

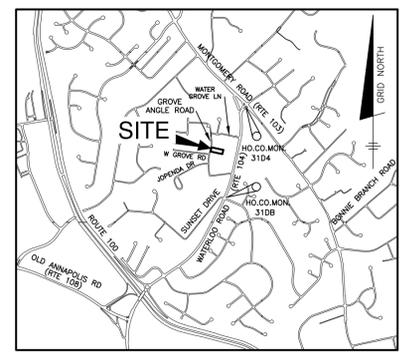
GENERAL NOTES

- 1. THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS AN ALTERNATIVE COMPLIANCE HAS BEEN APPROVED.
2. SUBJECT PROPERTY IS ZONED R-20 PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
3. THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
4. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NO. 310B AND 3104 WERE USED FOR THIS PROJECT.
5. ALL AREAS ARE "MORE OR LESS".
6. TRACT BOUNDARY IS BASED ON A FIELD SURVEY PERFORMED BY BENCHMARK ENGINEERING, IN OCTOBER, 2022.
7. THERE ARE NO WETLANDS, STREAMS, THEIR BUFFERS, 100-YEAR FLOODPLAIN, OR 25% OR GREATER STEEP SLOPES WITH MORE THAN 20,000 SF OF CONTIGUOUS AREA LOCATED ON THIS LOT. FIELD REVIEW WAS PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC. RESULTS IN THEIR LETTER DATED OCTOBER 17, 2022.
8. THIS SITE IS WITHIN THE METROPOLITAN DISTRICT PER THE HOWARD COUNTY PLAN FOR WATER AND SEWER, DATED NOVEMBER, 2015.
9. TO THE BEST OF OUR KNOWLEDGE, INFORMATION, AND BELIEF, THERE ARE NO CEMETERIES OR HISTORIC STRUCTURES LOCATED ON THIS LOT.
10. THERE ARE NO EXISTING STRUCTURES LOCATED LOT 2.
11. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
A) WIDTH - 12' (16' SERVING MORE THAN ONE RESIDENCE).
B) SURFACE - 6" OF CRUSHER RUN BASE WITH TAR AND CHIP COATING (1.5" MIN)
C) GEOMETRY - MAX 15% GRADE, MAX 10% GRADE CHANGE, & MIN. 45' TURNING RADIUS.
D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOAD)
E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
F) STRUCTURE CLEARANCES - MINIMUM 12 FEET
G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE
12. PER F-23-025, THIS LOT IS NOT SUBJECT TO THE REQUIREMENTS OF SECTION 16.1200 FOR FOREST CONSERVATION SINCE IT WAS PART OF A MINOR SUBDIVISION THAT CREATED ONE ADDITIONAL LOT AND HAS NO FURTHER SUBDIVISION POTENTIAL PER SECTION 16.1202(b)(vi).
13. PERIMETER LANDSCAPING FOR THIS LOT IS IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$3,760.00 FOR 3 SHADE TREES (\$300 EACH), 2 EVERGREEN TREES (\$150 EACH) AND 256 FEET OF FENCE (\$10 PER LF) SHALL BE PAID AS PART OF THE GRADING PERMIT UNDER THIS SITE DEVELOPMENT PLAN, SDP-24-006.
14. THE NOISE STUDY WAS PREPARED BY MARS GROUP IN OCTOBER, 2022 AND APPROVED UNDER F-23-025. THE 65DBA NOISE LINE WAS ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS, AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPT OF HOUSING AND URBAN DEVELOPMENT. THE NOISE LINE DID NOT FALL WITHIN THE LIMITS OF LOT 2.
15. A TRAFFIC STUDY WAS/IS NOT REQUIRED SINCE THIS IS A MINOR SUBDIVISION, PER DESIGN MANUAL VOLUME III, SECTION 4.7.B.5
16. THE SIGHT DISTANCE ANALYSIS FOR THE PROPOSED DRIVEWAY WAS PREVIOUSLY SUBMITTED AND APPROVED UNDER F-23-025.
17. THE MULTIMODAL STUDY WAS SUBMITTED WITH F-23-025.
18. THE STORMWATER MANAGEMENT REPORT WAS PREPARED BY BENCHMARK ENGINEERING, INC. IN AUGUST, 2023. STORMWATER MANAGEMENT FOR THIS LOT HAS BEEN PROVIDED VIA ENVIRONMENTAL SITE DESIGN TO THE MAXIMUM EXTENT PRACTICAL (ESD TO THE MEP) AND COMPLES WITH THE "MARYLAND DEPARTMENT OF THE ENVIRONMENT STORMWATER MANAGEMENT ACT OF 2007" AND THE "HOWARD COUNTY DESIGN MANUAL VOLUME I, CHAPTER 5". STORMWATER MANAGEMENT IS PROVIDED VIA ONE M-6 MICRO BIO-RETENTION PRACTICE. IT SHALL BE OWNED AND MAINTAINED BY THE OWNER OF LOT 2.
19. A TEST PIT FOR STORMWATER MANAGEMENT WAS DUG BY HILLIS-CARNES ON OCTOBER 18, 2022. THE TEST PIT LOG HAS BEEN INCORPORATED INTO THE STORMWATER MANAGEMENT REPORT
20. THIS LOT IS SUBJECT TO SECTION 16.1107(b)(1)(v) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO ALLOW FOR A SINGLE LOT FAMILY MEMBER EXEMPTION.
21. UNDER F-23-025, A FEE-IN-LIEU REQUEST FOR ROAD IMPROVEMENTS ALONG GROVE ANGLE ROAD AND MD RTE 104 (WATERLOO ROAD) IN THE AMOUNT OF \$2,141 WAS APPROVED ON JANUARY 9, 2023 AND WAS APPLIED TO CAPITAL PROJECT NUMBER J-4711.
22. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPERS EXPENSE.
23. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
24. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST (5) WORKING DAYS PRIOR TO THE START OF WORK.
25. REFUSE COLLECTION AND MAIL DELIVERY FOR LOT 2 IS PROVIDED AT THE JUNCTION OF THE PRIVATE DRIVEWAY AND THE ROAD RIGHT-OF-WAY.
26. APPROVAL OF THIS SITE DEVELOPMENT PLAN IS REQUIRED FOR THE DEVELOPMENT OF LOT 2 PRIOR TO ISSUANCE OF ANY GRADING OR BUILDING PERMITS FOR NEW HOUSE CONSTRUCTION IN ACCORDANCE WITH SECTION 16.155 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
27. WATER AND SEWER IS PUBLIC. THE CONTRACT NUMBERS ARE 64-W AND 302-S. A NEW WATER AND SEWER SERVICE (N.W.S.S.) AGREEMENT SHALL BE EXECUTED FOR WATER AND SEWER HOUSE CONNECTION HOOKUP FROM THE PUBLIC MAINS TO THE RIGHT-OF-WAY.
28. WATER AND SEWER SERVICE TO LOT 2 WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 16.122B OF THE HOWARD COUNTY CODE. PUBLIC WATER AND SEWER ALLOCATIONS SHALL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
29. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
30. ANY TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
31. THIS PROJECT IS LOCATED IN THE RED HILL BRANCH OF THE LITTLE PATUXENT WATERSHED #02131105.
32. THIS LOT IS SUBJECT TO SECTION 13.402(c)(6) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS FOR MODERATE INCOME HOUSING UNITS. THIS SHALL BE ACCOMPLISHED VIA FEE-IN-LIEU PAYMENT THAT IS TO BE CALCULATED AND PAID AT THE TIME OF BUILDING PERMIT ISSUANCE.
33. FOR DRIVEWAY APRON REFER TO HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.06. A DRIVEWAY CULVERT IS NOT REQUIRED SINCE THE CALCULATED FLOW OVER THE DRIVEWAY IS LESS THAN THE AMOUNT REQUIRED FOR A CULVERT (5cfs) AS APPROVED UNDER F-23-025.
34. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, WINDOW WELLS, ORIELS, VESTIBULES, BALCONIES AND CHIMNEYS MAY ENCR OACH 4 FEET INTO ANY SETBACK OR REQUIRED DISTANCE BETWEEN BUILDINGS PROVIDED THE FEATURE HAS A MAXIMUM WIDTH OF 16 FEET. EXTERIOR STAIRWAYS OR RAMPS ABOVE OR BELOW GROUND LEVEL (EXCLUDING THOSE ATTACHED TO A PORCH OR DECK) MAY ENCR OACH 10 FEET INTO A FRONT SETBACK OR A SETBACK FROM A PROJECT BOUNDARY, 16 FEET INTO A REAR SETBACK, 4 FEET INTO A SIDE SETBACK OR REQUIRED DISTANCE BETWEEN BUILDINGS. OPEN OR ENCLOSED PORCHES OR DECKS AND THE STAIRWAYS OR RAMPS ATTACHED THERETO MAY ENCR OACH 10 FEET INTO A FRONT OR REAR SETBACK, SETBACK FROM A PROJECT BOUNDARY OR A REQUIRED DISTANCE BETWEEN BUILDINGS.
35. IN ACCORDANCE WITH COUNCIL BILL 76-2018, EFFECTIVE JAN 11, 2019 AND PER SECTION 3.105(C) OF THE COUNTY CODE, ALL NEW RESIDENTIAL CONSTRUCTION THAT HAS A GARAGE, CARPORT, OR DRIVEWAY SHALL FEATURE A DEDICATED ELECTRIC LINE OF SUFFICIENT VOLTAGE SO THAT AN ELECTRIC VEHICLE CHARGING STATION MAY BE ADDED IN THE FUTURE. THIS DEDICATED LINE SHALL BE PROVIDED FOR EACH UNIT.

RESIDENTIAL SITE DEVELOPMENT PLAN
WELLS PROPERTY
LOT 2

LEGEND OF SYMBOLS

- EXISTING CONTOURS
EXISTING TREELINE
NRCS SOILS DELINEATION LINE
NRCS SOILS TYPE
LIMIT OF SUBMISSION
EXISTING FENCE LINE
EXISTING SEWER
EXISTING WHC
EXISTING OVERHEAD LINES
EXISTING POWER POLE
EXISTING FOREST CON EASEMENT
BUILDING RESTRICTION LINE
PROPOSED ROOF DRAIN
PROPOSED FENCE LINE
TEST PIT LOCATION
EXISTING TREE



VICINITY MAP
SCALE: 1" = 2000'
ADC MAP: 4936
GRID: C3

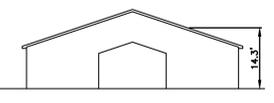
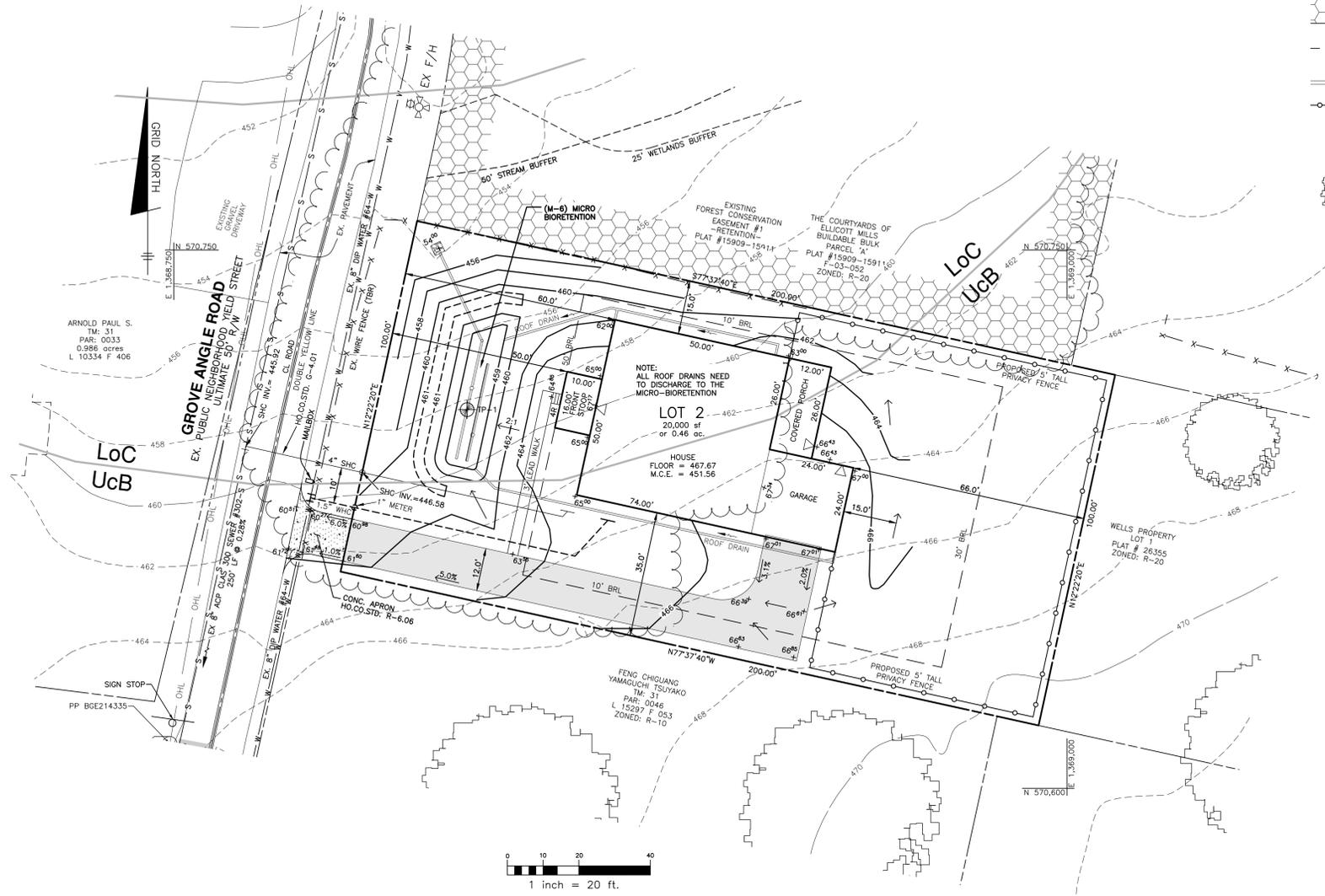
BENCHMARKS
HORIZONTAL: MARYLAND NAD83
VERTICAL: NAVD83
HO. CO. #3104 (AKA: 2843004)
STAMPED BRASS DISK SET ON TOP OF A 3" DEEP COLUMN OF CONCRETE.
ELEVATION: 494.445'

SHEET INDEX table with columns NO. and TITLE. Includes entries for Site Development and Grading Plan, Stormwater Management Plan, Landscape Plan, Sediment and Erosion Control Plan, and Traffic Control Plan.

ADDRESS CHART table with columns LOT and STREET ADDRESS. Shows Lot 2 at 8360 Grove Angle Road.

SITE ANALYSIS DATA CHART

- A.) TOTAL PROJECT AREA 0.46 ACRES
B.) AREA OF PLAN SUBMISSION 0.46 ACRES
C.) LIMIT OF DISTURBED AREA 0.38 ACRES
D.) PRESENT ZONING: R-20
E.) PROPOSED USE OF SITE: RESIDENTIAL SINGLE FAMILY DETACHED
F.) FLOOR SPACE ON EACH LEVEL OF BLDG PER USE N/A
G.) TOTAL NUMBER OF UNITS ALLOWED AS SHOWN ON FINAL PLAT(S) 1
H.) TOTAL NUMBER OF UNITS PROPOSED 1
I.) MAXIMUM NUMBER OF EMPLOYEES, TENANTS ON SITE PER USE N/A
J.) NUMBER OF PARKING SPACES REQUIRED BY HO. CO. ZONING REGS AND/OR FDP CRITERIA 1 SFD x 2.5 = 2.5 SPACES
K.) NUMBER OF PARKING SPACES PROVIDED ONSITE (INCLUDES HANDICAPPED SPACES) 4 (2 IN GARAGE AND 2 IN DRIVEWAY)
L.) OPEN SPACE ON-SITE N/A
M.) AREA OF RECREATIONAL OPEN SPACE REQUIRED N/A
AREA OF RECREATIONAL OPEN SPACE PROVIDED N/A
N.) BUILDING COVERAGE OF SITE N/A
PERCENTAGE OF GROSS AREA (MAXIMUM ALLOWED 60%) N/A
O.) APPLICABLE DPZ FILE REFERENCES: ECP-23-012
F-23-025



1 inch = 20 ft.

1 inch = 20 ft.

MODERATE INCOME HOUSING UNIT (MIHU) APPLICATION EXEMPTIONS TRACKING table showing counts for Total Number of Lots/Units Proposed, Total Number of MIHUs Required, etc.

STANDARD STORMWATER MANAGEMENT PRACTICE CHART table with columns LOT NUMBER, ADDRESS, MICRO-BIORETENTION.

STORMWATER MANAGEMENT SUMMARY CHART - INDIVIDUAL PRACTICES table with columns Practice, DA (sf), Imp Area (sf), % Imp, Rv, Pe Required, etc.

PERMIT INFORMATION CHART table with columns SUBDIVISION NAME, SECTION/AREA, LOT/PARCEL #, PLAT No., GRID No., ZONE, TAX MAP NO, ELECTION DISTRICT, CENSUS TRACT.

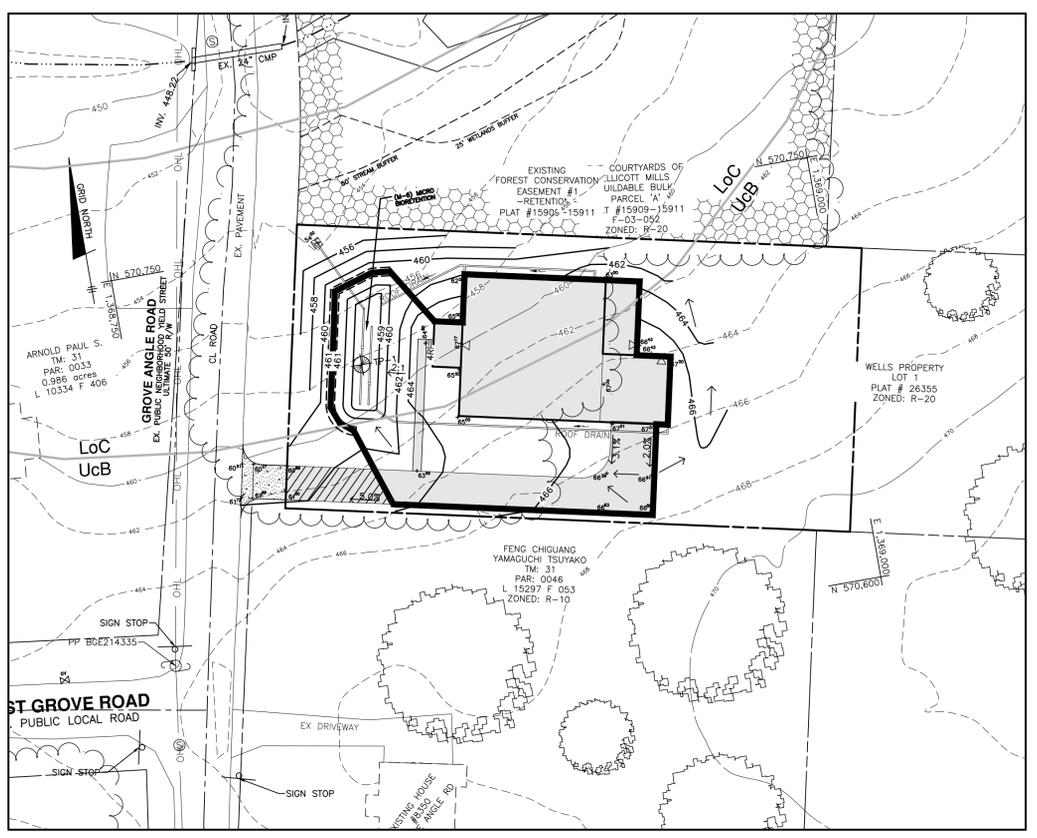
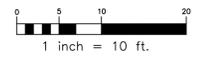
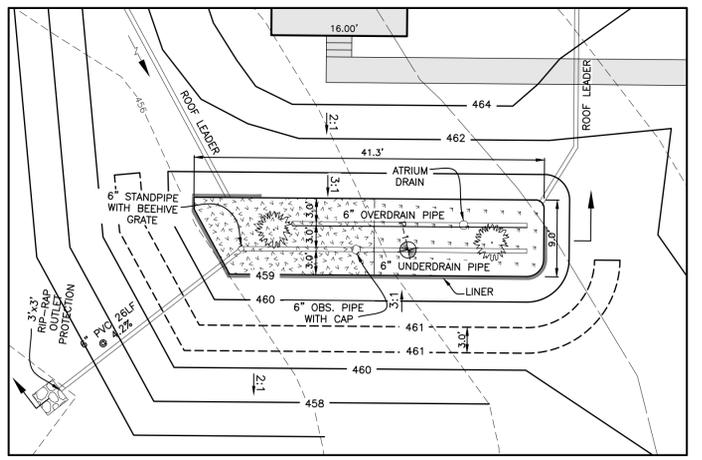
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. Includes signatures of Chad Edmondson and Lynda Eisenberg with dates.

Professional seal for BENCHMARK ENGINEERING, INC. and project information including OWNER (JACLYN SUZANNE WELLS), BUILDER (JACLYN SUZANNE WELLS), and SITE DEVELOPMENT AND GRADING PLAN details.

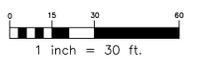
TEST PIT LOG					
Test Pit No.: B-1					
PROJECT			PROJECT NO.		
5008 Waterloo Road			22630A		
CLIENT			DATE		
Jackie Wells			10/18/22		
LOCATION			ELEV.		
Ellicott City					
EXCAVATION METHOD			LOGGER		
Groundwater depth - At completion: Dry			Cave-in depth:		
ELEVATION/DEPTH	SOIL SYMBOLS AND SAMPLES	USCS	DESCRIPTION	DENSITY (pcf)	MOISTURE (%)
0		SM	Topsil - 5"		
		SC	Dark brown, moist, silty SAND (SM) Brown, moist, clayey SAND (SC)		
5		SM	Brown, moist, silty SAND, some gravel (SM) Hard excavation at 10'		
Bottom of test pit at 10'					
					
Notes:					
HILLIS-CARNES ENGINEERING ASSOCIATES, INC.					

(M-6) Micro Bio-Retention Landscaping Chart					
PLANT NAME	COMMON NAME	Surface Area TYPE	SIZE	QUANTITY	MB #1
Cornus Amomum	Silky Dogwood	deciduous shrub	18-24" ht. #3 CAN	4	354
Echinacea Purpurea	Purple Coneflower	perennial	2 gal. container	22	4
Juncus Effusus	Common Rush	perennial	1 qt.	66	22

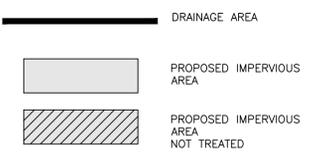
PLANTING LEGEND	
	SILKY DOGWOOD
	PURPLE CONEFLOWER
	COMMON RUSH



DRAINAGE AREA MAP

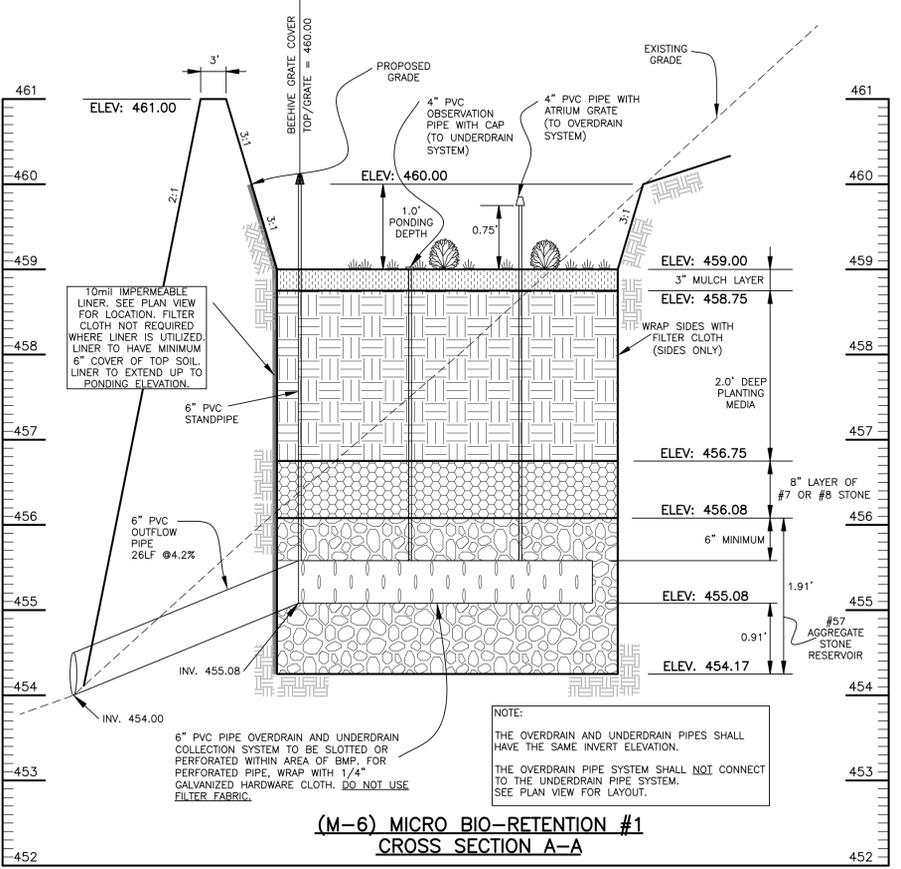


STORMWATER MANAGEMENT LEGEND



OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

- The Owner shall maintain the plant material, mulch layer and soil layer annually. Maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland Stormwater Design Manual Volume II, Table A.4.1 and 2.
- The Owner shall perform a plant inspection in the spring and in the fall of each year. During the inspection, the Owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material, treat diseased trees and shrubs, and replace all deficient stakes and wires.
- The Owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years. The previous mulch layer shall be removed the new layer is applied.
- The Owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy storm.



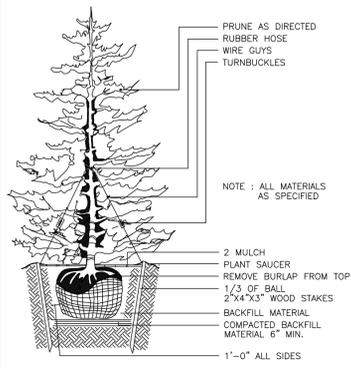
(M-6) MICRO-BIORETENTION #1 CROSS SECTION A-A

Appendix B.4. Construction Specifications for Environmental Site Design Practices

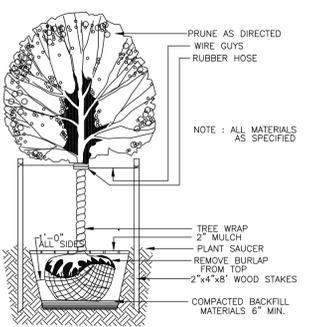
Table B.4.1 Materials Specifications for Micro-Bioretenion, Rain Gardens & Landscape Infiltration			
Material	Specification	Size	Notes
Plantings	see Appendix A, Table A.4	n/a	Plantings are site-specific
Planting soil [2' to 4' deep]	loamy sand (60 - 65%) & compost (35 - 40%) or sandy loam (30%) coarse sand (30%) & compost (40%)	n/a	USDA soil types loamy sand or sandy loam; clay content < 5%
Organic content	Min. 10% by dry weight (ASTM D 2974)		
Mulch	shredded hardwood		aged 6 months, minimum; no pine or wood chips
Pea gravel diaphragm	pea gravel: ASTM-D-448	NO. 8 OR NO. 9 (1.8" TO 3/8")	
Curtain drain	ornamental stone: washed cobbles	stone: 2" to 5"	
Geotextile	AASHTO M-43	n/a	PE Type 1 nonwoven
Gravel (underdrains and infiltration berms)	NO. 57 OR NO. 6 AGGREGATE (3/8" to 3/4")		
Underdrain piping	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underdrain pipes. Perforated pipe shall be wrapped with 1/2-inch galvanized hardware cloth
Poured in place concrete (if required)	MSHA Mix No. 3; f'c = 3500 psi @ 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved State or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 350.R.89; vertical loading [14-10 or 14-20]; allowable horizontal loading (based on soil pressures); and analysis of potential cracking
Sand	AASHTO-M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonate or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
DocuSigned by: <i>Howard Edmondson</i>	2/13/2024
DocuSigned by: <i>Lynda Eisenberg</i>	2/14/2024

			
OWNER: JACLYN SUZANNE WELLS 5008 WATERLOO ROAD ELLICOTT CITY, MARYLAND 21043-6653 410-207-2188		WELLS PROPERTY LOT 2	
BUILDER: JACLYN SUZANNE WELLS 5008 WATERLOO ROAD ELLICOTT CITY, MARYLAND 21043-6653 410-207-2188		TAX MAP: 31 - GRID: 13 - PARCEL: 45 ZONED: R-20 ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND	
STORMWATER MANAGEMENT PLAN, DRAINAGE AREA MAP, AND DETAILS			
DESIGN: DBT	CHECK: CAM	DATE: JANUARY 16, 2024	BEI PROJECT NO. 3133
SCALE: AS SHOWN		SHEET 2 OF 5	



TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



TYPICAL DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE

BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE-YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

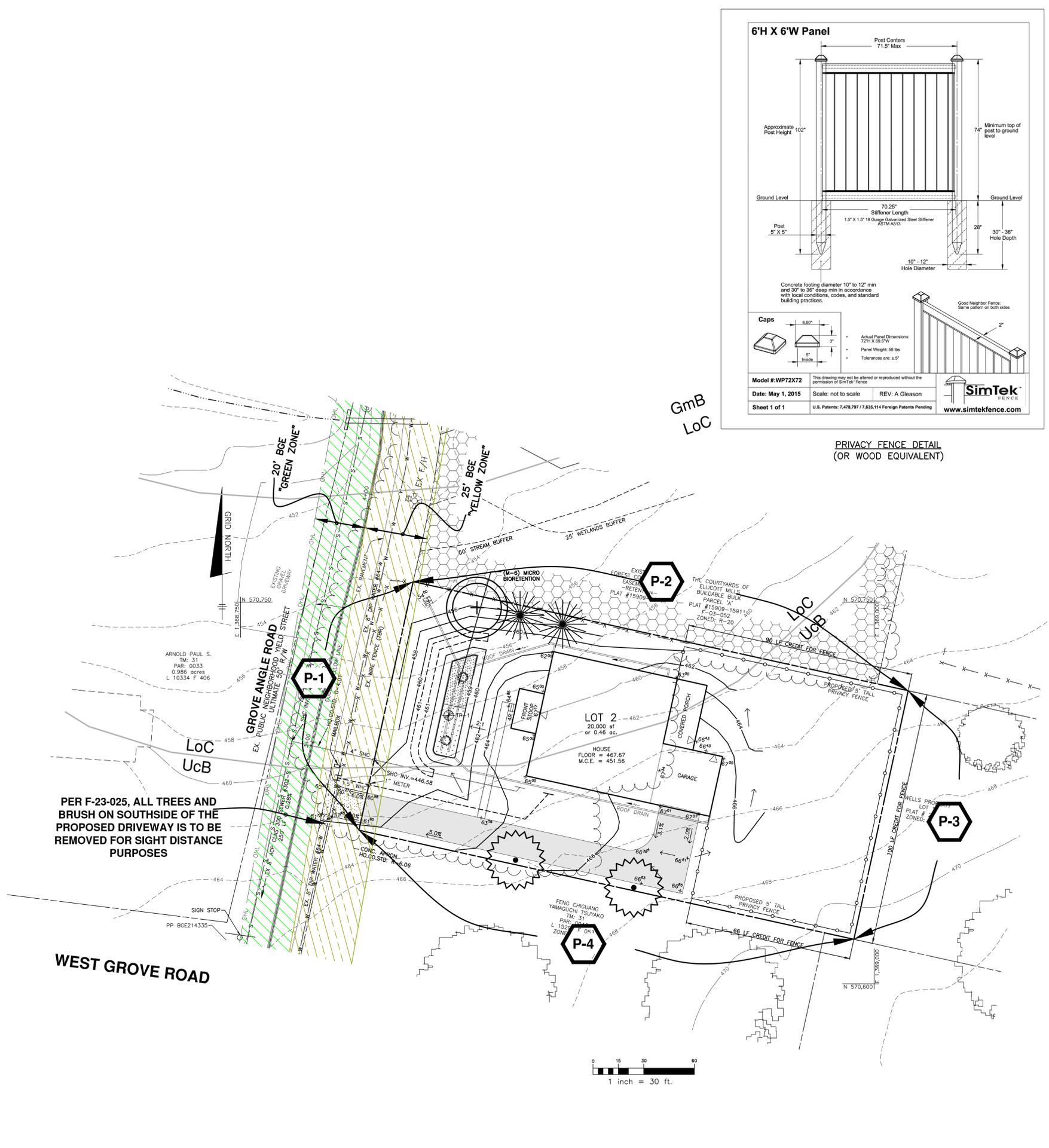
Jaclyn Wells 1/17/2024
JACLYN WELLS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DocuSigned by: *Chad Edmondson* 2/13/2024
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DocuSigned by: 2/13/2024
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DocuSigned by: *Lynnda Eisenberg* 2/14/2024
DIRECTOR DATE



Schedule A				
Perimeter Landscape Edge				
Category	P-1	P-2	P-3	P-4
Landscape Type	N/A	A	A	A
Linear Feet of Road Frontage or Perimeter	100	200	100	200
Credit for Existing Vegetation (Yes, No, Linear Feet)	0	0	0	0
Credit for Wall, Fence, or Berm (Yes, No, Linear Feet)	0	90	100	66
Linear Feet of Planting	100	110	0	134
Number of Plants Required				
Shade Trees	0	2	0	2
Evergreen Trees	0	0	0	0
Other Trees (2:1 substitute)	0	0	0	0
Shrubs	0	0	0	0
Number of Plant Provided				
Shade Trees	0	1	0	2
Evergreen Trees	0	2	0	0
Other Trees (2:1 substitute)	0	0	0	0
Shrubs	0	0	0	0

2 evergreen trees will be substituted for 1 shade tree along P-2

LANDSCAPE PLANTING LIST				
SYMBOL	QUANTITY	NAME	REMARKS	DESCRIPTION
+	1	ACER RUBRUM (Red Sunset Red Maple)	2.5" - 3" cal.	PERIMETER EDGE SHADE TREE, PROVIDED BY DEVELOPER
•	2	QUERCUS RUBRA (Northern Red Oak)	2.5" - 3" cal.	PERIMETER EDGE SHADE TREE, PROVIDED BY DEVELOPER
☼	2	THUJA PLICATA (Green Giant)	5'-6' hgt	PERIMETER EDGE EVERGREEN TREE, PROVIDED BY DEVELOPER

- LANDSCAPE NOTES:**
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.
 - AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATIONS.
 - THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
 - BGE ZONES: TREE HEIGHTS AT MATURITY SHALL BE LIMITED TO 25 FEET MAXIMUM WITHIN THE "GREEN ZONE". TREE HEIGHTS AT MATURITY SHALL BE LIMITED TO 40 FEET MAXIMUM WITHIN THE "YELLOW ZONE". IF TREES ARE TO BE PLANTED ON BERMS THE TREE HEIGHTS SHALL BE REDUCED BY THE HEIGHT OF THE BERM AS MEASURED ABOVE THE MEAN GROUND ELEVATION OF THE UTILITY POLE LINE.
 - SEE GENERAL NOTE 13 ON SHEET 1 FOR SURETY INFORMATION.

NO.	DATE	REVISION

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. 22390, Expiration Date: 6-30-2025.

BENCHMARK ENGINEERING, INC.
ENGINEERS & LAND SURVEYORS & PLANNERS
3300 N. RIDGE ROAD SUITE 140 ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BEI-CVLENGINEERING.COM

Professional Engineer
01.17.2024

OWNER: JACLYN SUZANNE WELLS
5008 WATERLOO ROAD
ELLICOTT CITY, MARYLAND 21043-6653
410-207-2188

WELLS PROPERTY LOT 2

TAX MAP: 31 - GRID: 13 - PARCEL: 45
ZONED: R-20
ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

BUILDER: JACLYN SUZANNE WELLS
5008 WATERLOO ROAD
ELLICOTT CITY, MARYLAND 21043-6653
410-207-2188

LANDSCAPE PLAN

DATE: JANUARY 16, 2024 BEI PROJECT NO. 3133

DESIGN: DBT CHECK: CAM SCALE: AS SHOWN SHEET 3 OF 5

B-4 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

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:

- Soil Preparation**
 - Temporary Stabilization**
 - 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 rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged south 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.
 - Permanent Stabilization**
 - 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.
- 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.
- 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 (Agro-Tack), DCA-70, Petrosel, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders should be heavier at the edges where wind catches much, 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.

Criteria:

- Soil Preparation**
 - Temporary Stabilization**
 - 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 rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged south 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.
 - Permanent Stabilization**
 - 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.
- 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.
- 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 (Agro-Tack), DCA-70, Petrosel, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders should be heavier at the edges where wind catches much, 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-4-4 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.

Criteria:

- Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.
- For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary, Seed and.
- When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4-3A.1.b and maintain until the next seeding season.

H-5 STANDARDS AND SPECIFICATIONS FOR DUST CONTROL

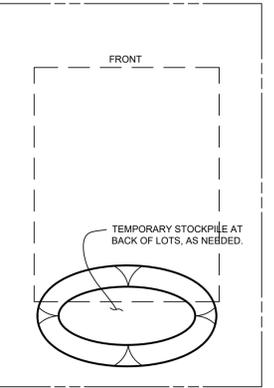
Definition: Controlling the suspension of dust particles from construction activities.

Purpose: To prevent blowing and movement of dust from exposed soil surfaces to reduce on and off-site damage including health and traffic hazards.

Conditions Where Practice Applies: Areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

Specifications:

- Mulches: See Section B-4-2 Soil Preparation, Topsoiling, and Soil Amendments, Section B-4-3 Seeding and Mulching, and Section B-4-4 Temporary Stabilization. Mulch must be anchored to prevent blowing.
- Vegetative Cover: See Section B-4-4 Temporary Stabilization.
- Tillage: Till to roughen surface and bring clods to the surface. Begin tilling on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment that may produce the desired effect.
- Irrigation: Sprinkle site with water until the surface is moist. Repeat as needed. The site must not be irrigated to the point that runoff occurs.
- Barrages: Solid board fences, salt fences, snow fences, burlap fences, straw bales, and similar material can be used to control air currents and soil blowing.
- Chemical Treatment: Use of chemical treatment requires approval by the appropriate plan review authority.



B-4-1 STANDARDS AND SPECIFICATIONS FOR INCREMENTAL STABILIZATION

Definition: Establishment of vegetative cover on cut and fill slopes.

Purpose: To provide timely vegetative cover on cut and fill slopes as work progresses.

Conditions Where Practice Applies: Any cut or fill slope greater than 15 feet in height. This practice also applies to stockpiles.

Criteria:

- Incremental Stabilization - Cut Slopes**
 - Excavate and stabilize cut slopes in increments not to exceed 15 feet in height. Prepare seeded and apply seed and mulch on all cut slopes as the work progresses.
 - Construction sequence example (Refer to Figure B.1):
 - Construct and stabilize all temporary swales or dikes that will be used to convey runoff around the excavation.
 - Perform Phase 1 excavation, prepare seeded, and stabilize.
 - Perform Phase 2 excavation, prepare seeded, and stabilize. Overseed Phase 1 areas as necessary.
 - Perform final phase excavation, prepare seeded, and stabilize. Overseed previously seeded areas as necessary.
- Incremental Stabilization - Fill Slopes**
 - Construct and stabilize fill slopes in increments not to exceed 15 feet in height. Prepare seeded and apply seed and mulch on all fill slopes as the work progresses.
 - Stabilize slopes immediately when the vertical height of a lift reaches 15 feet, or when the grading operation ceases as prescribed in the plans.
 - At the end of each day, install temporary water conveyance practice(s), as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.
 - Construction sequence example (Refer to Figure B.2):
 - Construct and stabilize all temporary swales or dikes that will be used to divert runoff around the fill. Construct silt fence on low side of fill unless other methods shown on the plans address this area.
 - At the end of each day, install temporary water conveyance practice(s), as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.
 - Place Phase 1 fill, prepare seeded, and stabilize.
 - Place Phase 2 fill, prepare seeded, and stabilize.
 - Place final phase fill, prepare seeded, and stabilize. Overseed previously seeded areas as necessary.

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.

Criteria:

- Seeding**
 - Specifications
 - 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 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 frozen. The appropriate seeding mixture must be applied when the ground thaws.
 - Inoculants: 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 inoculants as directed on the package. Use four times the recommended rate when hydrosowing. 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.
 - 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 seeded 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. Seeded must be firm after planting.
 - Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
 - Hydrosowing: Apply seed uniformly with hydroseder (slurry includes seed and fertilizer).
 - If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P2O5 (phosphorous), 200 pounds per acre; K2O (potassium), 200 pounds per acre.
 - Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydrosowing). Normally, not more than 2 tons are applied by hydrosowing at any one time. Do not use burnt or hydrated lime when hydrosowing.
 - Mix seed and fertilizer on site and seed immediately and without interruption.
 - When hydrosowing do not incorporate seed into the soil.
- Mulching**
 - Mulch Materials (in order of preference)
 - Straw consisting of thoroughly treshed 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 musty, moldy, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in areas where one species of grass is desired.

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:

- Seed Mixtures**
- General Use**
 - Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixtures, 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 areas 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 in the Permanent Seeding Summary.
- 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 mixtures, 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 1/2 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/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky Bluegrass Cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
 - Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes: Certified Tall Fescue Cultivars 85 to 100 percent, Certified Kentucky Bluegrass Cultivars 10 to 15 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, intensive management 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.

Table B.1: Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate Lb/acre	Seeding Depth (inches)	Recommended Seeding Dates by Plant Hardness Zone/1	
			3a and 6a	4b, 7a and 7b
Cool-Season Grasses				
Annual Ryegrass (Lolium perenne ssp. Multiflorum)	40	1.0	0.5	Mar 1 to May 15; Aug 1 to Oct 31
Perennial Ryegrass (Lolium perenne ssp. Perenne)	96	2.2	1.0	Mar 1 to May 15; Aug 1 to Oct 31
Dactylis (Avena sativa)	17	1.7	1.0	Mar 1 to May 15; Aug 1 to Oct 31
Wheat (Triticum aestivum)	130	2.8	1.0	Mar 1 to May 15; Aug 1 to Oct 31
Cereal Rye (Secale cereale)	112	2.8	1.0	Mar 1 to May 15; Aug 1 to Nov 15
Warm-Season Grasses				
Parrot Mistle (Sporobolus laticus)	39	0.7	0.5	May 16 to Jul 31
Poa Mille (Pennisetum glaucum)	29	0.5	0.5	May 16 to Jul 31

Notes:

- Seeding rates for the warm season grasses are on a basis of Pure Live Seed (PLS). Actual planting rates shall be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses.
- Seeding rates listed above are for temporary seedings, when planted alone. When planted as a nurse crop with permanent seed mixture, use 1/3 of the seeding rate listed above for barley, oats, and rye; for medium seeded grasses (annual ryegrass, perennial ryegrass, tall fescue, parrot millet), do not exceed more than 75% by weight of the overall permanent seed mixture. Cereal rye generally should not be used as a nurse crop, unless planting will occur very fall before the seeding date, or other temporary seeding.
- Cover the soil after the appropriate preparation that will maintain the germination and growth of other plants. It must be used as a nurse crop, and at 1/3 of the rate listed above.

Other are the recommended nurse crop for warm-season grasses:

- For sandy soils, plant seeds at least the depth listed below.
- The planting dates listed are averages for each zone and may require adjustments to reflect local conditions, especially near the boundaries of the zone.

Permanent Seeding Summary

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth (in)	N	P2O5	K2O	Lime Rate (10-20-20)	Lime Rate
9	Bluegrass, Kentucky	40	Mar 1 to May 15 Aug 1 to Oct 31	1/4 - 1/2 in					

HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

- Prior to the start of earth disturbance, upon completion of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading, prior to the start of another phase of construction or opening of another grading unit, prior to the removal or modification of sediment control practices.
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization is required within the (3) calendar days after the surface of all perimeter controls, dikes, 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.
- 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-4-5), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with mulch alone can only be applied between the fall and spring seeding dates only. The ground surface receiving stabilization (Sec. B-4-1) specifications shall be enforced in areas with >15' of cut and/or fill. Stockpiles (Sec. B-4-8) in excess of 20 feet must be benched with stable outlet. All concentrated flow, steep slope, and highly erodible areas shall receive soil stabilization matting (Sec. B-4-6).
- All sediment control structures are to remain in place, and are to be maintained in operative condition until permission for their removal has been obtained from the CID.
- Site Analysis:**

Total Area of Site:	0.46 Acres (LOT 2 ONLY)
Area Disturbed:	0.38 Acres
Area to be reseeded or paved:	0.13 Acres
Area to be vegetatively stabilized:	0.25 Acres
Total cut:	0 * Cu Yds
Total fill:	500 * Cu Yds
- Any sediment control practice which 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 CID. The site and all controls shall be inspected by the contractor weekly, and the next day after each inspection by the CID. If the contractor, made available upon request, is part of every inspection and should include:
 - Inspection date
 - Inspection type (routine, pre-storm event, during rain event)
 - Name and title of inspector
 - Weather information (current conditions as well as time and amount of last recorded precipitation)
 - Brief description of project's status (e.g. percent complete) and/or current activities
 - Evidence of sediment discharge
 - Identification of plan deficiencies
 - Identification of sediment controls that require maintenance
 - Identification of missing or improperly installed sediment controls
 - Compliance status regarding the sequence of construction and stabilization requirements
 - Photographs
 - Monitoring/sampling
 - Maintenance and/or corrective action performed
 - Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MDC).
- Trenches 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 work day, whichever is shorter.
- 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 allowed by the CID per the list of HSCD-approved field changes.
- Disturbance shall not occur under the L.O.D. A project is to be sequenced so that grading activities begin on a grading unit (maximum acreage of 20 ac. per grading unit) at 10 a.m. 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 20 acres cumulatively may be disturbed at a given time.
- Wash water from any equipment, vehicles, wheels, pavement, and other sources must be treated in a sediment basin or other approved wash water structure.
- Topsoil shall be stockpiled and preserved on-site for redistribution until final grade.
- All silt fence and super silt fence shall be placed on- and- the contour, and be imbricated at 25' minimum intervals, with lower end curled up by 2' in elevation.
- Stream channels must not be disturbed during the following restricted time periods (inclusive):
 - Use I and IIIP March 1 - June 15
 - Use III and IIIIP October 1 - April 30
 - Use IV March 1 - May 31
- A copy of this plan, the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and associated permits shall be on-site and available when the site is active.

DESIGN CERTIFICATION

I, CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Christopher A. Malagari 1/17/2024

ENGINEER
CHRISTOPHER A. MALAGARI
DATE: 1/17/2024
MD REGISTRATION NO. 22390
(FE) RLS, OR RLA (circle one)

DEVELOPERS CERTIFICATION

"I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."

Jaclyn Wells 1/17/2024

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 1/17/2024

HOWARD SOIL CONSERVATION DISTRICT

Declassified by: *Alexander Bratoliev* 2/14/2024

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Declassified by: *Carl Edmondson* 2/13/2024

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 2/13/2024

Declassified by: *Lynnda Stenzel* 2/14/2024

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 2/14/2024

DIRECTOR

WELLS PROPERTY
LOT 2

TAX MAP: 31 - GRID: 13 - PARCEL: 45
ZONED: R-20
ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

SEDIMENT AND EROSION CONTROL NOTES

DATE: JANUARY 16, 2024
BEI PROJECT NO. 3133

DESIGN: DBT
CHECK: CAM
SCALE: AS SHOWN
SHEET 5 OF 5

THIS PLAN IS FOR SEDIMENT AND EROSION CONTROL ONLY.