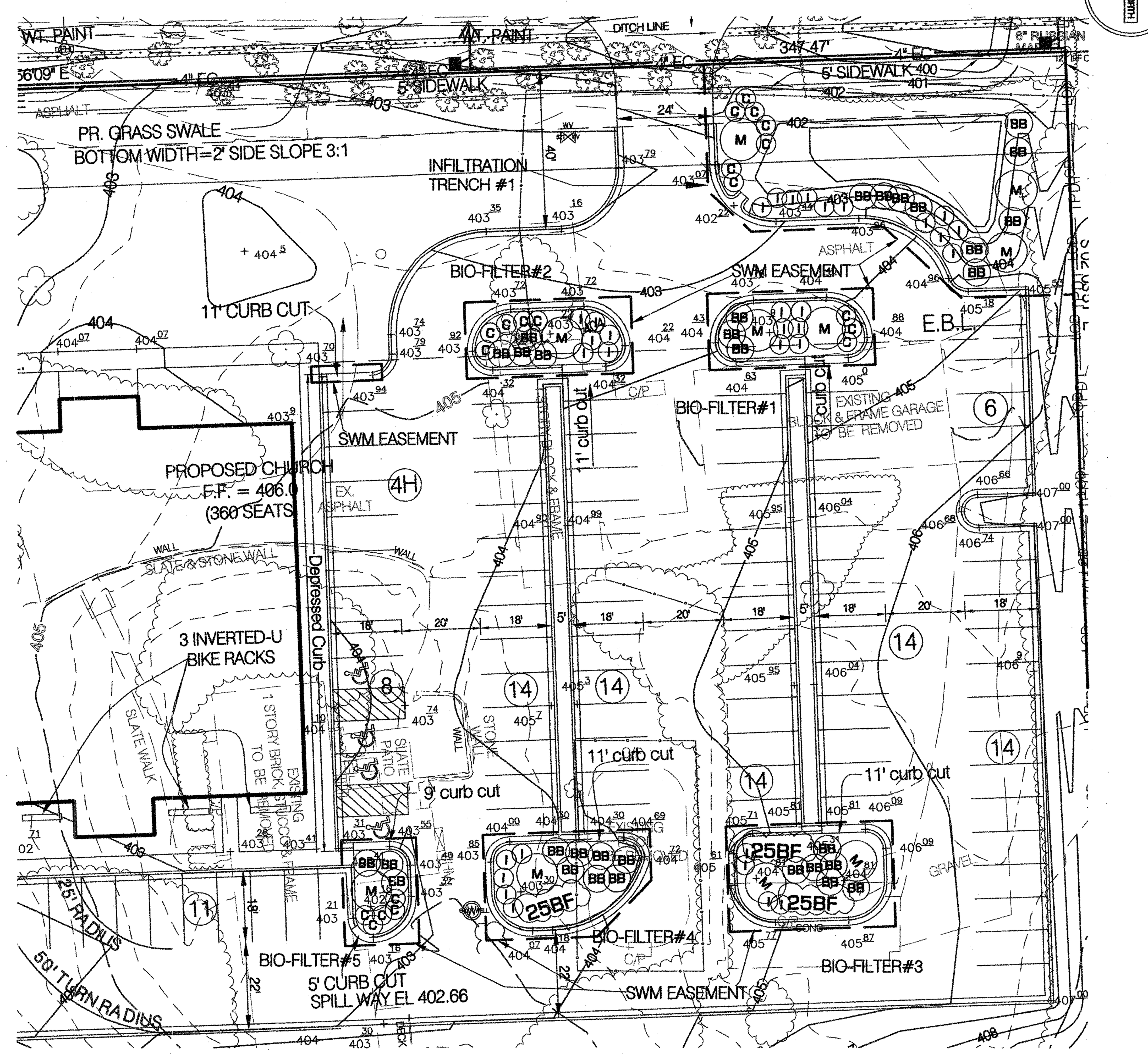
BIO - FILTER AND INFILTRATION TRENCH LANDSCAPE PLAN

SCALE: 1" = 20'



LEGEND

Existing 2' Contour	
Existing 10' Contour	
Proposed Contour	
Stormdrain Pipe	
Existing Tree Line	
Tree Save - Limit of Disturbance	TS—LOD
Limit of Disturbance	LOD
Ex. Fence	X
Proposed 2" Schedule 40 PVC Conduit and PEPCO supplied and Approved Splicebox	
Proposed Duel 4" Schedule 40 PVC Conduit	4" EC
3 - Proposed Street Lights 70 Watt H.P.S. Colonial on Black Fiberglass Pole	
Proposed Street Tree	
Existing Street Tree	

VEGETATIVE STABILIZATION

Permanent and Temporary Seeding, Sodding and Mulching

Site Preparation

Permanent or temporary stabilization shall be completed within (a.) seven calendar days as to the surface of all sediment control practices such as diversions, grade stabilization structures, berms, dikes, grassed waterways, sediment basins, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and (b.) fourteen days as to all other disturbed or graded areas on the project site.

II. Seedbed Preparation and Seeding Application

The top layer of soil shall be loosened, limed and fertilized by raking, discing or harrowing or other acceptable means before seeding. Flat areas and slopes up to 3 to 1 grade shall be loose and friable to a depth of at least 3 inches. Slopes steeper than 3 to 1 shall have the slopes up to 1-3 inches of loose soil and friable before seeding. Flat areas and slopes up to 3 to 1 grade shall be loose and friable to a depth of at least 3 inches. Slopes steeper than 3 to 1 shall have the top 1-3 inches of soil loose and friable before seeding. Apply seed uniformly with a cyclone seeder, drill cultipacker, seeder or hydroseeder on a firm moist seedbed.

III. Soil Amendments

Lime and fertilize according to soil tests. In lieu of soil test apply the following:

Dolomitic: 2 tons/acre or 92 lbs/1000 sq. ft. (permanent and sodding)

Limestone: 1 ton/acre or 46 lbs/1000 sq. ft. (temporary)

Fertilizer: 10-10-10 or equivalent at 1000 lbs/acre or 23 lbs/1000 sq. ft. (permanent and sodding) 10-10-10 or equivalent at 600 lbs/acre or 15 lbs/1000 sq. ft. (temporary).

IV. Sediment Control Practices Seeding

Seed: 'Kentucky 31' Tall Fescue 60 lbs/acre or 1.38 lbs/1000 sq. ft. and Italian (annual) ryegrass 40 lbs/acre or .92 lbs/1000 sq. ft.

Dates: 2/1 - 10/3 1 5/1 - 8/14 with irrigation

V. Temporary Seeding: Per growing season

Seed: Italian or perennial ryegrass 40 lbs/acre or .92 lbs/1000 sq. ft.

Dates: 2/1 - 4/30 and 8/15 - 11/30

Seed: Millet 40 lbs/acre or .92/1000 sq. ft.

Dates: 5/1 - 8/14

VI. Permanent Seeding

A. Residential and High Maintenance Areas

Seed: Kentucky Bluegrass, 'Plush', 'Birka', 'Parade', 'Vantage', 'Columbia', 'Merion', 'Adelphi', 'South Dakota', 'Kenblue'. Any three varieties at 30 lbs. to make 90 lbs/acre of 2 lbs/1000 sq. ft. and Red Fescue - 'Pennlawn' or Jamestown 10 lbs/1000 sq. ft.

Dates: 2/1 - 4/30 and 8/15 - 10/3 1

Seed: 'Kentucky 31' Tall Fescue 220-260 lbs/acre or 5-6 lbs/1000 sq. ft.

Dates: 2/1 - 10/31(5/I - 8/14 irrigation required)

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B. Low Maintenance and Mining Areas

Seed: 'Kentucky 31' Tall Fescue 40 lbs/acre or 1.92 lbs/1000 sq. ft. and 'Interstate' Sericea lespedeza (inoculated) 20 lbs/acre or .46 lbs/1000 sq. ft.

Dates: 2/1 - 4/30 and 8/15 - 10/31

C. General and large Acreage

Seed: 'Kentucky 31' Tall Fescue 60 lbs/acre or 1.38 lbs/l000 sq. ft.

Dates: 2/1 - 10/31

VII. Mulching

All seedings require mulching. Also, use mulch during non-seeding dates until seeding can be done.

Mulch shall be unrotted, unchopped small grain straw applied at a rate of 1-1/2 to 2 tons/acre or 70-90 lbs/1000 sq. ft. (2 bales). Mulch materials shall be relatively free of all kinds of weeds and shall be free of prohibited noxious weeds. Spread mulch uniformly mechanically or by hand. Mulch anchoring shall be accomplished immediately after mulch placement to minimize loss by wind or water. This may be done by mulch nettings, mulch anchoring tool, peg and twine or liquid mulch binders.

Liquid mulch binder shall be rapid curing cutback asphalt applied at a rate of 200 gal/acre or 5 gal. Per 1000 sq. ft. Slopes 8 feet or more high use 348 gal/acre or 8 gal/1000 sq. ft.

VIII. Sodding

Class of turfgrass sod shall be Maryland or Virginia State certified, or Md. Or Virginia State approved sod. Sod shall be harvested, delivered and installed within a period of 36 hours. Sod is to be laid with the long edges parallel to the contour with staggered joints with all ends tightly abutting and not over lapping. Sod shall be rolled and thoroughly watered within eight hours of installation. Daily watering to maintain 4 inch depth of moisture for the first week is required in the absence of rainfall. Sod is not to be applied on frozen ground.

IX. Maintenance

A. Irrigation - when soil moisture deficient irrigate to prevent loss of stand of protection vegetation.

B. Repairs - If stand is inadequate for erosion control, overseed and fertilize using half of the rates originally applied. If stand is over 60% damaged, reestablish following original rates and procedures.

Note: Use of this information does not preclude meeting all of the requirements of the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control Vegetative Practices or SCS Standards and Specifications for Critical Area Planting (MD-342).

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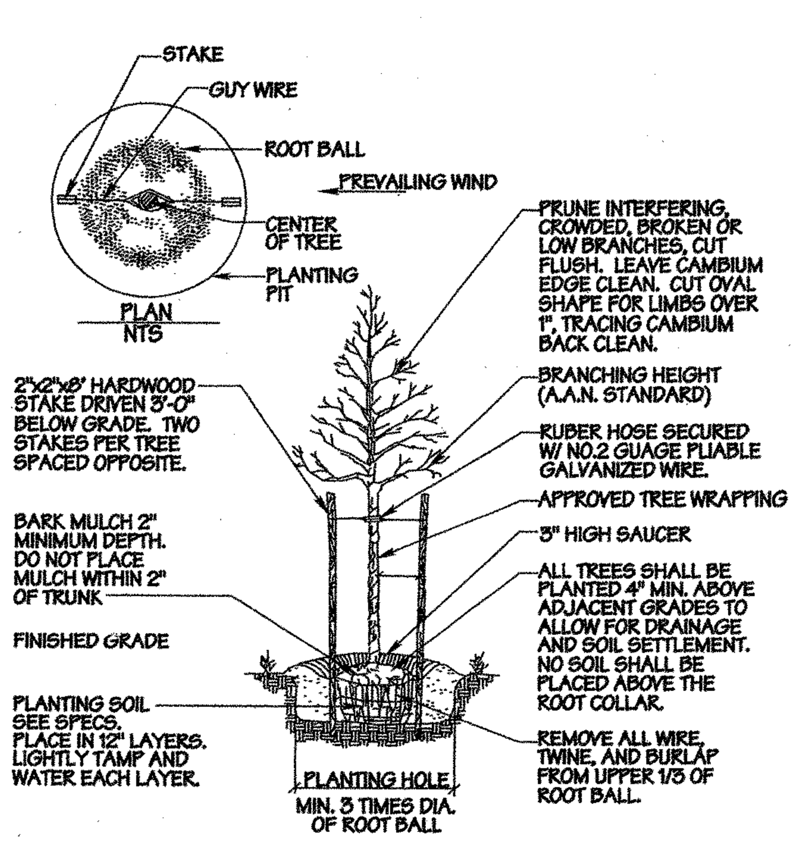
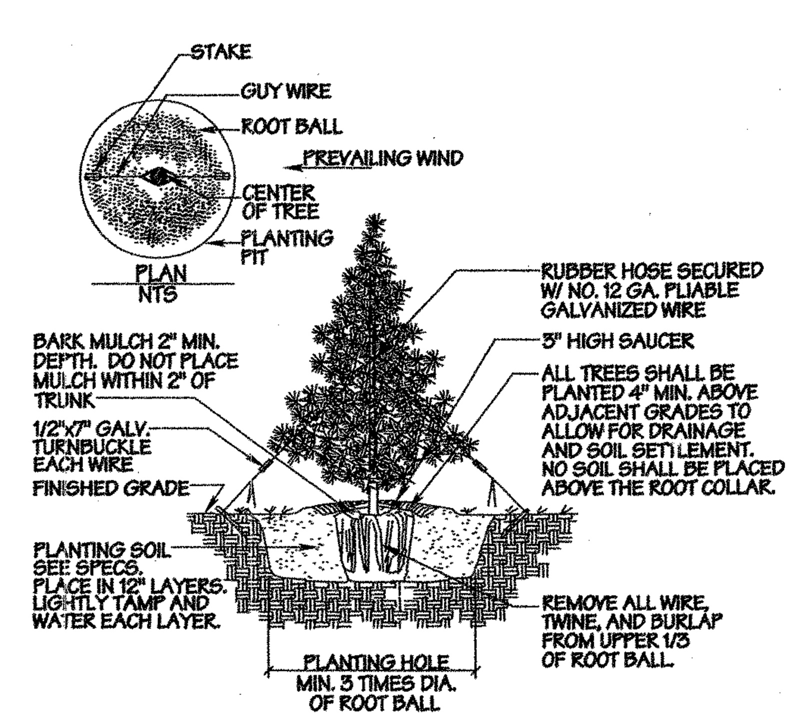


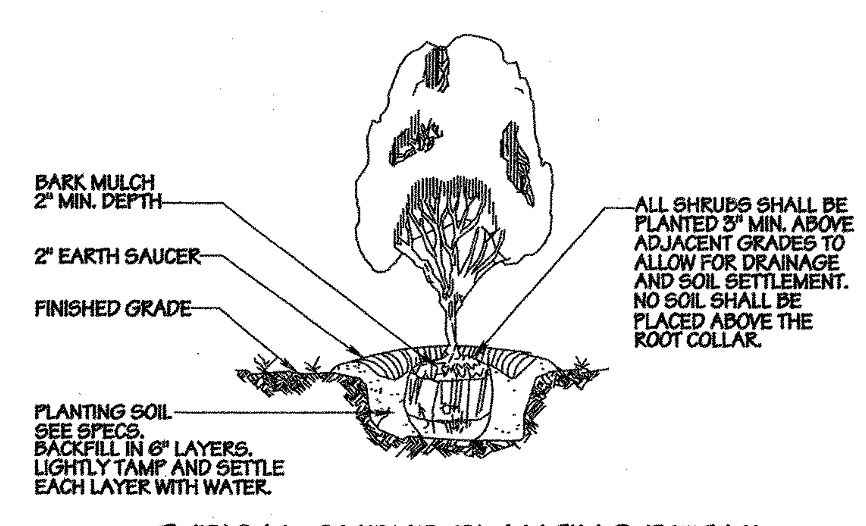
TYPICAL SMALL TREE PLANTING DETAIL

(2" CALIPER OR LESS)
NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE



TYPICAL SHRUB PLANTING DETAIL

NOT TO SCALE

BIO-FILTER #1

PLANT LIST

SYMBOL	QTY.	BOTANICAL / COMMON NAME	SIZE	REMARKS
M	1	Magnolia virginiana / Sweetbay	5'-6' high	B & B
BB	04	Cephalanthus occidentalis / Buttonbush	12-18" high	Container
C	03	Clethra alnifolia / Sweet Pepperbush	12-18" high	Container
I	06	Ilex verticillata / Winterberry	12-18" high	Container

BIO-FILTER #2

PLANT LIST

SYMBOL	QTY.	BOTANICAL / COMMON NAME	SIZE	REMARKS
M	2	Magnolia virginiana / Sweetbay	5'-6' high	B & B
BB	03	Cephalanthus occidentalis / Buttonbush	12-18" high	Container
C	05	Clethra alnifolia / Sweet Pepperbush	12-18" high	Container
I	06	Ilex verticillata / Winterberry	12-18" high	Container

BIO-FILTER # 3

PLANT LIST

SYMBOL	QTY.	BOTANICAL / COMMON NAME	SIZE	REMARKS
M	2	Magnolia virginiana / Sweetbay	5'-6' high	B & B
BB	06	Cephalanthus occidentalis / Buttonbush	12-18" high	Container
I	04	Ilex verticillata / Winterberry	12-18" high	Container
BF	50	Iris versicolor / Blue Flag	12-18" high	Container

BIO-FILTER # 4

PLANT LIST

SYMBOL	QTY.	BOTANICAL / COMMON NAME	SIZE	REMARKS
M	1	Magnolia virginiana / Sweetbay	5'-6' high	B & B
BB	07	Cephalanthus occidentalis / Buttonbush	12-18" high	Container
BF	50	Iris versicolor / Blue Flag	12-18" high	Container
I	05	Ilex verticillata / Winterberry	12-18" high	Container

BIO-FILTER #5

PLANT LIST

SYMBOL	QTY.	BOTANICAL / COMMON NAME	SIZE	REMARKS
M	1	Magnolia virginiana / Sweetbay	5'-6' high	B & B
BB	03	Cephalanthus occidentalis / Buttonbush	12-18" high	Container
C	05	Clethra alnifolia / Sweet Pepperbush	12-18" high	Container

INFILTRATION TRENCH # 1

PLANT LIST

SYMBOL	QTY.	BOTANICAL / COMMON NAME	SIZE	REMARKS
M	3	Magnolia virginiana / Sweetbay	5'-6' high	B & B
BB	09	Cephalanthus occidentalis / Buttonbush	12-18" high	Container
C	04	Clethra alnifolia / Sweet Pepperbush	12-18" high	Container
I	10	Ilex verticillata / Winterberry	12-18" high	Container

STATE OF MARYLAND — MICHAEL S. NAGY — NO. 520 — REGISTERED LANDSCAPE ARCHITECT

OWNER / APPLICANT:

Mircale Temple Assembly of God
2457 Linden Lane
Silver Spring, MD 20910
301-868-5900

"MISS UTILITY"
FOR LOCATION OF UTILITIES CALL
1-800-257-7777 48 HOURS IN ADVANCE
OF ANY WORK IN THIS VICINITY.

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. 8231
Expiration Date: 11/28/11

Chander S. Dhalwala, P.E. Maryland Registration No. 8231 — 3/14/2011 Date

STATE OF MARYLAND — CHANDER S. DHALWALA — No. 8231 — PROFESSIONAL ENGINEER

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
SF/ES/INF/BR(5)	4-5-2011	4-5-2011
4-5-2011	Reviewed — Date 4/5/11	Reviewed — Date 233735
Reviewed — Date 4/5/11	Approved — Date	SEDIMENT CONTROL PERMIT NO.
Approved — Date 230470 SM FILE #		

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT.

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

RDA ENGINEERING CO. INC.
ENGINEERS
LAND PLANNERS
LAND SURVEYORS
14603 MAIN STREET - UPPER MARLBORO, MD. 20772
UPPER MARLBORO (301)627-3100 (301)952-8200
PRINCE FREDERICK (301)855-9500 (410)535-8600

REVISIONS

JOB NO.	W - 686
SCALE:	AS SHOWN
DESIGNED BY:	RH
DRAWN BY:	MARTIN
CHECKED BY:	CSD
DATE:	APRIL, 2008

STORM DRAIN AND STORMWATER MANAGEMENT PLAN

BIO- FILTERS & INFILTRATION TRENCH LANDSCAPE SHEET

MIRACLE TEMPLE ASSEMBLY OF GOD

(13th) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND