SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN AND LANDSCAPE PLAN
3	LANDSCAPE PLAN
4	LANDSCAPE DETAILS
5	SEDIMENT AND EROSION CONTROL PLAN, NOTES AND SEWER PROFILE
6	STORMWATER MANAGEMENT NOTES AND DETAILS
7	HANDICAP DETAIL SHEET

SITE DEVELOPMENT PLAN

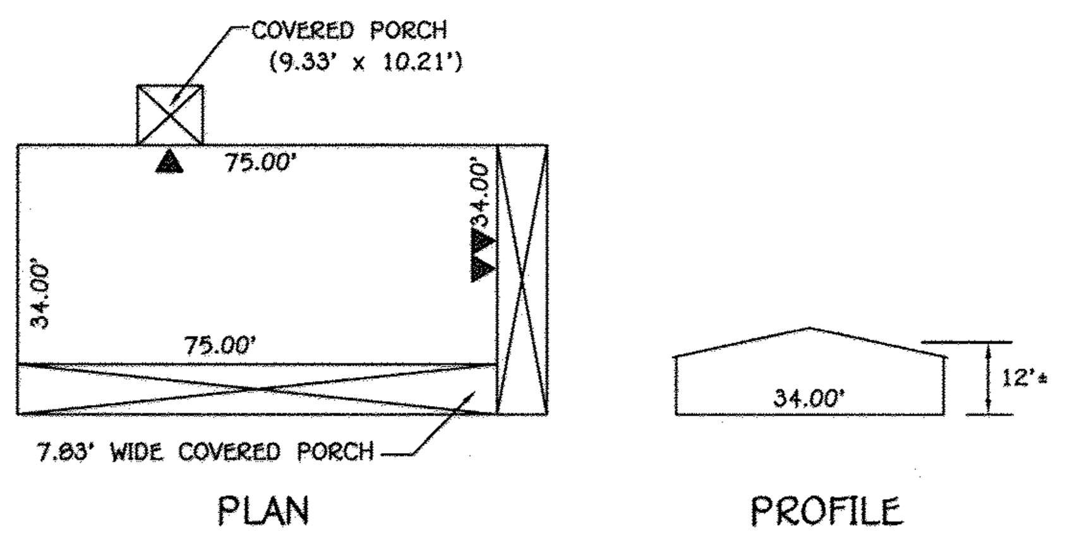
COLUMBIA MEMORIAL PARK

SECTION 1 AREA 1 LOT 1 AND SECTION 1 AREA 2 LOT 3

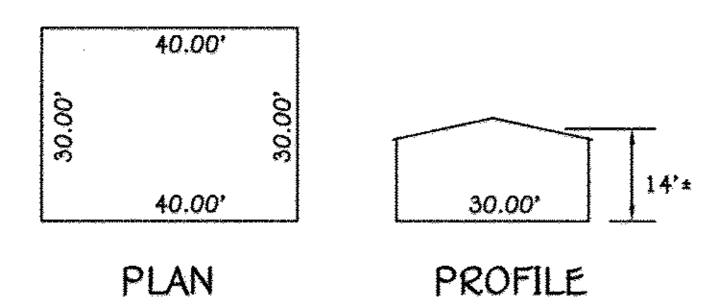
ZONED: NT

TAX MAP No. 29 GRID No. 19 PARCEL No. 371

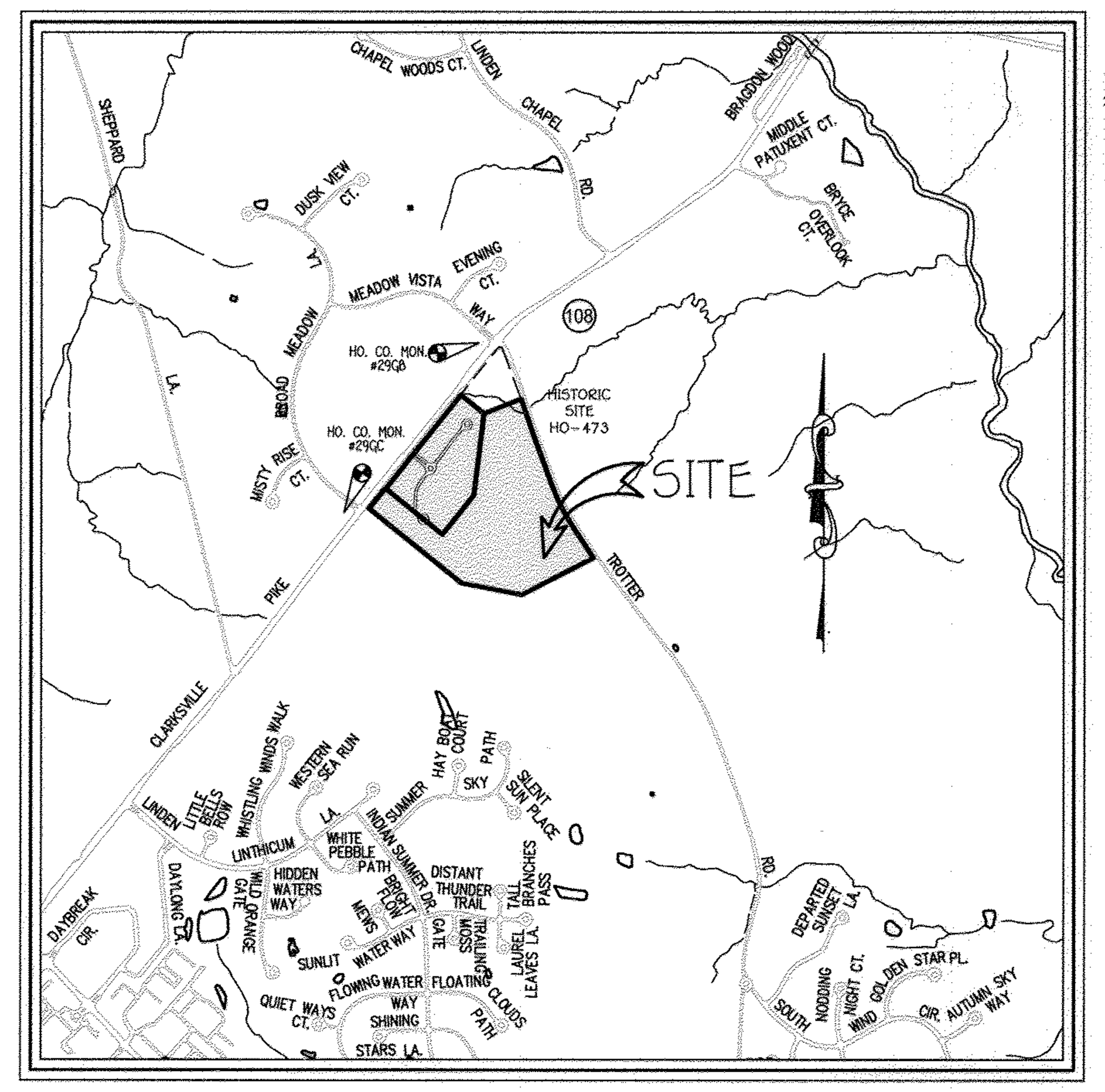
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



OFFICE BUILDING
SCALE: 1" = 30'



SHED
SCALE: 1" = 30'



ADC STREET MAP: MAP 4934 GRID B5

VICINITY MAP
SCALE: 1" = 1200'

BENCH MARKS

HO. CO. MON. 29GB
N566026.1700 E1333265.0543 ELEV. 455.965
CONCRETE MONUMENT SET
CORNER MEADOW VISTA ROAD & RT-108

HO. CO. MON. 29GC
N565530.8130 E1332240.7022 ELEV. 490.710
CONCRETE MONUMENT SET
RT-108 ACROSS FROM CLARKSVILLE ELEM. SCH.

GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
2. THE CONTRACTOR SHALL NOTIFY (MISS UTILITY) AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
3. THE EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD RUN SURVEY WITH 2' CONTOURS INTERVALS PREPARED BY FISHER, COLLINS & CARTER, INC. DATED OCTOBER, 2011.
4. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 29GB AND 29GC WERE USED FOR THIS PROJECT.
5. STORM WATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009. WE ARE PROVIDING STORM WATER MANAGEMENT BY THE USE OF TWO (2) M-6 MICRO BIO-RETENTION AREAS TO BE PRIVATELY OWNED AND MAINTAINED.
6. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
7. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
9. THE SUBJECT PROPERTY IS ZONED NT-OPEN SPACE CREDITED PER FDP-188-A-1 (PER 02/02/04 COMPREHENSIVE ZONING PLAN AND THE COMP-LITE ZONING AMENDMENTS DATED 07/28/06)
10. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
11. ON 7/26/12, HOWARD HUGHES CORPORATION REVIEWED AND APPROVED THE LANDSCAPE PLAN IN ACCORDANCE WITH THE NEW TOWN ALTERNATIVE COMPLIANCE PROVISIONS OF THE LANDSCAPE MANUAL. FINANCIAL SURETY RELATED TO THIS PROJECT FOR THE REQUIRED 10 SHADE TREES, 5 ORNAMENTAL TREES 18 EVERGREEN TREES, 89 SHRUBS AND 365 LINEAR FEET OF FENCE HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF $12,770.00.
12. IN ACCORDANCE WITH SECTION 16.1202.(B).(1).(IV) OF THE HOWARD COUNTY CODE THIS SITE IS EXEMPT FROM THE REQUIREMENT TO FILE A FOREST CONSERVATION PLAN -- A PLANNED UNIT DEVELOPMENT WHICH HAD PRELIMINARY DEVELOPMENT PLAN APPROVAL AND 50% OR MORE OF THE LAND RECORDED AND SUBSTANTIALLY DEVELOPED BEFORE THE ENACTMENT OF THE FOREST CONSERVATION ACT EFFECTIVE DECEMBER 31, 1992.
13. THERE IS NO 100 YEAR FLOODPLAIN ON THIS PROPERTY.
14. NO GRADING OR CONSTRUCTION SHALL BE PERMITTED WITHIN 10 FEET OF INDIVIDUAL GRAVE SITES, IN ACCORDANCE WITH SECTION 16.118 (c) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
15. THE BURIAL GROUND HAS NOT AND WILL NOT BE DISTURBED EXCEPT AS PERMITTED BY STATE LAW.
16. OFFICE BUILDING SHALL HAVE A 1" WATER HOUSE CONNECTION WITH A 3/4" OUTSIDE METER SETTING; STD. DET. W-3.27.
17. ACTIVITIES PROPOSED BY SDP-12-040 ARE NOT IN OR NEAR A DRAINAGEWAY OR AN AREA LIKELY TO SUPPORT WETLANDS. A COMPLETE STREAM AND WETLAND DELINEATION REPORT MAY BE REQUIRED FOR FUTURE PROJECTS ENCROACHING INTO THE STREAM AND WETLAND AREAS IDENTIFIED BY PLAT 11185.
18. THIS PROJECT IS SUBJECT TO COMPLYING WITH SETBACKS, LOT COVERAGE, BUILDING HEIGHT, PARKING AND OTHER REQUIREMENTS IN ACCORDANCE WITH FDP-188-A-1.
19. ALL EXTERIOR LIGHTING SHALL BE PROPOSED UNDER THE ARCHITECTURAL PLANS AND SHALL BE ORIENTED TO DIRECT OR REFLECT LIGHT INWARD AND DOWNWARD AWAY FROM ALL ADJOINING PUBLIC STREETS AND RESIDENTIAL AREAS. ALL OUTDOOR LIGHTING SHALL BE IN COMPLIANCE WITH THE OUTDOOR LIGHTING REQUIREMENT STANDARDS SPECIFIED IN SECTION 134 OF THE ZONING REGULATIONS.
20. THE PROPOSED BUILDINGS ARE TO BE SERVED BY PUBLIC WATER CONTRACT#44-3218 AND PRIVATE SEWER.
21. PARKING IS PROVIDED ALONG THE ACCESS DRIVE DURING FUNERAL SERVICES OR VISITATIONS (SEE GENERAL NOTE #14 ON SDP-11-039.
22. THIS PLAN IS SUBJECT TO DESIGN MANUAL WAIVER APPROVED ON MAY 31, 2012 BY DEVELOPMENT ENGINEERING DIVISION THAT REQUESTS A WAIVER TO SECTION 2.9 C, OF DESIGN MANUAL VOLUME IV TO UTILIZE A NON STANDARD SURFACE MATERIAL (GRAVEL LOT) FOR STORAGE OF VARIOUS SUPPLIES AND EQUIPMENT. THIS APPROVAL IS BASED ON THE EXPLANATION PROVIDED, WHICH INCLUDE THE FOLLOWING:
    1. IT WILL BE ONLY USED FOR A STORAGE AREA FOR VAULTS AND EQUIPMENT.
    2. THE PARKING AREA IS PRIVATELY OWNED.
    3. HEAVY TRACKED EQUIPMENT SHOULD NOT BE USED ON PAVED SURFACES.
23. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE MARS GROUP DATED JANUARY 30, 2012.

SITE ANALYSIS DATA CHART

A. TOTAL PROJECT AREA = 35.629 Ac.±.
B. LIMIT OF DISTURBED AREA =
   L.O.D. ASSOCIATED WITH BUILDING SITE: 48,032 SqFt. or 1.10 Ac±.
   L.O.D. ASSOCIATED WITH PR. WATER LINE 4,880 SqFt. or 0.11 Ac±.
   TOTAL L.O.D. = 52,912 SqFt. or 1.21 Ac±.
C. PRESENT ZONING DESIGNATION = NT "OPEN SPACE CREDITED"
   (PER 02/02/04 COMPREHENSIVE ZONING PLAN AND THE COMP-LITE ZONING AMENDMENTS DATED 07/28/06).
D. PROPOSED USE: OFFICE, SHED & GRAVEL STORAGE AREA.
E. FLOOR SPACE OF PROPOSED BUILDING: 2550 SQ.FT.
F. PARKING REQUIRED: 9 SPACES (3.3 SPACES PER 1,000 SqFt. OF OFFICE)
   PROPOSED BUILDING 2,550 SqFt. (2,550/1000) X 3.3 = 8.42 SPACES
G. PARKING PROVIDED: 9 SPACES
   8 STANDARD SPACES & 1 HANDICAP SPACE
H. OPEN SPACE ON SITE: 35.629 Ac.±
I. RECREATIONAL AREA PROVIDED: N/A
J. BUILDING COVERAGE OF SITE: 4698.72 SQ.FT. OR 0.10 Ac.±
   (MAXIMUM ALLOWED BUILDING COVERAGE = 10%); 35.629 Ac. x 10% = 3.56 Ac.±
   (EXISTING BUILDING COVERAGE = 0.28%) 0.10 Ac.± INCLUDES PROPOSED MAUSOLEUMS UNDER SDP-09-039
   (PROPOSED BUILDING COVERAGE = 0.28%) = 0.10 Ac.± OFFICE BUILDING AND SHED
   (TOTAL BUILDING COVERAGE = 0.56%) = 0.20 Ac.±
K. PREVIOUS HOWARD COUNTY FILES: FDP-188-A1, F-83-116, SDP-84-280, ECP-11-033, SDP-11-039, ECP-12-027
L. TOTAL AREA OF FLOODPLAIN LOCATED ON SITE: 0.00 Ac.
M. TOTAL AREA OF SLOPES IN EXCESS OF 25% = 0.00 Ac.
N. NET TRACT AREA = 35.629 Ac±
   (TOTAL SITE AREA - FLOODPLAIN - STEEP SLOPES AREA)
O. TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 1.74 Ac±
P. TOTAL AREA OF FOREST = 20.77 Ac.±
Q. TOTAL GREEN OPEN AREA = 14.07 Ac.±
R. TOTAL IMPERVIOUS AREA = 0.79 Ac.±

0' 1200' 2400' 4800'

Scale: 1" = 1200'

0' 30' 60' 120'

Scale: 1" = 30'

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE October 4, 2012

AS-BUILT CERTIFICATION FOR PSWM
Note: There is no "AS BUILT" information provided on this sheet.
CHARLES J. CROVO SR. #13204 11/9/16
Date

ADDRESS CHART	
LOT/PARCEL #	STREET ADDRESS
1	12005 CLARKSVILLE PIKE

APPROVED FOR PUBLIC WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER 1/9/2013
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

DATE	DESCRIPTION
3/31/17	AS-BUILT
11/18/14	REVISE SIZE OF WATER HOUSE CONNECTION & METER SETTING

REVISION BLOCK

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20784, EXPIRATION DATE: 2/22/13.

10/16/12
DATE

OWNERS & DEVELOPER

COLUMBIA MEMORIAL PARK LLC
C\O MR. WALKER
4111 PENNSYLVANIA AVE.
SUITLAND, MARYLAND 20746
240-447-7525

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning 2/25/13 Date

Chief, Division of Land Development 2-25-13 Date

Chief, Development Engineering Division 2-19-13 Date

SUBDIVISION			SECTION/AREA		LOT NO.
COLUMBIA CEMETERY SITE			SECTION 1 AREA 1 SECTION 1 AREA 2		1 3
PLAT No.	PARCEL NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
11185/5489	371	NT	29	5th	605501

TITLE SHEET

COLUMBIA MEMORIAL PARK
CEMETERY SITE
SECTION 1 AREA 1 LOT 1, SECTION 1 AREA 2 LOT 3
PROPOSED OFFICE BUILDING, SHED AND GRAVEL STORAGE AREA
PREVIOUS HOWARD COUNTY FILES: FDP-188-A1, F-83-116, SDP-84-280, ECP-11-033, SDP-11-039, ECP-12-027
TAX MAP No.: 29 GRID No.: 19 PARCEL No.: 371
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JULY 16, 2012

SDP-12-040

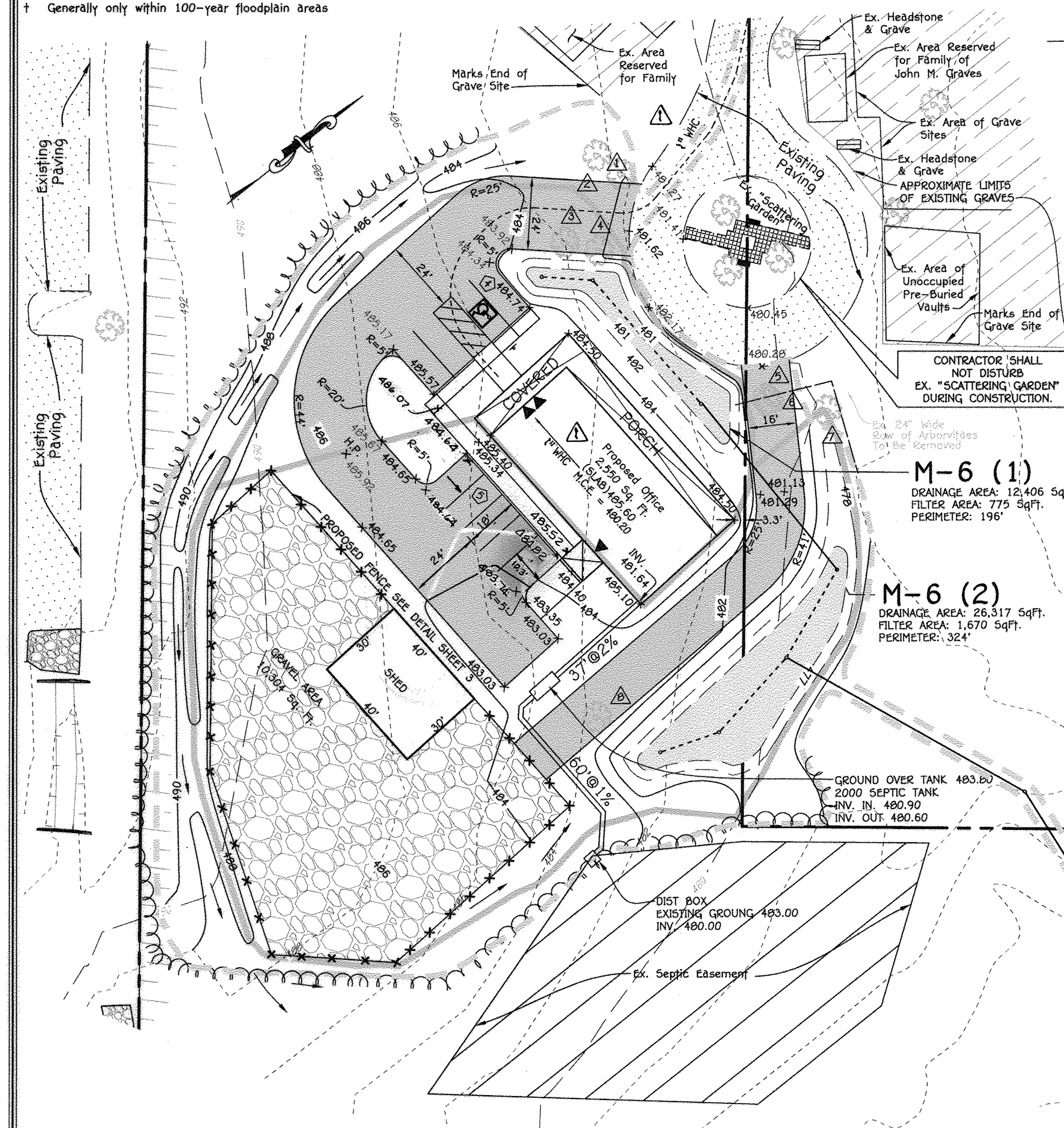
THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

SOILS LEGEND

SOIL	NAME	CLASS
** Ba	Baile silt loam	D
ChA	Chester silt loam, 0 to 3 percent slopes	B
ChB2	Chester silt loam, 3 to 8 percent slopes, moderately eroded	B
ChC2	Chester silt loam, 8 to 15 percent slopes, moderately eroded	B
EkA	Elioak silt loam, 0 to 3 percent slopes	B
EkB2	Elioak silt loam, 3 to 8 percent slopes, moderately eroded	B
GlB2	Glenelg loam, 3 to 8 percent slopes, moderately eroded	B
GlC2	Glenelg loam, 8 to 15 percent slopes, moderately eroded	B
* GnB2	Glenville silt loam, 3 to 8 percent slopes, moderately eroded	C
** Ha	Hatboro silt loam	D
MgB2	Manor gravelly loam, 3 to 8 percent slopes, moderately eroded	B
MgC2	Manor gravelly loam, 8 to 15 percent slopes, moderately eroded	B
MlA	Manor loam, 0 to 3 percent slopes	B
MlB2	Manor loam, 3 to 8 percent slopes, moderately eroded	B
MlC2	Manor loam, 8 to 15 percent slopes, moderately eroded	B
MlD2	Manor loam, 15 to 25 percent slopes, moderately eroded	B
MnD	Manor very stony loam, 3 to 25 percent slopes	B

NOTES:
- * Hydric soils and/or contains hydric inclusions
- ** May contain hydric inclusions
- † Generally only within 100-year floodplain areas

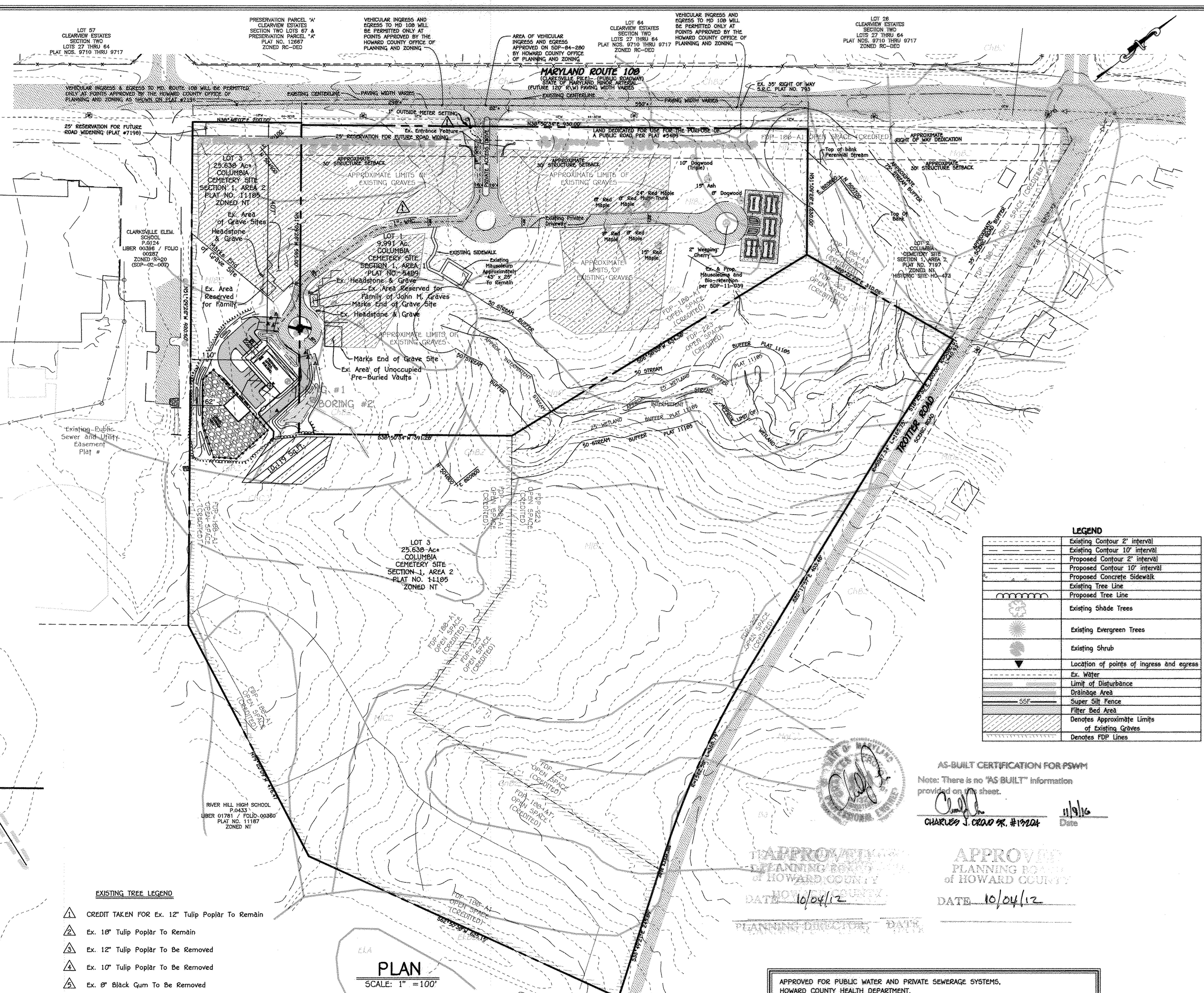
NO GRADING OR CONSTRUCTION SHALL BE PERMITTED WITHIN 10 FEET OF INDIVIDUAL GRAVE SITES AS STATED IN 16.118(c) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.



NOTE: FOR PROPOSED LANDSCAPING SEE SHEET 3 OF 7

PLAN
SCALE: 1" =30'

0' 30' 60' 120'
Scale: 1" = 30'



LEGEND

Symbol	Description
	Existing Contour 2' interval
	Existing Contour 10' interval
	Proposed Contour 2' interval
	Proposed Contour 10' interval
	Proposed Concrete Sidewalk
	Existing Tree Line
	Proposed Tree Line
	Existing Shade Trees
	Existing Evergreen Trees
	Existing Shrub
▼	Location of points of ingress and egress
	Ex. Water
	Limit of Disturbance
	Drainage Area
SSF	Super Silt Fence
	Filter Bed Area
	Denotes Approximate Limits of Existing Graves
	Denotes FDP Lines

AS-BUILT CERTIFICATION FOR PSWM

Note: There is no "AS BUILT" information provided on this sheet.

CHARLES J. CROVO SR. #13204 — 11/9/16 — Date

APPROVED PLANNING BOARD of HOWARD COUNTY DATE 10/04/12

PLANNING DIRECTOR DATE

APPROVED PLANNING BOARD of HOWARD COUNTY DATE 10/04/12

EXISTING TREE LEGEND

1. CREDIT TAKEN FOR Ex. 12" Tulip Poplar To Remain
2. Ex. 18" Tulip Poplar To Remain
3. Ex. 12" Tulip Poplar To Be Removed
4. Ex. 10" Tulip Poplar To Be Removed
5. Ex. 8" Black Gum To Be Removed
6. Ex. 12" Black Cherry To Be Removed
7. Ex. 15" Ash To Be Removed
8. Ex. 29" Ash To Be Removed

PLAN
SCALE: 1" =100'

0' 100' 200' 400'
Scale: 1" = 100'

APPROVED FOR PUBLIC WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — 1/9/2013 — DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

DATE	DESCRIPTION
3/31/17	AS-BUILT
11/18/14	⚠ REVISE SIZE OF WHC & METER/REVISE ALIGNMENT AT ENTRANCE
9/4/13	REVISION TO INCLUDE SECOND HANDICAP ACCESS RTE TO PROP. BLDG.

REVISION BLOCK

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20784, EXPIRATION DATE: 2/22/13.

ALDO M. VITUCCI — 10/16/12 — DATE

OWNERS

COLUMBIA MEMORIAL PARK LLC
C\O JESSE WALKER
4111 PENNSYLVANIA AVE.
SUITLAND MARYLAND, 20904
240-447-7525

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 2/25/13 — Date

Chief, Division of Land Development — 2-25-13 — Date

Chief, Development Engineering Division — 2-19-13 — Date

SUBDIVISION	SECTION/AREA	LOT NO.
COLUMBIA CEMETERY SITE	SECTION 1 AREA 1 SECTION 1 AREA 2	1 3

PLAT No.	PARCEL NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
11185/5489	371	NT	29	5th	605501

SITE DEVELOPMENT PLAN AND LANDSCAPE PLAN

COLUMBIA MEMORIAL PARK

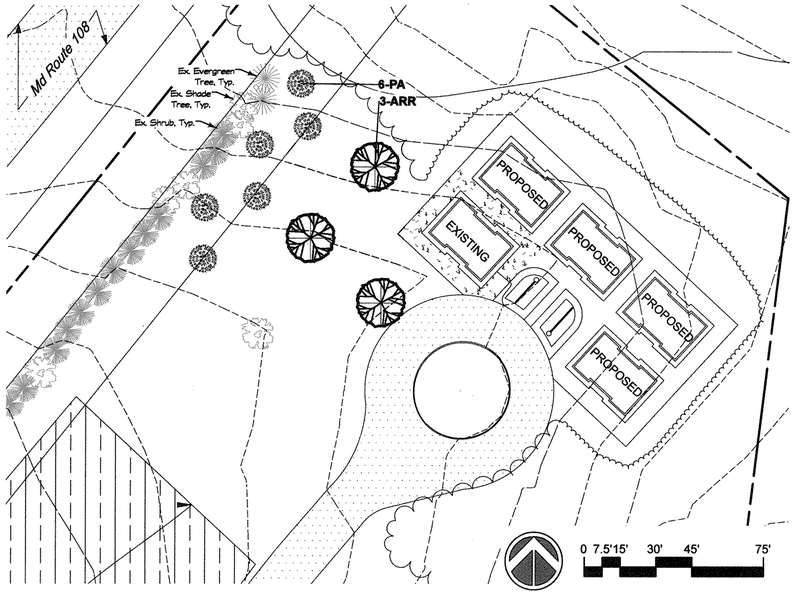
CEMETERY SITE
SECTION 1 AREA 1 LOT 1, SECTION 1 AREA 2 LOT 3
PROPOSED OFFICE BUILDING, SHED AND GRAVEL STORAGE AREA
PREVIOUS HOWARD COUNTY FILES: FDP-188-A1, F-83-116, SDP-84-280, ECP-11-033, SDP-11-039, ECP-12-027

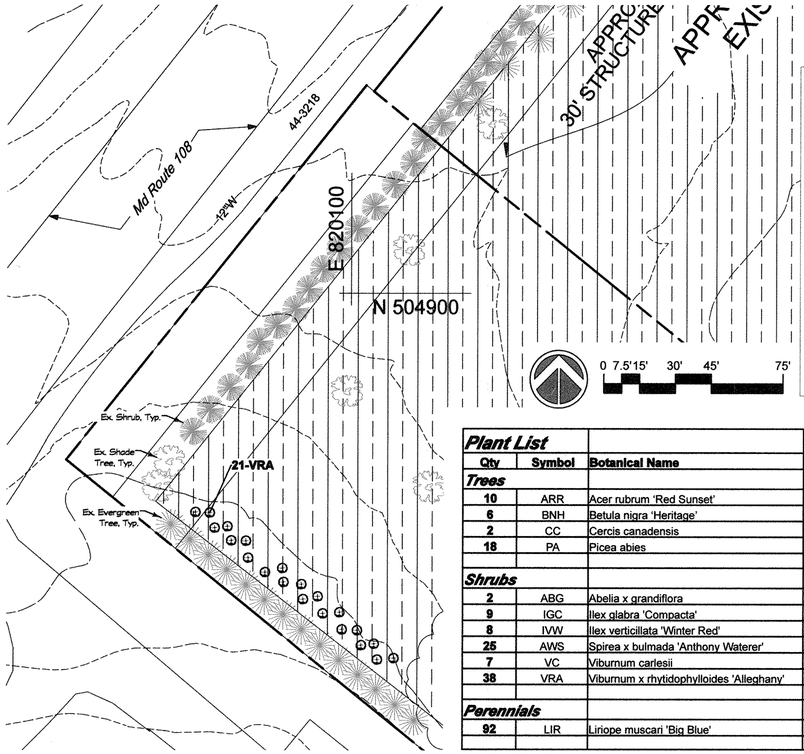
TAX MAP No.: 29 GRID No.: 19 PARCEL No.: 371
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JULY 16, 2012

SDP-12-040

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

I:\2010\10056\dwg\SDP Office\10056 SDP Office.dwg, Sheet 2, 10/16/2012 10:37:39 AM, 1:1





PROPOSED PLANTING LEGEND

Proposed Shade Trees
1-ARR

Proposed Ornamental Trees
1-BNH
1-CC

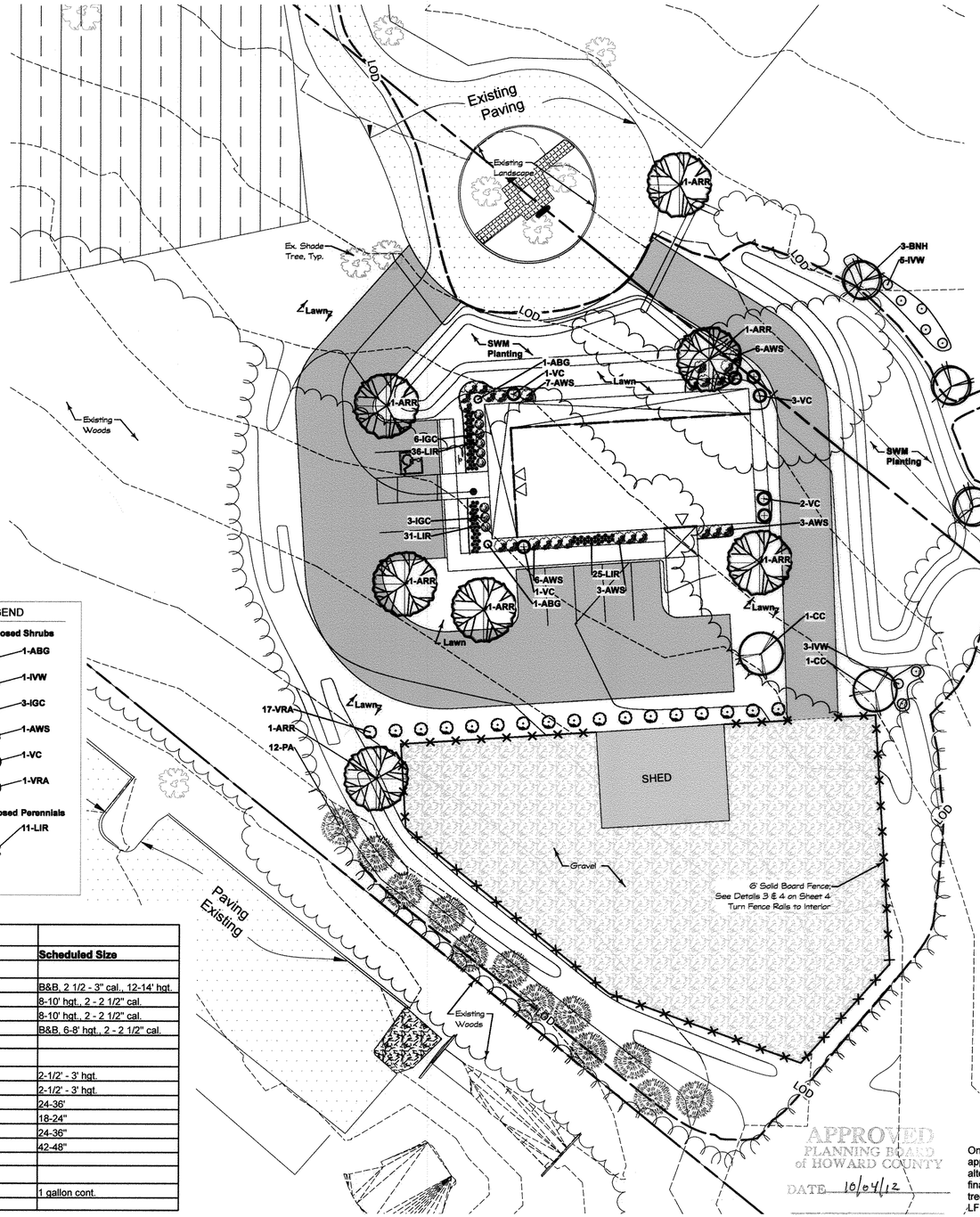
Proposed Evergreen Trees
1-PA

Proposed Shrubs
1-ABG
1-IVW
3-IGC
1-AWS
1-VC
1-VRA

Proposed Perennials
11-LIR

Plant List

Qty	Symbol	Botanical Name	Common Name	Scheduled Size
Trees				
10	ARR	Acer rubrum 'Red Sunset'	Red Maple Red Sunset	B&B, 2 1/2 - 3" cal., 12-14' hgt.
6	BNH	Betula nigra 'Heritage'	Heritage River Birch	8-10' hgt., 2 - 2 1/2" cal.
2	CC	Cercis canadensis	Eastern Redbud	8-10' hgt., 2 - 2 1/2" cal.
18	PA	Picea abies	Norway Spruce	B&B, 6-8' hgt., 2 - 2 1/2" cal.
Shrubs				
2	ABG	Abelia x grandiflora	Glossy Abelia	2-1/2' - 3' hgt.
9	IGC	Ilex glabra 'Compacta'	Compacta Inkberry	2-1/2' - 3' hgt.
8	IVW	Ilex verticillata 'Winter Red'	Winter Red Winterberry	24-36'
25	AWS	Spirea x bulmada 'Anthony Waterer'	Anthony Waterer Spirea	18-24"
7	VC	Viburnum carlesii	Korean Spice Viburnum	24-36"
38	VRA	Viburnum x rhytidophylloides 'Alleghany'	'Alleghany' Leatherleaf Viburnum	42-48"
Perennials				
92	LIR	Liriope muscari 'Big Blue'	Big Blue Lily Turf	1 gallon cont.



Developer's/Builder's Certificate:

I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124(c) Alternative Compliance of the Howard County Subdivision and Land Development Regulations and the Landscape Manual. I/We further certify that upon completion, a letter of notice, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

Jesse Walker 10/22/12
Developer/Builder Date

--The owner, tenant and/or their agents shall be responsible for maintenance of the required landscaping, plant materials, berms, fences and walls. All plant materials shall be maintained in good growing condition and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.

-- At the time of installment, all shrubs and other plantings herewith listed and approved for this site shall be of the proper height requirements in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to applicable plans and certificates.

--Should any tree designated for preservation, for which credit is given, die prior to release of bonds, the owner will be required to replace the tree with the equivalent species or with a tree which will obtain the same height, spread and growth characteristics. The replacement tree must be a minimum of 3 inches in caliper and installed as required in the Landscape Manual.

--No clearing of existing vegetation is permitted within the landscape edge for which credit is being taken; however, landscape maintenance is authorized.

AS-BUILT CERTIFICATION FOR PSWM

Note: There is no "AS BUILT" information provided on this sheet.

CHARLES J. CERVO JR. #19204 11/9/16
Date

LEGEND

	Existing Contour 2' interval
	Existing Contour 10' interval
	Proposed Contour 2' interval
	Proposed Contour 10' interval
	Proposed Concrete Sidewalk
	Existing Tree Line
	Proposed Tree Line
	Existing Shade Trees
	Existing Evergreen Trees
	Existing Shrub
	Location of points of ingress and egress
	Ex. Water
LOD	Limit of Disturbance
	Drainage Area
SSF	Super Silt Fence
	Filter Bed Area
	Denotes Approximate Limits of Existing Graves
	Denotes FDP Lines
	Proposed Fence Line

0 5' 10' 20' 30' 50'

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 10/04/12

On July 26, 2012, Howard Hughes Corporation reviewed and approved the landscape plan in accordance with the new town alternative compliance provisions of the landsdcape manual financial surety related to this projects for the required 10 shade trees, 5 Ornamental trees, 18 evergreen trees, 89 shrubs, & 365 LF of fencing has been posted as part of the developer's agreement in the amount of $12,770.00.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

SLATER ASSOCIATES, INC.
5560 Sterrett Pl. Suite 302
Columbia, MD 21044
410.992.0212 - fax
410.992.0001 - phone
www.slaterassociates.com
Landscape Architecture · Site Planning · Land Planning

REVISION BLOCK

DATE	DESCRIPTION
09-25-12	ADD NORTH ARROW, REVISE LANDSCAPE, ADD SYMBOLS TO LEGEND
9/01/17	AS-BUILT

STATE OF MARYLAND JOHN B. SLATER No. 205 REGISTERED LANDSCAPE ARCHITECT

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 205, EXPIRATION DATE: 5-20-13.

JOHN B. SLATER 10-16-12
DATE

OWNERS

COLUMBIA MEMORIAL PARK LLC
C\O JESSE WALKER
4111 PENNSYLVANIA AVE.
SUITLAND MARYLAND, 20904
240-447-7525

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning Date 2/25/13

Chief, Division of Land Development Date 2-25-13

Chief, Development Engineering Division Date 2.19.13

SUBDIVISION	SECTION/AREA	LOT NO.
COLUMBIA CEMETERY SITE	SECTION 1 AREA 1 SECTION 1 AREA 2	1 3

PLAT No.	PARCEL NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
11185/5489	371	NT	29	5th	605501

LANDSCAPE PLAN

COLUMBIA MEMORIAL PARK

CEMETERY SITE
SECTION 1 AREA 1 LOT 1
SECTION 1 AREA 2 LOT 3

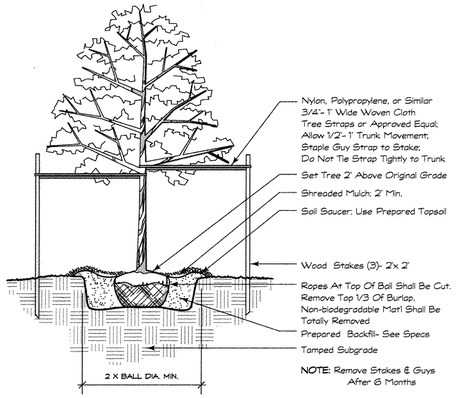
Proposed Office Building, Shed, and Gravel Storage Area.
Previous Howard County Files: FDP-188-A1, F-83-116, SDP-84-280, ECP-11-033, SDP-11-039, ECP-12-027

TAX MAP No.: 29 GRID No.: 19 PARCEL No.: 371

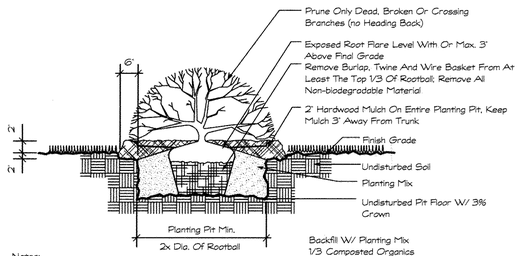
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: 1" = 20'-0" DATE: SEPTEMBER 25, 2012
SHEET 3 OF 7 SDP-12-040

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

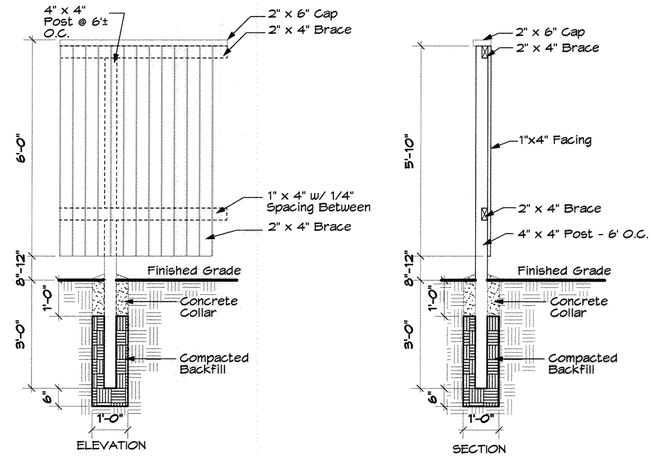


1 Tree Planting Detail
Scale: 1/2" = 1'-0"



Notes:
1. Water @ Planting When Soil Pit Is 1/2 Backfilled
2. Container Shrubs - Completely Remove Non-biodegradable Containers And Scarify Rootball Using Sharp Blade

2 Shrub Planting Detail
Scale: 1/2" = 1'-0"



NOTE:
1. All wood shall be pressure treated or approved equal.
2. All wood construction with galvanized nails.
3. Notch 4" x 4" posts to receive 2" x 4" stringers as shown.
4. All wood members shall be stained dark brown, samples to be approved by Landscape Architect.

4 6' Solid Board Fence: Flat Top
Scale: 1/2" = 1'-0"

Developer's/Builder's Certificate:

I/We certify that the landscaping shown on this plan will be done according to the plan. Section 16.124(c) Alternative Compliance of the Howard County Subdivision and Land Development Regulations and the Landscape Manual. I/We further certify that upon completion, a letter of notice, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

Jesse Walker 10/22/12
Developer/Builder Date

--The owner, tenant and/or their agents shall be responsible for maintenance of the required landscaping, plant materials, berms, fences and walls. All plant materials shall be maintained in good growing condition and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.

-- At the time of installment, all shrubs and other plantings herewith listed and approved for this site shall be of the proper height requirements in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to applicable plans and certificates.

--Should any tree designated for preservation, for which credit is given, die prior to release of bonds, the owner will be required to replace the tree with the equivalent species or with a tree which will obtain the same height, spread and growth characteristics. The replacement tree must be a minimum of 3 inches in caliper and installed as required in the Landscape Manual.

--No clearing of existing vegetation is permitted within the landscape edge for which credit is being taken; however, landscape maintenance is authorized.

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 10/04/12

AS-BUILT CERTIFICATION FOR PSWM
Note: There is no "AS BUILT" information provided on this sheet.
CHARLES J. CROVO SR. #13204 11/9/16
Date

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

SLATER ASSOCIATES, INC.
Landscape Architecture · Site Planning · Land Planning
5560 Sterrett Pl. Suite 302
Columbia, MD 21044
410.992.0212 - fax
410.992.0001 - phone
www.slaterassociates.com

REVISION BLOCK

DATE	DESCRIPTION
3/21/17	AS-BUILT

STATE OF MARYLAND JOHN B. SLATER REGISTERED LANDSCAPE ARCHITECT 298

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 298, EXPIRATION DATE: 3-26-13

John B. Slater 10-16-12
JOHN B. SLATER DATE

OWNERS

COLUMBIA MEMORIAL PARK LLC
C\O JESSE WALKER
4111 PENNSYLVANIA AVE.
SUITLAND MARYLAND, 20904
240-447-7525

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning Date 2/25/13

Chief, Division of Land Development Date 2-25-13

Chief, Development Engineering Division Date 2-19-13

SUBDIVISION				SECTION/AREA	LOT NO.
COLUMBIA CEMETERY SITE				SECTION 1 AREA 1 SECTION 1 AREA 2	1 3
PLAT No.	PARCEL NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
11185/5489	371	NT	29	5th	605501

LANDSCAPE DETAILS

COLUMBIA MEMORIAL PARK
CEMETERY SITE
SECTION 1 AREA 1 LOT 1
SECTION 1 AREA 2 LOT 3

Proposed Office Building, Shed, and Gravel Storage Area.
Previous Howard County Files: FDP-188-A1, F-83-116, SDP-84-280, ECP-11-033, SDP-11-039, ECP-12-027

TAX MAP No.: 29 GRID No.: 19 PARCEL No.: 371

FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: 1" = 20'-0" DATE: SEPTEMBER 25, 2012
SHEET 4 OF 7

SDP-12-040

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

DEFINITION

Using vegetation as cover for barren soil to protect it from forces that cause erosion.

PURPOSE

Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES

This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration O(up to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary Soil Stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc.

EFFECTS ON WATER QUALITY AND QUANTITY

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth.

Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone.

Sediment control devices must remain in place during grading, seedbed preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

SECTION 1 – VEGETATIVE STABILIZATION METHODS AND MATERIALS

A. Site Preparation
- i. Install erosion and sediment control structures (either temporary of permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
- ii. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
- iii. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.

B. Soil Amendments (Fertilizer and Lime Specifications)
- i. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
- ii. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee of the producer.
- iii. Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 98-100% will pass through a #20 mesh sieve.
- iv. Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.

C. Seedbed Preparation
- i. Temporary Seeding
  - a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3:1) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
  - b. Apply fertilizer and lime as prescribed on the plans.
  - c. In corporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.
- ii. Permanent Seeding
  - a. Minimum soil conditions required for permanent vegetative establishment:
    1. Soil pH shall be between 6.0 and 7.0.
    2. Soluble salts shall be less than 500 parts per million (ppm).
    3. The soil shall contain less than 40% clay, but enough fine grained material (>30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or serecia lespedezas is to be planted, then a sandy soil (<30% silt plus clay) would be acceptable.
    4. Soil shall contain 1.5% minimum organic matter by weight.
    5. Soil must contain sufficient pore space to permit adequate root penetration.
    6. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
  - b. Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
  - c. Apply soil amendments as per soil test or as included on the plans.
  - d. Mix soil amendments into the top 3-5" of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-3" of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.

D. Seed Specifications
- i. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.

Note: Seed tags shall be made available to the inspector to verify type and rate of seed used.
- ii. Inoculant – The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75°-80° F. can weaken bacteria and make the inoculant less effective.

E. Methods of Seeding
- i. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a cultipacker seeder.
  - a. If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen; maximum of 100 lbs. per acre total of soluble nitrogen; P205 (phosphorous); 200 lbs/ac; K20 (potassium): 200 lbs/ac.
  - b. Lime – use only ground agricultural limestone, (Up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
  - c. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.
- ii. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
  - a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact.
  - b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
- iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.
  - a. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.
  - b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

F. Mulch Specifications (In order of preference)
- i. Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonable bright in color, and shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
- ii. Wood Cellulose Fiber Mulch (WCFM)
  - a. WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
  - b. WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
  - c. WCFM, including dye, shall contain no germination or growth inhibiting factors.
  - d. WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
  - e. WCFM material shall contain no elements of compounds at concentration levels that will be phytol-toxic.
  - f. WCFM must conform to the following physical requirements: fiber length to approximately 10 mm. , diameter approximately 1 mm., pH range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90% minimum.

Note: Only sterile straw mulch should be used in areas where one species of grass is desired.

G. Mulching Seeded Areas – Mulch shall be applied to all seeded areas immediately after seeding.
- i. If grading is completed outside of the seeding season, mulch along shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
- ii. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1" and 2". Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
- iii. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.

H. Securing Straw Mulch (Mulch Anchoring): Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:
- i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should be used on the contour if possible.
- ii. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and crest of banks. The remainder of area should be appear uniform after binder application. Synthetic binders – such as Acrylic DLR (Agro-Tack), DCA-70 Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.
- iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.

I. Incremental Stabilization – Cut Slopes
- i. All cuts slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15'.
- ii. Construction sequence (Refer to Figure 3 below):
  - a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.
  - b. Perform Phase 1 excavation, dress, and stabilize.
  - c. Perform Phase 2 excavation, dress and stabilize. Overseed Phase 1 areas as necessary.
  - d. Perform final phase excavation, dress and stabilize. Overseed previously seeded areas as necessary.

Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions int he operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization.

J. Incremental Stabilization of Embankments – Fill Slopes
- i. Embankments shall be constructed in lifts as prescribed on the plans.
- ii. Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 15", or when the grading operation ceases as prescribed in the plans.
- iii. At the end of each day, temporary berms and pipe slope drains should be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-erosive manner to a sediment trapping device.
- iv. Construction sequence: Refer to Figure 4 (below).
  - a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct slope silt fence on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.
  - b. Place Phase 1 embankment, dress and stabilize.
  - c. Place Phase 2 embankment, dress and stabilize.
  - d. Place final phase embankment, dress and stabilize. Overseed previously seeded areas as necessary.

Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of and placement of topsoil (if required) grading and permanent seed and mulch. any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

SECTION 2 – TEMPORARY SEEDING

Vegetation – annual grass or grain used to provide cover on disturbed areas for up to 12 months. For longer duration of vegetative cover, Permanent Seeding is required.

A. Seed mixtures – Temporary Seeding

- i. Select one or more of the species or mixtures listed in Table 26 for the appropriate Plant Hardiness Zone (from Figure 5) and enter them in the Temporary seeding summary below, along with application rates, seeding dates and seeding depths. If this summary is not put on the plans and completed, then Table 26 must be put on the plans.
- ii. For sites having soil tests performed, the rates shown on this table shall be deleted and the rates recommended by the testing agency shall be written in. Soil tests are not required for Temporary Seeding.

Seed Mixture (Hardiness Zone 6b) From Table 26					Fertilizer Rate (10-10-10)	Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths		
1	BARLEY OATS RYE	122 96 140	3/1 – 5/15, 8/15 – 10/15	1" – 2" 1" – 2" 1" – 2"	600 lb/ac (15 lb/1000sf)	2 tons/ac (100 lb/1000sf)

SECTION 3 – PERMANENT SEEDING

Seeding grass and legumes to establish groung cover for a minimum of one year on disturbed areas generally receiving low maintenance.

A. Seed mixtures – Permanent Seeding

- i. Select one or more of the species or mixtures listed in Table 25 for the appropriate Plant Hardiness Zone (from Figure 5) and enter them in the Permanent Seeding Summary below, along with application rates and seeding dates. Seeding depths can be estimated using Table 26. If this summary is not put on the construction plans and completed, then Table 25 must be put on the plans. Additional planting specifications for exceptional sites such as shorelines, streambanks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-SCS Techinical Field Office Guide, Section 342 – Critical Area Planting. For special lawn maintenance areas, see Sections IV Sod and V Turfgrass.
- ii. For sites having disturbed area over 5 areas, the rates shown on this table shall be deleted and the rates recommended by the soil testing agency shall be written in.
- iii. For areas receiving low maintenance, apply ureaform fertilizer (46-0-0) at 3 1/2 lbs/1000 sq. ft. (150 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed at the time of seeding.

Seed Mixture (Hardiness Zone 6b) From Table 25					Fertilizer Rate (10-20-20)			Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P205	K20	
3	TALL FESCUE (85%) PERENNIAL RYE GRASS (10%) KENTUCKY BLUEGRASS (5%)	125 15 10	3/1 – 5/15, 8/15 – 10/15	1" – 2"	90 lb/ac (2.0 lb/ 1000sf)	175 lb/ac (4 lb/ 1000sf)	175 lb/ac (4 lb/ 1000sf)	2 tons/ac (100 lb/ 1000sf)
10	TALL FESCUE (80%) HARD FESCUE (20%)	120 30	3/1 – 5/15, 8/15 – 10/15	1" – 2"				

SEDIMENT CONTROL NOTES

1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LISCENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
3) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4) ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7) SITE ANALYSIS:

TOTAL AREA OF SITE	35.63	ACRES
AREA DISTURBED	1.21	ACRES
AREA OF L.O.D. TO BE ROOFED OR PAVED	0.60	ACRES
AREA OF L.O.D. TO BE VEGETATIVELY STABILIZED	0.61	ACRES
TOTAL CUT	1,179	CU.YDS.
TOTAL FILL	622	CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION		CU.YDS.

8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGHTS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

SEQUENCE OF CONSTRUCTION

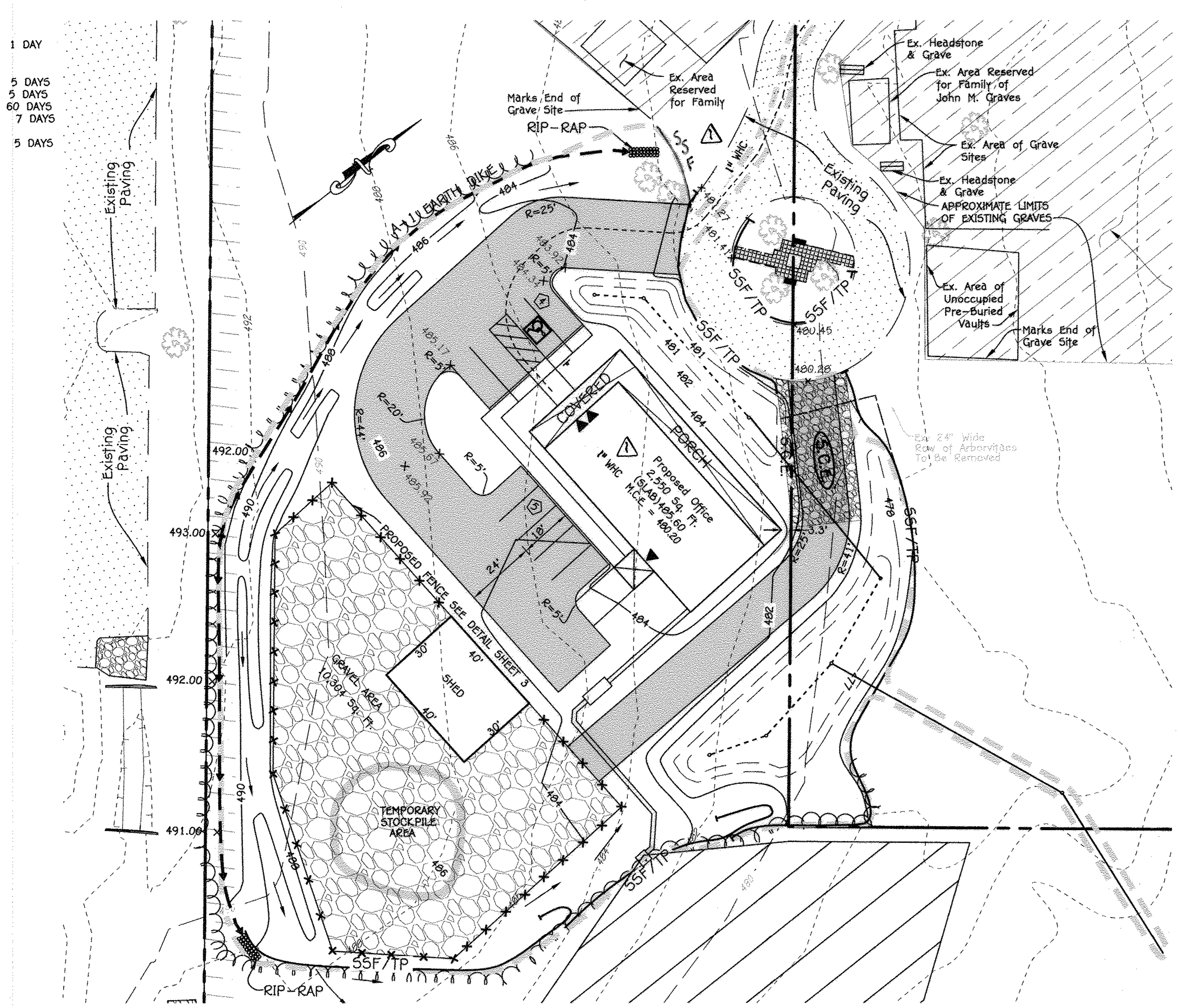
1. OBTAIN GRADING PERMIT	1 DAY
2. INSTALL SEDIMENT EROSION CONTROL DEVICES AS SHOWN ON PLAN, WHICH INCLUDE SUPER SILT FENCE AND TREE PROTECTION, AS WELL A STONE CONSTRUCTION ENTRANCE	5 DAYS
3. CLEAR AND GRUB TO LIMITS OF DISTURBANCE	5 DAYS
4. CONSTRUCT BUILDING	60 DAYS
5. FINE GRADE SITE AND INSTALL PERMANENT SEEDING AND LANDSCAPE	7 DAYS
6. REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERMISSION IS GRANTED BY E/S CONTROL INSPECTOR.	5 DAYS

LEGEND

Symbol	Description
	Existing Contour 2' interval
	Existing Contour 10' interval
	Proposed Contour 2' interval
	Proposed Contour 10' interval
	Proposed Concrete Sidewalk
	Existing Tree Line
	Proposed Tree Line
	Existing Shade Trees
	Existing Evergreen Trees
	Existing Shrub
	Location of points of ingress and egress
	Ex. Water
	Limit of Disturbance
	Drainage Area
SSF	Super Silt Fence
	Filter Bed Area
	Denotes Approximate Limits of Existing Graves
	Denotes FDP Lines

NOTE: FOR PROPOSED LANDSCAPING SEE SHEET 3 OF 7

NO GRADING OR CONSTRUCTION SHALL BE PERMITTED WITHIN 10 FEET OF INDIVIDUAL GRAVE SITES AS STATED IN 16.118(c) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.



PLAN
SCALE: 1" =30'

NOTE:
ALL SEDIMENT CONTROLS DAMAGED BY CONSTRUCTION ACTIVITIES ARE TO BE REPAIRED IMMEDIATELY.

0' 30' 60' 120'
Scale: 1" = 30'

APPROVED PLANNING BOARD of HOWARD COUNTY
DATE 10/04/12

AS-BUILT CERTIFICATION FOR PSWM
Note: There is no "AS BUILT" information provided on this sheet.
CHARLES J. CROVO SR. #13204 — Date 11/9/16

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK – 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 – 2855

DATE	DESCRIPTION
3/31/17	AS-BUILT
11/18/14	△ REVISE SIZE OF WATER HOUSE CONNECTION & METER SETTING

REVISION BLOCK

ENGINEER'S CERTIFICATE
"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
Signature of Engineer — ALDO M. VITUCCI — 10/16/12 Date

BUILDER/DEVELOPER'S CERTIFICATE
"I/We certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
Signature of Developer — 10/22/12 Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
Howard SCD — 10/24/12 Date

OWNERS
COLUMBIA MEMORIAL PARK LLC
C\O JESSE WALKER
4111 PENNSYLVANIA AVE.
SUITLAND MARYLAND, 20904
240-447-7525

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Director – Department of Planning and Zoning — 2/25/13 Date
Chief, Division of Land Development — 2-25-13 Date
Chief, Development Engineering Division — 2.19.13 Date

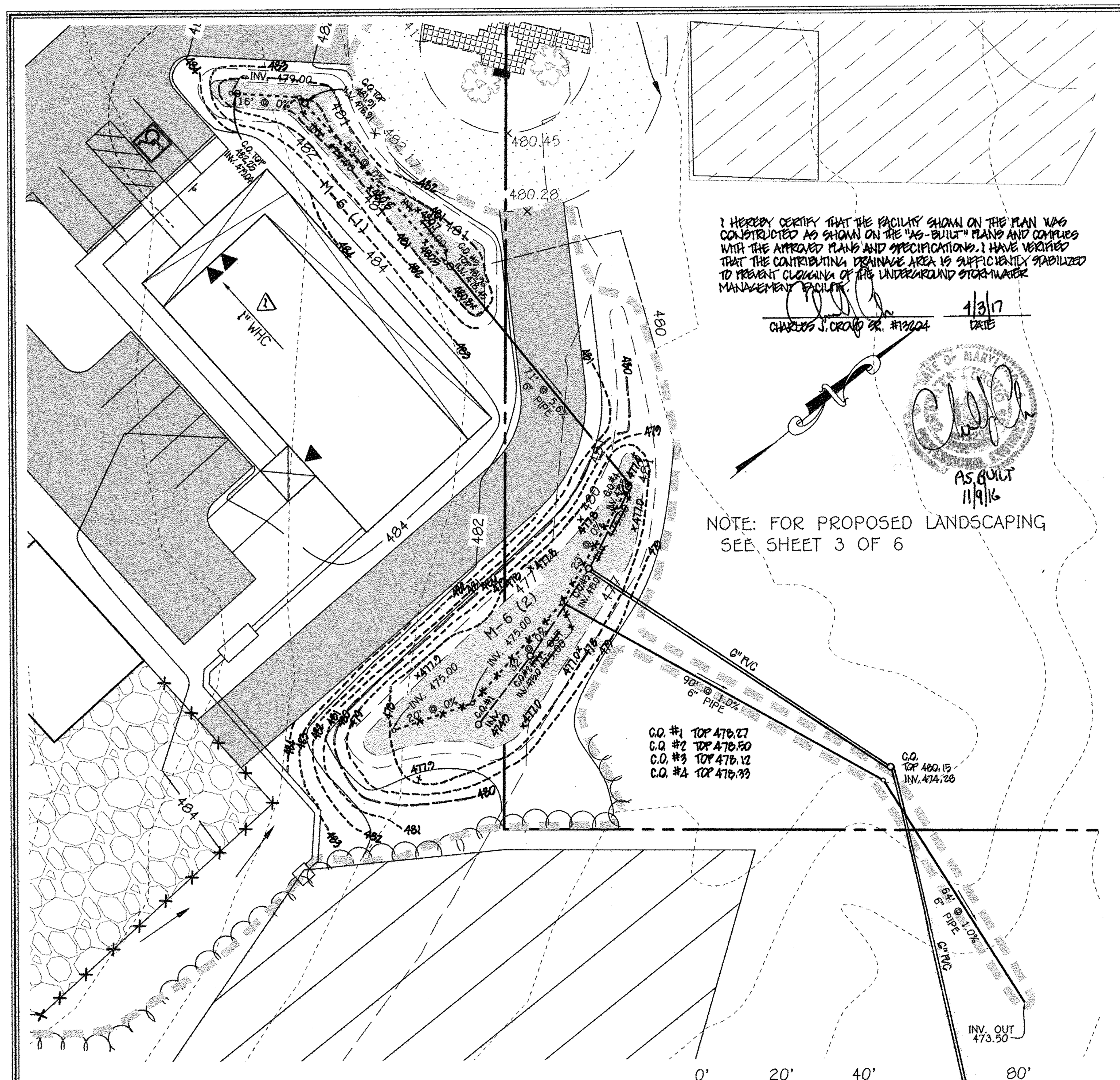
SUBDIVISION			SECTION/AREA		LOT NO.
COLUMBIA CEMETERY SITE			SECTION 1 AREA 1 SECTION 1 AREA 2		1 3
PLAT No.	PARCEL NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
11185/5489	371	NT	29	5th	605501

SEDIMENT AND EROSION CONTROL PLAN, NOTES AND SEWER PROFILE

COLUMBIA MEMORIAL PARK

CEMETERY SITE
SECTION 1 AREA 1 LOT 1, SECTION 1 AREA 2 LOT 3
PROPOSED OFFICE BUILDING, SHED AND GRAVEL STORAGE AREA
PREVIOUS HOWARD COUNTY FILES: FDP-188-A1, F-83-116, SDP-84-280, ECP-11-033, SDP-11-039, ECP-12-027
TAX MAP No.: 29 GRID No.: 19 PARCEL No.: 371
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JULY 16, 2012
SHEET 5 OF 7 SDP-12-040

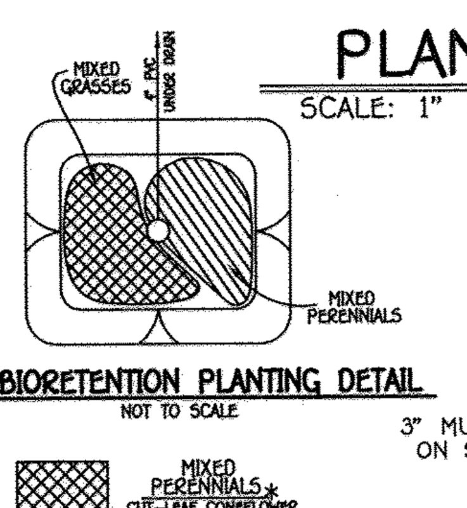
THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET



NO GRADING OR CONSTRUCTION SHALL BE PERMITTED WITHIN 10 FEET OF INDIVIDUAL GRAVE SITES AS STATED IN 16.118(c) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.

PLAN

SCALE: 1" =20'



MICRO-BIORETENTION PLANTING DETAIL

NOT TO SCALE

MIXED PERENNIALS* — CUT-LEAF CONEFLOWER, CARDINAL FLOWER, TRADUSCANT ASTER

SHRUBS* — INK BERRY, ARROWWOOD, BAYBERRY

* SEE PLANT MATERIAL CHARTS FOR QUANTITIES AND SPACING

NOTE: PLANT MATERIAL MUST COVER AT LEAST 50% OF THE SURFACE AREA OF THE MICRO-BIORETENTION

DRAINAGE AREA M-6 (1) MICRO-BIORETENTION PLANT MATERIAL

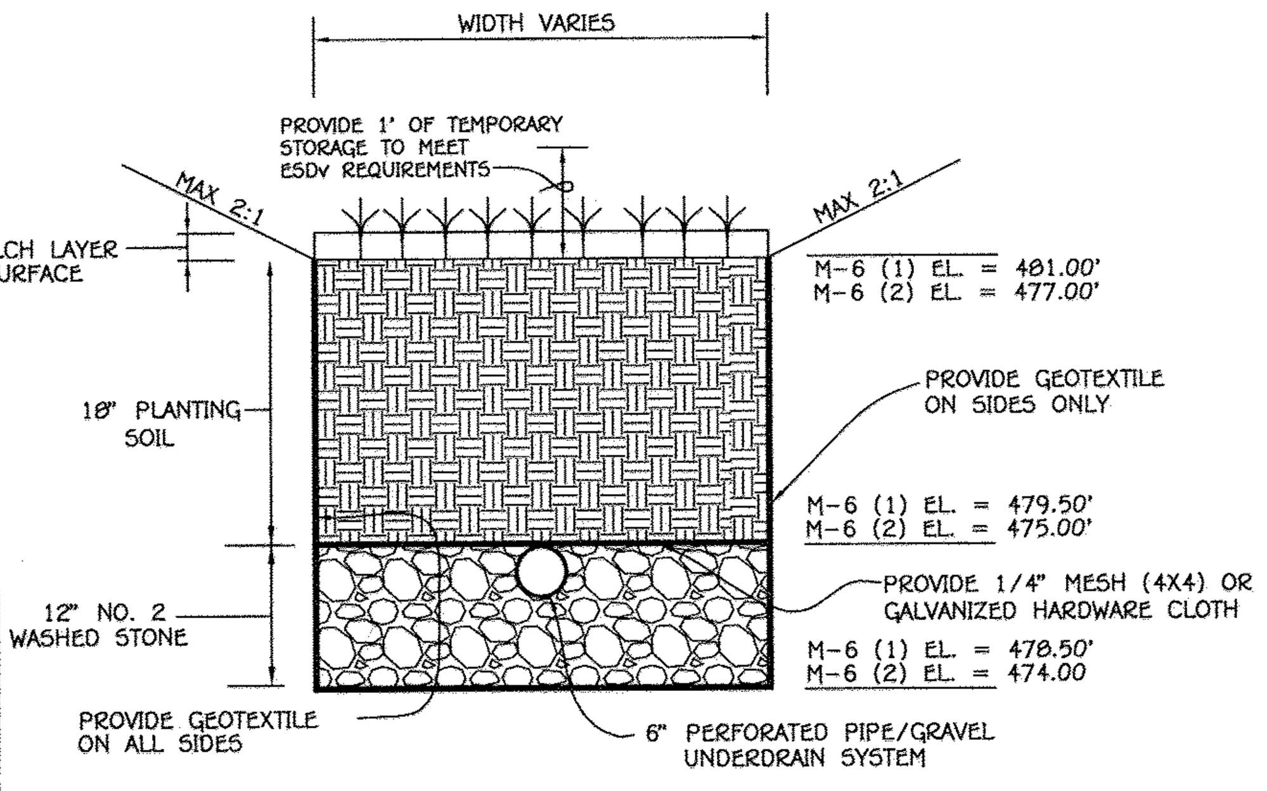
QUANTITY	NAME	MAXIMUM SPACING (FT.)
258	MIXED PERENNIALS	1 FT.
129	SHRUBS	2 FT.

DRAINAGE AREA M-6 (2) MICRO-BIORETENTION PLANT MATERIAL

QUANTITY	NAME	MAXIMUM SPACING (FT.)
556	MIXED PERENNIALS	1 FT.
278	SHRUBS	2 FT.

LEGEND

Symbol	Description
	Existing Contour 2' interval
	Existing Contour 10' interval
	Proposed Contour 2' interval
	Proposed Contour 10' interval
	Proposed Concrete Sidewalk
	Existing Tree Line
	Proposed Tree Line
	Existing Shade Trees
	Existing Evergreen Trees
	Existing Shrub
	Location of points of ingress and egress
	Ex. Water
	Limit of Disturbance
	Drainage Area
SSF	Super Silt Fence
	Filter Bed Area
	Denotes Approximate Limits of Existing Graves
	Denotes FDP Lines



TYPICAL SECTION - BIO-RETENTION FACILITY (M-6)

NO SCALE

Infiltration and Filter System Construction Specifications

Infiltration and filter systems either take advantage of existing permeable soils or create a permeable medium such as sand for WQv, and Re v. In some instances where permeability is great, these facilities may be used for Qp as well.

When properly planted, vegetation will thrive and enhance the functioning of these systems. For example, pre-treatment buffers will trap sediments that often are bound with phosphorous and metals. Vegetation planted in the facility will aid in nutrient uptake and water storage. Additionally, plant roots will provide arteries for stormwater to permeate soil for groundwater recharge. Finally, successful plantings provide aesthetic value and wildlife habitat making these facilities more desirable to the public.

Design Constraints:

> Planting buffer strips of at least 20 feet will cause sediments to settle out before reaching the facility, thereby reducing the possibility of clogging.
> Determine areas that will be saturated with water and water table depth so that appropriate plants may be selected (hydrology will be similar to bioretention facilities, see figure A.5 and Table A.4 for planting material guidance).
> Plants known to send down deep taproots should be avoided in systems where filter fabric is used as part of facility design.
> Test soil conditions to determine if soil amendments are necessary.
> Plants shall be located so that access is possible for structure maintenance.
> Stabilize heavy flow areas with erosion control mats or sod.
> Temporarily divert flows from seeded areas until vegetation is established.
> See Table A.5 for additional design considerations.

Bio-retention

Soil Bed Characteristics

The characteristics of the soil for the bioretention facility are perhaps as important as the facility location, size, and treatment volume. The soil must be permeable enough to allow runoff to filter through the media, while having characteristics suitable to promote and sustain a robust vegetative cover crop. In addition, much of the nutrient pollutant uptake (nitrogen and phosphorus) is accomplished through absorption and microbial activity within the soil profile. Therefore, soils must balance their chemical and physical properties to support biotic communities above and below ground.

The planting soil should be a sandy loam, loamy sand, loam (USDA), or a loam/sand mix (should contain a minimum 35 to 60% sand, by volume). The clay content for these soils should be less than 25% by volume [Environmental Quality Resources (EQR), 1996; Engineering Technology Inc. and Biohabitats, Inc. (ETAB), 1993]. Soils should fall within the SM, ML, SC classifications or the Unified Soil Classification System (USCS). A permeability of at least 1.0 feet per day (0.5"/hr) is required (a conservative value of 0.5 feet per day is used for design). The soil should be free of stones, stumps, roots, or other woody material over 1" in diameter. Brush or seeds from noxious weeds (e.g., Johnson Grass, Mugwort, Nutsedge, and Canada Thistle or other noxious weeds as specified under COMAR 15.08.01.05.) should not be present in the soils. Placement of the planting soil should be in 12 to 18 lifts that are loosely compacted (tamped lightly with a backhoe bucket or traversed by dozer tracks). The specific characteristics are presented in Table A.3.

Table A.3 Planting Soil Characteristics

Parameter	Value
pH range	5.2 to 7.00
Organic matter	1.5 to 4.0% (by weight)
Magnesium	35 lbs. per acre, minimum
Phosphorus (phosphate - P2O5)	75 lbs. per acre, minimum
Potassium (potash -1(K2O)	85 lbs. per acre, minimum
Soluble salts	500 ppm
Clay	10 to 25 %
Silt	30 to 55 %
Sand	35 to 60%

Mulch Layer

The mulch layer plays an important role in the performance of the bioretention system. The mulch layer helps maintain soil moisture and avoids surface sealing, which reduces permeability. Mulch helps prevent erosion, and provides a microenvironment suitable for soil biota at the mulch/soil interface. It also serves as a pretreatment layer, trapping the finer sediments, which remain suspended after the primary pretreatment.

The mulch layer should be standard landscape style, single or double shredded hardwood mulch or chips. The mulch layer should be well aged (stockpiled or stored for at least 12 months), uniform in color, and free of other materials, such as weed seeds, soil, roots, etc. The mulch should be applied to a maximum depth of three inches. Grass clippings should not be used as a mulch material.

Planting Guidance

Plant material selection should be based on the goal of simulating a terrestrial forested community of native species. Bioretention simulates an upland-species ecosystem. The community should be dominated by trees, but have a distinct community of understory trees, shrubs and herbaceous materials. By creating a diverse, dense plant cover, a bioretention facility will be able to treat stormwater runoff and withstand urban stresses from insects, disease, drought, temperature, wind, and exposure.
The proper selection and installation of plant materials is key to a successful system. There are essentially three zones within a bioretention facility (Figure A.5). The lowest elevation supports plant species adapted to standing and fluctuating water levels. The middle elevation supports plants that like drier soil conditions, but can still tolerate occasional inundation by water. The outer edge
is the highest elevation and generally supports plants adapted to dryer conditions. A sample of appropriate plant materials for bioretention facilities are included in Table A.4. The layout of plant material should be flexible, but should follow the general principals described in Table A.5. The objective is to have a system, which resembles a random, and natural plant layout, while maintaining optimal conditions for plant establishment and growth. For a more extensive bioretention plan, consult ETAB, 1993 or Claytor and Schueler, 1997.

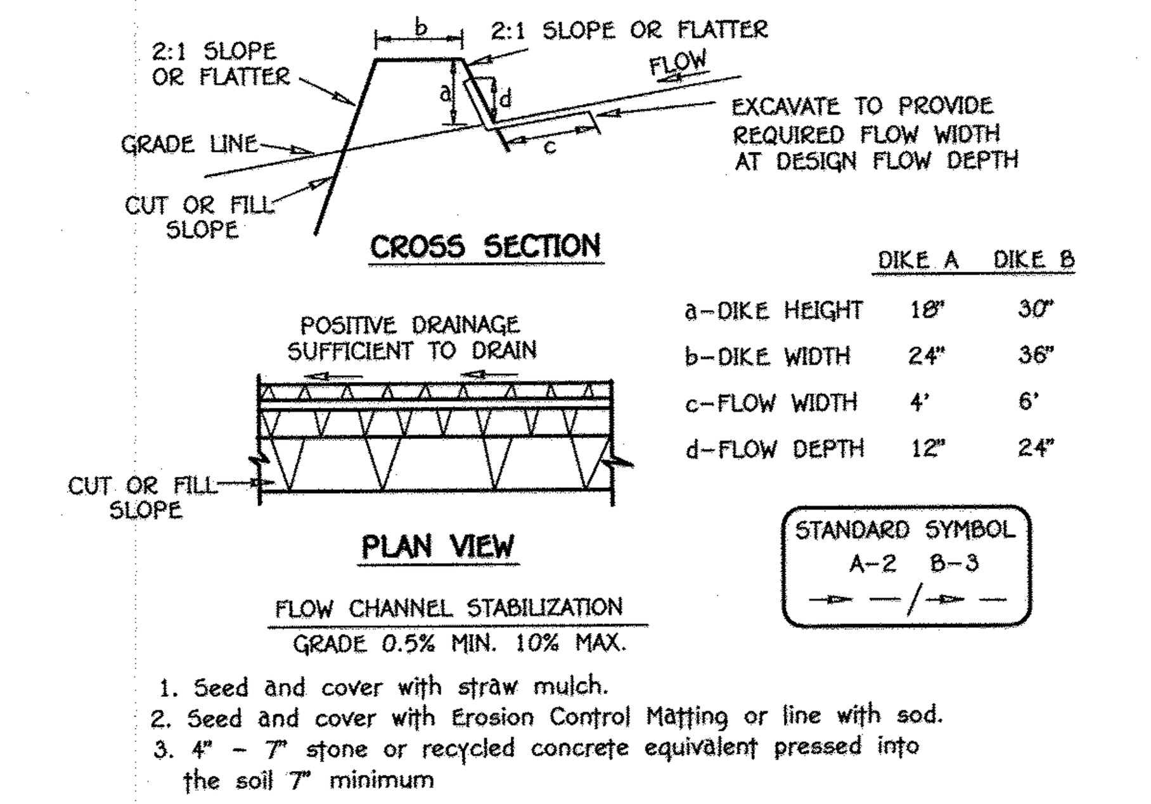
OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS (M-6)

1. Annual maintenance of plant material, mulch layer and soil layer is required. Maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning.

2. Schedule of plant inspection will be twice a year in spring and fall. This inspection will include removal of dead and diseased vegetation considered beyond treatment, treatment of all diseased trees and shrubs and replacement of all deficient stakes and wires.

3. Mulch shall be inspected each spring. Remove previous mulch layer before applying new layer once every 2 to 3 years.

4. Soil erosion to be addressed on an as needed basis, with a minimum of once per month and after heavy storm events.



	DIKE A	DIKE B
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	12"	24"

STANDARD SYMBOL A-2 B-3

FLOW CHANNEL STABILIZATION

GRADE 0.5% MIN. 10% MAX.

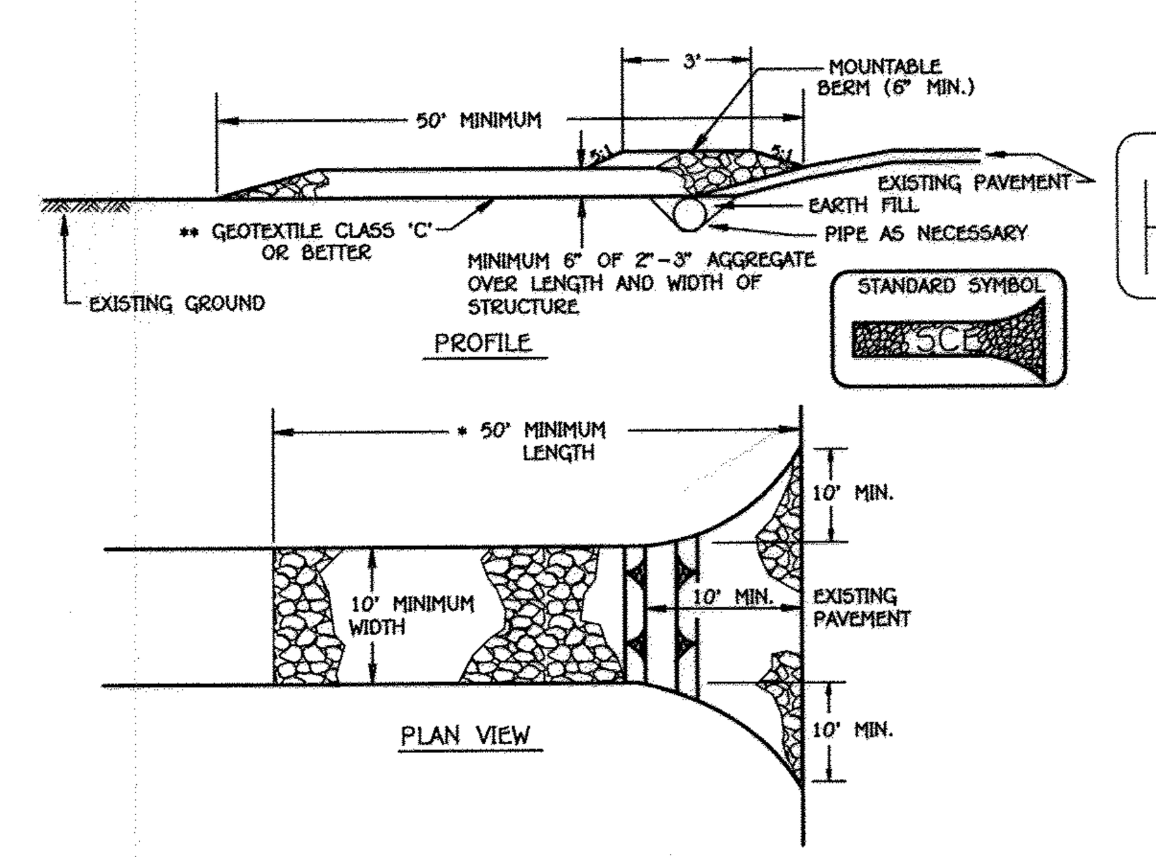
1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum

Construction Specifications

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.
4. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
6. Fill shall be compacted by earth moving equipment.
7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
8. Inspection and maintenance must be provided periodically and after each rain event.

EARTH DIKE

NOT TO SCALE

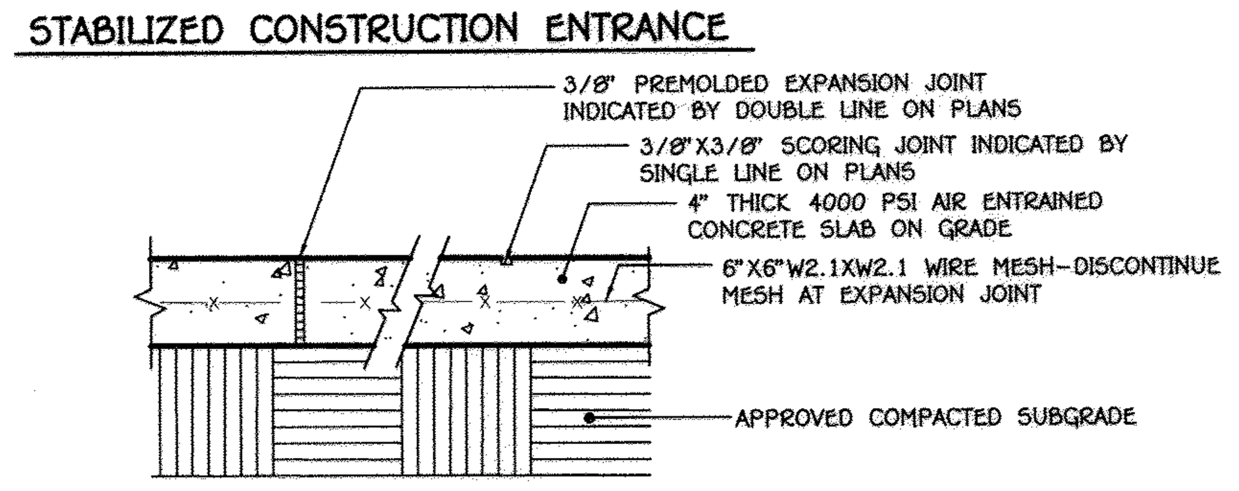


STANDARD SYMBOL ——SSF/TP——

CONSTRUCTION SPECIFICATION

1. LENGTH - MINIMUM OF 50' (*30' FOR SINGLE RESIDENCE LOT).
2. WIDTH - 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
3. GEOTEXTILE FABRIC (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. **THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEOTEXTILE.
4. STONE - CRUSHED AGGREGATE (2" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
5. SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 6" OF STONE OVER THE PIPE. PIPE HAS TO BE SIZED ACCORDING TO THE DRAINAGE. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED. A 6" MINIMUM WILL BE REQUIRED.
6. LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

STABILIZED CONSTRUCTION ENTRANCE

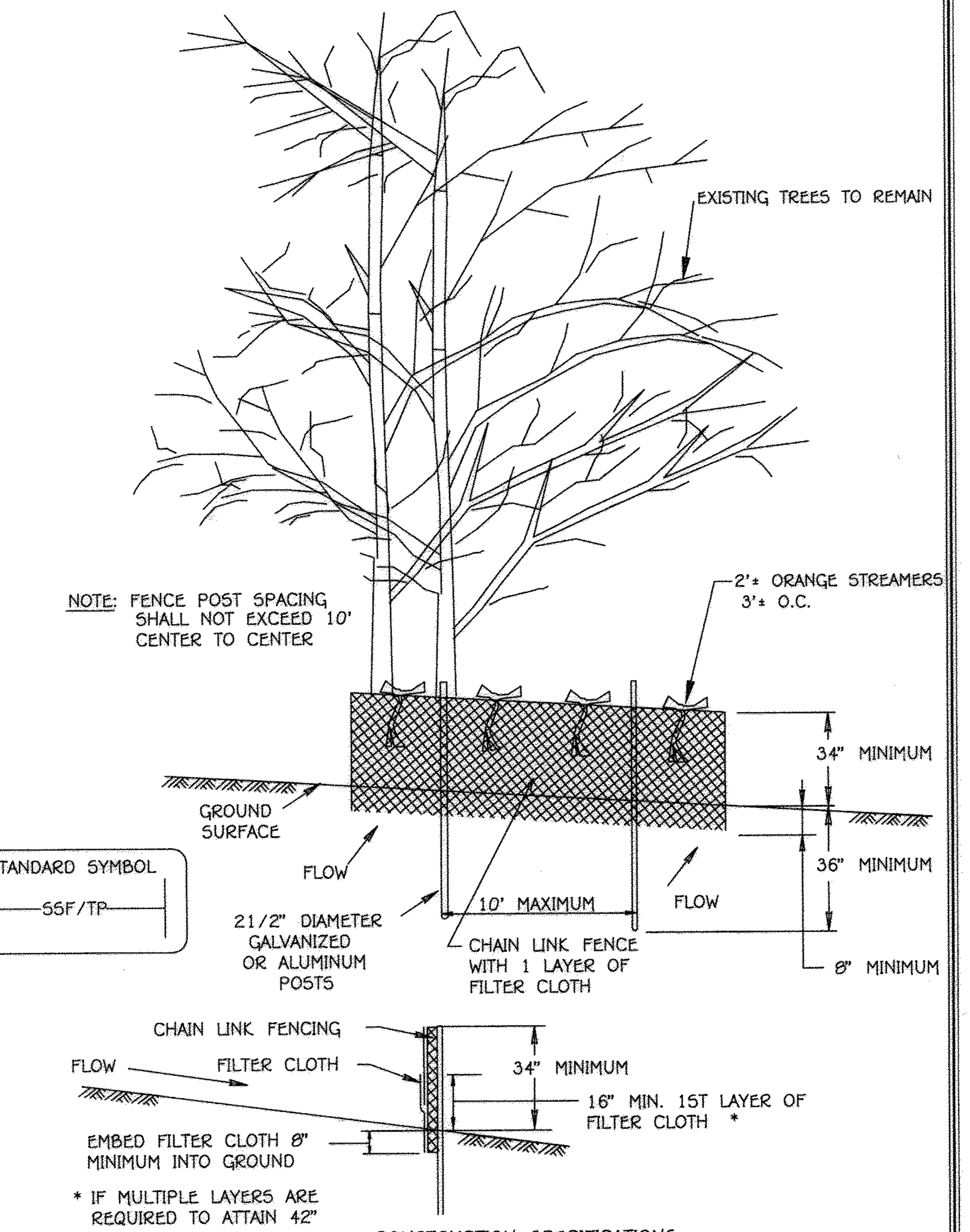


NOTE: REFER TO A-1 FOR LOCATIONS OF EXPANSION JOINTS AND SCORING JOINTS. WHERE NOT INDICATED, INSTALL EXPANSION JOINTS AT MAX. 15'-0" O.C. AND INSTALL SCORING JOINTS AT MAX. 5'-0" O.C.

SLOPE ACROSS SIDEWALK SHALL BE MIN. 1/8"/FT.

CONCRETE WALK DETAIL

NOT TO SCALE



* IF MULTIPLE LAYERS ARE REQUIRED TO ATTAIN 42"

CONSTRUCTION SPECIFICATIONS

1. FENCING SHALL BE 42" IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY DETAILS FOR CHAIN LINK FENCING. THE SPECIFICATION FOR A 6' FENCE SHALL BE USED, SUBSTITUTING 42" FABRIC AND 6' LENGTH POSTS.
2. CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE.
3. FILTER CLOTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.
4. FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 8" INTO THE GROUND.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT BUILDUPS REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE, OR WHEN SILT REACHES 50% OF FENCE HEIGHT
7. FILTER CLOTH SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MID SECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F:

TENSILE STRENGTH	50 LBS/IN (MIN.)	TEST: MSMT 509
TENSILE MODULUS	20 LBS/IN (MIN.)	TEST: MSMT 509
FLOW RATE	0.3 GAL/FT²/MINUTE (MAX.)	TEST: MSMT 322
FILTERING EFFICIENCY	75% (MIN.)	TEST: MSMT 322

DESIGN CRITERIA

SLOPE	SLOPE STEEPNESS	SLOPE LENGTH (MAXIMUM)	SILT FENCE LENGTH (MAXIMUM)
0 - 10%	0 - 10:1	UNLIMITED	UNLIMITED
10 - 20%	10:1 - 5:1	200 FEET	1,500 FEET
20 - 33%	5:1 - 3:1	100 FEET	1,000 FEET
33 - 50%	3:1 - 2:1	100 FEET	500 FEET
50% +	2:1 +	50 FEET	250 FEET

SUPER SILT FENCE, TREE PROTECTION FENCE

NOT TO SCALE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

DATE	DESCRIPTION
3/31/17	AS-BUILT
11/18/14	△ REVISE SIZE OF WATER HOUSE CONNECTION & METER SETTING

REVISION BLOCK

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Approved: John R Robertson 10/24/12
Howard S.C.D. Date

APPROVED PLANNING BOARD of HOWARD COUNTY
DATE 10/04/12

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20784, EXPIRATION DATE: 2/22/13.
ALDO M. VITUCCI 10/16/12
DATE

OWNERS
COLUMBIA MEMORIAL PARK LLC
C\O JESSE WALKER
4111 PENNSYLVANIA AVE.
SUITLAND MARYLAND, 20904
240-447-7525

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 2/25/13

Chief, Division of Land Development — Date 2.25.13

Chief, Development Engineering Division — Date 2.19.13

SUBDIVISION	SECTION/AREA	LOT NO.
COLUMBIA CEMETERY SITE	SECTION 1 AREA 1 SECTION 1 AREA 2	1 3

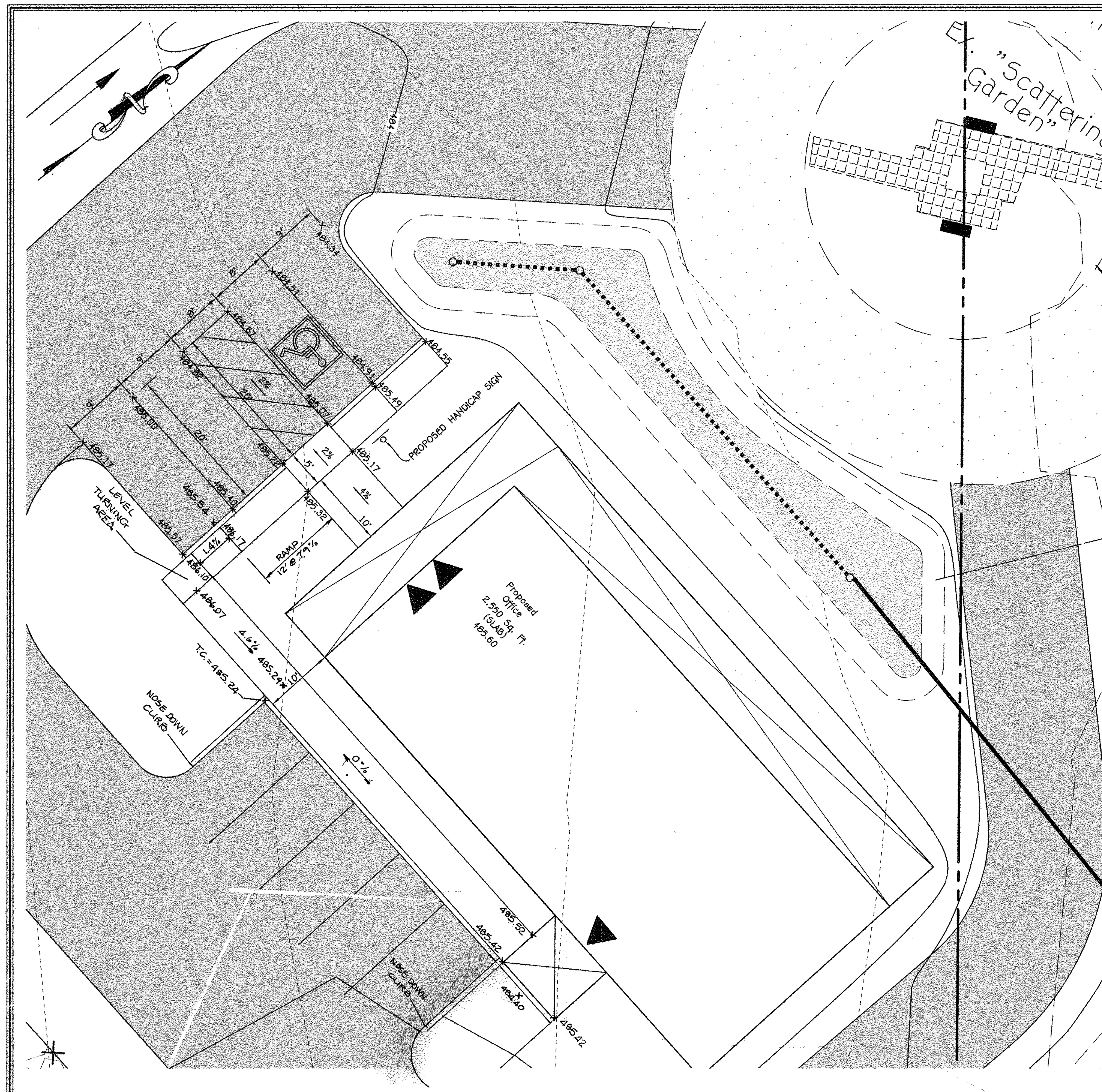
PLAT No.	PARCEL NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
11185/5489	371	NT	29	5th	605501

STORMWATER MANAGEMENT NOTES AND DETAILS

COLUMBIA MEMORIAL PARK

CEMETERY SITE
SECTION 1 AREA 1 LOT 1, SECTION 1 AREA 2 LOT 3
PROPOSED OFFICE BUILDING, SHED AND GRAVEL STORAGE AREA
PREVIOUS HOWARD COUNTY FILES: FDP-188-A1, F-83-116, SDP-84-280, ECP-11-033, SDP-11-039, ECP-12-027
TAX MAP No.: 29 GRID No.: 19 PARCEL No.: 371
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JULY 16, 2012

AS-BUILT

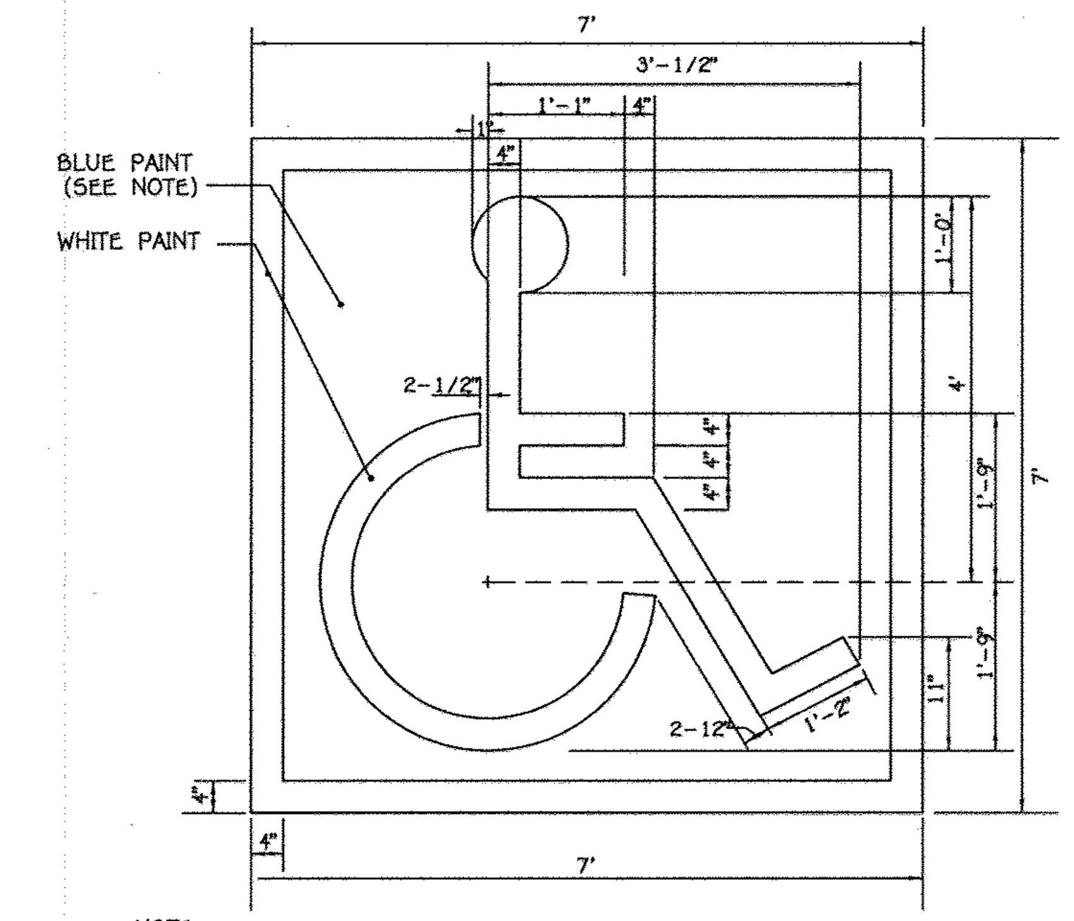


HANDICAP ACCESS PLAN

SCALE: = 1" = 10'

LEGEND

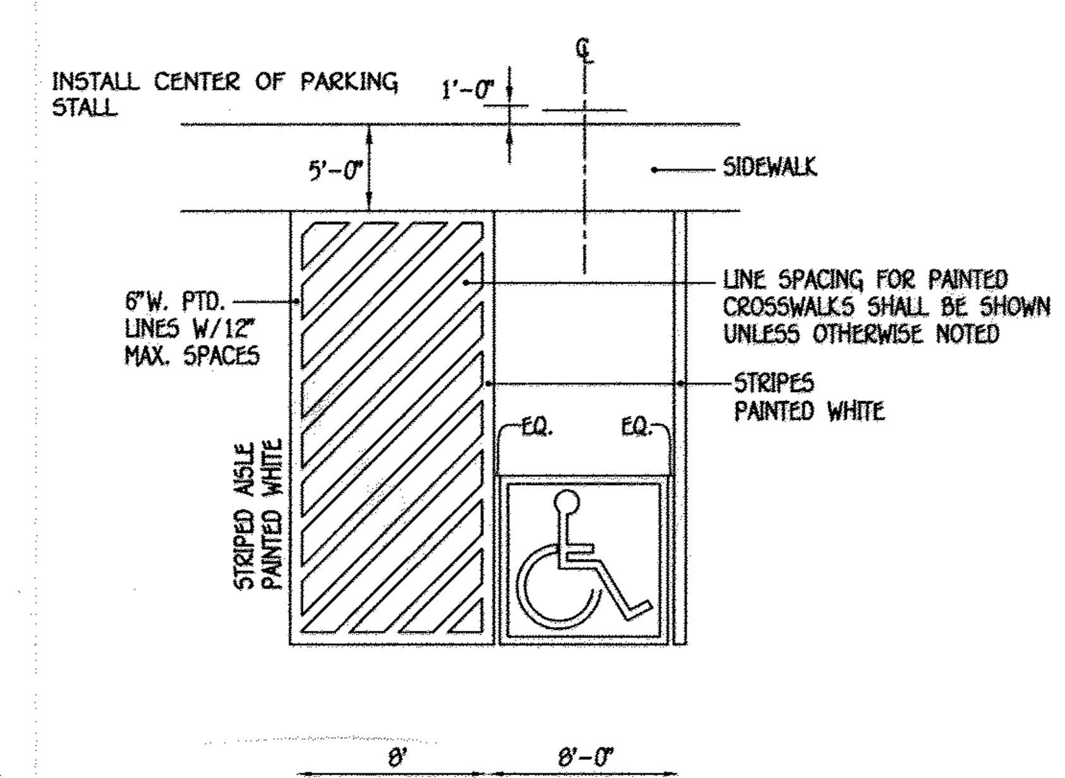
Symbol	Description
	Existing Contour 2' interval
	Existing Contour 10' interval
	Proposed Contour 2' interval
	Proposed Contour 10' interval
	Proposed Concrete Sidewalk
	Existing Tree Line
	Proposed Tree Line
	Existing Shade Trees
	Existing Evergreen Trees
	Existing Shrub
▼	Location of points of ingress and egress
	Ex. Water
	Limit of Disturbance
	Drainage Area
SSF	Super Silt Fence
	Filter Bed Area
	Denotes Approximate Limits of Existing Graves
	Denotes FDP Lines



NOTE:
SYMBOL IS REQUIRED TO CONTRAST WITH BACKGROUND (WHITE ON BLUE: COLOR NO. 105090 IN FED. STANDARD 5952-DOUBLE COAT TYP.)

HANDICAP SPACE STENCIL LAYOUT

NOT TO SCALE

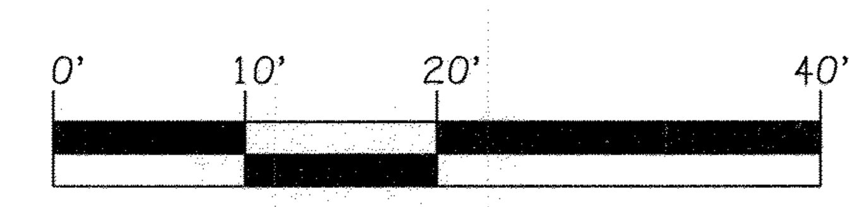


ACCESSIBLE SPACE LAYOUT

NOT TO SCALE

HANDICAP PARKING SIGN DETAIL

NOT TO SCALE



Scale: 1" = 10'

APPROVED PLANNING BOARD of HOWARD COUNTY
DATE 10/04/12

AS-BUILT CERTIFICATION FOR PSWM
Note: There is no "AS BUILT" information provided on this sheet.
CHARLES J. CROVO SR. #13204 — Date 11/9/16

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

DATE	DESCRIPTION
3/31/17	AS-BUILT
9/4/13	REVISION TO INCLUDE SECOND HANDICAP ACCESS RTE TO PROP. BLDG.

REVISION BLOCK

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20784, EXPIRATION DATE: 2/22/13.
ALDO M. VITUCCI — DATE 10/16/12

OWNERS
COLUMBIA MEMORIAL PARK LLC
C\O JESSE WALKER
4111 PENNSYLVANIA AVE.
SUITLAND MARYLAND, 20904
240-447-7525

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Director - Department of Planning and Zoning — Date 2/25/13
Chief, Division of Land Development — Date 2-25-13
Chief, Development Engineering Division — Date 2.19.13

SUBDIVISION			SECTION/AREA		LOT NO.
COLUMBIA CEMETERY SITE			SECTION 1 AREA 1 SECTION 1 AREA 2		1 3
PLAT No.	PARCEL NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
11185/5489	371	NT	29	5th	605501

HANDICAP DETAIL SHEET

COLUMBIA MEMORIAL PARK

CEMETERY SITE
SECTION 1 AREA 1 LOT 1, SECTION 1 AREA 2 LOT 3
PROPOSED OFFICE BUILDING, SHED AND GRAVEL STORAGE AREA
PREVIOUS HOWARD COUNTY FILES: FDP-188-A1, F-83-116, SDP-84-280, ECP-11-033, SDP-11-039, ECP-12-027
TAX MAP No.: 29 GRID No.: 19 PARCEL No.: 371
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JULY 16, 2012
SHEET 7 OF 7 SDP-12-040

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

I:\2010\10056\dwg\SDP Office\10056 SDP Office.dwg, Sheet 7, 10/16/2012 10:39:48 AM, 1:1