
Existing Forest	20.30 Acres
Total Forest Retention	15.88 Acres
Land Use Category	Residential (RE-2)
Afforestation Threshold	20%
Reforestation Threshold	25%
Forest in Wetlands Retained	100%
Cleared	0.00 Acres
Planted	0.00 Acres
Forest in 100-year Floodplain Retained	10.58 Acres
Cleared	0.03 Acres
Planted	0.77 Acres
Forest in Stream Valley Buffer Retained	11.13 Acres
Cleared	0.25 Acres
Planted	0.77 Acres
Forest in other Priority Areas Retained	0.00 Acres
Cleared	0.00 Acres
Planted	0.00 Acres
Stream Valley Buffer Length	2350 Feet
Avg. Width	125 Feet

**FOREST CONSERVATION WORKSHEET**  
"Friends House"

NET TRACT AREA: 5-Aug-02

A. Total tract area = 62.18

B. Land dedication areas (roads, 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 = 62.18

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

ARA	MOR	EA	HDR	MPD	CIA
0	1	0	0	0	0

G. Afforestation Threshold = 20% x F = 12.44

H. Conservation Threshold = 25% x F = 15.55

EXISTING FOREST COVER:

I. Existing forest cover = 20.30

J. Area of forest above afforestation threshold = 7.86

K. Area of forest above conservation threshold = 4.79

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation = 16.50

M. Clearing permitted without mitigation = 3.80

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared = 4.42

O. Total area of forest to be retained = 15.88

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold = 1.11

Q. Reforestation for clearing below conservation threshold = 0.00

R. Check for retention above conservation threshold = 0.34

S. Total reforestation required = 0.77

T. Total afforestation required = 0.00

U. Check for anticipated may not exceed 20% of "S" = 0.00

V. Total reforestation and afforestation required = 0.77

*See note on sediment & erosion control plan for special care unit addition.*

THE MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION  
FINAL FOREST CONSERVATION PLAN  
**CONDITIONAL APPROVAL** for 3.8 acres forest cleared  
Plan No. 18-55  
Candy Benney 10/24/03 DATE

THE MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION  
FINAL FOREST CONSERVATION PLAN  
**APPROVAL** for area west of stream only  
Plan No. 18-55  
Candy Benney 10/24/03 DATE

NOTE:  
EXISTING HIKING / BIKING TRAILS AND PATHS SHALL BE MAINTAINED IN CONSERVATION AREAS.

\* BONDING  
BONDING FOR THE 0.77 ACRES REFORESTATION / AFFORESTATION WILL BE AT THE RATE OF \$0.30 PER SQUARE FOOT. THE BOND AMOUNT SHALL BE \$10,623.66.



OWNER/APPLICANT  
Friends House, Inc.  
17340 Quaker Lane  
Sandy Spring, MD 20860  
(301) 924-5100  
Contact: Mr. Darryl Clemmer

JT121  
JT341  
TAX MAP JT342

**FOREST CONSERVATION PLAN**  
**FRIENDS HOUSE**  
(PARCEL C)  
OLNEY ELECTION DISTRICT No. 8

**MHG** Macris, Hendricks & Glascock, P.A.  
Engineers • Planners  
Landscape Architects • Surveyors  
8220 Whigman Road, Suite 120  
Montgomery Village, Maryland  
20886-1279  
Phone 301.870.0840  
Fax 301.948.0693  
www.mhgpa.com

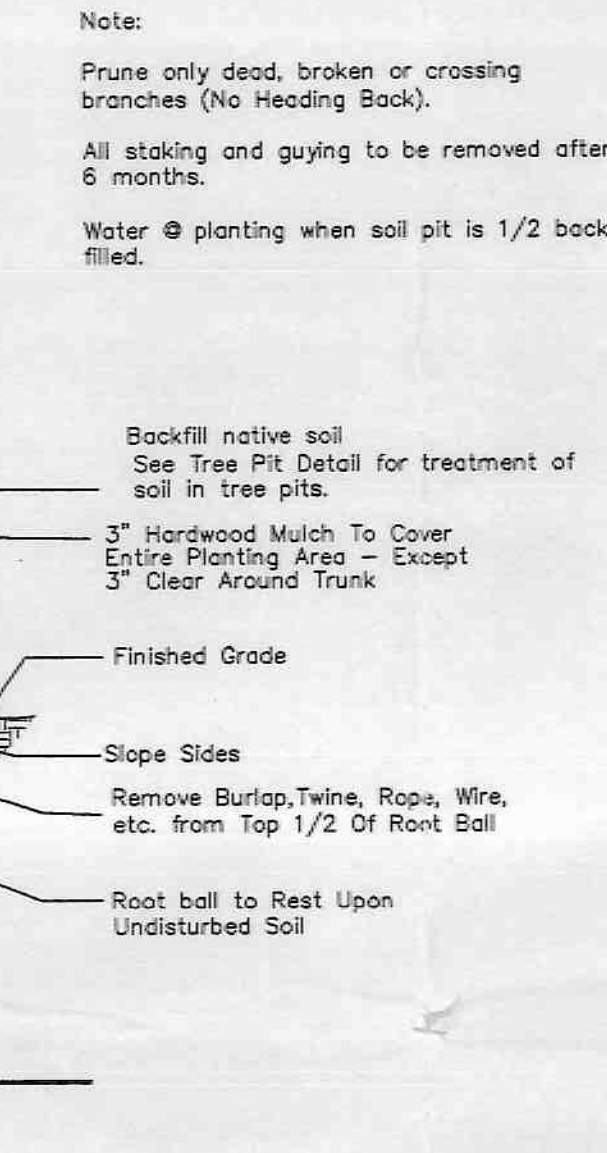
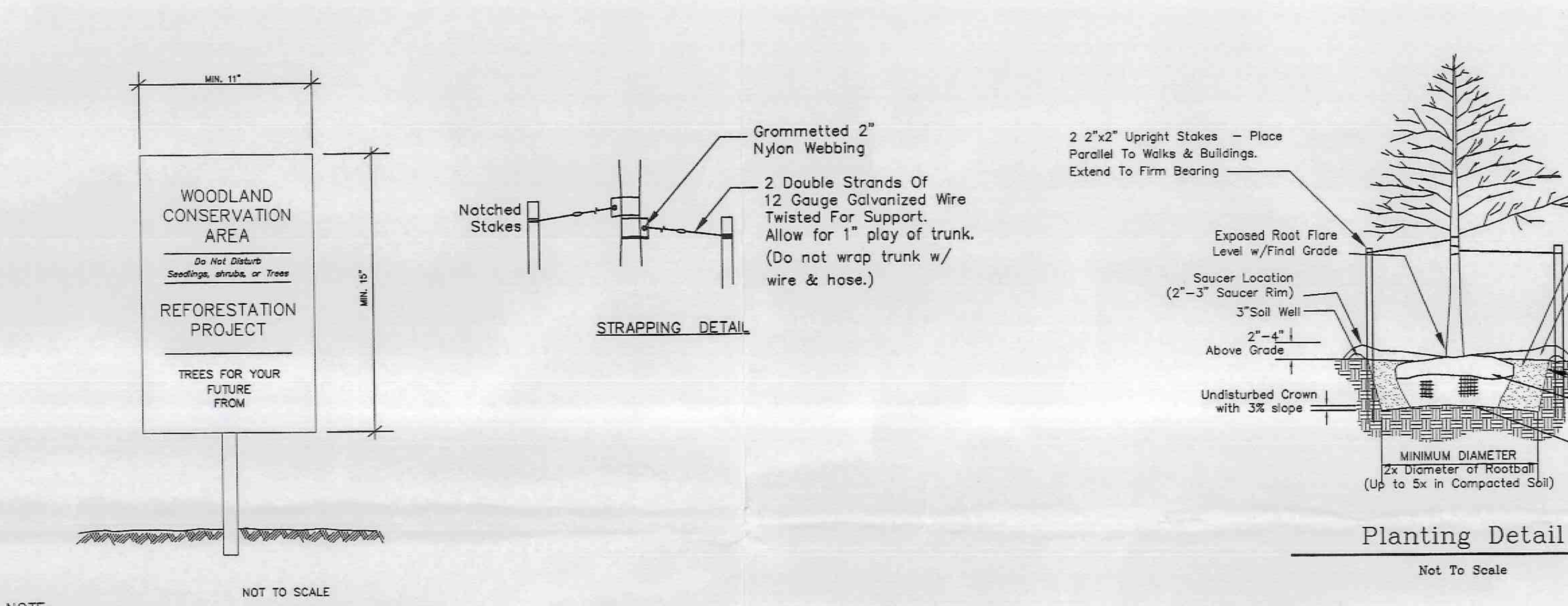
Proj. Mgr. VSB  
Designer TSW  
Date 10/15/03  
Scale 1"=100'  
Project No. 96-380  
Sheet 1 of 2

NO.	DATE	DESCRIPTION	BY

Call "Miss Utility" at 1-800-257-7777, 48 hours prior to the start of work. The excavator must notify all public utility companies with underground facilities in the area of proposed excavation and have those facilities located by the utility companies prior to commencing excavation. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

15000010MDFC-15-01.dwg, 28/12/03, 10:00:00 AM, 10/20/03 04:50:05 PM, where: COPYRIGHT ©2003 MACRIS, HENDRICKS & GLASCOCK, P.A.

FOREST CONSERVATION PLANTING NOTES



- SEQUENCE OF CONSTRUCTION
- Schedule a pre-construction meeting with the Developer's representative, Construction Superintendent, tree professional, M-NCPPC inspector (301-495-4523), 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.
  - Install sediment control devices. Install Tree Protection Fencing and perform Root Pruning operations.
  - Conduct field inspection with M-NCPPC inspector to verify proper installation of tree protection devices.
  - Begin demolition of existing buildings.
  - Clear, grub, and begin excavating and grading.
  - Begin building construction.
  - Begin storm drain construction.
  - Begin water & sewer and other utility construction.
  - Begin stormwater management facility construction.
  - Begin curb & gutter and paving.
  - 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."
  - Schedule a pre-planting meeting with M-NCPPC staff.
  - Upon completion and site stabilization, and with the approval of the sediment control inspector, all sediment control structures shall be removed.
  - Upon completion of planting, conduct final inspection with M-NCPPC inspector.
  - Remove tree protection fence.

NOTE:

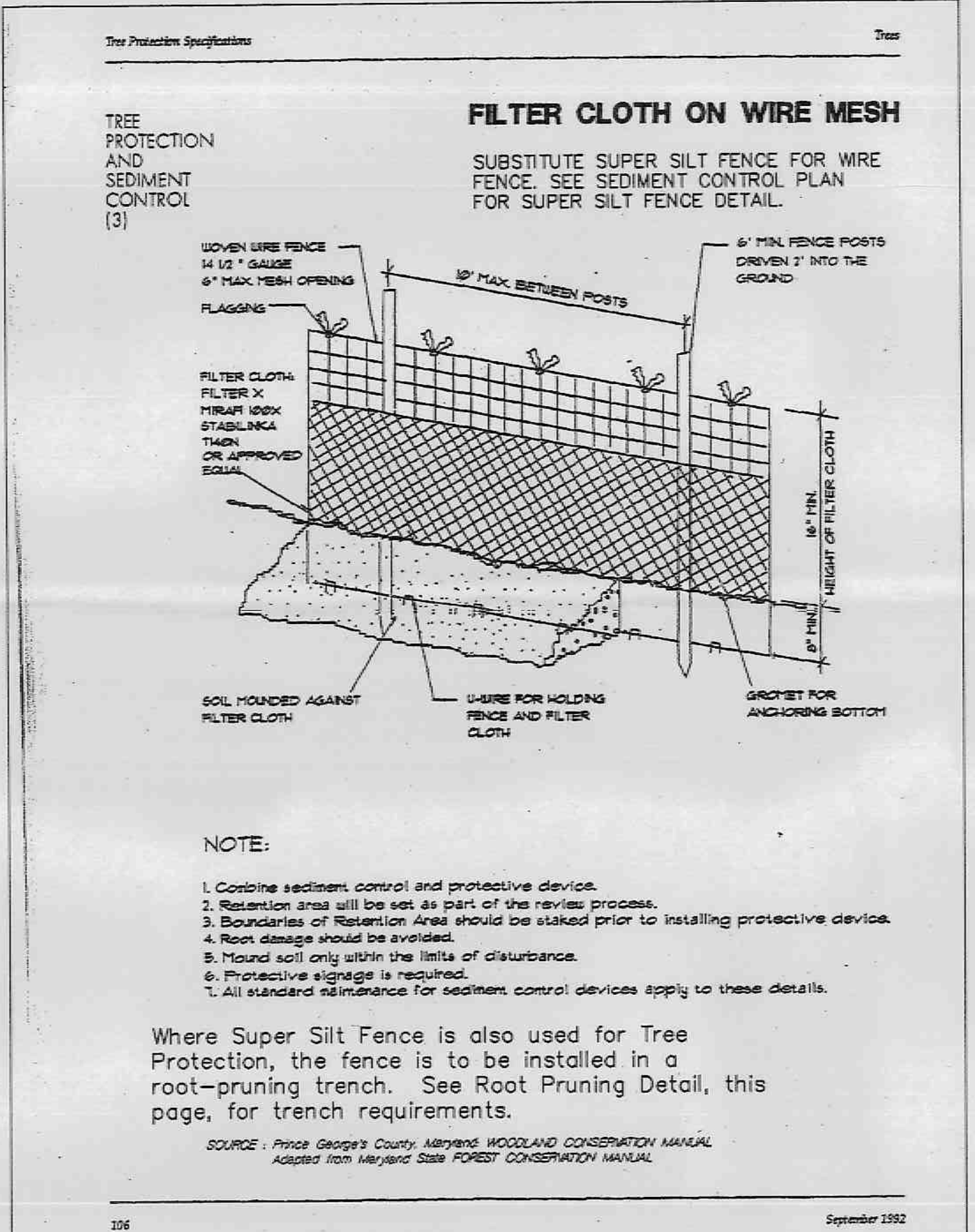
- Attachment of signs to trees is prohibited.
- Signs should be properly maintained.
- Avoid injury to roots when placing posts for the signs.
- Signs should be posted to be visible to all construction personnel from all directions.

- Pre-construction
- An on-site pre-construction meeting shall be required after the limits of disturbance have been staked and flagged, but before any clearing or grading begins. The owner shall contact the Maryland National Capital Park and Planning Commission (M-NCPPC) Inspector (301-495-4523) 48 hours prior to commencing construction for a pre-planting meeting and again after planting is completed in order to arrange for inspection (up to one half of financial security to be released if stock properly planted and in good condition). The attendees at this meeting should include: developer's representative, construction superintendent, tree professional, M-NCPPC inspector, and sediment control inspector.
  - No clearing or grading shall begin before stress-reduction measures have been implemented, unless otherwise permitted by Montgomery County. Appropriate measures (see Forest Conservation Plan). Appropriate measures (see Forest Conservation Plan) may include:
    - Root pruning
    - Crown reduction or pruning
    - Watering
    - Fertilizing
    - Vertical mulching
  - All stress-reduction measures must be performed by a State of Maryland licensed tree expert or International Society of Arboriculture certified arborist. Documentation of stress reduction must be sent to MNCPPC Environmental Planning Division 8787 Georgia Ave., Silver Spring, Maryland.
  - Temporary tree protection devices shall be installed per the Forest Conservation Plan and prior to any construction/activities. Tree protection fencing locations shall be staked in the field prior to the preconstruction meeting; or if installed, be prepared to make field adjustments as determined by Montgomery County. Temporary tree protection devices may include:
    - Chain link fence (four feet high)
    - Orange plastic mesh fence (four feet high)
    - Borbed wire
    - Protective signage
  - Field inspection to be conducted by M-NCPPC Inspector in order to verify proper installation of tree protection devices.
  - Temporary protection devices shall be maintained and installed by the contractor for the duration of the construction project and must not be altered without prior approval from Montgomery County. No equipment, trucks, materials, or debris may be stored within the tree protection fence areas during the entire construction project. No access to the fenced area will be permitted. Tree protection fencing shall not be removed without approval of Montgomery County. Tree protection devices to be coordinated with erosion and sediment control devices as indicated on the approved ESC plan.
  - Forest Retention Area signs shall be installed as required by inspector. Tree stakes shall be installed along the Afforestation/Reforestation project perimeter at 25 foot intervals. They shall be 2" x 2" x 3", and driven plumb 1' below grade.
  - Long-term protection devices (see Forest Conservation Plan) may include:
    - Root aeration systems
    - Retaining walls
    - Raised sidewalks
    - Tunnelling of utilities
    - Pier and panel walls
    - Porous pavers
  - Long-term protection devices will be installed per the Forest Conservation Plan and attached details. Installation will occur at the appropriate time during the construction project.
  - Periodic inspections by Montgomery County will occur during the construction project. Corrections and repairs to all tree protection devices, as determined by the inspector, must be made in a timely fashion.
- Planting:
- Contractor to mow afforestation area and remove all invasive plants (i.e. multiflora rose, mulberry trees) and apply herbicide to eliminate competition of weed seed prior to planting.
  - All plant material shall be approved by the Owner or duly appointed representative prior to planting. If plant material is not available substitutions may be made with prior approval from the developer and Montgomery County.
  - Size and standards of plant materials shall conform to latest edition of "USA Standards for Nursery Stock", by the American Association of Nurserymen, Inc. (AA), by the American Association of Nurserymen, Inc. (AA).
  - Plants shall be inspected by the contractor and any material that is either damaged or which has root ball compaction, 1-rooted or killed root systems will be replaced. No plants will be stored on-site. Plants will be planted immediately once received from the nursery.
  - All plants shall be placed so as not to obstruct drainage.
  - Plants shall be installed randomly in a triangular or staggered pattern (not in a straight line). Tree species shall be spaced 15 to 20 feet on center. Understory shrubs shall be evenly distributed over planting area and among trees.
  - Planting field should be limited to 2.5 X root ball diameter. Native soil material will be used to back fill plant site and area will be packed to remove air pocket. Rose soil evenly over the planting field and cover hole with 3 inches of mulch. Water to settle soil and provide moisture as needed.
  - Slow release fertilizer (osmoacote 10-10-5) shall be applied at the time of planting at the rate of 500 lbs. per acre.
  - Where field conditions exist which would adversely affect plant performance, or interfere with proper planting procedures, the contractor shall notify the Owner prior to installation of plant material.
  - All trees are to be located a minimum distance of 5' from all utility boxes, 3' from a storm drain inlet or manhole, 10' from a fire hydrant, 15' from any public street light, and 5' from any driveway aprons.
  - Remove litter and debris as required during the first growing season and at the beginning of the second growing season.
  - Plants shall be installed only between the months of January and May and between September and December when the ground is not frozen. Plants shall be guaranteed for one-year period from the time of installation. Any replacement must be installed as above.
  - All disturbed areas within the Forest Conservation assessment to be seeded with Southern Tier Consulting, Inc. (716-868-3100), Native/Naturalized Wildflower Seed Mix (Westmix) at a rate of 23 pounds per acre.
  - Deer protection measures to be provided for all planted trees. Specific measures to be determined as part of the pre-planting meeting.

INDIVIDUAL TREE PRESERVATION AND STRESS REDUCTION MEASURES

ID # (*)	PRESERVATION TREE	RP	DRF	CA	SP	MB	DRW
32	Red Oak	X					
35	Tulip Poplar	X					
37	Tulip Poplar	X					
48	Tulip Poplar	X					
49	Tulip Poplar	X	X	X	X	X	X
50	Red Oak	X					
52	Tulip Poplar	X	X	X	X	X	X
55	White Oak	X	X	X	X	X	X
67	White Oak	X					
70	Red Maple	X					
71	Red Maple	X	X	X	X	X	X
77	Willow Oak	X	X	X	X	X	X
78	Red Maple	X	X	X	X	X	X

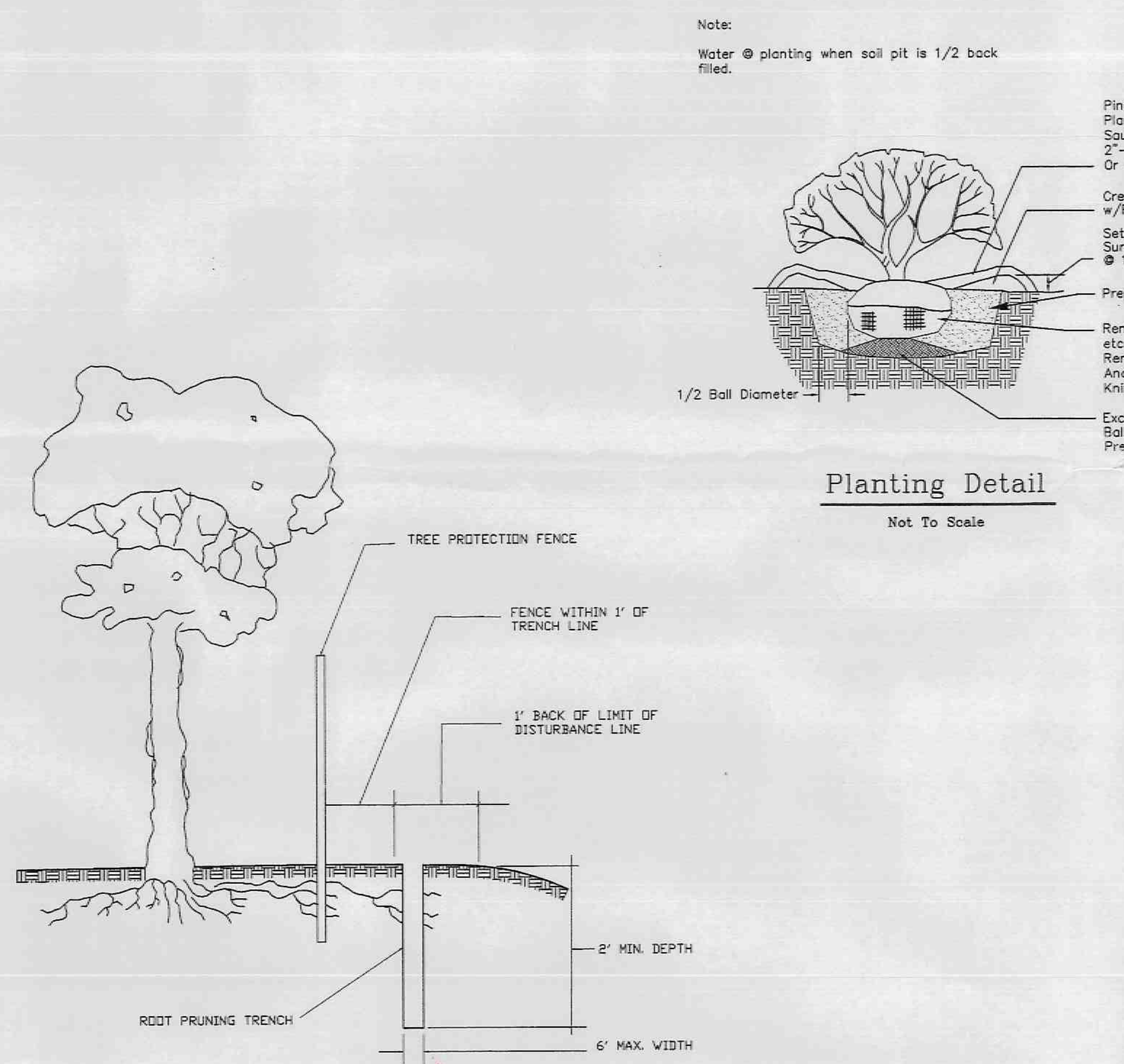
- INSPECTIONS
- The M-NCPPC Planning Department inspector (301-495-4523) must conduct field inspections of a site subject to an approved forest conservation plan as follows:
    - after the limits of disturbance have been staked and flagged, but before any clearing or grading begins (the purpose of the meeting will be to field-verify the limits of clearing specified on the approved plan, authorize necessary adjustments and authorize necessary stress reduction measures and installation of protective devices); the purpose will also be to determine the extent, location, schedule, and nature of invasive plant removal and control in forest save areas.
    - after necessary stress reduction measures have been completed and the protection measures have been installed, but before any clearing or grading begins (the purpose of the meeting will be to field verify that both measures have been done correctly and to authorize clearing and grading);
    - following completion of all construction activities to determine the level of compliance with the provisions of the forest conservation plan;
    - prior to the start of any required reforestation and afforestation planting (the purpose of the meeting will be to determine whether necessary pre-planting measures have been completed and authorize any necessary adjustments to the planting specifications);
    - after required reforestation and afforestation planting has been completed to verify that the planting is acceptable and begin the 2-year maintenance agreement to determine the level of compliance with the provisions of the planting plan.
  - These inspections must be requested by the applicant at the designated points:
    - Two inspections per year for 2 years after planting has been completed. Inspections to include M-NCPPC inspector, builder, and contractor. Purpose for these inspections is to determine reasonable maintenance measures.



NOTE:

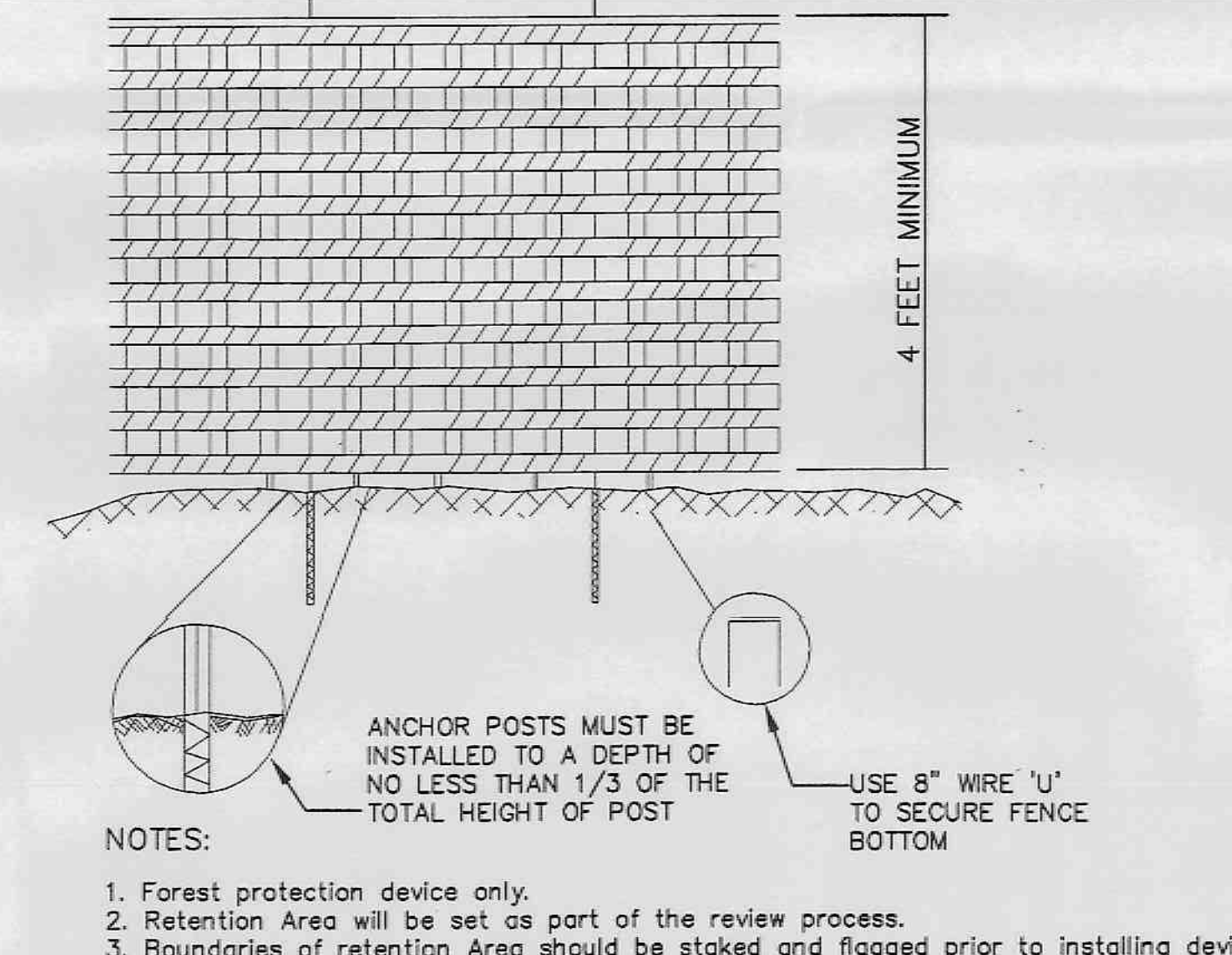
- Continue sediment control and protective devices.
- Retention area will be set as part of the review process.
- Boundaries of Retention Area should be staked prior to installing protective device.
- Root damage should be avoided.
- Rooted soil only within the limits of disturbance.
- Protective signage is required.

Where Super Silt Fence is also used for Tree Protection, the fence is to be installed in a root-pruning trench. See Root Pruning Detail, this page, for trench requirements.



NOTE:

- Retention Area will be set as part of the review process.
- Boundaries of Retention Area should be staked and flagged prior to trenching.
- Exact location of trench should be identified.
- Trench should be immediately backfilled with soil removed or other high organic soil.
- Roots should be cleanly cut using vibratory knife or other acceptable equipment.



NOTE:

- Forest protection devices only.
- Retention Area will be set as part of the review process.
- Boundaries of retention Area should be staked and flagged prior to installing device.
- Root damage should be avoided.
- Protective signage is required.
- Device should be maintained throughout construction.

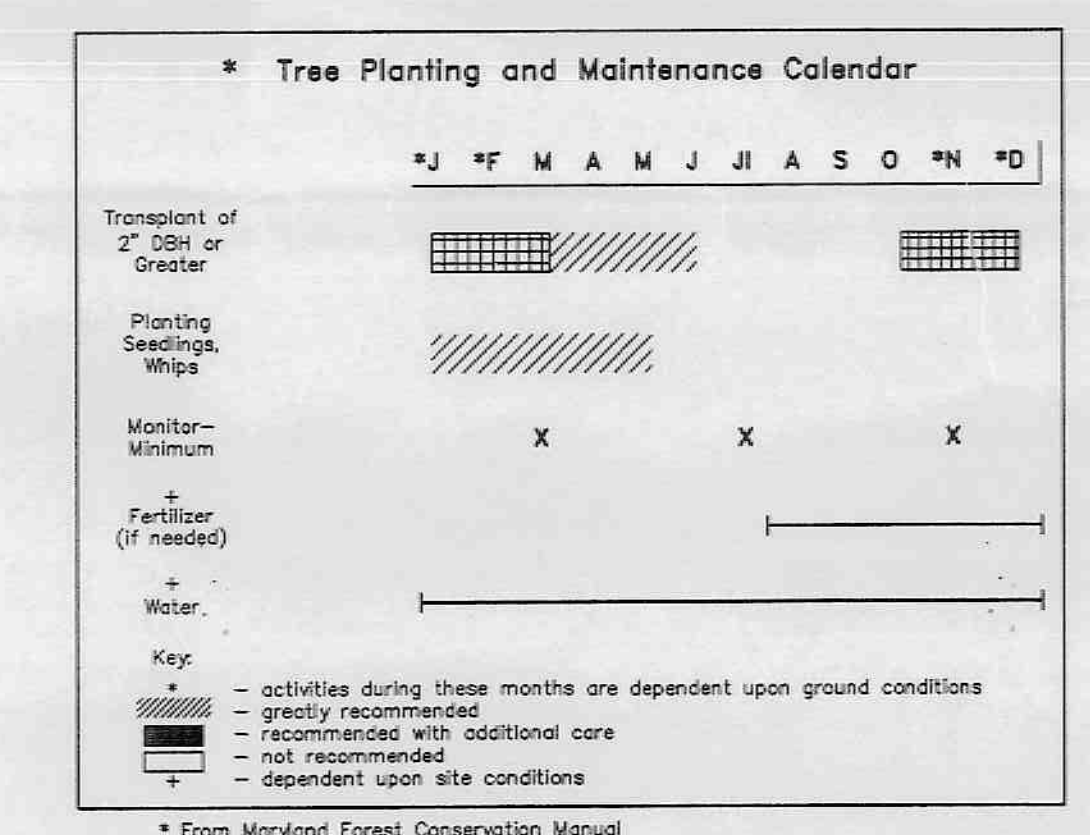
ROOT PRUNING

0.77 ACRE ON-SITE REFORESTATION PLANT SCHEDULE

QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT
18	<i>Acer rubrum</i>	Red Maple	1 1/2" - 2" cal.	Cont.
18	<i>Liriodendron tulipifera</i>	Tulip Poplar	1 1/2" - 2" cal.	Cont.
18	<i>Platanus occidentalis</i>	American Sycamore	1 1/2" - 2" cal.	Cont.
12	<i>Nyssa sylvatica</i>	Black Gum	1 1/2" - 2" cal.	Cont.
11	<i>Fraxinus americana</i>	White Ash	1 1/2" - 2" cal.	Cont.
13	<i>Viburnum dentatum</i>	Southern Arrowwood	18-24" ht.	Cont.
13	<i>Lindera benzoin</i>	Spicebush	18-24" ht.	Cont.

NOTE: The 0.77 acre Afforestation Area will be planted with the above plant material at a rate of:

- 100 container trees/acre x 0.77 acres = 77 trees
- Shrub species shall be planted at 1/3 the rate of trees: 77 trees x 1/3 = 26 Shrubs
- The mix shall be 70% dominant species (54 trees) and 30% understory species (23 trees) planted a maximum of 20' on-center.



NO. DATE DESCRIPTION BY

THE MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION

FINAL FOREST CONSERVATION PLAN

APPROVAL

Plan No. CP-1-855

Cody Brumby 10/29/02

SIGNATURE DATE

DATE

TAX MAP JT342

FOREST CONSERVATION PLAN

FRIENDS HOUSE (PARCEL C)

OLNEY ELECTION DISTRICT No. 8

MHG Macris, Hendricks & Glascock, P.A. Engineers • Planners Landscape Architects • Surveyors

9220 Wightman Road, Suite 120 Montgomery Village, Maryland 20886-1279

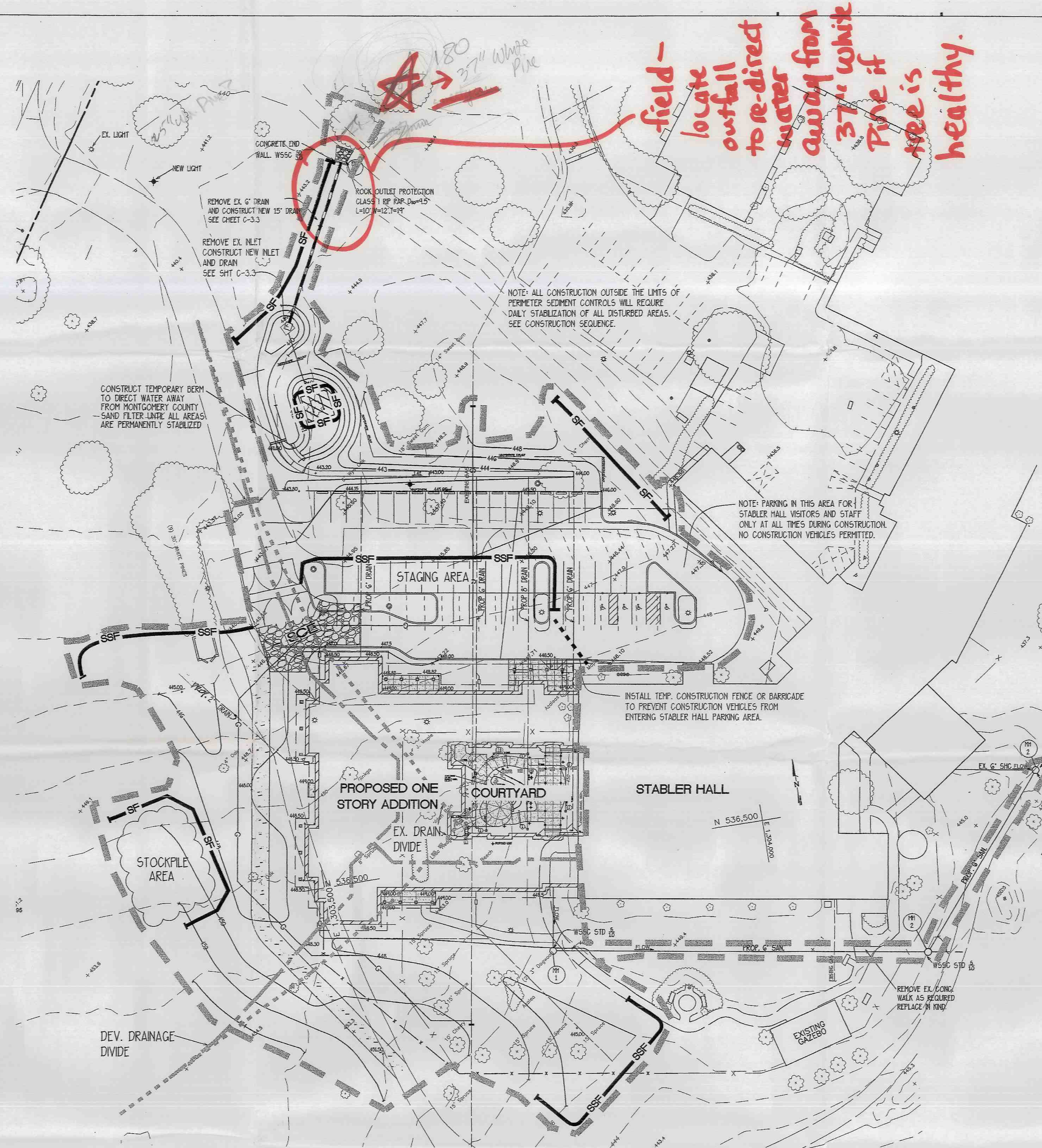
Phone 301.670.0840 Fax 301.548.0893 www.mhgapa.com

Proj. Mgr. VSB Designer TSW

Date 10/15/03 Scale NONE

Project No. 96-380 Sheet 2 of 2

E:\68628\DWG\FD\_15\_02\_Asp\_2042.dwg, 10/20/03 05:00:18 PM, W:\info, COPYRIGHT © 2003 MACRIS, HENDRICKS & GLASCOCK, P.A.



**LEGEND**

LIMIT OF DISTURBANCE	[Symbol]
STABILIZED CONSTRUCTION ENTRANCE (SCE)	[Symbol]
SILT FENCE	[Symbol]
SUPER SILT FENCE	[Symbol]
EX. DRAINAGE DIVIDE	[Symbol]
DEV. DRAINAGE DIVIDE	[Symbol]
PROPERTY LINE	[Symbol]
EX. CONTOUR	[Symbol]
PROPOSED CONTOUR	[Symbol]
EXISTING SPOTGRADE	[Symbol]
PROPOSED SPOTGRADE	[Symbol]
CHAIN LINK FENCE	[Symbol]
EX. CURB	[Symbol]
PROPOSED CURB	[Symbol]
EXISTING GAS	[Symbol]
PROPOSED GAS	[Symbol]
EXISTING BUILDING	[Symbol]
PROPOSED BUILDING	[Symbol]
PROPOSED BITUMINOUS PAVING	[Symbol]
PROPOSED CONCRETE PAVING	[Symbol]
PROPOSED GRAVEL PAVING	[Symbol]

PLAN SCALE: 1" = 30'

- SEQUENCE OF CONSTRUCTION**
- Prior to clearing of trees, installing sediment control measures, or grading, a preconstruction meeting must be conducted on-site with the Montgomery County Department of Permitting Services (MCPS) sediment control inspector (240) 777 9210 (48 hours notice), the Owners' representative, and the site Engineer.
  - The limits of disturbance must be field marked prior to clearing of trees, installation of sediment control measures, construction, or other land disturbing activities.
  - Clear and grade for installation of sediment control devices.
  - Install sediment control devices. Traps and basins shall be constructed prior to construction of any earth dikes that convey drainage to a trap and/or basin.
  - Once the sediment control devices are installed, the permittee must obtain written approval from the MCPS inspector before proceeding with any additional clearing, grubbing or grading.
  - As a first order of work, the contractor shall arrange for the relocation of the gas service line which runs through the construction site to the limits shown. Relocation of the gas service piping may proceed prior to installation of perimeter sediment controls. Daily stabilization of areas disturbed by each day's operations will be required. See note for utility installation outside perimeter sediment controls.
  - Note: The work in items 7, through 10, below is outside the limits of the perimeter sediment controls. Daily stabilization of disturbed areas will be required. The Contractor shall restrict earth disturbance to that area which can be stabilized by the end of the work day. If it is impractical to provide stabilization for any area at the end of the work day, the Contractor shall install silt fence on the down-slope side of the disturbance, or provide other measures as directed by the sediment control inspector.
  - Install new inlet I-1, proposed storm drain pipe and endwall E-1. Disturbed areas around the new inlet shall be stabilized with permanent seed and mulch anchored with erosion control matting.
  - Rough grade for road side ditch, Montgomery County Sand Filter and parking area expansion. Begin work at new inlet I-1 and work up-slope. Disturb only the amount of area which can be stabilized at the end of the work day. Excess excavated materials shall be removed from the Owner's property to a suitable disposal site. Stockpiling on-site will not be permitted during this phase of the work. The bottoms of all ditches and all slopes 3H to 1V shall be seeded and mulched and protected with erosion control matting.
  - Box out for pavement subgrade and construct stone base and bituminous base paving.
  - Construct Sand Filter. Install Earth Berm as shown to prevent surface water from the road side ditch from entering the sand filter until all on-site areas have been permanently stabilized. After installation of the sand filter bed, install silt fence as shown to protect the sand from contamination until adjacent areas have been permanently stabilized.
  - Remove existing pavement for the stabilized construction entrance and super silt fence in the existing parking area. Construct SCE and SSF as shown. No construction traffic will be allowed on the paved parking areas outside the limits of the SSF. The Contractor shall maintain free access to this area for parking and access to the existing Stabler Hall at all times during construction.
  - Clear and grub remainder of site. Strip topsoil and stockpile in location shown for re-use. Shape stockpile to drain and protect with silt fence.
  - Rough grade site. Excess excavated materials not needed for backfill for footings and foundation walls or to establish final site grades shall be removed from the Owner's property to a suitable disposal area. Begin footing excavation.
  - Install site and building utilities.
  - Proceed with building construction.
  - After the building is under roof, install gravel drip beds under building eaves, and fine grade overlot areas south and west of building addition. Construct gravel driveway around west end of building addition. Topsoil and stabilize overlot areas with permanent seed and mulch.
  - Construct new curbs and sidewalks.
  - When construction on the building addition is essentially completed, and with the prior written approval of the MCPS sediment control inspector, clean existing paved areas in the contractor staging area and remove the stabilized construction entrance and super silt fence in the existing parking area. Patch any pavement disturbed for the installation of these devices using bituminous base course material. Minimum depth of bituminous patch shall be as least equal to the depth of the existing pavement. Repair any paved areas disturbed by construction activities as required.
  - Construct bituminous surface overlay over entire parking area.
  - Fine grade, topsoil and stabilize any remaining disturbed areas. Install plantings.
  - After all site areas have been stabilized with established vegetation, and with the prior written approval of the MCPS sediment control inspector, remove any remaining sediment control devices and stabilize any areas disturbed in the process. Remove the earth berm diverting water from the Sand Filter, and stabilize the areas disturbed in the process using permanent seed and mulch with erosion control matting.

EXISTING TOPOGRAPHY AND FEATURES SHOWN ON THIS DRAWING ARE PLOTTED FROM TOPOGRAPHY FURNISHED BY MACRIS, HENDRICKS & GLASCOCK, P.A., 9220 WIGHTMAN ROAD, GAITHERSBURG, MD 20879.

ALL DISTURBED AREAS MUST BE TOPSOILED PER THE "MONTGOMERY COUNTY STANDARDS AND SPECIFICATIONS FOR TOPSOIL", PRIOR TO VEGETATIVE STABILIZATION.

VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL REGION AND SEDIMENT CONTROL." FOR PERMANENT SEEDINGS, USE SEED MIX NO. 3 FROM TABLE 25. TURFGRASS VARIETIES SHOULD BE SELECTED FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND."

NOTES FOR UTILITY INSTALLATION OUTSIDE PERIMETER SEDIMENT CONTROLS

- THE CONTRACTOR SHALL OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY. IF TRENCH MUST REMAIN OPEN LONGER THAN ONE DAY, SILT FENCE SHALL BE PLACED BELOW (DOWNSLOPE) OF THE TRENCH.
- PLACE ALL EXCAVATED MATERIAL ON THE UPHILL SIDE OF THE TRENCH.
- ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

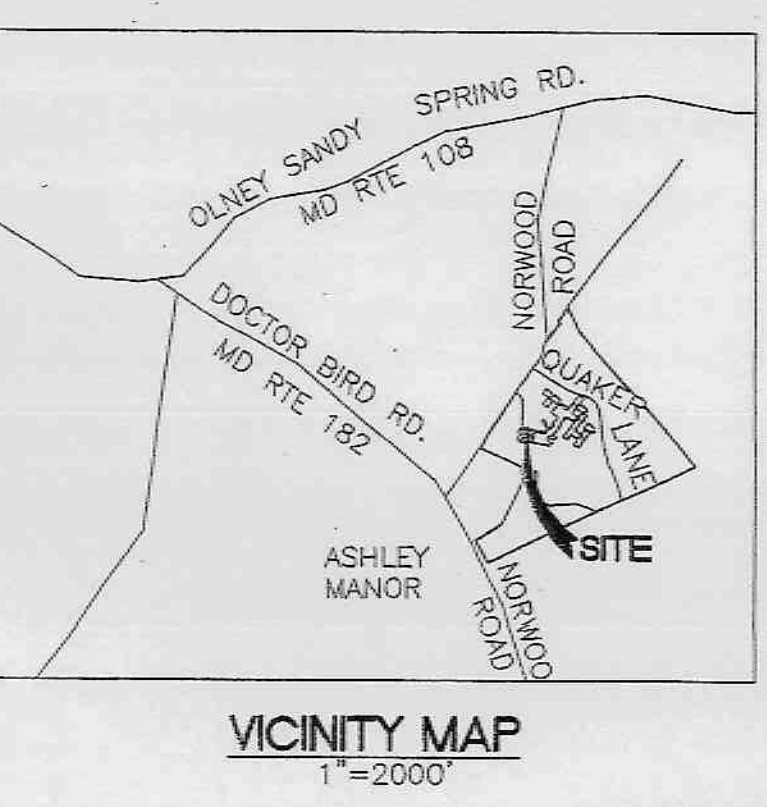
MISS UTILITY

CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDER GROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

**RELATED REQUIRED PERMITS**  
To be completed by the consultant and placed on the first sheet of the Sediment Control / Stormwater Management plan set for all projects.

IT IS THE RESPONSIBILITY OF PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF THE APPROVED SEDIMENT CONTROL PERMIT

TYPE OF PERMIT	REQD	NOT REQD	PERMIT #	EXPIRATION DATE	WORK RESTRICTION DATES
MCPS Floodplain District		✓			
WATERWAYS/WETLAND(S):					
a. Corps of Engineers		✓			
b. MDE		✓			
c. MDE Water Quality Certification		✓			
MDE Dam Safety		✓			
N.P.D.E.S. NOTICE OF INTENT	✓		N/A	N/A	DATE FILED
OTHERS (Please List):					



Friends House Retirement Community  
17340 Quaker Lane  
Sandy Spring, Maryland 20860

# Special Care Unit Addition

Sandy Spring, Maryland

Cochran, Stephenson & Donkervoet, Inc.  
The Warehouse at Camden Yards  
323 West Camden Street  
Baltimore, MD 21201  
WWW.CSDARCH.COM

Mechanical/Electrical Engineer  
James Posey Associates  
3112 Lord Baltimore Drive  
Baltimore, Maryland 21214  
Structural Engineer  
Morabito Consultants, Inc.  
2538 St. Paul St.  
Baltimore, MD 21218  
Civil Engineers and Landscape  
Farrand & English, Inc.  
416 Lyman Avenue  
Baltimore, MD 21212

**MCPS APPROVED FOR:**

Stormwater Management:	Reviewed	Date
	Approved	Date
Sediment Control Technical Requirements:	Reviewed	Date
	Approved	Date
Administrative Requirements:	Reviewed	Date

**NOTE**  
MCPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL. IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.  
THIS APPROVAL DOES NOT NEGATE THE NEED OF A MCPS ACCESS PERMIT.

No.	Date	Revisions
	3/31/03	PERMIT SET
	5/1/03	100% CD

CSD Project No: 0051  
File Name:  
Date: 1 MAY 2003  
Scale:  
Dwg. Name:  
**EROSION AND SEDIMENT CONTROL PLAN**  
Dwg. No: **C 3.1**  
SHEET 1 OF 3  
SPECIAL CARE UNIT ADDITION

NOTE: THIS SHEET IS FOR SEDIMENT CONTROL ONLY SEE SHIT C1.2 FOR LAYOUT & UTILITY SEE SHEET C1.3 FOR GRADING

OWNER/APPLICANT NAME  
FRIENDS HOUSE, INC.  
17340 QUAKER LANE  
SANDY SPRINGS, MD 20860  
CONTACT: DARRYL CLEMMER  
PHONE: 301-924-7528

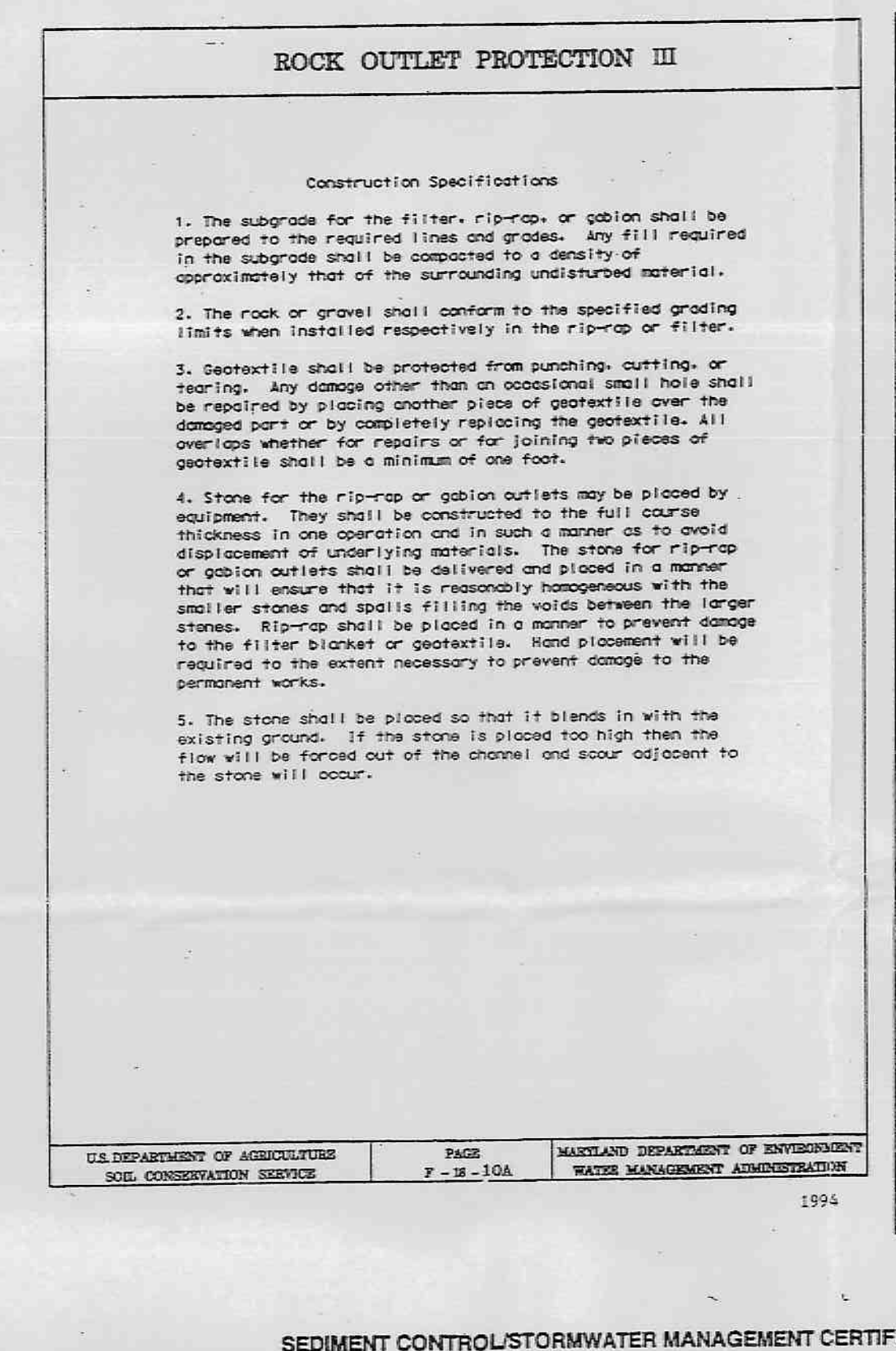
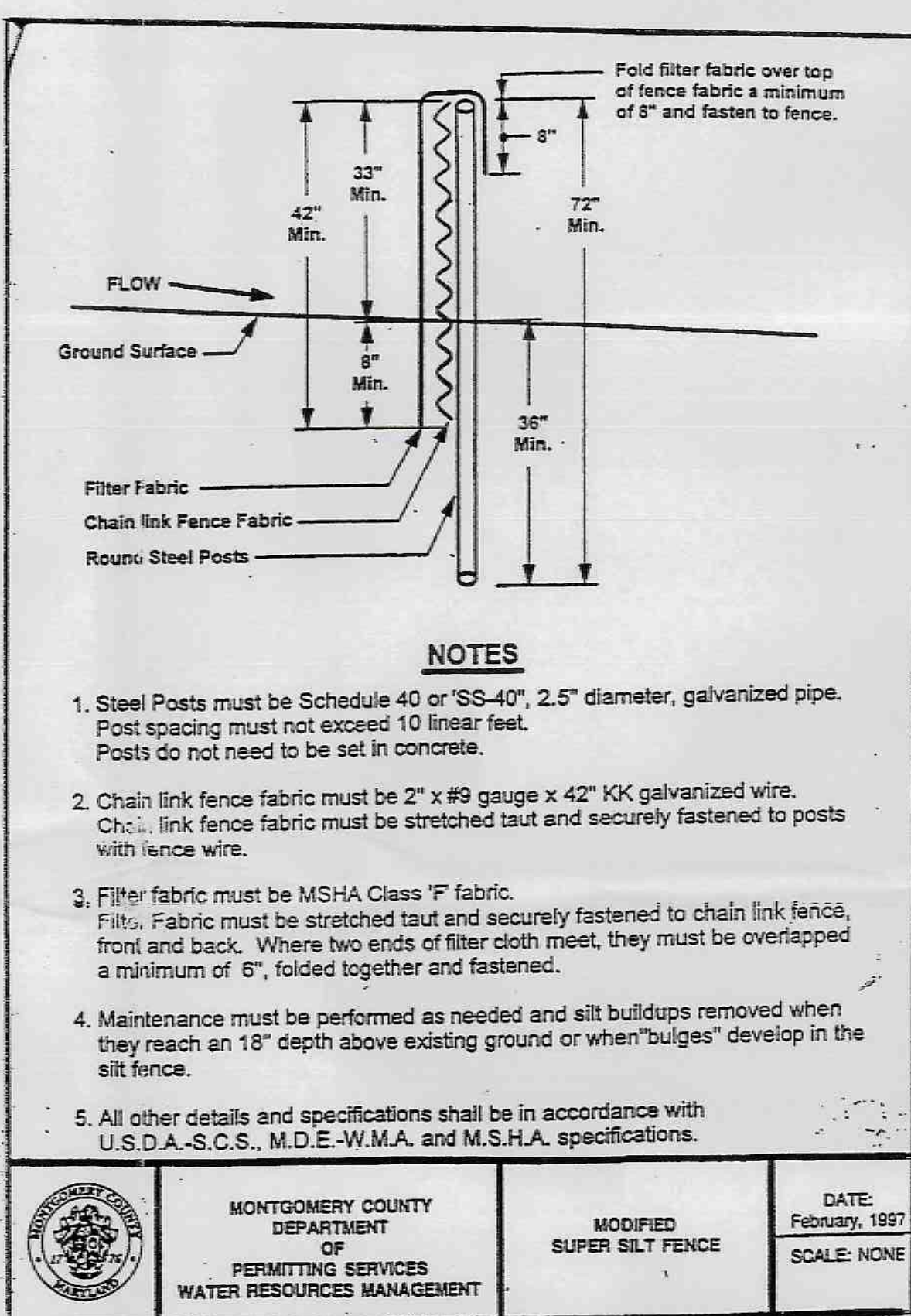
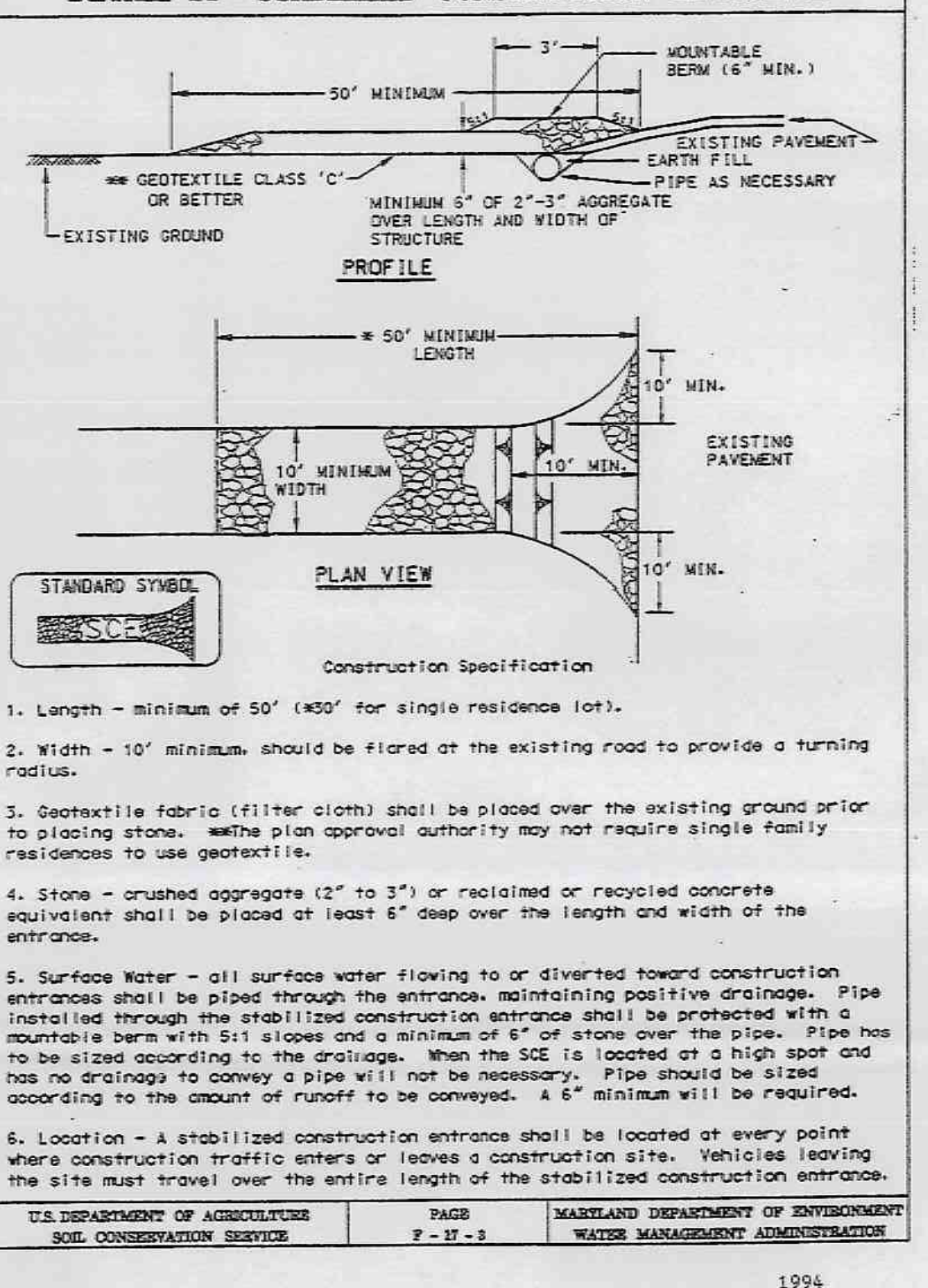
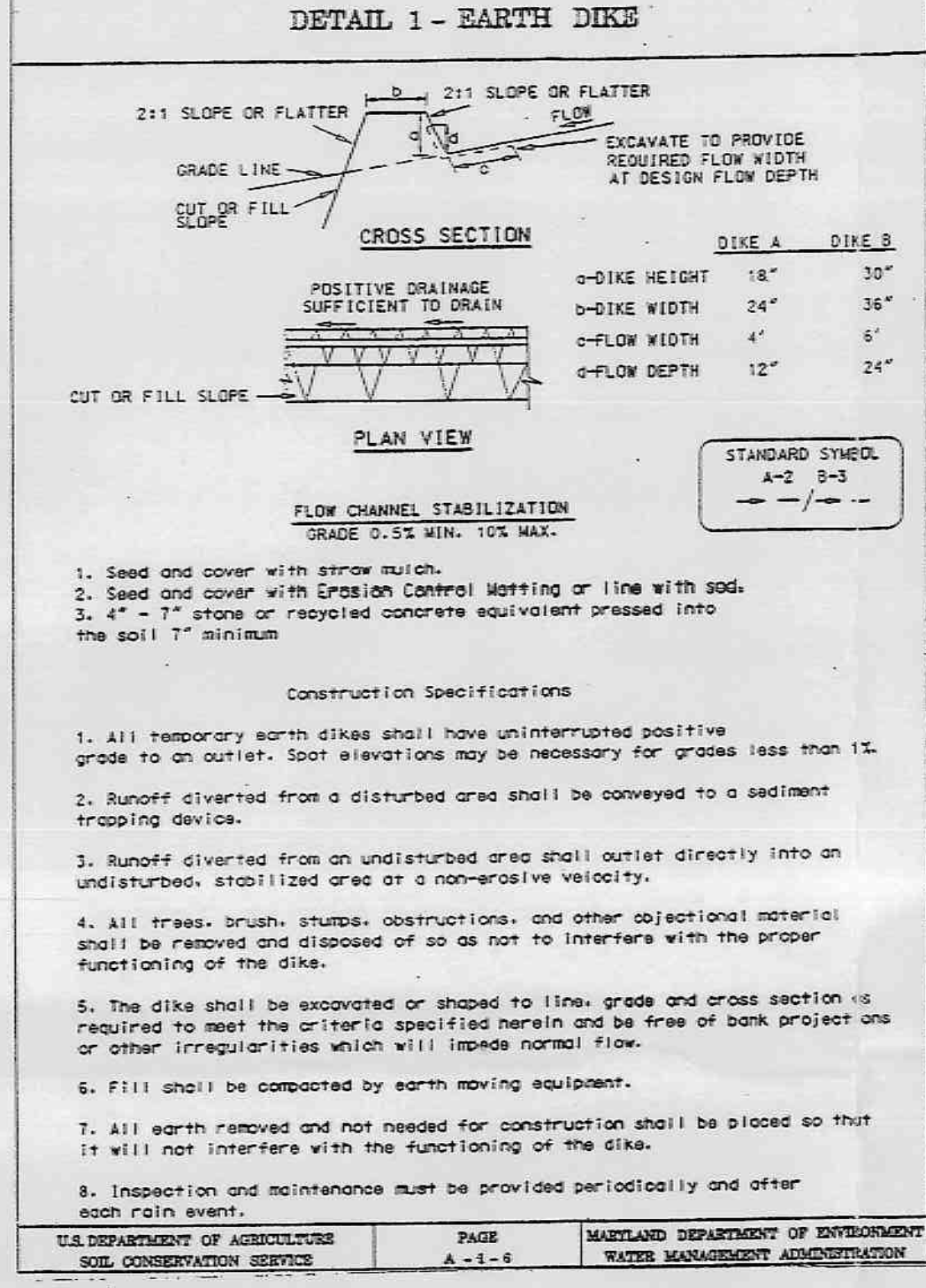
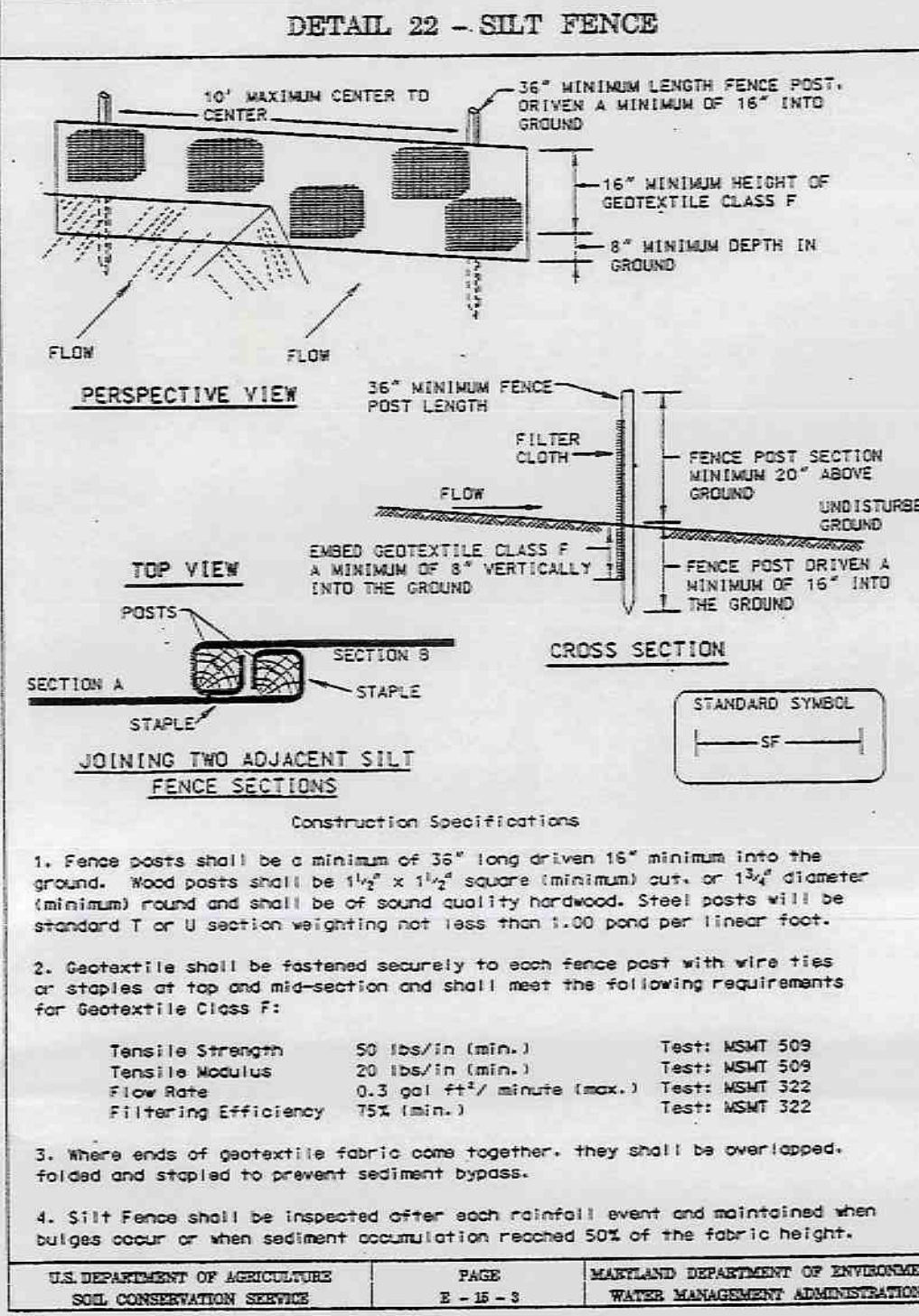
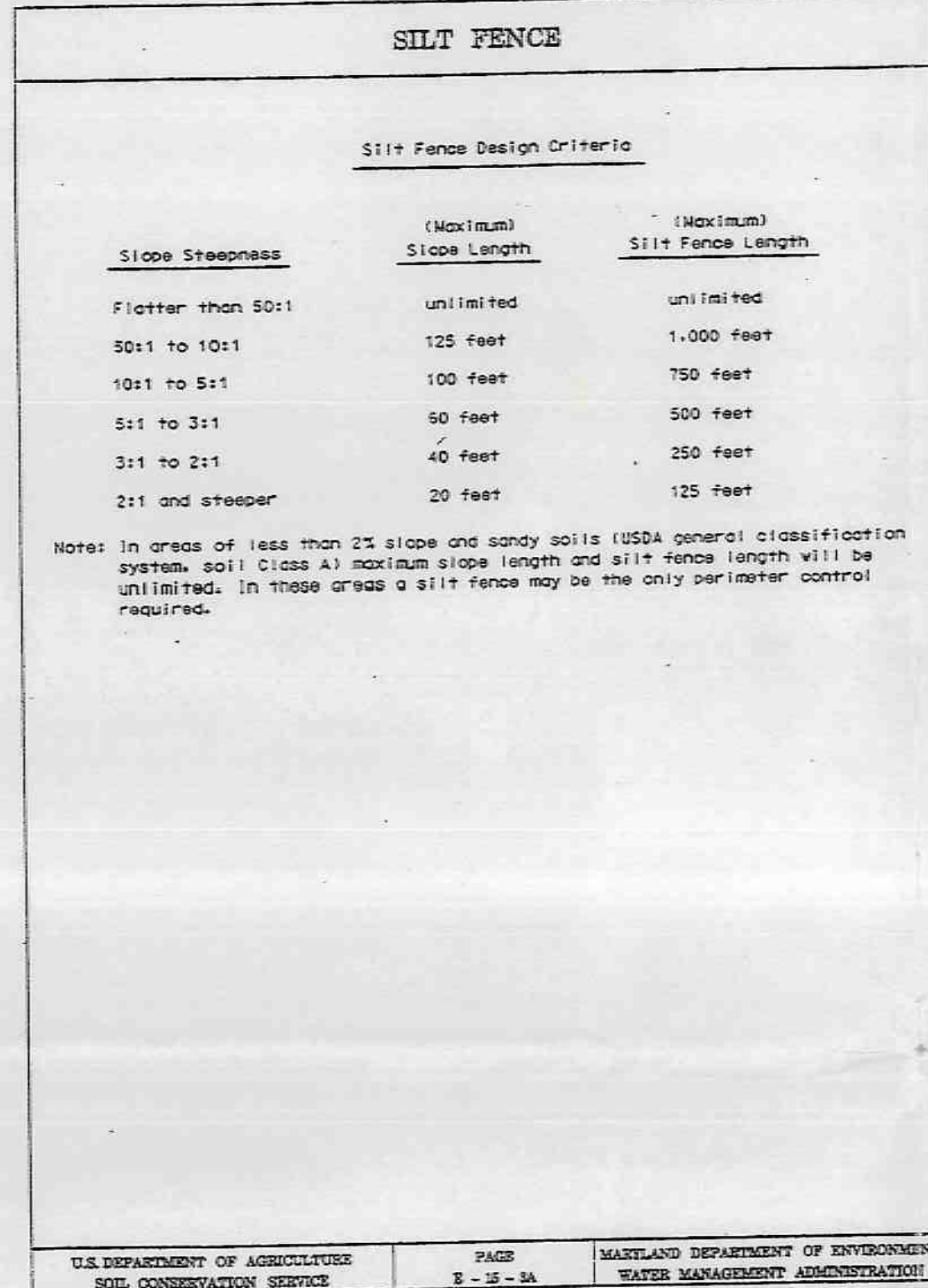
**FRIENDS HOUSE RETIREMENT COMMUNITY**  
17340 QUAKER LANE, SANDY SPRINGS, MD 20860  
LIBER/POLIO: P.B.125, NO. 14595  
PARCEL: C  
ELECTION DISTRICT NO. 8  
**SPECIAL CARE UNIT ADDITION**

STANDARDS AND SPECIFICATIONS FOR TOPSOIL

STANDARD EROSION AND SEDIMENT CONTROL NOTES

- 1. The permittee shall notify the Department of Permitting Services (DPS) forty-eight (48) hours before commencing any land disturbing activity...
2. The permittee must obtain inspection and approval by DPS at the following points:
A. At the required pre-construction meeting.
B. Following installation of sediment control measures...
C. During the installation of a sediment basin or stormwater management structure...
D. Prior to removing or modification of any sediment control structure(s).
E. Prior to final acceptance.
3. The permittee shall construct all erosion and sediment control measures per the approved plan and construction sequence...
4. The permittee shall protect all points of construction ingress and egress to prevent the deposition of materials onto traveled public thoroughfares...
5. The permittee shall inspect periodically and maintain continuously in effective operating condition all erosion and sediment control measures...
6. All sediment basins, trap embankments, perimeter dikes, and all disturbed slopes steeper or equal to 3:1 shall be stabilized with topsoil...
7. The permittee shall apply seed, weed, and anchored straw mulch...
8. Prior to removal of sediment control measures, the permittee shall stabilize all contributory disturbed areas with required soil amendments and topsoil...
9. The site permit work, materials, approved GCS/M plans, and test reports shall be available at the site for inspection by duly authorized officials of Montgomery County.
10. Surface drainage flows over unestablished cut and fill slopes shall be controlled by either preventing drainage flows from traversing the slopes or by installing mechanical devices...
11. Permanent swales or other points of concentrated water flow shall be stabilized within 7 calendar days of establishment with soil or seed...
12. Temporary sediment control devices shall be removed with permission of the Department...
13. No permanent cut or fill slope with a gradient steeper than 3:1 will be permitted in lawn maintenance areas or on residential lots...
14. The permittee shall install a splashblock at the bottom of each downspout...
15. For finished grading, the permittee shall provide adequate gradients so as to: (1) prevent water from standing on the surface of lawns more than twenty-four (24) hours...
16. Sediment traps or basins are not permitted within 20 feet of a building which is existing or under construction...
17. All inlets in non-sump areas shall have asphalt berms installed at the time of base paving establishment...
18. The sediment control inspector has the option of requiring additional sediment control measures, as deemed necessary...
19. All trap elevations are relative to the outlet elevation which must be on existing undisturbed ground...
20. Vegetative stabilization shall be performed in accordance with the Standards and Specifications for Soil Erosion and Sediment Control...
21. Temporary sediment trap(s) shall be cleaned out and restored to the original dimensions when sediment has accumulated to the point of one-half (1/2) the wet volume of the trap...
22. Sediment removed from traps shall be placed and stabilized in approved areas, but not within a floodplain...
23. All sediment basins and traps must be surrounded with a welded wire safety fence...
24. No excavation in the areas of existing utilities is permitted unless their location has been determined...
25. Off-site spoil or borrow areas must have prior approval by DPS...
26. The grade away from foundation walls shall fall a minimum of six inches within the first 10 feet...
27. Sediment trap/basin dewatering for cleanout or repair may only be done with the DPS inspector's permission...
A. Pump discharge may be directed to another on-site sediment trap or basin...
B. The pump intake may utilize a Removable Pumping Station...
C. The pump intake may be floated and discharge into a Dirt Bag...
Remember: Dewatering operation and method must have prior approval by the DPS inspector.
28. The permittee must notify the Department of all utility construction activities within the permitted limits of disturbance prior to the commencement of those activities...
29. Topsoil must be applied to all pervious areas within the limits of disturbance prior to permanent stabilization in accordance with Montgomery County standards and specifications for topsoil.

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.
Purpose: To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
Conditions Where Practice Applies: This practice is limited to areas having 2:1 or flatter slopes.
For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.
Construction and Material Specifications: Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications.
Topsoil Specifications - Soil to be used as topsoil must meet the following:
1. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by DPS.
2. Topsoil shall be uniformly distributed to a 4 inch layer and lightly compacted to a minimum thickness of 4 inches. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
3. Topsoil shall not be placed while the topsoil is in a frozen or sandy condition, when the soil is excessively wet or in a condition that may otherwise be detrimental to proper grading and the seedbed preparation.
Topsoil Application:
1. When topsoiling, maintain needed erosion and sediment control practices.
2. Topsoil shall be uniformly distributed to a 4 inch layer and lightly compacted to a minimum thickness of 4 inches. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
3. Topsoil shall not be placed while the topsoil is in a frozen or sandy condition, when the soil is excessively wet or in a condition that may otherwise be detrimental to proper grading and the seedbed preparation.



SEDIMENT CONTROL/STORMWATER MANAGEMENT CERTIFICATIONS

CERTIFICATIONS ON THIS SHEET MUST BE ON EVERY SEDIMENT CONTROL/STORMWATER MANAGEMENT PLAN.

OWNER/DEVELOPER'S CERTIFICATION
I/We hereby certify that all clearing, grading, construction, and/or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project.

DESIGN CERTIFICATION
I hereby certify that this plan has been prepared in accordance with the 1994 Maryland Standards and Specification for Soil Erosion and Sediment Control, Montgomery County Department of Permitting Services Executive Regulations 5-20 and 52-00, and Montgomery County Department of Public Works and Transportation 'Storm Drain Design Criteria' dated August 1988.

CERTIFICATION OF THE QUANTITIES
I hereby certify that the estimated total amount of excavation and fill as shown on these plans has been computed to be 4,210 cubic yards of excavation, 90 cubic yards of fill and the total area to be disturbed as shown on these plans has been determined to be 104,700 square feet.

MAINTENANCE CERTIFICATION ON PRIVATE LANDS
I/We hereby certify that I/we assume maintenance responsibilities for all stormwater management structures shown hereon. If maintenance responsibility is legally transferred, I/we agree to supply the Montgomery County Department of Environmental Protection with a copy of the document (signed by both parties) transferring said maintenance responsibility at that time.

MCDPS APPROVED FOR:

Stormwater Management:
Reviewed Date
Approved Date

Sediment Control Technical Requirements:
Reviewed Date
Approved Date

Administrative Requirements:
Reviewed Date
Approved Date

NOTE
MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL, IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

Table with columns: No., Date, Revisions. Row 1: 3/31/03 PERMIT SET. Row 2: 5/1/03 100% CD.

CSD Project No: 0051
File Name:
Date: 1 MAY 2003
Scale:
Dwg. Name: EROSION AND SEDIMENT CONTROL NOTES/DETAILS
Dwg. No: C 3.2

FRIENDS HOUSE RETIREMENT COMMUNITY
17340 QUAKER LANE, SANDY SPRING, MD 20860
LIBERFOLIO: F.B.15, NO. 14595
PARCEL: C
ELECTION DISTRICT NO. 8
SPECIAL CARE UNIT ADDITION
SHEET 2 OF 3
SPECIAL CARE UNIT ADDITION



Friends House Retirement Community
17340 Quaker Lane
Sandy Spring, Maryland 20860

Special Care Unit Addition

Sandy Spring, Maryland

Cochran, Stephenson & Donkervoet, Inc.
The Warehouse at Camden Yards
323 West Camden Street
Baltimore, MD 21201
WWW.CSDARCH.COM

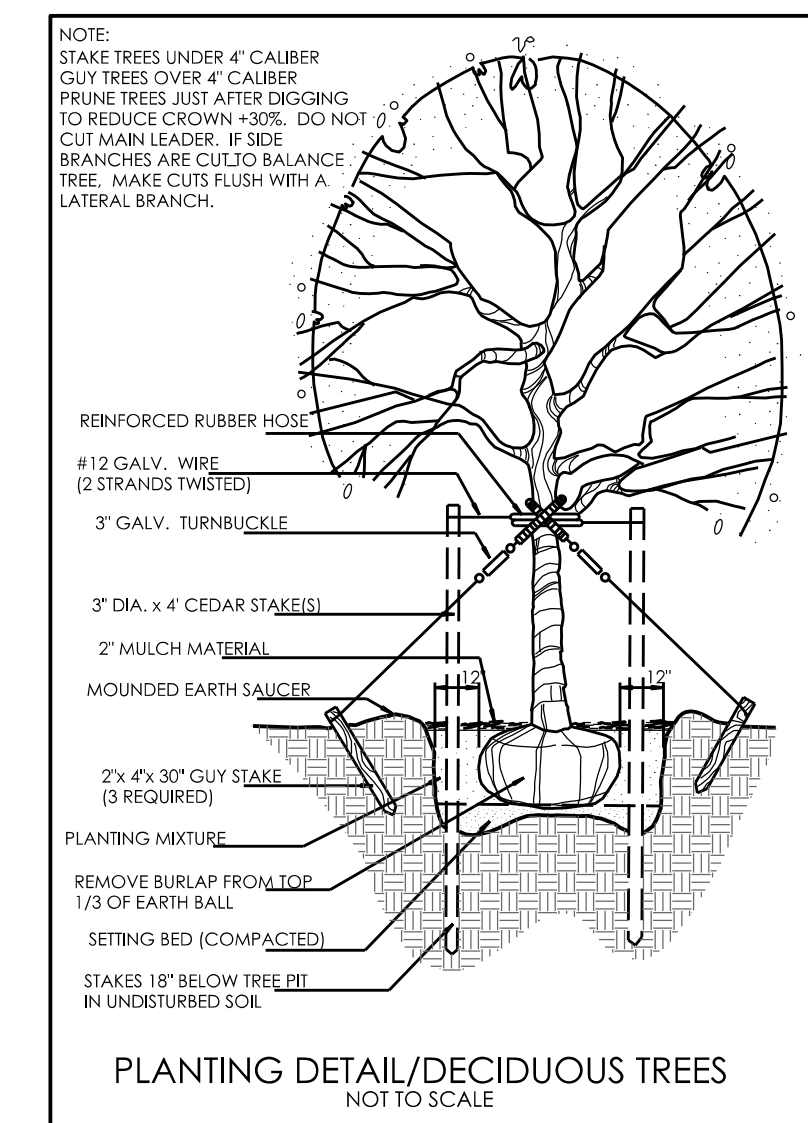
Mechanical/Electrical Engineer
James Pessey Associates
3112 Lord Baltimore Drive
Baltimore, Maryland 21204
Structural Engineers
Morabito Consultants, Inc.
2626 St. Paul St.
Baltimore, MD 21218
Civil Engineers and Landscape
Farran & English, Inc.
418 Lyman Avenue
Baltimore, MD 21212

SPECIMEN & SIGNIFICANT TREES

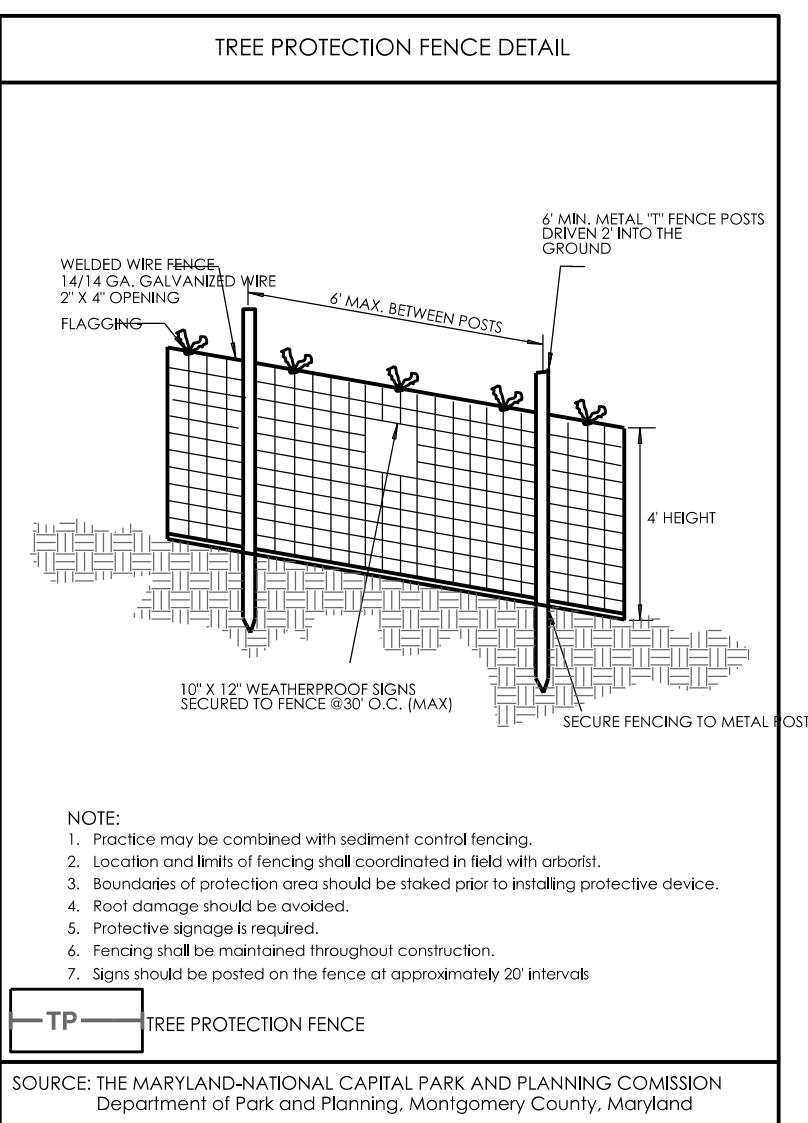
Table with columns: ID, COMMON NAME, SIZE, BOTANICAL NAME, CONDITION, REMARKS. Lists various tree specimens and their status.

Table with columns: ID, COMMON NAME, SIZE, BOTANICAL NAME, CONDITION, REMARKS. Lists various tree specimens and their status.

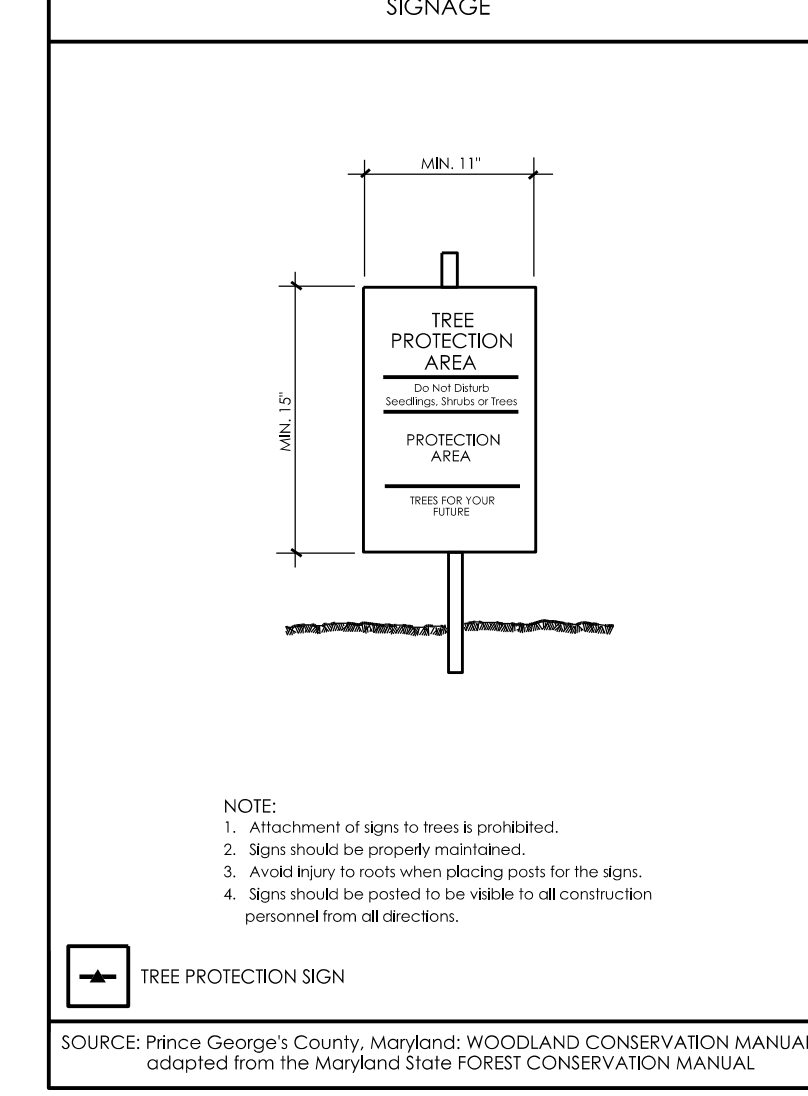
Notes: Diameters are given for each trunk of multiple bole trees when division occurs below 4.5 feet. \* Indicates specimen trees for size per MMNCPFC Trees Technical Manual.



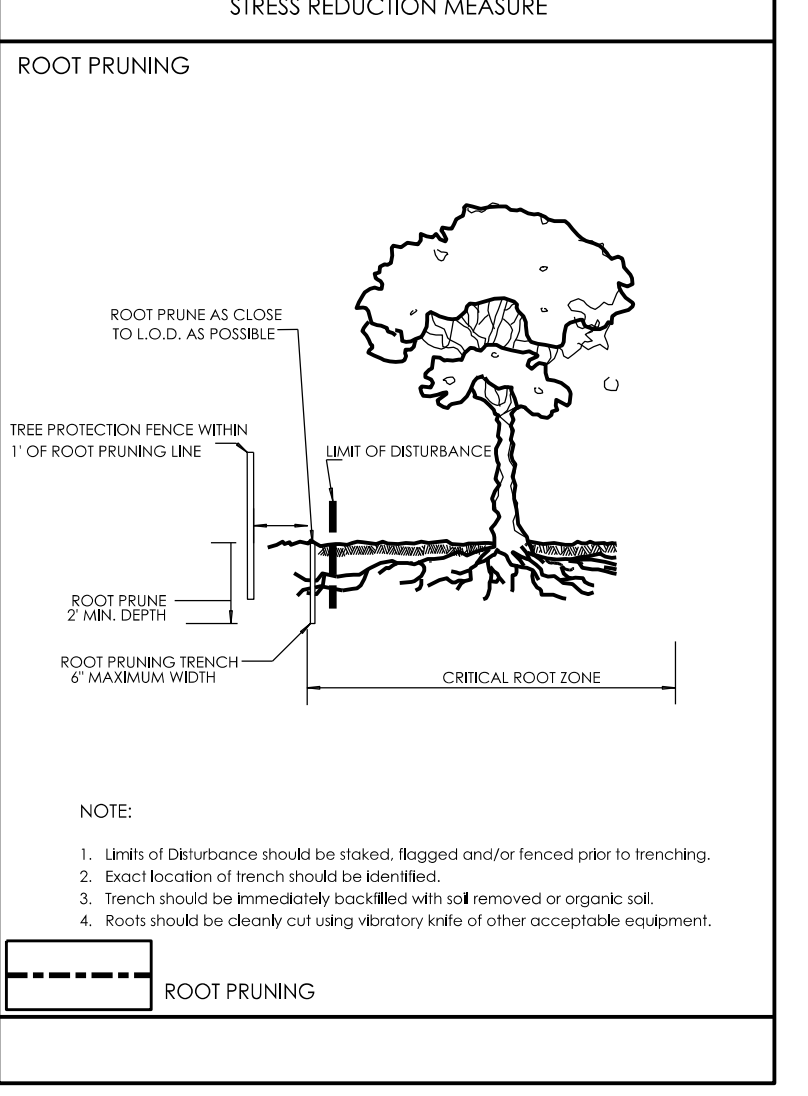
PLANTING DETAIL/DECIDUOUS TREES



PLANTING DETAIL/DECIDUOUS TREES



TREE PROTECTION SIGN



ROOT PRUNING

Sequence of Events

- Pre-Construction: 1. An on-site pre-construction meeting is required... 2. No land disturbance shall begin before stress-reduction measures have been implemented... 3. A Maryland licensed tree expert... 4. Temporary tree protection devices shall be installed... 5. Forest retention area signs must be installed... 6. Long-term protection devices must be installed... 7. Periodic inspections by the Forest Conservation Inspector... 8. The property owner must immediately notify the Forest Conservation Inspector... 9. After construction is completed... 10. After the final inspection and completion of all corrective measures...

Inspections

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

- Plans without Planting Requirements: 1. After the limits of disturbance have been staked and flagged... 2. After necessary stress reduction measures have been completed... 3. After completion of all construction activities... 4. Before the start of any required reforestation and afforestation planting... 5. After the required reforestation and afforestation planting has been completed... 6. At the end of the maintenance period...

- 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... 6. At the end of the maintenance period...

DEVELOPER'S CERTIFICATE form with fields for Developer's Name, Contact Person or Owner, Address, Phone and Email, Signature.

Project No. 2029072340, Scale NONE, Design Checked JS, Drawn Date Feb. 2016, Sheet.

No.	Revision	Date	By
1	Revised per MNCPPC comments.	02/17/16	DK
2	Revised SVB and associated labelations per MNCPPC comments.	10/24/16	DK
3	Revised EC worksheet & plan to identify variance mitigation trees.	10/24/16	SS

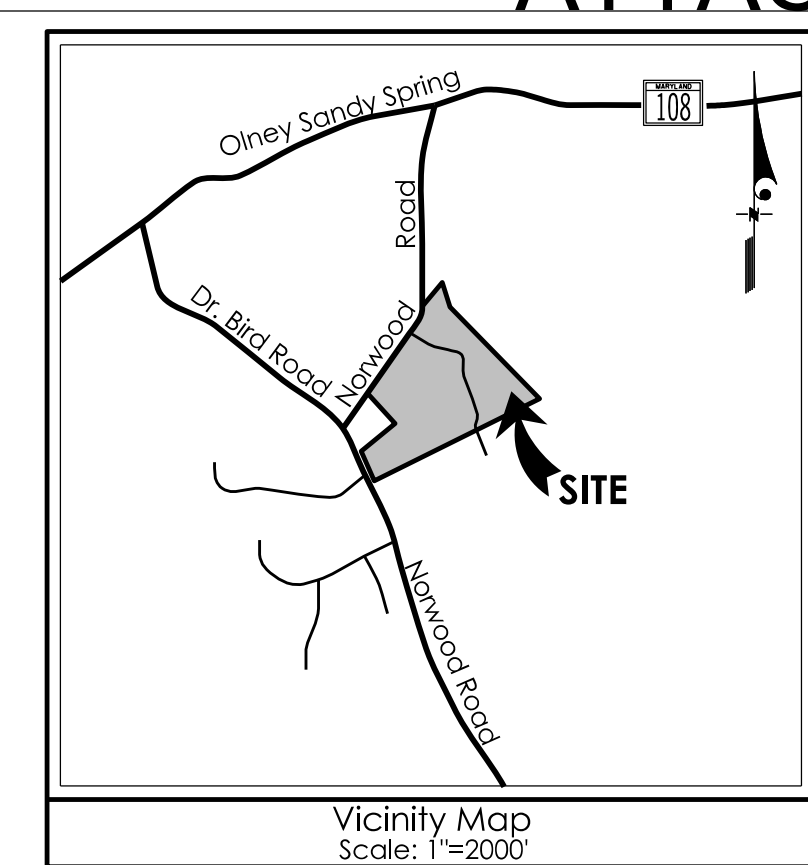
Owner/Developer:  
**FRIENDS OF HOUSE RETIREMENT COMMUNITY**  
 10000 Knoll Road, Sandy Spring, Maryland 20860  
 Phone: (301) 444-8282  
 Contact/Attn.: Mr. Kevin Harrington

**CAMPUS AMENDMENT TO FINAL FOREST CONSERVATION PLAN #S-1855**

8th Election District, Montgomery County, Maryland

**General Notes**

- The purpose of this plan is for the modification of the existing Special Exceptions: Housing and Related Facilities for Senior Adults and Persons with Disabilities (S-452-C) and Nursing Home and Domiciliary Care Homes (S-856-A).
- Boundary information shown is based on boundary survey prepared by Macris, Hendricks and Glascock, P.A.
- Topographic information is two foot contour interval from topographic survey prepared by Macris, Hendricks and Glascock, P.A. Surrounding property information is from M-NCPPC GIS.
- NRI/FSD 4-97071 has been approved for this site on 10/24/03. Preliminary/Final Forest Conservation Plan S-1855 was also approved on 10/24/03.
- Water and Sewer Category: W-1 & S-1 respectively.
- This site is within the 1998 Sandy Spring/Asht on Master Plan area.
- This site is within the Patuxent Annual Growth Policy Area.
- This site is within the Northwest Branch Watershed (Class IV).
- This plan is not for construction purposes.
- Portions of this site are in the 100-Yr FEMA floodplain as shown on FIRM 24031C0220D effective 9/29/2006.



**PLANT LIST for Reforestation**

QTY	BOTANICAL NAME/Common Name	SIZE	COMMENTS
84	Carinus caroliniana/American Hornbeam	1" caliper	Container
76	Fagus grandifolia/American Beech	1" caliper	Container
126	Platanus occidentalis/Sycamore	1" caliper	Container
84	Prunus serotina/Black Cherry	1" caliper	Container
126	Quercus coccinea/Scarlet Oak	1" caliper	Container
136	Quercus prinus/Chestnut Oak	1" caliper	Container
<b>TOTAL</b>	<b>672</b>		
<b>Shrubs</b>			
75	Ametanchier canadensis/Shadblow Serviceberry	3 Gal.	Container
75	Asimina triloba/Paw Paw	3 Gal.	Container
74	Lindera benzoin/Spicebush	3 Gal.	Container
<b>TOTAL</b>	<b>224</b>		

\*Planting rate was determined from the Montgomery County Tree Technical Manual, (pg. 36: 5 Standards) 1" caliper trees/acre, shrubs must be planted at one third the rate of trees.)  
 Planting area proposed= 3.36 acres  
 Rate= 200 1" caliper trees/acre  
 3.36 x 200= 672 trees total  
 Shrubs= 3.36 x 200= 672 shrubs total  
 1/3 tree total= 224 shrubs total

Planting Distribution: All plant species specified should be located in a random positive association pattern and evenly distributed throughout the indicated planting area.  
 Spacing:  
 TREES- approximately 15' x 20' o.c.  
 SHRUBS- evenly distributed

NOTE:  
 The contractor shall make appropriate adjustments to tree spacing and field locate proposed plantings around existing vegetation. Whenever possible, proposed tree plantings should be located at least 15 feet from existing trees.

**PLANT LIST for Tree Variance Mitigation**

KEY	QTY	BOTANICAL NAME/Common Name	SIZE	COMMENTS
AR	19	Acer rubrum/Red Maple	3 inch caliper min.	Ball and burlap
PO	24	Platanus x acerifolia/London Plane Tree	3 inch caliper min.	Ball and burlap
QR	10	Quercus rubra/Northern Red Oak	3 inch caliper min.	Ball and burlap

0.70 ACRES FOREST SAVED-  
 0.81 ACRES PROPOSED CATEGORY  
 1 FOREST CONSERVATION EASMENT

3.31 ACRES FOREST  
 TO BE CLEARED

15.69 ACRES FOREST SAVED

20.02 ACRES  
 PROPOSED CATEGORY I FOREST  
 CONSERVATION EASEMENT

0.62 ACRES FOREST  
 TO BE CLEARED

**FOREST CONSERVATION WORKSHEET**

NET TRACT AREA:

A. Total tract area	=	62.41 ac.
B. Land dedication acres (parks, county facility, etc.)	=	0.00 ac.
C. Land dedication for roads or utilities (not being constructed by this plan)	=	3.71 ac.
D. Area to remain in commercial agricultural production/use	=	0.00 ac.
E. Other deductions (specify)	=	0.00 ac.
F. Net Tract Area	=	58.70 ac.

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	1	0	0	0	0

G. Afforestation Threshold .....= 20% x F = 11.74 ac.  
 H. Conservation Threshold .....= 25% x F = 14.68 ac.

EXISTING FOREST COVER:

I. Existing forest cover	=	16.59 ac.
J. Area of forest above afforestation threshold	=	4.85 ac.
K. Area of forest above conservation threshold	=	1.92 ac.

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation	=	15.06 ac.
M. Clearing permitted without mitigation	=	1.53 ac.

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared	=	3.93 ac.
O. Total area of forest to be retained	=	12.66 ac.

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold	=	0.48 ac.
Q. Reforestation for clearing below conservation threshold	=	4.03 ac.
R. Credit for retention above conservation threshold	=	0.00 ac.
S. Total reforestation required	=	4.51 ac.
T. Total afforestation required	=	0.00 ac.
U. Credit for landscaping (may not exceed 20% of 'S')	=	0.00 ac.
V. Total reforestation and afforestation required	=	4.51 ac.

.. 0.18 acres Parcel C, plus off-site disturbance.  
 .. 3.71 acres of existing storm drain and sanitary sewer easement excluded from tract area.  
 .. 0.23 acres pre-approved FIRM #S-1855, but excluding 3.71 acres of existing storm drain and sanitary sewer easement.

Notes:  
 1. Applicant is proposing to plant 3.36 acres of forest within the conservation easement.  
 2. The remaining 1.15 acres of mitigation required will be provided via off-site banking.

**DATA TABLE**

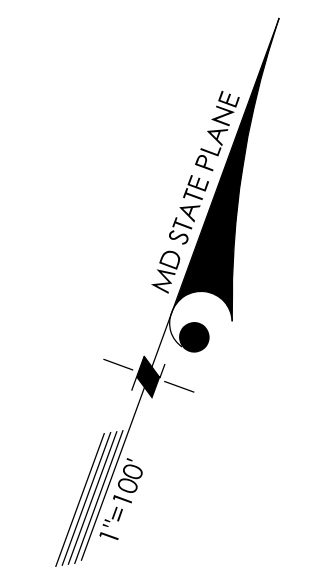
Tract Area	62.18 Acres (Parcel C) + 0.23 Acres (Offsite) 62.41 Acres - 3.71 Acres (Existing SD/SS Esmt.) 58.70 Acres NET TRACT AREA
Area of Existing Forest	16.59 Acres
Area of Forest to be Retained	12.66 Acres
Area of Forest to be Cleared	3.93 Acres
Land Use Category	RE-2
Conservation Threshold	20%
Afforestation Threshold	25%
Linear Feet of Stream Valley Buffer	3,000 Feet
Area of Stream Valley Buffer	16.74 Acres
Area of Forest within Stream Valley Buffer	11.57 Acres

**DEVELOPER'S CERTIFICATE**

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

Developer's Name: \_\_\_\_\_  
 Contact Person or Owner: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone and Email: \_\_\_\_\_  
 Signature: \_\_\_\_\_

Project No. 2029072340 Scale 1"=100'  
 Design DK Checked JS  
 Drawn DK Date Feb. 2016  
 Sheet 1 of 2

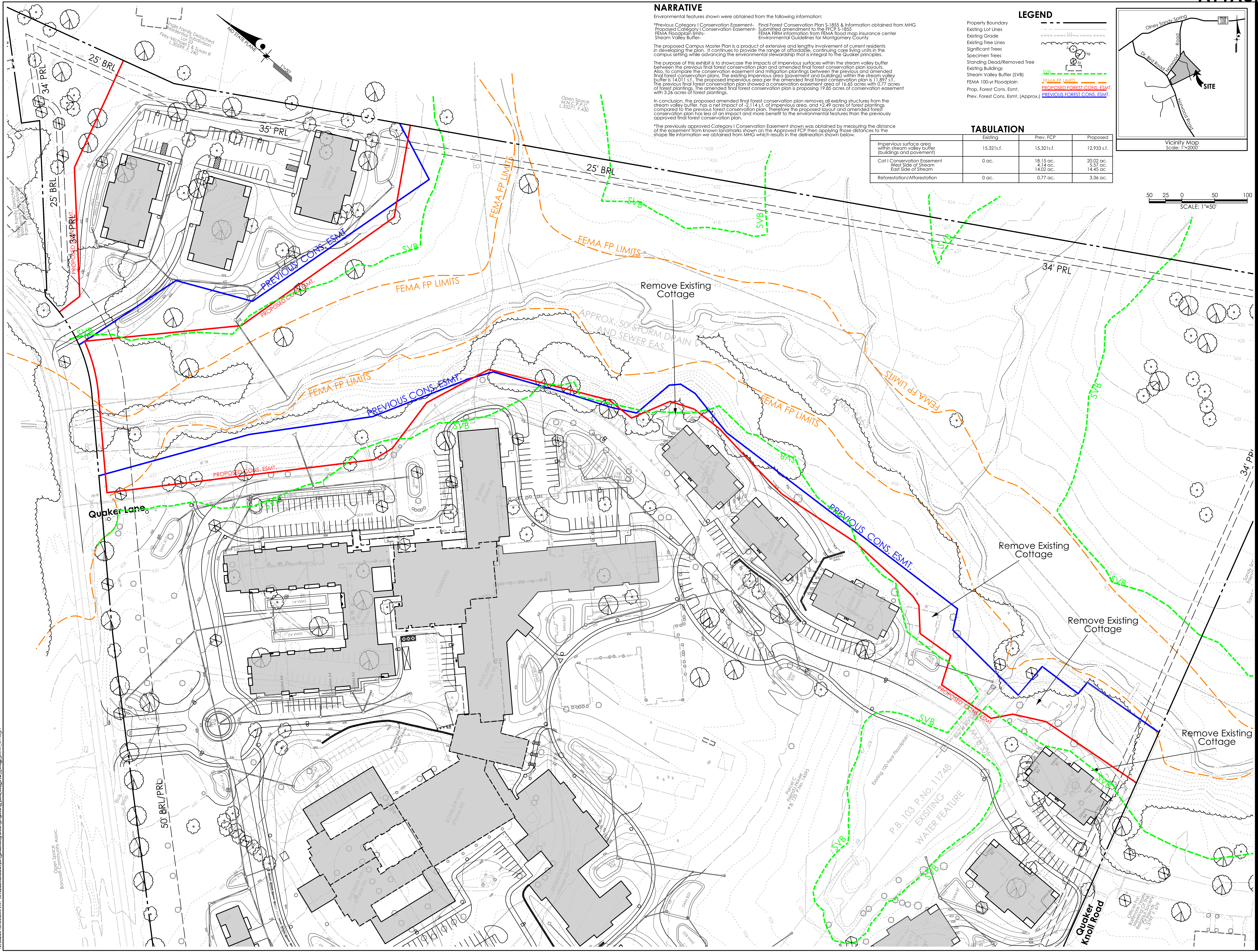


No.	Revision	Date	By
1	10/24/16	DK	
2	10/27/16	DK	

Owner/Developer:  
**FRIENDS HOUSE RETIREMENT COMMUNITY**  
 Phone: Quaker Lane, Sandy Spring, Maryland 20886  
 Contact/Attn.: Mr. Kevin Harrington

**ENVIRONMENTAL FEATURES EXHIBIT  
 for SPECIAL EXCEPTION**  
 8th Election District  
 Montgomery County, Maryland

Project No.	Scale
2029072340	1"=50'
Design	Checked
DK	JS
Drawn	Date
DK	May 2016
Sheet	



**NARRATIVE**  
 Environmental features shown were obtained from the following information:  
 \*Previous Category I Conservation Easement- Final Forest Conservation Plan S-1855 & information obtained from MHG  
 Proposed Category I Conservation Easement- Submitted amendment to the FCP S-1855  
 FEMA Floodplain limits- FEMA FIRM information from FEMA flood map insurance center  
 Stream Valley Buffer- Environmental Guidelines for Montgomery County  
 The proposed Campus Master Plan is a product of extensive and lengthy involvement of current residents in developing the plan. It continues to provide the range of affordable, continuing care living units in the campus setting while advancing the environmental stewardship that is integral to the Quaker principles.  
 The purpose of this exhibit is to showcase the impacts of impervious surfaces within the stream valley buffer between the previous final forest conservation plan and amended final forest conservation plan layouts. Also, to compare the conservation easement and mitigation plantings between the previous and amended final forest conservation plans. The existing impervious area (pavement and buildings) within the stream valley buffer is 14,011 s.f., the proposed impervious area per the amended final forest conservation plan is 11,327 s.f. The previous final forest conservation plan showed a conservation easement area of 16.65 acres with 0.77 acres of forest plantings. The amended final forest conservation plan is proposing 19.65 acres of conservation easement with 3.26 acres of forest plantings.  
 In conclusion, the proposed amended final forest conservation plan removes all existing structures from the stream valley buffer, has a net impact of -2,114 s.f. of impervious area, and +2.49 acres of forest plantings compared to the previous forest conservation plan. Therefore, the proposed layout and amended forest conservation plan has less of an impact and more benefit to the environmental features than the previously approved final forest conservation plan.  
 \*The previously approved Category I Conservation Easement shown was obtained by measuring the distance of the easement from known landmarks shown on the Approved FCP then applying those distances to the shape file information we obtained from MHG which results in the delineation shown below.

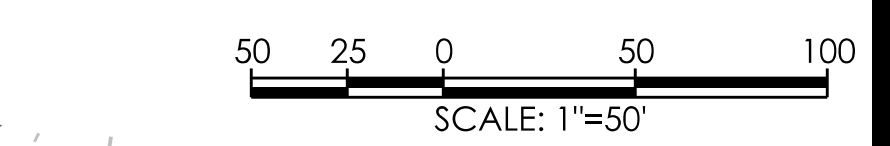
**LEGEND**

- Property Boundary
- Existing Lot Lines
- Existing Grade
- Existing Tree Lines
- Significant Trees
- Specimen Trees
- Standing Dead/Removed Tree
- Existing Buildings
- Stream Valley Buffer (SVB)
- FEMA 100-yr Floodplain
- Prop. Forest Cons. Esmt.
- Prev. Forest Cons. Esmt. (Approx.)

SVB  
 FEMA FP LIMITS  
 PROPOSED FOREST CONS. ESMT.  
 PREVIOUS FOREST CONS. ESMT.

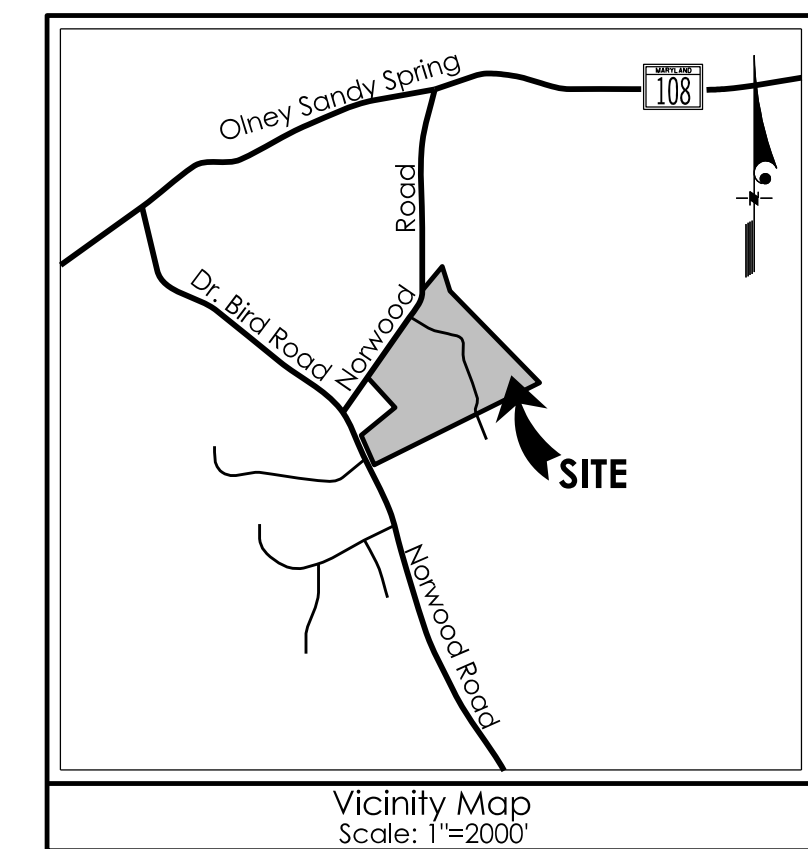
**TABULATION**

	Existing	Prev. FCP	Proposed
Impervious surface area within stream valley buffer (buildings and pavement)	15,321 s.f.	15,321 s.f.	12,933 s.f.
Cat I Conservation Easement West Side of Stream East Side of Stream	0 ac.	18.15 ac. 14.02 ac.	20.02 ac. 14.42 ac.
Reforestation/Afforestation	0 ac.	0.77 ac.	3.36 ac.



10/27/2016 10:00:00 AM \\L:\2029072340\10/27/2016\10/27/2016\10/27/2016\10/27/2016\10/27/2016.dwg  
 Open Space  
 Bancroft Community Assoc.





**LEGEND**

- Property Boundary
- Existing Lot Lines
- Existing Grade
- Existing Buildings
- Existing Tree Lines
- Significant Trees
- Specimen Trees
- Standing Dead/Removed Tree
- Specimen Tree Impacted by Previous LOD
- Specimen Tree Impacted by Proposed LOD
- Specimen Tree to be removed within Proposed LOD
- Critical Root Zone
- Tree Impacted on/near Historic property
- Previously Approved LOD
- Proposed LOD

**Specimen Trees Impacted by the previous LOD**

34, 38, 41, 46, 66, 198.

**Specimen Trees Impacted by the proposed LOD**

10, 11, 13, 17, 19, 35, 37, 61, 67, 72, 73, 74, 75, 76, 77, 82, 93, 97, 98, 108, 110, 120, 122, 125, 149, 150, 158, 168, 169, 170, 181, 182, 196, 214, 218

**Trees on/near Historic Property impacted by the proposed LOD**

219, 244, 245, 259, 354.

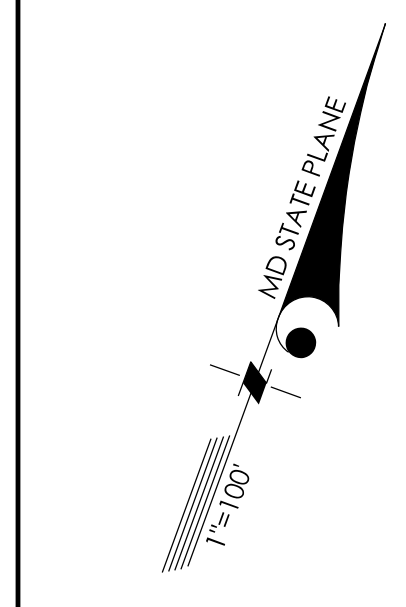
No.	Revision	Date	By
1	Revised LOD and associated impacts per ANCFPC comments.	11/09/16	DK
2	Revised LOD and associated impacts per ANCFPC comments.	10/24/16	DK

Owner/Developer:  
**FRIENDS HOUSE RETIREMENT COMMUNITY**  
 Phone: (301) 444-8282, (301) 444-8181  
 Contact/Attn: Mr. Kevin Harrington

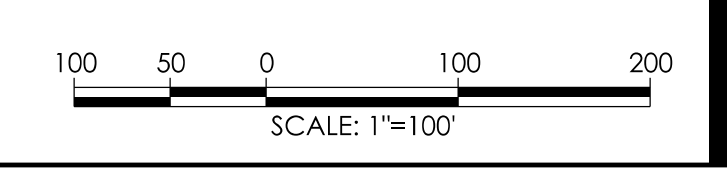
**TREE VARIANCE EXHIBIT**  
 for SPECIAL EXCEPTION

8th Election District  
 Montgomery County, Maryland

Project No.	2029072340	Scale	1"=100'
Design	DK	Checked	JS
Drawn	DK	Date	May 2016
Sheet			



17/0001 12/20/2016 AM U:\0000000000\p\Load\used\engineering\drawings\JH\_engr\_cowr\_01.dgn

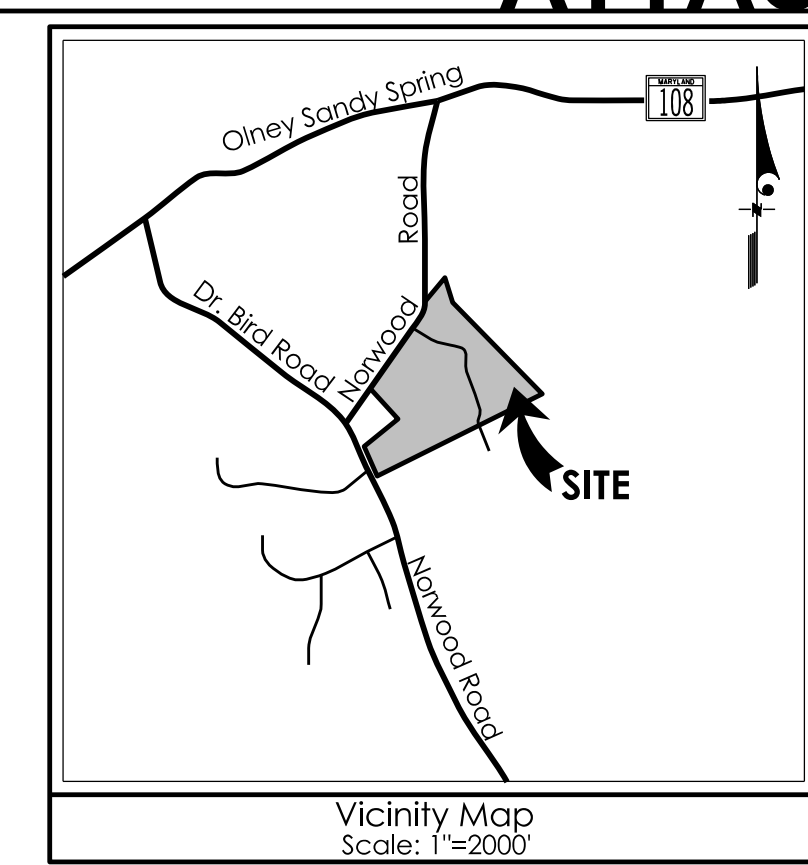


**Purpose note:**

The purpose of this Tree Variance Exhibit is to show the trees which are subject to the variance request within the context of the previously approved LOD, the proposed LOD, and the impacted trees within the Historic Property adjacent to the site. The previously LOD is based on the previous FFCP S-1855. The proposed LOD is what is proposed on the FFCP amendment. The existing Specimen trees shown were located from the previously approved NRI/FSD 4-19970710. A site visit was conducted 06/10/15 to verify the trees as well as add any significant trees where necessary. The trees on the historic property were ocularly located via site visit conducted on 03/25/16. All trees 1" DBH and greater that are potentially impacted near and on the historic property are shown.

Sheet 2 of 4

Sheet 3 of 4



**LEGEND**

- Property Boundary
- Existing Lot Lines
- Existing Grade
- Existing Buildings
- Existing Tree Lines
- Significant Trees
- Specimen Trees
- Standing Dead/Removed Tree
- Specimen Tree Impacted by Previous LOD
- Specimen Tree Impacted by Proposed LOD
- Tree Impacted on/near Historic property
- Specimen Tree to be removed within Proposed LOD
- Critical Root Zone
- Previously Approved LOD
- Proposed LOD

**Specimen Trees Impacted by the previous LOD**  
 34, 38, 41, 46, 66, 198.

**Specimen Trees Impacted by the proposed LOD**  
 10, 11, 13, 17, 19, 35, 37, 61, 67, 72, 73, 74, 75, 76, 77, 92, 93, 97, 98, 108, 110, 120, 122, 125, 149, 150, 158, 168, 169, 170, 181, 182, 196, 214, 218.

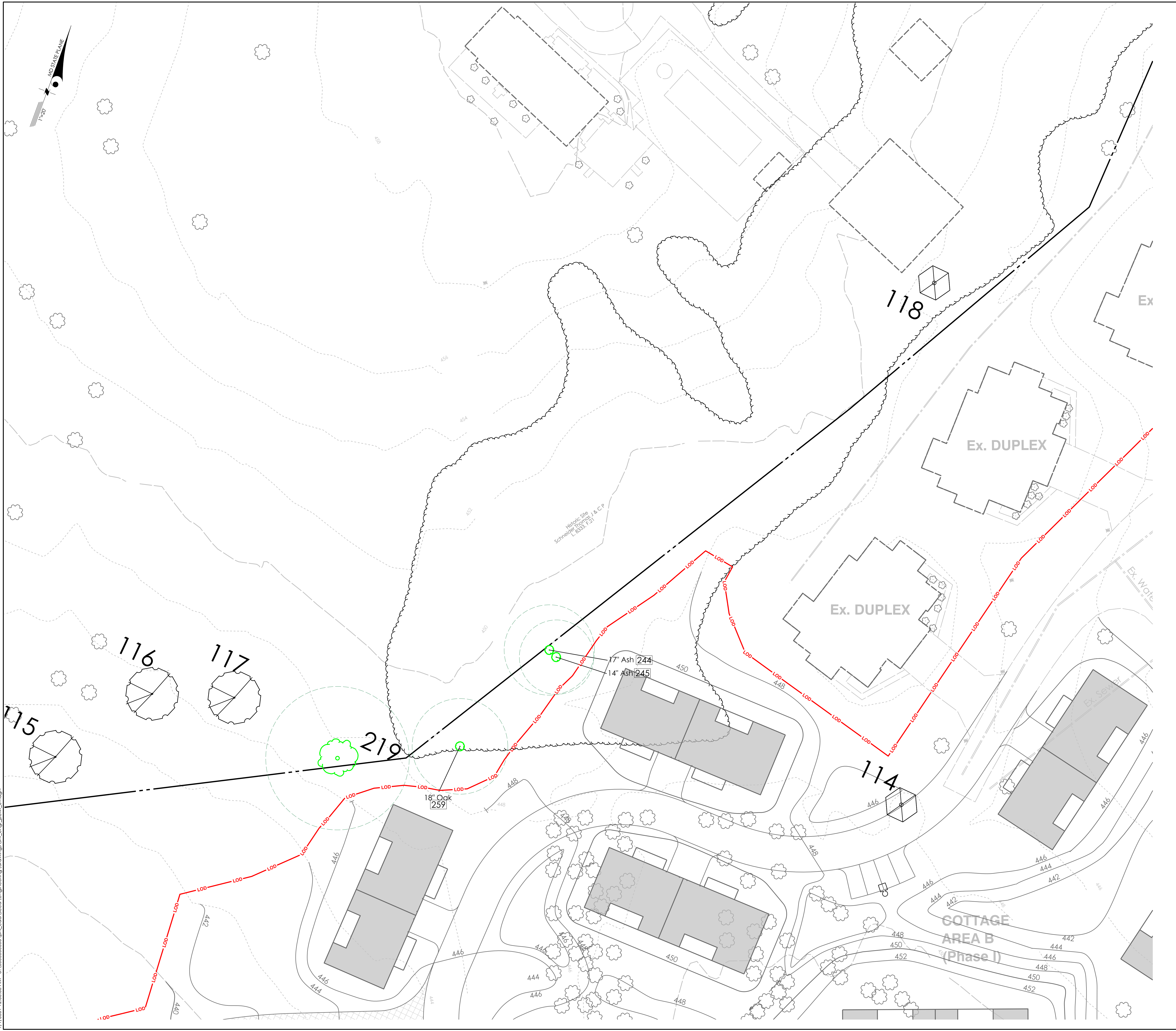
**Trees on/near Historic Property impacted by the proposed LOD**  
 219, 244, 245, 259, 354.

No.	Revision	Date	By
1	Revised LOD and associated impacts per ANCPFC comments.	10/24/16	DK
2	Revised LOD and associated impacts per ANCPFC comments.	11/09/16	DK

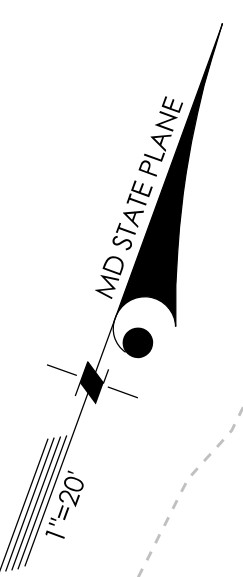
Owner/Developer:  
**FRIENDS HOUSE RETIREMENT COMMUNITY**  
 Friends of Cause, Sandy Spring, Maryland 20860  
 Phone: (301) 444-8282  
 Contact/Attn.: Mr. Kevin Harrington

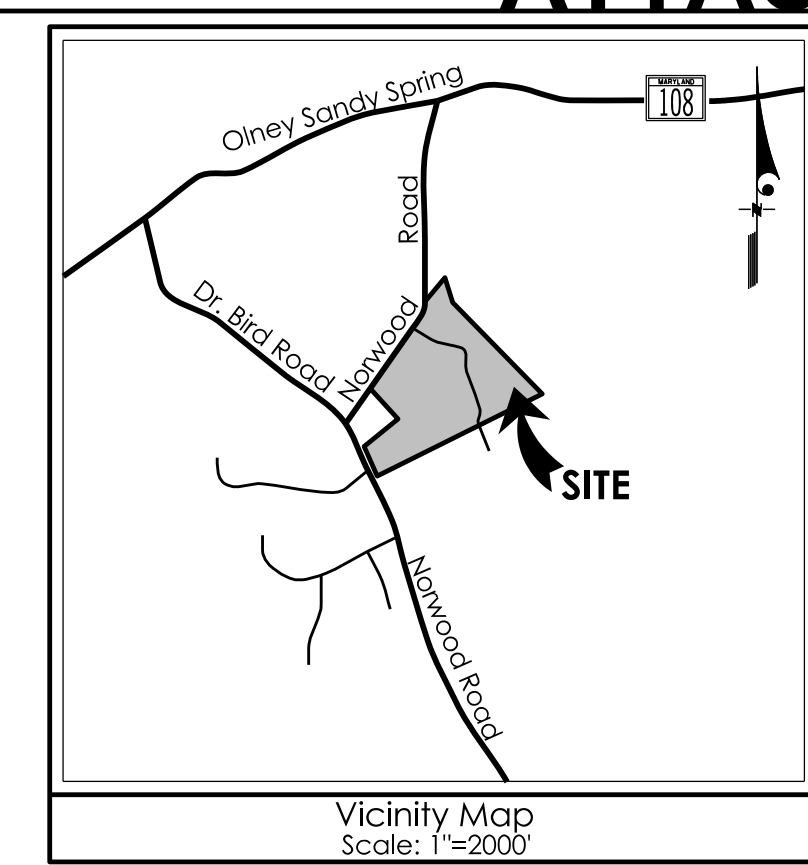
**TREE VARIANCE EXHIBIT**  
 for SPECIAL EXCEPTION  
 8th Election District  
 Montgomery County, Maryland

Project No.	Scale
2029072340	1"=20'
Design	Checked
DK	JS
Drawn	Date
DK	May 2016
Sheet	



17/10001.12/2016 AM U:\0000000000\p\l\lod\used\engineering\drawings\p\l\lod\engr\_low\_01.dgn





**LEGEND**

- Property Boundary
- Existing Lot Lines
- Existing Grade
- Existing Buildings
- Existing Tree Lines
- Specimen Trees
- Standing Dead/Removed Tree
- Specimen Tree Impacted by Previous LOD
- Specimen Tree Impacted by Proposed LOD
- Tree Impacted on/near Historic Property
- Specimen Tree to be removed within Proposed LOD
- Critical Root Zone
- Previously Approved LOD
- Proposed LOD

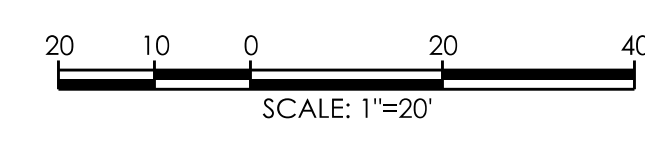
- Specimen Trees Impacted by the previous LOD**  
 34, 38, 41, 46, 66, 198.
- Specimen Trees Impacted by the proposed LOD**  
 10, 11, 13, 17, 19, 35, 37, 61, 62, 72, 73, 74, 75, 76, 77, 92, 93, 97, 98, 108, 110, 120, 122, 125, 149, 150, 158, 168, 169, 170, 181, 182, 196, 214, 218.
- Trees on/near Historic Property impacted by the proposed LOD**  
 219, 244, 245, 259, 354.

No.	Revision	Date	By
1	Revised LOD and associated impacts per ANCPFC comments.	10/24/14	DK
2	Revised LOD and associated impacts per ANCPFC comments.	11/09/14	DK

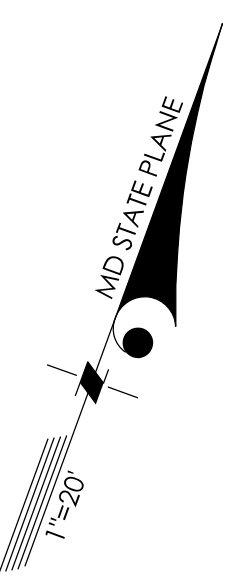
Owner/Developer:  
**FRIENDS HOUSE RETIREMENT COMMUNITY**  
 Phone: (301) 444-8282, (301) 444-8181  
 Contact/Attn.: Mr. Kevin Harrington

**TREE VARIANCE EXHIBIT for SPECIAL EXCEPTION**  
 8th Election District  
 Montgomery County, Maryland

Project No.	Scale
2029072340	1"=20'
Design	Checked
DK	JS
Drawn	Date
DK	May 2016
Sheet	



17/1/0001:12:00:00 AM U:\0000000000\p\l\lod\used\engineering\drawings\p\l\lod\p\l\lod.pdw.01.dgn







November 8, 2016  
File: 2029072340

**Attention: Development Applications & Regulatory Coordination**  
M-NCPPC  
8787 Georgia Avenue  
Silver Spring, MD 20910

Dear DARC,

**Reference: Friend's House Retirement Community- Request for Tree Variance for Special Exception Project. Case No. S-856-B & S-452**

This letter replaces the one submitted on 5/26/16 and the addendum submitted 10/17/16.

On behalf of the property owner (Friends House Retirement Community) and pursuant to Section 22A-21 Variance provisions of the Montgomery County Forest Conservation Ordinance and recent revisions to the State Forest Conservation Law enacted by S.B. 666, we are writing to request a variance(s) to allow impacts to or removal of the following trees identified on the Tree Variance Exhibit, Natural Resources Inventory/Forest Stand Delineation(419970710), and Final Forest Conservation Plan (S-1855) for the above named Special Exception project.

**Project Description:**

The applicant, "Friends House, Inc." is a non-profit organization with a Board of Directors that operates Friends Retirement Community in accordance with the Religious Society of Friends (Quakers). Its mission is to connect all participants—from residents, to volunteers, to staff--- in a caring community that nurtures all aspects of their well-being. Currently the community houses approximately 260 residents in 246 units of varying types. The 62 acre site provides a natural setting allowing for leisurely outdoor activities. Friend's House proposes to expand its existing structures and create new facilities and infrastructure. The campus redesign will create 126 new independent apartment living units, 163 lodge apartment units, 24 cottage dwelling units and 48 assisted living units, for a total of 361 new living units.

Their mission is guided by the Religious Society of Friends (Quakers) to connect all participants regardless of religious affiliation in a caring community that nurtures all aspects of their well-being. A large aspect of their community building is the understanding that maintaining natural environments for leisure outdoor activities as well ecological preservation benefits the community and surrounding area tremendously. This understanding is a profound underlying fabric of the Friends House mission.



November 8, 2016

Page 2 of 6

**Reference: Friend's House Retirement Community- Tree Variance Request**

Therefore, the Board of Directors and individual residents have been integral to the design process. We have worked with Friends House to determine what areas and specific trees have special importance both to the community and the overall natural environment. Our site has been specifically designed to account for these important areas.

**Tree Variance Exhibit:**

We have prepared a Tree Variance Exhibit showing the proposed impacts to trees we are requesting a variance for. The exhibit shows the limit of disturbance from the original Forest Conservation Plan and trees which were impacted (shown in blue). These impacts were approved prior to S.D. 666 and therefore are not subject to the variance request. The new limit of disturbance for the proposed new development and the specimen trees impacted (shown in red) as well as trees of all sizes impacted on the historic site adjacent to the property (shown in green) are subject to the variance and are noted as such on the plan.

**Requirements for Justification of Variance:**

Section 22A-21(b) *Application requirements* states that the applicant must:

1. *Describe the special conditions peculiar to the property which would cause the unwarranted hardship;*
2. *Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas;*
3. *Verify that State water quality standards will not be violated or that a measurable degradation in water quality will not occur as a result of the granting of the variance;*  
*and*
4. *Provide any other information appropriate to support the request.*

**Justification of Variance:**

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

The development program proposed by the applicant entails some demolition of existing buildings. Specifically tree # 125 which is already in POOR condition is adjacent to the existing building needing to be removed. This tree would not be able to survive the impacts required for building demolition. It is also critical to remove tree # 158 in order to implement any proposed improvements to the main building. If a variance is not provided for the removal of the trees referenced above then the applicant would not be able to implement its needed program and thus would be considered an "unwarranted hardship" to the property owner.



November 8, 2016

Page 3 of 6

**Reference: Friend's House Retirement Community- Tree Variance Request**

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

If the tree variance requests were not granted, the proposed improvements for benefit of the Friends House Retirement Community would not be able to be implemented thereby denying the rights commonly enjoyed by other retirement communities.

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

We are proposing to add 3.36 acres of forest plantings within the stream valley buffer. In addition, this property will be developed in accordance with the latest Maryland Department of the Environment criteria for stormwater management. This includes Environmental Site Design to provide for protecting natural resources to the maximum extent practical. This includes limiting the impervious areas and providing on-site stormwater management systems. A Stormwater Management Concept has been approved by the Montgomery County Department of Permitting Services to ensure that this criterion is enforced. In addition to the SWM and FCP mitigation requirements, new trees are being proposed to offset the proposed Variance Trees to be removed. At a rate of ¼":1" removed, the applicant will be providing a minimum of 44 trees as mitigation. Therefore, the proposed activity will not degrade the water quality in the downstream areas and will not result in measureable degradation in water quality.

4. *Provide any other information appropriate to support the request.*

The cottages are provided in the area of the former "Christmas Tree Grove". They are set back a generous distance from Norwood Road to provide the open vista characteristics of the SSA Master Plan. During the review of the plan by the MNCPPC Historic Preservation Planner, the layout of the cottages was substantially revised to further remove the proposed cottages from the viewshed of the adjoining historic home. The revision affected the layout in two ways: 1) all of the previously-proposed single cottages were converted to duplexes to reduce/condense their overall footprint and, 2) the units were further compressed into the limited space further away from Norwood Road.

The currently-developed portion of the campus is served by two, existing entrances from Norwood Road. The internal driveways from those two entrances are not connected making for an inefficient circulation pattern. The applicant proposes to combine the two entrances in to one, making for a superior arrival identity for the campus and completing the internal circulation for fire access. The location of the new entrance is aligned with the location of one of the existing entrances with safe sight-distance characteristics and



November 8, 2016

Page 4 of 6

**Reference: Friend's House Retirement Community- Tree Variance Request**

widened to provide two, 20-foot wide ingress and egress lanes to maintain safe fire apparatus access if either the ingress or egress lane is blocked for whatever reason.

Also, See attached "Tree Variance Exhibit".

As, Further basis for its variance request, the applicant can demonstrate that it meets the *Section 22A-21(d) Minimum criteria, which states that a variance must not be granted if granting the request:*

1. *Will confer on the applicant a special privilege that would be denied to other applicants;*

The applicant's proposed improvements are in accordance with the site Master Plan. All variance requests are being pursued under requirements that all applicants would have to follow therefore no special privilege is being given to this application.

2. *Is based on conditions or circumstances which are the result of the actions by the applicant;*

Friend's House Retirement Community has taken no actions leading to the conditions or circumstances that are the subject of this variance request.

3. *Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; or*

The surrounding land uses do not have any inherent characteristics or conditions that have created or contributed to this particular need for a variance.

4. *Will violate State water quality standards or cause measurable degradation in water quality.*

Granting this variance request will not violate State water quality standards or cause measurable degradation in water quality.

The tree lists on the following pages are separated into 3 different categories. (1) Specimen Trees onsite proposed for removal (TBR), (2) Specimen Trees onsite with known impacts, (3) Specimen Trees on/near Historic Property with known impacts.





November 8, 2016  
Page 5 of 6

Reference: Friend's House Retirement Community- Tree Variance Request

(1) Specimen Trees onsite proposed for removal (TBR):

ID		COMMON NAME	SIZE	BOTANICAL NAME	CONDITION	REMARKS	Impact
11	*	Oriental Plane	22"-26"- 32"	Plantanus orientalis	Good		TBR
13	*	Oriental Plane	40"	Plantanus orientalis	Good		TBR
67	*	White Oak	42"	Quercus alba	Good		TBR/ See note below
75	*	Honey Locust	32"	Gleditsia tricanthos	Good		TBR
76	*	Honey Locust	32"	Gleditsia tricanthos	Good		TBR
77	*	Willow Oak	41"	Quercus phellos	Good		TBR/ See note below
97	*	Pin Oak	44"	Quercus palustris	Good		TBR
120	*	Red Maple	17"-26"- 32"	Acer rubrum	Good	Splits @ 2'	TBR
122	*	Sugar Maple	30"	Acer saccharum	Good		TBR
125	*	Red Maple	32"-32"- 26"	Acer rubrum	Poor	Heavily pruned; splits @ 3'; off-site	TBR
149	*	Red oak	35"	Quercus sp.	Good		TBR/ See note below
150	*	Red Maple	30"	Acer rubrum	Good		TBR
158	*	Red Maple	35"	Quercus sp.	Good		TBR
168	*	Sugar Maple	32"	Acer saccharum	Good		TBR
169	*	White Pine	42"	Pinus strobus	Good		TBR
170	*	Red Maple	32"	Acer rubrum	Good		TBR
181	*	Dawn Redwood	34"	Metasequoia glyptostroboides	Good		TBR
182	*	White Pine	39"	Pinus strobus	Good		TBR
214	*	White Ash	31"	White Ash	Good		TBR/ See note below

(2) Specimen Trees onsite with known impacts:

ID		COMMON NAME	SIZE	BOTANICAL NAME	CONDITION	REMARKS	Impact
10	*	Oriental Plane	38"	Plantanus orientalis	Good		26% of CRZ Impacted
17	*	Oriental Plane	38"	Plantanus orientalis	Good		13% of CRZ Impacted
19	*	White Pine	40"	Pinus strobus	Good		30% of CRZ Impacted
35	*	Tulip Poplar	34"	Liriodendron tulipifera	Good		15% of CRZ Impacted
37	*	Tulip Poplar	32"	Liriodendron tulipifera	Good		26% of CRZ Impacted
60	*	White Oak	33"	Quercus alba	Good		7% of CRZ impacted
61	*	Pin Oak	39"	Quercus palustris	Good		17% of CRZ Impacted



## ATTACHMENT D

November 8, 2016

Page 6 of 6

**Reference: Friend's House Retirement Community- Tree Variance Request**

72	*	White Pine	38"	Pinus strobus	Good	11% of CRZ Impacted
73	*	White Pine	32"	Pinus strobus	Good	5% of CRZ Impacted
74	*	White Pine	32"	Pinus strobus	Good	8% of CRZ Impacted
92	*	Black Walnut	44"	Juglans nigra	Good	33% of CRZ Impacted
93	*	Black Walnut	43"	Juglans nigra	Good	4% of CRZ Impacted
98	*	Slippery Elm	30"	Ulmus rubra	Good	4% of CRZ Impacted
108	*	Black Walnut	30"	Juglans nigra	Good	22% of CRZ impacted
110	*	Sycamore	30"	Platanus occidentalis	Good	2% of CRZ Impacted
218	*	Slippery Elm	32"	Ulmus rubra	Good	4% of CRZ impacted

### (3) Specimen Trees on/near Historic Property with known impacts:

ID	COMMON NAME	SIZE	BOTANICAL NAME	CONDITION	REMARKS	Impact
219	Norway Maple	27"	Acer platanoides	Good		12% CRZ impacted
244	Ash	17"	Fraxinus sp.	Good		8% CRZ impacted
245	Ash	14"	Fraxinus sp.	Good		14% CRZ impacted
259	Oak	18"	Quercus sp.	Good		5% CRZ impacted
354	Catalpa	22"	Catalpa bignonioides	Good		20% CRZ impacted

Notes: Diameters are given for each trunk of multiple bole trees when division occurs below 4.5 feet. If major division occurs above 4.5 feet only the trunk diameter at 4.5 feet is given.

\* Indicates specimen trees for size per M-NCPPC Trees Technical Manual.

Tree ID numbers correspond to those assigned on the Natural Resource Inventory/Forest Stand Delineation Map.

- Tree # 's 37, 67, 77, 149, 214, 60 were impacted by the previously approved LOD. The proposed LOD is now removing or further impacting them.

Enclosed you will find the following supporting materials:

- Tree Variance Exhibit (4 sheets)

Regards,

Devin Kennedy, PLA  
Landscape Architect, Certified Arborist  
devin.kennedy@stantec.com



## DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett  
County Executive

Lisa Feldt  
Director

November 18, 2016

Casey Anderson, Chair  
Montgomery County Planning Board  
Maryland National Capital Park & Planning Commission  
8787 Georgia Avenue  
Silver Spring, Maryland 20910

RE: Sandy Spring Friends House, CBA-1855, application for modification to existing special exception accepted on 1/6/2016

Dear Mr. Anderson:

All applications for a variance from the requirements of Chapter 22A of the County Code submitted after October 1, 2009 are subject to Section 22A-12(b)(3). Accordingly, given that the application for the above referenced request was submitted after that date and must comply with Chapter 22A, and the Montgomery County Planning Department ("Planning Department") has completed all review required under applicable law, I am providing the following recommendation pertaining to this request for a variance.

Section 22A-21(d) of the Forest Conservation Law states that a variance must not be granted if granting the request:

1. Will confer on the applicant a special privilege that would be denied to other applicants;
2. Is based on conditions or circumstances which are the result of the actions by the applicant;
3. Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; or
4. Will violate State water quality standards or cause measurable degradation in water quality.

Applying the above conditions to the plan submitted by the applicant, I make the following findings as the result of my review:

1. The granting of a variance in this case would not confer a special privilege on this applicant that would be denied other applicants as long as the same criteria are applied in each case. Therefore, the variance can be granted under this criterion.
2. Based on a discussion on March 19, 2010 between representatives of the County, the Planning Department, and the Maryland Department of Natural Resources Forest Service, the disturbance of trees, or other vegetation, as a result of development activity is not, in and of itself, interpreted as a condition or circumstance that is the result of the actions by the applicant. Therefore, the variance can be granted under this criterion, as long as appropriate mitigation is provided for the resources disturbed.

---

255 Rockville Pike, Suite 120 • Rockville, Maryland 20850 • 240-777-0311 • 240-777-7715 FAX  
www.montgomerycountymd.gov/dep

Casey Anderson  
November 18, 2016  
Page 2

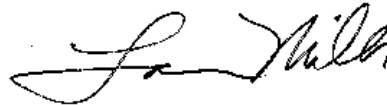
3. The disturbance of trees, or other vegetation, by the applicant does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property. Therefore, the variance can be granted under this criterion.
4. The disturbance of trees, or other vegetation, by the applicant will not result in a violation of State water quality standards or cause measurable degradation in water quality. Therefore, the variance can be granted under this criterion.

Therefore, I recommend a finding by the Planning Board that this applicant qualifies for a variance conditioned upon meeting 'conditions of approval' pertaining to variance trees recommended by Planning staff, as well as the applicant mitigating for the loss of resources due to removal or disturbance to trees, and other vegetation, subject to the law based on the limits of disturbance (LOD) recommended during the review by the Planning Department. In the case of removal, the entire area of the critical root zone (CRZ) should be included in mitigation calculations regardless of the location of the CRZ (i.e., even that portion of the CRZ located on an adjacent property). When trees are disturbed, any area within the CRZ where the roots are severed, compacted, etc., such that the roots are not functioning as they were before the disturbance must be mitigated. Exceptions should not be allowed for trees in poor or hazardous condition because the loss of CRZ eliminates the future potential of the area to support a tree or provide stormwater management. Tree protection techniques implemented according to industry standards, such as trimming branches or installing temporary mulch mats to limit soil compaction during construction without permanently reducing the critical root zone, are acceptable mitigation to limit disturbance. Techniques such as root pruning should be used to improve survival rates of impacted trees but they should not be considered mitigation for the permanent loss of critical root zone. I recommend requiring mitigation based on the number of square feet of the critical root zone lost or disturbed. The mitigation can be met using any currently acceptable method under Chapter 22A of the Montgomery County Code.

In the event that minor revisions to the impacts to trees subject to variance provisions are approved by the Planning Department, the mitigation requirements outlined above should apply to the removal or disturbance to the CRZ of all trees subject to the law as a result of the revised LOD.

If you have any questions, please do not hesitate to contact me directly.

Sincerely,



Laura Miller  
County Arborist

cc: Josh Penn, Planner Coordinator