



Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

Date Received: _____

Permit No.: _____

Building Address: 6506 HEATHER GLEN WAY
City: CLARKSVILLE State: MD Zip Code: 21029
Suite/Apt. # _____ SDP/WP/BA #: _____
Census Tract: _____ Subdivision: WILLOW POND
Section: _____ Area: _____ Lot: 1
Tax Map: _____ Parcel: _____ Grid: _____
Zoning: _____ Map Coordinates: _____ Lot Size: _____

Existing Use: SFD
Proposed Use: SFTH W/DECK, DETACHED PAVILION, & STEPS TO GRADE

Estimated Construction Cost: \$ 60,000
Description of Work: CONSTRUCT 23'X 62' DECK & 14'X18' DETACHED PAVILION WITH TO GRADE

Occupant or Tenant: _____
Was tenant space previously occupied? Yes No
Contact Name: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Fax: _____
Email: _____

Commercial Building Characteristics	Residential Building Characteristics	
Height:	<input checked="" type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse	
No. of stories:	<u>Depth</u>	<u>Width</u>
Gross area, sq. ft./floor:	1 st floor:	
	2 nd floor:	
Area of construction (sq. ft.):	Basement:	
	<input type="checkbox"/> Finished Basement	
Use group:	<input type="checkbox"/> Unfinished Basement	
	<input type="checkbox"/> Crawl Space	
<u>Construction type:</u>	<input type="checkbox"/> Slab on Grade	
<input type="checkbox"/> Reinforced Concrete	No. of Bedrooms:	
<input type="checkbox"/> Structural Steel	<u>Multi-family Dwelling</u>	
<input type="checkbox"/> Masonry	No. of efficiency units:	
<input type="checkbox"/> Wood Frame	No. of 1 BR units:	
<input type="checkbox"/> State Certified Modular	No. of 2 BR units:	
	No. of 3 BR units:	
	Other Structure: <u>DECK</u>	
	Dimensions: <u>23'x62' deck 14'x18' pavilion</u>	
<input checked="" type="checkbox"/> <u>Roadside Tree Project Permit</u>	Footings: <u>CONCRETE</u>	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Roof: <u>RAFTERS</u>	
<u>Roadside Tree Project Permit #</u>	<input type="checkbox"/> State Certified Modular	
	<input type="checkbox"/> Manufactured Home	

Property Owner's Name: PAUL MASSARO
Address: 6506 HEATHER GLEN WAY
City: CLARKSVILLE State: MD Zip Code: 20129
Phone: 301-395-4902 Fax: _____
Email: PMASSARO2000@YAHOO.COM

Applicant's Name & Mailing Address, (If other than stated herein)
Applicant's Name: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Fax: _____
Email: _____

Contractor Company: PROBUILT CONSTRUCTION, INC.
Contact Person: EDWARD PACYLOWSKI
Address: 13330 CLARKSVILLE PIKE
City: HIGHLAND State: MD Zip Code: 20777
License No.: MHIC 20247
Phone: 301-854-0821 Fax: 301-854-9632
Email: CHRISTINA@PROBUILTCONSTRUCTION.COM

Engineer/Architect Company: _____
Responsible Design Prof.: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Fax: _____
Email: _____

Utilities	
<u>Water Supply</u>	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
<u>Sewage Disposal</u>	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
Electric: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Gas: <input type="checkbox"/> Yes <input type="checkbox"/> No	
<u>Heating System</u>	
<input type="checkbox"/> Electric <input type="checkbox"/> Oil	
<input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas	
<input type="checkbox"/> Other:	
<u>Sprinkler System:</u>	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
<u>Grading Permit Number:</u>	
<u>Building Shell Permit Number:</u>	

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Christina
Applicant's Signature
CHRISTINA@PROBUILTCONSTRUCTION.COM
Email Address
OWNER
Title/Company

Edward Pacylo
Print Name
12-15-16
Date

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

PLEASE WRITE NEATLY & LEGIBLY

-FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL
State Highways		
Building Officials		
PSZA (Zoning)		
PSZA (Engineering)		
Health	<u>12-15-16</u>	<u>Edward Pacylo</u>

Is Sediment Control approval required for issuance? Yes No
 CONTINGENCY CONSTRUCTION START

DPZ SETBACK INFORMATION
Front:
Rear:
Side:
Side St.:
All minimum setbacks met? <input type="checkbox"/> Yes <input type="checkbox"/> No
Is Entrance Permit Required? <input type="checkbox"/> Yes <input type="checkbox"/> No
Historic District? <input type="checkbox"/> Yes <input type="checkbox"/> No
Lot Coverage for New Town Zone:
SDP/Red-line approval date:

Filing Fee	\$
Permit Fee	\$
Tech Fee	\$
Excise Tax	\$
PSFS	\$
Guaranty Fund	\$
Add'l per Fee	\$
Total Fees	\$
Sub- Total Paid	\$
Balance Due	\$
Check	#

Distribution of Copies: White: Building Officials Green: PSZA,Zoning Yellow: PSZA,Engineering Pink: Health Gold: SHA



House Calculations for 5 BR + 5 in arcilla

Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

Date Received: 8/7/15

Permit No.: B15D003395

Building Address: 6500 HEATHERGLEN WAY
City: CLARKSVILLE State: MD Zip Code: 21029
Suite/Apt. #: _____ SDP/WP/BA #: _____
Census Tract: _____ Subdivision: WILLOW POND
Section: _____ Area: _____ Lot: 1
Tax Map: 34 Parcel: 44 Grid: _____
Zoning: RR-D10 Map Coordinates: _____ Lot Size: 3.14AC

Existing Use: VACANT LOT
Proposed Use: NEW SFD
Estimated Construction Cost: \$ 800,000
Description of Work: 4 BR, 5 FB, 2 HB, 3 CAR GAR
2 GAS FIREPLACES, PART FIN BSMT
2 PORCH

Occupant or Tenant: _____
Was tenant space previously occupied? Yes No
Contact Name: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Fax: _____
Email: _____

Property Owner's Name: MASSARO / GILL
Address: 6050 LUSTER DR
City: HIGHLAND State: MD Zip Code: 20777
Phone: 410-365-3702 Fax: _____
Email: RAMINOR@COMCAST.NET

Applicant's Name & Mailing Address, (if other than stated herein)
Applicant's Name: RICK MINOR GREENFIELD HOMES
Address: 6050 LUSTER DR
City: HIGHLAND State: MD Zip Code: 20777
Phone: 410-365-3702 Fax: _____
Email: RAMINOR@COMCAST.NET

Contractor Company: GREENFIELD HOMES INC.
Contact Person: RICK MINOR
Address: 6050 LUSTER DR
City: HIGHLAND State: MD Zip Code: 20777
License No.: 3601
Phone: 410-365-3702 Fax: _____
Email: RAMINOR@COMCAST.NET

Engineer/Architect Company: MARK PANDY
Responsible Design Prof.: _____
Address: _____
City: FELICITY CT State: MD Zip Code: 21043
Phone: 410-750-2262 Fax: _____
Email: _____

Commercial Building Characteristics	Residential Building Characteristics
Height: _____	<input checked="" type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse
No. of stories: _____	Depth Width
Gross area, sq. ft./floor: _____	1 st floor: <u>72'-11" 101'-8"</u>
Area of construction (sq. ft.): _____	2 nd floor: <u>53'-10" 101'-8"</u>
Use group: _____	Basement: <u>72'-11" x 101'-8"</u>
<u>Construction type:</u>	<input checked="" type="checkbox"/> Finished Basement
<input type="checkbox"/> Reinforced Concrete	<input type="checkbox"/> Unfinished Basement
<input type="checkbox"/> Structural Steel	<input type="checkbox"/> Crawl Space
<input type="checkbox"/> Masonry	<input type="checkbox"/> Slab on Grade
<input type="checkbox"/> Wood Frame	No. of Bedrooms: <u>4</u>
<input type="checkbox"/> State Certified Modular	<u>Multi-family Dwelling</u>
	No. of efficiency units: _____
	No. of 1 BR units: _____
	No. of 2 BR units: _____
	No. of 3 BR units: _____
	Other Structure: _____
	Dimensions: _____
<input checked="" type="checkbox"/> Roadside Tree Project Permit	Footings: _____
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Roof: _____
Roadside Tree Project Permit # _____	<input type="checkbox"/> State Certified Modular
	<input type="checkbox"/> Manufactured Home

Utilities	
<u>Water Supply</u>	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
<u>Sewage Disposal</u>	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
Electric: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Gas: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<u>Heating System</u>	
<input type="checkbox"/> Electric <input type="checkbox"/> Oil	
<input checked="" type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas	
<input type="checkbox"/> Other: _____	
<u>Sprinkler System:</u>	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Grading Permit Number: <u>G15006299</u>	
Building Shell Permit Number: _____	

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Applicant's Signature: RAMINOR@COMCAST.NET
Email Address: _____
Title/Company: RICK MINOR GREENFIELD HOMES

Print Name: RICK MINOR
Date: 8-7-15

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
PLEASE WRITE NEATLY & LEGIBLY
-FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL
<input checked="" type="checkbox"/> State Highways		
<input checked="" type="checkbox"/> Building Officials		
<input checked="" type="checkbox"/> PSZA (Zoning)		
<input checked="" type="checkbox"/> PSZA (Engineering)		
<input checked="" type="checkbox"/> Health		<u>9-20-15 [Signature]</u>

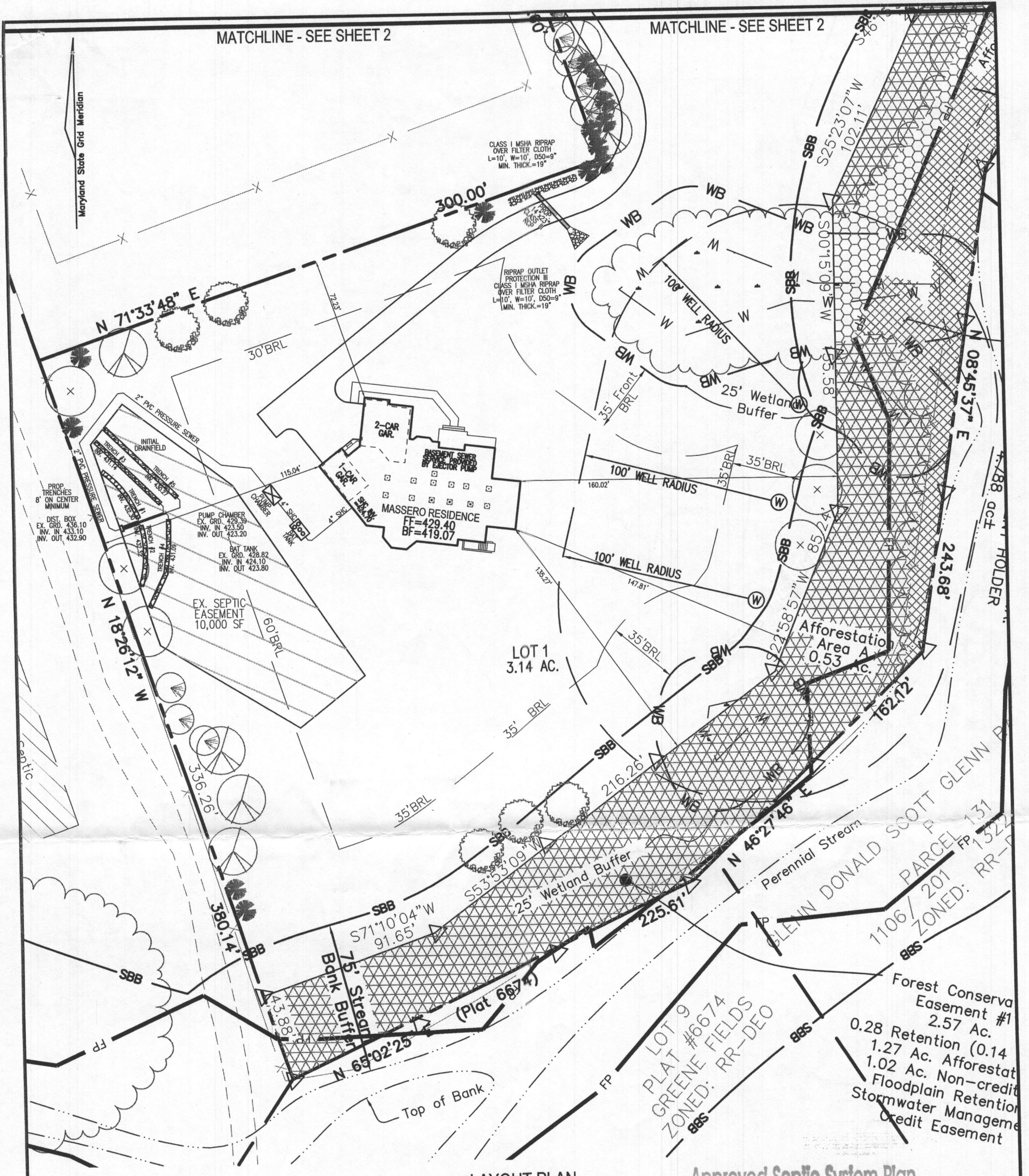
Is Sediment Control approval required for issuance? Yes No
 CONTINGENCY CONSTRUCTION START

DPZ SETBACK INFORMATION	
Front:	
Rear:	
Side:	
Side St.:	
All minimum setbacks met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is Entrance Permit Required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Historic District?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Lot Coverage for New Town Zone:	
SDP/Red-line approval date:	

Filing Fee	\$ <u>100.00</u>
Permit Fee	\$
Tech Fee	\$
Excise Tax	\$
PSFS	\$
Guaranty Fund	\$ <u>50.00</u>
Add'l per Fee	\$
Total Fees	\$
Sub-Total Paid	\$
Balance Due	\$
Check	# <u>87360</u>

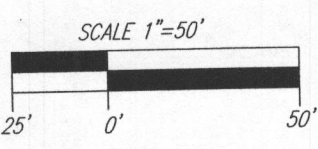
MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 2



LAYOUT PLAN
SCALE: 1"=50'

Approved Septic System Plan
 Howard County Health Department
Dana Bernard 9-28-15
 Signature Date
 B15003395



VA ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET TEL: 410.461.7666
 ELLICOTT CITY, MD 21043 FAX: 410.461.8961

OWNER
 ROBERT L. NAECKER
 12740 ROUTE 108
 CLARKSVILLE, MD 21029
 (410) 781-6782

DEVELOPER
 GREENFIELD HOMES, INC.
 6656 LUSTER DRIVE
 HIGHLAND, MARYLAND 20777
 (410) 781-6782

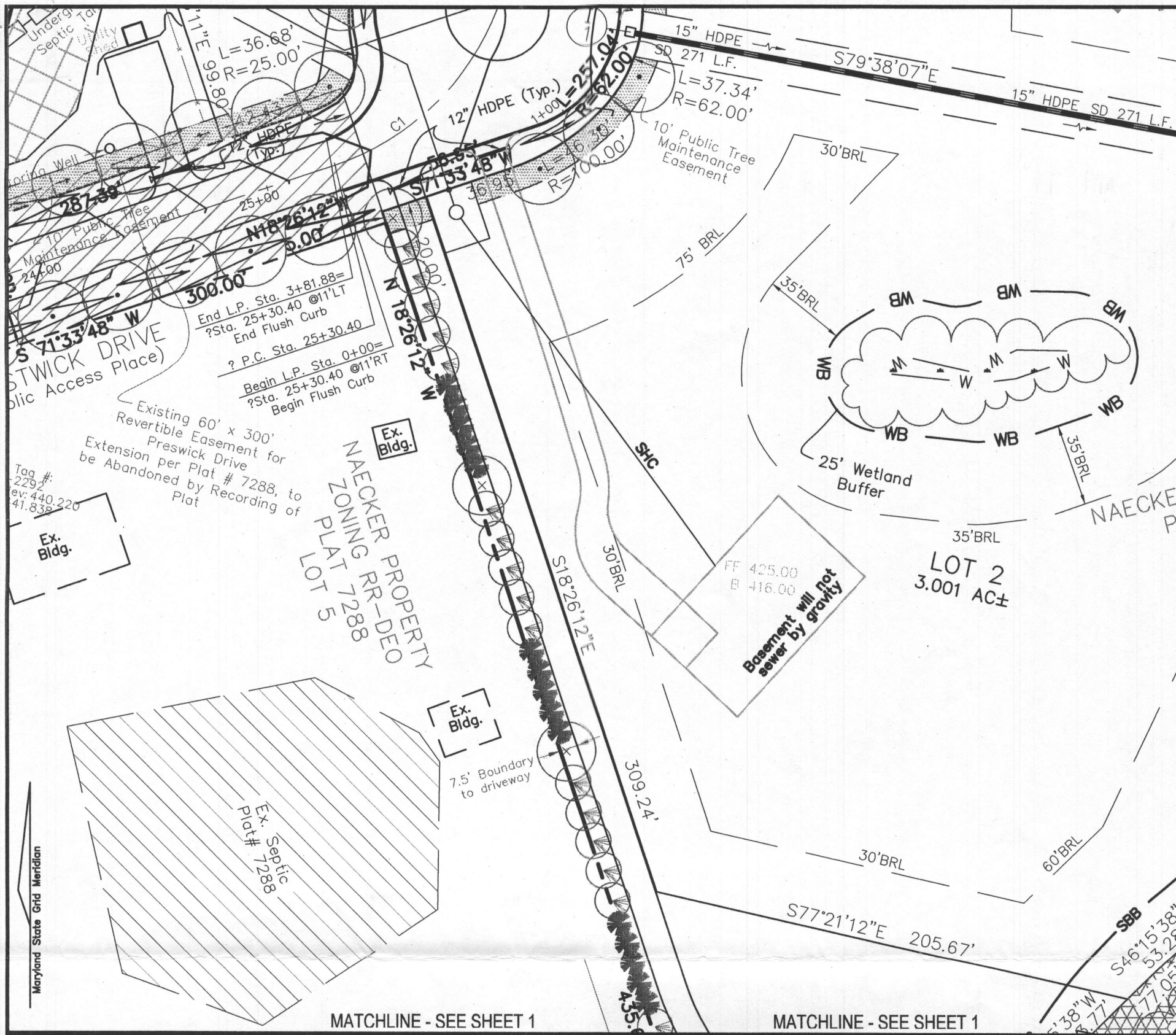
PLOT PLAN
WILLOW POND - LOT 1
 6506 HEATHER GLEN WAY
 (FORMERLY PRESTWICK DRIVE)
 CLARKSVILLE, MD 21029
 REF: F-10-106

SCALE	AS SHOWN
DRAWN BY	JMR
CHECKED BY	RHV
DATE	JULY 2015
W. O. #	14-33
SHEET#	1 OF 4

5TH ELECTION DISTRICT
 TAX MAP: 34 PARCEL: 444

BLOCK: 17
 ZONED: RR-DEO
 HOWARD COUNTY, MARYLAND

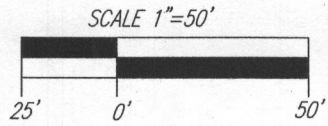
K:\Projects\14-33\ENGR\dwg\GRADING PLAN\LOT 101_PLOT PLAN.dwg, 8/7/2015 12:06:37 PM



MATCHLINE - SEE SHEET 1

MATCHLINE - SEE SHEET 1

LAYOUT PLAN
SCALE: 1"=50'



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SCALE	AS SHOWN
DRAWN BY	JMR
CHECKED BY	RHV
DATE	JULY 2015
W. O. #	14-33
SHEET#	2 OF 4

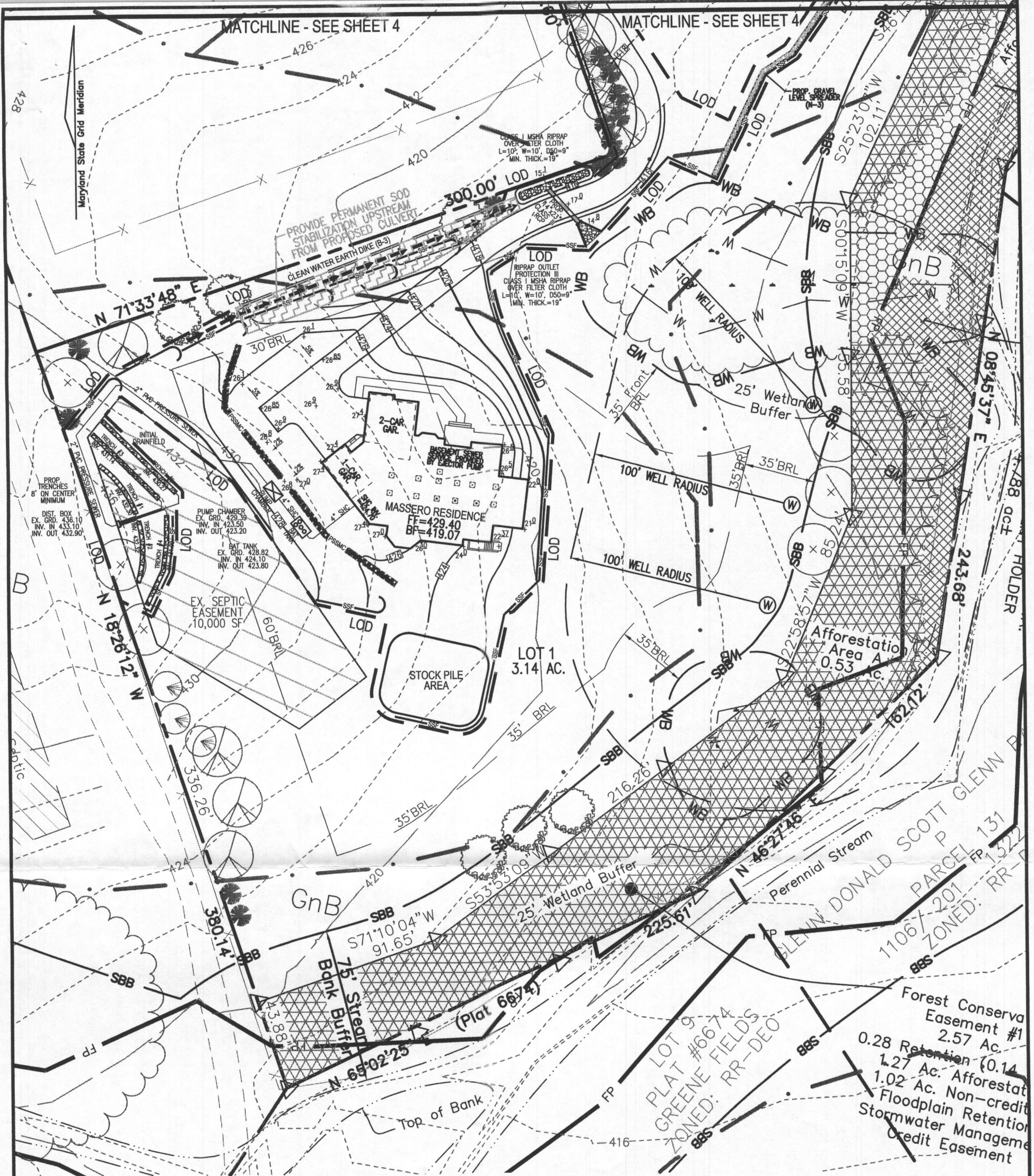
5TH ELECTION DISTRICT
TAX MAP: 34 PARCEL: 444

PLOT PLAN
WILLOW POND - LOT 1

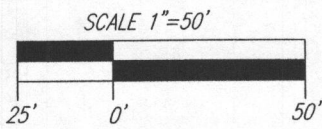
6506 HEATHER GLEN WAY
(FORMERLY PRESTWICK DRIVE)
CLARKSVILLE, MD 21029

REF: F-10-106

BLOCK: 17
ZONED: RR-DEO
HOWARD COUNTY, MARYLAND



GRADING PLAN
SCALE: 1"=50'



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DEVELOPER
GREENFIELD HOMES, INC.
6656 LUSTER DRIVE
HIGHLAND, MARYLAND 20777
(410) 781-6782

PLOT PLAN
WILLOW POND - LOT 1
6506 HEATHER GLEN WAY
(FORMERLY PRESTWICK DRIVE)
CLARKSVILLE, MD 21029
REF: F-10-106

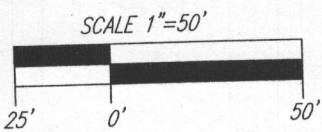
SCALE AS SHOWN
DRAWN BY JMR
CHECKED BY RHV
DATE JULY 2015
W. O. # 14-33
SHEET# 3 OF 4

5TH ELECTION DISTRICT
TAX MAP: 34 PARCEL: 444

BLOCK: 17
ZONED: RR-DEO
HOWARD COUNTY, MARYLAND



GRADING PLAN
SCALE: 1"=50'



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PLOT PLAN
WILLOW POND - LOT 1

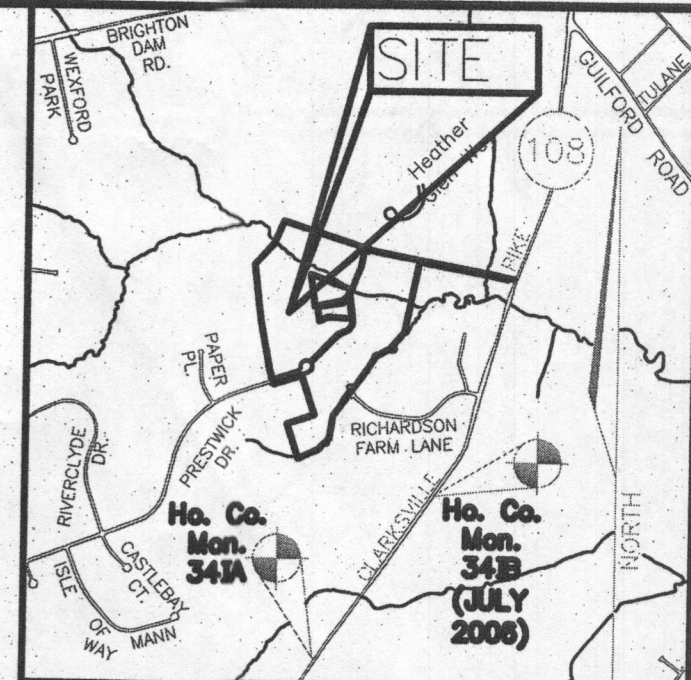
6506 HEATHER GLEN WAY
(FORMERLY PRESTWICK DRIVE)
CLARKSVILLE, MD 21029

REF: F-10-106

SCALE	AS SHOWN
DRAWN BY	JMR
CHECKED BY	RHV
DATE	JULY 2015
W. O. #	14-33
SHEET#	4 OF 4

5TH ELECTION DISTRICT
TAX MAP: 34 PARCEL: 444

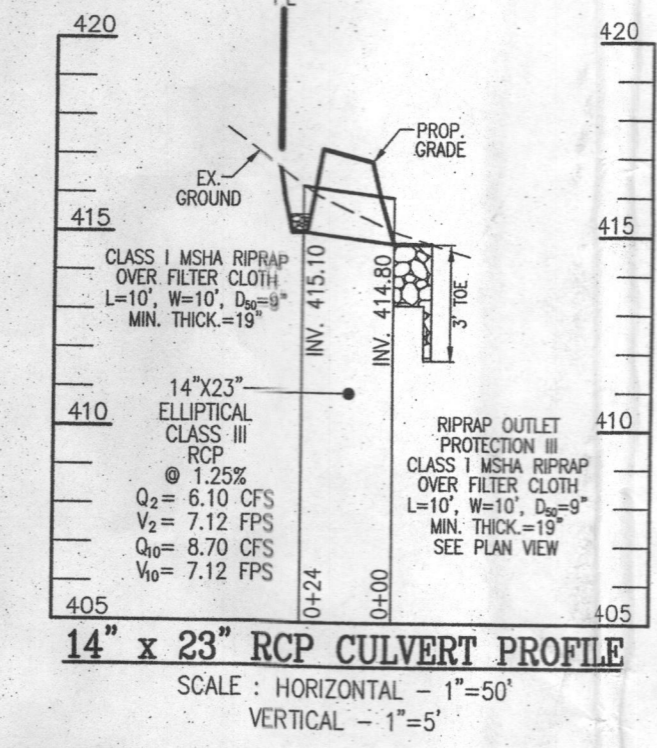
BLOCK: 17
ZONED: RR-DEO
HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1" = 2000'

- LEGEND:**
- PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - - - ADJACENT PROPERTY LINE
 - EXISTING SANITARY MANHOLE
 - SS EXISTING SANITARY LINE
 - EXISTING CLEANOUT
 - EXISTING FIRE HYDRANT
 - W EXISTING WATER LINE
 - EXISTING 10' CONTOUR
 - EXISTING 2' CONTOUR
 - SeE SOILS
 - EXISTING TREELINE
 - PROPOSED TREELINE
 - EXISTING WELL
 - PROPOSED 10' CONTOUR
 - PROPOSED 2' CONTOUR
 - PROPOSED SPOT ELEVATION
 - PROPOSED STABILIZED CONSTRUCTION ENTRANCE
 - SSF PROPOSED SUPER SILT FENCE
 - DF PROPOSED DIVERSION FENCE
 - LOD PROPOSED LIMIT OF DISTURBANCE
 - PROPOSED EROSION CONTROL MATTING
 - PROPOSED SOD STABILIZATION
 - PROPOSED SEPTIC EASEMENT

DRIVEWAY CULVERT
 $Q_{10} = C L_{10} A = 8.7$ cfs
 $A = 10.50$ AC.
 $T_c = 26$ MIN.
 $L_{10} = 4.05$
 $C = 0.21$
 *USE 18" (OR 14"x23" EQUIVALENT)



PLAN VIEW
SCALE: 1"=30'

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	KFACTOR	ERODIBLE
GmB	GLAUCIOUS LOAM, 3 TO 8 PERCENT SLOPES	A	28	NO
GmC	GLAUCIOUS LOAM, 8 TO 15 PERCENT SLOPES	A	28	NO
GmD	GLENNVILLE SILT LOAM, 0 TO 3 PERCENT SLOPES	C	43	NO
GmE	GLENNVILLE-BALLE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	43	YES
MmB	MANOR LOAM, 3 TO 8 PERCENT SLOPES	B	28	NO

SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE
 HOWARD COUNTY SOILS MAP NUMBER 16 - CLARKSVILLE MD
 NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

PLAN VIEW
SCALE: 1"=30'

NOTE: SEDIMENT CONTROL IS TO BE PROVIDED ALONG ACCESS DRIVE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

NOTE: STOCKPILING WILL BE PERMITTED ON LOT 1 ONLY.

OWNER
 ROBERT L. NAECKER
 12740 ROUTE 108
 CLARKSVILLE, MD 21029
 (410) 781-6782

BUILDER
 GREENFIELD HOMES, INC.
 6656 LUSTER DRIVE
 HIGHLAND, MARYLAND 20777
 (410) 781-6782

GRADING PLAN
WILLOW POND - LOT 1
 6506 HEATHER GLEN WAY
 (FORMERLY PRESTWICK DRIVE)
 CLARKSVILLE, MD 21029

BUILDING PERMIT #
 5TH ELECTION DISTRICT
 TAX MAP: 34 PARCEL: 444
 DPZ REF'S: F-10-106, F-09-13, F-98-170, F-89-112, F-87-174, F-79-115, SP-09-03, SP-07-011, VP-87-103, WP-09-62, PLAT 7288

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET
 ELLICOTT CITY, MD 21043
 TEL: 410-461-7666
 FAX: 410-461-8961



DESIGN BY: RHV
 DRAWN BY: JMR
 CHECKED BY: RHV
 DATE: July 2015
 SCALE: AS SHOWN
 W.O. NO.: 14-33

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18183 EXPIRATION DATE: 09-27-2016

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

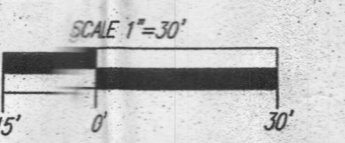
Signature of Developer: [Signature]
 DATE: 7/14/15

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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: [Signature]
 DATE: 7/14/15

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of SCD: [Signature]
 DATE: 7/20/15



K:\Projects\14-083\GRADING\GRADING PLAN\LOT 101_Grading Plan.dwg, 7/14/2015, 8:33 AM

**HOWARD SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT CONTROL NOTES**

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID) PRIOR TO THE START OF ANY CONSTRUCTION. (410-313-5712).
- 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.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN A 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DICES, FERTILIZER STRIPS AND ALL SLOPES GREATER THAN 3:1, @ 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. B-4-2), TEMPORARY SEEDING (SEC. B-4-4), AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS OBTAINED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 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.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

SITE ANALYSIS

TOTAL AREA OF SITE:	3.14 ACRES
AREA DISTURBED:	1.12 ACRES
AREA TO BE ROOFED OR PAVED:	0.32 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	0.80 ACRES
TOTAL CUT:	570 CY*
TOTAL FILL:	570 CY*
OFFSITE WASTE/BORROW AREA LOCATION:	**

* ESTIMATE ONLY. CONTRACTOR SHALL VERIFY QUANTITIES TO HIS OWN SATISFACTION. ** TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, WITH AN APPROVED AND ACTIVE GRADING PERMIT.

**B-4-4 STANDARDS AND SPECIFICATIONS
FOR
TEMPORARY STABILIZATION**

- DEFINITION**
TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 16 MONTHS.
- USAGE**
TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.
- CONDITIONS WHERE PRACTICE APPLIES**
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.
- CRITERIA**
- SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDNESS ZONE (FROM FIGURE B.3), 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 PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
 - FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
 - WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONG AS PRESCRIBED IN SECTION B-4-3.1.1.8 AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY

NO	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES		SEEDING DEPTHS	FERTILIZER RATE (10-20-20)	LIME RATE
			START	END			
1	COOL SEASON PERENNIAL GRASSES OR LEGUMES	40 LB / AC	MAY 1 TO AUG 15	AUG 15 TO OCT 15	1/2 IN.	4.5B / AC (10 LB PER 1000 SF)	2 TONS / AC (50 LB PER 1000 SF)
2	WARM SEASON FOXTAIL OR EGAL	30 LB / AC	MAY 16 TO JUL 31		1/2 IN.		

**B-4-5 STANDARDS AND SPECIFICATIONS
FOR
PERMANENT STABILIZATION**

- DEFINITION**
TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.
- USAGE**
TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.
- CONDITIONS WHERE PRACTICE APPLIES**
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.
- CRITERIA**
- GENERAL SPECIFICATIONS
 - SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDNESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE (FROM TABLE B.2 - ENTER SELECTED MIXTURES).
 - FOR AREAS RECEIVING LOW MAINTENANCE, ENTER THE QUALITY OF SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
 - ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHOULDER, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING.
 - FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED ON THE SOIL TESTING AGENT.
 - FOR AREAS RECEIVING LOW MAINTENANCE, APPLY LIME FIRM FERTILIZER (46-0-0) AT 3-1/2 POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACR) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.
 - TURFGRASS MIXTURES
 - KENTUCKY BLUEGRASS: MUST BE DESIRED INCLUDE LAWN, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.
 - SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE AREA TO BE SEEDING. ENTER SELECTED MIXTURES, APPLICATION RATES, SEEDING DATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
 - KENTUCKY BLUEGRASS: FULL SUN MIXTURE; FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE HEAT OF CENTRAL MARYLAND.
 - SEEDING RATES: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
 - KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE; FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL PASTURE CULTIVARS/ CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
 - TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE; FOR USE IN DROUGHT PRONE AREAS AND/OR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURES INCLUDE: CERTIFIED TALL FESCUE CULTIVARS 80 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS TO 5 PERCENT. SEEDING RATES: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.
 - KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE; FOR USE IN AREAS WITH SHADE OR BLUEGRASS LAWN. FOR ESTABLISHMENT IN HIGH QUALITY INTERSEEDING MAINTAINED TURF AREA MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 20 TO 40 PERCENT AND CERTIFIED FINE FESCUE 60 TO 70 PERCENT. SEEDING RATES: 1.5 TO 3 POUNDS PER 1000 SQUARE FEET.
 - TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE; FOR USE IN DROUGHT PRONE AREAS AND/OR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURES INCLUDE: CERTIFIED TALL FESCUE CULTIVARS 80 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS TO 5 PERCENT. SEEDING RATES: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.
 - KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE; FOR USE IN AREAS WITH SHADE OR BLUEGRASS LAWN. FOR ESTABLISHMENT IN HIGH QUALITY INTERSEEDING MAINTAINED TURF AREA MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 20 TO 40 PERCENT AND CERTIFIED FINE FESCUE 60 TO 70 PERCENT. SEEDING RATES: 1.5 TO 3 POUNDS PER 1000 SQUARE FEET.

- GENERAL SPECIFICATIONS
 - CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
 - SOD MUST BE MOISTURE CURED AT A MINIMUM SOIL THICKNESS OF 3/4 INCH, PLUS OR MINUS 1/8 INCH, AT THE TIME OF CUTTING. MEASUREMENT FORTHOICKNESS MUST EXCLUDE TOP GROWTH AND TRASH. BROKEN PADS AND TOP OR UNDER ENDS WILL NOT BE ACCEPTABLE.
 - STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
 - SOD MUST NOT BE HARVESTED OR TRANSPORTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
 - SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPORTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.
- SOD INSTALLATION
 - DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IF AREAS HAVING DRY SUBSOIL, IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
 - LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY INTERLOCK AGAINST EACH OTHER. STAGGER JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THE SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
 - WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERED JOINTS. ROLL AND TAMP FOR CONTACT BETWEEN THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.
 - WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PORE OF SOD WITHIN EIGHT HOURS.
- SOD MAINTENANCE
 - IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING.
 - AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
 - DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

NOTES:
SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY NEWS #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND" CHOICE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTURE PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE.

**B-4-2 STANDARDS AND SPECIFICATIONS
FOR
SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS**

- DEFINITION**
THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.
- USAGE**
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.
- CONDITIONS WHERE PRACTICE APPLIES**
WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.
- CRITERIA**
- SOIL PREPARATION
 - TEMPORARY STABILIZATION
 - SEEDING PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DOG HARROWS OR CHISEL FLAWS, OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSEND, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE UNROUNDENED CONDITION. SLOPES 3:1 OR FLATTER SHOULD BE TRACED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
 - APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
 - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
 - PERMANENT STABILIZATION
 - SOIL PREPARATION CONSISTS OF ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
 - SOIL PH LESS THAN 6.0 AND 7.0.
 - SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
 - SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GRIN) THAN 30 PERCENT CLAY TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION IF LONGER GRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
 - SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
 - SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
 - GRADED AREAS MUST BE PLANNED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARRED OR OTHERWISE PREPARED TO A DEPTH OF 3 TO 5 INCHES.
 - APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
 - SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. PAVE LAWN AREAS TO SMOOTH THE SURFACE. REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND REPAIR THE AREA AS FAST AS A FASHION AS TO BE SURFACE SOIL BY DISKING WITH A RIGID CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDING.
 - PREPARATION TRACED SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRAGILE. SEEDING LOGGING MAY BE NECESSARY ON NEWLY DISTURBED AREAS.
 - TOPSOILING
 - TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCRETE, HIGHLY COMPACTED, OR UNACCEPTABLE SOIL GRADE, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADE.
 - TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE CRITERIA AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.
 - TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
 - THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
 - THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUSTAIN PLANTS OR CONTAIN A GREEN DIE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMITY SPREAD SLURRY.
 - WORM MULCH, INCLUDING DIRT, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.
 - WORM MULCH AREAS ARE 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 TO FORM A BLOTTER-LIKE GROUND COVER TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST BE SUFFICIENTLY FINE TO ALLOW FOR APPLICATION HAVING MOISTURE ASSOCIATION AND PERFORATION PROPERTIES AND MUST CONTAIN AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INTERRUPTING THE GROWTH OF THE GRASS SEEDLINGS.
 - WORM MULCH MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATIONS THAT WILL BE PHYTO-TOXIC.
 - WORM MULCH MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT, MAXIMUM WATER HOLDING CAPACITY OF 90 PERCENT HUMIDITY.
 - APPLICATION
 - APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.
 - WHEN STRAW MULCH IS USED, SPREAD IT OVERALL SEEDING AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LAYER DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SURFACE IS NOT EXPOSED. MULCH USING A MULCH ANCHORING TOOL. INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE.
 - WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 PARTS PER HUNDRED OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
 - ANCHORING
 - PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON THE SIZE OF THE EROSION HAZARD:
 - MULCH ANCHORING TOOL: A TRUCKER DRIVEN IMPELANT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THE WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 PARTS PER HUNDRED OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
 - SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), (DA-70), PETROSET, TERMA W, TERA TACK OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVY AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON HESHS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.
 - LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER SPECIFICATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 14 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.
 - SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)
 - SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATES AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSES MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSIS.
 - FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZERS WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY.
 - FERTILIZERS MUST BE DELIVERED TO THE SITE FULLY LABELLED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND MANUFACTURER OF THE PRODUCT.
 - LIME MATERIALS MUST BE GROUND LIMESTONE (HARD) OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING WHICH CONTAINS AT LEAST 50 PERCENT TONN OXIDES (CALCIUM OXIDE PLUS MANGANESE OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.
 - LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
 - WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 1 TO 6 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

PERMANENT SEEDING SUMMARY

NO	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES		SEEDING DEPTHS	FERTILIZER RATE (10-20-20)	LIME RATE
			START	END			
1	COOL SEASON PERENNIAL GRASSES OR LEGUMES	40 LB / AC	MAY 1 TO AUG 15	AUG 15 TO OCT 15	1/2 IN.	4.5B / AC (10 LB PER 1000 SF)	2 TONS / AC (50 LB PER 1000 SF)
2	WARM SEASON FOXTAIL OR EGAL	30 LB / AC	MAY 16 TO JUL 31		1/2 IN.		

**B-4-3 STANDARDS AND SPECIFICATIONS
FOR
SEEDING AND MULCHING**

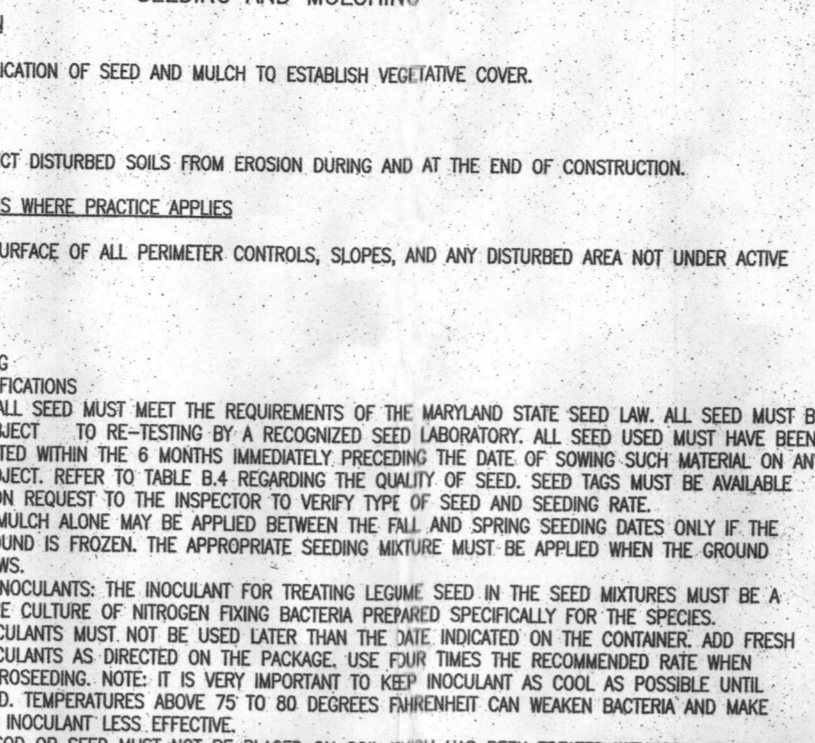
- DEFINITION**
THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.
- USAGE**
TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.
- CONDITIONS WHERE PRACTICE APPLIES**
TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE CONSTRUCTION.
- CRITERIA**
- SEEDING
 - SEEDS MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. AFTER THE SEEDS ARE TESTED, THE QUALITY OF SEED, SEED TYPES MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.
 - IN THE UNROUNDENED CONDITION, SLOPES 3:1 OR FLATTER SHOULD BE TRACED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRAGILE. SEEDING LOGGING MAY BE NECESSARY ON NEWLY DISTURBED AREAS.
 - INCULCANTS: THE INCULCANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF INCULCANT FROM A REPUTABLE SOURCE SPECIFICALLY FOR THE SPECIES. INCULCANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. AND FRESH INCULCANTS ARE REQUIRED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INCULCANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INCULCANT LESS EFFECTIVE.
 - SOIL MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL. UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
 - APPLICATION
 - DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL GROW OR BROADCAST SPREADERS.
 - INCORPORATE SEED INTO THE SOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING SUMMARY.
 - PERMANENT SEEDING TABLE B.3, BY SITE-SPECIFIC SEEDING SUMMARIES.
 - APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.
 - DRILL OR CULTEPACER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL. CULTIPACER SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE NUTRIENT AT LEAST 1/4 INCH OF SOIL COVERING. SEEDING MUST BE FIRM AFTER PLANTING.
 - APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.
 - HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER).
 - IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN, 2000 (PHOSPHORUS), 200 POUNDS PER ACRE (200 POTASSIUM), 200 POUNDS PER ACRE.
 - LIME: USE ONLY ORGANIC AGRICULTURAL LIME (UP TO 5 TONS PER ACRE MAY BE APPLIED PER ACRE IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR BY HYDROSEEDING). NORMALLY, NO MORE THAN 2 TONS PER ACRE MAY BE APPLIED AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.
 - SEED AND FERTILIZER CAN BE APPLIED WITHOUT INTERRUPTION.
 - WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.
 - MULCHING
 - MULCH MATERIALS (IN ORDER OF PREFERENCE)
 - STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, LIME, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF MINOR WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLLY, WET, DECAYED, OR EXCESSIVELY DUTY. NOTE: ONLY ONLY STRAW MULCH IS ALLOWED IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED.
 - WOOD CELLULOSE FIBER MULCH (WCM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.
 - WCM IS TO BE EVEN GREEN OR CONTAIN A GREEN DIE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMITY SPREAD SLURRY.
 - WCM, INCLUDING DIRT, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.
 - WCM MATERIALS ARE TO 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 TO FORM A BLOTTER-LIKE GROUND COVER TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST BE SUFFICIENTLY FINE TO ALLOW FOR APPLICATION HAVING MOISTURE ASSOCIATION AND PERFORATION PROPERTIES AND MUST CONTAIN AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INTERRUPTING THE GROWTH OF THE GRASS SEEDLINGS.
 - WCM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATIONS THAT WILL BE PHYTO-TOXIC.
 - WCM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT, MAXIMUM WATER HOLDING CAPACITY OF 90 PERCENT HUMIDITY.
 - APPLICATION
 - APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.
 - WHEN STRAW MULCH IS USED, SPREAD IT OVERALL SEEDING AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LAYER DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SURFACE IS NOT EXPOSED. MULCH USING A MULCH ANCHORING TOOL. INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE.
 - WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 PARTS PER HUNDRED OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
 - ANCHORING
 - PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON THE SIZE OF THE EROSION HAZARD:
 - MULCH ANCHORING TOOL: A TRUCKER DRIVEN IMPELANT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THE WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 PARTS PER HUNDRED OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
 - SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), (DA-70), PETROSET, TERMA W, TERA TACK OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVY AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON HESHS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.
 - LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER SPECIFICATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 14 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.

SEQUENCE OF CONSTRUCTION

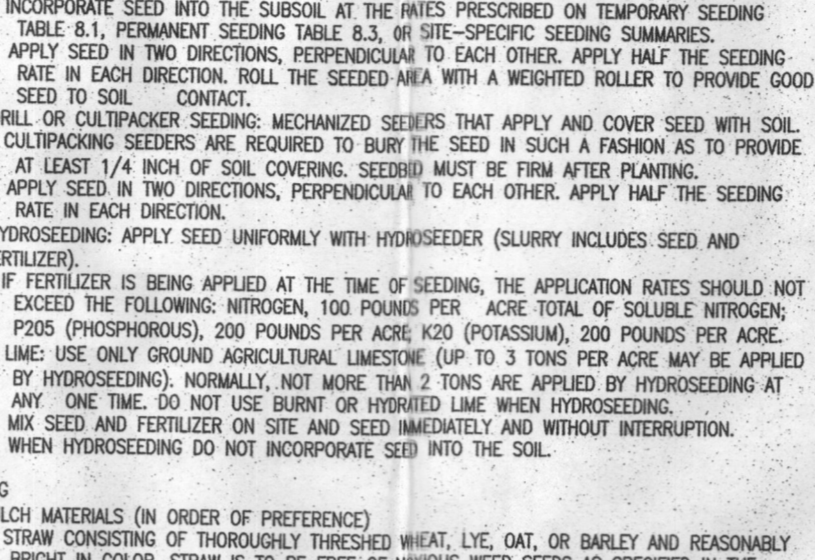
- OBTAIN GRADING PERMIT. (2 WEEKS)
- REQUEST A PRE-CONSTRUCTION MEETING WITH THE HOWARD COUNTY DPW, CONSTRUCTION INSPECTION DIVISION (CID) 313-5712 PRIOR TO BEGINNING CONSTRUCTION. (1 DAY)
- NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410-313-1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK. (1 DAY)
- CLEARING AND GRUBBING AS NECESSARY FOR THE INSTALLATION OF PERIMETER CONTROLS. (2 DAYS)
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, CLEAN WATER EARTH DIKE, AND DRIVEWAY CULVERT. INSTALL PERIMETER CONTROLS, DIRECT CLEAN OFFSITE RUNOFF TO DRIVEWAY CULVERT UTILIZING DIVERSION FENCE AND CLEAN WATER EARTH DIKE. (2 DAYS)
- PERFORM CLEARING, GRUBBING, AND DEMOLITION WITHIN INSTALLED PERIMETER CONTROLS. (2 DAYS)
- AFTER OBTAINING PERMISSION FROM THE SEHMENT CONTROL INSPECTOR TO PROCEED, INSTALL DRIVEWAY CULVERT, RIPRAP, AND ROLLER GRADE SITE. INSTALL PCCM AND BEGIN HOUSE CONSTRUCTION. (2 WEEKS)
- CONSTRUCT HOUSE, LEVEL SPREADERS, SEPTIC SYSTEM, AND DRIVEWAY. (6 MONTHS)
- PERFORM FINAL GRADING, LANDSCAPING, STABILIZATION, AND INSTALL PERMANENT SOD STABILIZATION CULVERT UPSTREAM OF THE PROPOSED CULVERT. (2 WEEKS)
- UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROLS AND STABILIZE DISTURBANCES.

NOTES:
ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.

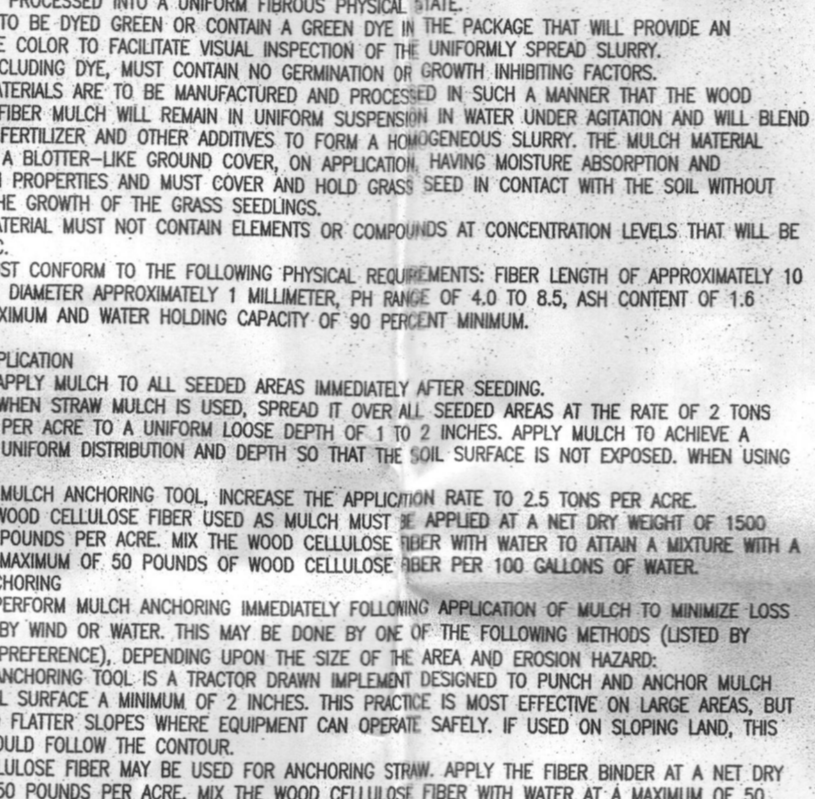
**B-4-1 STANDARDS AND SPECIFICATIONS
FOR
STABILIZED CONSTRUCTION ENTRANCE**



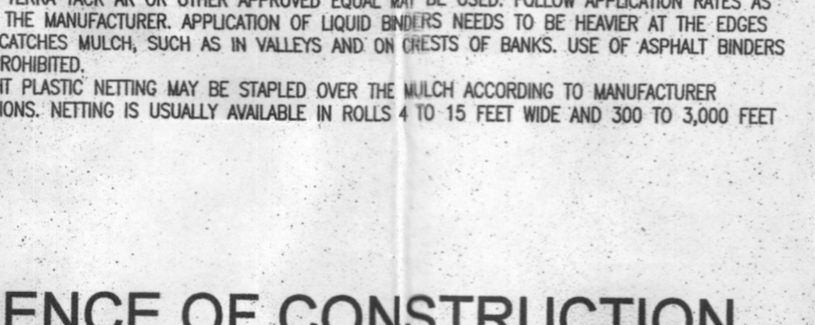
PERMANENT SOIL STABILIZATION MATTING CHANNEL APPLICATION



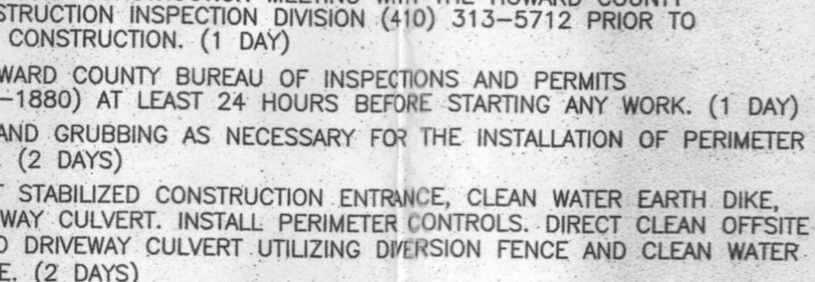
DETAIL E-1 SILT FENCE



DETAIL C-1 EARTH DIKE



GRADING PLAN



DEVELOPER'S CERTIFICATE

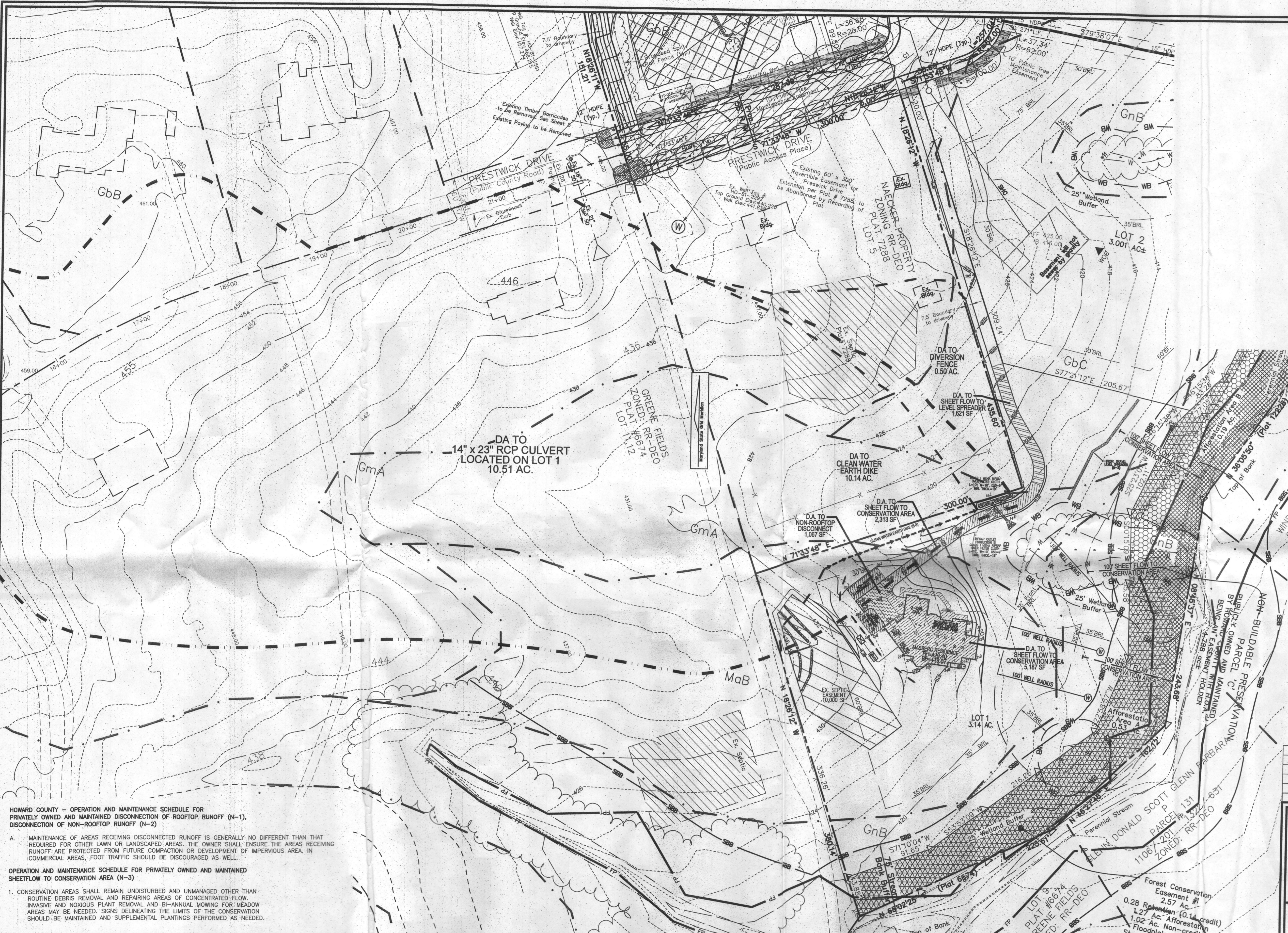
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

ENGINEER'S CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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."

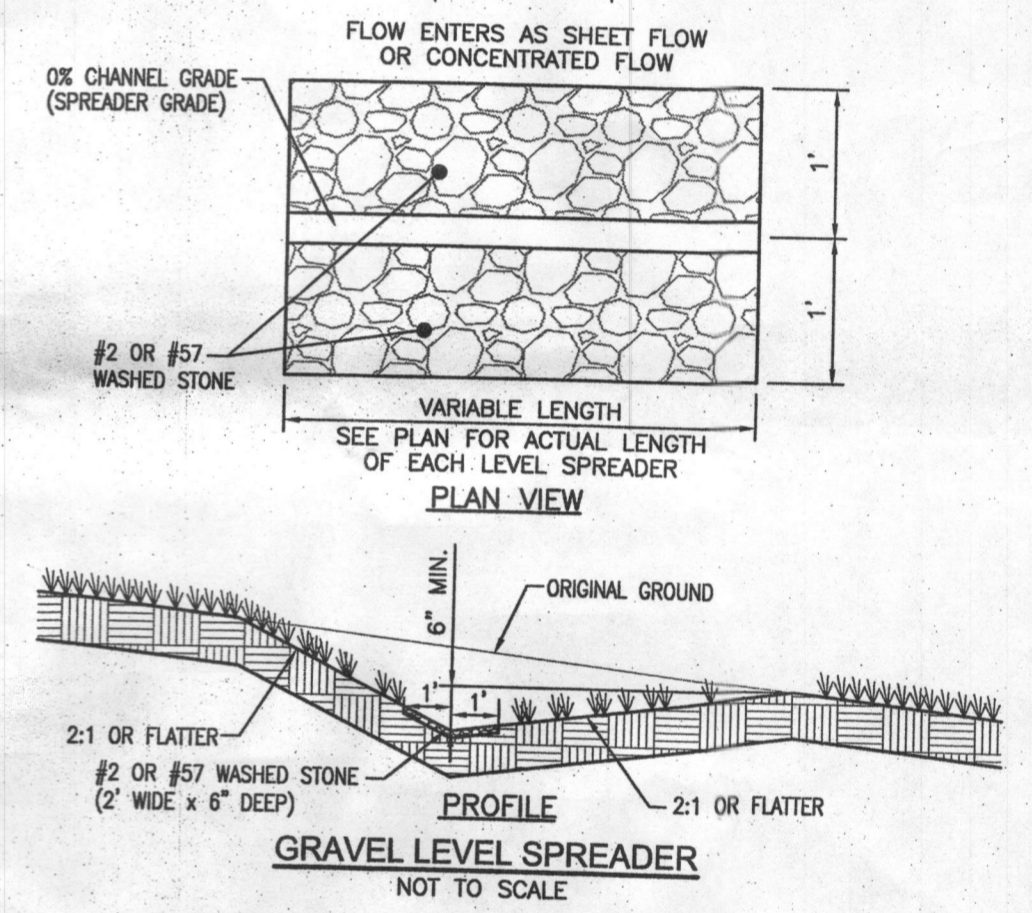
NOTES

- DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE THE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN HEREON.



LEGEND:

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- SOILS
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING WELL
- EXISTING SEPTIC EASEMENT
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- PROPOSED SPOT ELEVATION
- NON-ROOFTOP DISCONNECT (N-2)
- GRAVEL LEVEL SPREADER (N-3)
- AREA OF DRAINAGE SHEETFLOW TO CONSERVATION AREA (N-3) (EFFECTIVE BUFFER WIDTH=100') (SLOPES $\leq 5.0\%$ $P_{e}=1.0$)
- AREA OF DRAINAGE TO SHEETFLOW TO GRAVEL LEVEL SPREADER (N-3) (EFFECTIVE BUFFER WIDTH=100') (SLOPES $\geq 5.0\%$ $P_{e}=1.0$)
- AREA OF DRIVEWAY DRAINAGE TO NON-ROOFTOP DISCONNECT (N-2) (IMPERVIOUS RATIO 1:1 $P_{e}=1.0$)
- DRAINAGE AREA TO 14" x 23" RCP CULVERT LOCATED ON LOT 1



OWNER
 ROBERT L. NAECKER
 12740 ROUTE 108
 CLARKSVILLE, MD 21029
 (410) 781-6782

BUILDER
 GREENFIELD HOMES, INC.
 6656 LUSTER DRIVE
 HIGHLAND, MARYLAND 20777
 (410) 781-6782

HOWARD COUNTY - OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF ROOFTOP RUNOFF (N-1), DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

A. MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE OWNER SHALL ENSURE THE AREAS RECEIVING RUNOFF ARE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED SHEETFLOW TO CONSERVATION AREA (N-3)

1. CONSERVATION AREAS SHALL REMAIN UNDISTURBED AND UNMANAGED OTHER THAN ROUTINE DEBRIS REMOVAL AND REPAIRING AREAS OF CONCENTRATED FLOW. INVASIVE AND NOXIOUS PLANT REMOVAL AND BI-ANNUAL MOWING FOR MEADOW AREAS MAY BE NEEDED. SIGNS DELINEATING THE LIMITS OF THE CONSERVATION AREAS SHOULD BE MAINTAINED AND SUPPLEMENTAL PLANTINGS PERFORMED AS NEEDED.

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

Robert H. Vogel
 SIGNATURE OF DEVELOPER

ENGINEER'S CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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."

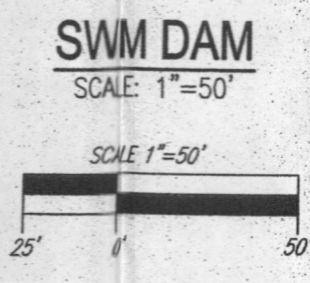
Robert H. Vogel
 SIGNATURE OF ENGINEER

7/20/15
 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John R. Roberts
 SIGNATURE OF HOWARD SCD

7/20/15
 DATE



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE
GbB	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	A	.28	NO
GbC	GLADSTONE LOAM, 8 TO 15 PERCENT SLOPES	A	.28	NO
GnB	GLENNVILLE SILT LOAM, 0 TO 5 PERCENT SLOPES	C	.43	NO
GnB	GLENNVILLE-SALE SILT LOAMS, 0 TO 5 PERCENT SLOPES	C	.43	YES
MaB	MANOR LOAM, 3 TO 8 PERCENT SLOPES	B	.28	NO

NOTE:
 HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

NO. _____ REVISION _____ DATE _____

**GRADING PLAN
 WILLOW POND - LOT 1**
 6506 HEATHER GLEN WAY
 (FORMERLY PRESTWICK DRIVE)
 CLARKSVILLE, MD 21029

BUILDING PERMIT # _____

5TH ELECTION DISTRICT
 TAX MAP: 34 PARCEL: 444
 DTZ REF'S: F-10-106, F-09-13, F-08-170, F-08-112, F-87-174, F-79-115, SP-08-03, SP-07-011, SP-07-103, WF-09-02, PLAT 7288

BLOCK: 17
 ZONE: RR-DEO
 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET
 ELLICOTT CITY, MD 21043
 TEL: 410.461.7666
 FAX: 410.461.8961

DESIGN BY: RHV
 DRAWN BY: JMR
 CHECKED BY: RHV
 DATE: JULY 2015
 SCALE: AS SHOWN
 W.O. NO.: 14-33

STATE OF MARYLAND
 REGISTERED PROFESSIONAL ENGINEER

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. 16193, EXPIRATION DATE 09-27-2016

3 SHEET OF 3