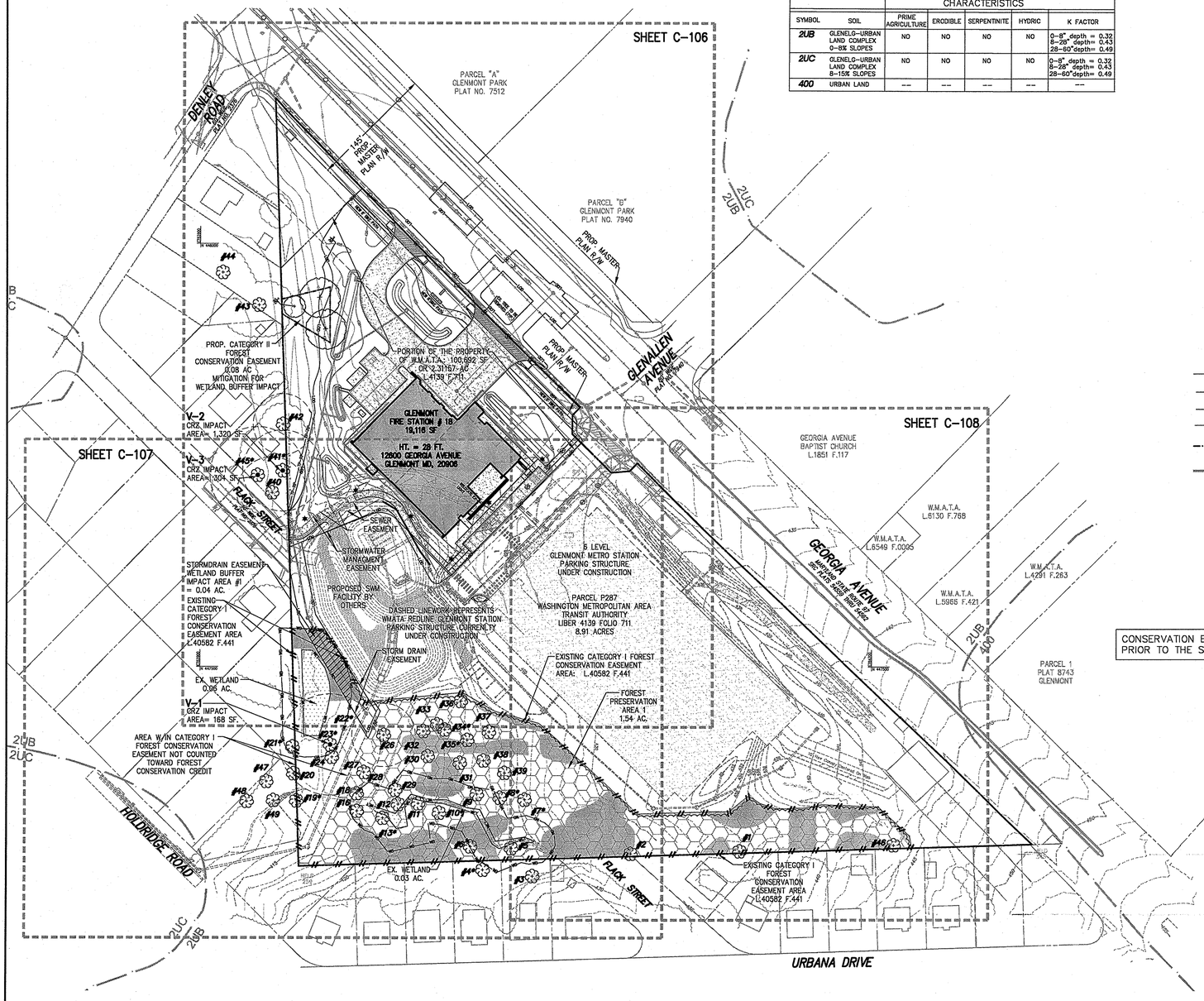
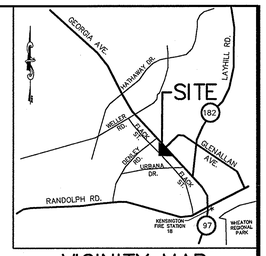


SOILS LEGEND

SYMBOL	SOIL	PRIME AGRICULTURE	ERODIBLE	SERPENTINITE	HYDRIC	K FACTOR
		CHARACTERISTICS				
2UB	GLENELG-URBAN LAND COMPLEX 0-8% SLOPES	NO	NO	NO	NO	0-8" depth = 0.32 8-28" depth= 0.43 28-60"depth= 0.49
2UC	GLENELG-URBAN LAND COMPLEX 8-15% SLOPES	NO	NO	NO	NO	0-8" depth = 0.32 8-28" depth= 0.43 28-60"depth= 0.49
400	URBAN LAND	---	---	---	---	---

LEGEND

- EX. TREE <24" DBH TO REMAIN
- EX. TREE <24" DBH REMOVED PER GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT
- EX. TREE <24" TO BE REMOVED
- #22 EX. SIGNIFICANT TREE 24"-29" DBH TO REMAIN
- #24* EX. SPECIMEN TREE ≥30"DBH TO REMAIN
- V-1 #26* EX. SPECIMEN TREE ≥30"DBH FOR WHICH A VARIANCE IS REQUESTED TO IMPACT THE CRZ OR REMOVE TREE.
- CRITICAL ROOT ZONE OF SIGNIFICANT & SPECIMEN TREES IMPACTED BY THE LOD
- SHADE TREE FOR WETLAND BUFFER MITIGATION
- EVERGREEN TREE FOR WETLAND BUFFER MITIGATION
- EXISTING TREELINE
- FOREST PRESERVATION
- WETLAND BUFFER IMPACT AREA
- GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT SUPPLEMENTAL FOREST PLANTING AREA
- LOD — LIMITS OF DISTURBANCE
- WET — WETLAND
- WB — WETLAND BUFFER
- EXISTING CATEGORY I FOREST CONSERVATION EASEMENT
- PROPOSED CATEGORY II FOREST CONSERVATION EASEMENT
- 2UC / 16D — SOILS
- PEDESTRIAN LIGHT



VICINITY MAP
SCALE: 1" = 2000'

CONSERVATION EASEMENTS TO BE RECORDED PRIOR TO THE START OF CLEARING OR GRADING

FCP TREE TABLE:

ID #	Common Name	Botanical Name	DBH	CRZ (s.f.)	RZ (radiu	Conditions/Remarks
1	White Oak	Quercus alba	24	4069	36	Fair - heavy vines
2	Sycamore	Platanus occidentalis	24	4069	36	Good
3	Dead Tree	unknown	24	4069	36	Dead - topped @ 30'
*4	Silver Maple	Acer saccharinum	32	7235	48	Good - codom @ 7
5	Red Maple	Acer rubrum	24	4069	36	Good
6	White Oak	Quercus alba	24	4069	36	Good
*7	Red oak	Quercus rubra	56	22156	84	Fair - baserot, scars, codom @ 6'; 75% of champion
*8	White Oak	Quercus alba	40	11304	60	Good - codom @ 8', tree fallen on it
9	White Oak	Quercus alba	24	4069	36	Good - P. Ivy
*10	White Oak	Quercus alba	30	6359	45	Good - codom @ 8'
11	White Oak	Quercus alba	28	5539	42	Good - vines
12	Red oak	Quercus rubra	24	4069	36	Good - P. Ivy
*13	Red oak	Quercus rubra	32	7235	48	Fair/Good
14	White Oak	Quercus alba	24	4069	36	Good - between shed & fence
*15	Red Maple	Acer rubrum	40	11304	60	Poor/Fair - codom @ 5', rot, epic.; **REMOVE**
16	Red Maple	Acer rubrum	25	4416	37.5	Fair - vines, epic.
*17	White Oak	Quercus alba	30	6359	45	Fair - leans, rot; **REMOVE**
18	White Oak	Quercus alba	23	3737	34.5	Good
*19	Red oak	Quercus rubra	32	7235	48	Good
20	Red oak	Quercus rubra	28	5539	42	Fair - dead branches, narrow canopy
*21	White Oak	Quercus alba	32	7235	48	Good
*22	White Oak	Quercus alba	30	6359	45	Fair/Good - P.ivy; **REMOVE**
*23	White Oak	Quercus alba	40	11304	60	Fair/Good
24	Red Maple	Acer rubrum	24	4069	36	Fair - dieback
25	White Oak	Quercus alba	27	5150	40.5	Fair - Ivvy vines, dead branches; **REMOVE**
26	White Oak	Quercus alba	25	4416	37.5	Fair - Ivvy vines, dead branches
27	Dead Tree	unknown	24	4069	36	Dead; **REMOVE**
28	White Oak	Quercus alba	28	5539	42	Good - vines
29	Red oak	Quercus rubra	26	4776	39	Good
30	Red oak	Quercus rubra	24	4069	36	Fair
31	Black oak	Quercus velutina	25	4416	37.5	Good
32	Red Maple	Acer rubrum	24	4069	36	Fair - leans, rot, hollow @ base
33	Red oak	Quercus rubra	27	5150	40.5	Poor - topped, lopsided, dieback
*34	Red oak	Quercus rubra	36	9156	54	Good/Fair - dead branches
*35	White Oak	Quercus alba	38	10202	57	Fair - vines, dieback
36	White Oak	Quercus alba	24	4069	36	Fair/Poor - swollen growth, vines, leans
37	White Oak	Quercus alba	26	4776	39	Fair - Dieback, vines
38	White Oak	Quercus alba	27	5150	40.5	Fair - Ivvy vines; dieback
39	Pignut Hickory	Carya glabra	24	4069	36	Good
40	Silver Maple	Acer saccharinum	28	5539	42	Good
*41	Siberian Elm	Ulmus pumila	32	7235	48	Fair - multi stem @ 5' dieback, epic.
42	Boxelder	Acer negundo	24	4069	36	Fair/Poor - on fence
43	Red Maple	Acer rubrum	25	4416	37.5	Good
44	Red Maple	Acer rubrum	24	4069	36	Good
*45	Sweetgum	Liquidambar styraciflua	38	10202	57	Fair/Poor - dieback, scars, size estimated, off-site, 75% champion?
46	Black Locust	Nyssa sylvatica	24	4069	36	Fair - vines
47	Tulip Poplar	Liriodendron tulipifera	27	5150	40.5	Dead - topped @ 30'
48	Red Maple	Acer rubrum	24	4069	36	Fair - vines
49	Red oak	Quercus rubra	27	5150	40.5	Fair/poor - heavy vines, dieback
*50	Red Maple	Acer rubrum	41	11876	61.5	Fair - heavy Poison Ivy, 12" bole @ 5'; **REMOVE**
*51	Black Oak	Quercus velutina	34	8167	51	Fair - dieback, poison ivy; **REMOVE**
52	Pignut Hickory	Carya glabra	24	4069	36	Fair/Good - P.ivy; **REMOVE**
*53	Red Maple	Acer rubrum	32	7235	48	Fair - leans east, vines, some dieback; **REMOVE**
*54	Black Oak	Quercus velutina	32	7235	48	Fair - black ooze @ scar, dieback; **REMOVE**
55	White Oak	Quercus alba	24	4069	36	Poor - dieback, dead branches, vines; **REMOVE**
56	Red Maple	Acer rubrum	24	4069	36	Poor/almost dead - topped for OHW, vines; **REMOVE**

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. Tree ID Numbers correspond to those assigned on the Natural Resource Inventory/Forest Stand Delineation Map.
Trees less than 24" DBH are shown for informational purposes only.
* Specimen tree (DBH >/= 30" and better than Poor condition or DBH >/= 75% of the champion for the species)

SHEET INDEX

C-105 (old C6.05) GLENMONT FIRE STATION OVERALL FINAL FOREST CONSERVATION PLAN
C-106 GLENMONT FIRE STATION DETAILED FINAL FOREST CONSERVATION PLAN
C-107 (old C6.06) GLENMONT FIRE STATION DETAILED FINAL FOREST CONSERVATION PLAN
C-108 (old C6.07) GLENMONT FIRE STATION DETAILED FINAL FOREST CONSERVATION PLAN
C-109 (old C6.08) WMATA REDLINE GLENMONT STATION PARKING STRUCTURE DETAILED FINAL FCP
C-110 (old C6.09) WMATA REDLINE GLENMONT STATION PARKING STRUCTURE DETAILED FINAL FCP
C-111 (old C6.10) WMATA REDLINE GLENMONT STATION PARKING STRUCTURE INVASIVE PLANT CONTROL PLAN

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.

STATE OF MARYLAND — MEREDITH LEE BYER — NO. 3108 — REGISTERED LANDSCAPE ARCHITECT

SIGNATURE — DATE 9.23.11

MEREDITH BYER — PRINTED NAME
TITLE: ASSOCIATE — 10/03/2013 EXPIRATION DATE

LICENSE No. 3108

FINAL FOREST CONSERVATION PLAN
GLENMONT FIRE STATION #18
AMENDMENT TO FCP# MR1994002

ARCHITECT:
HG HUGHES GROUP ARCHITECTS
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CONSULTANT:

CLIENT:
MONTGOMERY COUNTY MARYLAND
MONTGOMERY COUNTY
DEPARTMENT OF GENERAL SERVICES
OFFICE OF PLANNING & DEVELOPMENT
101 MONROE STREET
11TH FLOOR
ROCKVILLE, MARYLAND 20850

PROJECT:
GLENMONT FIRE STATION #18
12600 GEORGIA AVENUE, GLENMONT MD, 20906

WSSC MAP 216NW03
TAX MAP HQ63
ELECTION DISTRICT 13
SEAL

NO.	ISSUE DESCRIPTION	DATE

PROJECT NUMBER: 0907
DRAWN BY:
CHECKED BY:

KEY PLAN

SHEET TITLE

SHEET NUMBER
C-105

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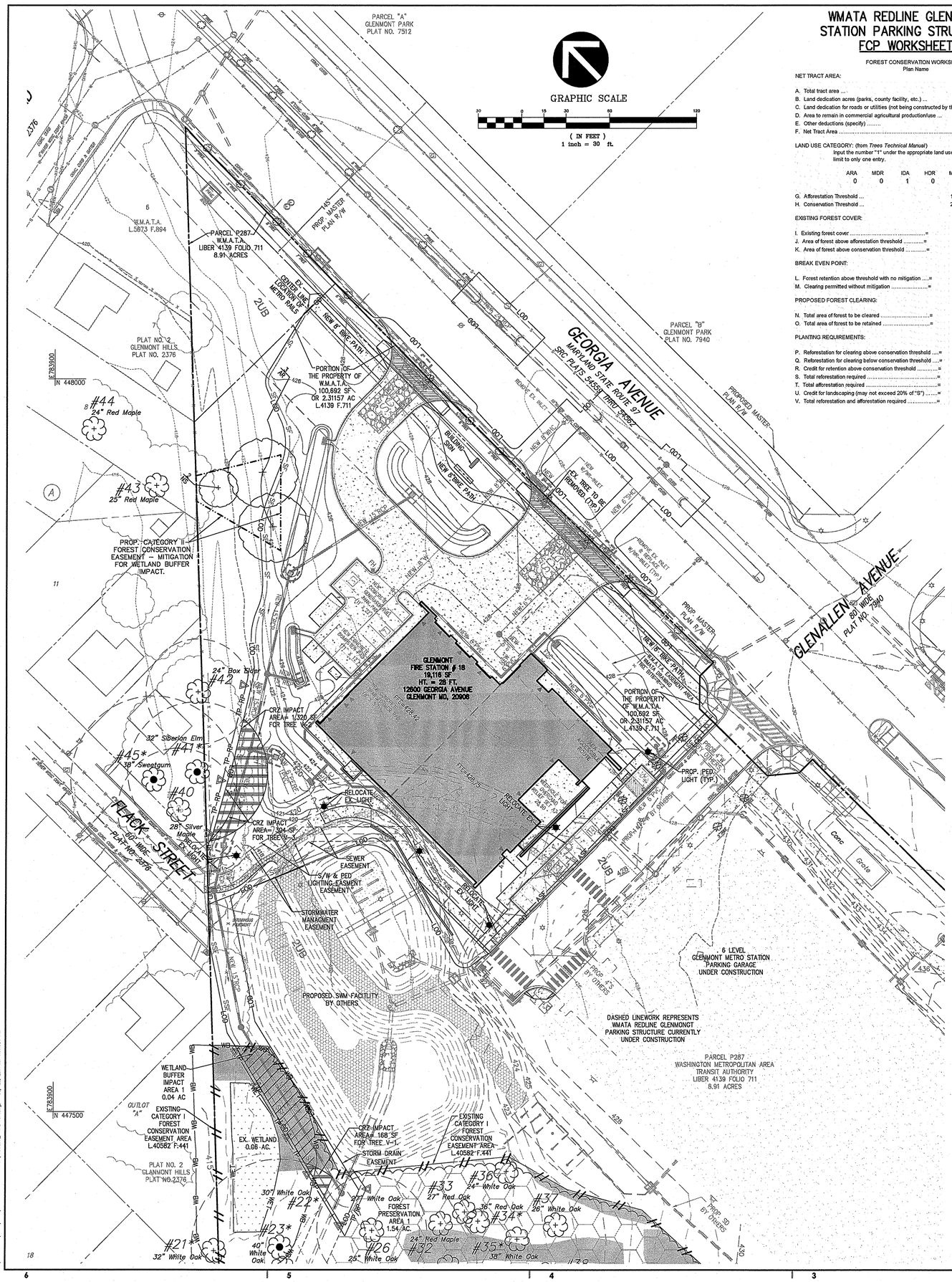


WMATA REDLINE GLENMONT STATION PARKING STRUCTURE FCP WORKSHEET

FOREST CONSERVATION WORKSHEET
Plan Name

NET TRACT AREA:

A. Total tract area ...	10.27
B. Land dedication acres (parks, county facility, etc.) ...	0.00
C. Land dedication for roads or utilities (not being constructed by this plan) ...	0.00
D. Area to remain in commercial agricultural production/use ...	0.00
E. Other deductions (specify)	0.00
F. Net Tract Area ..... =	10.27

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

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

G. Afforestation Threshold ...	15%	x F =	1.54
H. Conservation Threshold ...	20%	x F =	2.05

EXISTING FOREST COVER:

I. Existing forest cover ..... =	2.30
J. Area of forest above afforestation threshold ..... =	0.76
K. Area of forest above conservation threshold ..... =	0.25

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation .... =	2.10
M. Clearing permitted without mitigation ..... =	0.20

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared ..... =	0.76
O. Total area of forest to be retained ..... =	1.54

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold .... =	0.06
Q. Reforestation for clearing below conservation threshold .... =	1.03
R. Credit for retention above conservation threshold ..... =	0.00
S. Total reforestation required ..... =	1.09
T. Total afforestation required ..... =	0.00
U. Credit for landscaping (may not exceed 20% of "S") ..... =	0.00
V. Total reforestation and afforestation required ..... =	1.09

GLENMONT FIRE STATION FCP WORKSHEET

FOREST CONSERVATION WORKSHEET
Amendment to FC Plan # MR 1994002

NET TRACT AREA:

A. Total tract area ...	10.27 *
B. Land dedication acres (parks, county facility, etc.) ...	0.00
C. Land dedication for roads or utilities (not being constructed by this plan) ...	0.00
D. Area to remain in commercial agricultural production/use ...	0.00
E. Other deductions (specify)	0.00
F. Net Tract Area	10.27 *

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

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

G. Afforestation Threshold ...	15%	x F =	1.54
H. Conservation Threshold ...	20%	x F =	2.05

EXISTING FOREST COVER:

I. Existing forest cover ..... =	1.54
J. Area of forest above afforestation threshold ..... =	0.00
K. Area of forest above conservation threshold ..... =	0.00

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation .... =	0.00
M. Clearing permitted without mitigation ..... =	0.00

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared ..... =	0.00
O. Total area of forest to be retained ..... =	1.54

PLANTING REQUIREMENTS:

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

*TOTAL TRACT INCLUDES 8.91 ACRE SUBJECT PROPERTY PLUS 1.36 ACRES PER PREVIOUS FCP (WMATA REDLINE GLENMONT STATION PARKING STRUCTURE FCP # MR1994002).

THE 0.04 AC IMPACT TO THE WETLAND BUFFER BY PROPOSED STORM DRAIN WILL BE MITIGATED WITH ON-SITE LANDSCAPING AT A 2:1 RATIO PLACED IN A CATEGORY II FOREST CONSERVATION EASEMENT. SEE FCP NOTE #14, THIS SHEET.

GENERAL NOTES:

1.) THE SITE IS COMPRISED OF PARCEL P287 AND IS LOCATED ON TAX ASSESSMENT MAP NO. HQ63 WITH A TAX ACCOUNT NO. OF 13-00982088 AND IS ZONED RT-12.5.

2.) THE SUBJECT PROPERTY IS 8.91 ACRES OR 388,120 SF.

3.) THE HORIZONTAL DATUM IS BASED ON WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY DATUM.

4.) THE VERTICAL DATUM IS U.S.C.&GS, MEAN SEA LEVEL, 1929 GENERAL ADJUSTMENT.

6.) EXISTING UTILITIES SHOWN (I.E. WATER, SEWER, STORM DRAIN, CULVERTS, ELECTRIC, PHONE) ARE SHOWN IN SURVEY LOCATIONS.

7.) 2' CONTOUR TOPOGRAPHY AND BOUNDARY INFORMATION BY MACRIS, HENDRICKS, & GLASCOCK, P.A.

8.) BOUNDARY INFORMATION FROM DEEDS OF RECORD.

FOREST CONSERVATION NOTES:

1.) THIS PLAN IS AN AMENDMENT TO THE MR 1994002 WMATA REDLINE GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT FOR THE CONSTRUCTION OF THE GLENMONT FIRE STATION ON A 2.31 ACRE PORTION OF THE WMATA SITE.

2.) PER THE WMATA REDLINE GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT, THE TOTAL FCP AREA IS 10.27 ACRES AND THERE ARE 1.54 ACRES OF EXISTING FOREST ON THE SITE. SIGNIFICANT AND SPECIMEN TREES DESIGNATED AS REMOVED PER THE GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT ARE NOT SHOWN ON THIS PLAN.

3.) THERE ARE TWENTY-FIVE SPECIMEN TREES WITH DBH GREATER THAN OR EQUAL TO 24" ON THE SUBJECT PROPERTY AND TEN SIGNIFICANT TREES WITHIN 100' OF THE SUBJECT PROPERTY AS SHOWN ON THE PLAN.

4.) THERE ARE SIX SPECIMEN TREES WITH DBH GREATER THAN >24" AND < 30" DBH ON THE SUBJECT PROPERTY AND FOUR SPECIMEN TREES WITHIN 100' OF THE SUBJECT PROPERTY AS SHOWN ON THE PLAN.

5.) THERE IS ONE CHAMPION TREE (TREE # 7) WHICH IS 75% OF THE STATE CHAMPION FOR THE SPECIES ON THE SUBJECT PROPERTY AND NO ADDITIONAL CHAMPION TREES WITHIN 100' OF THE SITE AS SHOWN ON THE PLAN.

6.) THE SUBJECT PROPERTY IS NOT IDENTIFIED IN THE MONTGOMERY COUNTY HISTORIC ATLAS.

7.) THIS SITE IS NOT WITHIN AN SPA OR PMA. THERE ARE NO WATERS OF THE US, FLOODPLAINS, OR THEIR ASSOCIATED BUFFERS ON THE SUBJECT PROPERTY. PER MR 1994002 WMATA REDLINE GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT, THERE ARE TWO WETLANDS AND THEIR ASSOCIATED BUFFERS ON THE SUBJECT PROPERTY AS SHOWN ON THE PLAN.

8.) THE SUBJECT PROPERTY IS LOCATED IN THE LOWER ROCK CREEK WATERSHED, USE CLASS I.

9.) THE SUBJECT PROPERTY IS LOCATED ON WSSC MAP 216NW03.

10.) THERE ARE NO SLOPES GREATER THAN 15% ON THIS SITE.

11.) THERE ARE THREE SOIL TYPES ON THE SUBJECT PROPERTY, 400-URBAN LAND, 2UB-GLENELG URBAN LAND COMPLEX 0-8% SLOPES, AND 2UC-GLENELG URBAN LAND COMPLEX 8-15% SLOPES AS SHOWN ON THE PLAN.

12.) THIS SITE IS SUBJECT TO NRI #420092340 APPROVED AUGUST 25, 2009.

13.) THIS PLAN REQUESTS A VARIANCE TO IMPACT THE CRITICAL ROOT ZONE OF THREE SPECIMEN TREES, ONE ON THE SUBJECT PROPERTY AND TWO WITHIN 100' OF THE SITE. ALL THREE TREES ARE TO BE SAVED.

14.) THIS PLAN PROPOSES NO IMPACTS TO THE EXSITNG ON-SITE FOREST. PROPOSED STORM DRAIN WILL IMPACT 0.04 ACRES OF WETLAND BUFFER WHICH WILL BE MITIGATED BY 0.8 ACRES OF TREE COVER CANOPY CREDIT PLACED IN A CATEGORY II FOREST CONSERVATION EASEMENT AS SHOWN ON THE PLAN. THE CORRESPONDING STORM DRAIN EASEMENT WILL BE REPLANTED AS SHOWN ON THIS PLAN.

15.) THIS PLAN SHOWS LANDSCAPING FOR TREE CANOPY CREDIT ONLY AS MITIGATION FOR THE WETLAND BUFFER IMPACT. PLEASE SEE THE LANDSCAPE PLAN FOR THE COMPLETE PROJECT LANDSCAPING.

WETLAND BUFFER IMPACT MITIGATION PLANT SCHEDULE AND CANOPY CREDIT*

COMMON NAME	CALIPER	ASSUMED 20 YR. CANOPY DIAMETER (Ft.)	ASSUMED 20 YR. CANOPY SF PER TREE	NO. OF TREES CREDITED	FOREST CONSERVATION CREDIT	SUBSTITUTION SPECIES BOTANICAL NAME	SUBSTITUTION SPECIES COMMON NAME
Red Maple	2-2.5"	48	1,808.64	2	3,617	Quercus rubra	Red Oak
Black Tupelo	2-2.5"	26	530.66	1	531	Liquidambar styraciflua 'Rotundiloba'	Fruitless Sweetgum
			TOTAL SHADE TREES	3	4,148		
				MINUS OVERLAP	542		
				TOTAL CREDIT SF	3,606		
				TOTAL CREDIT AC	0.08		

* MITIGATION FOR 0.04 AC. OF WETLAND BUFFER IMPACTS

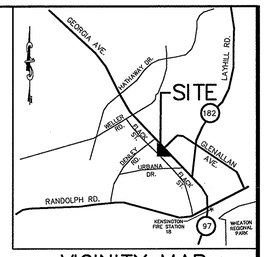
STORM DRAIN EASEMENT REPLANTING SCHEDULE

NOTE: LIFT & REPLANT DISPLACED LANDSCAPING WITHIN WMATA REDLINE GLENMONT METRO STATION PARKING STRUCTURE SUPPLEMENTAL PLANTING AREA #14 OR REPLACE IN KIND

FOREST CONSERVATION PLANTING SCHEDULE AREA #14
WMATA REDLINE GLENMONT METRO STATION PARKING STRUCTURE

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
2	Acer rubrum	Red Maple	1½"-2"		B&B
2	Quercus bicolor	Swamp White Oak	1½"-2"		B&B
1	Platanus occidentalis	American Sycamore	1½"-2"		B&B
2	Amelanchier canadensis	Serviceberry	1½"-2"		B&B
2	Ilex verticillata	Winterberry		3'-4'min	Cont./B&B

NOTES:
1. The 0.07 acre Planting Area will be planted with the above plant material at a rate of 100 2" caliper trees/acre x 0.07 acres = 7 trees
2. The mix of trees planted shall be 70% dominant species (5 trees) and 30% understory species (2 trees) planted 12' to 15' on-center.
3. Shrub species shall be planted at a rate of 33 per acre x 0.07 acres = 2 shrubs. Shrubs are to be grouped together (as spacing allows) with temporary mesh fencing.



VICINITY MAP
SCALE: 1" = 2000'

LEGEND

	EX. TREE <24" DBH TO REMAIN
	EX. TREE <24" DBH REMOVED PER GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT
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#22	EX. SIGNIFICANT TREE 24"-29" DBH TO REMAIN
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	CRITICAL ROOT ZONE OF SIGNIFICANT & SPECIMEN TREES
	SHADE TREE FOR WETLAND BUFFER MITIGATION
	EVERGREEN TREE FOR WETLAND BUFFER MITIGATION
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	GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT SUPPLEMENTAL FOREST PLANTING AREA
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WET	WETLAND
WB	WETLAND BUFFER
	EXISTING CATEGORY I FOREST CONSERVATION EASEMENT
	PROPOSED CATEGORY II FOREST CONSERVATION EASEMENT
2UC 16D	SOILS
	NEW PEDESTRIAN LIGHT
TP	TREE PROTECTION FENCE WITH SIGNAGE
TP/RP	ROOT PRUNING ALONG TREE PROTECTION FENCING WITH SIGNAGE
SF	SILT FENCE
SSF	SUPER SILT FENCE
ASF	ASPHALT SILT FENCE
	PROPERTY LINE
SCE	STABILIZED CONSTRUCTION ENTRANCE
	CURB INLET PROTECTION
	AT GRADE INLET PROTECTION

PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.

SIGNATURE — DATE 9.23.11
MEREDITH BYER — 10/03/2013
PRINTED NAME — EXPIRATION DATE
TITLE: ASSOCIATE
LICENSE No. 3108

FINAL FOREST CONSERVATION PLAN AMENDMENT
GLENMONT FIRE STATION
M-NCPPC FCP # MR1994002

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22630 DAVIS DRIVE, SUITE 175 STERLING, VIRGINIA 20164 703.437.6600

CONSULTANT:

CLIENT:
MONTGOMERY COUNTY MARYLAND
MONTGOMERY COUNTY
DEPARTMENT OF GENERAL SERVICES
OFFICE OF PLANNING & DEVELOPMENT
101 MONROE STREET
11TH FLOOR
ROCKVILLE, MARYLAND 20850

PROJECT:
GLENMONT FIRE STATION #18
12600 GEORGIA AVENUE, GLENMONT MD, 20906

WSSC MAP 216NW03
TAX MAP HQ63
ELECTION DISTRICT 13

SEAL

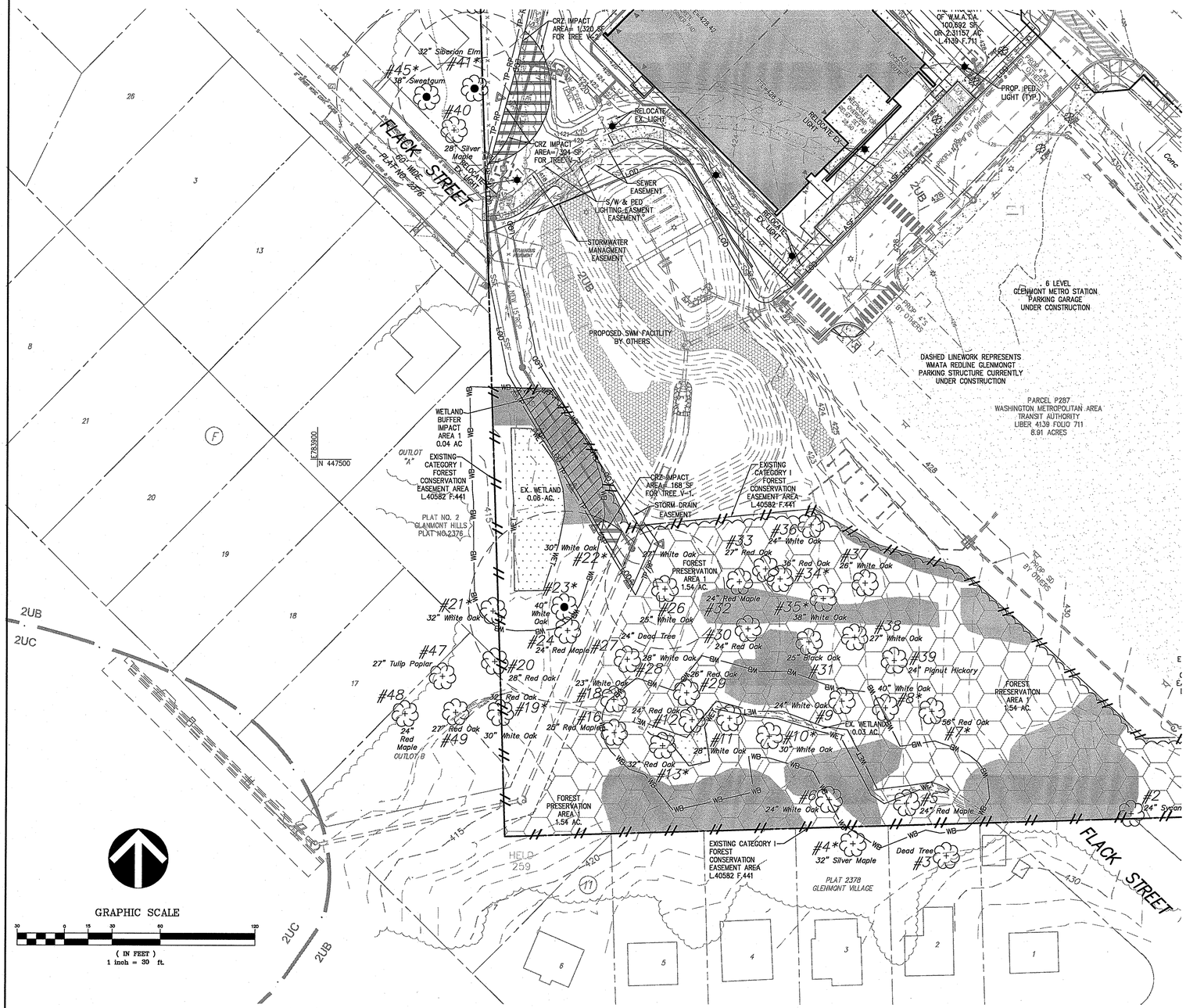
NO.	ISSUE DESCRIPTION	DATE

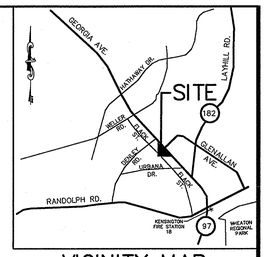
PROJECT NUMBER: 0907
DRAWN BY:
CHECKED BY:

KEY PLAN

SHEET TITLE
GLENMONT FIRE STATION DETAILED FINAL FCP: AMENDMENT TO FINAL FOREST CONSERVATION PLAN MR1994002

SHEET NUMBER
C-106





VICINITY MAP
SCALE: 1" = 2000'

GLENMONT STATION PARKING STRUCTURE FOREST CONSERVATION TABLE

DESCRIPTION	ACRES
ACREAGE OF TRACT	10.27
TRACT REMAINING IN AGRICULTURAL USE	0.00
ROAD & UTILITY ROW (unimproved)	0.00
EXISTING FOREST	4.62*
TOTAL FOREST RETENTION	1.54**
TOTAL FOREST CLEARED	3.08**
LAND USE CATEGORY	
AFFORESTATION THRESHOLD	15%
REFORESTATION THRESHOLD	20%
FOREST IN WETLANDS	Retained: 0.05 Cleared: 0.00 Planted: 0.00
FOREST IN 100 YR FLOODPLAIN	Retained: 0.00 Cleared: 0.00 Planted: 0.00
FOREST IN STREAM VALLEY BUFFER	Retained: 0.00 Cleared: 0.00 Planted: 0.00
FOREST IN PRIORITY AREAS	Retained: 0.00 Cleared: 0.00 Planted: 0.00
STREAM VALLEY BUFFER LENGTH	Linear Feet: 0' Average Width: 0'

* APPROVED FCP MR1994002 SHOWS 4.62 ACRES OF EXISTING FOREST AND CURRENT NRI/FSD SHOWS 2.30 ACRES OF EXISTING FOREST.
**DOES NOT INCLUDE ADDITIONAL AREAS SAVED THAT WERE SMALLER OR SEPARATED FROM THE LARGER TRACT OF FOREST. NOT ALL FOREST ACTUALLY "CLEARED."

GLENMONT FIRE STATION #18 FOREST CONSERVATION TABLE

DESCRIPTION	ACRES
ACREAGE OF TRACT	10.27 *
TRACT REMAINING IN AGRICULTURAL USE	0.00
ROAD & UTILITY ROW (unimproved)	0.00
EXISTING FOREST	1.54
TOTAL FOREST RETENTION	1.54
TOTAL FOREST CLEARED	0.00
LAND USE CATEGORY	
AFFORESTATION THRESHOLD	15%
REFORESTATION THRESHOLD	20%
FOREST IN WETLANDS	Retained: 0.05 Cleared: 0.00 Planted: 0.00
FOREST IN 100 YR FLOODPLAIN	Retained: 0.00 Cleared: 0.00 Planted: 0.00
FOREST IN STREAM VALLEY BUFFER	Retained: 0.00 Cleared: 0.00 Planted: 0.00
FOREST IN PRIORITY AREAS	Retained: 0.00 Cleared: 0.00 Planted: 0.00
STREAM VALLEY BUFFER LENGTH	Linear Feet: 0' Average Width: 0'

*TOTAL TRACT INCLUDES 8.91 ACRE SUBJECT PROPERTY PLUS 1.36 ACRES PER PREVIOUS FCP (WMATA REDLINE GLENMONT STATION PARKING STRUCTURE FCP # MR1994002).

GLENMONT STATION PARKING STRUCTURE FOREST CONSERVATION NOTE

*ORIGINAL FC REQUIRED 2.63 ACRES TO BE SAVED/PLANTED. NOW PROPOSING TO SAVE 1.54 ACRES. THIS LEAVES A DIFFERENCE OF 1.09 ACRES. AT 2:1 REPLACEMENT = 2.18 ACRES TO BE MITIGATED OFF-SITE AT AN EXISTING MCDOT FOREST BANK.

GLENMONT FIRE STATION #18 FOREST CONSERVATION NOTE

EXISTING ON-SITE FOREST = 1.54 ACRES. FOREST IMPACT TOTALS 0.00 ACRES. STORM DRAIN IMPACT TO WETLAND BUFFER = 0.04 ACRES. THIS IMPACT TO THE WETLAND BUFFER WILL BE MITIGATED WITH ON-SITE LANDSCAPING AT A 2:1 RATIO PLACED IN A CATEGORY II FOREST CONSERVATION EASEMENT. SEE WETLAND BUFFER IMPACT MITIGATION PLANT SCHEDULE AND CANOPY CREDIT SHEET C-106.

LEGEND

- EX. TREE <24" DBH TO REMAIN
- EX. TREE <24" DBH REMOVED PER GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT
- EX. TREE <24" TO BE REMOVED
- #22 EX. SIGNIFICANT TREE 24"–29" DBH TO REMAIN
- #24* EX. SPECIMEN TREE ≥30"DBH TO REMAIN
- V–1 #26* EX. SPECIMEN TREE ≥30"DBH FOR WHICH A VARIANCE IS REQUESTED TO IMPACT THE CRZ OR REMOVE TREE.
- CRITICAL ROOT ZONE OF SIGNIFICANT & SPECIMEN TREES
- SHADE TREE FOR WETLAND BUFFER MITIGATION
- EVERGREEN TREE FOR WETLAND BUFFER MITIGATION
- EXISTING TREELINE
- FOREST PRESERVATION
- WETLAND BUFFER IMPACT AREA
- GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT SUPPLEMENTAL FOREST PLANTING AREA
- CRITICAL ROOT ZONE IMPACT AREA
- LOD — LIMITS OF DISTURBANCE
- WET — WETLAND
- WB — WETLAND BUFFER
- EXISTING CATEGORY I FOREST CONSERVATION EASEMENT
- PROPOSED CATEGORY II FOREST CONSERVATION EASEMENT
- 2UC / 16D — SOILS
- NEW PEDESTRIAN LIGHT
- TP — TREE PROTECTION FENCE WITH SIGNAGE
- TP/RP — ROOT PRUNING ALONG TREE PROTECTION FENCING WITH SIGNAGE
- SF — SILT FENCE
- SSF — SUPER SILT FENCE
- ASF — ASPHALT SILT FENCE
- PROPERTY LINE
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- CURB INLET PROTECTION
- AT GRADE INLET PROTECTION

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: _____
PRINTED COMPANY NAME

CONTACT PERSON OR OWNER: _____
PRINTED NAME

ADDRESS: _____

PHONE AND EMAIL: _____

SIGNATURE: _____

PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.

SIGNATURE 9.23.11 DATE

MERIDITH BYER 10/03/2013
PRINTED NAME EXPIRATION DATE
TITLE: ASSOCIATE

LICENSE No. 3108

FINAL FOREST CONSERVATION PLAN
GLENMONT FIRE STATION #18
AMENDMENT TO FCP# MR1994002

ARCHITECT:

HUGHES GROUP ARCHITECTS
22630 DAVIS DRIVE, SUITE 175 STERLING, VIRGINIA 20164 703.437.6600

CONSULTANT:

CLIENT:

MONTGOMERY COUNTY MARYLAND

MONTGOMERY COUNTY

DEPARTMENT OF GENERAL SERVICES
OFFICE OF PLANNING & DEVELOPMENT
101 MONROE STREET
11TH FLOOR
ROCKVILLE, MARYLAND 20850

PROJECT:

GLENMONT FIRE STATION #18

12600 GEORGIA AVENUE, GLENMONT MD, 20906

WSSC MAP 216NW03

TAX MAP HQ63

ELECTION DISTRICT 13

SEAL

NO.	ISSUE DESCRIPTION	DATE

PROJECT NUMBER: 0907

DRAWN BY:

CHECKED BY:

KEY PLAN

SHEET TITLE

GLENMONT FIRE STATION DETAILED FINAL FCP: AMENDMENT TO FINAL FOREST CONSERVATION PLAN MR1994002

SHEET NUMBER

C-107

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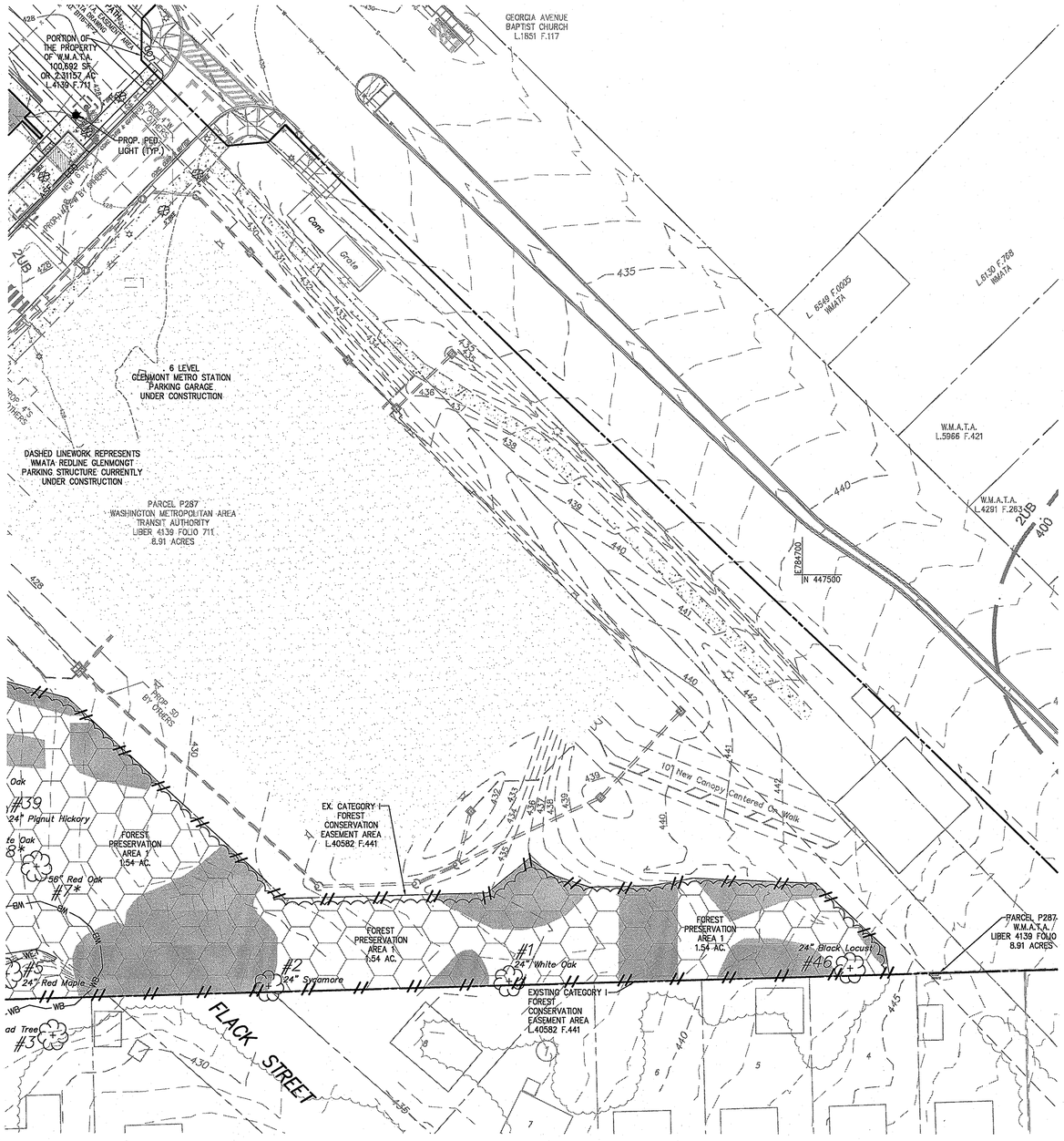

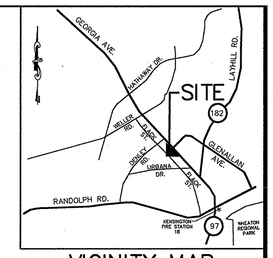

VICINITY MAP
SCALE: 1" = 2000'

LEGEND

	EX. TREE <24" DBH TO REMAIN
	EX. TREE <24" DBH REMOVED PER GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT
	EX. TREE <24" TO BE REMOVED
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	EXISTING TREELINE
	FOREST PRESERVATION
	WETLAND BUFFER IMPACT AREA
	GLENMONT METRO STATION PARKING STRUCTURE FCP AMENDMENT SUPPLEMENTAL FOREST PLANTING AREA
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WET	WETLAND
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SSF	SUPER SILT FENCE
ASF	ASPHALT SILT FENCE
	PROPERTY LINE
SCE	STABILIZED CONSTRUCTION ENTRANCE
	CURB INLET PROTECTION
	AT GRADE INLET PROTECTION

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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: _____
PRINTED COMPANY NAME

CONTACT PERSON OR OWNER: _____
PRINTED NAME

ADDRESS: _____

PHONE AND EMAIL: _____

SIGNATURE: _____

PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED REGISTERED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.

SIGNATURE — DATE 9.23.11

MEREDITH BYER — 10/03/2013
PRINTED NAME — EXPIRATION DATE
TITLE: ASSOCIATE

LICENSE No. 3108

FINAL FOREST CONSERVATION PLAN
GLENMONT FIRE STATION #18
AMENDMENT TO FCP# MR1994002

ARCHITECT:

HUGHES GROUP ARCHITECTS
22630 DAVIS DRIVE, SUITE 175 STERLING, VIRGINIA 20164 703.437.6600

CONSULTANT:

CLIENT:

MONTGOMERY COUNTY MARYLAND

MONTGOMERY COUNTY

DEPARTMENT OF GENERAL SERVICES
OFFICE OF PLANNING & DEVELOPMENT
101 MONROE STREET
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PROJECT:

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12600 GEORGIA AVENUE, GLENMONT MD, 20906

WSSC MAP 216NW03

TAX MAP HQ63

ELECTION DISTRICT 13

SEAL

NO.	ISSUE DESCRIPTION	DATE

PROJECT NUMBER: 0907

DRAWN BY:

CHECKED BY:

KEY PLAN

SHEET TITLE
WMATA REDLINE GLENMONT STATION PARKING STRUCTURE DETAILED FINAL FCP: AMENDMENT TO FINAL FOREST CONSERVATION PLAN MR1994002

SHEET NUMBER
C-108

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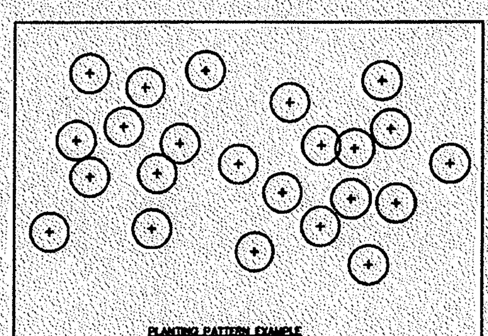
FOREST CONSERVATION PLANTING NOTES

Planting:

1. a. Owner shall contact MC Planning Department staff before planting.
   b. Contractor to mow afforestation area and remove all invasive plants (ie: multiflora rose, mulberry trees) and apply herbicide, only if determined to be needed by MC Planning Department Inspector, to eliminate competition of weed seed prior to planting. MC Planning Dept. Inspector will determine if additional measures are needed.
   c. See sheet C6.10 for more detailed notes concerning invasive plant removal and control.
2. 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 MC Planning Dept.
3. Size and standards of plant materials shall conform to latest edition of "USA Standards for Nursery Stock", by the American Association of Nurserymen, Inc. (AAN).
4. All plants shall be placed so as not to obstruct drainage.
5. Plants shall be installed randomly in a triangular or staggered pattern (not in a straight line). Container stock shall be spaced minimum 8–12 feet on center (See detail).
6. Slow release fertilizer (Osmocote® 10–10–5) shall be applied at the time of planting at the rate of 600 lbs. per acre. If Osmocote is not available, equivalent product or other means of fertilization to be determined during pre-planting meeting.
7. 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.
8. All trees are to be located a minimum distance of 5' from all utility boxes, 5' from a storm drain inlet or manhole, 10' from a fire hydrant, 15' from any public street light, and 5' from any driveway aprons.
9. Remove litter and debris as required during the first growing season and at the beginning of the second growing season.
10. Plants shall be installed only between the months of January and May and between September and December when the ground is not frozen.
11. All disturbed areas within the Forest Conservation easement to be seeded with Southern Tier Consulting, Inc. (716–968–3120), Native/Naturalized Wildflower Seed Mix (Northeast) at M–NCPPC and DPS approval.
12. After planting is complete, MNCPPC inspector must inspect the planted area to determine if planted area is acceptable and required maintenance period may begin or whether additional measures are needed in order for the planted area to be accepted. At the discretion of the MNCPPC Plan reviewer, up to one–half of the financial security may be released if stock and planted area is in good condition. Plants shall have 2 year maintenance/warranty period from the time of installation with MNCPPC acceptance. Any replacement must be installed as above.
13. See top soil specifications this sheet for restoring disturbed areas within the proposed conservation easements to ensure proper soil mix for planting.

Maintenance:

1. The plant material shall be maintained by the owner/developer for two (2) years after the completion. Maintenance shall consist of:
   A. Remove and replace all dead or diseased vegetation.
   B. Remove all invasive non–native plants.
   C. Necessary watering, fertilization, or pest control.
   D. Mowing shall not occur unless performed under a valid M–NCPPC maintenance and management agreement.
   E. Deer protection measures as seen necessary.
2. Maintenance of the afforestation/reforestation area for a period of five years is required per the Montgomery County Tree Technical Manual. During this maintenance period the health and vigor of the plantings shall be monitored and may include the need to specify actions to correct existing problems. The following inspection schedule shall be carried out:
   – Two inspections per year: Inspect in the beginning of the growing season (May or June), and in–spect at the end of the growing season (September or October).
   – At the end of the fifth year the survival rate of all the afforestation/reforestation areas shall be 100% of the total trees planted, additional plant material may be needed to be planted to bring the total count up to the 100%.
3. At the end of the maintenance period a final inspection shall be set up at the site with the Owner or owner's representative and a staff member from MNCP&PC to insure that the required afforestation/reforestation survival rate has been achieved.



209006

Sequence of Events for Properties Required To Comply With Forest Conservation Plans and/or Tree Save Plans

Pre-Construction

1. 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 Montgomery County Planning Department inspection staff prior to commencing construction to verify the limits of disturbance and discuss tree protection and tree care measures. The attendants at this meeting should include: developer's representative, construction superintendent, ISA certified arborist or MD license tree expert that will implement the tree protection measures, Forest Conservation Inspector, and DPS sediment control inspector.
2. No clearing or grading shall begin before stress-reduction measures have been implemented. Appropriate measures may include, but are not limited to:
   a. Root pruning
   b. Crown Reduction or pruning
   c. Watering
   d. Fertilizing
   e. Vertical mulching
   f. Root aeration matting
   Measures not specified on the forest conservation plan may be required as determined by the Forest Conservation Inspector in coordination with the arborist.
3. A State of Maryland licensed tree expert, or an International Society of Arboriculture certified arborist must perform all stress reduction measures. Documentation of stress reduction measures must be either observed by the Forest Conservation Inspector or sent to the Forest Conservation Inspector at 8787 Georgia Avenue, Silver Spring, MD 20910. The Forest Conservation Inspector will determine the exact method to convey the stress reductions measures during the pre-construction meeting.
4. Temporary tree protection devices shall be installed per the Forest Conservation Plan/Tree Save Plan and prior to any construction activities. Tree protection fencing locations should be staked prior to the pre-construction meeting. The Forest Conservation Inspector, in coordination with the DPS sediment control inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan. Temporary tree protect devices may include:
   a. Chain link fence (four feet high)
   b. Super silt fence with wire strung between the support poles (minimum 4 feet high) with high visibility flagging.
   c. 14 gauge 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.
5. Temporary protection devices shall be maintained and installed by the contractor for the duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. No equipment, trucks, materials, or debris may be stored within the tree protection fence areas during the entire construction project. No vehicle or equipment access to the fenced area will be permitted. Tree protection shall not be removed without prior approval of Forest Conservation Inspector.
6. Forest retention area signs shall be installed as required by the Forest Conservation Inspector, or as shown approved plan.
7. Long-term protection devices will be installed per the Forest Conservation Plan/Tree Save Plan and attached details. Installation will occur at the appropriate time during the construction project. Refer to the plan drawing for long-term protection measures to be installed.

During Construction

8. Periodic inspections by Forest Conservation Inspector will occur during the construction project. Corrections and repairs to all tree protection devices, as determined by the Forest Conservation Inspector, must be made within the timeframe established by the Forest Conservation Inspector.

Post-Construction

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

Inspections

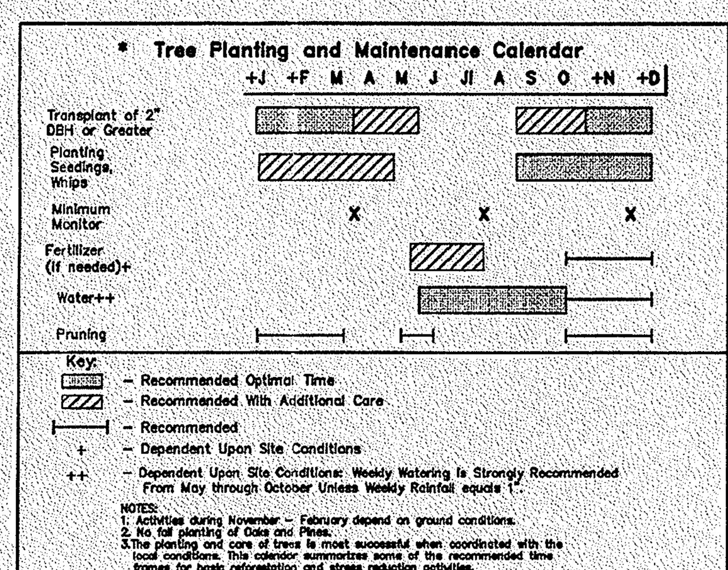
All field inspections must be requested by the applicant. Field inspections must be conducted as follows:

Tree Save Plan and Forest Conservation Plans without Planting Requirements

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

Additional Requirements for Plans with Planting Requirements

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



* From Maryland Forest Conservation Manual 1991

TREE PRESERVATION AND STRESS REDUCTION MEASURES

ID #	PRESERVATION	RP	DRF	CA	SP	MB	DRW
*16	25" Maple	X	X	X	X	X	X
*18	23" Oak	X	X	X	X	X	X
*19	32" Oak	X	X	X	X	X	X
*23	40" Oak	X	X	X	X	X	X
*24	24" Maple	X	X	X	X	X	X
*26	25" Oak	X	X	X	X	X	X
*28	28" Oak	X	X	X	X	X	X
36	24" Oak	X	X	X	X	X	X

* USE ROOT MULCH MATTING WHERE ABLE ALONG STORM DRAIN WITH ROOT PRUNING AT EXCAVATION LINE

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

TERMINOLOGY

(RP) ROOT PRUNING IS TO BE PERFORMED OUTSIDE THE TREE PROTECTION FENCE WITHIN THE CRITICAL ROOT ZONE. IT IS TO BE ACCOMPLISHED BY A VIBRATORY PLOW WITH A SERRATED CUTTING EDGE OR A ROOT CUTTER WITH A 36" WHEEL TO A DEPTH OF 8". CHAIN DRIVEN TRENCHERS ARE NOT ACCEPTABLE. (SEE DETAIL)

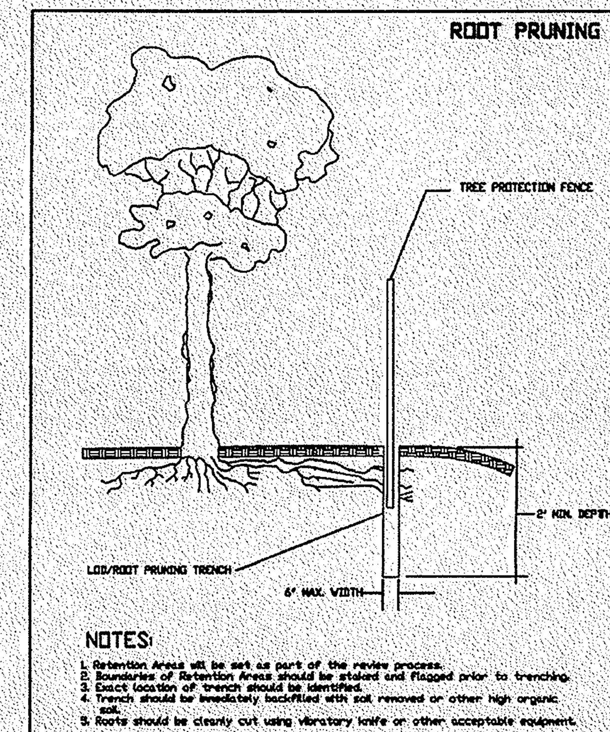
(DRF) DEEP ROOT FERTILIZE UTILIZING A HYDRALIC PUMP TO INJECT A LIQUID SOLUTION OF 30–10–7 ARBORICULTURAL GRADE FERTILIZER AND A BIOROOT STIMULATOR SUCH AS "ROOTS" OR "ESSENTIAL".

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

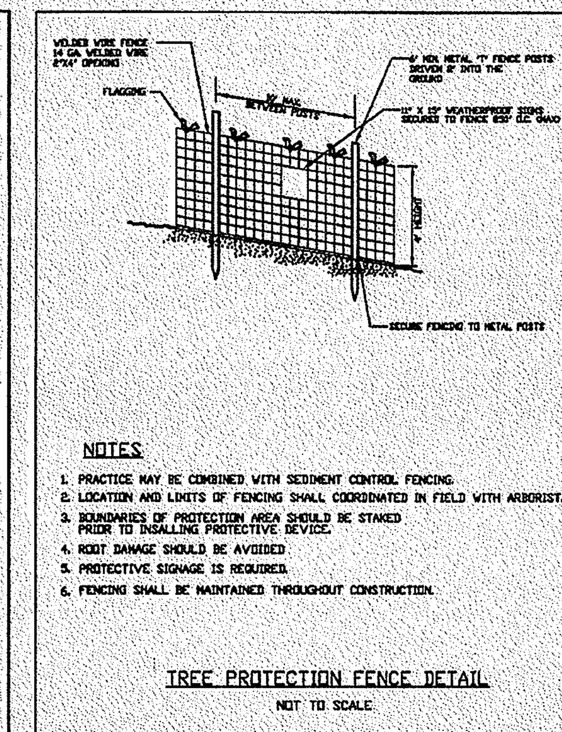
(SP) SANITATION PRUNE TO REMOVE ALL DEAD OR DYING LIMBS GREATER THAN ONE INCH ON A TREE TO IMPROVE ITS HEALTH AND APPEARANCE. THIN CROWN WHERE NECESSARY TO REDUCE CANOPY DENSITY BY MAXIMUM TWENTY–FIVE PERCENT TO COMPENSATE FOR ROOT LOSS AND CONSTRUCTION STRESS.

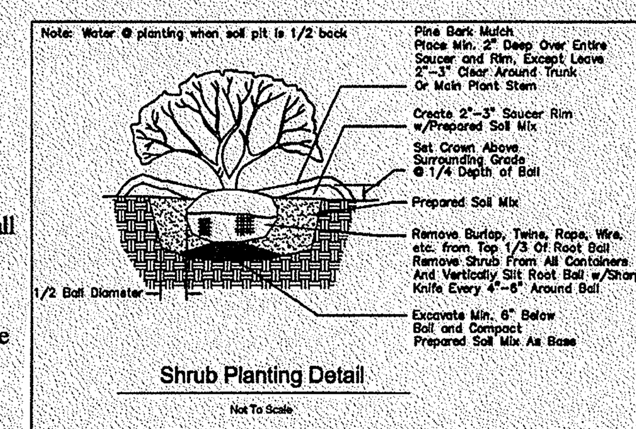
(MB) MULCH BEDS ARE TO BE 2–4" SHREDDED HARDWOOD MULCH, SHREDDED PINE BARK MULCH, OR COMPOSTED WOOD CHIPS. FRESHLY CUT WOODCHIPS ARE NOT ACCEPTABLE.

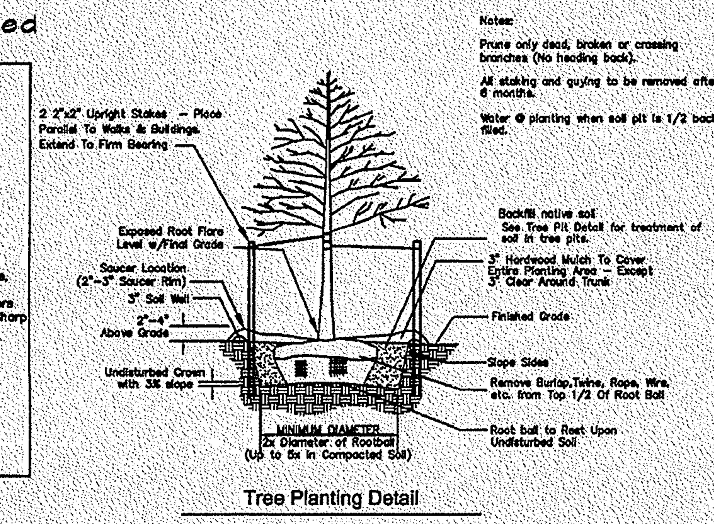
(DRW) DEEP ROOT WATERING TO OCCUR ON A WEEKLY BASIS DURING DROUGHT PERIODS.

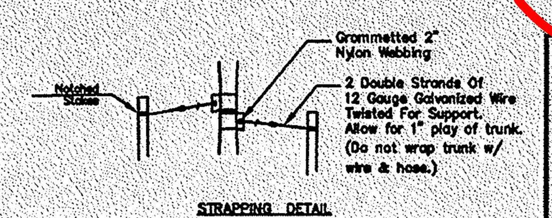


* Root Prune at LOD unless otherwise noted









Temporary Signage

MIN 11"

FOREST RETENTION AREA

MACHINERY DUMPING OR STORAGE OF ANY MATERIALS IS ***PROHIBITED***

VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 1991

MIN. 15"

THE MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION
SEP 28 2010
ENVIRONMENTAL PLANNING DIVISION

NOTE:

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

Temporary Signage

MIN 11"

SPECIMEN TREE

DO NOT REMOVE

MACHINERY DUMPING OR STORAGE OF ANY MATERIALS IS ***PROHIBITED***

VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 1991

MIN. 15"

NOTE:

1. Attachment of signs to trees is prohibited. Should be attached only to temporary tree protection fence as shown in fence detail.
2. Signs should be properly maintained.
3. Avoid injury to roots when placing posts for the signs.
4. Signs should be posted to be visible to all construction personnel from all directions.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

FINAL FOREST CONSERVATION PLAN

APPROVAL

Plan No. Amendment to MR 1994002

Signature: [signature] Date: 10/5/10 cb

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. MR1994002 including, financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: Washington Metropolitan Area Transit Authority (Printed Company Name)

Contact Person or Owner: Mr. Edward M. Shepperson, CCM (Printed Name)

Address: 5801 Sunnyside Avenue College Park, MD 20740

Phone and Email: p: 202–962–9814 email: eshepperson@wmata.com

Signature: [signature]

SEQUENCE OF CONSTRUCTION

1. Schedule a pre–construction meeting with the Developer's representative, Construction Superintendent, tree professional, MNCP&PC staff, and sediment control inspector. Call at least 48 hours prior to beginning construction. Contact Miss Utility at 1–800–257–7777 for water and sewer locations at 301–309–3093, 48 hours prior to any land disturbance.
2. Install Tree Protection Fencing and perform Root Pruning operations. Install sediment control devices.
3. Clear, grub, and begin excavating and grading.
4. Begin building construction.
5. Begin storm drain construction.
6. Begin utility construction.
7. Begin stormwater management construction.
8. Begin curb & gutter and paving.
9. As various areas are completed, place topsoil and sod/seed on grassed areas in conformance with these plans and the "Standard Erosion and Sediment Control Notes."
10. Upon completion and site stabilization, and with the approval of the sediment control inspector, all sediment control structures shall be removed.
11. Upon completion, conduct final inspection with M–NCP&PC staff.
12. Remove tree protection fence.

FOREST CONSERVATION PLAN CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS CORRECT AND THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF EXISTING STATE AND COUNTY FOREST CONSERVATION LEGISLATION.

9/27/10 DATE

[signature] Frank C. Johnson

RECOGNIZED AS QUALIFIED PROFESSIONAL BY MD. DEPT. OF NATURAL RESOURCES

* Amendment to approved FCP MR1994002

DESIGNED FCJ	4/15/10	DATE
DRAWN FCJ	4/15/10	DATE
CHECKED VSB	4/15/10	DATE
APPROVED		DATE

AS – BUILT
I CERTIFY THAT THIS DRAWING ACCURATELY DEPICTS THE WORK CONSTRUCTED AS OF
(DATE)
(AN OFFICER OF THE Design–Builder)

ISSUE

DATE	BY	DESCRIPTION
7/1/09		50% Design Review
9/10/09		95% Design Review
9/25/09		For Building Permit
10/23/09		95% Backcheck
4/15/10		Issued for Construction

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

FORRESTER CONSTRUCTION Design Builder
GROUP GOETZ ARCHITECTS Architecture
CULP & TANNER Structural Engineering
MACRIS, HENDRICKS and GLASCOCK Civil Engineering
CS CONSULTING ENGINEERS MEP & FP Engineering

04/15/2010 | MHG #2008.129.21 | CONTRACT NO. JD7000

WMATA RED LINE
GLENMONT STATION PARKING STRUCTURE
DETAILED FINAL FOREST CONSERVATION PLAN

SCALE: NTS | DRAWING NO. C6.08 | M1250 -65

NOTE:
NO CHANGES TO THIS SHEET WITH GLENMONT FIRE STATION AMENDMENT

FINAL FOREST CONSERVATION PLAN
GLENMONT FIRE STATION #18
AMENDMENT TO FCP# MR1994002

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ARCHITECT:

HUGHES GROUP ARCHITECTS
22630 DAVIS DRIVE, SUITE 175 STERLING, VIRGINIA 20164 703.437.6600

CONSULTANT:

CLIENT:

MONTGOMERY COUNTY MARYLAND 1776

MONTGOMERY COUNTY

DEPARTMENT OF GENERAL SERVICES
OFFICE OF PLANNING & DEVELOPMENT
101 MONROE STREET
11TH FLOOR
ROCKVILLE, MARYLAND 20850

PROJECT:

GLENMONT FIRE STATION #18

12600 GEORGIA AVENUE, GLENMONT MD, 20906

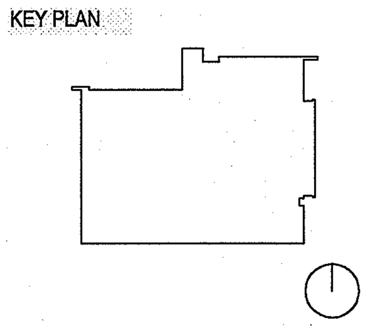
WSSC MAP 216NW03
TAX MAP HQ63
ELECTION DISTRICT 13

SEAL

NO.	ISSUE DESCRIPTION	DATE

PROJECT NUMBER: 0907
DRAWN BY:
CHECKED BY:

KEY PLAN



SHEET TITLE
WMATA REDLINE GLENMONT STATION PARKING STRUCTURE DETAILED FINAL FCP: AMENDMENT TO FINAL FOREST CONSERVATION PLAN MR1994002

SHEET NUMBER
C-109

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FOREST CONSERVATION PLANTING SCHEDULE AREA #1

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
1	Fagus grandifolia	American Beech	1½"-2"		B&B
1	Ilex opaca	American Holly	1½"-2"		B&B
1	Ilex verticillata	Winterberry		3'-4' min	Cont/B&B

NOTES:
1. Shrubs are to be protected with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #2

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
1	Quercus alba	White Oak	1½"-2"		B&B
1	Ilex opaca	American Holly	1½"-2"		B&B
1	Hamamelis virginiana	Witchhazel		3'-4' min	Cont/B&B

NOTES:
1. The .02 acre Planting Area will be planted with the above plant material at a rate of 100 2" caliper trees/acre x .02 acres = 2 trees
2. The mix of trees planted shall be 70% dominant species (1 trees) and 30% understory species (1 trees) planted 12' to 15' on-center.
3. Shrub species shall be planted at a rate of 33 per acre x .02 acres = 1 shrubs. Shrubs are to be protected with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #3

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
1	Fagus grandifolia	American Beech	1½"-2"		B&B
1	Pinus strobus	White Pine	1½"-2"		B&B
1	Hamamelis virginiana	Witchhazel		3'-4' min	Cont/B&B

NOTES:
1. Shrubs are to be protected with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #4

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
2	Fagus grandifolia	American Beech	1½"-2"		B&B
1	Pinus strobus	White Pine	1½"-2"		B&B
2	Ilex opaca	American Holly	1½"-2"		B&B
2	Ilex verticillata	Winterberry		3'-4' min	Cont/B&B

NOTES:
1. Shrubs are to be grouped together (as spacing allows) with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #5

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
2	Fagus grandifolia	American Beech	1½"-2"		B&B
1	Pinus strobus	White Pine	1½"-2"		B&B
2	Ilex opaca	American Holly	1½"-2"		B&B
2	Ilex verticillata	Winterberry		3'-4' min	Cont/B&B

NOTES:
1. Shrubs are to be grouped together (as spacing allows) with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #6

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
1	Quercus alba	White Oak	1½"-2"		B&B
1	Ilex opaca	American Holly	1½"-2"		B&B
1	Hamamelis virginiana	Witchhazel		3'-4' min	Cont/B&B

NOTES:
1. Shrubs are to be protected with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #7

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
3	Fagus grandifolia	American Beech	1½"-2"		B&B
3	Pinus strobus	White Pine	1½"-2"		B&B
2	Ilex opaca	American Holly	1½"-2"		B&B
2	Cercis Canadensis	Eastern Redbud	1½"-2"		B&B
2	Hamamelis virginiana	Witchhazel		3'-4' min	Cont/B&B
2	Ilex verticillata	Winterberry		3'-4' min	Cont/B&B

NOTES:
1. Shrubs are to be grouped together (as spacing allows) with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #8

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
2	Fagus grandifolia	American Beech	1½"-2"		B&B
2	Pinus strobus	White Pine	1½"-2"		B&B
1	Ilex opaca	American Holly	1½"-2"		B&B
1	Cercis Canadensis	Eastern Redbud	1½"-2"		B&B
2	Ilex verticillata	Winterberry		3'-4' min	Cont/B&B

NOTES:
1. Shrubs are to be grouped together (as spacing allows) with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #9

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
2	Fagus grandifolia	American Beech	1½"-2"		B&B
2	Quercus alba	White Oak	1½"-2"		B&B
2	Ilex opaca	American Holly	1½"-2"		B&B
2	Ilex verticillata	Winterberry		3'-4' min	Cont/B&B

NOTES:
1. Shrubs are to be grouped together (as spacing allows) with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #10

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
2	Fagus grandifolia	American Beech	1½"-2"		B&B
1	Quercus alba	White Oak	1½"-2"		B&B
2	Ilex opaca	American Holly	1½"-2"		B&B
2	Ilex verticillata	Winterberry		3'-4' min	Cont/B&B

NOTES:
1. Shrubs are to be grouped together (as spacing allows) with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #11

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
2	Fagus grandifolia	American Beech	1½"-2"		B&B
1	Pinus strobus	White Pine	1½"-2"		B&B
1	Ilex opaca	American Holly	1½"-2"		B&B
2	Hamamelis virginiana	Witchhazel		3'-4' min	Cont/B&B

NOTES:
1. Shrubs are to be grouped together (as spacing allows) with temporary mesh fencing.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
PLATTED
SEP 28 2010
REVIEWED
ENVIRONMENTAL PLANNING DIVISION

FOREST CONSERVATION PLANTING SCHEDULE AREA #12

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
2	Fagus grandifolia	American Beech	1½"-2"		B&B
2	Pinus strobus	White Pine	1½"-2"		B&B
1	Ilex opaca	American Holly	1½"-2"		B&B
1	Cercis Canadensis	Eastern Redbud	1½"-2"		B&B
2	Hamamelis virginiana	Witchhazel		3'-4' min	Cont/B&B

NOTES:
1. Shrubs are to be grouped together (as spacing allows) with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #13

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
5	Acer rubrum	Red Maple	1½"-2"		B&B
4	Quercus alba	White Oak	1½"-2"		B&B
4	Fagus grandifolia	American Beech	1½"-2"		B&B
2	Cercis Canadensis	Eastern Redbud	1½"-2"		B&B
3	Ilex opaca	American Holly	1½"-2"		B&B
3	Ilex verticillata	Winterberry		3'-4' min	Cont/B&B
3	Hamamelis virginiana	Witchhazel		3'-4' min	Cont/B&B

NOTES:
1. The 0.18 acre Planting Area will be planted with the above plant material at a rate of 100 2" caliper trees/acre x 0.18 acres = 18 trees
2. The mix of trees planted shall be 70% dominant species (13 trees) and 30% understory species (5 trees) planted 12' to 15' on-center.
3. Shrub species shall be planted at a rate of 33 per acre x 0.18 acres = 6 shrubs. Shrubs are to be grouped together (as spacing allows) with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE AREA #14

QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT
2	Acer rubrum	Red Maple	1½"-2"		B&B
2	Quercus bicolor	Swamp White Oak	1½"-2"		B&B
1	Platanus occidentalis	American Sycamore	1½"-2"		B&B
2	Amelanchier canadensis	Serviceberry	1½"-2"		B&B
2	Ilex verticillata	Winterberry		3'-4'min	Cont./B&B

NOTES:
1. The 0.07 acre Planting Area will be planted with the above plant material at a rate of 100 2" caliper trees/acre x 0.07 acres = 7 trees
2. The mix of trees planted shall be 70% dominant species (5 trees) and 30% understory species (2 trees) planted 12' to 15' on-center.
3. Shrub species shall be planted at a rate of 33 per acre x 0.07 acres = 2 shrubs. Shrubs are to be grouped together (as spacing allows) with temporary mesh fencing.

FOREST CONSERVATION PLANTING SCHEDULE FENCE VINES

QTY	BOTANICAL NAME	COMMON NAME	ROOT
50	Parthenocissus quinquefolia	Virginia Creeper	Cont
50	Lonicera sempervirens	Trumpet Honeysuckle	Cont

NOTES:
1. Vines to be planted along fence within forest area every 10 feet.
2. Vines to be planted in the spring after one season of invasive management/removal of existing invasive species that are on and along the fence line. Coordinate with invasive removal personnel to ensure planted vines are not affected by invasive management.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

FINAL FOREST CONSERVATION PLAN

APPROVAL

Plan No. Amendment to MR 1994002

Signature: Date 10/5/10

DEVELOPER'S CERTIFICATE

The undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. MR1994002 including, financial bonding, forest planting, maintenance, and all other agreements as required by applicable agreements.

Developer's Name: Washington Metropolitan Area Transit Authority
Printed Company Name

Contact Person or Owner: Edward M. Shepperson, CCM
Printed Name

Address: 5801 Sunnyside Avenue College Park, MD 20740

Phone and Email: p: 202-962-9[illegible] email: eshepperson@wmata.com

Signature:

FOREST CONSERVATION PLAN CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS CORRECT AND THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF EXISTING STATE AND COUNTY FOREST CONSERVATION LEGISLATION.

9/27/10
DATE

Frank C. Johnson

RECOGNIZED AS QUALIFIED PROFESSIONAL BY MD. DEPT. OF NATURAL RESOURCES

* Amendment to approved FCP MR1994002

04/15/2010	MHG #2008.129.21	CONTRACT NO. JD7000

DESIGNED FCJ 4/15/10 DATE
DRAWN FCJ 4/15/10 DATE
CHECKED VSB 4/15/10 DATE
APPROVED DATE

AS - BUILT
I CERTIFY THAT THIS DRAWING ACCURATELY DEPICTS THE WORK CONSTRUCTED AS OF
(DATE)
(AN OFFICER OF THE Design-Builder)

ISSUE

DATE	BY	DESCRIPTION
7/1/09		50% Design Review
9/10/09		95% Design Review
9/25/09		For Building Permit
10/23/09		95% Backcheck
4/15/10		Issued for Construction

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

FORRESTER CONSTRUCTION
Design Builder

GROUP GOETZ ARCHITECTS
Architecture

CULP & TANNER
Structural Engineering

MACRIS, HENDRICKS and GLASCOCK
Civil Engineering

CS CONSULTING ENGINEERS
MEP & FP Engineering

WMATA RED LINE
GLENMONT STATION PARKING STRUCTURE
DETAILED FINAL FOREST CONSERVATION PLAN

SCALE: NTS	DRAWING NO. C6.09	M1250 -66

NOTE:
NO CHANGES TO THIS SHEET WITH GLENMONT FIRE STATION AMENDMENT

FINAL FOREST CONSERVATION PLAN
GLENMONT FIRE STATION #18
AMENDMENT TO FCP# MR1994002

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22630 DAVIS DRIVE, SUITE 175 STERLING, VIRGINIA 20164 703.437.6600

CONSULTANT:

CLIENT:
MONTGOMERY COUNTY MARYLAND 1776
MONTGOMERY COUNTY
DEPARTMENT OF GENERAL SERVICES
OFFICE OF PLANNING & DEVELOPMENT
101 MONROE STREET
11TH FLOOR
ROCKVILLE, MARYLAND 20850

PROJECT:
GLENMONT FIRE STATION #18
12600 GEORGIA AVENUE, GLENMONT MD, 20906

WSSC MAP 216NW03
TAX MAP HQ63
ELECTION DISTRICT 13
SEAL

NO.	ISSUE DESCRIPTION	DATE

PROJECT NUMBER: 0907
DRAWN BY:
CHECKED BY:

KEY PLAN

SHEET TITLE
WMATA REDLINE GLENMONT STATION PARKING STRUCTURE DETAILED FINAL FCP: AMENDMENT TO FINAL FOREST CONSERVATION PLAN MR1994002

SHEET NUMBER
C-110

INVASIVE PLANT MANAGEMENT PLAN

The forest on-site must be managed for multiple invasive species. These species include but are not limited to Multiflora rose, Bamboo, Wisteria, Japanese Honeysuckle, English Ivy, Five-leaf Aralia, and Porcelain Berry. With the exception of Bamboo, these species are found in multiple locations throughout the forest area; the area that contains Bamboo is highlighted on the plan view. Where feasible plants should be hand cut; brush-hogging as deemed necessary. All cut plants should be removed from the site. After initial clearing, trees should be planted per the tree planting calendar as shown on sheet C6.08.

Many of the vines, mostly English Ivy, are overwhelming the trees with some reaching into the canopy. These vines should be cut at the base as well as approximately 5 feet above the ground while leaving the vines in the canopy to fall out on their own. Do not attempt to pull vines from the canopy because this could result in unwanted damage to the trees.

Cut invasive vines on fence at edge of forest and remove as able. It may prove to be easier to remove at a later time after vines die off. Plant native vines per vine plant schedule in the beginning of the following growing season after clearing and treatment. Notify neighboring property owners of invasive plant removal along fence line. Follow up treatments must take care to protect newly planted native vines.

Use of herbicides should be limited as much as possible. Herbicides may be used as approved by MNCPPC Inspector and may vary depending on location and species being removed. Licensed herbicide applicator is required for all herbicide treatments and shall follow state requirements including proper notification of neighbors regarding pesticide sensitive individuals. Herbicides should be applied to stump either by spray or by painting on as possible after plant is cut and follow up spraying should occur on new growth. The type of herbicide and concentrations of herbicide to be used should be plant/species appropriate.

Sequence of Invasive Management Process

1) Invasive plant management personnel must have experience in invasive plant removal and management techniques. The person performing the invasive plant management must be able to demonstrate that he/she can properly identify the invasive species and must also demonstrate that he/she has experience in performing NNI removal and management. Qualifications must be submitted for review and approval prior to the pre-construction meeting.

2) No later than the pre-construction meeting, the invasive plant management person must provide to the M-NCPPC forest conservation inspector, a detailed time schedule for invasive plant management work and how this work will fit into the overall project timeline, including planting of native trees/shrubs/vines and construction work. Invasive plant removal may begin after pre-construction meeting and notifying MNCPPC inspector of intention to begin. Inspector may require additional meetings and/or documentation to address specifics, including specific time schedule, of invasive plant removal and management. Initial non-native, invasive plant removal should occur between April 15th and November 15th or as modified by the M-NCPPC forest conservation inspector. The forest management plan will be effective for 5 years following this date. Invasive vines on trees and fence may be cut and removed at any time as needed. Tree and shrub planting should occur in first planting season following initial invasive removal.

3) Treatments/invasive removal should continue throughout the entire conservation area at a rate of approximately once a month as needed through the growing season between April 15th and November 15th. Following each treatment, a description of what occurred and an assessment of the effectiveness of those treatments should be sent to the M-NCPPC forest conservation inspector prior to the next treatment. At any time effectiveness is in question the invasive management professional(s) should meet with the M-NCPPC inspector to reevaluate and discuss alternate methods that may be more effective.

4) Removal of invasive plants from surrounding chain link fence is to be achieved by removing **all** vines from the fence and replacing any native vines that were removed during the process. See documents on this page for individual plant removal techniques. Replacement is to be achieved by replanting of native vines during the appropriate planting season. See Forest Conservation Planting Schedule-Fence Vines for native vine species and quantities. If it can be reasonable accomplished, the invasive management professional shall cut off native vines at the base before applying a foliar spray to the foliage on the fence. If cut stem or basal bark treatment is intended then this step is not required as it will be impossible to determine which stem/bark to treat. The complete quantity of plants listed on the Forest Conservation Planting Schedule-Fence Vines shall be installed regardless of how many native vines have be retained. Only the forest conservation inspector has the discretion to decrease the native vine planting requirements. The invasive management professional must request in writing from the forest conservation inspector for the ability to reduce the number of native vines to be installed. A justification statement as to why the additional plantings are not required must be included in the letter.

Notes:

1) Per state requirements, neighboring property owners should be informed whenever herbicides are used. If herbicides are approved for use, safety information and signage may be required to keep homeowners informed.
2) If effectiveness of this plan appears to be an issue then a reevaluation should take place.
3) See notes this sheet for additional recommendations for invasive management of specific species.

MATERIAL SAFETY DATA SHEET

OSHA-MEETS 29 CFR 191.1200 STANDARDS — HELM

NFPA HAZARD RATINGS		
HEALTH	1	0 = INSIGNIFICANT 3 = HIGH
FLAMMABILITY	1	1 = SLIGHT 4 = EXTREME
REACTIVITY	0	2 = MODERATE

TRANSPORTATION INFORMATION
PROPER SHIPPING NAME: Compound, Tree or Weed Killing, Liquid, NOIBN
HAZARD CLASS / DIVISION: None REF: Not applicable
IDENTIFICATION NUMBER: None LABEL: NONE REQUIRED

SECTION 1 - PRODUCT / COMPANY IDENTIFICATION

IDENTITY (AS USED ON LABEL AND LIST): Glyphosate 41% — EPA Reg. No. 74530-4 — Page 1 of 2
COMPANY IDENTIFICATION: Helm Agro US, Inc., 8295 Tournament Drive, Suite 310, Memphis, Tennessee 38125
EMERGENCY PHONE: (800) 424-9300 (CHEMTREC)
INFORMATION PHONE: (901) 312-1528 (Helm Agro)
DATE PREPARED: July 15, 2003 SUPERSEDES: February 10, 2003

SECTION 2 - COMPOSITIONAL INFORMATION

COMPONENTS Specific Chemical Identity; (Common Name(s))	CAS #	% (OPTIONAL)	ACGIH PPM	TWA MG/M³	OSHA PPM	HELM MG/M³	SARA TITLE III	RQ LBS
N-(phosphonomethyl)glycine, isopropylamine salt (Glyphosate)	38641-94-0	41.0						
Inert ingredients								
Surfactant								
Water	7732-18-5							

(a) A "YES" in the SARA TITLE III column indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372. * Effective 1996.
(b) Indicates an employee's skin exposure shall be prevented or reduced to the extent necessary in the circumstances through the use of gloves, coveralls, goggles, or other appropriate equipment.
(c) The Workplace Hazardous Materials Information System (WHMIS), Canada's version of the Hazard Communication, has determined this product must be disclosed as a hazardous ingredient to the extent described in the regulations.
(d) Indicates the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ) or greater amounts according to 40 CFR 302.

SECTION 3 - HEALTH HAZARD DATA

ROUTES OF ENTRY - SIGNS & SYMPTOMS OF EXPOSURE	EMERGENCY AND FIRST AID PROCEDURES
INHALATION: Practically non-toxic. Brief inhalation exposure is not likely to cause adverse effects.	Move subject to fresh air. If effects occur, consult a physician.
SKIN: Practically non-irritating to skin. May cause slight irritation upon prolonged contact.	Remove contaminated clothing; wash affected area with soap and water. Launder contaminated clothing before reuse. If irritation persists, seek medical attention.
EYES: Causes temporary eye irritation.	Flush eyes with water for 15 minutes while holding eyelids open. Seek medical attention if irritation persists.
INGESTION: Due to low toxicity no significant adverse effects are expected if small amounts are swallowed.	Do not induce vomiting unless directed by qualified medical personnel. If possible, dilute by giving 2 glasses of water to drink. If symptoms occur, call physician or Poison Control Center.

HEALTH HAZARDS (ACUTE AND CHRONIC): Acute Oral LD_{50} (rats) >5000 mg/kg. Acute Dermal LD_{50} (rabbits) >5000 mg/kg. Acute Inhalation LC_{50} (rats) 3.26 mg/L. Not sensitizing to skin. Eye Irritation (Rabbit) Severely irritating. Skin Irritation (Rabbit) Slight irritation.
CARCINOGENICITY: NTP? Not listed | IARC MONOGRAPHS? Not listed | OSHA REGULATED? Not listed
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known.

MATERIAL SAFETY DATA SHEET
IDENTITY (AS USED ON LABEL AND LIST): Glyphosate 41% — Page 2 of 2 — Date: July 15, 2003

SECTION 4 - FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED): Does not flash (Setaflash) | FLAMMABLE LIMITS LFL: Not applicable UFL: Not applicable
EXTINGUISHING MEDIA: CO_2, water, water fog, dry chemical, and chemical foam. | AUTOIGNITION TEMPERATURE: None known.
SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus (pressure-demand MSHA/NIOSH-approved or equivalent) and full protective gear. Runoff should be contained.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Fire may produce toxic, irritating gases. Pesticide particulates may become airborne.

SECTION 5 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Comply with fire, explosion, safety precaution, personal protective equipment sections of this MSDS before proceeding with cleanup. Absorb material with inert material such as "oil dry" and place in suitable container. Keep out of streams, water supplies, and sewers. Contact Helm or Chemtrec if assistance is needed. For spills in excess of allowable limits (RQ) notify the National Response Center (800) 424-8802; refer to SARA Title III, Section 313 40 CFR 372, and CERCLA 40 CFR 302 for complete regulations concerning reporting requirements.

SECTION 6 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use. Protect containers from abuse and extreme temperatures. Do not store or consume food, drink, or tobacco in areas where they may become contaminated with this material. Minimize body contact with this product as well as all chemicals in general.

SECTION 7 - EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE): In most cases no respiratory protection is required. If discomfort is experienced, wear a respirator (MSHA/NIOSH-approved or equivalent) suitable for the mist or vapor concentrations encountered.
VENTILATION: LOCAL EXHAUST: May be required to control mist or vapor concentration. MECHANICAL (GENERAL): May be required to control mist or vapor condensation.
PROTECTIVE GLOVES: Chemical resistant | EYE PROTECTION: Chemical splash goggles (ANSI Z-87.1 or equivalent)
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Clean, non-contaminated body covering clothes should be worn. Easy access to eye wash facility and safety shower.
WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Shower after handling. Wash contaminated clothing before wearing again.

SECTION 8 - PHYSICAL / CHEMICAL PROPERTIES

FREEZING POINT	-14°F	SPECIFIC GRAVITY (WATER = 1)	1.1656 @ 20°C
APPEARANCE	Liquid	pH	4.4 - 5.0
ODOR	Slight	SOLUBILITY IN WATER	Miscible
COLOR	Amber - Brown	% VOLATILE (BY WEIGHT)	Approximately 50%

SECTION 9 - STABILITY AND REACTIVITY

STABILITY: Stable when stored under normal warehouse conditions. CONDITIONS TO AVOID:
INCOMPATIBILITY (MATERIALS TO AVOID): Contact with galvanized or unlined steel (except stainless steel) may initiate decomposition and generation of hydrogen gas that can be highly combustible.
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen gas may be generated via contact with galvanized or unlined mild steel equipment.
HAZARDOUS POLYMERIZATION: Not known to occur. CONDITIONS TO AVOID:

SECTION 10 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Incinerate pesticide or triple rinsate that cannot be used according to label directions and contaminated diking material in a permitted facility according to current local, state, and Federal regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. HELM AGRO U.S. ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE TO VENDEES, USERS OR THIRD PARTIES CAUSED BY THE MATERIAL. SUCH VENDEES OR USERS ASSUME ALL RISKS ASSOCIATED WITH THE USE OF THE MATERIAL.

— Use product specified in safety data material or similar.

Hedera helix (English ivy) — VINE

Helpful Hints: An evergreen climbing vine that attaches to tree trunks and branches with small, sticky root like structures. It can also form dense patches on the ground and can thrive in shady areas as well as those in the sun. Leaves are usually three-lobed with a heart-shaped base, and are dark green, with a waxy—almost leathery—feel. It kills by smothering and can add tremendous extra weight to trees, making them susceptible to blow-over during storms.

Mechanical: Climbing vines on trees can be cut near the base and several inches higher up to kill the upper portions of the vine. Portions of vines that stay rooted will remain alive and must later be treated with herbicide, pulled out, or cut repeatedly until no re-growth occurs.

Chemical: Triclopyr may be applied to either foliage or cut stems.
- *Since English ivy remains active year round, herbicide treatment can be done in the winter.*
- Temperatures below 40 degrees F. will impede absorption of herbicides through plant tissues.
- Fall and winter applications will minimize herbicide impact on desirable plant species.

Cut stem treatment
- Use triclopyr salt @ 25% (e.g., Garlon 3A in water). Ready-to-use triclopyr products such as Pathfinder II are also effective.
- Accessible low-growing plants should be cut and herbicide applied immediately to cut stems with a spray bottle or backpack sprayer.
- For climbing vines, cut a section from the vine (i.e., "cut a window") and treat the rooted portion with herbicide. The upper portion of the vine will eventually die.
- *English ivy's persistence makes follow up treatments likely.*

Basal bark treatment
- On climbing stems, use triclopyr ester @ 20% (e.g., Garlon 4 in oil carrier such as Arborchem Basal Oil or Timberland JBL—follow label instructions), or a ready-to-use triclopyr product such as Pathfinder II.
- *Be aware of the possibility that the herbicide will be absorbed into the host tree unless it is applied carefully only to the ivy stem.*
- If possible, carefully pull stem away from the base of the host tree before applying herbicide.

Foliar spray (Review information on pp. 3 & 6-7; contact NRS before initiating any foliar spray project)
- Use triclopyr salt (e.g., Garlon 3A in water) @ 5% (high concentration required due to plant's waxy leaf cuticle). Add a 0.5% non-ionic surfactant.
- This approach is most effective if low-growing plants are cut, allowed to re-grow, and the herbicide is applied to the new foliage (herbicide more easily penetrates the leaf cuticle of new growth).
- Use approved blue marker dye.

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"Best Management Practices for control of Non–Native Invasives". Natural Resource Stewardship Section, Park Planning & Stewardship Division, Montgomery Parks. April 2009.

Phyllostachys spp. and others (Running Bamboo) — HERB (grass)

Helpful Hints: Bamboo is a fast-growing, aggressive perennial grass that has escaped from yards and gardens to invade parkland.

Mechanical: *There is a very narrow control window for optimal mechanical treatment of bamboo*, generally running from March 1 – May 31.
- Pulling or digging can be effective for small infestations.
- If large infestations are cut back from March through May, new shoots will not grow. New growth from existing stems, called "culms," will emerge and can be cut again. Continued spring cutting over several years may exhaust the plant and allow the underground parts to rot and die.

Chemical: *There is a very narrow control window for optimal herbicidal treatment of bamboo*, generally running from October 1 – 31.
- Cut bamboo back as described under "Mechanical."
- Allow any new growth to emerge and form leaves during the summer.
- Apply herbicide twice in October, allowing 10 to 14 days between treatments.

Foliar spray (Review information on pp. 3 & 6-7; contact NRS before initiating any foliar spray project)
- Use a glyphosate product such as Roundup Pro, or its equivalent, @ 2%. (NOTE: *Since bamboo is a grass, triclopyr products such as Garlon will not be effective.*)
- Treatment can be done as long as the temperature is above 40 degrees and no rain is expected for several hours.
- Add approved blue marker dye.

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"Best Management Practices for control of Non–Native Invasives". Natural Resource Stewardship Section, Park Planning & Stewardship Division, Montgomery Parks. April 2009.

Ampelopsis brevipedunculata (Porcelainberry) — VINE

Helpful Hints: A non-native grape vine that kills trees by producing heavy, smothering masses of stems and leaves. Unlike native grape vines, which should not be removed, this plant produces multicolored fruits (in late summer-early fall) that stand upright in flat clusters. Native grape vine fruits hang down in long clusters.

Mechanical: Bush-hog or mow vines in open, accessible areas. Power hedge trimmers, power saws, handsaws, loppers, and hand pruners can also be used.
- *Climbing vines on trees can be cut to kill the upper portions of the vine by "cutting a window."*
- *Cut the vine at ground level and as high as you can reach.* Portions of vines that stay rooted will remain alive and must later be treated with herbicide, pulled out, or cut repeatedly until no re-growth occurs.

Chemical: *Sue Salmons of the NPS has reported most success with the triclopyr product Garlon in both its salt and ester formulations.*

Cut stem treatment
- Use triclopyr salt @ 25% (e.g., Garlon 3A in water) OR triclopyr ester @ 20% (e.g., Garlon 4 in oil carrier such as Arborchem Basal Oil or Timberland JBL—follow label instructions).
- Ready-to-use triclopyr products such as Pathfinder II are also effective.
- Take care using triclopyr in oil if you will be near water.

Basal bark treatment
- Use triclopyr ester @ 20% (e.g., Garlon 4 in oil carrier such as Arborchem Basal Oil or Timberland JBL—follow label instructions).
- Ready-to-use triclopyr products such as Pathfinder II are also effective.
- *Application can be made in winter as long as stems are not wet or snow-covered and temperatures will be above freezing during the middle of the day.*

Foliar spray: (Review information on pp. 3 & 6-7; contact NRS before initiating any foliar spray project)
- DO NOT USE this method for foliage on climbing vines unless they are below applicator's shoulder height.
- Effective for the recumbent (i.e., low-growing) form of this plant.
- Use triclopyr salt @ 2% (e.g., Garlon 3A in water) with a non-ionic surfactant at 0.5%. *Always use the lowest concentration that proves effective.*
- Add approved blue marker dye.

"Best Management Practices for control of Non–Native Invasives". Natural Resource Stewardship Section, Park Planning & Stewardship Division, Montgomery Parks. April 2009.

THE MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION — SEP 28 2010 — ENVIRONMENTAL PLANNING DIVISION

Lonicera japonica (Japanese honeysuckle) — VINE

Helpful Hints: A perennial vine—semi-evergreen in our area—that climbs by twining around trunks and limbs of shrubs and small trees. In sunny edge areas its smothering growth can climb 15-20 feet. Leaves are oblong or oval and occur in pairs along the stem. Stems and leaves often have fine, soft hairs. The tube-shaped flowers occur from April through the summer. They are white or pink and turn yellow with age. Small black fruits occur in the fall.

Mechanical: Bush-hog Japanese honeysuckle in accessible areas and treat re-sprouting foliage with herbicide. Mowing or cutting with power or hand tools, without follow up herbicide treatment, is effective only if repeated often.

Chemical: *Use glyphosate. Sue Salmons of NPS reports that this is the most effective herbicide for this plant.*

Cut stem treatment
- Use glyphosate @ 25% (e.g., Roundup Pro) on cut surfaces *any time of the year.*
- Temperatures below 40 degrees F. will impede absorption of herbicides through plant tissues.

Foliar spray (Review information on pp. 3 & 6-7; contact NRS before initiating any foliar spray project)
- Use glyphosate @ 2% (e.g., Roundup Pro, or Rodeo with a 0.5% surfactant if near water). *Always use the lowest concentration that proves effective.*
- Japanese honeysuckle may stay green long after other plants have lost their leaves. *Treatment during mild fall or winter weather will minimize herbicide impact on desirable plant species.*
- Add approved blue marker dye.
- *Sue Salmons also suggests treating Japanese honeysuckle in the spring at the same time lesser celandine is being sprayed.*

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"Best Management Practices for control of Non–Native Invasives". Natural Resource Stewardship Section, Park Planning & Stewardship Division, Montgomery Parks. April 2009.

Rosa multiflora (Multiflora rose) — SHRUB

Helpful Hints: This non-native rose can form very large stands in open areas and along forest or trail edges. It is a thorny perennial shrub with arching stems and compound leaves divided into 5-11 sharply toothed leaflets. The plant can sometimes behave like a climbing vine, scrambling up tree trunks, fences or other structures to heights of 20-30 feet. Clusters of showy, fragrant white to pink flowers begin to appear in late spring. Small, bright red fruits—known as rose hips—develop during the summer and remain on the plant through the winter.

Mechanical: Control requires frequent, repeated bush hogging or mowing, or cutting with power tools or hand tools.
- Cut three times a year over a period of two to four years.
- Cutting with power or hand tools may be preferable to bush hogging or mowing in high-quality natural areas to minimize disturbance.

Chemical: Apply glyphosate or triclopyr to freshly cut stumps or foliar re-growth.

Cut stump treatment
- Use glyphosate @ 25% (e.g., Roundup Pro) or triclopyr @ 25% (e.g., Garlon 3A in water). Ready-to-use triclopyr products such as Pathfinder II are also effective.
- *This method is most effective if done late in the growing season or while plant is dormant.*

Foliar spray
- Early re-growth or low-growing plants can be effectively treated with foliar spray using a glyphosate or triclopyr products @ 2% (follow label directions).
- Add approved blue marker dye.
- Consult NRS for advice before initiating any foliar spray project.

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"Best Management Practices for control of Non–Native Invasives". Natural Resource Stewardship Section, Park Planning & Stewardship Division, Montgomery Parks. April 2009.

Eleutherococcus sieboldianus (Five-Leaf Aralia) — SHRUB

Helpful Hints: This plant has five to seven palmately compound deciduous leaves that are bright green with no showy fall color, mostly yellow. Height is 6'-10' with a width of 8'-10'.

Mechanical: Cutting with a brush-type mower, chain saw, power tool or hand tool in combination with herbicide applications.

Chemical: Apply glyphosate or triclopyr to foliar re-growth or freshly cut stems.

Cut stem Treatment
- Use glyphosate @ 25% (e.g., Roundup Pro) or triclopyr @ 25% (e.g., Garlon 3A in water). Ready-to-use triclopyr products such as Pathfinder II as also effective.

Foliar Spray (Review information on pp. 3 & 6-7; Contact NRS before initiating any foliar spray project.)
- Early re-growth or low-growing plants can be effectively treated with foliar spray using a 2% solution of glyphosate (e.g., Roundup Pro) or triclopyr (e.b., Garlon 3A). Always use the lowest concentration that proves effective.
- Add approved blue marker dye.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

FINAL FOREST CONSERVATION PLAN

APPROVAL

Plan No. Amendment to MR1994002

Signature [signature] Date 10/5/10 cb

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. MR1994002 including, financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: Washington Metropolitan Area Transit Authority (Printed Company Name)

Contact Person or Owner: Mr. Edward M. Shepperson, CCM (Printed Name)

Address: 5801 Sunnyside Avenue, College Park, MD 20740

Phone and Email: p: 202-962-9814, email: eshepperson@wmata.com

Signature: [signature]

FOREST CONSERVATION PLAN CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS CORRECT AND THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF EXISTING STATE AND COUNTY FOREST CONSERVATION LEGISLATION.

9/27/10 DATE — [signature] Frank C. Johnson

RECOGNIZED AS QUALIFIED PROFESSIONAL BY MD. DEPT. OF NATURAL RESOURCES

* Amendment to approved FCP MR1994002

DESIGNED FCJ	4/15/10	DATE
DRAWN FCJ	4/15/10	DATE
CHECKED VSB	4/15/10	DATE
APPROVED		DATE

AS – BUILT
I CERTIFY THAT THIS DRAWING ACCURATELY DEPICTS THE WORK CONSTRUCTED AS OF
(DATE)
(AN OFFICER OF THE Design–Builder)

ISSUE

DATE	BY	DESCRIPTION
7/1/09		50% Design Review
9/10/09		95% Design Review
9/25/09		For Building Permit
10/23/09		95% Backcheck
4/15/10		Issued for Construction

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

FORRESTER CONSTRUCTION — Design Builder
GROUP GOETZ ARCHITECTS — Architecture
CULP & TANNER — Structural Engineering
MACRIS, HENDRICKS and GLASCOCK — Civil Engineering
CS CONSULTING ENGINEERS — MEP & FP Engineering

04/15/2010 | MHG #2008.129.21 | CONTRACT NO. JD7000

WMATA RED LINE
GLENMONT STATION PARKING STRUCTURE
INVASIVE PLANT CONTROL PLAN

SCALE: NTS | DRAWING NO. C6.10 | M1250 -67

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NOTE:
NO CHANGES TO THIS SHEET WITH GLENMONT FIRE STATION AMENDMENT

FINAL FOREST CONSERVATION PLAN
GLENMONT FIRE STATION #18
AMENDMENT TO FCP# MR1994002

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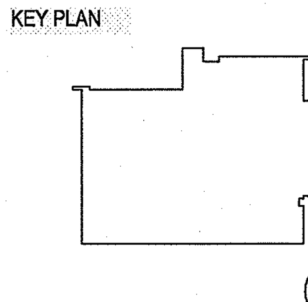
WSSC MAP 216NW03
TAX MAP HQ63
ELECTION DISTRICT 13

SEAL

NO.	ISSUE DESCRIPTION	DATE

PROJECT NUMBER: 0907
DRAWN BY:
CHECKED BY:

KEY PLAN



SHEET TITLE
WMATA REDLINE GLENMONT STATION PARKING STRUCTURE INVASIVE PLANT CONTROL PLAN: AMENDMENT TO FINAL FOREST CONSERVATION PLAN MR1994002

SHEET NUMBER
C-111