

RESIDENTIAL SITE DEVELOPMENT PLAN

SDP-15-025

FUHR PROPERTY

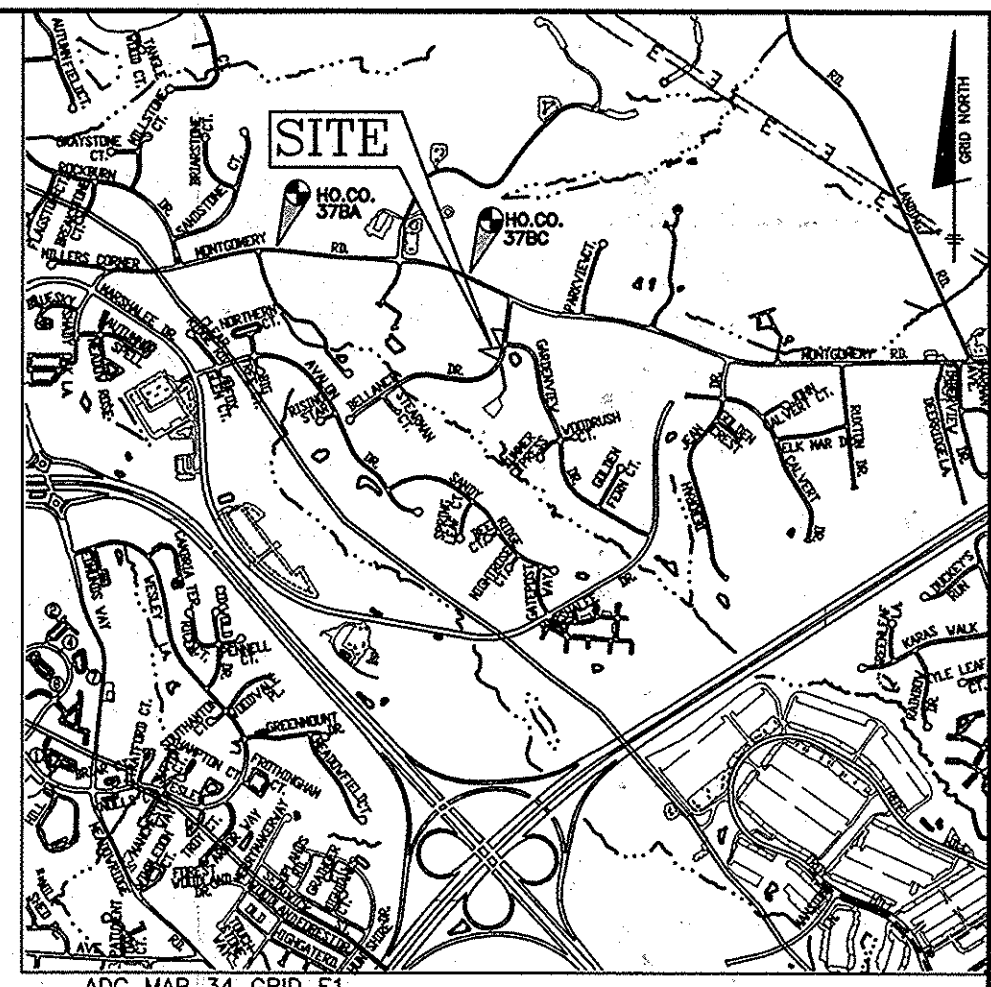
5814 BELLANCA DRIVE

1ST ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

BENCH MARKS

HO. CO. #37BA (NAD '83)	ELEV. 393.959
STANDARD DISC ON CONCRETE MONUMENT	
MONTGOMERY ROAD 0.4MI. OF MEADOWIDGE ROAD	
N 563785.6441	E 1376343.207
HO. CO. #37BC (NAD '83)	ELEV. 373.097
STANDARD DISC ON CONCRETE MONUMENT	
MONTGOMERY ROAD AT ROCKBURN ES	
N 563666.336	E 1378054.838



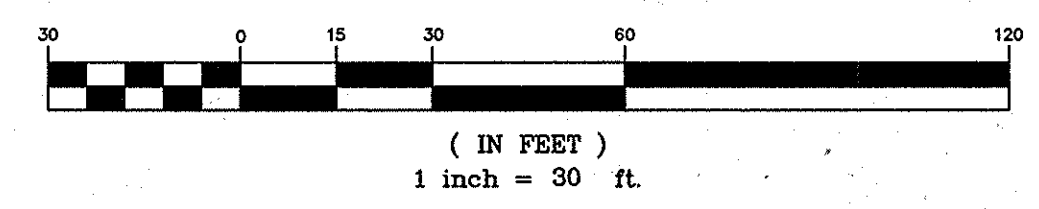
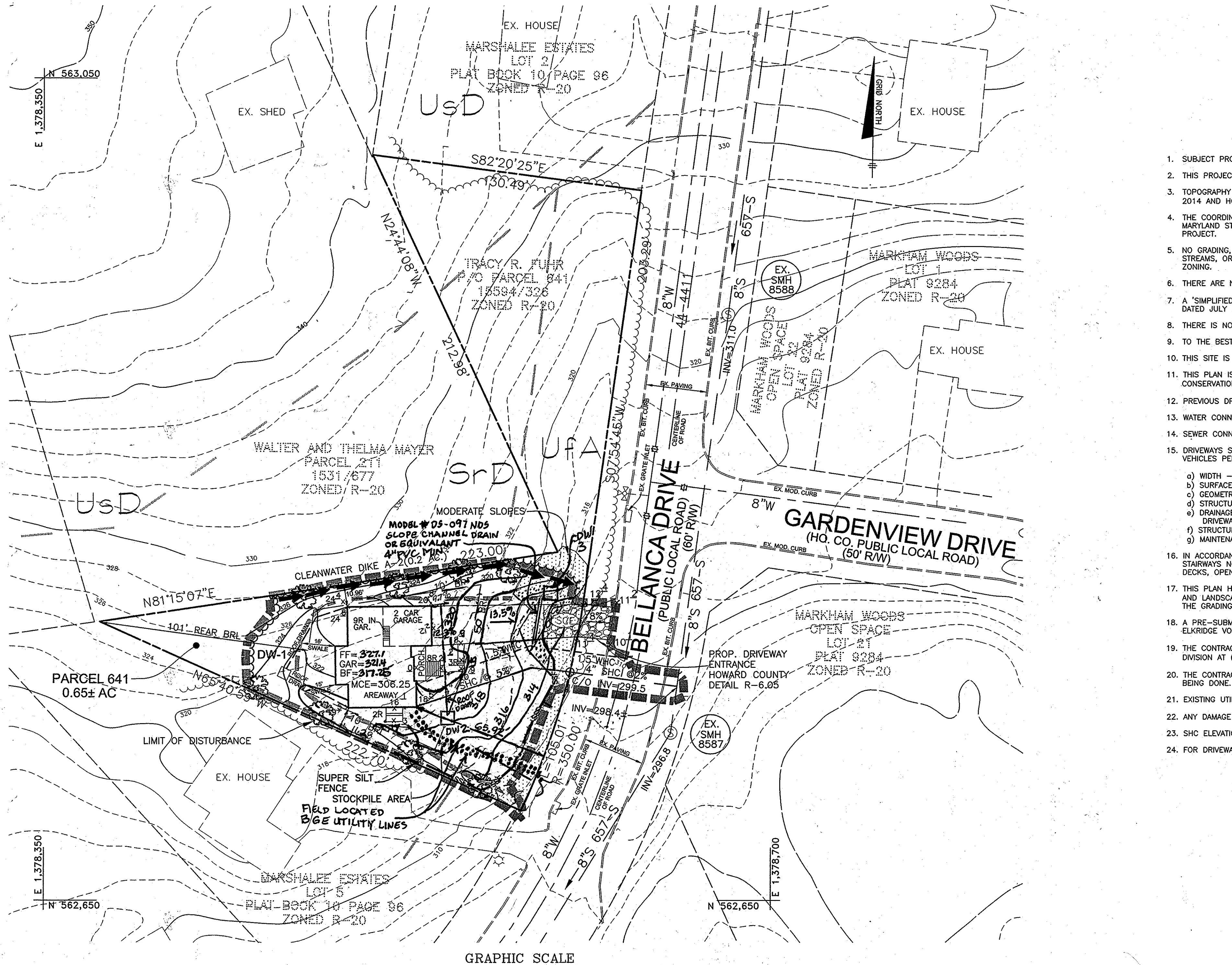
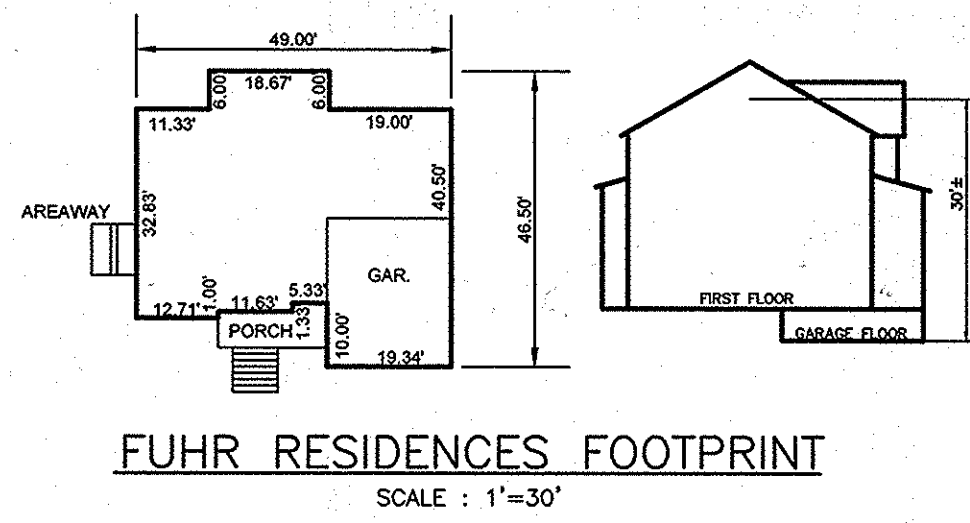
VICINITY MAP
SCALE: 1"=2000'

LEGEND

EXISTING CONTOURS	
EXISTING TREELINE	
PROPOSED TREELINE	
EXISTING STRUCTURE	
PROPOSED HOUSE	
SOIL DELINEATION	
SOILS TYPE	
PROP. MICRO-BIORETENTION FACILITY	
PROP. DRYWELL	
SUPER SILT FENCE	
CLEANWATER DIVERSION	
LIMIT OF DISTURBANCE	
EROSION CONTROL MATTING	
MODERATE SLOPES	
15-24.9% SLOPES	

SITE ANALYSIS DATA/TABULATION

A) TOTAL PROJECT AREA.....	0.65 AC.
B) AREA OF WETLANDS AND BUFFER.....	N/A
C) AREA OF 100-YR. FLOODPLAIN.....	N/A
D) AREA OF EXISTING FOREST.....	0.65 AC.
E) AREA OF STEEP SLOPES 25% OF GREATER.....	N/A
F) NET AREA OF SITE.....	0.65 AC.
G) AREA OF MODERATE SLOPES 15% TO 25%.....	0.05± AC.
H) HIGHLY ERODIBLE SOILS (K > 0.35).....	0.10± AC.
I) AREA OF PLAN SUBMISSION.....	0.65 AC.
J) LIMIT OF DISTURBED AREA.....	0.32 AC.
K) PRESENT ZONING DESIGNATION.....	R-20
L) PROPOSED USE.....	SINGLE FAMILY DETACHED
M) IMPERVIOUS COVER.....	0.08± AC.
N) APPLICABLE DPZ #.....	ECP-15-019, SDP-09-036(VOID), SDP-15-025
O) PROPOSED WATER AND SEWER.....	_X_ PUBLIC, _ _ PRIVATE



SOILS LEGEND

SYMBOL	NAME/DESCRIPTION	K VALUE	GROUP
SrD	SASSAFRAS AND CROOM SOILS, 10 TO 15 PERCENT SLOPES	0.28	B
UfA	URBAN LAND-FALLSINGTON COMPLEX, 0 TO 2 PERCENT SLOPES	-	D
UsD	URBAN LAND-SASSAFRAS-BELTSVILLE COMPLEX, 5 TO 15 PERCENT SLOPES	0.37	D

BASED ON USDA NRCS WEB SOIL NATIONAL COOPERATIVE SOIL SURVEY. SEE HOWARD COUNTY SOIL SURVEY MAP NO. 19

ADDRESS CHART

STREET ADDRESS	5814 BELLANCA DRIVE
----------------	---------------------

GENERAL NOTES

- SUBJECT PROPERTY ZONED R-20 PER THE 10-6-13 COMPREHENSIVE ZONING PLAN.
- THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PREPARED BY BENCHMARK ENGINEERING, INC. DATED JULY 2014 AND HOWARD COUNTY 2008 GIS AND ARE 2' INTERVALS.
- 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. 37BA AND 37BC WERE USED FOR THIS PROJECT.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE STREAMS, OR THEIR REQUIRED BUFFERS AND FLOODPLAIN UNLESS DEEMED NECESSARY BY THE DEPARTMENT OF PLANNING AND ZONING.
- THERE ARE NO ONSITE STEEP SLOPES GREATER THAN 25%.
- A 'SIMPLIFIED' FOREST STAND DELINEATION AND WETLANDS DELINEATION WAS PREPARED BY BENCHMARK ENGINEERING, INC. DATED JULY 2014.
- THERE IS NO FLOODPLAIN, STREAMS, WETLANDS OR THEIR BUFFERS LOCATED ONSITE.
- TO THE BEST OF OUR KNOWLEDGE THERE ARE NO CEMETERIES LOCATED ON THIS SITE.
- THIS SITE IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- THIS PLAN IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION PER SECTION 16.1202(b)(1)(i) - DEVELOPMENT OF LAND WHICH IS LESS THAN 40,000 SQUARE FEET IN SIZE.
- PREVIOUS DPZ FILES: ECP-15-019, SDP-09-036(VOID), SDP-15-025
- WATER CONNECTION FOR THIS PROPERTY WILL BE FROM PUBLIC WATER MAIN CONTRACT NUMBER 44-4411-D.
- SEWER CONNECTION FOR THIS PROPERTY WILL BE FROM PUBLIC SEWER CONTRACT 657-S.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH - 12' (16' SERVING MORE THAN ONE RESIDENCE).
 - SURFACE - 6" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN).
 - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM 45' TURNING RADIUS.
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET.
 - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- IN ACCORDANCE WITH SECTION 128 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.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$2,400.00 FOR THE 8 SHADE TREES HAS BEEN POSTED WITH THE GRADING PERMIT.
- A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS HELD AT 6:00PM ON AUGUST 28, 2014 AT THE ELKRIE VOLUNTEER FIRE DEPARTMENT.
- 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 THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- EXISTING UTILITIES SHOWN ARE BASED ON A FIELD SURVEY AND HOWARD COUNTY GIS.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- SHC ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.05.

ENGINEER'S CERTIFICATE

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

C. Malaga 1/5/15
ENGINEER DATE

DEVELOPER'S CERTIFICATE

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

P. DeLoach 1-13-15
DEVELOPER DATE

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

John K. Khatun 2/10/15
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Clark 2-13-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

V. DeLoach 2-12-15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

David M. Weyla 2/4/15
DIRECTOR DATE

NO.	DATE	REVISION
2	5-10-16	REMOVE MICRO-BIO FACILITY & ADD DRY WELLS DW2 & DW3
1	2-10-16	REUSE BIO & GRADING DUE TO EXISTING BIO UTILITIES

BENCHMARK ENGINEERING, INC.
ENGINEERS & LAND SURVEYORS & PLANNERS
8480 BALTIMORE NATIONAL PIKE SUITE 315 • ELKRIE CITY, MARYLAND 21043
(P) 410-462-8105 (F) 410-462-6844
WWW.BE-CVLENGINEERING.COM

FUHR PROPERTY
5814 BELLANCA DRIVE
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

RESIDENTIAL SITE DEVELOPMENT PLAN
GRADING, SEDIMENT & EROSION CONTROL PLAN

DATE: DECEMBER, 2014
SCALE: AS SHOWN

OWNER: TRACY R. FUHR
5814 BELLANCA DRIVE
ELKRIE, MD 21075
410-989-1445

BUILDER: RYAN LEGACY BUILDERS
16013 LADY CARMARIN COURT
MT. AIRY, MD 21771
410-489-6640

TAX MAP 37 GRID 11, PARCELS 0641
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

BEI PROJECT NO. 2646
SHEET 1 OF 3

SHEET INDEX

NO.	DESCRIPTION
1	GRADING, SEDIMENT & EROSION CONTROL PLAN
2	SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
3	STORMWATER MANAGEMENT NOTES, DETAILS AND LANDSCAPE PLAN

PERMIT INFORMATION CHART

SUBDIVISION NAME:	NA	SECTION/AREA:	NA	LOT/PARCEL #:	641
5814 BELLANCA DRIVE					
PLAT No. OR L/F:	GRID No.:	ZONE:	TAX MAP NO:	ELECTION DISTRICT:	CENSUS TRACT:
15594/326	11	R-20	37	1	6012.00

B-4 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

Using vegetation as cover to protect exposed soil from erosion. Purpose: To promote the establishment of vegetation on exposed soil. On all disturbed areas not stabilized by other methods, this application is divided into sections on incremental stabilization; soil preparation, soil amendments and topsoiling; seeding and mulching; temporary stabilization; and permanent stabilization.

B-4-1 STANDARDS AND SPECIFICATIONS FOR INCREMENTAL STABILIZATION

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.

1. 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. 2. Construction sequence example (Refer to Figure B.1): a. Construct and stabilize all temporary swales or dikes that will be used to convey runoff around the excavation.

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

The process of preparing the soils to sustain adequate vegetative stabilization. Purpose: To provide a suitable soil medium for vegetative growth. Where vegetative stabilization is to be established, the following criteria apply:

1. Temporary Stabilization a. Seeded preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows, or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition.

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

The application of seed and mulch to establish vegetative cover. Purpose: To protect disturbed soils from erosion during and at the end of construction. To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

1. Specifications a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be tested within 6 months immediately preceding the date of sowing such material on any project.

B-4-4 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

To stabilize disturbed soils with permanent vegetation. Purpose: To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils. Exposed soils where ground cover is needed for 6 months or more.

1. General Use a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary.

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

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.

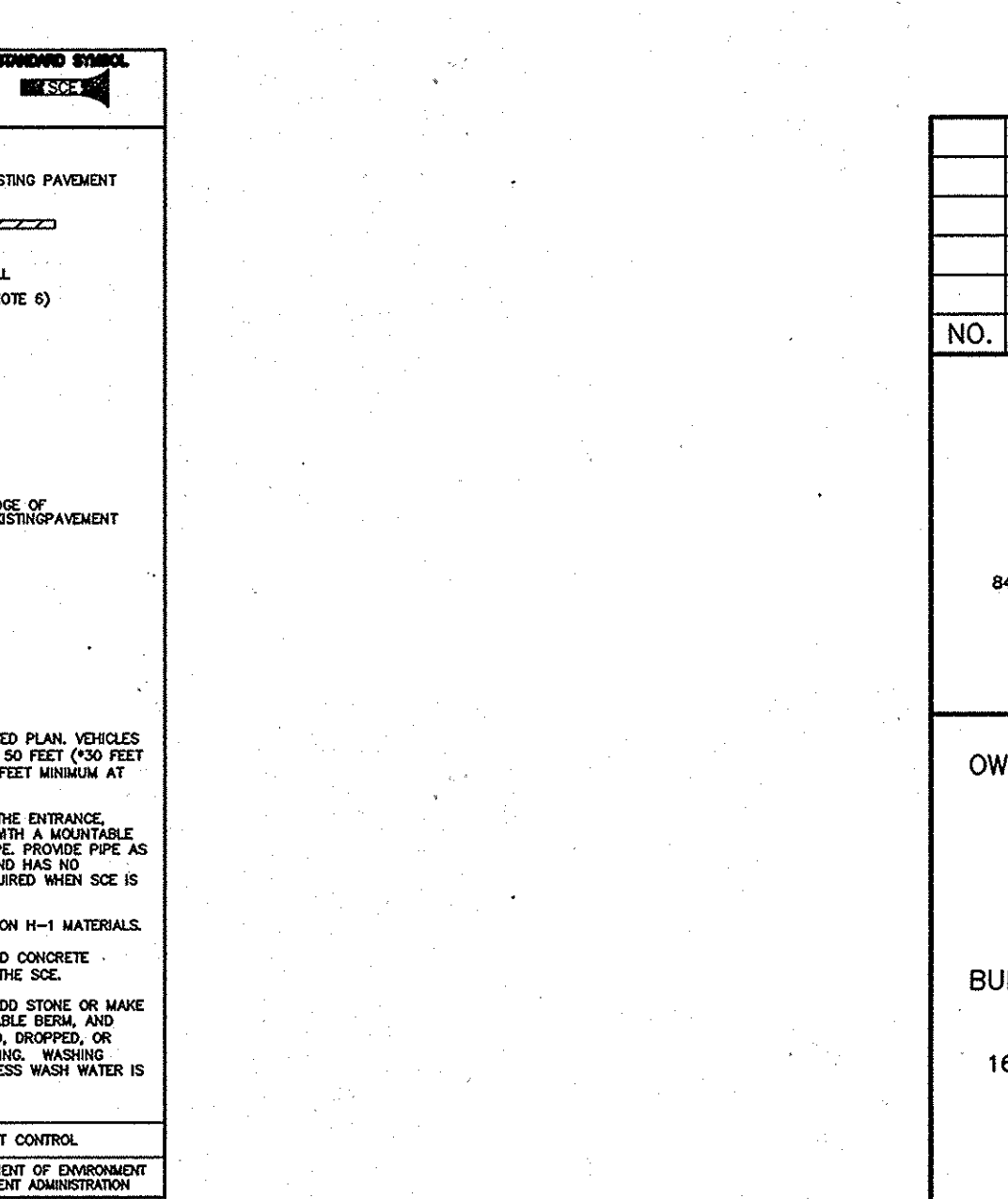
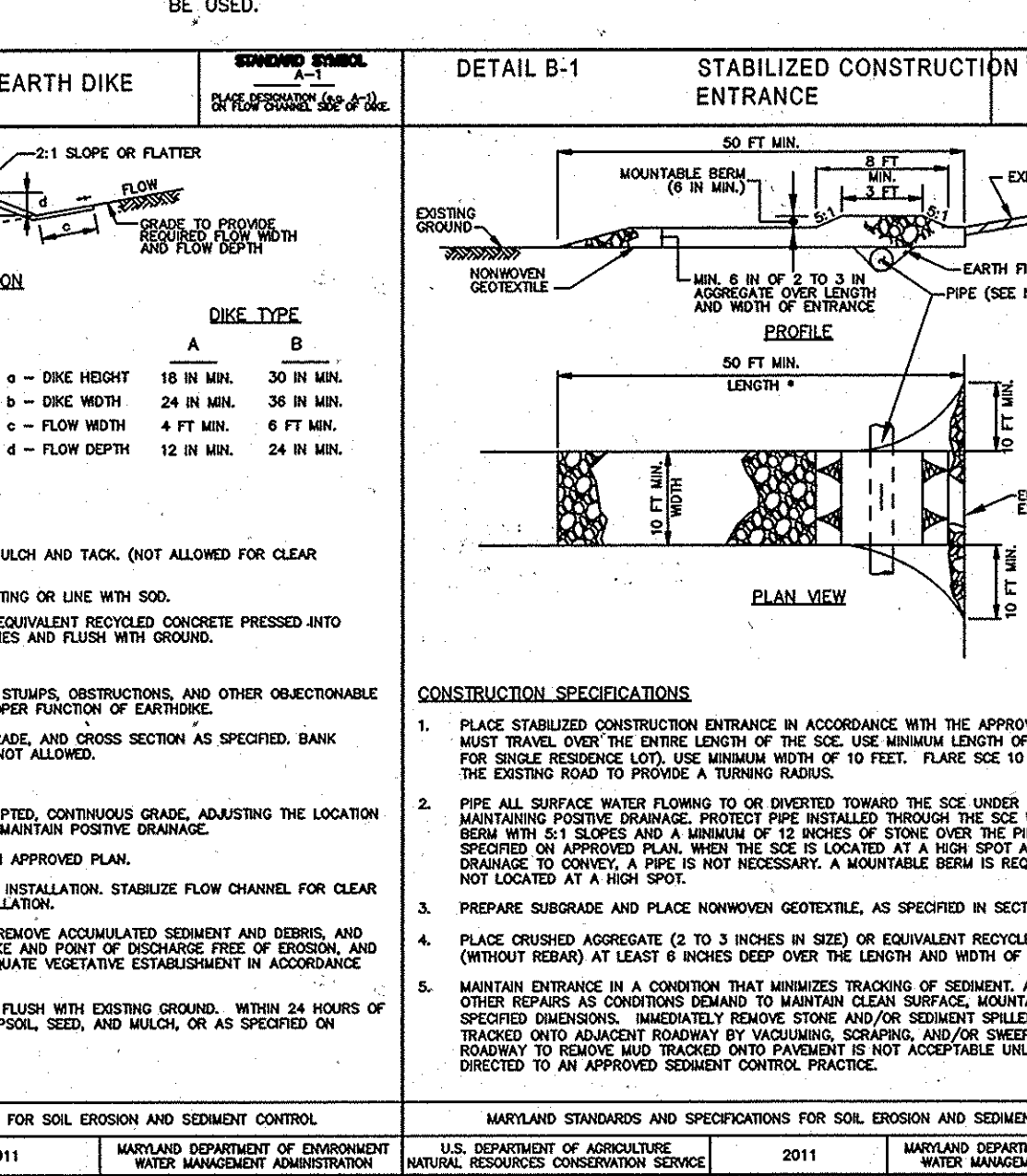
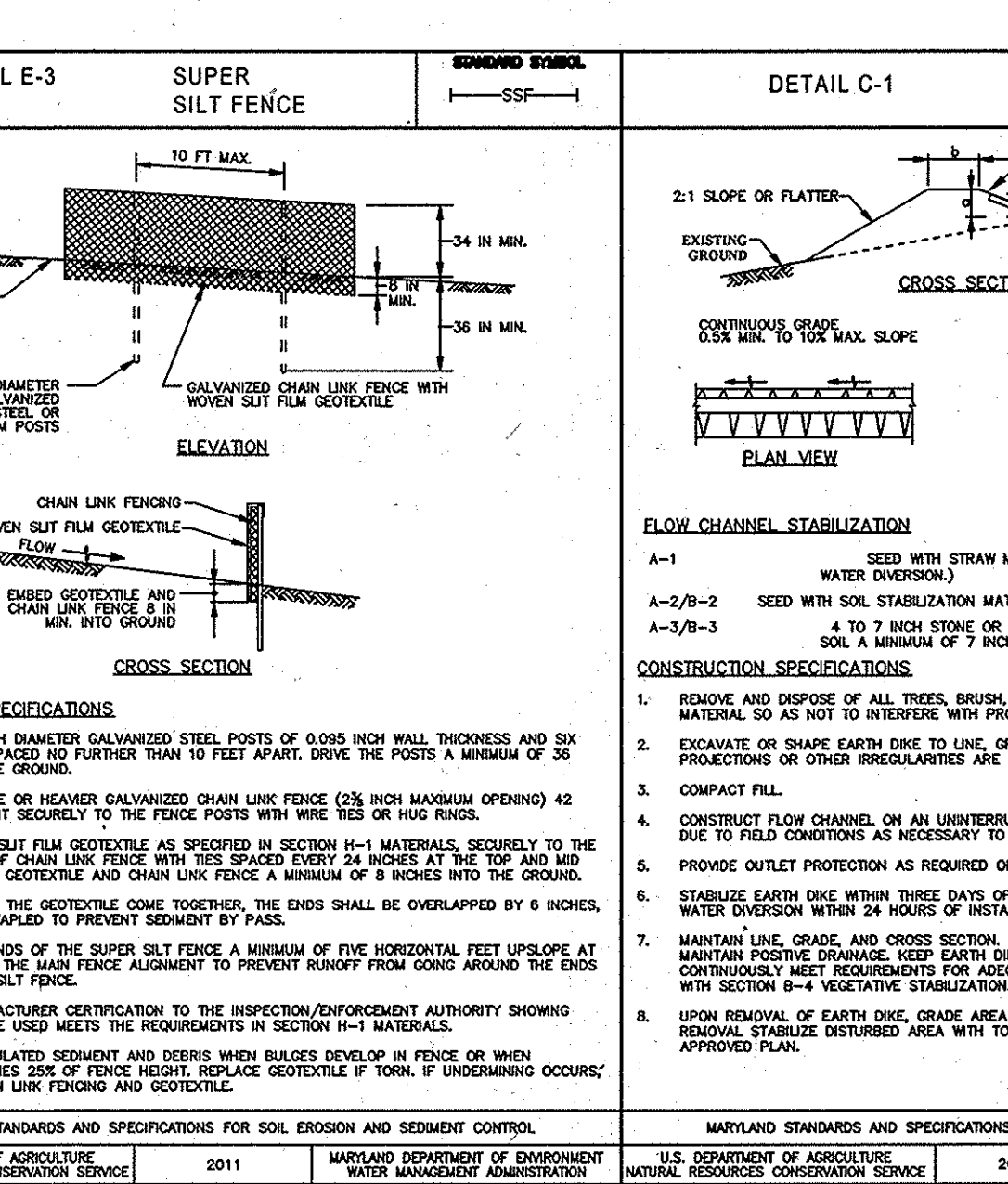
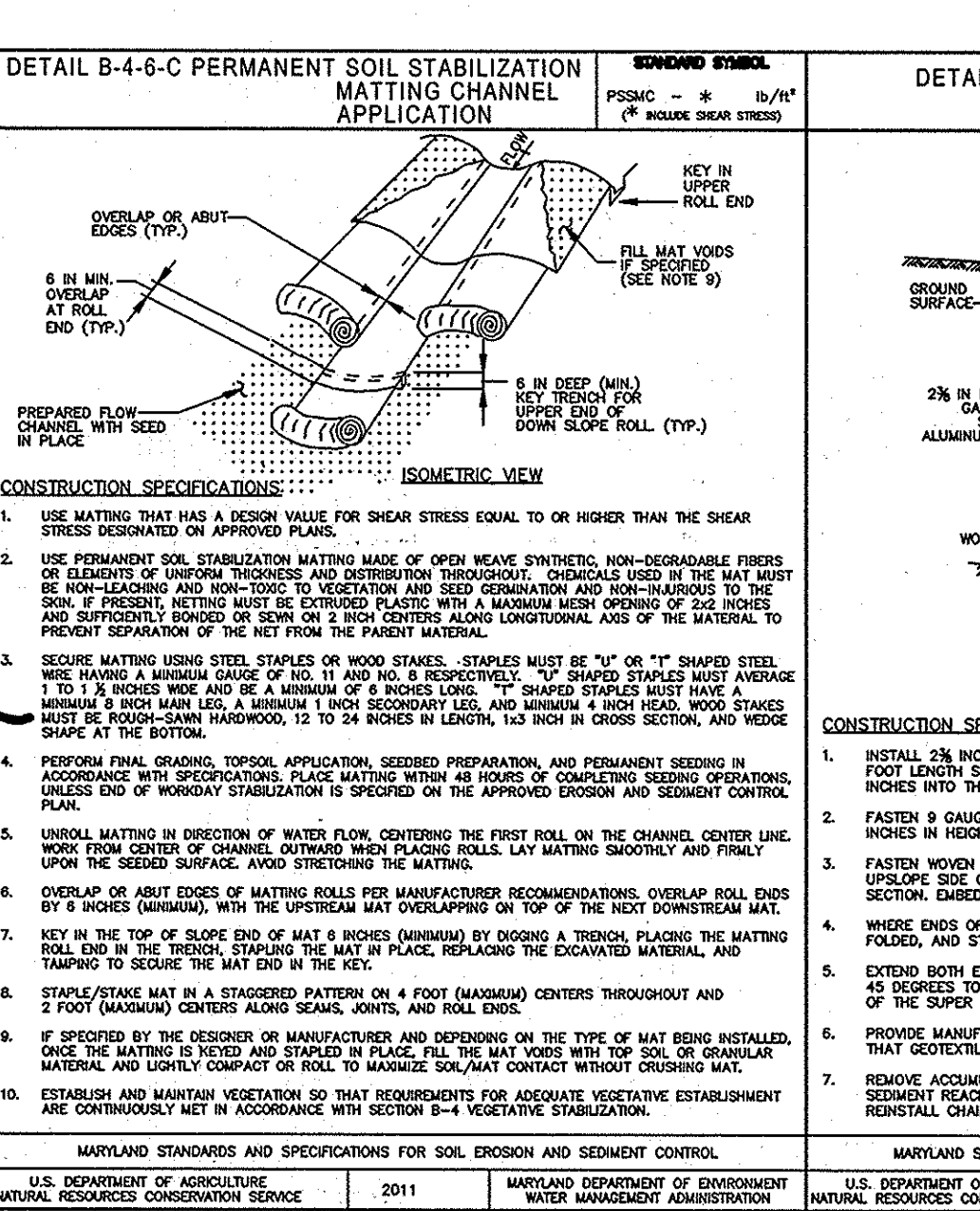
1. Select one or more of the species or mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths.

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

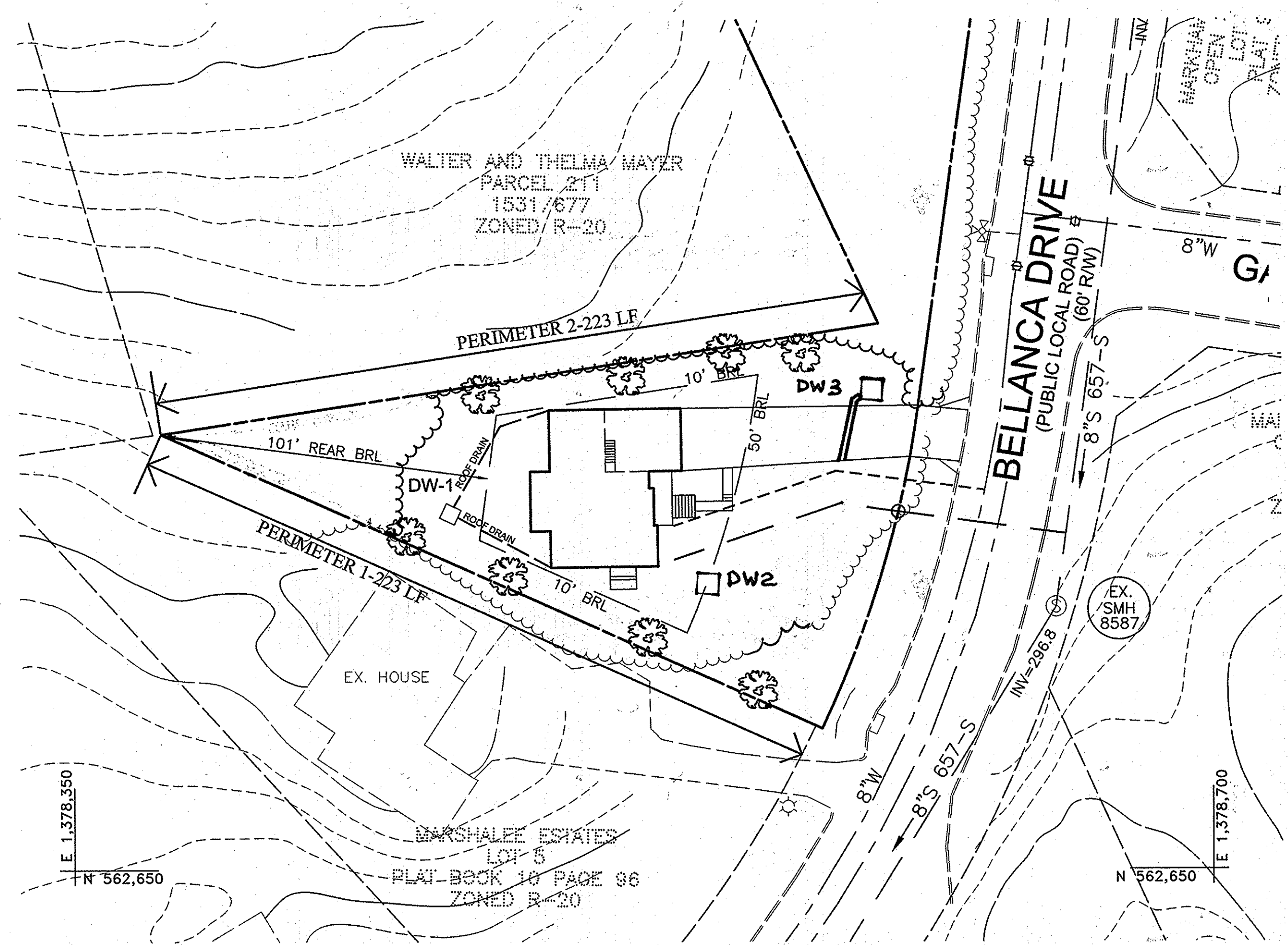
- 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855). 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT REGULATORY STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.

* CUT/FILL NUMBERS ARE FOR SEDIMENT CONTROL PURPOSES ONLY. CONTRACTOR TO VERIFY.

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

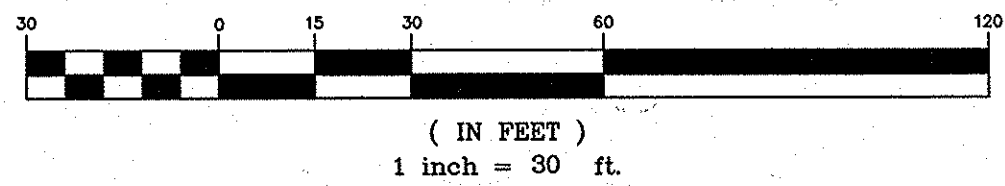


Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer in the State of Maryland. BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS. ENGINEERING INC. 8480 BALTIMORE NATIONAL PIKE A STE 315 A ELKROTT CITY, MARYLAND 21043. OWNER: TRACY R. FUHR. 5814 BELLANCA DRIVE ELKROTT, MD 21075. BUILDER: RYAN LEGACY BUILDERS. RESIDENTIAL SITE DEVELOPMENT PLAN SEDIMENT AND EROSION CONTROL PLAN NOTES AND DETAILS. DATE: DECEMBER, 2014. SHEET 2 OF 3.



LANDSCAPE PLAN

GRAPHIC SCALE



(M-5) DRYWELL TABLE

NO.	DW2	DW3
DIMENSIONS	8.5'x7' x 6'0"	7.5'x7' x 5'0"
TOP GRADE	318.5	314.0
TOP STONE	317.5	313.0
INVERT PIPE	316.5	312.0
BOTTOM STONE	312.5	308.0

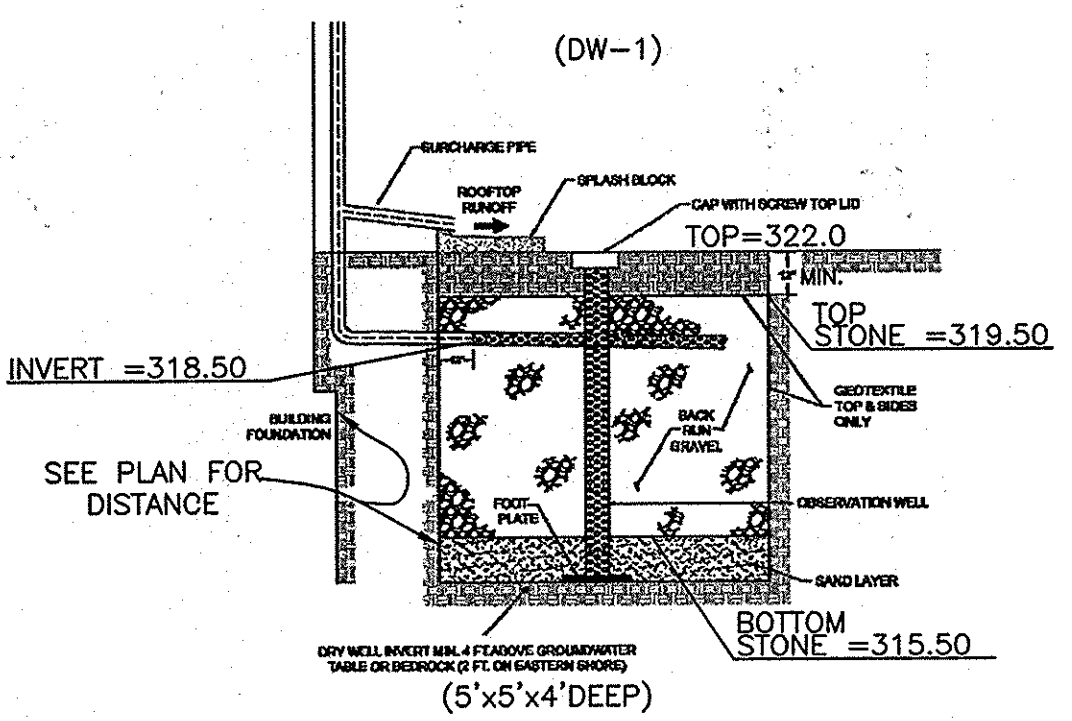
MICRO-BIORETENTION PLANTING TABLE

PLANTS	MBR-1
VINCA MINOR (COMMON PERIWINKLE)	5
AJUSTA CYPRIAN (CREEPING BANANA)	13
IRIS VERSICOLOR (IRIS)	13
ELYMUS VIRGINICUS (VIRGINIA WILD RYE)	5
POCINIUM ATROCCOCCUM (HIGHBUSH BLUEBERRY)	5
ACER RUBRUM (RED MAPLE)	1*

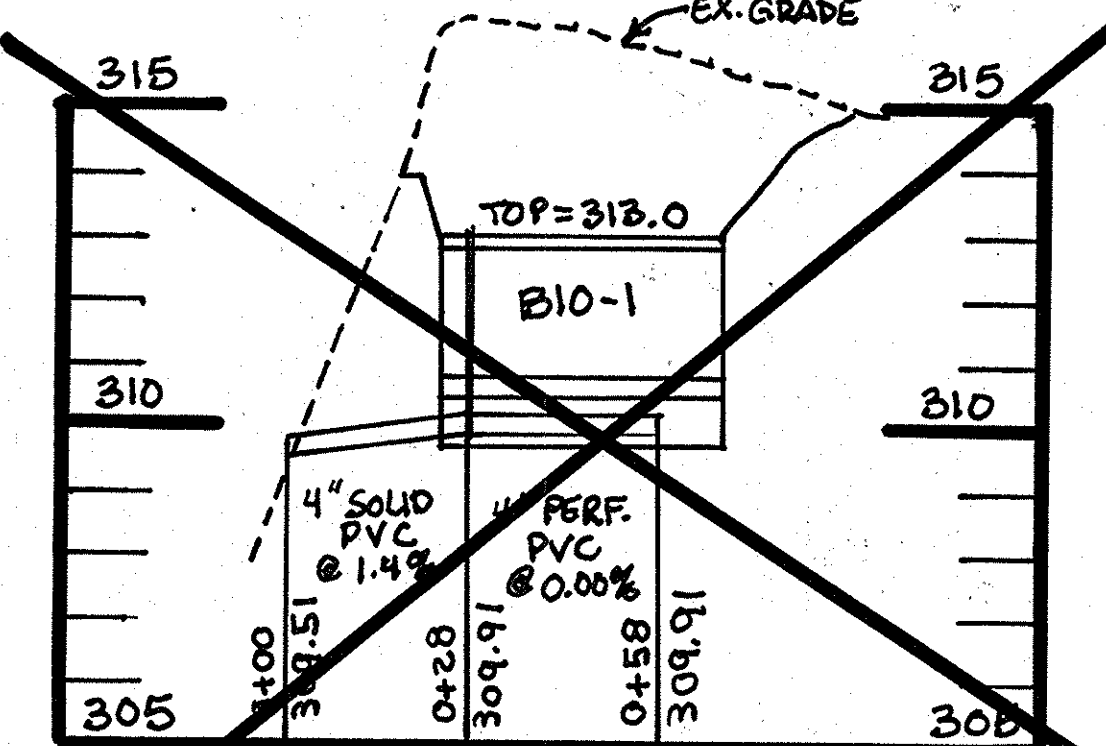
* TREE MUST BE PLANTED OUTSIDE OF PLANTING MATERIAL

MATERIALS AND SPECIFICATIONS FOR (M-6) MICRO-BIORETENTION

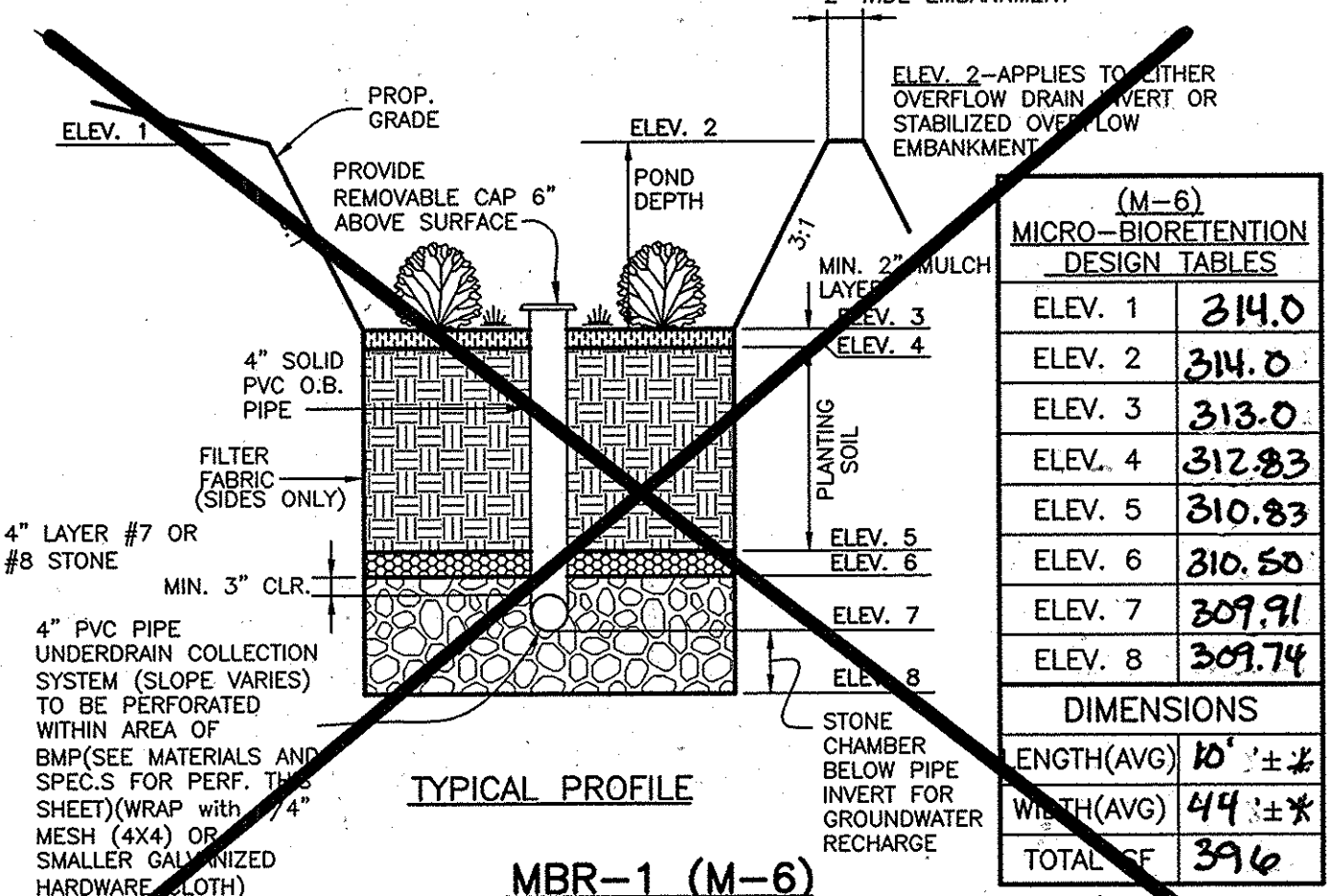
MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTING SOIL (2.0' TO 4.0' DEEP)	LOAMY SAND (60-65%) & COMPOST (35-40%) OR LOAMY SAND (30%) COARSE SAND (30%) & COMPOST (35-40%)	N/A	USDA SOIL TYPES: LOAMY SAND, SANDY LOAM; CLAY CONTENT <5%
ORGANIC CONTENT	MIN. 10% BY DRY WEIGHT (ASTM D2974)	N/A	
MULCH	SHREDDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM
GEOTEXTILE		N/A	PE TYPE 1 - NONWOVEN
GRAVEL (UNDERDRAINS & BERMS)	AASHTO M-43	#57 OR #6 AGGREGATE (3/8" TO 3/4")	#8 STONE
UNDERDRAIN PIPING	F758, TYPE PS28 OR AASHTO M-278	4" TO 6" RIGID SCALLOPED PVC OR SDR35	SLOTTED OR PERFORATED: 3/8" PERFS. @ 6" O/C. 4 HOLES PER ROW. MINIMUM OF 3" OF GRAVEL OVER PIPES. NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4" GALVANIZED HARDWARE CLOTH
SAND (1.0' DEEP)	AASHTO M-6 OR ASTM C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DOLMITE AND GRANVSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR DOLOMITIC SAND. SUBSTITUTIONS ARE ACCEPTABLE. NO TRUCK DUST CAN BE USED FOR SAND.



TYPICAL DRYWELL DETAILS (M-5)
NOT TO SCALE



MICRO-BIORETENTION FACILITY PROFILE ALONG PIPE
SCALE: HORIZ: 1" = 30', VERT: 1" = 5'



TYPICAL MICRO-BIORETENTION DETAILS (M-6)
NOT TO SCALE

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 STAKE AND WIRES.
- THE OWNER SHALL INSPECT MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE 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.
- FILTER MATERIAL MUST BE REPLACED WHEN THE WATER REMAINS ON THE SURFACE OF FILTER BED FOR MORE THAN 24 HOURS FOLLOWING A 1 OR 2 YEAR STORM EVENT OR MORE THAN 48 HOURS FOLLOWING A 10 YEAR STORM EVENT.

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAY	ADJACENT TO PERIMETER PROPERTIES	NO	YES	TOTAL
PERIMETER NO. / LANDSCAPE TYPE	(1) A	(2) A			
LINEAR FEET OF PERIMETER (FRONTAGE/ROADWAY)	223	223			
CREDIT FOR EXISTING VEGETATION: NO OR YES (w/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO			
LINEAR FEET OF REQUIRED PERIMETER LANDSCAPING	223	223			
CREDIT FOR WALL, FENCE OR BERM: NO OR YES (w/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO			
NUMBER OF PLANTS REQUIRED: SHADE TREES 1:60	4	4	4	8	
EVERGREEN TREES	0	0	0	0	
OTHER TREES (2:1 SUBSTITUTE) SHRUBS	0	0	0	0	
NUMBER OF PLANTS PROVIDED: SHADE TREES	4	4	4	8	
EVERGREEN TREES	0	0	0	0	
OTHER TREES (2:1 SUBSTITUTE) SHRUBS (1:1 SUBSTITUTE) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	0	0	0	0	

NOTE: LANDSCAPING IS NOT REQUIRED ON THE NORTHERN PORTION OF THE PROPERTY SINCE NO DEVELOPMENT IS PROPOSED; THE EXISTING VEGETATION WILL REMAIN.

LANDSCAPING NOTES

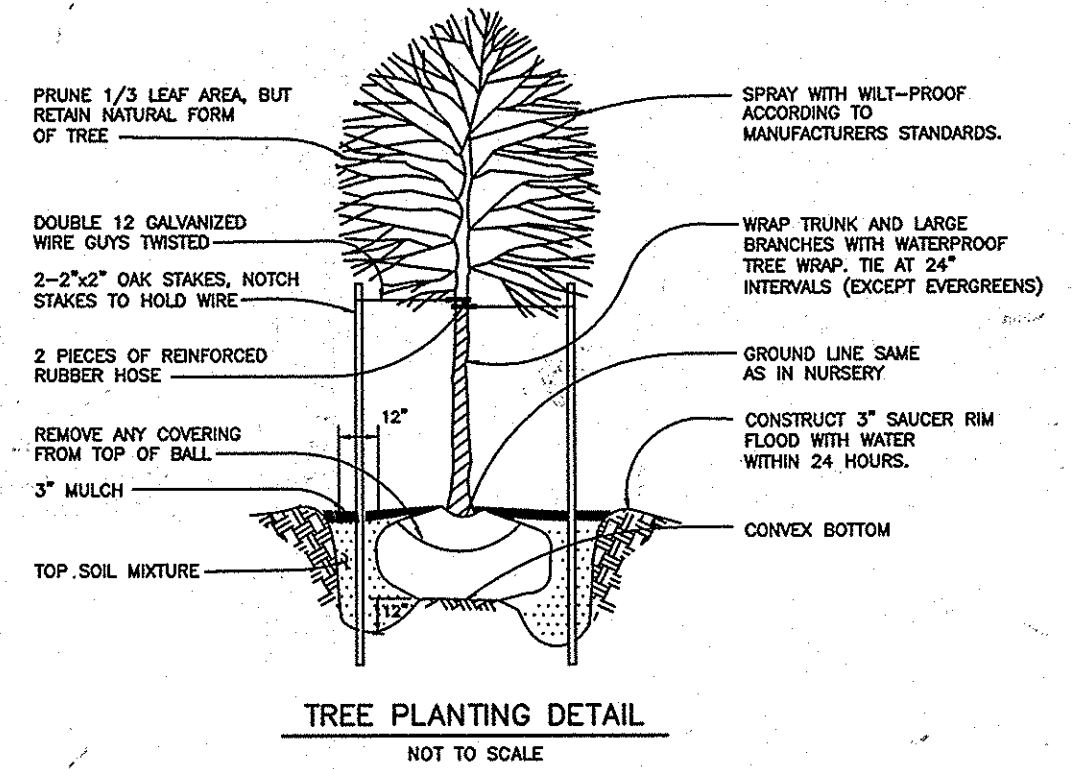
- THE PROPOSED LANDSCAPING SHALL BE PROVIDED BY THE PLANTINGS AS SHOWN ON THESE PLANS.
- THE DEVELOPER SHALL BE RESPONSIBLE FOR ALL INTERNAL PLANTINGS; THE PRESERVATION OF THE EXISTING PERIMETER VEGETATION; AND FOR THE PERIMETER PLANTINGS AS SHOWN ON THESE PLANS. BONDING FOR THE PROPOSED PLANTINGS IS THE OBLIGATION OF THE DEVELOPER AS PART OF THE GRADING PERMIT.
- TREES MUST BE A MINIMUM OF FOUR(4) FEET FROM THE CURB OR SIDEWALK AND MUST BE A MINIMUM OF FIVE(5) FEET FROM ANY STORM DRAIN.
- A MINIMUM DISTANCE OF TWENTY(20) FEET MUST BE MAINTAINED BETWEEN ANY TREES LOCATED ALONG THE CURB LINE AND FROM STREET LIGHTS.
- TREE MUST BE PLANTED A MINIMUM OF FIVE(5) FEET FROM AN OPEN SPACE ACCESS STRIP AND TEN(10) FEET FROM A DRIVEWAY AND A MINIMUM OF FIVE(5) FEET FROM DRAIN INLET STRUCTURES.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SEC-16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
- THE REQUIRED PERIMETER PLANTINGS ARE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE GRADING PERMIT \$2,400.00 FOR THE 8 SHADE TREES.
- 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.
- THE OWNERS, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIAL AND BERMS, FENCES AND WALLS. ALL PLANT MATERIAL SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHERE NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS.

LANDSCAPE PLANTING LIST

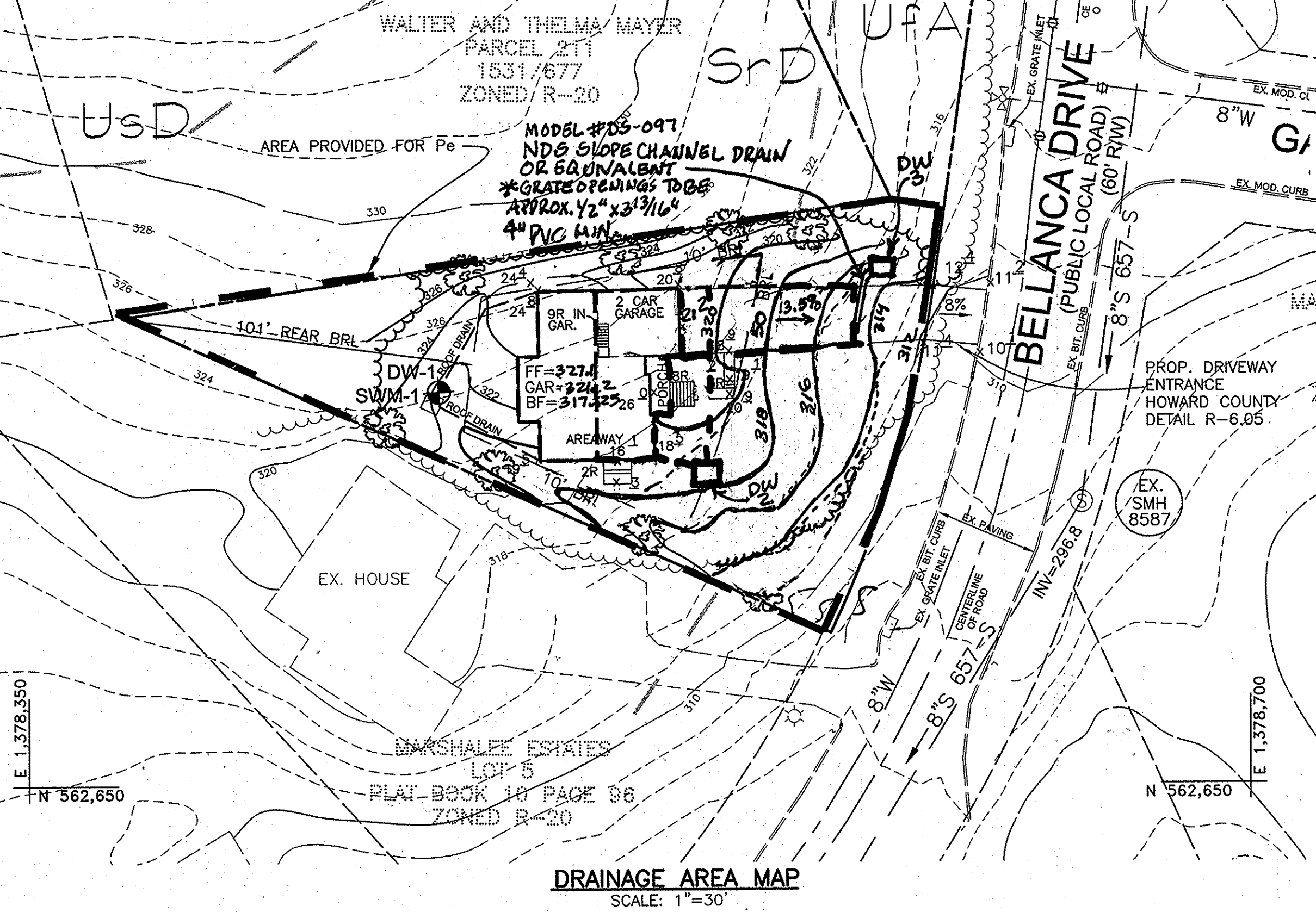
SYMBOL	QUANTITY	NAME	REMARKS
	8	QUERCUS RUBRA NORTHERN RED OAK	2 1/2"-3" CAL

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 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.

DEVELOPER: *Proff* DATE: 1-13-15



TREE PLANTING DETAIL
NOT TO SCALE



DRAINAGE AREA MAP
SCALE: 1" = 30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 2-13-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 2-18-15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4-19-15
DIRECTOR DATE

NO.	DATE	REVISION
2	5-10-16	REMOVE MICRO BIO FACILITY & ADD DRYWELLS DW2 & DW3
1	2-10-16	REVISE BIO & GRADING DUE TO EXISTING BGE UTILITIES

BENCHMARK ENGINEERING, INC.
ENGINEERS & LAND SURVEYORS & PLANNERS
8480 BALTIMORE NATIONAL PIKE & SUITE 215 A ELIJAH CITY, MARYLAND 21043
(P) 410-465-6102 (F) 410-465-6844
WWW.BE-CVLENGINEERING.COM

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. 1515
1/15/15

OWNER: TRACY R. FUHR
5814 BELLANCA DRIVE
ELK RIDGE, MD 21775
410-999-1445

BUILDER: RYAN LEGACY BUILDERS
16013 LADY CARMARIN COURT
MT. AIRY, MD 21771
410-469-6840

FUHR PROPERTY
5814 BELLANCA DRIVE

TAX MAP 37 GRD 11, PARCELS 0641
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

RESIDENTIAL SITE DEVELOPMENT PLAN
STORMWATER MANAGEMENT NOTES, DETAILS
AND LANDSCAPE PLAN

DATE: DECEMBER, 2014 BEI PROJECT NO. 2646
SCALE: AS SHOWN SHEET 3 OF 3