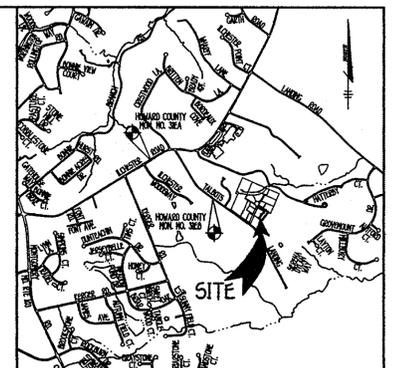


BENCH MARKS
 T.P. 316A ELEV. 468.60
 N. 569.641900
 E. 1.374.815.9240
 LOC. NEAR INTERSECTION OF
 ILICHESTER RD. & CRESTWOOD LA.
 T.P. 316B ELEV. 452.70
 N. 569.731990
 E. 1.376.273.5700
 LOC. NEAR INTERSECTION OF
 ILICHESTER RD. & TALBOTS LANDING



VICINITY MAP
 SCALE: 1" = 200'
 ADC MAP COORDINATE NO. 174A
 PAGE 16, GRID K-3 & K-4

GENERAL NOTES

- SUBJECT PROPERTY ZONED R-20 PER THE COMPREHENSIVE ZONING PLAN DATED 2/2/04 AND THE COMP LITE ZONING AMENDMENTS EFFECTIVE 7/28/06.
- TOTAL AREA OF SITE: 0.51 ACRES
- TOTAL NUMBER OF LOTS SUBMITTED: 1 SFD.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1800 AT LEAST FIVE 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.
- THIS SITE IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT OCTOBER, 2006 BY FISHER, COLLINS AND CARTER, INC.
- LOT AREA IS MORE OR LESS (± 0.2).
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER IS UTILIZED IN THIS SUBDIVISION.
- PREVIOUS DEPARTMENT OF PLANNING AND ZONING FILE NUMBERS: F-08-194, F-08-196, F-07-010, F-08-09, S-05-10, W-08-22, W & S CONTRACT NO. 14-4450-D.
- HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.
- HOWARD COUNTY MONUMENT 316A N. 569.641900 E. 1.374.815.9240 ELEV. 468.60
- HOWARD COUNTY MONUMENT 316B N. 569.731990 E. 1.376.273.5700 ELEV. 452.70
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING.
- SEWER HOUSE CONNECTION ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-605.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - A) WIDTH - 12' OR SERVING MORE THAN ONE RESIDENCE
 - B) SURFACE - 6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1/2" MIN)
 - C) GEOMETRY - MAXIMUM 1% GRADE, MAXIMUM 10% GRADE CHANGE AND 45 FOOT TURNING RADIUS
 - D) STRUCTURES - (BRIDGES/CULVERTS) CAPABLE OF SUPPORTING 25 GROSS TONS (25-TONS-LOADING)
 - E) DRAINAGE ELEMENTS - CAPABLE OF SAFETY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - F) STRUCTURE CLEARANCE - MINIMUM 12 FEET.
 - G) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- NO CEMETERIES OR HISTORIC STRUCTURES EXIST ON THIS SITE BASED ON A VISUAL SITE VISIT AND ON AN EXAMINATION OF THE HOWARD COUNTY CEMETERY INVENTORY MAP.
- NO 100 YEAR FLOOD PLAIN EXISTS ON SITE.
- THIS PLAN IS IN COMPLIANCE WITH THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL 45-2003 AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 79-2003, DEVELOPMENT AND THE JULY 28, 2006 UPDATE OF THE HOWARD COUNTY ZONING REGULATIONS. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION, OR BUILDING/GRADING PERMIT.
- IN ACCORDANCE WITH SECTION 153 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 8 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 SETBACKS.
- WATER QUALITY VOLUME (WQV) AND GROUNDWATER RECHARGE VOLUME (GRV) REQUIREMENTS WILL BE MET BY APPLYING NON-ROOFTOP DISCONNECTION CREDITS ALONG WITH A BIORETENTION FILTER SYSTEM IN ACCORDANCE WITH THE CRITERIA CONTAINED IN CHAPTERS 3 & 5 OF THE 2007 MARYLAND STORMWATER DESIGN MANUAL (MANUAL). CHANNEL PROTECTION VOLUME (CPV) IS NOT REQUIRED BECAUSE THE COMPUTED DISCHARGE FOR THE CPV STORM FOR EACH DESIGN POINT IS LESS THAN THE 220 CF5 AS MANDATED IN THE ABOVE REFERENCED MANUAL.
- THIS PLAN IS EXEMPT FROM FOREST CONSERVATION WITH SECTION 161222020X(VII) OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL SINCE IT IS A MINOR SUBDIVISION THAT CREATES ONE ADDITIONAL LOT AND HAS NO FURTHER SUBDIVISION POTENTIAL.
- THE USE-IN-COMMON DRIVEWAY MAINTENANCE AGREEMENTS FOR BANEY LOT 2 AND NON-BUILDABLE BULK PARCEL 19 AND TAX MAP 31, PARCELS 708 AND 709 HAVE BEEN RECORDED CONCURRENTLY WITH THE RECORD PLAT.
- THE OWNER AND OR TENANT OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPE AND PLANT MATERIALS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE COMPLIANCE WITH APPLICABLE REGULATIONS.
- LANDSCAPING FOR LOT 2 ON FILE WITH THE RECORD PLAT IS PROVIDED IN ACCORDANCE WITH A CERTIFIED LANDSCAPE PLAN IN ACCORDANCE WITH SECTION 16124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. SURETY FOR 181 SHADE TREES = \$300.00/EACH = \$2,400.00. AND HAS BEEN PROVIDED WITH THE OPINION DEVELOPER'S AGREEMENT.
- OPEN SPACE REQUIREMENTS ARE PROVIDED BY A FEE-IN-LIEU PAYMENT OF \$1,500.00 FOR LOT 2.
- NO WETLANDS OR STREAMS EXIST ON SITE. PER FIELD REVIEW PERFORMED BY ECO-SCIENCE PROFESSIONALS ON MAY 28, 2009 AND DECEMBER, 2009 UNDER 5-05-010.
- THIS DEVELOPMENT IS DESIGNED TO BE IN ACCORDANCE WITH SECTION 16127 RESIDENTIAL INTILL DEVELOPMENT OF SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE DEVELOPER OF THIS PROJECT SHALL CREATE COMPATIBILITY WITH THE EXISTING NEIGHBORHOOD THROUGH THE USE OF ENHANCED PERIMETER LANDSCAPING, BORDERS, FENCES, SIMILAR HOUSING UNIT TYPES AND THE DIRECTIONAL ORIENTATION OF THE PROPOSED HOUSES.
- THIS PLAN IS IN COMPLIANCE WITH SECTION 161078(XVI) AND IS EXEMPT FROM ADEQUATE PUBLIC FACILITIES ORDINANCE BECAUSE IT IS A MINOR SUBDIVISION WHICH CREATES ONE (1) ADDITIONAL DWELLING UNIT TO BE CONVEYED TO AN IMMEDIATE FAMILY MEMBER OR MEMBERS, PER F-08-196.

MINIMUM LOT SIZE CHART

LOT NO.	GROSS AREA	PRESHOT AREA	MINIMUM LOT SIZE
2	22,216 SQ.FT.	1,561 SQ.FT.	20,655 SQ.FT.

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
2	7518 SERENA DYLAN WAY

INDEX CHART

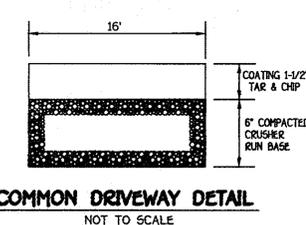
SHEET	DESCRIPTION
1	TITLE SHEET, HOUSE TYPE, NOTES,
2	SITE DEVELOPMENT & SEDIMENT/EROSION CONTROL PLAN, LOT 2
3	SEDIMENT/EROSION CONTROL NOTES & DETAILS
4	STORMWATER MANAGEMENT NOTES & DETAILS

SITE ANALYSIS DATA CHART

- TOTAL PROJECT AREA: 0.51 ACRES OR 22,216 SQUARE FEET.
- AREA OF SUBMISSION: 0.51 ACRES OR 22,216 SQUARE FEET.
- LIMITS OF DISTURBANCE: 0.107 ACRES OR 7,430 SQUARE FEET.
- PRESENT ZONING DESIGNATION: R-20.
- PROPOSED USES FOR SITE: RESIDENTIAL
- APPLICABLE DPE FILE REFERENCES: F-08-194, F-08-196, F-09-096, S-05-10, P-07-010, P-08-09, W-08-22, W & S CONTRACT NO. 14-4450-D AND W & S CONTRACT NO. 14-4333-D.

LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
+362.2	SPOT ELEVATION
---	WALKOUT BASEMENT
---	SUPER SILT FENCE
---	LIMIT OF DISTURBANCE
---	SRUBS PER SDP-09-030
---	STREET TREES PER F-08-194
---	LANDSCAPE TREES PER SDP-09-030



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. 9753, EXPIRATION DATE: 2/28/10.
 Signature: *Earl D. Collins* DATE: 4/27/10
 EARL D. COLLINS

ENGINEER'S CERTIFICATE

"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."

Signature of Engineer: *Earl D. Collins* DATE: 4/27/10
 EARL D. COLLINS

BUILDER/DEVELOPER'S CERTIFICATE

"We certify that all development and construction will be done according to this plan, for sediment and erosion control and that a 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. We also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer: *Kevin Bowser* DATE: 4/27/10
 KEVIN BOWSER

Reviewed for HOWARD SCD and meets Technical Requirements.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
 Signature: *John K. Roberts* DATE: 4/27/10
 HOWARD SCD

OWNER/BUILDER/DEVELOPER

RYAN HOMES, INC.
 6031 UNIVERSITY BOULEVARD
 SUITE 250
 ELLICOTT CITY, MARYLAND 21043
 410-796-9990

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development: *West Sheldahl* DATE: 4/27/10
 Chief, Development Engineering Division: *William J. ...* DATE: 4/27/10
 Director - Department of Planning and Zoning: *Thomas S. ...* DATE: 4/28/10

PROJECT	SECTION	LOT NO.
BANEY PROPERTY	N/A	2

PLAT	BLOCK NO.	ZONE	TAX/31	ELEC. DIST.	CENSUS TR.
20845 & 20846	16	R-20	31	1	6069.02

WATER CODE	SEWER CODE
C-02	7390000

TITLE SHEET, NOTES, HOUSE TYPES

SINGLE FAMILY DETACHED
BANEY PROPERTY
 LOT 2
 TAX MAP NO: 31 PARCEL NO: 705 GRID NO: 16
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 30' DATE: SEPTEMBER, 2009
 SHEET 1 OF 4

SDP 10-025

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20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION DEFINITION

Using vegetation as cover for barren soil to protect it from forces that cause erosion.

PURPOSE

Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and runoff to downstream areas, and improving wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES

This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary soil stockpiles, cleared areas being left idle between construction phases, earth dikes, and for Permanent Seeding are lawns, dunes, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc.

EFFECTS ON WATER QUALITY AND QUANTITY

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation and groundwater recharge. Vegetation will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices may remain in place during grading, seedling preparation, seeding, mowing and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- Site Preparation**
 - Install erosion and sediment control structures (either temporary or permanent) such as diversion, grade stabilization structures, berms, waterways, or sediment control basins.
 - Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
 - Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
- Soil Amendments (Fertilizer and Lime Specifications)**
 - Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analysis.
 - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
 - Lime materials shall be ground limestone hydrated or burnt lime may be substituted which contains at least 50% total calcium oxide plus magnesium oxide. Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 90-100% will pass through a #20 mesh sieve.
 - Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.
- Seedling Preparation**
 - Temporary Seeding**
 - Seedling preparation shall consist of loosening soil to a depth of 3" to 5" 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 should not be rolled or dragged smooth, but left in the rougher condition. Seeded areas greater than 50 should be tracked leaving the surface to an irregular condition 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 3-5" of soil by disking or other suitable means.
 - Permanent Seeding**
 - Minimum soil conditions required for permanent vegetative establishment:
 - Soil pH shall be between 6.0 and 7.0.
 - Suitable silt shall be less than 500 parts per million (ppm).
 - The soil shall contain less than 400 clay but enough fine grained material (D300 silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if loess or silt loess is to be planted, then a sandy soil (D300 silt plus clay) would be acceptable.
 - Soil shall contain 15% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
 - Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to prevent binding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
 - Apply soil amendments as per soil test or as indicated on the plans.
 - Apply all amendments into the top 3-5" of topsoil by disking or other suitable means. Lawn areas should be rolled to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Seed application shall not permit normal seeded preparation, loose surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 3-5" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.

- Seed Specifications**
 - All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing after seed lot has been established. All seed shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.
 - Incubant - The incubant for testing shall be a pure culture of a rare culture of nitrogen-fixing bacteria prepared specifically for the species. Incubants shall not be used later than the date indicated on the container. Add fresh incubant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep incubant as cool as possible until used. Temperatures above 75-80° F. can weaken bacteria and make the incubant less effective.
- Methods of Seeding**
 - Hydroseeding** - Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seed, or a cultipacker seeder.
 - If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen maximum of 100 lbs. per acre total of soluble nitrogen P205 phosphorus: 200 lbs./acre; K2O potassium: 200 lbs./acre.
 - Lime - use only ground agricultural limestone, 40 to 3 tons per acre may be applied by hydroseeding. Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
 - Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.
 - Dry Seeding** - This includes use of conventional drop or broadcast spreaders.
 - Seed spreader shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact.
 - Lime - use only ground agricultural limestone, 40 to 3 tons per acre may be applied by hydroseeding. Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
 - 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.
 - Where multiple seed shall be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
 - Mulch Specifications (in order of preference)**
 - Straw shall consist of thoroughly threshed wheat, rice or oat straw, reasonable bright in color, and shall not be mostly mold, broken, or excessively dirty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
 - Wood Cellulose Fiber Mulch (WCFM)
 - WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread straw.
 - WCFM including dye shall contain no germination or growth inhibiting factors.
 - WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a better-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 - WCFM material shall contain no chemicals or compounds of concentration levels that will be phytotoxic.
 - WCFM must conform to the following physical requirements: fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90% minimum.

Note: Only sterile straw mulch should be used in areas where one species of grass is desired.

SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1055).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOTTED AND ALL SLOPES STEEPER THAN 3:1, 10 DAY
 - FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 22 OF THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, FOR PERMANENT SEEDING (SEC. 20.0 SOE SEC. 59), TEMPORARY SEEDING (SEC. 50.0, AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER SEEDING AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSON FOR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	0.510 ACRES
AREA TO BE ROOFED OR PAVED	0.276 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.092 ACRES
TOTAL CUT	19.8 CUBIC YDS.
TOTAL FILL	24.3 CUBIC YDS.

PERMANENT SEEDING NOTES

- Apply to graded or cleared areas likely to be restudied where a short-term vegetative cover is needed.
- Seeded Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.
- Soil Amendments:** Apply 400 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.).
- Seeding:** For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of annual ryegrass (3.2 lbs. per 1000 sq.ft.). For the period November 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 1000 sq.ft.). For the period November 1 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use seed.
- Mulching:** Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding.
- Anchor mulch immediately after application using mulch anchoring tool or 210 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.
- Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

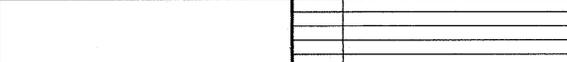
SEQUENCE OF CONSTRUCTION

- | | |
|--|---------|
| 1. OBTAIN GRADING PERMIT | 7 DAYS |
| 2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN | 7 DAYS |
| 3. CLEAR AND GLOB TO LIMITS OF DISTURBANCE | 4 DAYS |
| 4. INSTALL TEMPORARY SEEDING | 2 DAYS |
| 5. CONSTRUCT BUILDINGS | 60 DAYS |
| 6. INSTALL SIDWALK/STAIRWAY FACILITY | 2 DAYS |
| 7. FINE GRADE SITE AND INSTALL PERMANENT SEEDING AND LANDSCAPE | 18 DAYS |
| 8. REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERMISSON IS GRANTED BY E/S CONTROL INSPECTOR. | 7 DAYS |

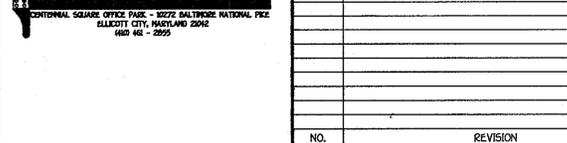
TEMPORARY SEEDING NOTES

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- Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

GRADING FOR PLANTING ON SLOPES



TREE PLANTING DETAIL



GRADING FOR PLANTING ON SLOPES



TREE PLANTING

GRADING FOR PLANTING ON SLOPES

TREE PLANTING

GRADING FOR PLANTING ON SLOPES</

SCHEDULE A - PERIMETER LANDSCAPE EDGE					
PERIMETER	P-1	P-2	P-3	P-4	TOTAL
CATEGORY	ADJACENT TO ROADWAY	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	
LANDSCAPE TYPE	N/A	D	A	A	
LINEAR FEET OF PERIMETER	20.14 L.F.	276.11 L.F.	244.40 L.F.	86.89 L.F.	
NUMBER OF PLANTS REQUIRED					
SHADE TREES	N/A	(276.11/60' = 4.60 = 5)	(244.40/60' = 4.07) = 4	(86.89/60' = 1.44) = 1	10
EVERGREEN TREES		0	0	0	0
CREDIT FOR WALL, FENCE OR BERM	N/A	0	0	0	0
CREDIT FOR EXISTING VEGETATION					
SHADE TREES	N/A	0	1	1	2
SMALL/MEDIUM DECIDUOUS TREES (2:1 SUBSTITUTION)		0	0	0	0
NUMBER OF PLANTS PROVIDED					
SHADE TREES	N/A	5	(4 REQUIRED - 1 CREDIT) = 3	(1 REQUIRED - 1 CREDIT) = 0	8
EVERGREEN TREES		0	0	0	0

A TOTAL LANDSCAPE SURETY FOR 8 SHADE TREES @ \$300/EACH \$2,400.00 IS PROVIDED PER DEVELOPMENT PLAN DEVELOPER'S AGREEMENT.
 LOT 2 @ SHADE TREES @ \$300/EACH = \$2,400.00



SEE PLANT MATERIAL CHARTS FOR QUANTITIES AND SPACING AT LEAST 50% OF THE SURFACE AREA OF THE RAINGARDEN

SOILS LEGEND		
SOIL	NAME	CLASS
SAB	SASSAFRAS LOAM, 2 TO 5 PERCENT SLOPES	B
SAC	SASSAFRAS LOAM, 5 TO 10 PERCENT SLOPES	B

NOTES:
 * HYDRIC SOILS AND/OR CONTAINS HYDRIC INCLUSIONS
 ** MAY CONTAIN HYDRIC INCLUSIONS
 † GENERALLY ONLY WITHIN 100-YEAR FLOODPLAIN AREAS

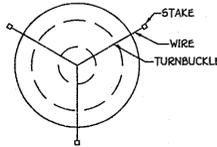
LANDSCAPING PLANT LIST			
QTY.	KEY	NAME	SIZE
8		ACER RUBRUM (OCTOBER GLORY) OCTOBER RED MAPLE	2 1/2" - 3" CALIPER FULL CROWN, BAB

BIORETENTION FILTER DATA								
BIORETENTION FILTER	A	B	C	D	E	F	G	H
1	407.50	407.50	407.00	406.84	404.34	403.00	402.50	401.59

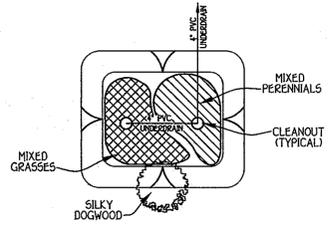
PRIVATE BIORETENTION FILTER OPERATION & MAINTENANCE SCHEDULE

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. 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.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION BEYOND TREATMENT. TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

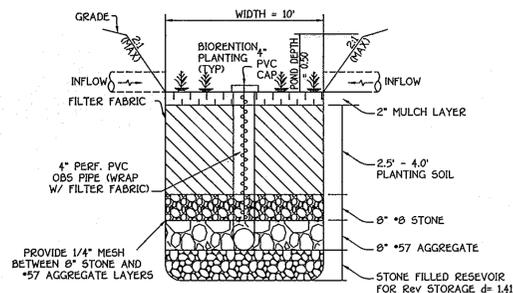
BIORETENTION FILTER PLANT MATERIAL		
QUANTITY	NAME	MAXIMUM SPACING (FT)
45	MIXED PERENNIALS	1 FT.
45	MIXED GRASSES	1 FT.
1	SILKY DOGWOOD	PLANT AWAY FROM INFLOW LOCATION



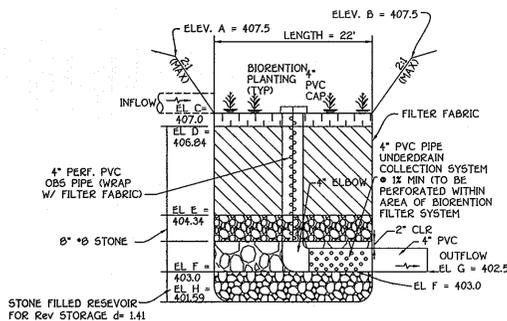
STAKING DETAIL
NOT TO SCALE



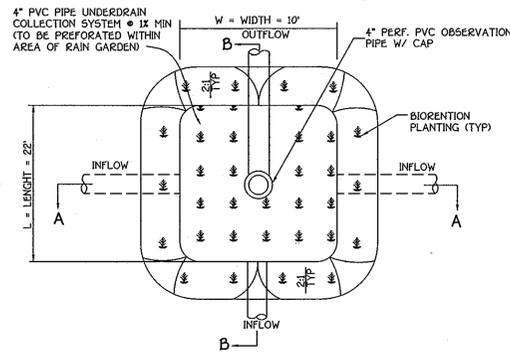
BIORETENTION FILTER PLANTING DETAIL
NOT TO SCALE



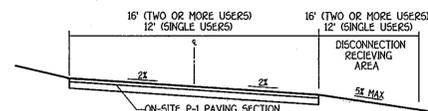
SECTION A-A
NOT TO SCALE



SECTION B-B
NOT TO SCALE



BIORETENTION FILTER SYSTEM DETAIL
NOT TO SCALE



TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION
NOT TO SCALE

BUILDER/DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT THE REQUIRED LANDSCAPING WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.324 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. I/FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF NOTICE, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

KEVIN BOWSER DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 2272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21117
 (410) 461-2995



ENGINEER'S CERTIFICATE

"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."

Signature of Engineer: *Earl D. Collins* Date: 4/27/10
 EARL D. COLLINS

DEVELOPER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan, for sediment and erosion control and that any 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."

Signature of Developer: *Kevin Bowser* Date: 4/27/10
 KEVIN BOWSER

Reviewed for HOWARD SCD and meets Technical Requirements.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

Howard SCD Date

OWNER/BUILDER/DEVELOPER

RYAN HOMES, INC.
 6031 UNIVERSITY BOULEVARD
 SUITE 250
 ELLICOTT CITY, MARYLAND 21043
 410-796-0980

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Signature: *Kevin Bowser* Date: 4/27/10
 Chief, Division of Land Development
 Signature: *Earl D. Collins* Date: 4/27/10
 Chief, Development Engineering Division
 Signature: *Morgan & Suttler* Date: 4/28/10
 Director - Department of Planning and Zoning

PROJECT	SECTION	LOT NO.			
BANEY PROPERTY	N/A	2			
PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
20845 & 20846	16	R-20	31	1	6069.02
WATER CODE	SEWER CODE				
C-02	7390000				

STORMWATER MANAGEMENT, LANDSCAPING NOTES AND DETAILS

SINGLE FAMILY DETACHED

BANEY PROPERTY

LOT 2

TAX MAP NO: 31 PARCEL NO: 705 GRID NO: 16
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: SEPTEMBER, 2009
 SHEET 4 OF 4

SDP 10-025