



Building Permit Application

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

OIL P 2017 AUG 25 AM 11:46

Date Received: _____

Permit No.: B17003213

702

Building Address: 702 WOODBINE CROSSING
City: MD State: MD Zip Code: 21220
Suite/Apt. #: _____ SDP/WP/BA #: F-07-103
Census Tract: _____ Subdivision: Woodbine Crossing
Section: N/A Area: _____ Lot: 15
Tax Map: 0002 Parcel: 0053 Grid: 0004
Zoning: _____ Map Coordinates: _____ Lot Size: 1.1423

Property Owner's Name: LIAM TAYLOR
Address: 2115 SHADYBROOK DRIVE
City: _____ State: MD Zip Code: _____
Phone: 301-585-7000 Fax: _____
Email: _____

Applicant's Name & Mailing Address, (if other than stated herein)
Applicant's Name: THOMAS W. HARRIS, LLC
Address: 1115 SHADYBROOK DRIVE
City: _____ State: MD Zip Code: _____
Phone: 301-585-7000 Fax: 301-443-3300
Email: THOMAS.HARRIS@THOMASW.HARRIS.COM

Existing Use: RESIDENTIAL
Proposed Use: RENOVATION
Estimated Construction Cost: \$ 250,000
Description of Work: RENOVATION OF EXISTING 3 1/2 BDRM + 4 BATH + 4 CAR GARAGE + 3 BRKMS + FRONT PORCH

Contractor Company: THOMAS W. HARRIS, LLC
Contact Person: THOMAS W. HARRIS
Address: 1115 SHADYBROOK DRIVE
City: _____ State: MD Zip Code: _____
License No.: 12141402 / MICHAELE P. HARRIS
Phone: 410-221-4433 Fax: 410-443-3300
Email: THOMAS.HARRIS@THOMASW.HARRIS.COM

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

Engineer/Architect Company: THOMAS W. HARRIS ARCHITECTS
Responsible Design Prof.: THOMAS W. HARRIS
Address: 1115 SHADYBROOK DRIVE
City: _____ State: MD Zip Code: _____
Phone: 410-221-4433 Fax: 410-443-3300
Email: THOMAS.HARRIS@THOMASW.HARRIS.COM

Commercial Building Characteristics	Residential Building Characteristics	
Height:	<input type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse	
No. of stories:	Depth Width	
Gross area, sq. ft./floor:	1 st floor:	
Area of construction (sq. ft.):	2 nd floor:	
Use group:	Basement:	
Construction type:	<input 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:	
<input type="checkbox"/> State Certified Modular	Multi-family Dwelling	
<input checked="" type="checkbox"/> Roadside Tree Project Permit	No. of efficiency units:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No. of 1 BR units:	
Roadside Tree Project Permit #	No. of 2 BR units:	
	No. of 3 BR units:	
	Other Structure:	
	Dimensions:	
	Footings:	
	Roof:	
	<input type="checkbox"/> State Certified Modular	
	<input type="checkbox"/> Manufactured Home	

Utilities	
Electric:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Gas:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Supply	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
Sewage Disposal	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
Heating System	
<input type="checkbox"/> Electric <input type="checkbox"/> Oil	
<input type="checkbox"/> Natural Gas <input checked="" 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: _____
Print Name: _____
Date: 9/25/17
Email Address: _____
Title/Company: _____

Print Name: _____
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>9/18/17</u>	<u>H. Oswald</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 checked="" type="checkbox"/> No
Is Entrance Permit Required?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Historic District?	<input type="checkbox"/> Yes <input checked="" 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	\$
Check	# <u>2444</u>



Building Permit Application

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

DILP 2017 NOV 29 4:22

Date Received: _____

Permit No.: B17004222

Building Address: 702 Woodbine Crossing Rd
 City: Ht Airy State: MD Zip Code: 21111
 Suite/Apt. #: _____ SDP/WF/BA #: _____
 Census Tract: _____ Subdivision: Woodbine Crossing
 Section: _____ Area: _____ Lot: 13
 Tax Map: 0002 Parcel: 0253 Grid: 0024
 Zoning: _____ Map Coordinates: _____ Lot Size: 1.2028A

Proprietor Name: Shobha Ganeswar
 Address: 702 Woodbine Crossing Rd
 City: Ht Airy State: MD Zip Code: 21111
 Phone: 410-497-2211 Fax: _____
 Email: _____

Applicant's Name & Mailing Address, (if other than stated herein)
 Applicant's Name: Thompson Gas, LLC Randal Thompson
 Address: 10708 Old National Pk
 City: Bonsbron State: MD Zip Code: 21113
 Phone: 301-432-1011 Fax: 301-302-8218
 Email: brohrer@thompsongas.com

Contractor Company: Thompson Gas
 Contact Person: Brad Brohrer
 Address: 10708 Old National Pk
 City: Bonsbron State: MD Zip Code: 21113
 License No.: 10003
 Phone: 301-432-1011 Fax: 301-302-8218
 Email: brohrer@thompsongas.com

Engineer/Architect Company: _____
 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: _____	Depth	Width
Gross area, sq. ft./floor:	1 st floor:	
	2 nd floor:	
Area of construction (sq. ft.):	Basement:	
	<input type="checkbox"/> Finished Basement	
	<input type="checkbox"/> Unfinished Basement	
Use group:	<input type="checkbox"/> Crawl Space	
	<input type="checkbox"/> Slab on Grade	
Construction type:	No. of Bedrooms:	
<input type="checkbox"/> Reinforced Concrete	<u>Multi-family Dwelling</u>	
<input type="checkbox"/> Structural Steel	No. of efficiency units:	
<input type="checkbox"/> Masonry	No. of 1 BR units:	
<input type="checkbox"/> Wood Frame	No. of 2 BR units:	
<input type="checkbox"/> State Certified Modular	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:	
<input type="checkbox"/> Roadside Tree Project Permit #	<input type="checkbox"/> State Certified Modular	
	<input type="checkbox"/> Manufactured Home	

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

THE UNDERSIGNED HEREBY DEMANDS 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 THEREIN; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS HOWARD COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Applicant's Signature: Randal Thompson
 Email Address: brohrer@thompsongas.com
 Title/Company: _____

Print Name: Randal Thompson
 Date: 11/27/17
RECEIVED
 NOV 29 2017
 LICENSES & PERMITS DIVISION

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		
SDP (Zoning)		
PS&A (Engineering)		
Health	<u>12-1-17</u>	<u>R-M</u>

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

DPZ SETBACK INFORMATION	
Front:	
Rear:	
Side:	
Side SL:	
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	\$ <u>100</u>
Tech Fee	\$ <u>10</u>
Excise Tax	\$
PS&S	\$
Guaranty Fund	\$
Add'l per Fee	\$
Total Fees	\$ <u>110.00</u>
Sub-Total Paid	\$
Balance Due	\$
Check	\$ <u>1011819</u>

Min/Bufile of Copies: White: Building Officials Green: PS&A, Zoning Yellow: PS&A, Engineering Pink: Health Gold: SDP

T:\Operations\Updated Form\Building apping 08.23.2014.docx

50' R/W

OLD FREDERICK ROAD
60' R/W

N64°34'37"W 190.60'

S25°30'53"E 35.12'

R=845.00'
L=80.9±

EX. WELL
HO-95-1078

ALT. WELL

ALT. WELL

PROP. DRIVEWAY

S19°51'49"W 160.61'
10' TREE MAINTENANCE
DRAINAGE & UTILITY EASEMENT

PROP. HOUSE
RIDGEFIELD
F.F. 666.00
B. 656.00

GAR.

Approval for UTY
B. 660
12/13/17
RJA

LOT 15
46,317 S.F.
OR 1.0633 Ac.±

1500 GAL.
SEPTIC TANK

10" - 4" PVC
DIST. BOX

UNDERGROUND
1000 GAL.
PROPANE TANK

1st REPLACEMENT 2 @ 52'

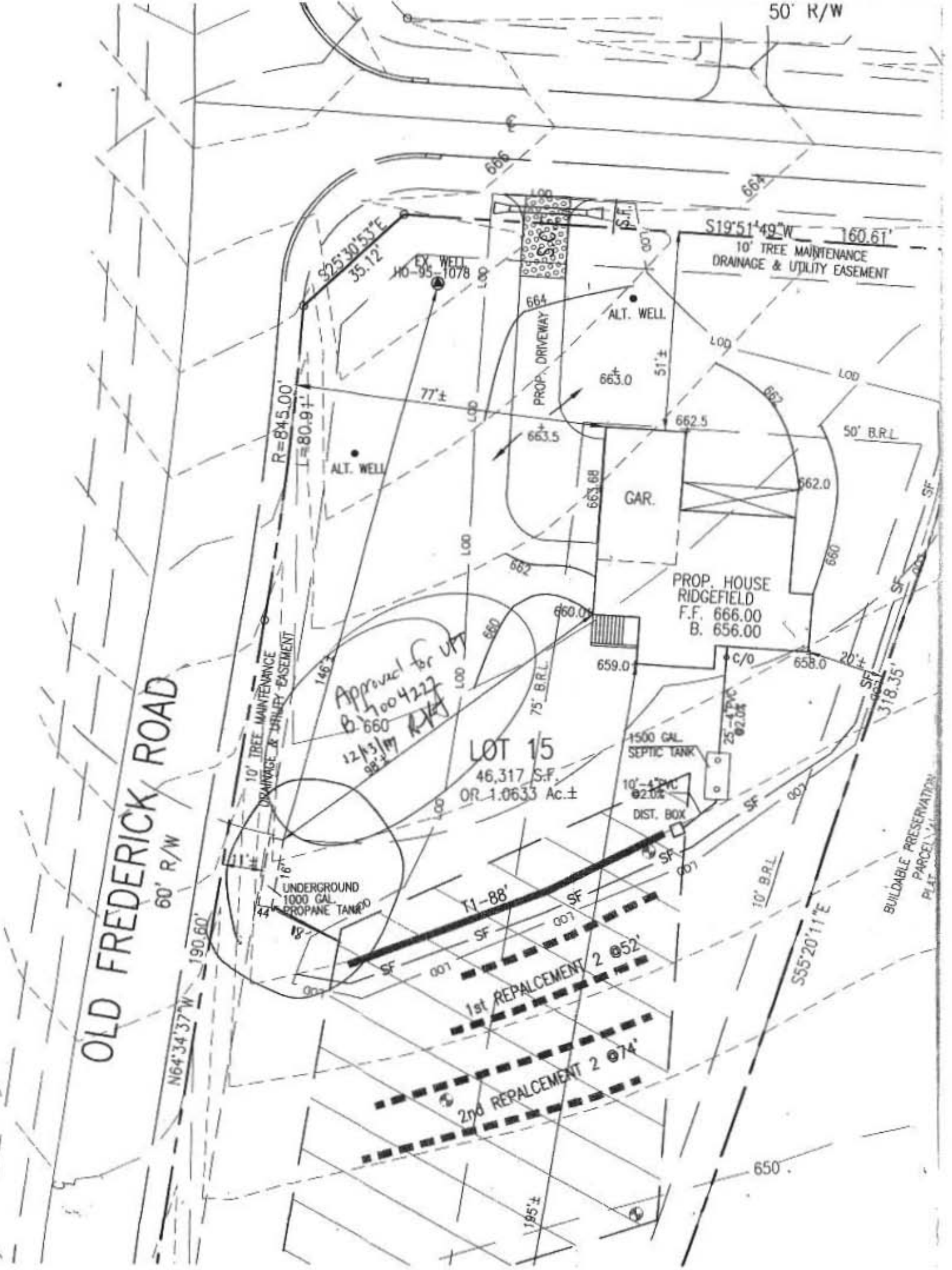
2nd REPLACEMENT 2 @ 74'

BUILDABLE PRESERVATION
PARCEL PLAT

555°20'11"E

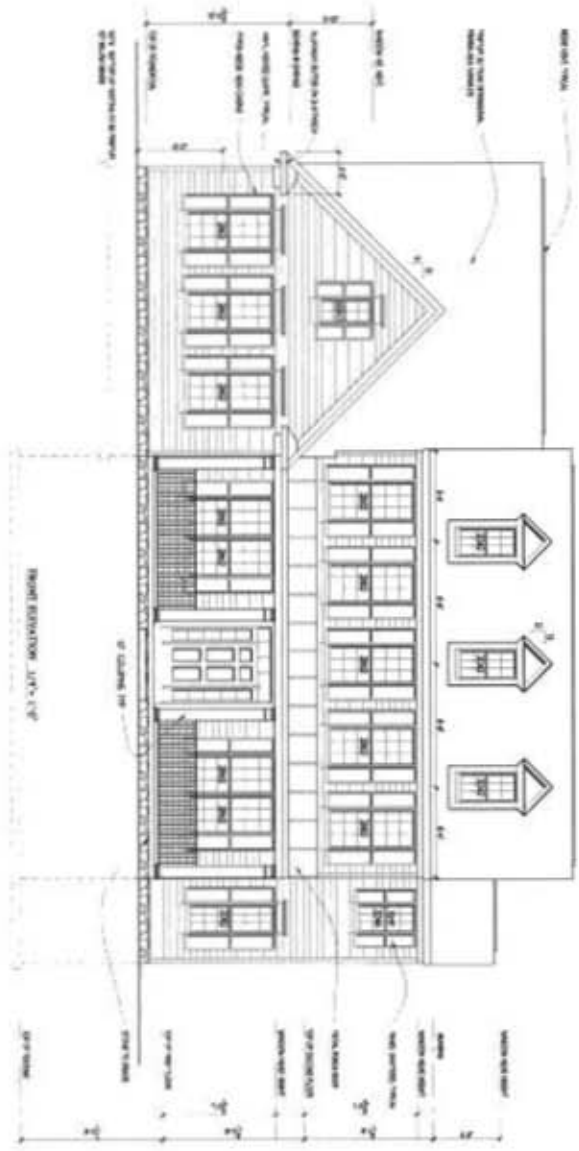
650

185±



HEALTH DEPT

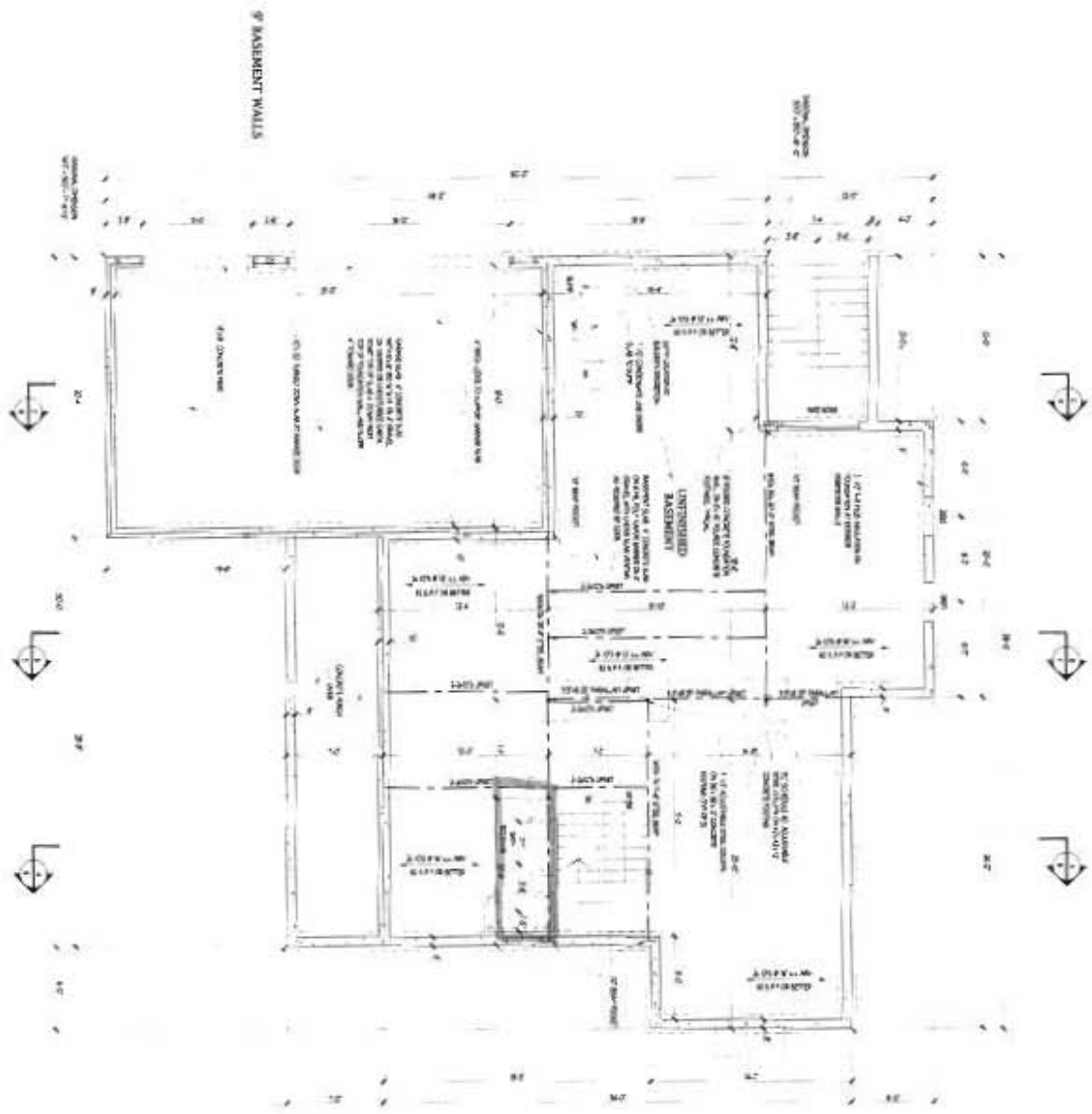
B17003213



BID AND PERMIT SET 8/15/17

1	Project No.: C17.08	Drawing: ELEVATIONS	FL1 SQ.FT: 1395
	Date: 8/17	Project: CATONSVILLE HOMES RIDGEFIELD WOODBONE CROSSING LOT 15	FL2 SQ.FT: 1400
	Scale: NOTED		Notes:

Plymouth Road Architects
 640 Plymouth Road Baltimore, MD 21229
 Phone: 410-788-0281 arch@plymouthroad.com



BID AND PERMIT SET 8/15/17

DATE: 8/17/17

SCALE: 1/4"=1'-0"

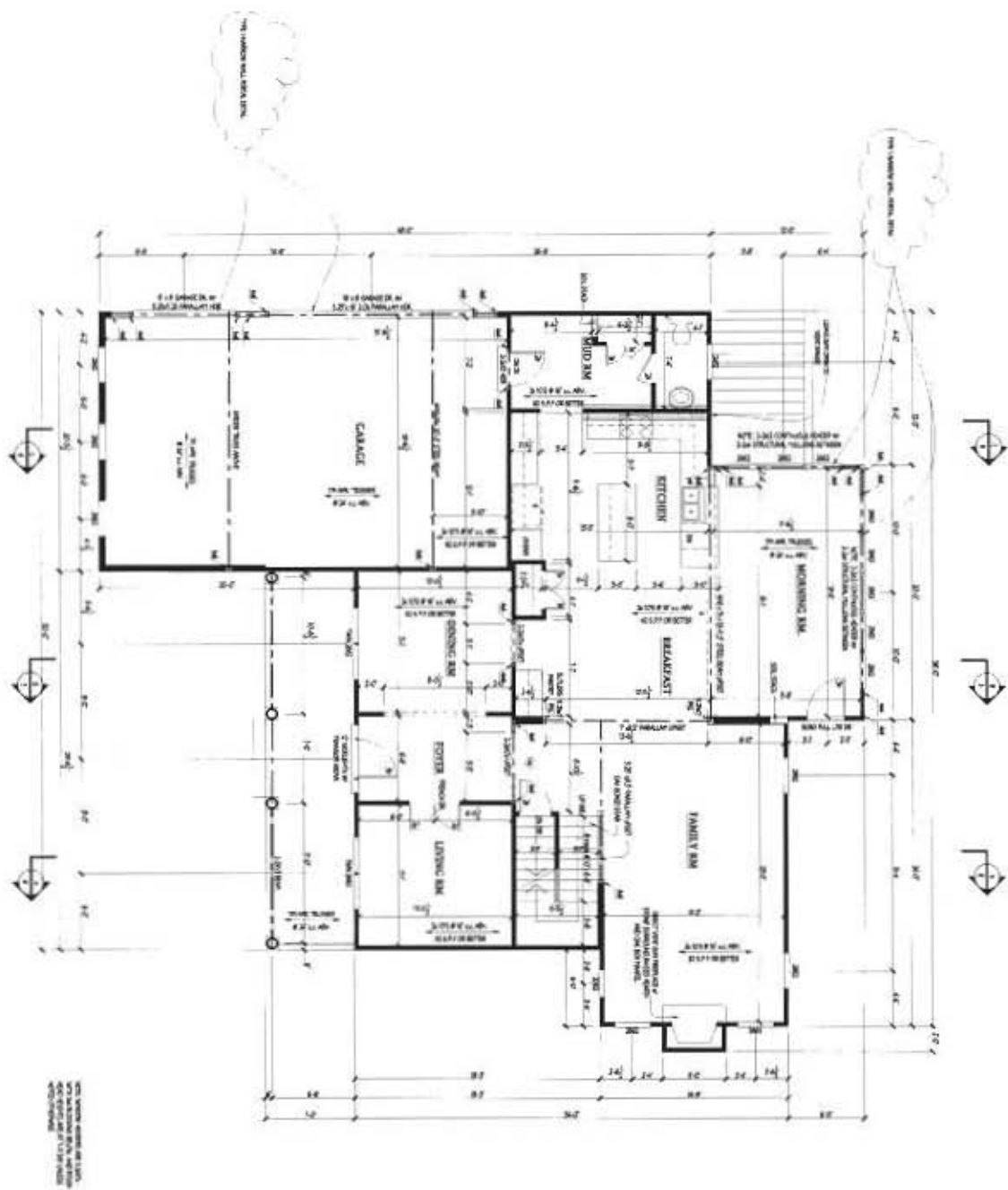
2

Project No.: C17.08
 Date: 8/17
 Scale: 1/4"=1'-0"

Drawing: BASEMENT/ FOUNDATION PLAN
 Project: CATONVILLE HOMES
 RIDGEFIELD
 WOODBINE CROSSING LOT 15

Notes

Plymouth Road Architects
 640 Plymouth Road, Baltimore, MD 21229. 410-788-0281
 PlymouthRoadArchitects.com



BID AND PERMIT SET 8/15/17

DATE: 8/15/17

3

Project No.: C17.08
 Date: 8/17
 Scale: 1/4"=1'-0"

Drawing: FIRST FLOOR PLAN
 Project: CATONVILLE HOMES
 RIDGEFIELD
 WOODBINE CROSSING LOT 15

Notes:

Plymouth Road Architects
 640 Plymouth Road, Baltimore, MD 21229 - 410-788-0281
 PlymouthRoadArchitects.com



BID AND PERMIT SET 8/15/17

Project No. C17.08
 Date: 8/17
 Scale: 1/4"=1'-0"

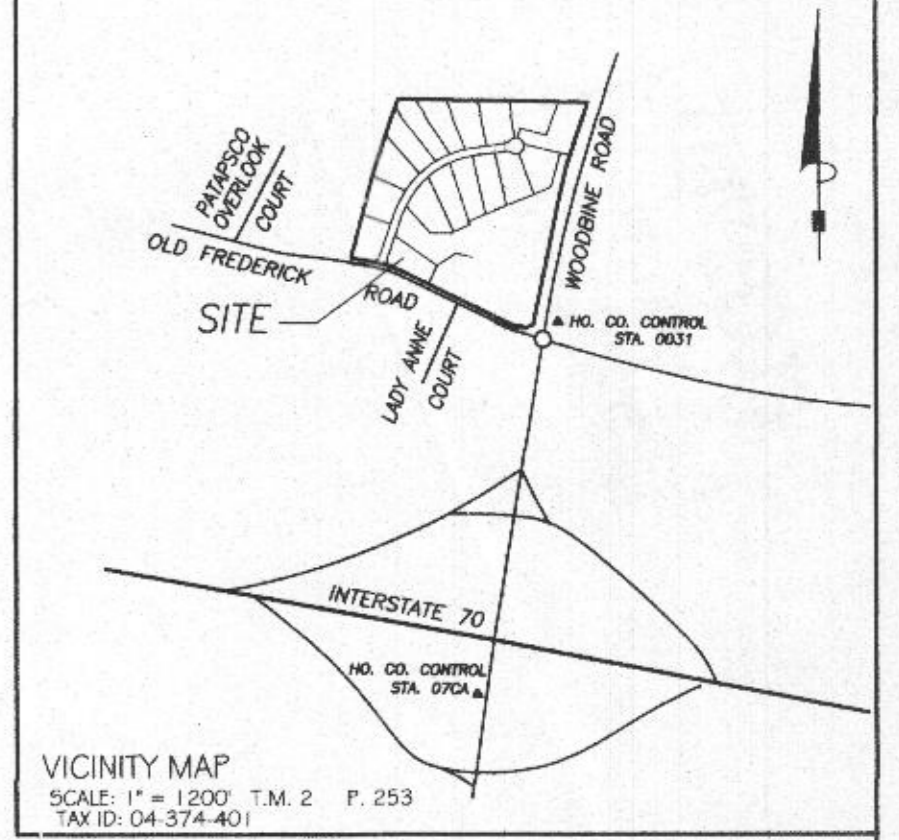
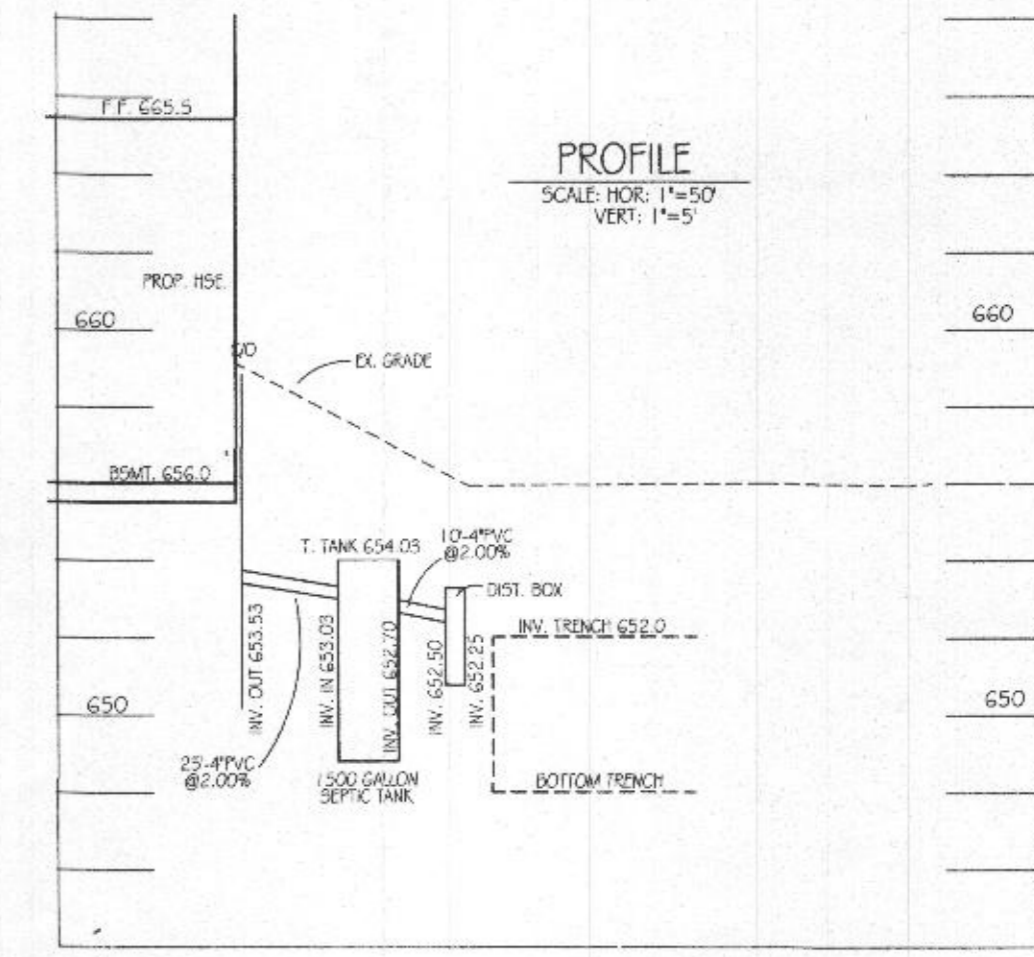
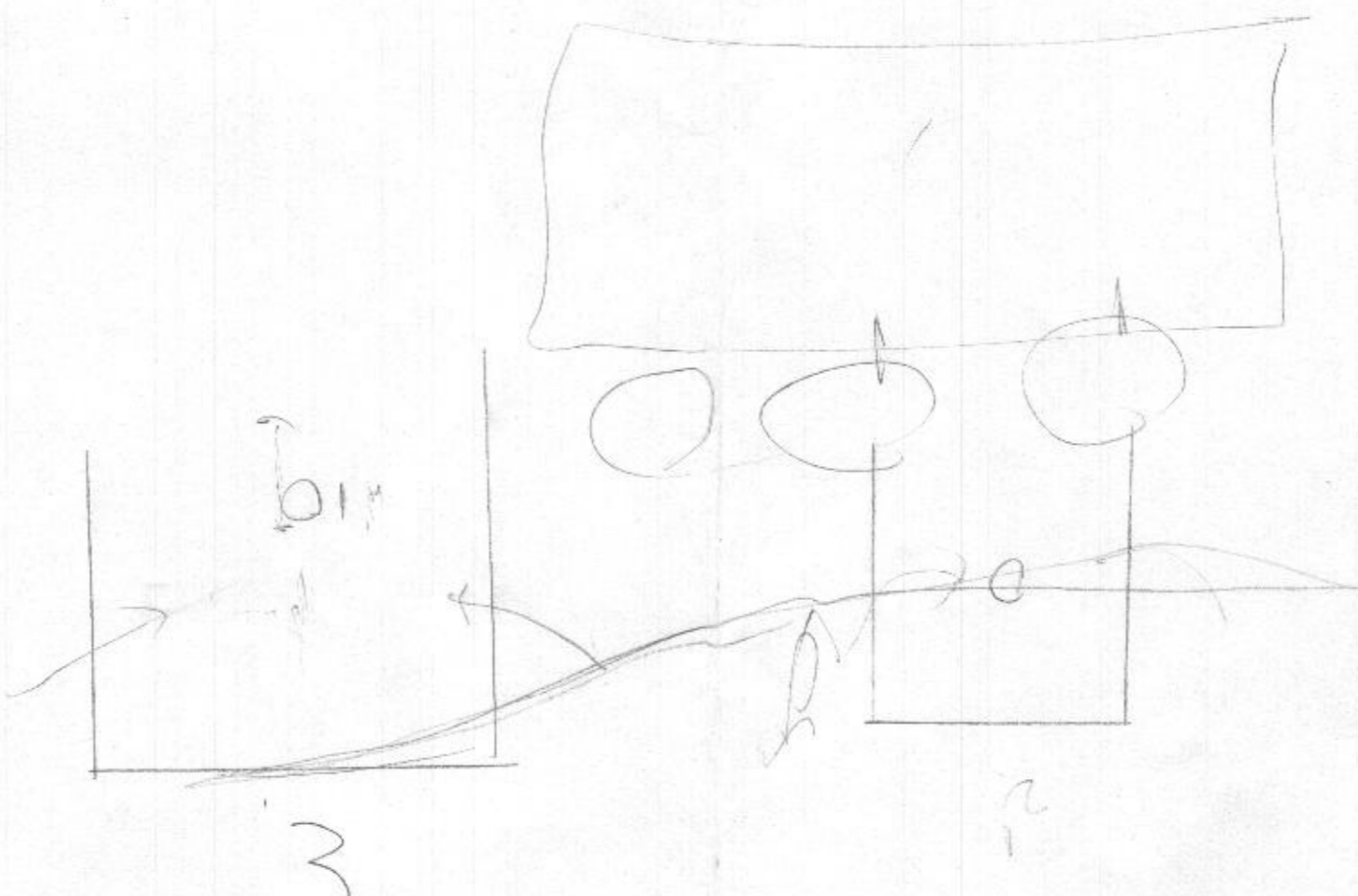
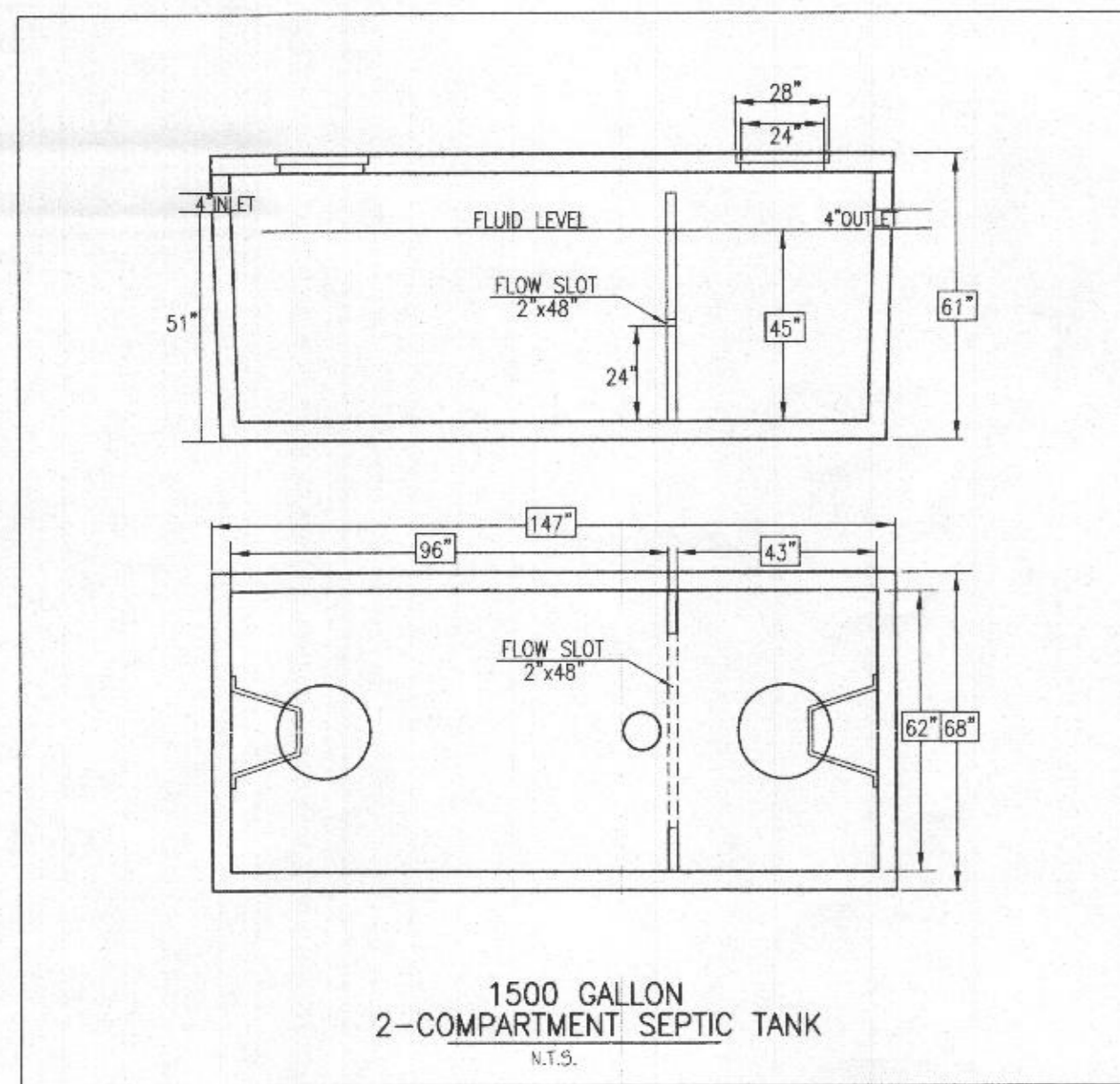
4

Project: CATONSVILLE HOMES
 HICKORY
 WOODBINE CROSSING LOT 15

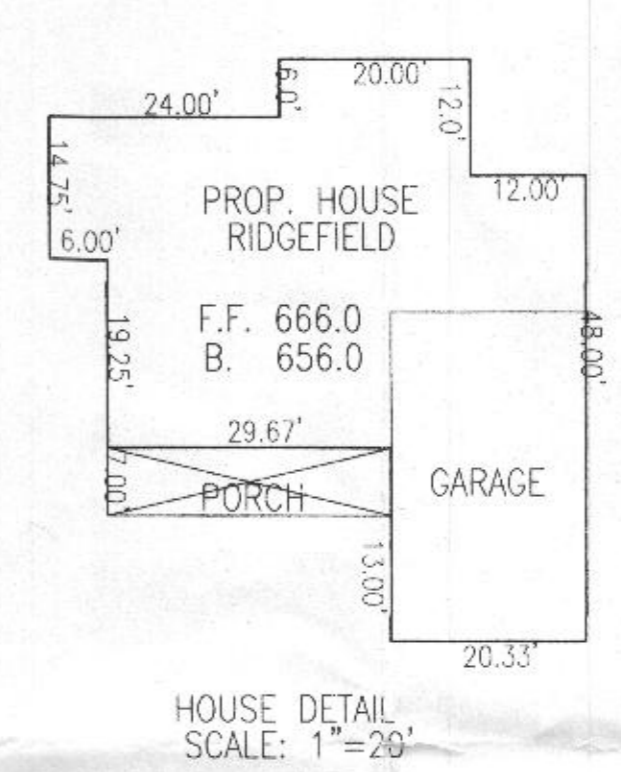
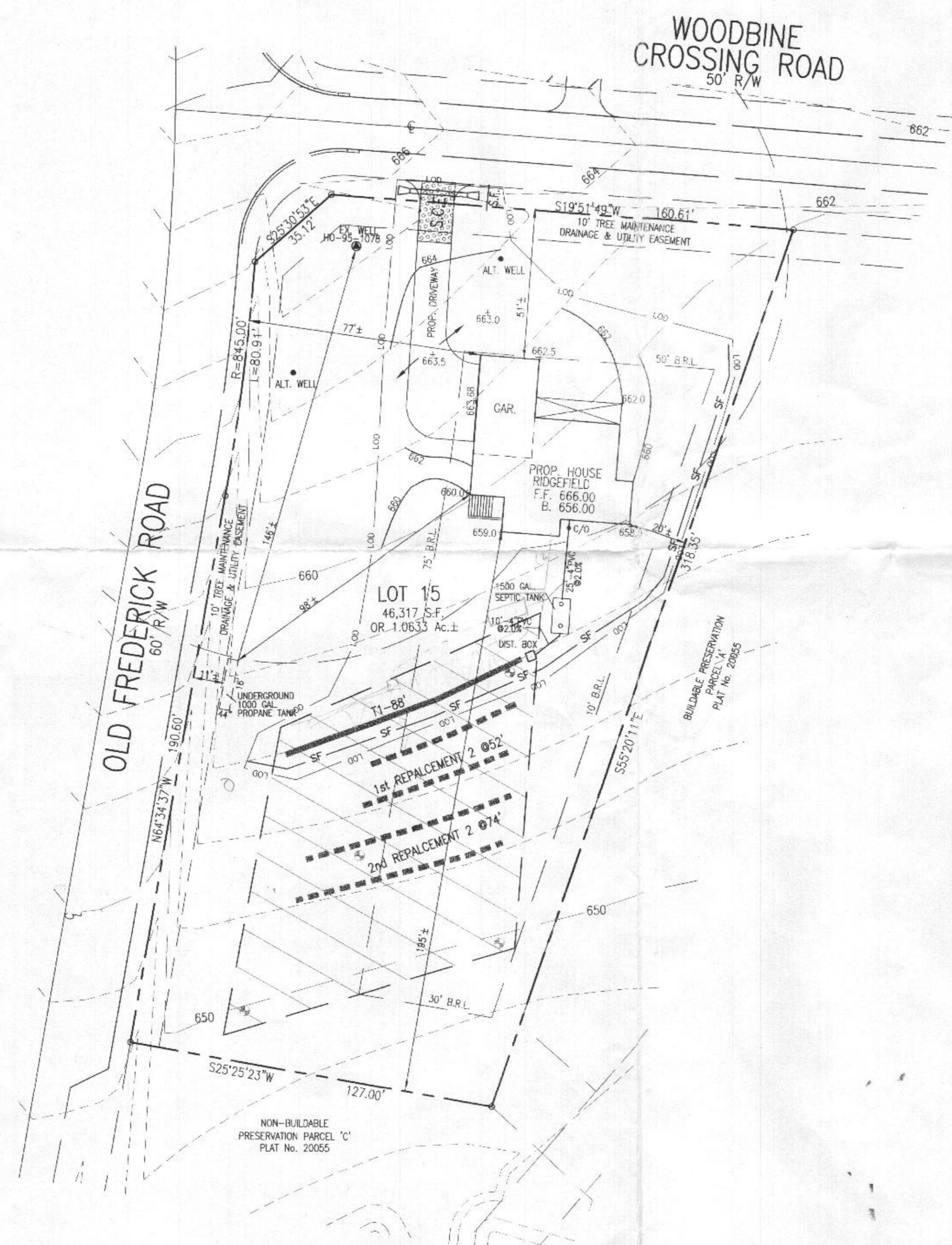
Project: CATONSVILLE HOMES
 HICKORY
 WOODBINE CROSSING LOT 15

Notes:

Plymouth Road Architects
 640 Plymouth Road, Baltimore, MD 21229, 410-788-0281
 PlymouthRoadArchitects.com



- GENERAL NOTES:
- TOPOGRAPHY & PLANIMETRIC FEATURES SHOWN HEREON TAKEN FROM COPYRIGHTED GIS DATA FROM HOWARD COUNTY, SUPPLEMENTED WITH FIELD LOCATIONS BY VANMAR ASSOCIATES, INC. CONTOUR INTERVAL IS 2 FEET. VERTICAL DATUM IS NAVD83.
 - THE EXISTING WELLS SHOWN ON THIS PLAN HAVE BEEN FIELD LOCATED BY VANMAR ASSOCIATES OR TAKEN FROM AVAILABLE RECORDS AND ACCURATELY SHOWN.
 - ZONING DISTRICT: RC-DEO
 - LIMIT OF DISTURBANCE (LOD) = 17,500 SQ.FT.
 - THERE ARE NO STREAMS, PONDS, FLOODPLAINS OR WETLANDS ON THIS LOT.
 - STORM WATER MANAGEMENT FOR THIS LOT IS PROVIDED BY EXISTING WOODBINE CROSSING STORM WATER MANAGEMENT FACILITIES FOR AND CONSTRUCTED BY THE DEVELOPER UNDER PLAN F-07-103.
 - DRIVEWAY CULVERT DESIGNED BY DEVELOPER UNDER PLAN F-07-103.



SEPTIC SYSTEM TRENCH DESIGN

INITIAL NUMBER OF BEDROOMS = 5
APPLICATION RATE = 1.2 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 5 BEDROOMS = 750 GPD
750 GPD / 1.2 GPD/sq.ft. = 625 sq.ft.
625 sq.ft. / 3 ft. WIDE TRENCH = 208 LF TRENCH
208 LF TRENCH X 0.42 REDUCTION CREDIT = 88 LF TRENCH
TRENCH 1 (T1) EX. GRD=656.0 -INV. TRENCH=652.0 -B. TRENCH=648.0

1st REPLACEMENT

INITIAL NUMBER OF BEDROOMS = 5
APPLICATION RATE = 1.2 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 5 BEDROOMS = 750 GPD
750 GPD / 1.2 GPD/sq.ft. = 625 sq.ft.
625 sq.ft. / 3 ft. WIDE TRENCH = 208 LF TRENCH
208 LF TRENCH X 0.50 REDUCTION CREDIT = 104 LF TRENCH
TRENCH 1 (T1) EX. GRD=655.0 -INV. TRENCH=651.0 -B. TRENCH=647.0
TRENCH 1 (T1) EX. GRD=654.2 -INV. TRENCH=650.2 -B. TRENCH=646.2

2nd REPLACEMENT

INITIAL NUMBER OF BEDROOMS = 5
APPLICATION RATE = 1.2 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 5 BEDROOMS = 750 GPD
750 GPD / 1.2 GPD/sq.ft. = 625 sq.ft.
625 sq.ft. / 3 ft. WIDE TRENCH = 208 LF TRENCH
208 LF TRENCH X 0.71 REDUCTION CREDIT = 148 LF TRENCH
TRENCH 1 (T1) EX. GRD=653.0 -INV. TRENCH=649.0 -B. TRENCH=645.0
TRENCH 1 (T1) EX. GRD=652.2 -INV. TRENCH=648.2 -B. TRENCH=644.2

- SITE PLAN NOTES:
- ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
 - MAXIMUM COVER OVER THE TANK IS 3 FEET. GREATER DEPTH WILL REQUIRE A HEAVY LOAD BEARING TANK.
 - ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
 - THE WELL (TAG #HO-95-1078) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
 - ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

Approved Septic System Plan
Howard County Health Department
Mark Oswald 9/28/17
Signature Date

OWNER:
LDG INC.
1EE PLAZA, SUITE 200
8501 GEORGIA AVENUE
SILVER SPRING, MD. 20910
301-585-7000

DEVELOPER:
CATONVILLE HOMES
11175 STRATHFIELD CT.
MARRIOTTVILLE, MD. 21104
410-442-2211

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 18417, Expiration Date: 9-18-17.



B17003213

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

LOT 15
WOODBINE CROSSING
PLAT No. 20055
TAX ID: 04-374-401
706 WOODBINE CROSSING ROAD
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' AUGUST, 2017

VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
(301) 829-2890 (301) 831-5015 (410) 549-2751
vanmar.com Fax (301) 831-5603 ©Copyright, Latest Date Shown

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.

- Criteria:**
1. Temporary Stabilization
 - a. Seeded 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 ripper 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 or to be tracked with rippers running parallel to the contour of the slope.
 - b. Apply fertilizer and lime as prescribed on the plans.
 - c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
 2. Permanent Stabilization
 - a. A soil test is required for any vertical disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
 - i. Soil pH between 6.0 and 7.0.
 - ii. Soluble salts less than 500 parts per million (ppm).
 - iii. 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.
 - iv. Soil contains 1.0 percent minimum organic matter by weight.
 - v. Soil contains sufficient pore space to permit adequate root penetration.
 - b. Application of amendments or topsoil soils do not meet the above conditions.
 - c. Graded areas must be maintained in a true and even grade as specified on the approved plan, be contoured or otherwise loosened to a depth of 3 to 5 inches. B.13
 - d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
 - e. Mix soil amendments in soil by disking or by other suitable means. Make sure amendments are thoroughly mixed with the soil. Do not use a chisel plow or other equipment 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 do not permit normal seeded 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. Seeded loosening may be unnecessary on newly disturbed areas.
 - f. Topsoiling
 - i. 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, and/or unacceptable soil gradation.
 - ii. 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.
 - iii. Topsoiling is limited to areas having 2:1 or flatter slopes where:
 - a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - b. The soil moisture is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - c. The original soil to be replaced contains material toxic to plant growth.
 - d. The soil is so acidic that treatment with limestone is not feasible.
 - iv. Areas having slopes steeper than 2:1 require special consideration and design.

- i. 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 volcanic stones, slag, coarse fragments, rocks, sticks, roots, or other materials larger than 1/2 inch in diameter.
- ii. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, grass grass, nut sedge, poison ivy, thistle, or other as specified on the approved plan.
- iii. 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.

- i. 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 maximum 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. Key irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.
- ii. Topsoil must be placed on the topsoil or subsoil in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading. B.14

- i. Soil Amendments (Fertilizer and Lime Specifications)
 - i. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized party or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analysis.
 - ii. 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 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.
 - iii. 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 plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 95 to 100 percent will pass through a #200 mesh sieve.
 - iv. 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.
 - v. 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.

TEMPORARY STABILIZATION SPECIFICATIONS TABLE

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depths	Fertilizer Rate (10-20-20)		Lime Rate
					N	P2O5	
1	ANNUAL RYEGRASS	40	MAR 1 - MAY 15 AUG 1 - OCT 15	0.5 INCHES	436 lb/acre	2 tons/acre	2 tons/acre
2	FESTUCA	30	JUNE 1 - JULY 31	0.5 INCHES	10 lb/1000 sq ft	90 lb/1000 sq ft	90 lb/1000 sq ft

PERMANENT STABILIZATION SPECIFICATIONS TABLE

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depths	Fertilizer Rate (10-20-20)		Lime Rate
					N	P2O5	
1	PERENNIAL RYEGRASS	20	MAR 1 - MAY 15 AUG 1 - OCT 15	1/4-1/2 in	45 pounds per acre	90 lb/acre	2 tons/acre
2	FESTUCA	10	JUNE 1 - JULY 31	1/4-1/2 in	10 lb/1000 sq ft	90 lb/1000 sq ft	90 lb/1000 sq ft

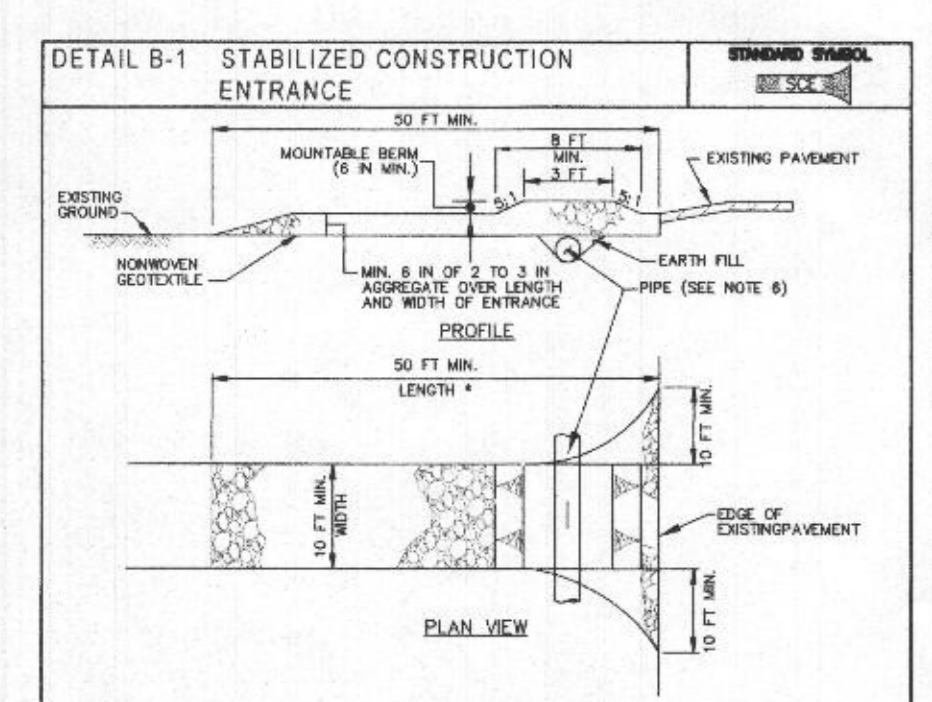
DUST CONTROL

DUST CONTROL METHOD FOR THIS SITE TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES. CALCIUM CHLORIDE SHALL BE APPLIED TO EXPOSED SURFACES AT A RATE THAT WILL KEEP SURFACE MOST UNTIL SOIL IS STABILIZED ACCORDING TO VEGETATIVE SPECS. FOR THIS SITE AND AREAS TO BE PAVED ARE COMPLETED.

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

- A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DITCHES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
- B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.



- CONSTRUCTION SPECIFICATIONS**
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE ENTRANCE. USE MINIMUM LENGTH OF 30 FEET (30 FEET FOR SINGLE RESIDUAL LANE). THE MINIMUM WIDTH OF THE ENTRANCE SHALL BE 30 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
 2. MAINTAIN ENTRANCE OPEN TO BE OPENED TOWARD THE SIDE UNDER THE ENTRANCE. MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE ENTRANCE FROM BEING BROKEN BY ALL SIZES OF TRUCKS AND TRAILERS AND FROM BEING BROKEN BY ALL SIZES OF TRUCKS AND TRAILERS. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE ENTRANCE FROM BEING BROKEN BY ALL SIZES OF TRUCKS AND TRAILERS. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE ENTRANCE FROM BEING BROKEN BY ALL SIZES OF TRUCKS AND TRAILERS.
 3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION B-1 - MATERIALS.
 4. PLACE CURBED DRAINAGE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
 5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT AND STONE OR MAKE OTHER REPAIRS AS REQUIRED TO MAINTAIN CLEAN SURFACE. MOUNTABLE BEAM AND SPECIFIED DIMENSIONS. IMMEDIATELY REPAIR AND REPAIR REPAIRS. REPAIRS ON TRACKS ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SHREDDING. WASHING ROADWAY TO REMOVE MUD. TRACKING ONTO ADJACENT ROADWAY IS NOT ACCEPTABLE. UNLESS MUD WATER IS DRAINED ON AN APPROVED SEDIMENT CONTROL PRACTICE.

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 after the end of construction.

Conditions Where Practice Applies:
To the surface of all perimeter contours, slopes, and any disturbed area not under active grading.

- Criteria:**
1. Specifications
 - a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 12 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed lots must be available upon request to the inspector to verify type of seed and seeding rate.
 - b. Much alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding rate must be applied when the ground thaws.
 - c. Inoculants: The inoculant for treating legume seed in the seed mixture must be a pure culture of nitrogen fixing bacteria. The inoculant for treating grass seed must be a pure culture of nitrogen fixing bacteria. Inoculants 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 used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and reduce the inoculant less effective.
 - d. Soil or seed must 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
 - a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
 - b. Hydroseeding: This includes use of the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.2, or site-specific seeding summaries.
 - c. Inoculants: The inoculant for treating legume seed in the seed mixture must be a pure culture of nitrogen fixing bacteria. The inoculant for treating grass seed must be a pure culture of nitrogen fixing bacteria. Inoculants 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 used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and reduce the inoculant less effective.
 - d. Soil or seed must 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.

- i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.2, or site-specific seeding summaries.
- ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. For all areas, use a weighted roller to seal seed to soil contact. B.16
- iii. Drill or Outcutter Seeding: Mechanized seeders that apply and cover seed with soil.
- iv. Outcutter Seeding: Mechanized seeders that apply and cover seed with soil.
- v. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
- vi. 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; P2 O5 (phosphorus), 200 pounds per acre; K2 O (potassium), 200 pounds per acre.
- vii. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding of any one time. Do not use burnt or hydrated lime when hydroseeding.
- viii. Mix seed and fertilizer on a s and s and seed immediately and without interruption.
- ix. When hydroseeding do not incorporate seed into the soil.

- i. Mulch Materials (in order of preference)
 - i. Straw consisting of thoroughly threshed wheat, rye, 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 much, moldy, coated, decayed, or dusty. Note: Use only sterile straw much in areas where species of grass is desired.
 - ii. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical sheet.
 - iii. 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 uniform spread slurry.
 - iv. WCFM, including dye, must contain no germination or growth inhibiting factors.
 - v. WCFM 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 with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and penetration properties and must cover and hold water and seed in contact with the soil without inhibiting the growth of the grass seedlings.
 - vi. WCFM material must not contain elements or compounds at concentration levels that will be phytotoxic.
 - vii. 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 1.5 percent maximum and water holding capacity of 90 percent minimum. B.17
- ii. Application
 - a. Apply mulch to all seeded areas immediately after seeding.
 - b. When straw mulch is used, spread 8" over oil 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.
 - c. Wood cellulose fiber used as mulch must be applied at a set dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to dilute a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
 - d. Anchoring
 - i. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This must be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard:
 - a. 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 access is not a problem.
 - b. This practice should follow the contour.
 - c. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder of 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.
 - d. Synthetic binders such as Acryl-Tex (Acryl-Tex), Dura-Tex, Terra-Tex, Terra-Tex II, Terra-Tex III, 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 much, such as in a valley and on crests of banks. Use of cash binders is strictly prohibited.
 - e. 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.

- i. Maintenance and/or corrective action performed
 - i. Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MDE).
 - ii. Fences for the construction of utilities is limited to three pipe lengths or that which can and shall be back-filled and stabilized by the end of each activity, whichever is shorter.
 - iii. Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may be approved by the CD per the list of HSCD-approved field changes.
 - iv. Disturbance shall not occur outside the L.O.D. 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 CD. Unless otherwise specified and approved by the HSCD, no more than 30 acres cumulatively may be disturbed at a given time.
 - v. 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 access is not a problem.
 - vi. This practice should follow the contour.
 - vii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder of 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.
 - viii. Synthetic binders such as Acryl-Tex (Acryl-Tex), Dura-Tex, Terra-Tex, Terra-Tex II, Terra-Tex III, 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 much, such as in a valley and on crests of banks. Use of cash binders is strictly prohibited.
 - ix. 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.

STOCKPILE AREA

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.

1. The stockpile location and related sediment control practices must be clearly indicated on the erosion and sediment control plan.
2. 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. Batching must be provided in accordance with Section B-3 Land Grading.
3. Runoff from the stockpile area must drain to a suitable sediment control practice.
4. Access the stockpile area from the updrift side.
5. 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.
6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.
7. 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.
8. 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 Stabilization 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 wind height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, sheeting must be provided in accordance with Section B-3 Land Grading.

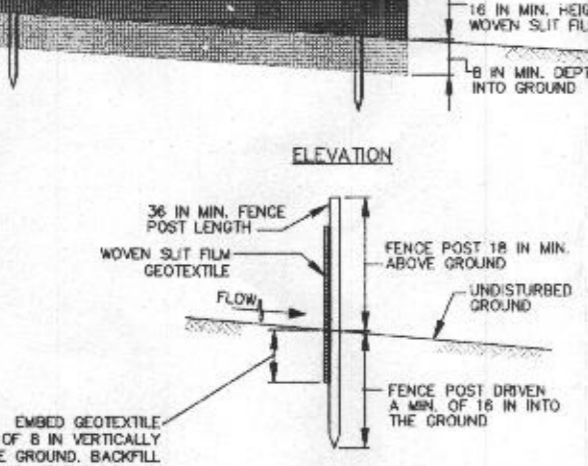
B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

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.

- Criteria:**
1. Seed Mixtures
 - a. General Use
 - i. 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 condition or purpose found on Plan B.2.
 - ii. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
 - iii. 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 Planning.
 - iv. For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency.
 - v. 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 in the Permanent Seeding Summary.
 - b. Turfgrass Mixtures
 - i. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
 - ii. 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.
 - iii. 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 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.
 - iv. Kentucky Bluegrass/Perennial Ryegrass Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when full turf will receive medium to intensive management. Certified Perennial Ryegrass/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.
 - v. Tall Fescue/Certified Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes: Certified Tall Fescue/Certified Kentucky Bluegrass 95 to 100 percent. Certified Kentucky Bluegrass/Certified Tall Fescue: 5 to 5 pounds per 1000 square feet. One or more cultivars may be blended.
 - vi. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass. For establishment in high quality, intensively managed turf area. Mixture includes: Certified Kentucky Bluegrass/Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 pounds per 1000 square feet.



1. Place silt fence in accordance with the approved plan. Vehicles must travel over the entire length of the silt fence. Use minimum length of 30 feet (30 feet for single residual lane). The minimum width of the silt fence shall be 30 feet minimum at the existing road to provide a turning radius.
2. Maintain silt fence in a condition that minimizes tracking of sediment and stone or make other repairs as required to maintain clean surface. MOUNTABLE BEAM AND SPECIFIED DIMENSIONS. IMMEDIATELY REPAIR AND REPAIR REPAIRS. REPAIRS ON TRACKS ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SHREDDING. WASHING ROADWAY TO REMOVE MUD. TRACKING ONTO ADJACENT ROADWAY IS NOT ACCEPTABLE. UNLESS MUD WATER IS DRAINED ON AN APPROVED SEDIMENT CONTROL PRACTICE.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION B-1 - MATERIALS.
4. PLACE CURBED DRAINAGE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT AND STONE OR MAKE OTHER REPAIRS AS REQUIRED TO MAINTAIN CLEAN SURFACE. MOUNTABLE BEAM AND SPECIFIED DIMENSIONS. IMMEDIATELY REPAIR AND REPAIR REPAIRS. REPAIRS ON TRACKS ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SHREDDING. WASHING ROADWAY TO REMOVE MUD. TRACKING ONTO ADJACENT ROADWAY IS NOT ACCEPTABLE. UNLESS MUD WATER IS DRAINED ON AN APPROVED SEDIMENT CONTROL PRACTICE.

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

1. A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-313-1855 after the future L.O.D and protected area marked clearly in the field. A minimum of 48 hour notice to CID must be given a the following stages:
 - a. Prior to the start of earth disturbance.
 - b. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading.
 - c. Prior to the start of another phase of construction or opening of another grading unit.
 - d. Prior to the removal or modification of sediment control practices.
 Other building or grading inspection approvals may not be authorized until this initial approval by inspection agency is made. Other related state and federal permits shall be referenced, to ensure coordination and to avoid conflicts with this plan.

2. All vegetative practices are to be installed in accordance with the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR THE SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization is required within three (3) calendar days as to the surface of all perimeter contours, ditches, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading.
4. 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 TOPSOIL (Sec. B-4-2), permanent seeding (Sec. B-4-3), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-5). All concentrated flow, steep slope, and highly erodible areas shall receive erosion and sediment control practices as specified in the approved plan.
5. 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 CID.

6. Site Analysis
 - a. Total Area of Site
 - i. Area Disturbed
 - a. Area to be roofed or paved
 - b. Area to be vegetatively stabilized
 - ii. Total Dist.
 - a. Ch. Yds.
 - b. Sq. Yds.
 - iii. Total Fill
 - a. Office waste/hollow area location
 - b. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
 - c. Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly, and the next day after each rain event. A written report by the contractor, made available upon request, is part of every inspection and should include:
 - i. Inspection site (routine, pre-storm event, during rain event)
 - ii. Name and title of inspector
 - iii. Weather information (current conditions as well as time and amount of last recorded precipitation)
 - iv. Brief description of project's status (e.g. percent complete) and/or current activities
 - v. Evidence of sediment deficiencies
 - vi. Identification of water deficiencies
 - vii. Identification of sediment controls that require maintenance
 - viii. Identification of missing or improperly installed sediment controls
 - ix. Compliance status regarding the sequence of construction and stabilization requirements
 - x. Photographs
 - xi. Monitoring/inspecting
 - xii. Maintenance and/or corrective action performed
 - xiii. Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MDE).
 - d. Fences for the construction of utilities is limited to three pipe lengths or that which can and shall be back-filled and stabilized by the end of each activity, whichever is shorter.
 - e. Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may be approved by the CD per the list of HSCD-approved field changes.
 - f. Disturbance shall not occur outside the L.O.D. 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 CID. Unless otherwise specified and approved by the HSCD, no more than 30 acres cumulatively may be disturbed at a given time.
 - g. 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 access is not a problem.
 - h. This practice should follow the contour.
 - i. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder of 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.
 - j. Synthetic binders such as Acryl-Tex (Acryl-Tex), Dura-Tex, Terra-Tex, Terra-Tex II, Terra-Tex III, 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 much, such as in a valley and on crests of banks. Use of cash binders is strictly prohibited.
 - k. 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.

7. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
8. Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly, and the next day after each rain event. A written report by the contractor, made available upon request, is part of every inspection and should include:
 - i. Inspection site (routine, pre-storm event, during rain event)
 - ii. Name and title of inspector
 - iii. Weather information (current conditions as well as time and amount of last recorded precipitation)
 - iv. Brief description of project's status (e.g. percent complete) and/or current activities
 - v. Evidence of sediment deficiencies
 - vi. Identification of water deficiencies
 - vii. Identification of sediment controls that require maintenance
 - viii. Identification of missing or improperly installed sediment controls
 - ix. Compliance status regarding the sequence of construction and stabilization requirements
 - x. Photographs
 - xi. Monitoring/inspecting
 - xii. Maintenance and/or corrective action performed
 - xiii. Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MDE).
9. Fences for the construction of utilities is limited to three pipe lengths or that which can and shall be back-filled and stabilized by the end of each activity, whichever is shorter.
10. Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may be approved by the CD per the list of HSCD-approved field changes.
11. Disturbance shall not occur outside the L.O.D. 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 CID. Unless otherwise specified and approved by the HSCD, no more than 30 acres cumulatively may be disturbed at a given time.
12. 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 access is not a problem.
13. Top soil shall be stockpiled and preserved on-site for redistribution until final grade.
14. All silt fence and Super Silt Fence shall be placed on the contour, and be imbricated at 25' minimum intervals, with lower ends curled up by 2' in elevation.
15. Stream channels must not be disturbed during the following restricted time periods (inclusive):
 - a. Use I and II March 1 - June 15
 - b. Use II and III October 1 - April 30
 - c. Use IV March 1 - May 31
16. A copy of this plan, the 2011 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL, and associated permits shall be on-site and available when the site is active.

1. A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-313-1855 after the future L.O.D and protected area marked clearly in the field. A minimum of 48 hour notice to CID must be given a the following stages:
 - a. Prior to the start of earth disturbance.
 - b. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading.
 - c. Prior to the start of another phase of construction or opening of another grading unit.
 - d. Prior to the removal or modification of sediment control practices.
 Other building or grading inspection approvals may not be authorized until this initial approval by inspection agency is made. Other related state and federal permits shall be referenced, to ensure coordination and to avoid conflicts with this plan.

2. All vegetative practices are to be installed in accordance with the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR THE SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization is required within three (3) calendar days as to the surface of all perimeter contours, ditches, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading.
4. 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 TOPSOIL (Sec. B-4-2), permanent seeding (Sec. B-4-3), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-5). All concentrated flow, steep slope, and highly erodible areas shall receive erosion and sediment control practices as specified in the approved plan.
5. 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 CID.

6. Site Analysis
 - a. Total Area of Site
 - i. Area Disturbed
 - a. Area to be roofed or paved
 - b. Area to be vegetatively stabilized
 - ii. Total Dist.
 - a. Ch. Y