



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.: B/6003445

Building Address: 8110 Brookwood Farms Rd
 City: Fulton State: MD Zip Code: 20759
 Suite/Apt. # _____ SDP/WP/BA #: _____
 Census Tract: _____ Subdivision: _____
 Section: _____ Area: _____ Lot: B A
 Tax Map: 45 Parcel: 0001 Grid: _____
 Zoning: _____ Map Coordinates: _____ Lot Size: 33.7A

Existing Use: SFD
 Proposed Use: SFD w/ tank
 Estimated Construction Cost: \$ 4,000
 Description of Work: install 1000 above ground propane tank

Occupant or Tenant: owner

Was tenant space previously occupied? Yes No

Contact Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Property Owner's Name: Rizvi Abd Raza
 Address: 9901 midsummer snow lane
 City: Laurel State: MD Zip Code: 20723
 Phone: _____ Fax: _____
 Email: _____

Applicant's Name & Mailing Address, (If other than stated herein)
 Applicant's Name: Michelle Leck
 Address: 300 Box 310
 City: Bernham State: MD Zip Code: 21028
 Phone: 301 725 3330 Fax: _____
 Email: Michelle@approvedandapproved.com

Contractor Company: HJ Potts
 Contact Person: Michael Underwood
 Address: 300 main street
 City: Laurel State: MD Zip Code: 20707
 License No.: 600029
 Phone: 301 725 3330 Fax: _____
 Email: _____

Engineer/Architect Company: Contractor
 Responsible Design Prof.: _____
 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	
Construction type:	<input type="checkbox"/> Slab on Grade	
<input type="checkbox"/> Reinforced Concrete	No. of Bedrooms:	
<input type="checkbox"/> Structural Steel	Multi-family Dwelling	
<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:	
	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	
Water Supply	
<input type="checkbox"/> Public	
<input type="checkbox"/> Private	
Sewage Disposal	
<input type="checkbox"/> Public	
<input type="checkbox"/> Private	
Electric: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Gas: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Heating System	
<input type="checkbox"/> Electric <input type="checkbox"/> Oil	
<input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas	
<input type="checkbox"/> Other:	
Sprinkler System:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Grading Permit Number:	
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: _____
 Michelle Leck
 Email Address: Michelle@approvedandapproved.com
 Title/Company: Permit

Print Name: _____
 Date: 8/31/16

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>8/30/16</u>	<u>[Signature]</u>

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

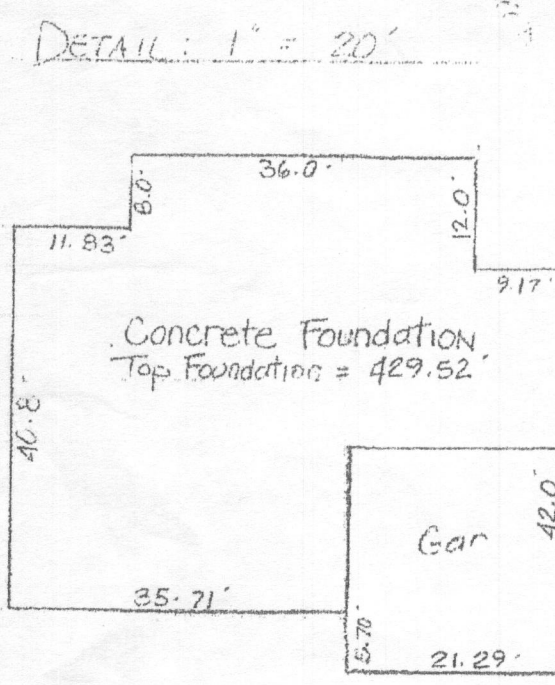
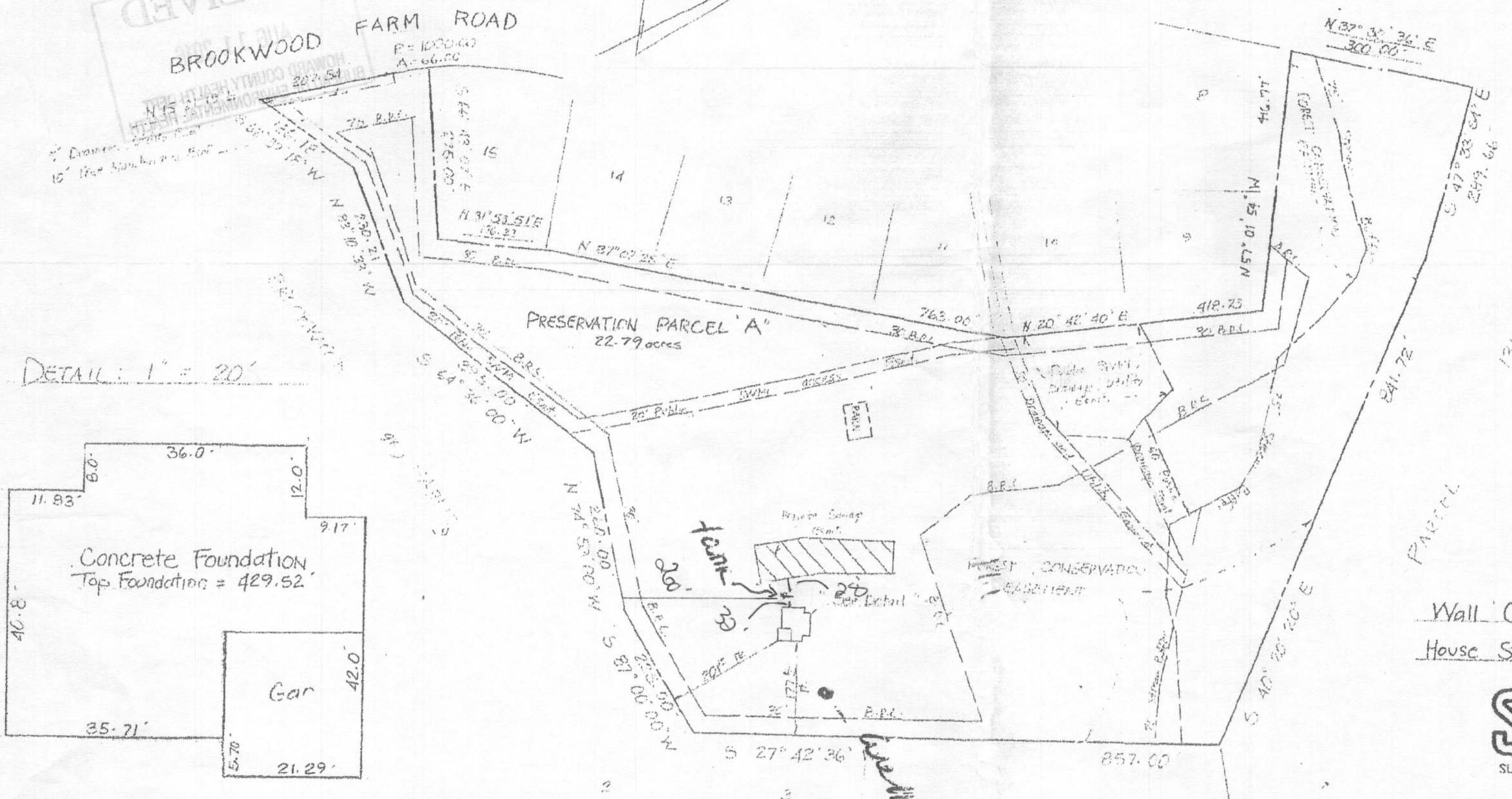
DPZ SETBACK INFORMATION
Front: _____
Rear: _____
Side: _____
Side St.: _____
All minimum setbacks met? <input type="checkbox"/> Yes <input type="checkbox"/> No
Is Entrance Permit Required? <input type="checkbox"/> Yes <input type="checkbox"/> No
Historic District? <input type="checkbox"/> Yes <input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

Filing Fee	\$
Permit Fee	\$
Tech Fee	\$
Excise Tax	\$
PSFS	\$
Guaranty Fund	\$
Add'l per Fee	\$
Total Fees	\$ <u>110</u>
Sub-Total Paid	\$
Balance Due	\$ <u>110</u>
Check	# <u>5489</u>

NOTES:

1. THIS SURVEY HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.
2. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN ZONE C AS SHOWN ON F.E.M.A. FLOOD INSURANCE RATE MAP COMMUNITY PANEL No. _____ OF Howard COUNTY, MARYLAND.
3. FOR TITLE PURPOSES ONLY.
4. THIS PLAT IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES, BUT PREPARED FOR THE EXCLUSIVE USE OF THE PRESENT PROPERTY OWNERS OF RECORD AND/OR THOSE WHO PURCHASE, MOREHOUSE OR GUARANTEE THE TITLE WITHIN SIX MONTHS FROM THE DATE HEREOF AND AS THEY WARRANT THIS HOUSE LOCATION PLAT.
5. PROPERTY CORNERS HAVE NOT BEEN SET WITH THIS SURVEY. PROPERTY INFORMATION WAS TAKEN FROM BEST AVAILABLE RECORDS.
6. THIS LOCATION PLAT IS NOT TO BE USED FOR THE CONSTRUCTION OF FENCES OR OTHER IMPROVEMENTS. A BOUNDARY SURVEY AND LOT STAKEOUT WOULD HAVE TO BE PERFORMED TO DETERMINE THE LOCATION OF ALL PROPERTY LINES AS SHOWN.

RECEIVED
HOWARD COUNTY HEALTH DEPT
1515 15th St
BETHESDA, MD 20814
207-541-1100



Approved 8/30
RAC B16003445

Wall Check, Elevation Check 3-30-2016
House Stakeout: Partially Revised 2-5-2016

SURVEYS, INC.
SURVEYORS ENGINEERS LAND PLANNERS
PERMIT SERVICES
350 MAIN STREET
LAUREL, MARYLAND, 20707

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS LOT SURVEY IS BASED ON A FIELD SURVEY PERFORMED BY MYSELF OR DIRECTLY UNDER MY SUPERVISION. INFORMATION HEREON WAS OBTAINED FROM COUNTY LAND RECORDS AND TO THE BEST OF MY KNOWLEDGE AND BELIEF IS CORRECT, THAT PROPERTY CORNERS HAVE BEEN FOUND AND/OR SET AS INDICATED.

[Signature]
GREGORY C. BENEFIELD
REGISTERED PROFESSIONAL
LAND SURVEYOR No. MD. 10994

12-23-15
DATE

DRAWN BY T.O.
CHECKED BY [Signature]
DATE 12-28-15
SCALE 1" = 200'
JOB NO. 15-20
CASE NO. _____



HOUSE LOCATION PLAT
8110 Brookwood Farm Road
~~LOT(S)~~ Parcel "A" BLOCK _____
BROOKWOOD FARMS
5 TH ELECTION DISTRICT
Howard COUNTY, MARYLAND
PLAT BOOK # 11848 PLAT _____
DWG No. 15-236

72
210
214



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: 8-14-15

Permit No.: B15003508

Building Address: 8110 Brookwood Farm Rd
 City: Fulton State: Md Zip Code: _____
 Suite/Apt. #: _____ SDP/WP/BA #: _____
 Census Tract: _____ Subdivision: _____
 Section: _____ Area: _____ Lot: _____
 Tax Map: 45 Parcel: 1 Grid: 8
 Zoning: _____ Map Coordinates: _____ Lot Size: 22.78 ac

Property Owner's Name: Abid Rizvi
 Address: 4401 Midsummer Snow Lane
 City: Lanier State: Md Zip Code: 20725
 Phone: 301-490-3651 Fax: _____
 Email: _____

Existing Use: Vacant Property
 Proposed Use: Construct Single Family House
 Estimated Construction Cost: \$ 400,000.
 Description of Work: Single Family Home

Applicant's Name & Mailing Address, (If other than stated herein)
 Applicant's Name: Legend Builders Inc
 Address: 300 Second St.
 City: Lanier State: Md Zip Code: 20725
 Phone: 301-490-9651 Fax: 301-490-9651
 Email: legendsgroup@comcast.net

Contractor Company: Legend Builders Inc
 Contact Person: Michael Collins
 Address: PO BOX 511
 City: Buffordsville State: Md Zip Code: 20846
 License No.: MHBR # 147
 Phone: 240-216-4878 Fax: 301-490-9651
 Email: legendsgroup@comcast.net

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

Engineer/Architect Company: DW TAYLOR ASSC.
 Responsible Design Prof.: Don Taylor
 Address: 5024 Horsey Hall Dr
 City: Ellicott City State: Md Zip Code: 21042
 Phone: 410-967-1121 Fax: 410-997-2924
 Email: INFO@DWTAYLOR.COM

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>57'</u>	<u>50'</u>
Area of construction (sq. ft.):	2 nd floor: <u>57'</u>	<u>46'</u>
	Basement: <u>57'</u>	<u>50'</u>
Use group:	<input checked="" type="checkbox"/> Finished Basement	
	<input type="checkbox"/> Unfinished Basement	
	<input type="checkbox"/> Crawl Space	
Construction type:	<input type="checkbox"/> Slab on Grade	
<input type="checkbox"/> Reinforced Concrete	No. of Bedrooms:	
<input type="checkbox"/> Structural Steel	Multi-family Dwelling	
<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:	
	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	
Water Supply	
<input type="checkbox"/> Public	
<input type="checkbox"/> Private	
Sewage Disposal	
<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
Heating System	
<input type="checkbox"/> Electric	<input type="checkbox"/> Oil
<input type="checkbox"/> Natural Gas	<input type="checkbox"/> Propane Gas
<input type="checkbox"/> Other:	
Sprinkler System:	
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Grading Permit Number:	
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: Michael Collins
 Email Address: legendsgroup@comcast.net
 Title/Company: Pres. / Legend Builders Inc.

Print Name: Michael Collins
 Date: 8/14/2015

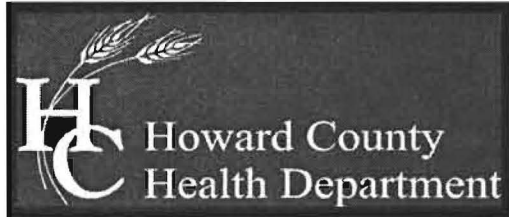
Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
 PLEASE WRITE NEATLY & LEGIBLY
 -FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL
State Highways		
Building Officials		
PSZA (Zoning)		
PSZA (Engineering)		
Health	<u>8/11/15</u>	<u>[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</u>
Permit Fee	\$
Tech Fee	\$
Excise Tax	\$
PSFS	\$
Guaranty Fund	\$ <u>50</u>
Add'l per Fee	\$
Total Fees	\$
Sub-Total Paid	\$
Balance Due	\$ <u>6537</u>
Check #	<u>6537</u>



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

MEMORANDUM

TO: Michael Collins
Legends Builders, Inc

FROM: Jeff Williams
Program Supervisor, Well & Septic Program

RE: B15003508
8110 Brookwood Farm Rd

DATE: August 25, 2015

I have reviewed the above referenced building permit and the following items must be completed prior to Health approval of the permit:

- The well must be drilled and a well completion report must be submitted to and approved by the Health Department
- The plot plan for the building permit must be revised to show the well location and a note must be added stating that the well has been field located and is accurately shown with a signature/seal from a professional surveyor.
- A copy of the house floor plans must be submitted to the Health Department to compare the number of bedrooms to the number used in the approved onsite sewage disposal system design. The plans may be emailed to me at jewilliams@howardcountymd.gov

The Building Permit will be placed on hold until the above item is completed. If you have any questions regarding this response, you may contact me at 410-313-1771 or jewilliams@howardcountymd.gov

Williams, Jeffrey

From: Williams, Jeffrey
Sent: Tuesday, August 25, 2015 11:02 AM
To: legendsgroup@comcast.net
Subject: 8110 Brookwood Farm Rd
Attachments: B15003508 8110 Brookwood Farm Rd.pdf

Attached are Health comments for B15003508, 8110 Brookwood Farm Rd

Jeff Williams
Program Supervisor, Well & Septic Program
Bureau of Environmental Health
Howard County Health Dept.
410-313-4261
jewilliams@howardcountymd.gov

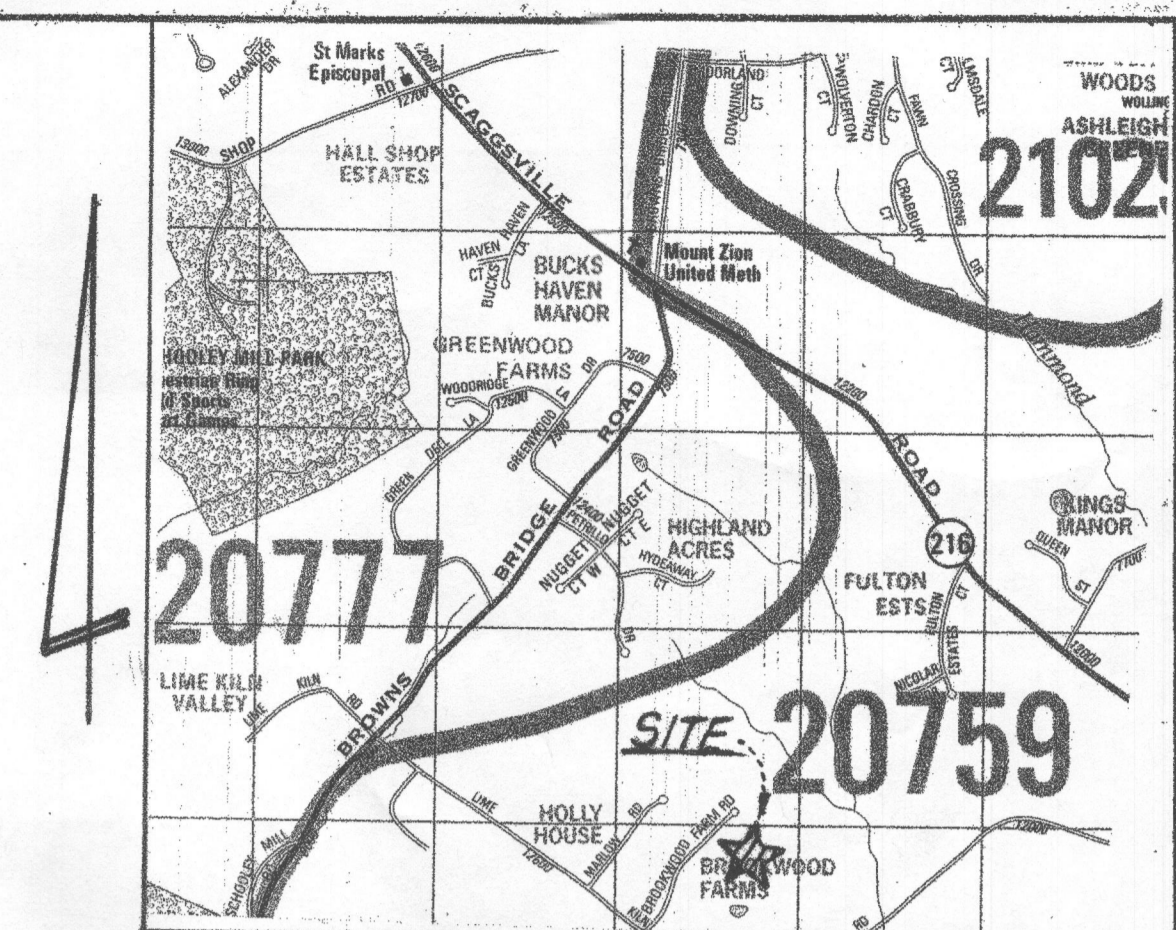
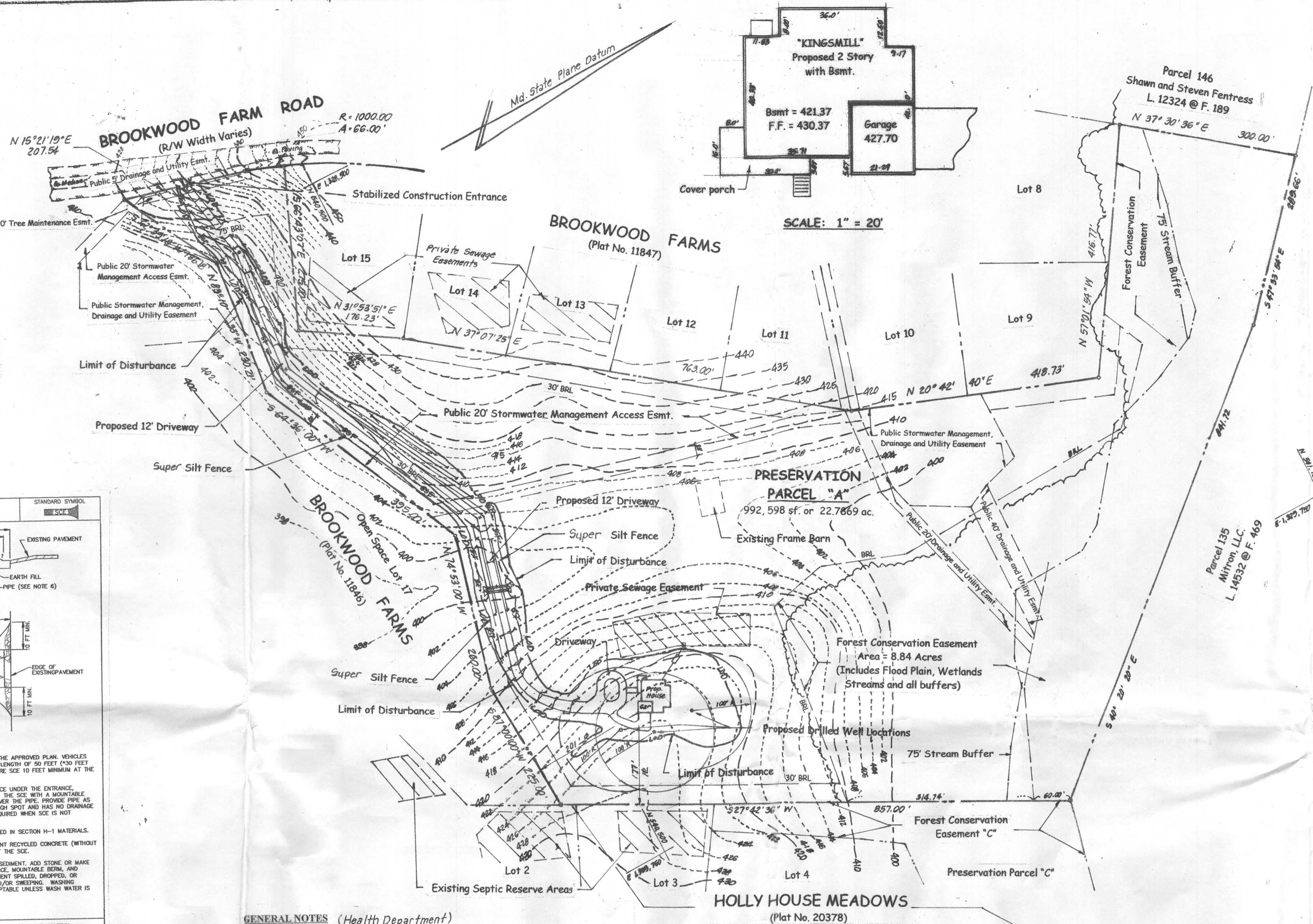
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LEGEND

These standard symbols will be found in the drawing.

- x EX. ELEVATIONS
- + PROP. ELEVATIONS
- EX. CONTOURS (2' 4.5')
- PROP. CONTOURS
- EX. WOODLINE
- SPECIFIC TREES
- STREAM/CREEK
- CONC. CURB
- SEWER LINE
- WATER LINE
- TREE CONSERVATION
- SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- UTILITY POLE
- UTILITY POLE W/LGHT
- ELEC. LINE
- ED. ROAD
- SPEC. FENCE

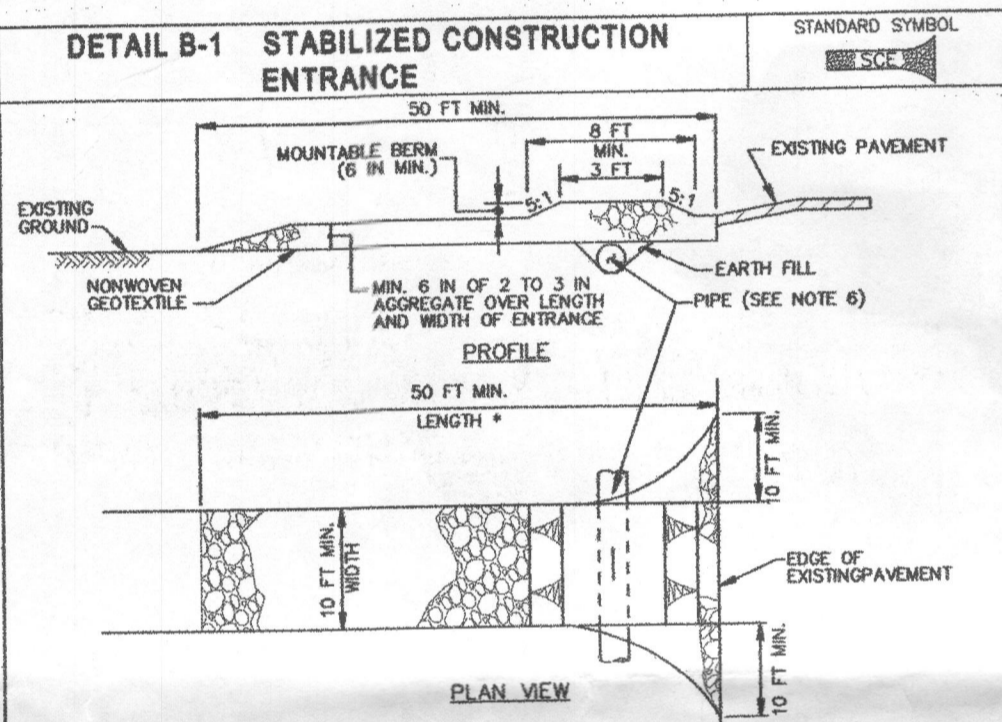


VICINITY MAP

Scale: 1" = 2000'
Copyright ADC "The Map People" Permitted Use No. 20492158

GENERAL NOTES

1. Site zoned RR-BEO per 10-1993 Comprehensive zoning Plan
2. Area of Site = 992,598 sf or 22,786.9 ac.
3. Site is located on Tax Map 45, Grid 6, Parcel 1.
4. Site is located on ADC Map page 18, grid E-5
5. Property Account No. - 414938.
6. Water and Sewer is to be private.
7. Owner: Abid Raza Rizvi
9901 Midsummer Snow Lane
Laurel, Md. 20723
8. Developer/Builder: Legends Builder's, Inc.
P.O. Box 511
Burtonsville, Md. 20866
240-216-4898
9. Property Description: a) Plat of Subdivision "BROOKWOODS FARMS" Plat # 11848.
b) Liber 10388 @ Folio 113
10. Coordinates are based on NAD 83 Md. Coordinate System projected by Howard Co. Md. Geodetic Control Stations No's 401A and 45CA.
11. All easements shown are public unless identified as private.
12. Driveway shall be provided prior to residential occupancy to insure safe access for fire and emergency vehicles per the following minimum requirements.
 - a) Width - 12' wide
 - b) Surface - 6" of compact crusher run base with tar and chip coating.
 - c) Geometric - Maximum 15% grade, Max. 10% grade change and minimum 45' turning radius.
 - d) Structures - (Culverts/bridges) - capable of supporting 25 gross tons (H25 Loading).
 - e) Drainage Elements - Capable of safely passing a 100 year flood with no more than the 1 foot depth over driveway surface
 - f) Structure Clearance - Minimum 12 Feet.
 - g) Maintenance - Sufficient to insure all weather use.
13. Reference Files: S-94-28, P-95-01, F-95-81.
14. Topography obtained from the approved Preliminary Plan and field observation.
15. Septic reserve easement shown as per record plat of subdivision.



- ### CONSTRUCTION SPECIFICATIONS
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SIZE. USE MINIMUM LENGTH OF 50 FEET (500 FEET FOR SINGLE RESIDENCE LOTS). USE MINIMUM WIDTH OF 10 FEET. FLARE SIZE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
 2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SITE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SIZE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SIZE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SIZE IS NOT LOCATED AT A HIGH SPOT.
 3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
 4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SIZE.
 5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE. MOUNTABLE BERM, OR SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT DRILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT
NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION

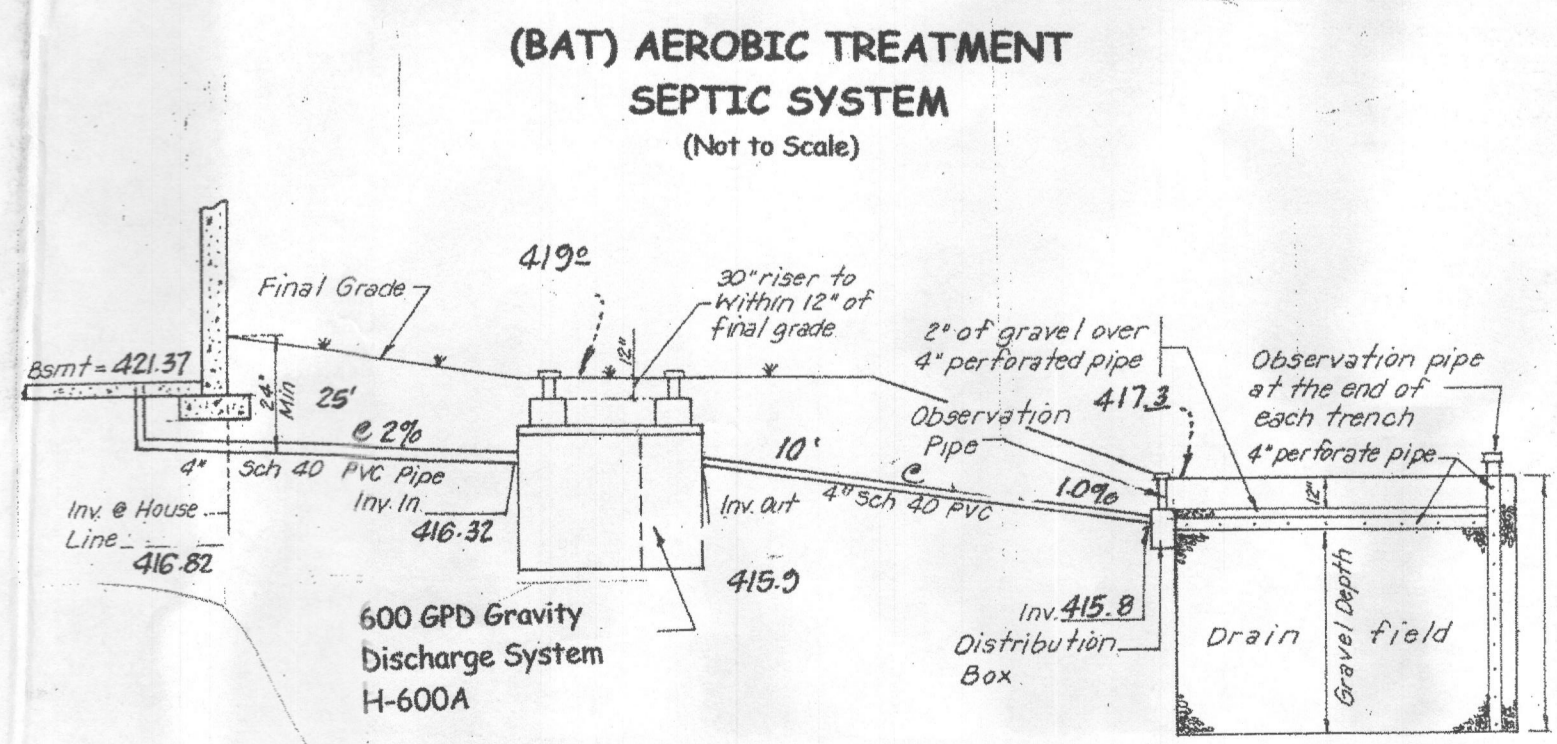
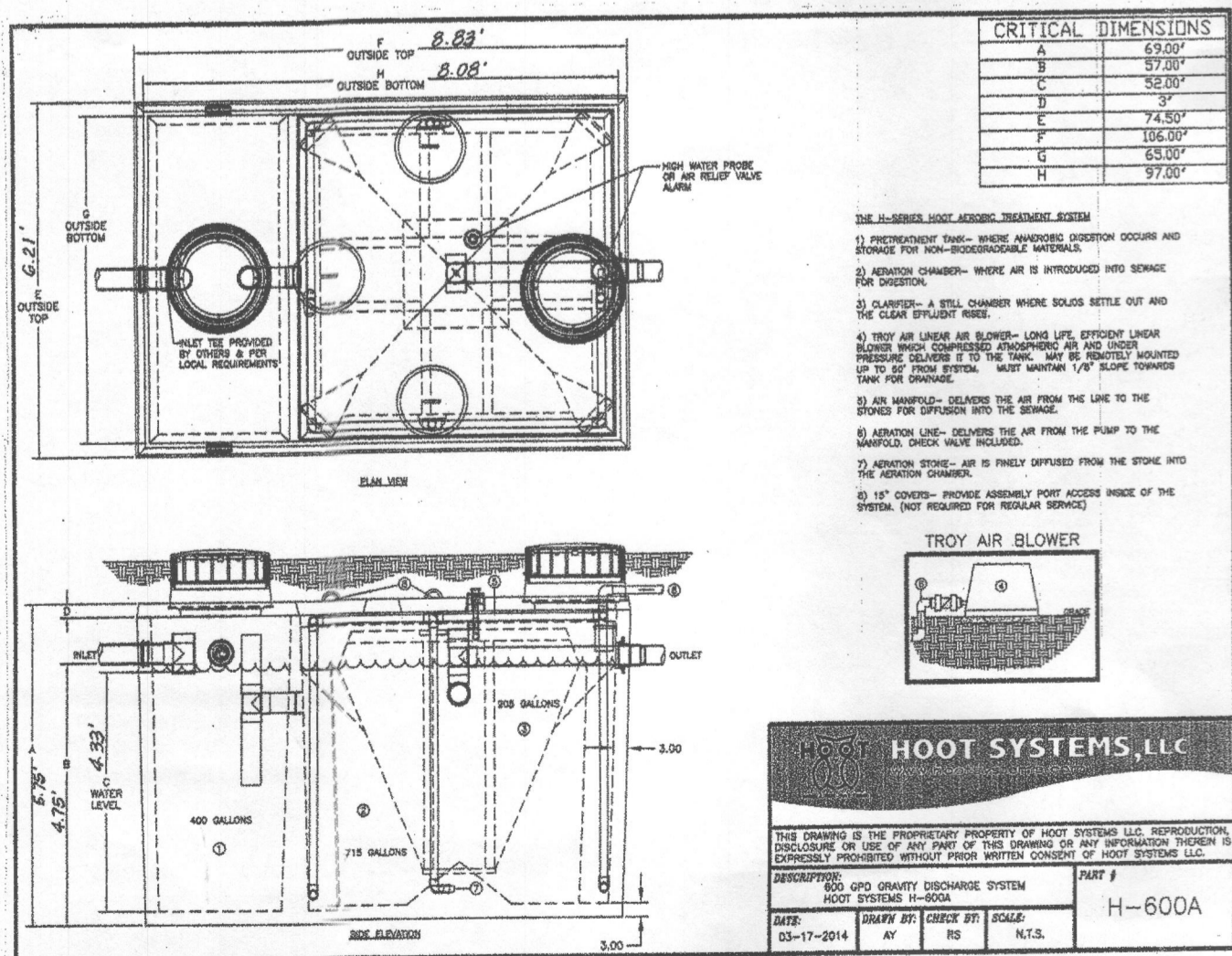
GENERAL NOTES (Health Department)

1. This area designates a private sewerage easement at least 10,000 square feet as required by the Maryland State Department of the Environment for individual sewerage disposal. Improvements of any nature in this area are restricted until public sewerage is available. These easements shall become null and void upon connection to a public sewerage system. The County Health Officer shall have the authority to grant adjustments to the private sewerage easement recordation of a modified sewerage easement shall not be necessary.
2. The lot shown hereon complies with the minimum ownership width and lot areas as required by the Maryland State Department of the Environment.
3. Existing wells and/or sewerage easement within 100 feet of the property have been shown from the best available information.
4. All house sites comply with minimum building restriction regulations.
5. All wells shall be drilled prior to final plat recordation. It is the developers responsibility to schedule the well drilling prior to final plat submission. It will not be considered government delayed if the well drilling holds up the Health Department signature of the record plat.

For detailed grading and layout see sheet 2 of 2.

ENGINEER'S CERTIFICATE
I certify that this plan for sediment and erosion 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.
Gregory C. Benefiel
Gregory C. Benefiel
Registered Professional
Surveyor Md. # 10994
License Exp. Aug. 8, 2016
Date 6-3-2015

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan 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 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.
Michael Collins
Michael Collins
Legends Builders, Inc.
Date 6-3-2015



THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Approved: *John A. Peterson*
Howard SCD
7/14/15
GP-15-086

SURVEYS, INC.
SURVEYORS * ENGINEERS * LAND PLANNERS
PERMIT SERVICES
350 MAIN STREET
LAUREL, MARYLAND, 20707
PHONE 204-716-0641 FAX 204-716-0642

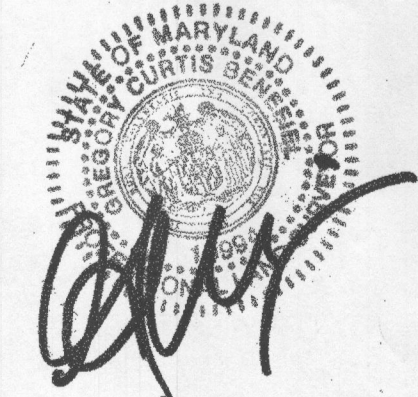
DATE	REVISION

Site Development, Grading and Erosion & Sediment Control Plan
E Lime Kiln Road - Brookwood Farm Road
Preservation Parcel "A"
BROOKWOOD FARMS
5th Election District
Howard County, Maryland

SCALE	DESIGNER	CHECKED BY
1" = 100'	BCB	AGP
DATE	DRAWN	FIELD BOOK
June, 2015	AGP	
JOB NUMBER	SHEET NUMBER	FILE NUMBER
15-20	1 of 3	L-399

Approved for private water and private sewerage systems in conformance with the master plan of Howard County.

Howard County Health Official Date



B-4.3 STANDARDS AND SPECIFICATIONS

FOR SEEDING AND MULCHING

Definition

The application of seed and mulch to establish vegetative cover.

Purpose

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 grading.

A. Seeding

1. Specifications

- All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate.
- Mulch alone may be applied between the fall and spring seeding dates only if the ground is firm. The appropriate seeding mixture must be applied when the ground thaws.
- Inoculate: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculant as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until use. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.
- Soil or seed 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 phytotoxic materials.

2. Application

- Dry Seeding:** This includes use of conventional drop or broadcast spreaders.
 - Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries.
 - Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seedbed area with a weighted roller to provide good seed to soil contact.
- Drill or Cultipacker Seeding:** Mechanized seeders that apply and cover seed with soil.
 - Cultipacker 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 and smooth.
 - Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
- Hydroseeding:** Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
 - If fertilizer is being applied at the time of seeding, the application rates must not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P₂O₅ (phosphorus), 200 pounds per acre; K₂O (potassium), 200 pounds per acre.
 - Lime:** Use only ground agricultural limestone (90 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.
 - Mix seed and fertilizer on site and seed immediately and without interruption.
 - When hydroseeding do not incorporate seed into the soil.

B. Mulching

1. Mulch Materials (in order of preference)

- Straw consisting of thoroughly cleaned, dry, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not moldy, mucky, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in areas where rare species of grass is desired.
- Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly sprayed slurry.
 - WCFM, including dye, must contain no germination or growth inhibiting factors.
 - WCFM materials are to be manufactured and processed in such a manner that the wood blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blatta-like ground cover, on application, having moisture absorption and permeation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 - WCFM material must not contain elements or compounds at concentrations levels that will be phytotoxic.
- WCFM 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 and water holding capacity of 90 percent minimum.

2. Application

- Apply mulch to all seeded areas immediately after seeding.
- When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When 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 pounds of wood cellulose fiber per 100 gallons of water.

3. 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 area and erosion hazard:
 - A mulch anchoring tool is a tractor drawn implement 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 flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.
 - 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 pounds of wood cellulose fiber per 100 gallons of water.
 - Synthetic binders such as Acrylic DLR (Aqua-Tack), DCA-70, Pitrowax, Terra Tex II, Terra Tack AR, or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited.
 - Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3,000 feet long.

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.

Purpose

To provide a suitable soil medium for vegetative growth.

Conditions Where Practice Applies

Where vegetative stabilization is to be established.

A. Soil Preparation

1. Temporary Stabilization

- Soilbed preparation consists of loosening soil to a depth of 3 to 5 inches 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 must be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked 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.

2. Permanent Stabilization

- A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
 - Soil pH between 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 (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if loess 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.
- Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
- Graded areas must be topsoiled in a true and even grade as specified on the approved plan, then certified or otherwise loosened to a depth of 3 to 5 inches.

d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.

- Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track 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 friable. Seedbed loosening may be unnecessary on newly disturbed areas.

B. 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 concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
- Topsoil salvaged from an existing site may be used provided it meets the standards 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 support plants or furnish containing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
 - Areas having slopes steeper than 2:1 require special consideration and design.

- Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
 - Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other material larger than 1 1/2 inches in diameter.
 - Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, distichlis, or others as specified.
 - Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

- Topsoil Application
 - Erosion and sediment control practices must be maintained when applying topsoil.
 - Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.
 - Topsoil must not be placed if the topsoil or subsoil is in a frozen or ramdy condition, when the soil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

- Soil Amendments (Fertilizer and Lime Specifications)
 - Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
 - Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.
 - Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to mesh 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 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

B-4.5 STANDARDS AND SPECIFICATIONS

FOR PERMANENT STABILIZATION

Definition

To stabilize disturbed soils with permanent vegetation.

Purpose

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.

A. Seed Mixtures

1. General Use

- Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site conditions or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
- Additional planting specifications for exceptional sites such as shorelines, 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 by the soil testing agency.
- For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 1/2 pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown on the Permanent Seeding Summary.

2. Turfgrass Mixtures

- Areas where turfgrass may be desired include lawns, 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 site conditions or purpose. Enter selected mixture(s), application rates, 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 areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 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 Ryegrass: 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 Ryegrass 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 15 percent of the total mixture by weight.
 - Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun with medium shade. Recommended mixture includes: Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.
 - Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes: Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 pounds per 1000 square feet.

- Ideal Times of Seeding for Turf Grass Mixtures
 - Western MD: March 15 to June 1, August 1 to October 1 (Hardiness Zones: 5b, 6a)
 - Central MD: March 15 to May 15, August 15 to October 15 (Hardiness Zones: 6b)
 - Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardiness Zones: 7a, 7b)

- Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1 1/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.
- If soil moisture is deficient, supply new seedings with adequate water for plant growth (1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

Permanent Seeding Summary

Hardiness Zone (from Figure B.3): 6b		Seed Mixture (from Table B.3):		Fertilizer Rate (10-20-20)		Lime Rate	
No.	Species	Application Rate (lb/acre)	Seeding Dates	N	P ₂ O ₅	K ₂ O	
1	Artisan Ryegrass	40	8-15/10-15	45 pounds per acre (1.0 lb/1000 sf)	90 lb/acre (2 lb/1000 sf)	90 lb/acre (2 lb/1000 sf)	2 tons/acre (90 lb/1000 sf)
2	Forster Millet	30	6-1/7-31	1/2"			

B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

1. General Specifications

- Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
- Sod must be machine cut at a uniform soil thickness of 1/2 inch, plus or minus 1/8 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven 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 transplanted 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 transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.

2. Sod Installation

- During periods of excessively high temperature or in areas having dry subsoil, lightly 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 wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the root.
- Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure 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 piece of sod within eight hours.

3. Sod Maintenance

- In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist 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.

B-4.4 STANDARDS AND SPECIFICATIONS

FOR TEMPORARY STABILIZATION

Definition

To stabilize disturbed soils with vegetation for up to 6 months.

Purpose

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.

1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness 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 alone as prescribed in Section B-4.3.A.1.b and maintain until the next seeding season.

Temporary Seeding Summary

Hardiness Zone (from Figure B.3): 6b		Seed Mixture (from Table B.1):		Fertilizer Rate (10-20-20)		Lime Rate	
No.	Species	Application Rate (lb/acre)	Seeding Dates	N	P ₂ O ₅	K ₂ O	
1	Artisan Ryegrass	40	8-15/10-15	45 pounds per acre (1.0 lb/1000 sf)	90 lb/acre (2 lb/1000 sf)	90 lb/acre (2 lb/1000 sf)	2 tons/acre (90 lb/1000 sf)
2	Forster Millet	30	6-1/7-31	1/2"			

SEQUENCE OF CONSTRUCTION

- Pre construction Meeting.....Day 1
- Obtain Necessary permits.....Day 2 - 3
- Notify "MISS UTILITY" at least 48 hours prior to beginning any construction 1-800-257-7777.....Day 2 - 4
- Install sediment control devices.....Day 5 - 36
 - Silt fence
 - Stabilized Construction Entrance (SCE)
- Construct driveway up to the proposed dwelling for access and culvert pipes.....Day 37 - 97
- Vegetatively stabilize all areas disturbed by driveway construction.....Day 98-119
- Construct dwelling and finalize driveway area.....Day 120-365
- Final grade and construct SWM facilities, grass swales, vegetatively stabilize all areas disturbed by construction. Remove all sediment control devices when written permission has been granted by the inspector.....Day 365-386

Total Disturbed Area.....Phase I = 1.33 ac.
Phase II = 0.76 ac.
Total = 2.07 ac.

B-4 STANDARDS AND SPECIFICATIONS

FOR VEGETATIVE STABILIZATION

Definition

Using vegetation as cover to protect exposed soil from erosion.

Purpose

To promote the establishment of vegetation on exposed soil.

Conditions Where Practice Applies

On all disturbed areas not stabilized by other methods. This specification is divided into sections on incremental stabilization, soil preparation, soil amendments and topsoiling, seeding and mulching, temporary stabilization, and permanent stabilization.

Effects on Water Quality and Quantity

Stabilization practices 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 runoff to downstream areas.

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. Over time, vegetation 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 practices must remain in place during grading, seedbed preparation, seeding, mulching, and vegetative establishment.

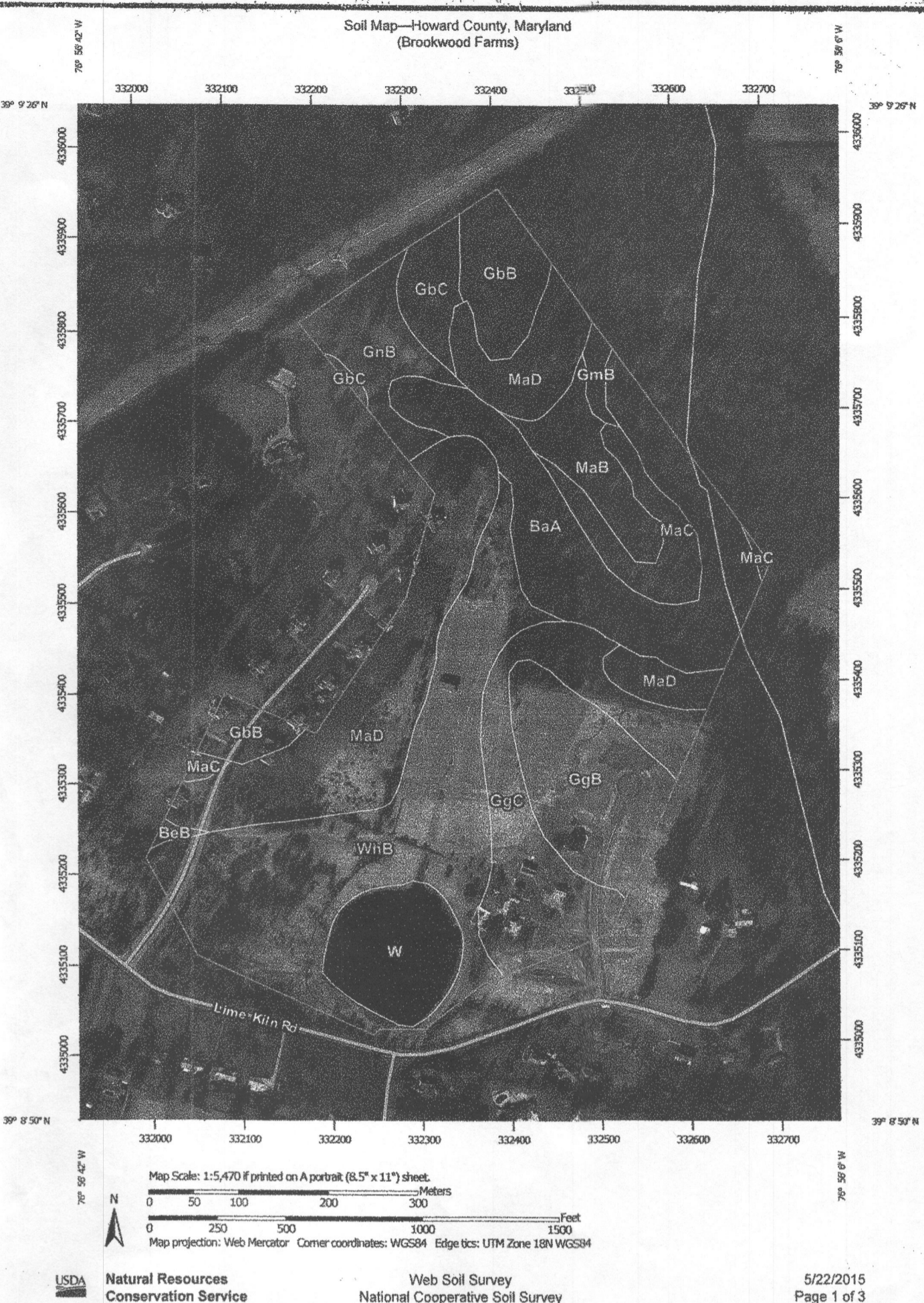
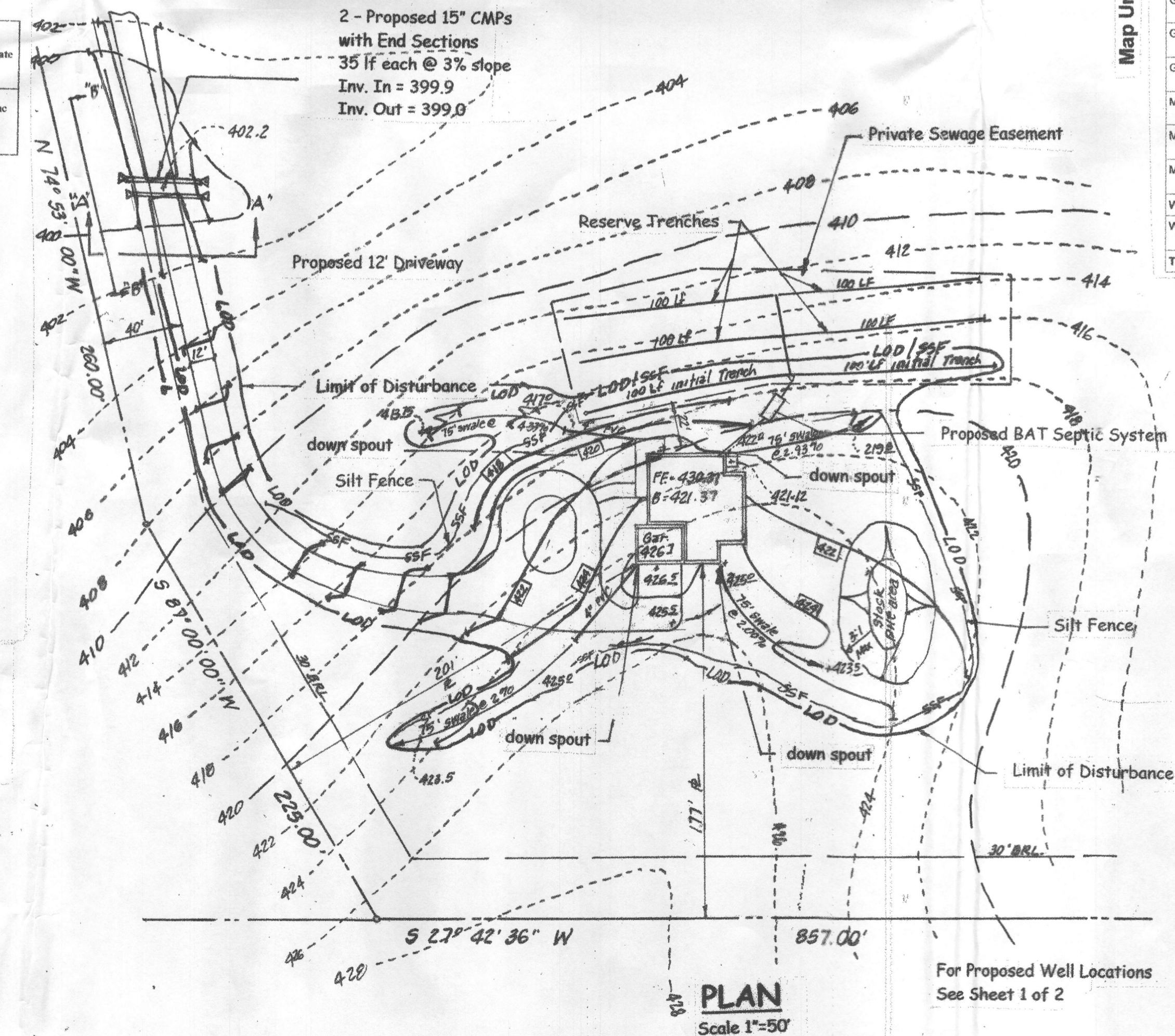
Adequate Vegetative Establishment

- Adequate vegetative stabilization requires 95 percent groundcover.
- If an area has less than 40 percent groundcover, restabilize following the original recommendations for lime, fertilizer, seedbed preparation, and seeding.
- If an area has between 40 and 94 percent groundcover, over-seed and fertilize using half of the rates originally specified.
- Maintenance fertilizer rates for permanent seeding are shown in Table B.6.

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

Approved: *[Signature]*
Howard SCD 7/14/15

Stormwater Management by rooftop disconnect down spouts/roof leaders drain to grass swales 5% or less.



Howard County, Maryland (MD027)				
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	Percent of AOI
BaA	Baile silt loam, 0 to 3 percent slopes	11.5	13.7%	
BeB	Blenville silt loam, 3 to 8 percent slopes	0.2	0.2%	
GbB	Gladstone loam, 3 to 6 percent slopes	4.5	5.3%	
GcC	Gladstone loam, 8 to 15 percent slopes	2.1	2.5%	
GgB	Glenelg loam, 3 to 8 percent slopes	7.0	8.4%	
GgC	Glenelg loam, 8 to 15 percent slopes	8.9	10.6%	
GmB	Glenelg silt loam, 3 to 8 percent slopes	0.6	0.7%	
GmB	Glenelg silt loam, 8 to 15 percent slopes	3.8	4.3%	
MaB	Manor loam, 3 to 8 percent slopes	3.0	3.5%	
MaC	Manor loam, 8 to 15 percent slopes	3.3	3.9%	
MaD	Manor loam, 15 to 25 percent slopes	15.7	18.7%	
W	Water	4.6	5.5%	
WmB	Withshire silt loam, 3 to 8 percent slopes	19.0	22.6%	
Totals for Area of Interest		84.0	100.0%	

SURVEYS, INC.
SURVEYORS + ENGINEERS + LAND PLANNERS
PERMIT SERVICES
350 MAIN STREET
LAUREL, MARYLAND, 21071
PHONE 301-714-0541 FAX 301-716-0642

DATE	REVISION

Site Development, Grading and Erosion & Sediment Control Plan
E Lime Kiln Road - Brookwood Farm Road
Preservation Parcel "A"
BROOKWOOD FARMS
5th Election District
Howard County, Maryland

SCALE	DESIGNER	CHECKED BY
As Shown	Ech	Ech
DATE	DRAWER	FIELD BOOK
June, 2015	Rjy	
JOB NUMBER	SHEET NUMBER	FILE NUMBER
15-2		

B-4-8 STANDARDS AND SPECIFICATIONS

FOR

STOCKPILE AREA

Definition

A mound or pile of soil protected by appropriately designed erosion and sediment control measures.

Purpose

To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.

Conditions Where Practice Applies

Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

Criteria

- The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
- The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B-3 Land Grading.
- Runoff from the stockpile area must drain to a suitable sediment control practice.
- Access the stockpile area from the upgrade side.
- Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner.
- Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.
- Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization.
- If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated material must be covered with impermeable sheeting.

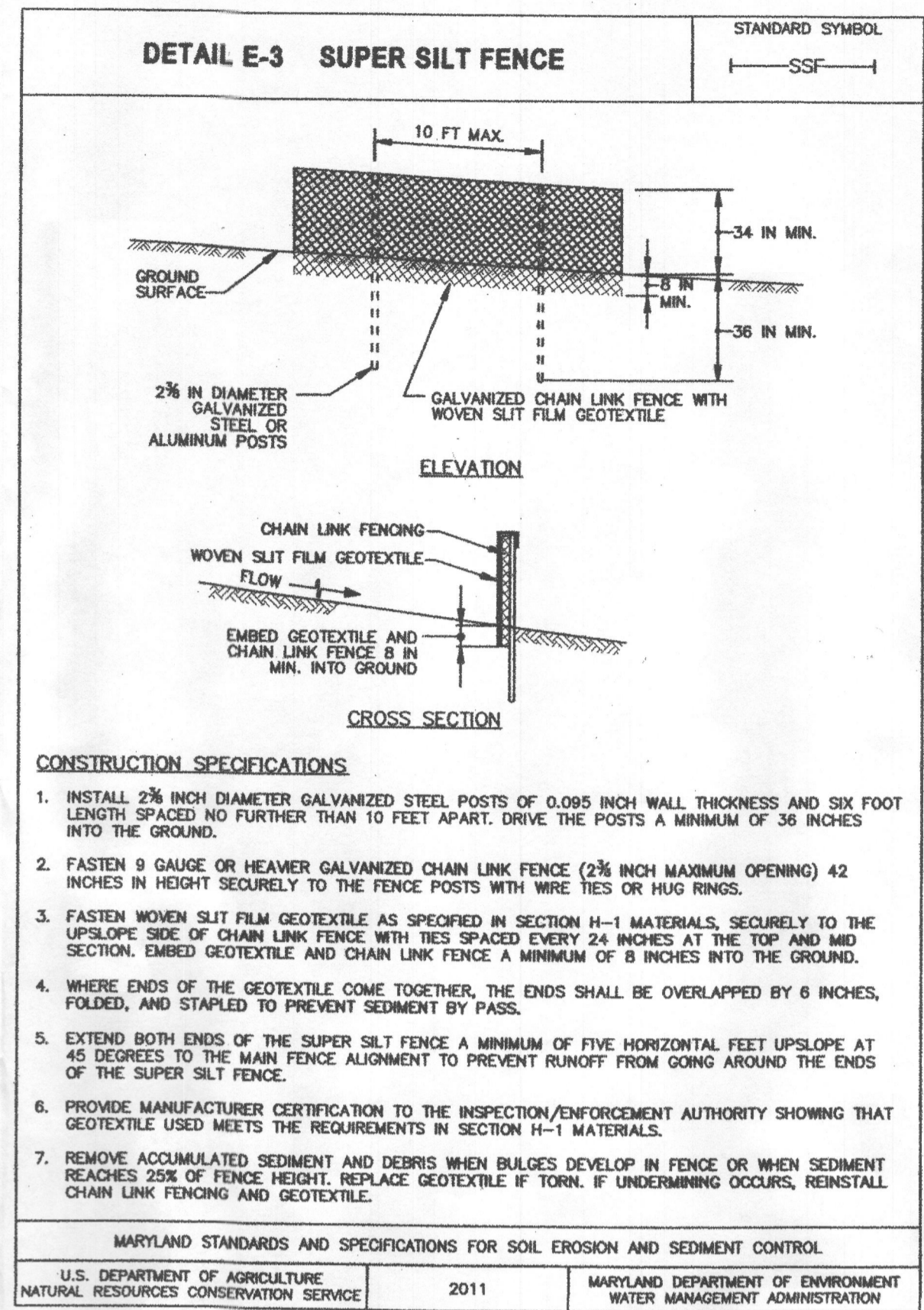
Maintenance

The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3 Land Grading.

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

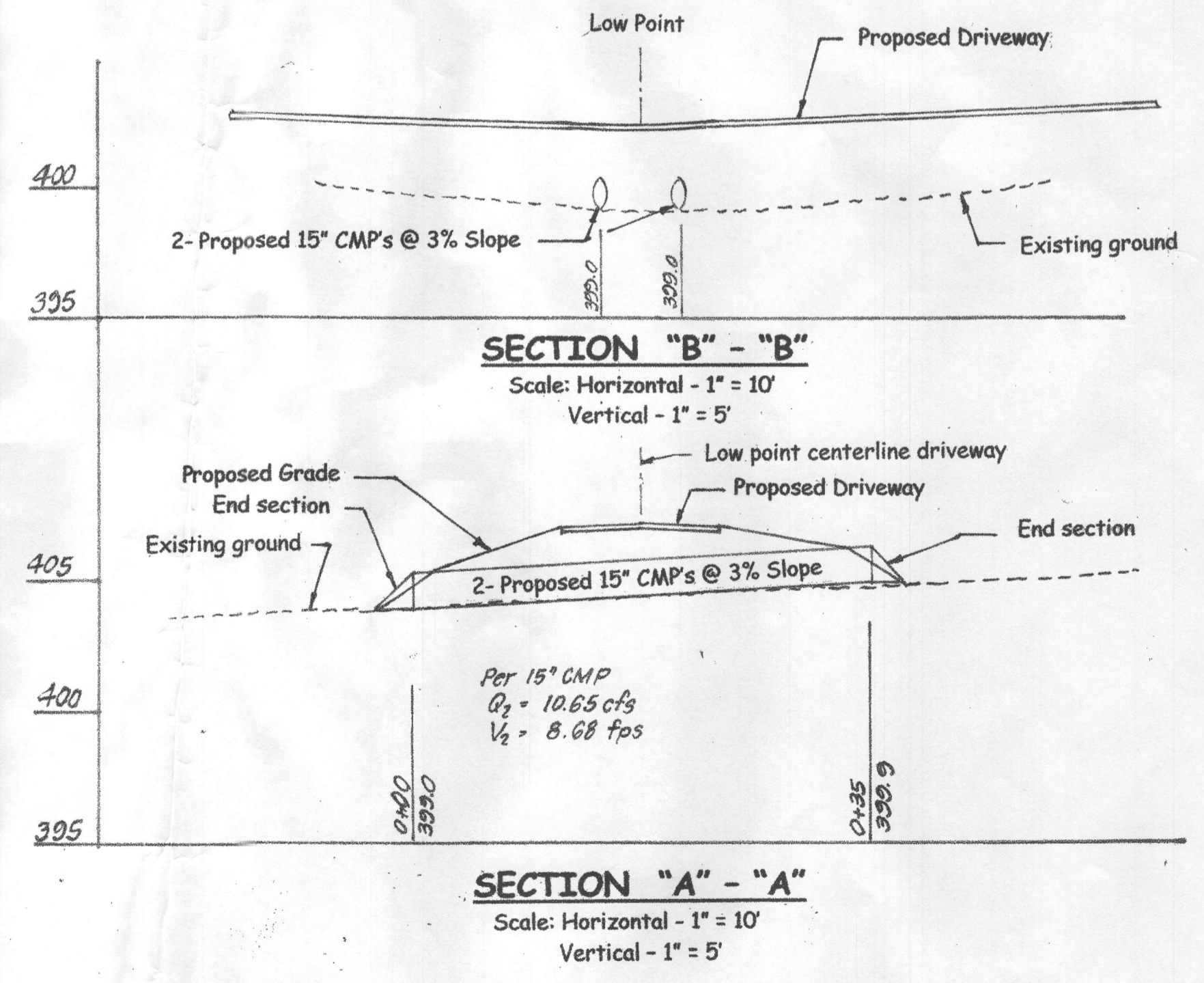
- A minimum of 48 hours notice must be given to the Howard County Department of Public Works, Construction Inspection Division (CID) prior to the start of any construction (410-313-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to 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 re-disturbance, permanent or temporary stabilization shall be completed within: a) 3 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 7 days as to all other disturbed or graded areas on the project site.
- 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-4-5), 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 operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:

Total Area of Site	22.78	Acres
Area Disturbed	2.07	Acres
Area to be roofed or paved	0.45	Acres
Area to be vegetatively stabilized	1.62	Acres
Total Cut	1500±	Cu. Yds.
Total Fill	1500±	Cu. Yds.
Offsite waste/borrow are location	N/A	
- Any sediment control practice that is disturbed 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 shall be back-filled and stabilized by the end of each workday, whichever is shorter.
- Any changes or revisions to the sequence of construction must be reviewed and approved by the plan approval authority prior to proceeding with construction.
- A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the enforcement authority. Unless otherwise specified and approved by the approval authority, no more than 30 acres cumulatively may be disturbed at a given time.



- CONSTRUCTION SPECIFICATIONS**
- INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
 - FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
 - FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
 - WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
 - EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
 - PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
 - REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT
 Approved: *Paul R. ...*
 Howard SCD 7/14/15



SURVEYS, INC.
 SURVEYORS * ENGINEERS * LAND PLANNERS
 PERMIT SERVICES
 350 MAIN STREET
 LAUREL, MARYLAND, 20707
 PHONE 301-716-0561 FAX 301-716-0642

DATE	REVISION

Site Development, Grading and Erosion & Sediment Control Plan
 E Lime Kiln Road - Brookwood Farm Road
 Preservation Parcel "A"
BROOKWOOD FARMS
 5th Election District
 Howard County, Maryland

SCALE	DESIGNER	CHECKED BY
A8 - Shown	RLB	RLB
DATE	DRAFTER	FIELD BOOK
July 2015	RLB	
JOB NUMBER	SHEET NUMBER	FILE NUMBER
15-20	3 of 3	L-399