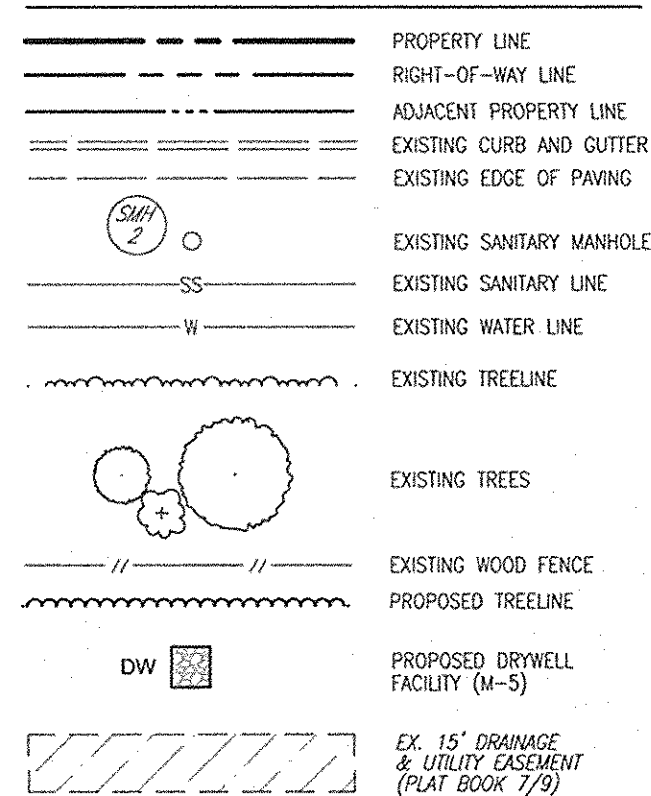


LEGEND:



SITE DATA

LOCATION: TAX MAP 24, GRID 10, PARCEL 660
DEED REFERENCE: L. 16330 / F. 42
2ND ELECTION DISTRICT
PRESENT ZONING DESIGNATION: R-20
PER THE COMPREHENSIVE ZONING PLAN DATED 10/6/13.
TOTAL PROJECT AREA: 0.58 AC. (25,157 SF)
AREA OF RIGHT OF WAY: 0.00 AC. (0.00 SF)
AREA OF FLOODPLAIN: 0.00 AC. (0.00 SF)
AREA OF STEEP SLOPES: 0.00 AC. (0.00 SF)
NET AREA OF PROJECT: 0.58 AC. (25,157 SF)
LIMIT OF DISTURBED AREA: 0.43 AC. (18,716 SF)
PROPOSED USES FOR SITE AND STRUCTURES: SFD RESIDENTIAL
TOTAL NUMBER OF UNITS ALLOWED: 1 UNIT
OPEN SPACE REQUIRED: 0.00 AC.
APPLICABLE DTY FILE REFERENCES: PLAT BOOK 7/9 & ECP-16-005 (APPROVED 09/14/15)

PETER R. PETERMAN
KELLI LYN PETERMAN
TM: 24 PARCEL: 660
L. 1622 / F. 322
GRAY ROCK
LOT: 26
AREA: 22,099 SF
USE: RESIDENTIAL
ZONED: R-20

DEBORAH C. MCKAY
TM: 24 PARCEL: 660
L. 15540 / F. 366
GRAY ROCK
LOT: 25
AREA: 21,605 SF
USE: RESIDENTIAL
ZONED: R-20

PARCEL 660 (L. 16330 / F. 42)
3630 BLUE HILL COURT
ELLICOTT CITY, MD 21042

JOHN H. BENNETT
ANDREA D. BENNETT
TM: 24 PARCEL: 660
L. 8769 / F. 636
GRAY ROCK
LOT: 20
AREA: 24,088 SF
USE: RESIDENTIAL
ZONED: R-20

WILLIAM B. BRISTOR
JEAN BRISTOR
TM: 24 PARCEL: 660
L. 928 / F. 403
GRAY ROCK
LOT: 21
AREA: 22,584 SF
USE: RESIDENTIAL
ZONED: R-20

JOHANNA P. MALEH
TM: 24 PARCEL: 660
L. 12141 / F. 284
GRAY ROCK
LOT: 22
AREA: 30,404 SF
USE: RESIDENTIAL
ZONED: R-20

KATHERINE L. WINDLEY
WILLIAM H. WINDLEY
TM: 24 PARCEL: 570
L. 8738 / F. 434
GRAY ROCK
LOT: 14
AREA: 20,255 SF
USE: RESIDENTIAL
ZONED: R-20

DONNA C. TROLL
PETER TROLL
TM: 24 PARCEL: 1052
L. 6255 / F. 208
DUNLOGGIN 2
LOT: 19
AREA: 21,582 SF
USE: RESIDENTIAL
ZONED: R-20

MARIO J. REDA SR.
MARION A. REDA
TM: 24 PARCEL: 1052
L. 11512 / F. 496
DUNLOGGIN 2
LOT: 20
AREA: 35,037 SF
USE: RESIDENTIAL
ZONED: R-20

JANET E. YEISLEY
TM: 24 PARCEL: 1052
L. 4427 / F. 482
DUNLOGGIN 2
LOT: 26
AREA: 28,271 SF
USE: RESIDENTIAL
ZONED: R-20

JOHN P. OMARA & WF
TM: 24 PARCEL: 1052
L. 747 / F. 374
DUNLOGGIN 2
LOT: 27
AREA: 22,507 SF
USE: RESIDENTIAL
ZONED: R-20

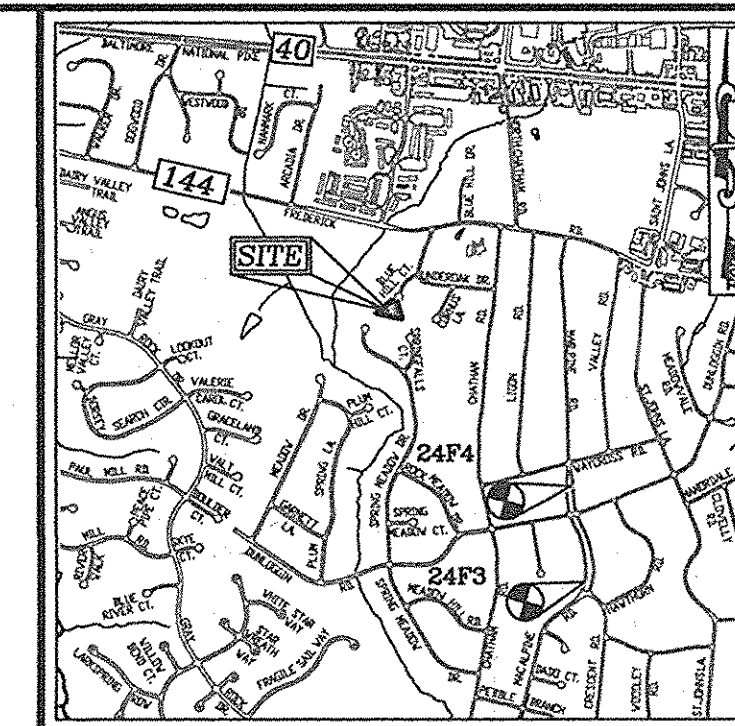
TOOD CALDIS
SHEILA CALDIS
TM: 24 PARCEL: 660
L. 3507 / F. 106
GRAY ROCK
LOT: 24
AREA: 37,853 SF
USE: RESIDENTIAL
ZONED: R-20

THE MILLER LAND CO.
TM: 24 PARCEL: 1030
L. 704 / F. 363
AREA: 9.51 AC.
USE: AGRICULTURAL
ZONED: R-20

SITE DEVELOPMENT PLAN
GRAY ROCK - SECTION TWO - LOT 23

GENERAL NOTES

- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
AT&T CABLE LOCATION DIVISION 1-800-393-3553
BGE (CONTRACTOR SERVICES) 410-850-4620
BGE (UNDERGROUND DAMAGE CONTROL) 410-787-4620
HOWARD COUNTY BUREAU OF UTILITIES 410-313-2366
COLONIAL PIPELINE CO. 410-795-1390
MISS UTILITY 1-800-257-7777
STATE HIGHWAY ADMINISTRATION 410-531-5533
VERIZON TELEPHONE CO. 1-410-954-6281
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 24F3 AND 24F4 WERE USED FOR THIS PROJECT.
- THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. DATED DECEMBER 12, 2014. DATUM USED IS FROM PLAT BOOK 7/9.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON FIELD RUN TOPOGRAPHIC SURVEY WITH TWO FOOT CONTOUR INTERVALS, PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. DATED JUNE 15, 2015.
- EXISTING UTILITIES ARE BASED ON HOWARD COUNTY RECORDS, FIELD SURVEY, ROAD CONSTRUCTION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND MAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO THE COUNTY'S RIGHTS-OF-WAY, PAVING, OR EXISTING UTILITIES SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- PUBLIC WATER AVAILABLE THROUGH CONTRACT NO. 11-W AND PUBLIC SEWER AVAILABLE THROUGH CONTRACT NO. 129-S. WATER AND SEWER SERVICE WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 16.122B OF THE HOWARD COUNTY CODE.
- PUBLIC WATER AND SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR OUTSIDE METER SETTING UNLESS OTHERWISE NOTED.
- THIS PROJECT IS LOCATED IN THE METROPOLITAN DISTRICT.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- THERE ARE NO STREAMS, OR STREAM BUFFERS LOCATED WITHIN THE LIMITS OF THIS SITE.
- THERE IS NO 100-YR FLOODPLAIN LOCATED WITHIN THE LIMITS OF THIS SITE.
- THERE ARE NO WETLANDS, OR WETLAND BUFFERS LOCATED WITHIN THE LIMITS OF THIS SITE.
- THE SUBJECT PROPERTY IS ZONED "R-20" IN ACCORDANCE WITH THE 10/06/13 COMPREHENSIVE ZONING PLAN.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED 6 SHADE TREES IN THE AMOUNT OF \$1,800.00 SHALL BE POSTED AS PART OF THE BUILDERS GRADING PERMIT APPLICATION.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION, OR BUILDING AND GRADING PERMITS.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES FOR THE FOLLOWING MINIMUM REQUIREMENTS:
a) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE);
b) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN.);
c) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM 45-FOOT TURNING RADIUS;
d) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING);
e) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE;
f) STRUCTURE CLEARANCES - MINIMUM 12 FEET;
g) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-605.
- THERE IS NO EXISTING HOUSE, CONSTRUCTION, OR HISTORIC STRUCTURES LOCATED ON THIS PROPERTY.
- STORM WATER MANAGEMENT TO BE PROVIDED FOR THIS DEVELOPMENT BY ENVIRONMENTAL SITE DESIGN UTILIZING DRYWELL FACILITIES (M-5). DRYWELL FACILITIES ARE TO BE PRIVATELY OWNED AND MAINTAINED BY THE HOMEOWNER. REFERENCE 2010 USE STORMWATER DESIGN MANUAL (CHAPTER 5).
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL/CEMETERY LOCATIONS ON SITE.
- THERE ARE NO STEEP SLOPES LOCATED ON THIS SITE.
- THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE THE TOTAL AREA OF THE PROJECT IS LESS THAN 40,000 SQUARE FEET, IN ACCORDANCE WITH SECTION 16.1202(b)(1)(i) OF THE SUBDIVISION REGULATIONS.
- IN ACCORDANCE WITH SECTION 128.0 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- NO RARE, THREATENED OR ENDANGERED SPECIES OR THEIR HABITATS WERE OBSERVED ON THE PROPERTY.
- SIC ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.
- THIS PROJECT IS EXEMPT FROM MODERATE INCOME HOUSING UNIT (MIHU) REQUIREMENTS.

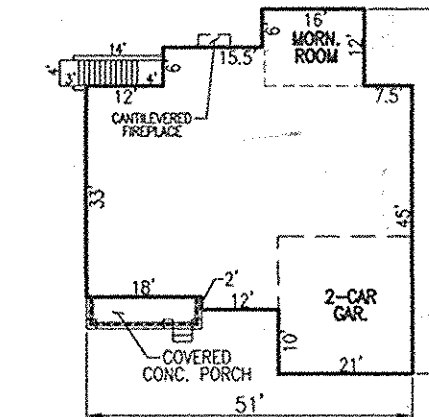


VICINITY MAP

SCALE: 1"=2,000'
ADC MAP COORDINATE: MAP: 20, GRID: D-8

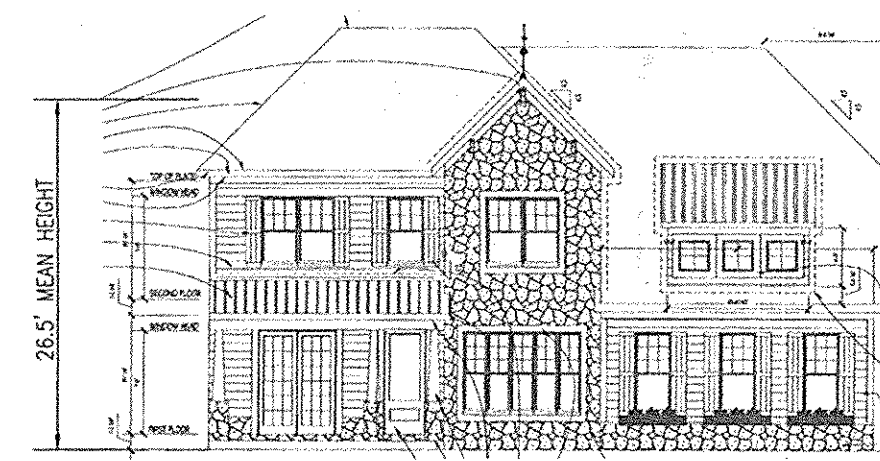
BENCHMARKS

HOWARD COUNTY BENCHMARK 24F3 (CONC. MON.)
N 581299.84 E 1360713.73 ELEV. 365.41
LOCATION: SILE OF MACALPINE RD. 4-1/2' 120' N. OF CRESCENT RD.
HOWARD COUNTY BENCHMARK 24F4 (CONC. MON.)
N 582298.62 E 1360570.97 ELEV. 386.19
LOCATION: MACALPINE ROAD, SOUTH OF WAYCROSS RD.



MADELINE

CHATEAU ELEVATION
SCALE: 1"=30'



OWNER/DEVELOPER

VINKING CUSTOM HOMES
C/O CARY CUMBERLAND
12800 FREDERICK ROAD
WEST FRIENDSHIP, MD 21794
(410) 489-6728

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	SECTION 16.1200 OF THE HOWARD COUNTY CODE	SECTION 16.1202 OF THE HOWARD COUNTY CODE	SECTION 16.1203 OF THE HOWARD COUNTY CODE	SECTION 16.1204 OF THE HOWARD COUNTY CODE
P-1	PRIVATE DRIVEWAY	1.0	1.0	1.0	1.0
P-2	PRIVATE DRIVEWAY	1.0	1.0	1.0	1.0
P-3	PRIVATE DRIVEWAY	1.0	1.0	1.0	1.0
P-4	PRIVATE DRIVEWAY	1.0	1.0	1.0	1.0

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
PAVING SECTIONS
P-1 TO P-4
R-2.01

ADDRESS CHART					
LOT/PARCEL#	STREET ADDRESS				
LOT 23	3630 BLUE HILL COURT				
PERMIT INFORMATION CHART					
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NUMBER			
GRAY ROCK - SECTION TWO	N/A	LOT 23 PARCEL 660			
PLAT OR L/F	GRID NO.	ZONING	TAX MAP NO.	ELECT. DIST.	CENSUS TR.
PLAT BOOK 7/9 L. 16330/F. 42	10	R-20	24	2ND	602306.1

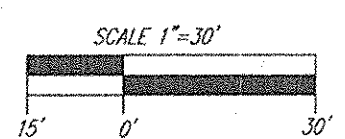
SHEET INDEX	DESCRIPTION	SHEET NO.
LAYOUT PLAN		1 OF 5
SOILS MAP, GRADING, EROSION AND SEDIMENT CONTROL PLAN		2 OF 5
SITE, GRADING, EROSION AND SEDIMENT CONTROL NOTES AND DETAILS		3 OF 5
STORMWATER MANAGEMENT DRAINAGE AREA MAP AND DETAILS		4 OF 5
LANDSCAPE PLAN, NOTES, AND DETAILS		5 OF 5

LAYOUT PLAN

SCALE: 1"=30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
CHIEF, DIVISION OF LAND DEVELOPMENT
DIRECTOR

SITE DEVELOPMENT PLAN
LAYOUT PLAN

GRAY ROCK - SECTION TWO - LOT 23
PARCEL 660 (L. 16330 / F. 42)
3630 BLUE HILL COURT
ELLICOTT CITY, MD 21042
SFD UNIT

TAX MAP: 24, GRID: 10
2ND ELECTION DISTRICT
DPZ REF: PLAT BOOK 7/9, ECP-16-005

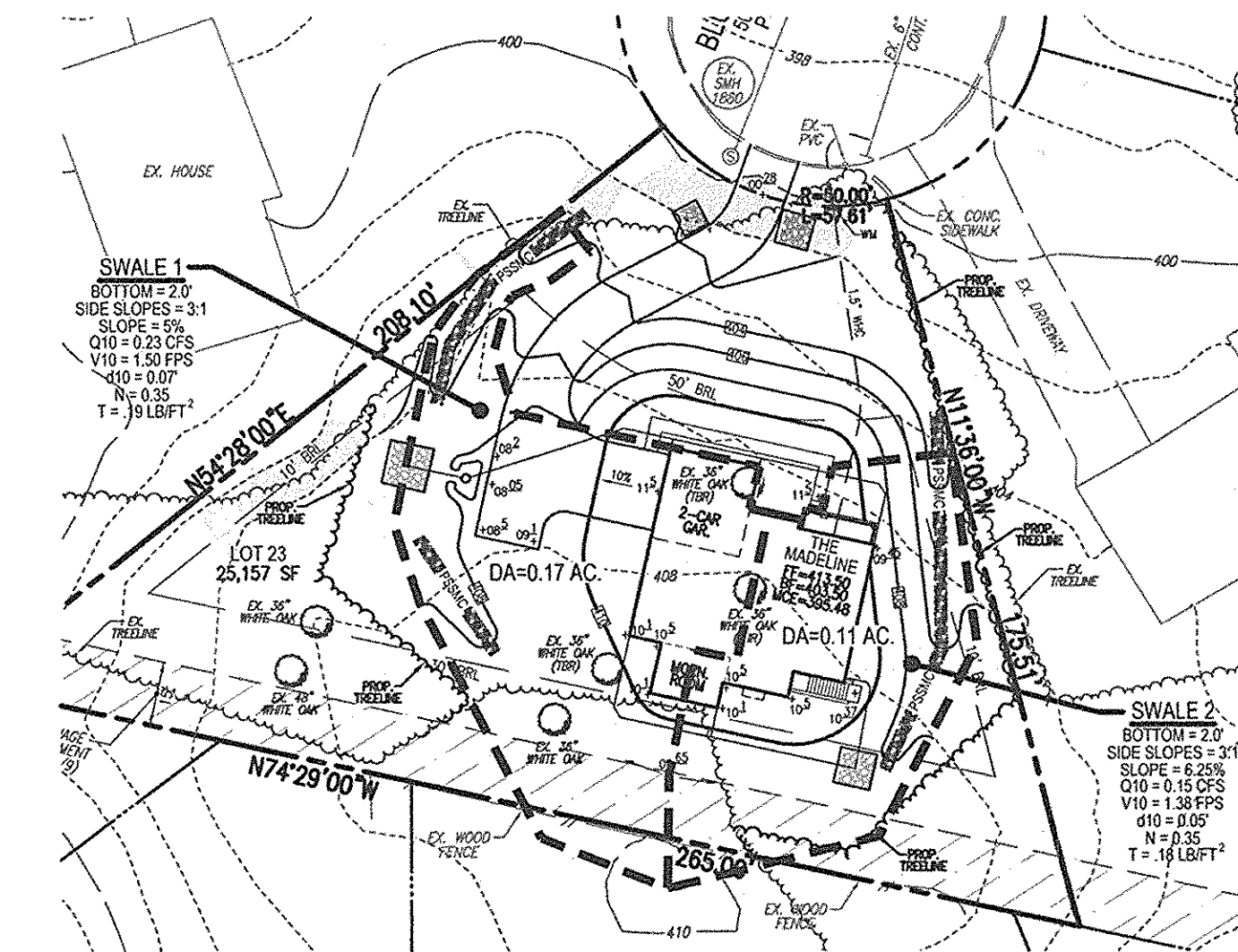
ROBERT H. VOGEL
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLICOTT CITY, MD 21043
TEL: 410.461.2666
FAX: 410.461.2961

PROFESSIONAL CERTIFICATE
DESIGN BY: RHY
DRAWN BY: JMR
CHECKED BY: RHY
DATE: DECEMBER 2018
SCALE: AS SHOWN
W.O. NO.: 15-16
1 SHEET OF 5



- FOR STOCKPILE AREA**
- DEFINITION**
- Stockpile area is defined as the area of the site used for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.
- CAUTIONS WHEN PRACTICE APPLIES**
- The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
 - The footprint of the stockpile must be sized to accommodate the anticipated volume of material and located on a stable surface with a minimum 2% slope. Stockpiling must be provided in accordance with Section 9.3 Land Grading.
 - Stockpiles must be stabilized in accordance with the 37 day stabilization requirement as well as Standard B-4.1 Erosion Control and Standard B-4.4 Temporary Stabilization.
 - Access to stockpiles must be provided from the approved side.
 - Clear water runoff from the stockpile area must be minimized by use of a diversion device such as an earth bank, temporary grade or diversion fence. Diversion must be made for discharging concentrated flow in a non-erosive manner.
 - When runoff occurs along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.
 - Stockpiles must be stabilized in accordance with the 37 day stabilization requirement as well as Standard B-4.1 Erosion Control and Standard B-4.4 Temporary Stabilization.
 - If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to prevent leachate. Stockpiles containing contaminated material must be covered with impermeable sheeting.
- MAINTENANCE**
- The stockpile area must be continuously maintained for Adequate Vegetative Establishment in accordance with Section 9.4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 10 feet for 3:1 slopes, or 6 feet for 4:1 slopes, bunding must be provided in accordance with Section 9.3 Land Grading.

- LEGEND:**
- PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - ADJACENT PROPERTY LINE
 - EXISTING CURB AND GUTTER
 - EXISTING EDGE OF PAVING
 - EXISTING SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - EXISTING WATER LINE
 - EXISTING TREELINE
 - EXISTING TREES
 - EXISTING WOOD FENCE
 - PROPOSED TREELINE
 - EXISTING 10' CONTOUR
 - EXISTING 2' CONTOUR
 - SOILS
 - PROPOSED 10' CONTOUR
 - PROPOSED 2' CONTOUR
 - PROPOSED SPOT ELEVATION
 - EXISTING MODERATE SLOPES (15% - 24.99%)
 - PROPOSED Silt Fence
 - PROPOSED LIMIT OF DISTURBANCE
 - PROPOSED EROSION CONTROL MATTING
 - PROPOSED STABILIZED CONSTRUCTION ENTRANCE
 - PROPOSED TREE PROTECTION FENCE
 - PROPOSED DRYWELL FACILITY (M-5)
 - EX. 15' DRAINAGE & UTILITY EASEMENT (PLAT BOOK 7/9)



CHANNEL MATTING EXHIBIT
SCALE: 1" = 40'

SWALE 1
Q10 = CIA
Q10 = (-16)(8.5)(0.17 AC.)
Q10 = 0.23 CFS
T = 0.19 LB/FT²
PROVIDE MATTING WITH SHEAR STRESS OF 1.5 LB/FT²

SWALE 2
Q10 = CIA
Q10 = (-16)(8.5)(0.11 AC.)
Q10 = 0.15 CFS
T = 0.18 LB/FT²
PROVIDE MATTING WITH SHEAR STRESS OF 1.5 LB/FT²

OWNER/DEVELOPER
Viking Custom Homes
C/O Cary Cumberland
12800 Frederick Road
West Friendship, MD 21094
(410) 489-6728

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
SOILS MAP, GRADING, EROSION, AND SEDIMENT CONTROL PLAN
GRAY ROCK - SECTION TWO - LOT 23
PARCEL 660 (L. 16330 / F. 42)
3630 BLUE HILL COURT
ELLICOTT CITY, MD 21042
SFD UNIT

TAX MAP: 24 GRID: 10
2ND ELECTION DISTRICT
DPZ REF'S: PLAT BOOK 7/9, ECP-106-005

PARCEL: 660
ZONED: R-20
HOWARD COUNTY, MARYLAND

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

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: DECEMBER 2016
SCALE: AS SHOWN
W.O. NO.: 15-16

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2016

2 SHEET OF **5**

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

4/12/16
DATE

4-14-16
DATE

4-15-16
DATE

BY THE DEVELOPER:

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

John R. Coleman 3/15/16
SIGNATURE OF DEVELOPER DATE

BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

John R. Coleman 3/15/16
SIGNATURE OF ENGINEER DATE

GRADING PLAN
SCALE: 1" = 30'

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

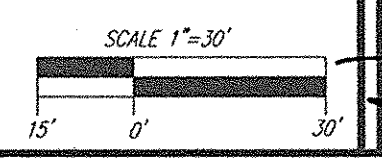
John R. Coleman 3/15/16
HOWARD S.C.D. DATE

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE
L6C	LECOIRE-MONTALTO-URBAN LAND COMPLEX, 8 TO 15 PERCENT SLOPES	B	N/A	NO

~SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE
~HOWARD COUNTY SOILS MAP NUMBER 17 - CLARKSVILLE NE

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



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), 410-313-1885, AFTER FUTURE LOD AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES:

- A. PRIOR TO THE START OF EARTH DISTURBANCE.
B. PRIOR TO THE START OF PERMANENT 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 THE 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 VEGETATION 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 THERE TO.
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 CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 1:1 VERTICAL (33:1) AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR AREAS SUCH AS 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). TEMPORARY STABILIZATION WITH MULCH APPLICATION CAN ONLY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-4) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH 1:1 OF CUT AND/OR FILL. MULCHING (SEC. B-4-5) IN EXCESS OF 20 FT MUST BE BENCHMARKED WITH STABLE OUTLET, ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATERIAL (SEC. B-4-4).
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 CID.
6. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR A PERMITS OF UTILITIES MUST BE REPAIRED, REINSTALLED OR THE SAME DAY OF DISTURBANCE.
7. 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:

- INSPECTION DATE
- INSPECTION TIME (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 DISCHARGES
- IDENTIFICATION OF PERMITS 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, MFC).

8. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIECE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
9. ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE INSPECTION AGENCY PRIOR TO IMPLEMENTATION. REVISIONS MAY BE ALLOWED BY THE CID PER THE LIST OF HSG-APPROVED FIELD CHANGES.

10. DISTURBANCE SHALL NOT OCCUR OUTSIDE THE LOD. 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 CID. NO MORE THAN 30 ACRES CANNOT BE DISTURBED AT A GIVEN TIME.
11. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE.
12. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE.
13. ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON THE-CONTOUR, AND BE BENCHMARKED AT 25' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2" IN ELEVATION.
14. STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVELY):

- USE 1 AND IF MARCH 1 - JUNE 15
- USE 1 AND IF MARCH 1 - APRIL 30
- USE 1 AND IF MARCH 1 - MAY 31
- USE 1 AND IF MARCH 1 - MAY 31
15. 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.

IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES

- WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 15 TO OCTOBER 1 (HARDNESS ZONE: 5B, 6A)
- CENTRAL MD: MARCH 15 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONE: 6B)
- SOUTHERN MD: MARCH 15 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONE: 6B)
- SOUTHERN MD, EASTERN SHORE: MARCH 15 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONE: 6A, 7B)
16. TALL TREES TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES. LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDING. REMOVE STONES AND DEBRIS OVER 18 INCHES IN DIAMETER. THE RESULTING SEEDING MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL BE WITHOUT PROBLEM.
17. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

18. SOIL TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

19. GENERAL SPECIFICATIONS
A. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE AVAILABLE TO THE CID FOR REVIEW AND INSPECTION.
B. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH, PLUS OR MINUS 1/8 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PANS AND 10M OR UNLINED ENDS ARE NOT BE ACCEPTABLE.
C. STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
D. SOD MUST NOT BE HARVESTED OR TRANSPORTED WHEN MOISTURE CONTENT IS EXCESSIVELY DRY (OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
E. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPORTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.

20. SOD INSTALLATION
A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
B. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY INTERLOCK AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
C. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL, TAMP, PEEL OR OTHERWISE SECURE THE SOD TO PREVENT UPLIFT ON SLOPES. ENSURE SOIL CONTACT EXISTS BETWEEN SOD ROWS AND THE UNDERLYING SOIL SURFACE.
D. WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PERIOD OF 500 WITHIN EIGHT HOURS.

21. SOD MAINTENANCE
A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING.
B. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
C. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

22. PERMANENT SEEDING SUMMARY
1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE 8.1 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 8.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING APPLICATION, APPLY SEED AND MULCH OR STRAW MULCH ALONG AS PRESCRIBED IN SECTION B-4-3.1.5 AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

23. TEMPORARY SEEDING SUMMARY
1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE 8.1 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 8.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING APPLICATION, APPLY SEED AND MULCH OR STRAW MULCH ALONG AS PRESCRIBED IN SECTION B-4-3.1.5 AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

24. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

25. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

26. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

27. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

28. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

29. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

30. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

31. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

32. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

33. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

34. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

35. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

R-4-2 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
A. SEED MIXTURES
1. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE 8.3 FOR THE APPROPRIATE PLANT HARDNESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE 8.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
2. 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 CIRCULAR, SECTION 342 - CRITICAL AREA PLANTING.
3. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE CID TESTING AGENCY.
4. D. FOR AREAS RECEIVING LOW MOISTURE, 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.
5. F. SOIL TESTS (SEC. B-4-3) IN EXCESS OF 20 FT MUST BE BENCHMARKED WITH STABLE OUTLET, ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATERIAL (SEC. B-4-4).

6. ANY 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 CID.

7. 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:

- INSPECTION DATE
- INSPECTION TIME (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 DISCHARGES
- IDENTIFICATION OF PERMITS 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, MFC).

8. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIECE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.

9. ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE INSPECTION AGENCY PRIOR TO IMPLEMENTATION. REVISIONS MAY BE ALLOWED BY THE CID PER THE LIST OF HSG-APPROVED FIELD CHANGES.

10. DISTURBANCE SHALL NOT OCCUR OUTSIDE THE LOD. 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 CID. NO MORE THAN 30 ACRES CANNOT BE DISTURBED AT A GIVEN TIME.

11. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE.

12. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE.

13. ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON THE-CONTOUR, AND BE BENCHMARKED AT 25' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2" IN ELEVATION.

14. STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVELY):

- USE 1 AND IF MARCH 1 - JUNE 15
- USE 1 AND IF MARCH 1 - APRIL 30
- USE 1 AND IF MARCH 1 - MAY 31
- USE 1 AND IF MARCH 1 - MAY 31

15. 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.

IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES

- WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 15 TO OCTOBER 1 (HARDNESS ZONE: 5B, 6A)
- CENTRAL MD: MARCH 15 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONE: 6B)
- SOUTHERN MD: MARCH 15 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONE: 6B)
- SOUTHERN MD, EASTERN SHORE: MARCH 15 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONE: 6A, 7B)

16. TALL TREES TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES. LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDING. REMOVE STONES AND DEBRIS OVER 18 INCHES IN DIAMETER. THE RESULTING SEEDING MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL BE WITHOUT PROBLEM.

17. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

18. SOIL TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

19. GENERAL SPECIFICATIONS
A. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE AVAILABLE TO THE CID FOR REVIEW AND INSPECTION.
B. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH, PLUS OR MINUS 1/8 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PANS AND 10M OR UNLINED ENDS ARE NOT BE ACCEPTABLE.
C. STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
D. SOD MUST NOT BE HARVESTED OR TRANSPORTED WHEN MOISTURE CONTENT IS EXCESSIVELY DRY (OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
E. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPORTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.

20. SOD INSTALLATION
A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
B. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY INTERLOCK AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
C. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL, TAMP, PEEL OR OTHERWISE SECURE THE SOD TO PREVENT UPLIFT ON SLOPES. ENSURE SOIL CONTACT EXISTS BETWEEN SOD ROWS AND THE UNDERLYING SOIL SURFACE.
D. WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PERIOD OF 500 WITHIN EIGHT HOURS.

21. SOD MAINTENANCE
A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING.
B. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
C. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

22. PERMANENT SEEDING SUMMARY
1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE 8.1 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 8.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING APPLICATION, APPLY SEED AND MULCH OR STRAW MULCH ALONG AS PRESCRIBED IN SECTION B-4-3.1.5 AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

23. TEMPORARY SEEDING SUMMARY
1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE 8.1 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 8.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING APPLICATION, APPLY SEED AND MULCH OR STRAW MULCH ALONG AS PRESCRIBED IN SECTION B-4-3.1.5 AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

24. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

25. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

26. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

27. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

28. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

29. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

30. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

R-4-3 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
EXPOSED SOILS WHERE GROUND COVER IS TO BE ESTABLISHED.

CRITERIA
A. SOIL PREPARATION
1. TEMPORARY STABILIZATION
A. SEEDBED 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 SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLAN. THE RECOMMENDED RATES FOR FERTILIZER AND LIME ARE TO BE USED.
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 EARTH DISTURBANCE OF 5 ACRES OR MORE. THE SOIL TESTS MUST BE PERFORMED IN ACCORDANCE WITH THE CID TESTING AGENCY. THE RESULTS OF A SOIL TEST:
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 OF LOOSENESS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
B. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE 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, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.
D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
E. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LANE AREAS TO SMOOTH THE SURFACE, REMOVE LARGE ROCKS, STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT DISKING. SEEDING PREPARATION TRACK SLOPES 3:1 OR FLATTER WITH TRACKING 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 FRABLE. SEEDING LOOSENESS MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

25. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

26. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

27. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

28. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

29. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

30. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

31. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

32. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

33. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

34. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

35. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

36. HARDNESS ZONE (FROM FIGURE B.3): ZONE 6b
SEED MIXTURE (FROM TABLE 8.1): S
FERTILIZER RATE (10-0-20): 2 TONS/AC
LIME RATE (1000 SF): 1000 SF

SCHEDULE A: PERIMETER LANDSCAPE EDGE				
CATEGORY	ADJACENT TO PERIMETER PROPERTIES AND ROADWAYS			TOTAL
PERIMETER/FRONTAGE DESIGNATION	A	2	3	
LANDSCAPE TYPE	A	2	3	
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	208'	265'	176'	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	YES 67'	YES 158'	YES 44'	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	
NUMBER OF PLANTS REQUIRED (IF REMAINING)	141'	107'	132'	
SHADE TREES	1:60 2	1:60 2	1:60 2	6
EVERGREEN TREES	1	1	1	1
SHRUBS	1	1	1	1
NUMBER OF PLANTS PROVIDED	2	2	2	6
SHADE TREES	1	1	1	1
EVERGREEN TREES	1	1	1	1
OTHER TREES (2:1 SUBSTITUTION)	1	1	1	1
SHRUBS (10:1 SUBSTITUTION)	1	1	1	1
DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)				

LANDSCAPE NOTES

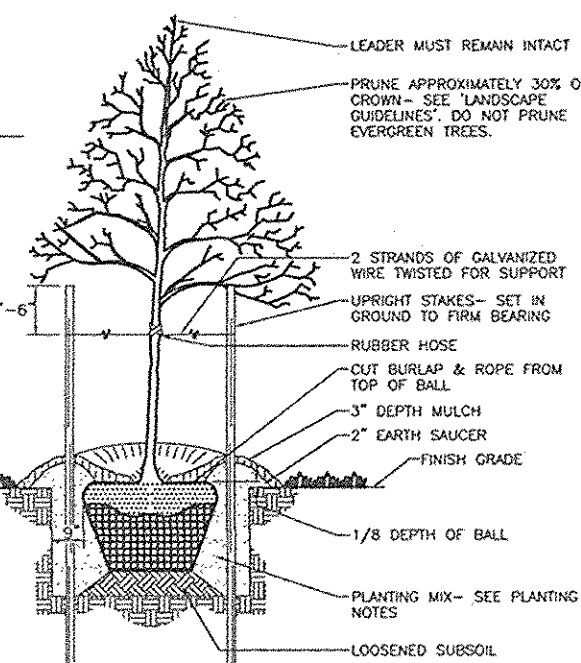
1. AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE APPLICABLE PLANS.
2. THE OWNER, TENANT 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.
3. SHOULD ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD, AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.
4. PLANTINGS SHOWN HEREON ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL DURING THE CONSTRUCTION OF THE FINAL PLAN.

GENERAL NOTE:

LANDSCAPING FOR LOT 23 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. A FINANCIAL SURETY IN THE AMOUNT OF \$1,800.00 FOR THE REQUIRED 6 SHADE TREES SHALL BE POSTED AS PART OF THE BUILDERS GRADING PERMIT APPLICATION.

NOTES

1. SEE "LANDSCAPE SPECIFICATION GUIDELINES FOR BATHURST-INDICATOR MICROPLANT AREA" FOR ALL MATERIAL, PROCESS, AND PROCEEDING.
2. SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 1-1/2" CALIPER.
3. PLACE UPRIGHT STAKES PARALLEL TO WALKS & DRIVELINES.
4. KEEP MULCH 1" FROM TRUNK.
5. SEE ARCHITECTURAL PLANS FOR ADDITIONAL PLANTINGS WHICH EXCEED HOWARD COUNTY MINIMUM REQUIREMENTS.
6. TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWAGE EASEMENT.



TREE PLANTING AND STAKING

DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE

DEVELOPER/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 CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

SIGNATURE OF DEVELOPER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR DATE

LANDSCAPE PLAN

SCALE: 1"=30'

LEGEND:

	PROPERTY LINE
	RIGHT-OF-WAY LINE
	ADJACENT PROPERTY LINE
	EXISTING CURB AND GUTTER
	EXISTING EDGE OF PAVING
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING WATER LINE
	EXISTING TREELINE
	EXISTING TREES
	EXISTING WOOD FENCE
	PROPOSED TREELINE
	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
	SOILS
	PROPOSED 10' CONTOUR
	PROPOSED 2' CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING MODERATE SLOPES (15%-24.99%)
	PROPOSED DRIVEWAY FACILITY (M-5)
	EX. 15' DRAINAGE & UTILITY EASEMENT (PLAT BOOK 7/9)

LANDSCAPE SCHEDULE NOTE:

1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AAS SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH HED PLANTING SPECIFICATIONS.
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
3. FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
4. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

LANDSCAPE SCHEDULE					
SYMBOL	KEY	QUAN.	BOTANICAL NAME	SIZE	REMARKS
	AR	2	ACER RUBRUM 'RED SUNSET'	2 1/2"-3" CAL.	B & B
	QP	4	QUERCUS PHELLOS WILLOW OAK	2 1/2"-3" CAL.	B & B

OWNER/DEVELOPER

VIRKING CUSTOM HOMES
C/O CHRY CUMBERLAND
12800 FREDERICK ROAD
WEST FRENDSHIP, MD 21794
(410) 489-6728

SITE DEVELOPMENT PLAN

LANDSCAPE PLAN, NOTES, AND DETAILS

GRAY ROCK - SECTION TWO - LOT 23

PARCEL 660 (L. 16330 / F. 42)
3630 BLUE HILL COURT
ELLICOTT CITY, MD 21042
SFD UNIT

TAX MAP: 24 GRID: 10
2ND ELECTION DISTRICT
DPZ REF: PLAT BOOK 7/9, ECP-16-005

PARCEL 660
ZONED: R-20
HOWARD COUNTY, MARYLAND

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



DESIGN BY: RHY
DRAWN BY: JMR
CHECKED BY: RHY
DATE: DECEMBER 2016
SCALE: AS SHOWN
W.O. NO. 15-16

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2018

5 SHEET OF 5