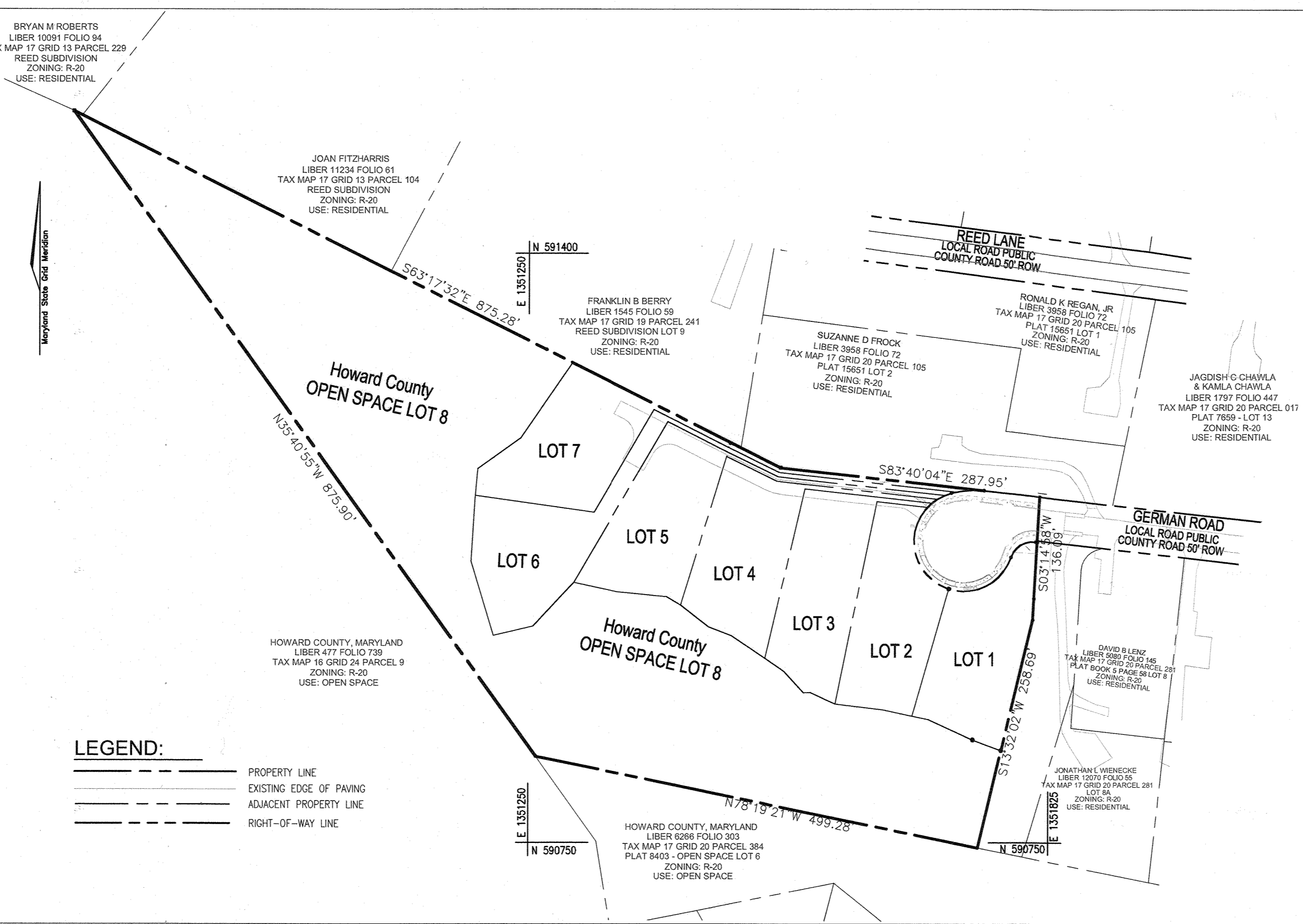


GENERAL NOTES

- 1. 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.
2. THE CONTRACTOR SHALL NOTIFY 'MISS UTILITY' AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.

WATER NOTE

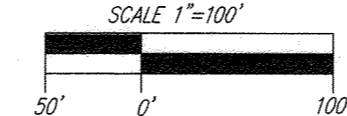
ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAILS W-3.28 OUTSIDE METER SETTINGS.



LEGEND

- PROPERTY LINE
EXISTING EDGE OF PAVING
ADJACENT PROPERTY LINE
RIGHT-OF-WAY LINE

LOCATION MAP



SUMMARY OF FINDINGS FOR APFO TRAFFIC ANALYSIS:

- A. DATE OF REPORT: AUGUST 9, 2018
B. DATE OF COUNTY(S): JUNE 7, 2018
C. REPORT SUBMITTED AS PART OF PLAN NUMBER: S-19-003
D. PROVIDE STATEMENT THAT SCHOOLS WERE IN SESSION ON THAT DATE(S).

SITE DATA

Table with 2 columns: Item (A-Q) and Description/Value. Includes total project area, parking tabulation, and DPZ file references.

PARKING TABULATION

TOTAL NUMBER OF DWELLING UNITS PROPOSED: 7
SINGLE FAMILY DETACHED (SFD) = 7 LOTS
1. OFF-STREET PARKING: SPACES REQUIRED: 2 SPACES PER UNIT

Addresses and Stormwater Management Information Chart

Table with columns: Lot/Parcel Number, Facility Name & Number, Practice Type (Quantity), Public, Private, HOA Maintains. Lists various stormwater practices like M-6 Micro-Bioretenition and M-5 Dry Well.

PERMIT INFORMATION CHART

Table with columns: Subdivision Name, Section/Area, Lots/Parcel #, Plat # or L/F, Block No., Zone, Tax Map, Elect. Dist., Census Tr. Lists RIVER BIRCH MANOR, LOT 1.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: Paul Dimarco, DATE: 4/27/2023
Chief, Division of Land Development: DATE: 5/1/2023
Director: DATE: _____

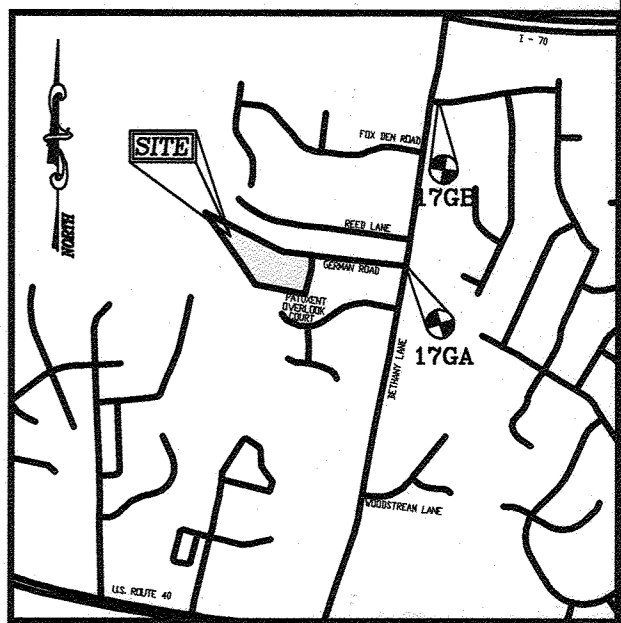
SITE DEVELOPMENT PLAN
RIVER BIRCH MANOR
HOWARD COUNTY, MD
LOTS 1-7

COORDINATE TABLE

Table with columns: NO., NORTH, EAST. Lists coordinate points for various locations on the site.

BENCHMARKS

HOWARD COUNTY BENCHMARK - 17GA (ELEV. 432.05)
HOWARD COUNTY BENCHMARK - 17GB (ELEV. 431.10)



VICINITY MAP

SCALE: 1"=2000'
ADC MAP 11 GRID G/5

SHEET INDEX

Table with columns: DESCRIPTION, SHEET NO. Lists sheet contents like COVER SHEET, LAYOUT PLAN, GRADING, etc.

MINIMUM LOT SIZE CHART

Table with columns: LOT, GROSS AREA, PIPESTEM AREA, NET AREA, MIN. LOT SIZE. Lists requirements for lots 3 through 7.

MODERATE INCOME HOUSING UNITS (MIHU) ALLOCATION EXEMPTIONS TRACKING

Table with columns: TOTAL NUMBER OF LOTS/UNITS PROPOSED, NUMBER OF MIHU REQUIRED, NUMBER OF MIHU PROVIDED ONSITE, NUMBER OF APFO ALLOCATIONS REQUIRED, MIHU FEE-IN-LIEU.

MIHU AGREEMENT

PLEASE NOTE THAT ALL NEW LOTS/RESIDENTIAL UNITS IN THIS SUBDIVISION (LOTS 1-7) ARE SUBJECT TO THE MIHU FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.

OWNER/DEVELOPER

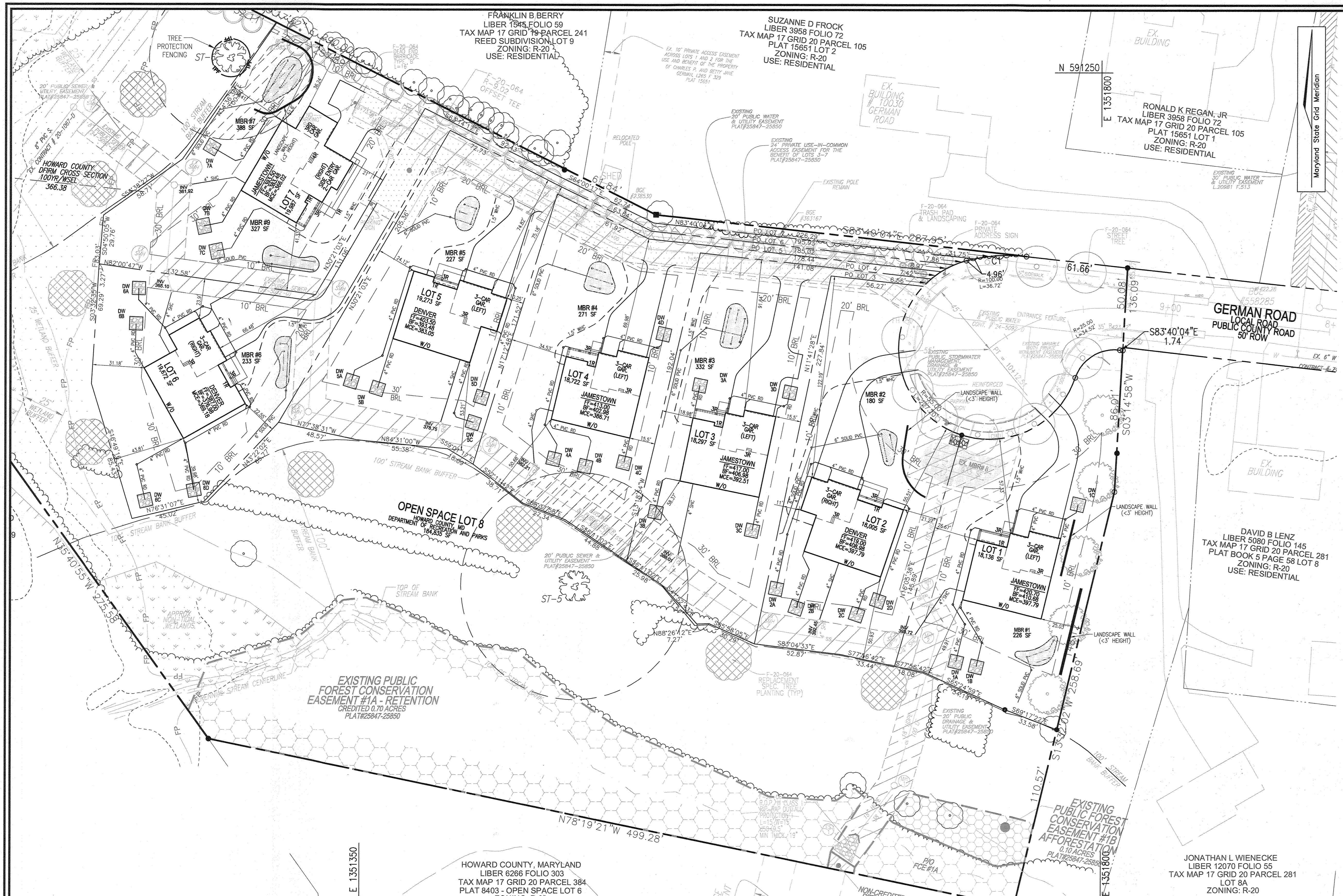
D.R. HORTON, INC.
137 MATCHELLS CHANGE RD, SUITE 300
EDGEMONT, MD 21627
(301) 407-2600

Table for revision tracking with columns: NO., REVISION, DATE. Includes a revision entry for house type, SWM, and grading on lots 1-7.

REVISED SITE DEVELOPMENT PLAN
COVER SHEET
RIVER BIRCH MANOR
LOTS 1-7
L 18205 / F. 247
TAX MAP: 17 GRID 20 PARCEL 385
ZONED: R-20
HOWARD COUNTY, MARYLAND

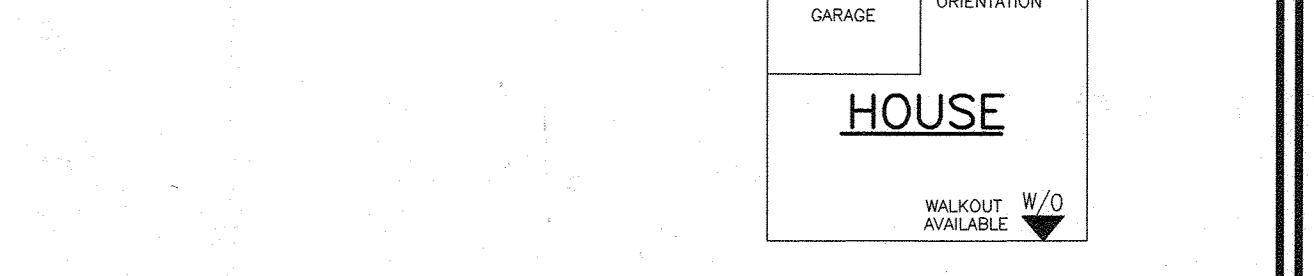
Professional seal for Robert H. Vogel, PE No. 161980. Logo for VOGEL ENGINEERING and TIMMONS GROUP. Address: 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043. P: 410.461.7666 F: 410.461.8961 www.timmons.com

DESIGN BY: RHV
DRAWN BY: ES
CHECKED BY: RHV
DATE: MARCH 2023
SCALE: AS SHOWN
W.O. NO.: 41656
1 SHEET OF 9



LEGEND:

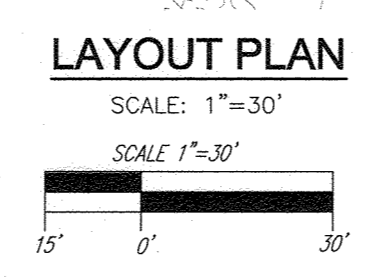
	EXISTING UTILITY		EXISTING CONCRETE SIDEWALK
	EXISTING SANITARY MANHOLE		EXISTING PUBLIC DRAINAGE & UTILITY EASEMENT PLATS 28547-28550
	EXISTING SANITARY LINE		EXISTING 24' PRIVATE USE-IN-COMMON ACCESS EASEMENT FOR THE BENEFIT OF LOTS 1-7 PLATS 28547-28550
	EXISTING WATER LINE		EXISTING 20' PUBLIC WATER & UTILITY EASEMENT PLATS 28547-28550
	EXISTING STORM DRAIN		EXISTING 20' PUBLIC SEWER & UTILITY EASEMENT PLATS 28547-28550
	EXISTING TREE		EXISTING 30' PUBLIC WATER & UTILITY EASEMENT PLATS 28547-28550
	EXISTING SPECIMEN TREES		EXISTING TREES F-20-064
	EXISTING TREE LINE		EXISTING FENCE
	EXISTING FENCE		ADJACENT PROPERTY LINE
	PROPERTY LINE		RIGHT-OF-WAY LINE
	RIGHT-OF-WAY LINE		EXISTING WETLAND
	EXISTING WETLAND		EXISTING WETLAND BUFFER
	EXISTING STREAM BUFFER		EXISTING STREAM
	EXISTING STREAM BUFFER		EXISTING STREAM BUFFER
	EXISTING PUBLIC 100 YEAR FLOODPLAIN DRAINAGE & UTILITY EASEMENT PLATS 28547-28550		TREELINE
	MICRO-BIORETENTION FACILITY (M-5)		DRY WELL (M-5)



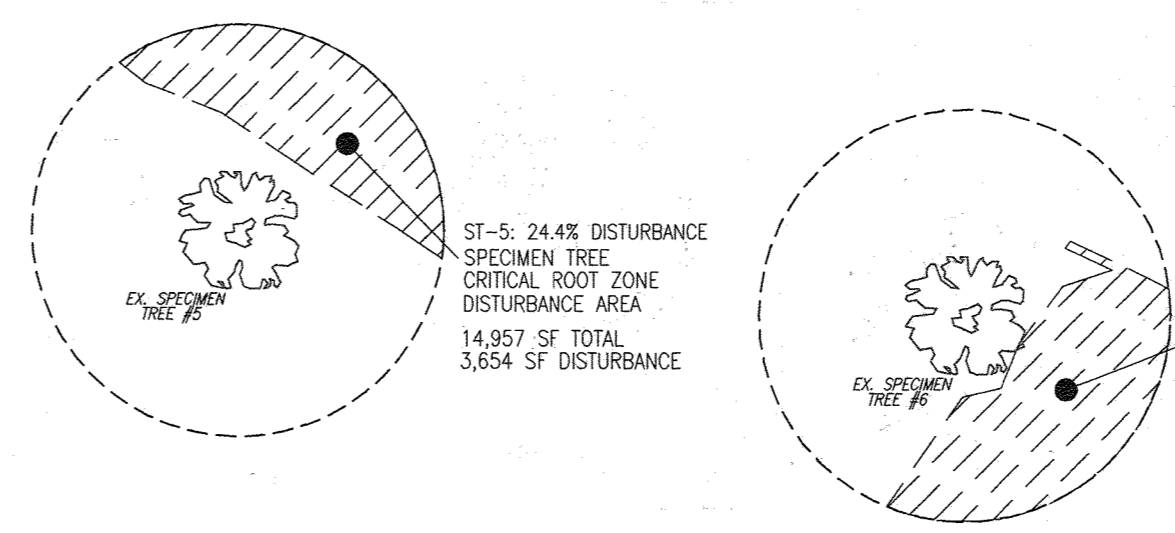
NOTE:
 1. ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAILS W-3.28 OUTSIDE METER SETTINGS.

NOTE:
 1. REFER TO SHEET 6 FOR DRYWELL (DW) SIZE, NOTES & DETAILS.

NOTES:
 1. GENERIC HOUSE BOXES ARE SHOWN IN ACCORDANCE WITH HOWARD COUNTY GUIDELINES AND DO NOT LIMIT MODEL TYPES AND OPTIONS THAT MAY FIT ON ANY INDIVIDUAL LOT.
 2. TYPICAL DRIVEWAY WIDTH SHOWN HEREON IS 18 FEET WIDE FOR THE PROPOSED 2 CAR GARAGE. DRIVEWAY TRANSITIONS TO 12' APPROACHING THE USE-IN-COMMON DRIVEWAY. DRIVEWAY SUBJECT TO CHANGE WITH BUILDER RESITE.
 3. DRIVEWAYS: THE SHOWN DRIVEWAY LOCATION CANNOT CHANGE UNLESS NOTED ON THIS SDP CONFIRMING THAT THE GRADING AND DRIVEWAY SLOPES WILL REMAIN THE SAME WHETHER THE DRIVEWAY IS ON THE RIGHT OR LEFT SIDE OF THE HOUSE. ONLY ONE DRIVEWAY ORIENTATION CAN BE SHOWN FOR CORNER LOTS.
 4. LANDSCAPE WALLS SHALL BE <3' TALL. SEE WALL DETAILING, SHEET 3 & 7



BUILDER NOTE:
SPECIMEN TREES:
 1. SPECIMEN TREE #5 IS LOCATED OUTSIDE THE PROJECT L.O.D. AND SHALL BE PROTECTED WITH TREE PROTECTION FENCE DURING ALL PHASES OF CONSTRUCTION. TREE PROTECTION MEASURES INCLUDING ROOT PRUNING SHALL BE USED AS NECESSARY FOR SUPR SILT FENCE INSTALLATION, SEWER MAIN INSTALLATION & DRYWELL CONSTRUCTION.
 2. SPECIMEN TREE #6 IS LOCATED OUTSIDE THE PROJECT L.O.D. AND SHALL BE PROTECTED WITH TREE PROTECTION FENCE DURING ALL PHASES OF CONSTRUCTION. TREE PROTECTION MEASURES INCLUDING ROOT PRUNING SHALL BE USED AS NECESSARY FOR SUPR SILT FENCE INSTALLATION & MBR CONSTRUCTION.
 3. SEE SHEET 5



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division 8/17/23
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 8/17/23

Chief, Division of Land Development 8/29/23
 CHIEF, DIVISION OF LAND DEVELOPMENT 8/29/23

Director
 DIRECTOR

JONATHAN L WIENECKE
 LIBER 12070 FOLIO 55
 TAX MAP 17 GRID 20 PARCEL 281
 LOT 8A
 ZONING: R-20
 USE: RESIDENTIAL

DAVID B LENZ
 LIBER 5080 FOLIO 145
 TAX MAP 17 GRID 20 PARCEL 281
 PLAT BOOK 5 PAGE 58 LOT 8
 ZONING: R-20
 USE: RESIDENTIAL

RONALD K REGAN, JR
 LIBER 3958 FOLIO 72
 PLAT 15651 LOT 1
 ZONING: R-20
 USE: RESIDENTIAL

SUZANNE D FROCK
 LIBER 3958 FOLIO 72
 TAX MAP 17 GRID 20 PARCEL 105
 PLAT 15651 LOT 2
 ZONING: R-20
 USE: RESIDENTIAL

FRANKLIN B BERRY
 LIBER 1545 FOLIO 59
 TAX MAP 17 GRID 19 PARCEL 241
 REED SUBDIVISION LOT 9
 ZONING: R-20
 USE: RESIDENTIAL

HOWARD COUNTY, MARYLAND
 LIBER 6266 FOLIO 303
 TAX MAP 17 GRID 20 PARCEL 384
 PLAT 8403 - OPEN SPACE LOT 6
 ZONING: R-20
 USE: OPEN SPACE

1	REVISE THE HOUSE TYPE, SWM AND GRADING ON LOTS 1-7	6-30-23
NO.	REVISION	DATE

REVISED SITE DEVELOPMENT PLAN
 LAYOUT PLAN
 RIVER BIRCH MANOR
 LOTS 1-7

L 18205 / F. 247
 TAX MAP: 17 GRID: 20
 2ND ELECTION DISTRICT
 DPZ REFERENCE: SEE SITE DATA

ZONED: R-20
 PARCEL: 0385
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING

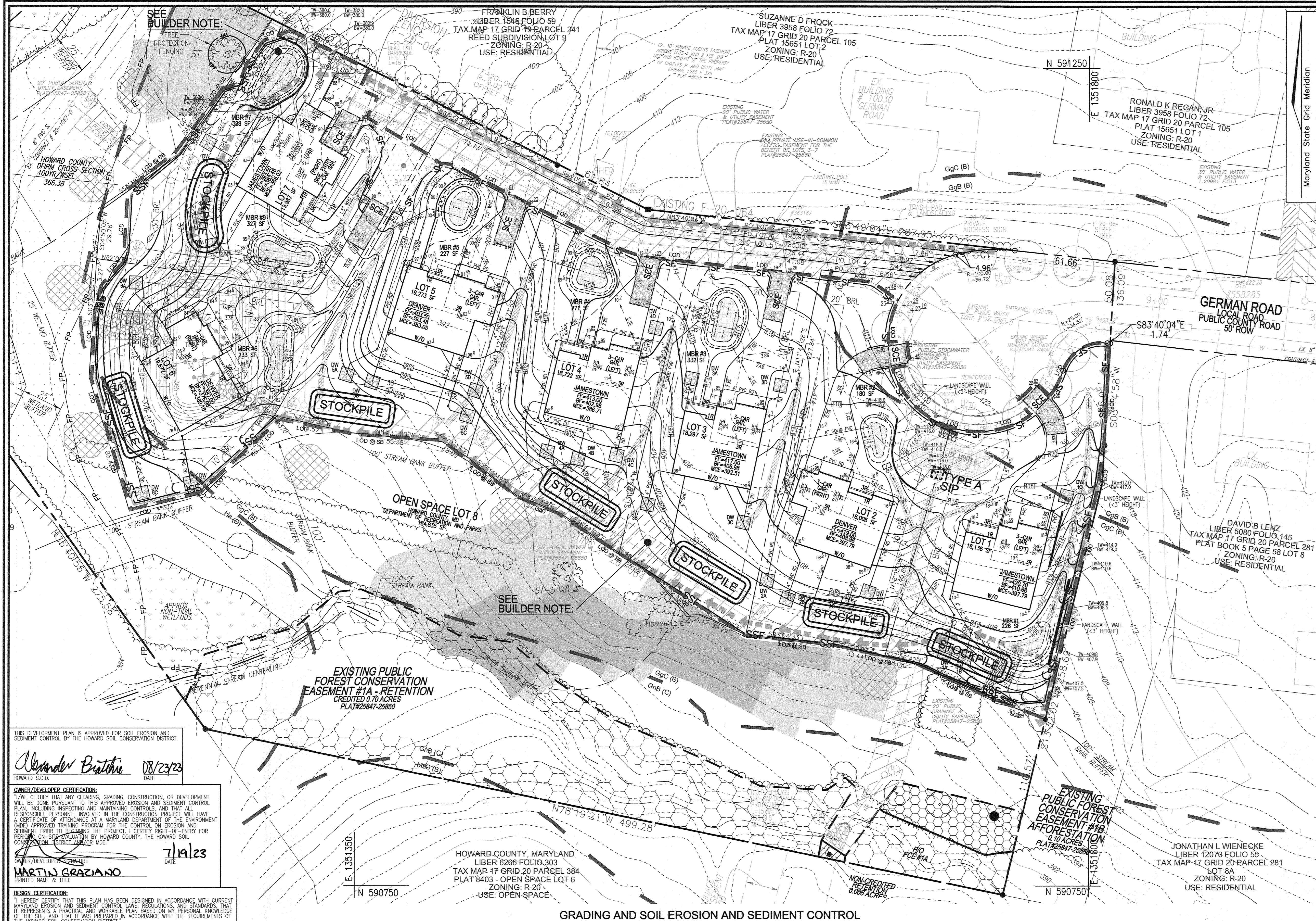
TIMMONS GROUP

3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21143
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

DESIGN BY: RHY
 DRAWN BY: ES
 CHECKED BY: RHY
 DATE: MARCH 2023
 SCALE: AS SHOWN
 W.O. NO.: 41656

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE 08-27-2024

2 SHEET OF 9

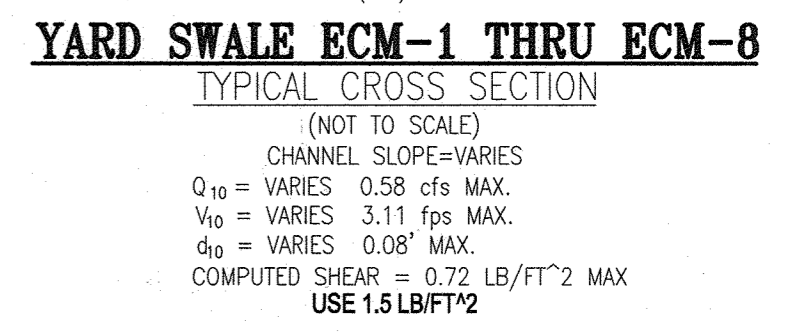


LEGEND:

- EXISTING CONTOUR
- EXISTING PAVING
- EXISTING UTILITY
- EXISTING SANITARY MANHOLE
- EXISTING WATER LINE
- EXISTING STORM DRAIN
- EXISTING TREE
- EXISTING SPECIMEN TREES
- EXISTING TRENCH
- EXISTING FENCE
- EXISTING PROPERTY LINE (TDA)
- EXISTING ADJACENT PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- EXISTING WETLAND
- EXISTING WETLAND BUFFER
- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING PUBLIC 100 YEAR FLOODPLAIN BRANCH & UTILITY EASEMENT PLATS 28547-28550
- TREELINE
- 10' CONTOUR
- 2' CONTOUR
- MICRO-BIORETENTION FACILITY (M-6)
- DRY WELL (M-5)
- UNDERDRAIN / ROOF DRAIN
- EXISTING CONCRETE SIDEWALK
- EXISTING PUBLIC DRAINAGE & UTILITY EASEMENT PLATS 28547-28550
- EXISTING 24' PRIVATE USE-IN-COMMON ACCESS EASEMENT FOR THE BENEFIT OF LOTS 1-7 PLATS 28547-28550
- EXISTING 20' PUBLIC WATER & UTILITY EASEMENT PLATS 28547-28550
- EXISTING 20' PUBLIC SEWER & UTILITY EASEMENT PLATS 28547-28550
- EXISTING 30' PUBLIC WATER & UTILITY EASEMENT L.20981 F.513
- EXISTING TREES F-20-064
- MODERATE SLOPES (15% - 24.99%)
- NRCS A/C/D/S/CS STEEP SLOPES (25% SLOPES OR GREATER)

SEDIMENT CONTROL LEGEND:

- LOD - LIMIT OF DISTURBANCE
- SSF - SUPER SILT FENCE
- SF - SILT FENCE
- STANDARD INLET PROTECTION
- TEMPORARY SOIL STABILIZATION MATING CHANNEL APPLICATION USE 1.5 LB/FT²
- ECM4
- STOCKPILE
- STABILIZED CONSTRUCTION ENTRANCE



LOT 6 NOTE:

- THE FOUNDATION FOR THE PROPOSED HOME ON LOT 6 WILL BE CONSTRUCTED IN THE AREA OF THE F-20-064 SEDIMENT TRAP BASIN EXCAVATION.
- UPON REMOVAL OF THE TRAP, PRECAUTIONS SHALL BE TAKEN TO ACHIEVE PROPER STRUCTURAL FILL IN THIS AREA. SOILS SHALL BE REMOVED 2' BELOW THE BOTTOM OF THE TRAP, RE-FILLED AND COMPACTED TO AVOID SETTLEMENT OF THE HOME.
- PROPER REMOVAL OF THE SEDIMENT AND WET SOIL AROUND THE TRAP AREA TO ACHIEVE PROPER COMPACTION IS REQUIRED.
- PROPER COMPACTION SHALL BE CERTIFIED BY A GEOTECHNICAL ENGINEER.

OWNER/DEVELOPER
D.R. HORTON, INC.
137 MICHELL'S CHANCE RD.
SUITE 300
EDGEWATER, MD 21037
(301) 407-2600

NO.	REVISION	DATE
1	REVISE THE HOUSE TYPE, SWM AND GRADING ON LOTS 1-7	6-30-23

REVISED SITE DEVELOPMENT PLAN
GRADING, SOIL EROSION AND SEDIMENT CONTROL PLAN
RIVER BIRCH MANOR
LOTS 1-7

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHY
DRAWN BY: ES
CHECKED BY: RHY
DATE: MARCH 2023
SCALE: AS SHOWN
W.O. NO.: 41656

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: 08-27-2024

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

Alexander Brattin 08/23/23
HOWARD S.C.D. DATE

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

Martin Graziano 7/19/23
OWNER/DEVELOPER DATE
MARTIN GRAZIANO
PRINTED NAME & TITLE

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

Robert H. Vogel 7-17-23
DESIGNER'S SIGNATURE DATE
ROBERT H. VOGEL MD REGISTRATION NO. 16193
PRINTED NAME (C, P, R.L.S., OR R.L.A. Circle one)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Debra E. Cowley 8/21/23
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Debra E. Cowley 8/21/23
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

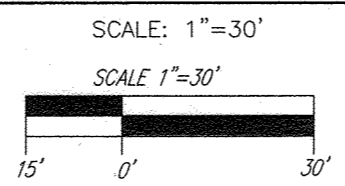
Debra E. Cowley 8/21/23
DIRECTOR DATE

SOILS LEGEND
HOWARD COUNTY SOILS MAP #13

SYMBOL	NAME / DESCRIPTION	GROUP	K FACTOR	ERODIBLE	ACREAGE
GnB	GLENVILLE-BALE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	0.49	YES	0.88
MdD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.32	YES	0.02
Ha	HATBORO-CODORUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	D	0.43	NO	2.48
GqC	GLENELG LOAM, 8 TO 15 PERCENT SLOPES	B	0.43	YES	3.71
GqB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	0.37	YES	0.46

SOILS NOTES:

- TAKEN FROM USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY
- 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.
- GnB AND Ha SOILS MAY CONTAIN HYDRIC COMPONENTS.
- K FACTORS OBTAINED FROM THE HOWARD SOIL CONSERVATION DISTRICT WEBSITE <https://www.howardscd.org/documents> - DOCUMENT TITLED "K FACTORS (USE KW)



BUILDER NOTE:
SPECIMEN TREES:
1. REFER TO SHEET 5 FOR SPECIMEN TREE ALLOWABLE DISTURBANCE DETAILS AND TREE PROTECTION MEASURES.

GENERAL NOTES:

- DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
- STOCKPILING WILL BE PERMITTED ON EACH LOT ONLY.
- LOCATE STOCKPILES AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR. STOCKPILES EXCEEDING 16 FEET IN HEIGHT SHALL BE BENCHED. SEE STABILIZATION SPECS ON SHEET 06.
- STABILIZATION IS TO BE DONE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE INTERVALS REQUIRED BY THE 2011 STDS. & SPECS, WHICHEVER IS MORE RESTRICTIVE.
- FOR SOILS ON SITE THAT WOULD BE CONSIDERED HIGHLY ERODIBLE BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT, MORE STRINGENT SEEDING AND STABILIZATION METHODS MAY BE EXPECTED AT SITE DEVELOPMENT STAGE.
- ALL EARTH DIKES ARE TO BE PLACED IN WORKING ORDER AT THE END OF EACH WORKING DAY.
- REFER TO PLAN SHEET 4 FOR SEQUENCE OF CONSTRUCTION.
- REFER TO PLAN SHEET 4 & 5 FOR STANDARD DETAILS AND STABILIZATION NOTES.

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- 1. A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS... 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN...

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

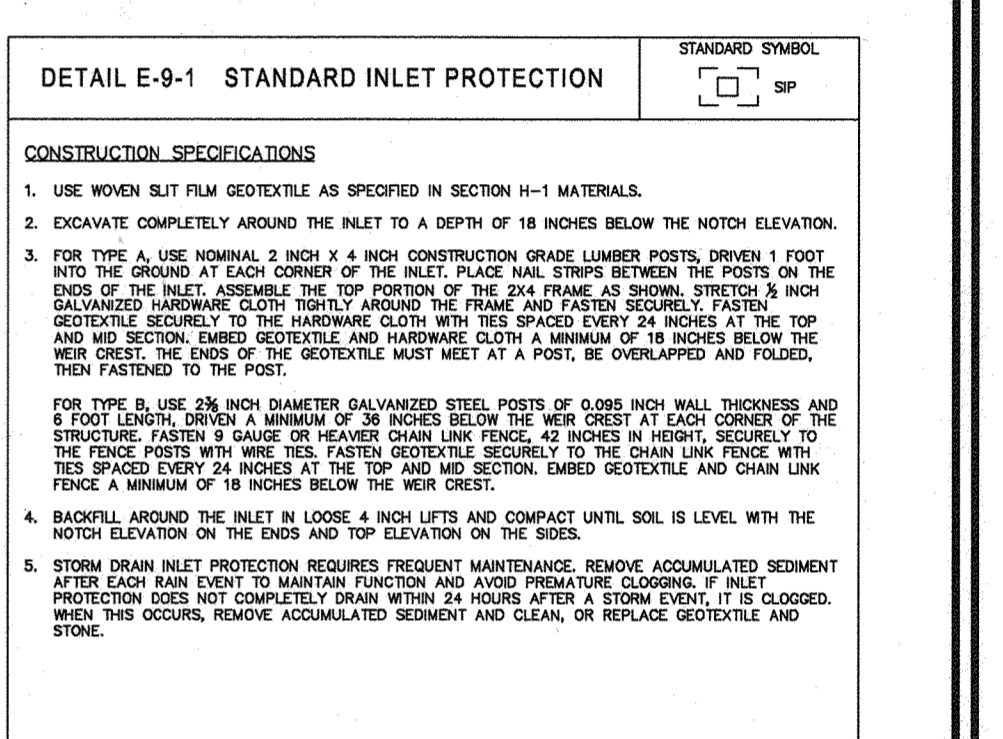
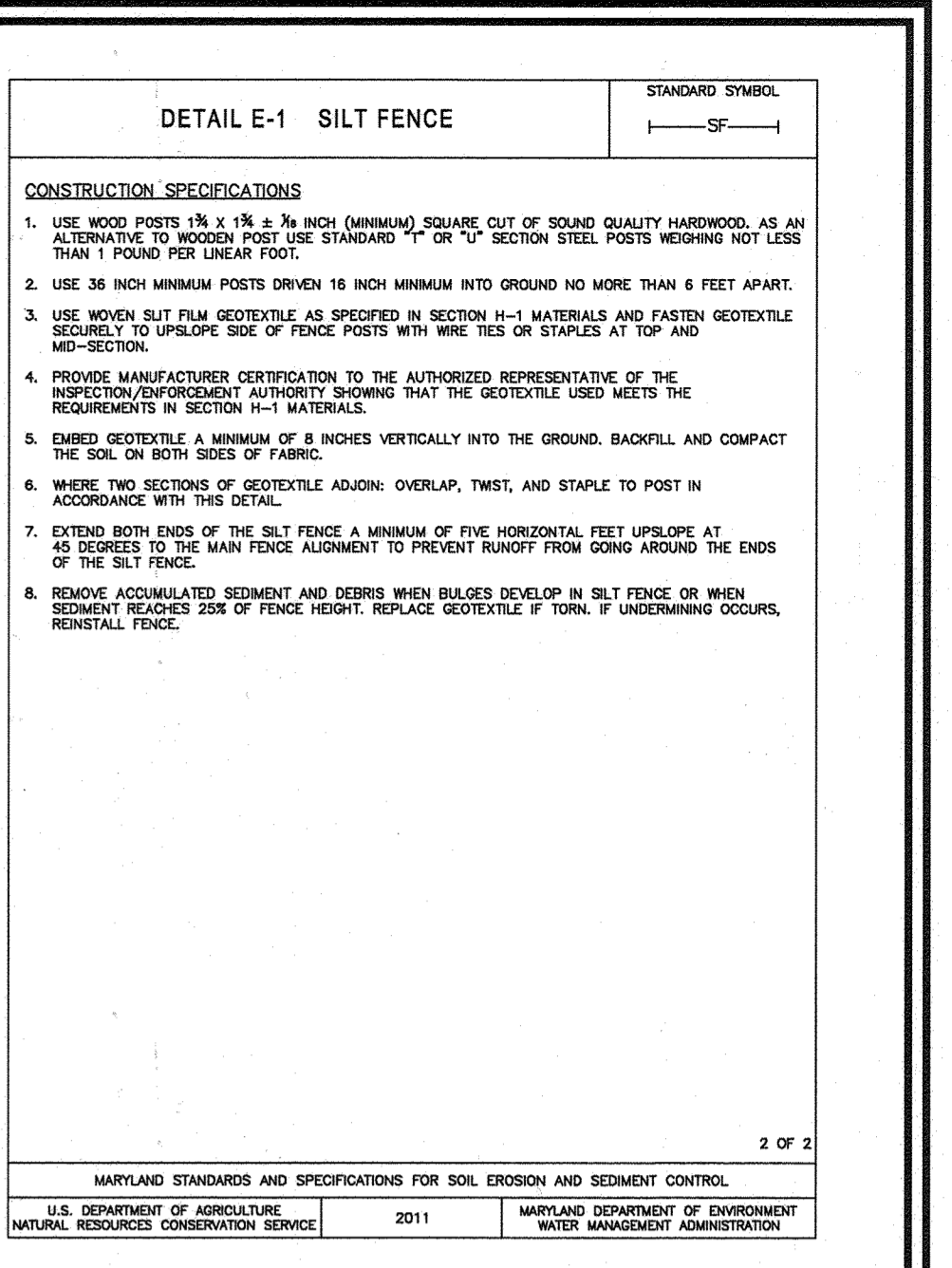
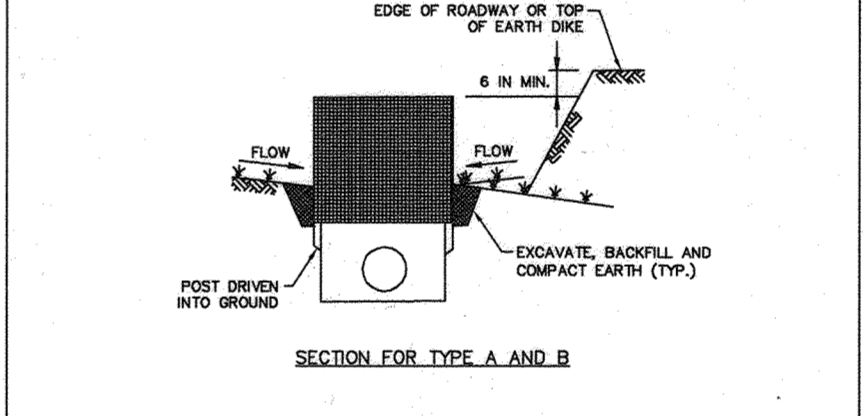
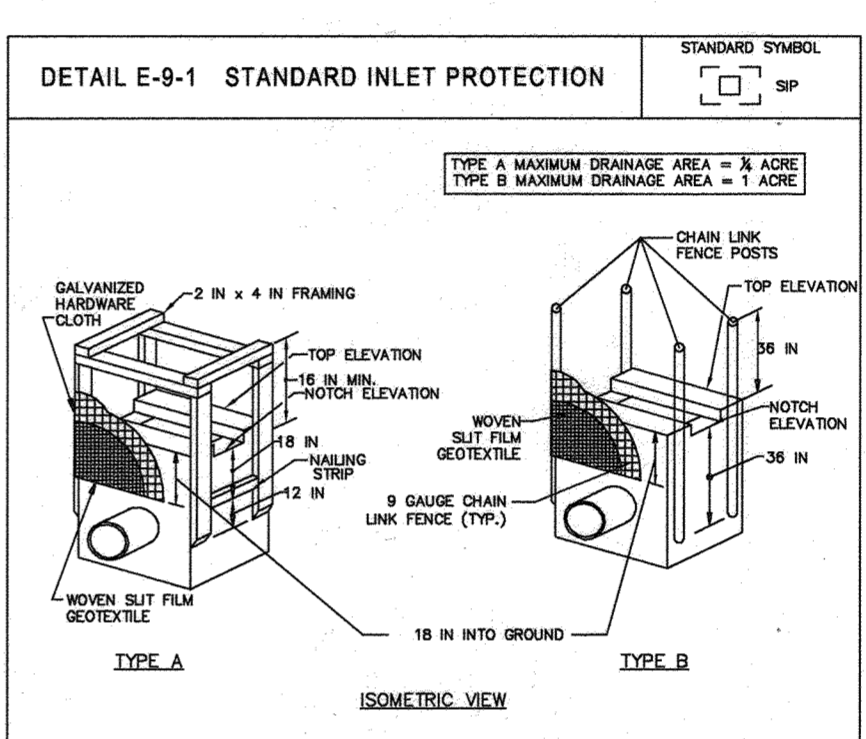
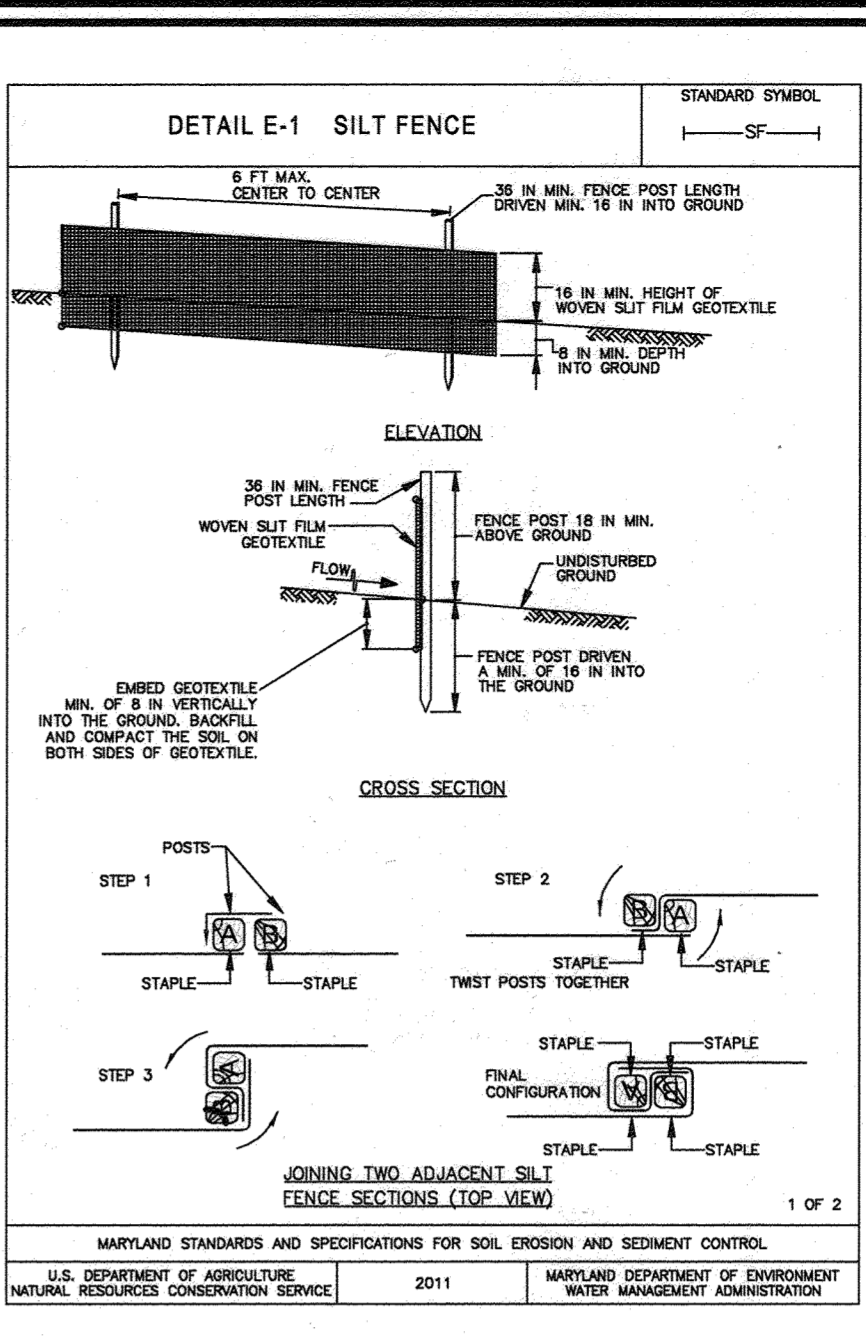
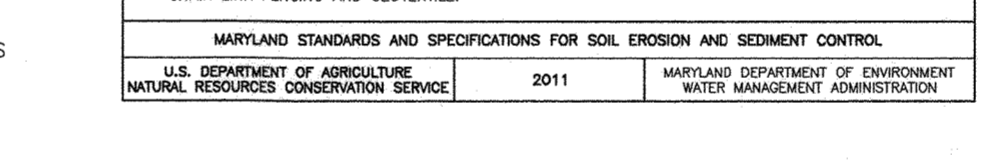
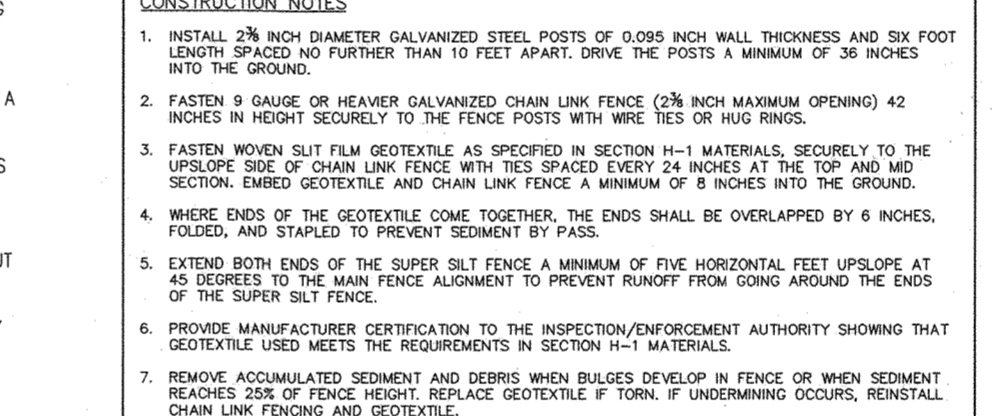
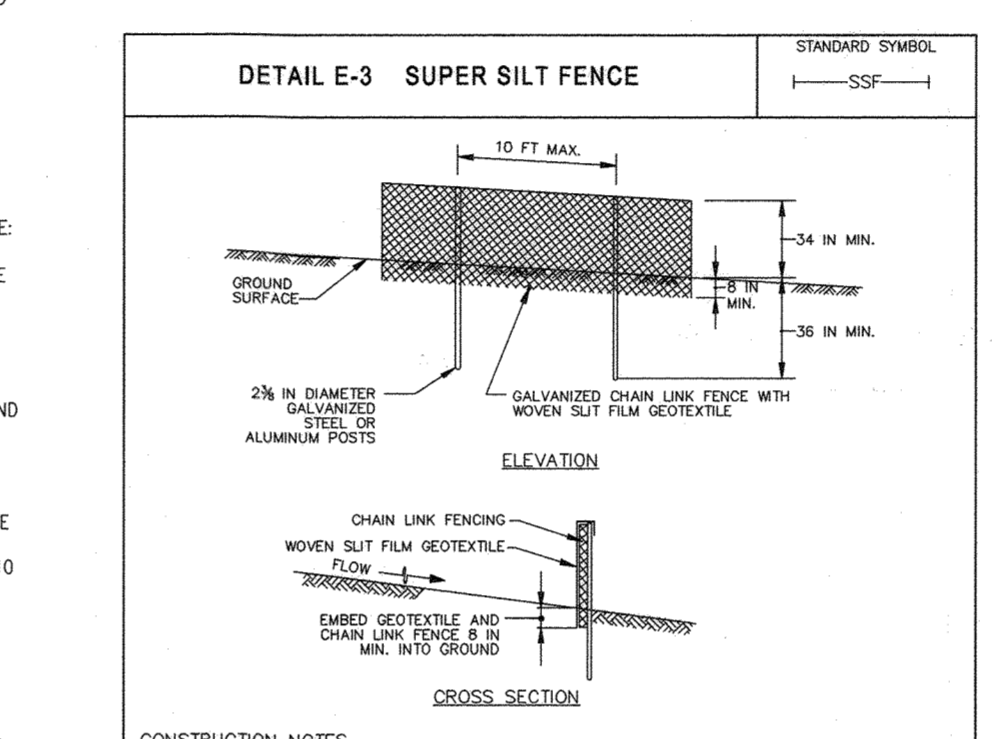
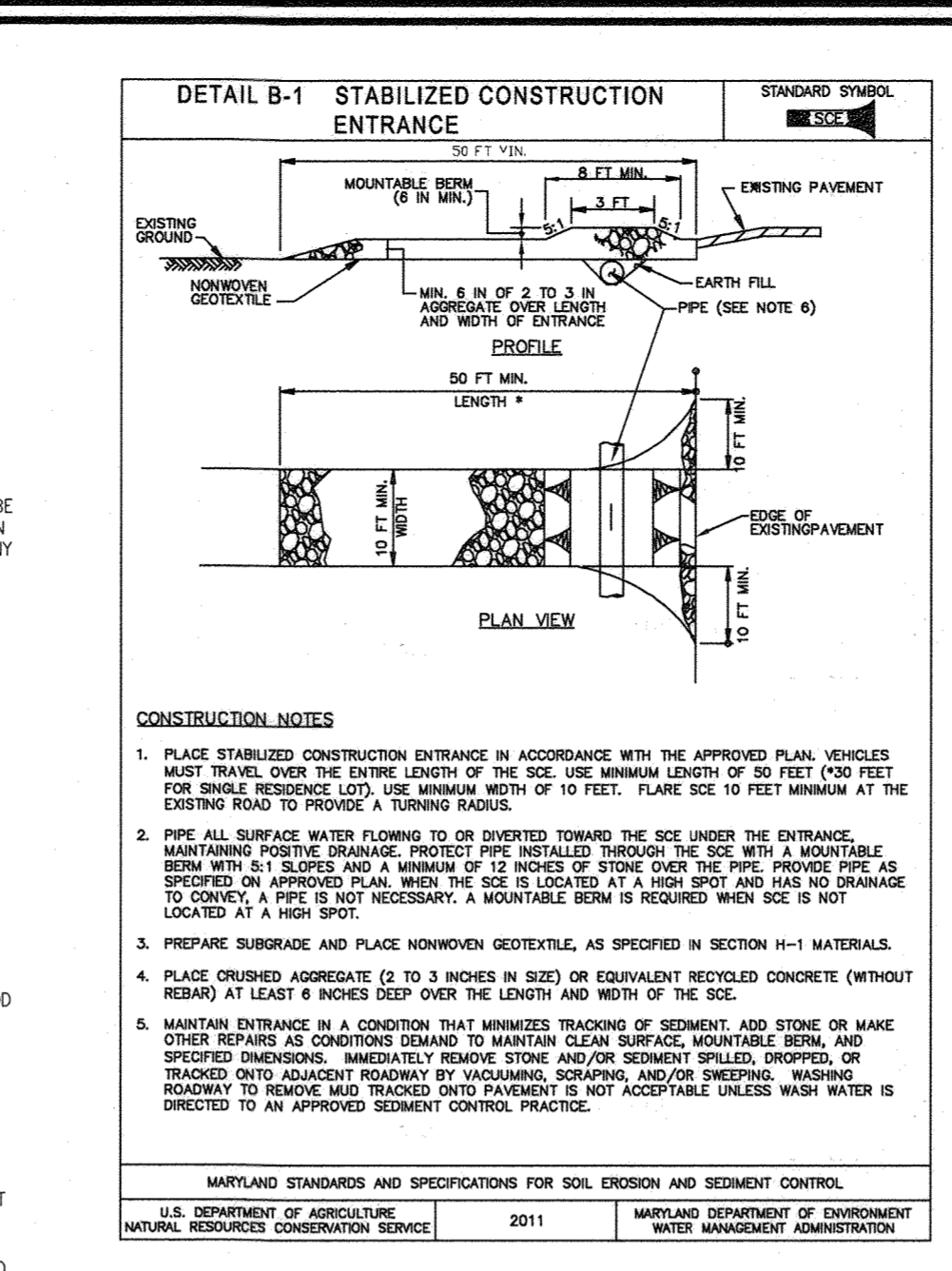
- DEFINITION: TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION. PURPOSE: TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS...

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

- DEFINITION: THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION. PURPOSE: TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH...

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

- DEFINITION: THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER. PURPOSE: TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION...



ITEM 11, REGARDING PROJECT DISTURBANCE IS NO LONGER A REQUIREMENT OF THE STATE OF MARYLAND, HOWEVER REMAINS A REQUIREMENT OF HOWARD COUNTY.

PERMANENT SEEDING SUMMARY. Table with columns for Hardness Zone, Seeding Rate, Seeding Dates, and Lime Rate.

TEMPORARY SEEDING SUMMARY. Table with columns for Hardness Zone, Seeding Rate, Seeding Dates, and Lime Rate.

TEMPORARY SEEDING SUMMARY. Table with columns for Hardness Zone, Seeding Rate, Seeding Dates, and Lime Rate.

TEMPORARY SEEDING SUMMARY. Table with columns for Hardness Zone, Seeding Rate, Seeding Dates, and Lime Rate.

DESIGNED BY: Olga Alexander, 4/28/2023. OWNER/DEVELOPER CERTIFICATION: I HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN...

DESIGNED BY: Rob Vogel, 4/5/2023. OWNER/DEVELOPER CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS...

DESIGNED BY: Robert H. Vogel, 4/5/2023. OWNER/DEVELOPER CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT...

DESIGNED BY: Robert H. Vogel, 4/5/2023. OWNER/DEVELOPER CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT...

DESIGNED BY: Robert H. Vogel, 4/5/2023. OWNER/DEVELOPER CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT...

DESIGNED BY: Robert H. Vogel, 4/5/2023. OWNER/DEVELOPER CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT...

DESIGNED BY: Robert H. Vogel, 4/5/2023. OWNER/DEVELOPER CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT...

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. CHIEF, DEVELOPMENT ENGINEERING DIVISION. DATE: 4/27/2023.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. CHIEF, DIVISION OF LAND DEVELOPMENT. DATE: 5/1/2023.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. DIRECTOR. DATE: 5/1/2023.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. DIRECTOR. DATE: 5/1/2023.

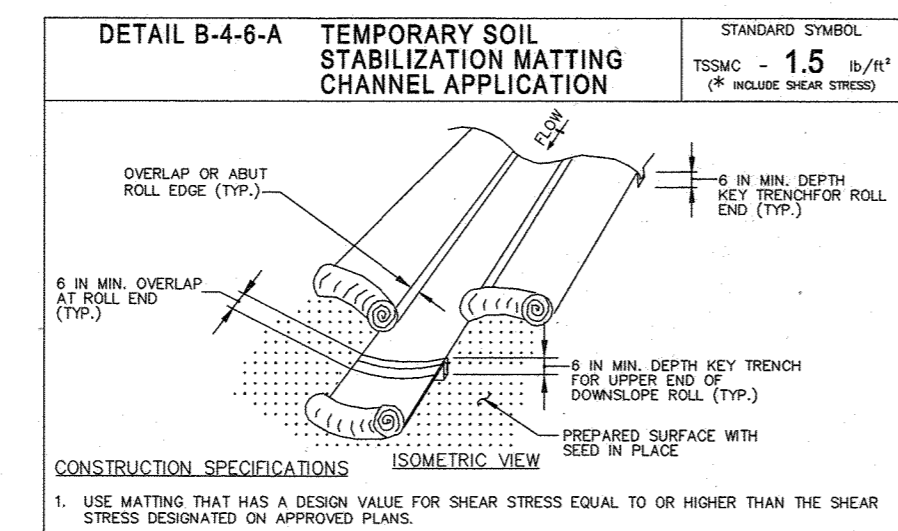
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. DIRECTOR. DATE: 5/1/2023.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. DIRECTOR. DATE: 5/1/2023.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. DIRECTOR. DATE: 5/1/2023.

Table B.1: Temporary Seeding for Site Stabilization. Table with columns for Plant Species, Seeding Rate, Seeding Depth, and Recommended Seeding Dates by Plant Hardiness Zone.

NOTES: 1. Seeding rates for the warm-season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates shall be adjusted to reflect percent seed germination and purity, as noted. Adjustments are usually not needed for cool-season grasses.



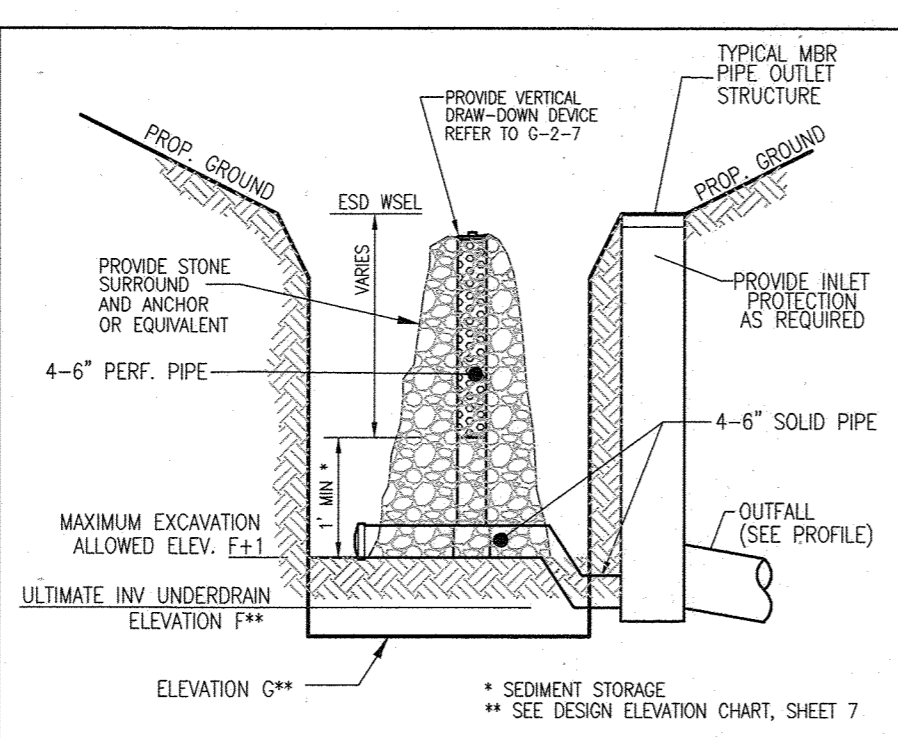
CONSTRUCTION SPECIFICATIONS: 1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS. 2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF BIODEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC) MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SHOWN RESISTANT TO CHEMICALS USED IN THE MAT.

H-1 STANDARDS AND SPECIFICATIONS FOR MATERIALS

Table H.1: Geotextile Fabrics. Table with columns for Property, Test Method, and Minimum Average Work Value (1).

TABLE H.2: STONE SIZE. Table with columns for Type, Size Range, and Midsize Weight (3).

STONE MUST BE COMPOSED OF A WELL GRADED MIXTURE OF STONE SIZES SO THAT FIFTY (50) PERCENT OF THE PIECES BY WEIGHT ARE LARGER THAN THE SIZE DETERMINED BY USING THE CHARTS. A WELL GRADED MIXTURE, AS SET HEREIN, IS DEFINED AS A MIXTURE COMPOSED PRIMARILY OF LARGER STONE SIZES BUT WITH A SUFFICIENT MIXTURE OF OTHER SIZES TO FILL THE SMALLER VOIDS BETWEEN THE STONES.



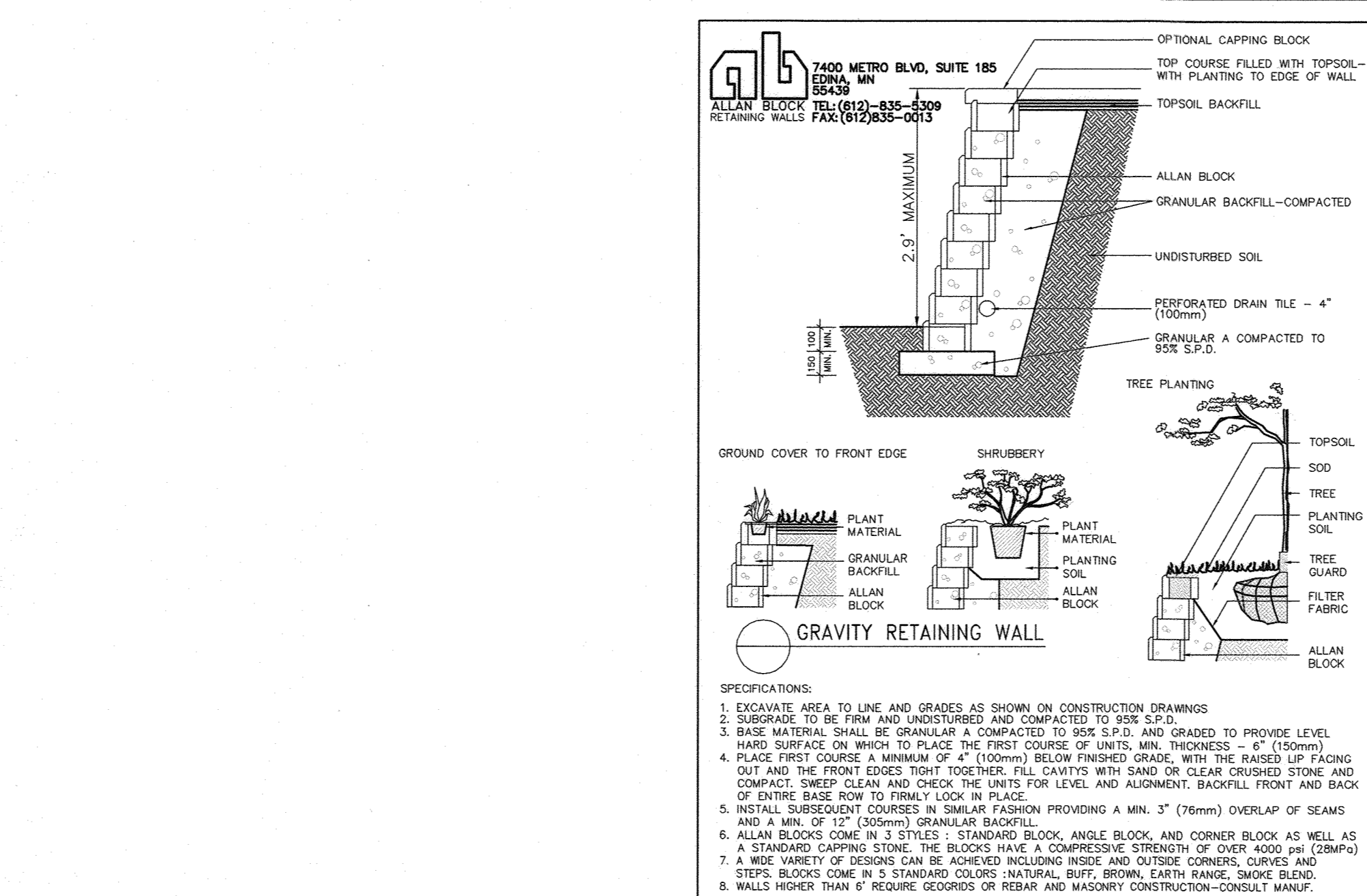
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Designed by: Alexander Botchie 4/28/2023. HOWARD S.C.D. DATE. OWNER/DEVELOPER CERTIFICATION: I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN.

DESIGN CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS.

Approved by: Rob Vogel, 4/5/2023. ROBERT H. VOGEL, MD REGISTRATION NO. 16193. PROFESSIONAL ENGINEER.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. Chief, Development Engineering Division: Paul Dimarco, 4/27/2023. Chief, Division of Land Development: [Signature], 5/1/2023. Director: [Signature], [Date].



TYPICAL LANDSCAPE (<2.9') GRAVITY WALL OR EQUAL. N.T.S. Specifications: 1. EXCAVATE AREA TO LINE AND GRADES AS SHOWN ON CONSTRUCTION DRAWINGS. 2. SUBGRADE TO BE FIRM AND UNDISTURBED AND COMPACTED TO 95% S.P.D.

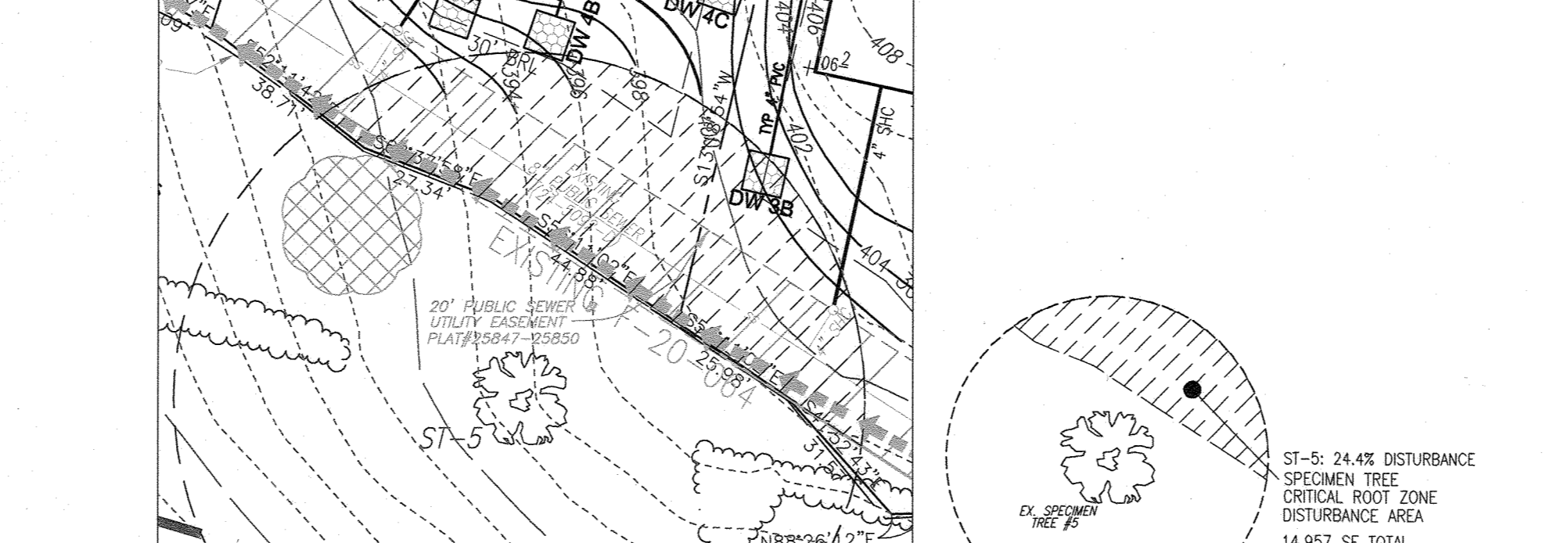
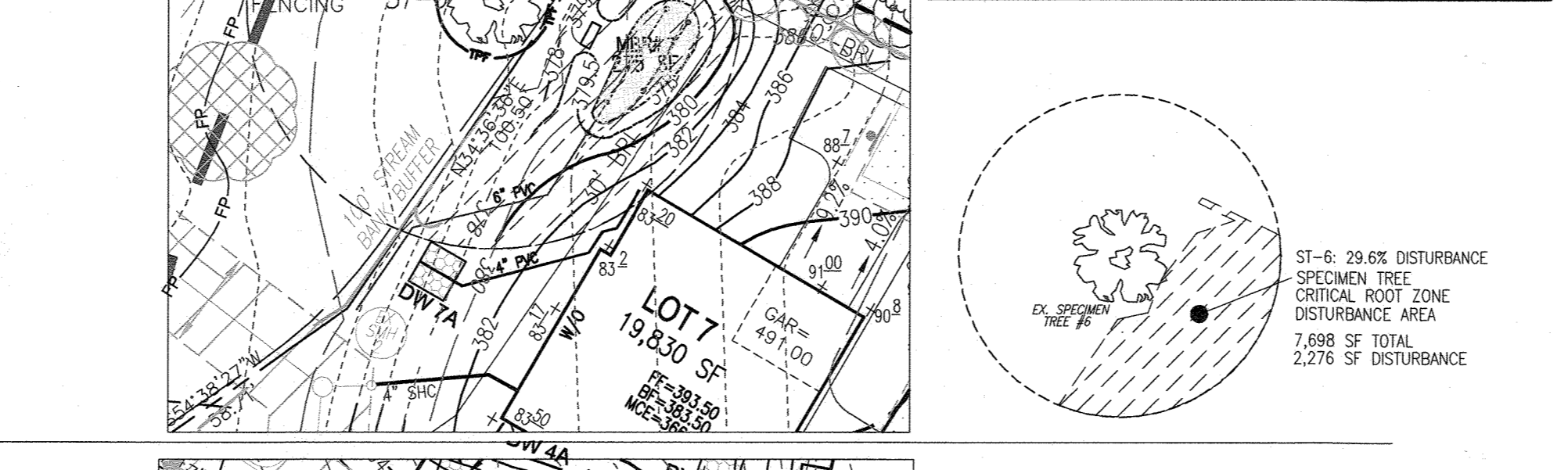
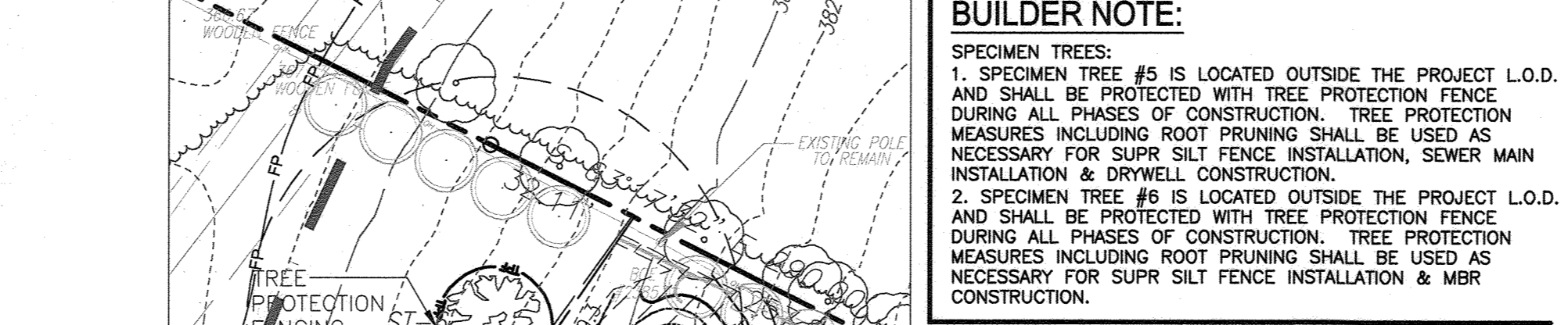
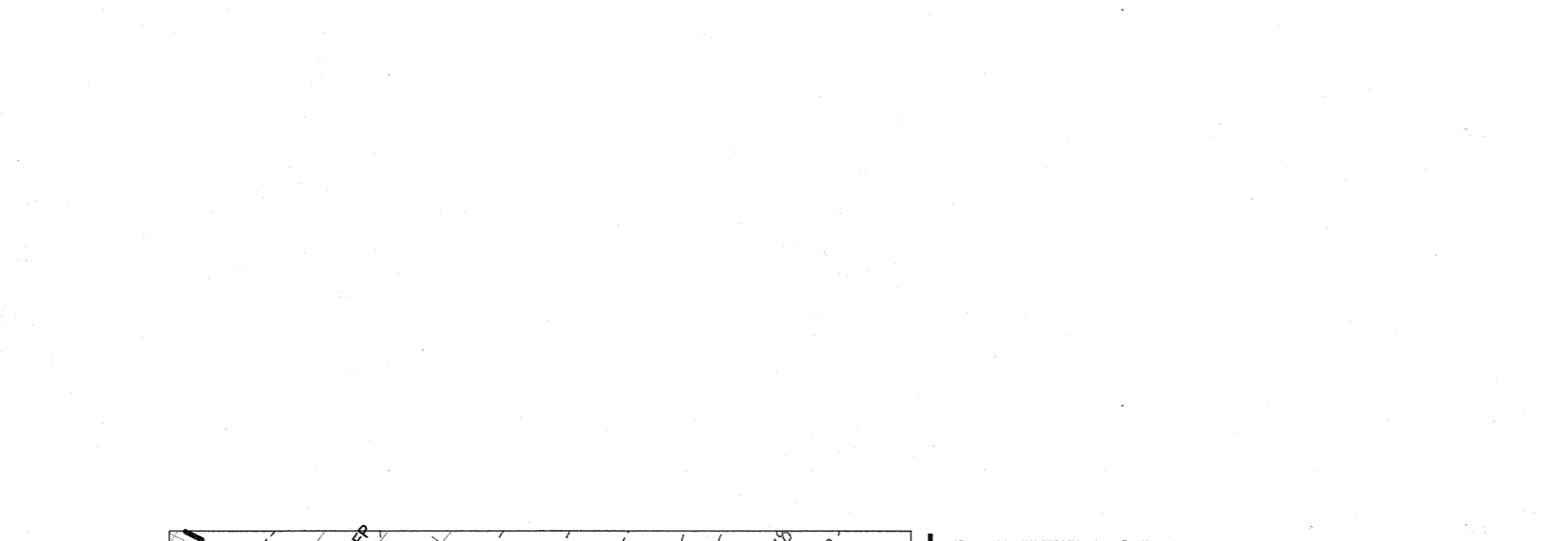
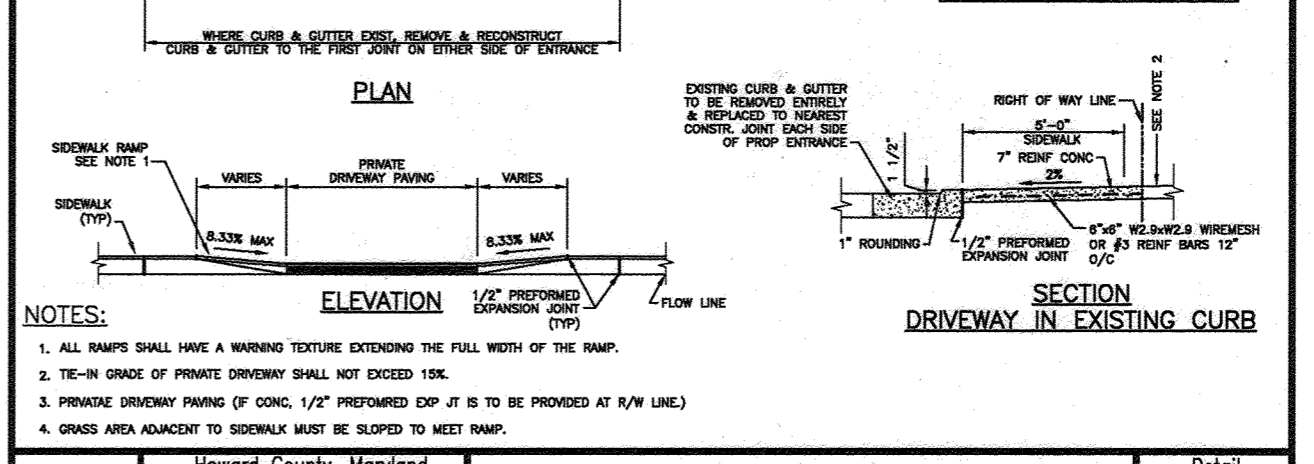
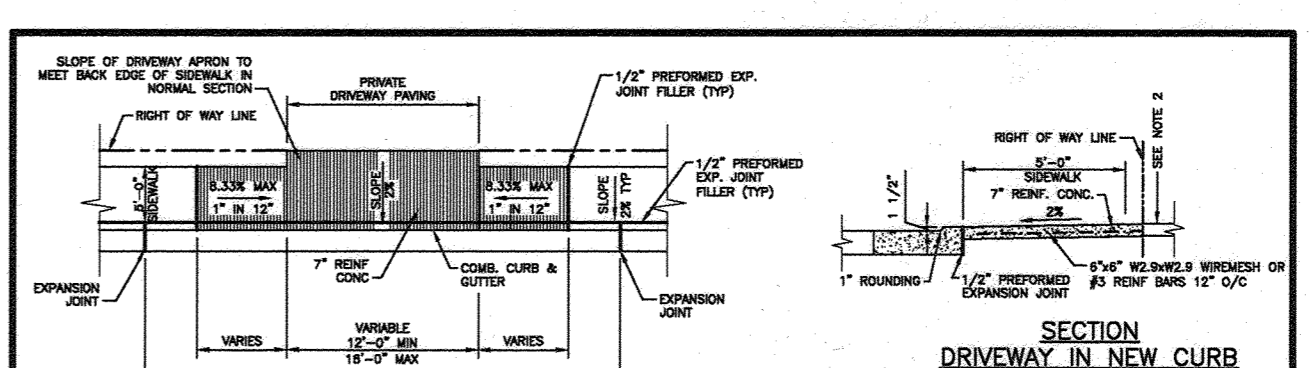
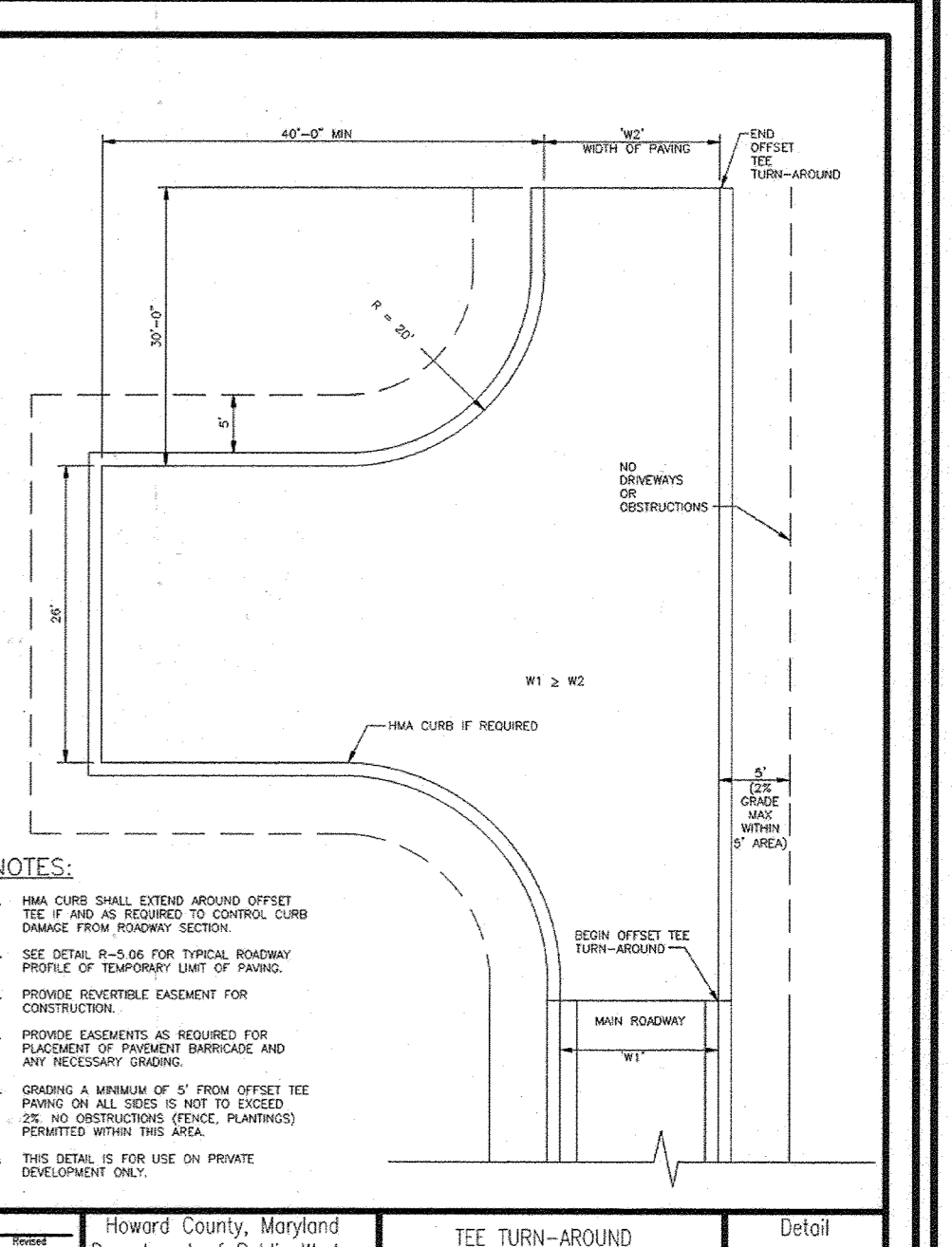
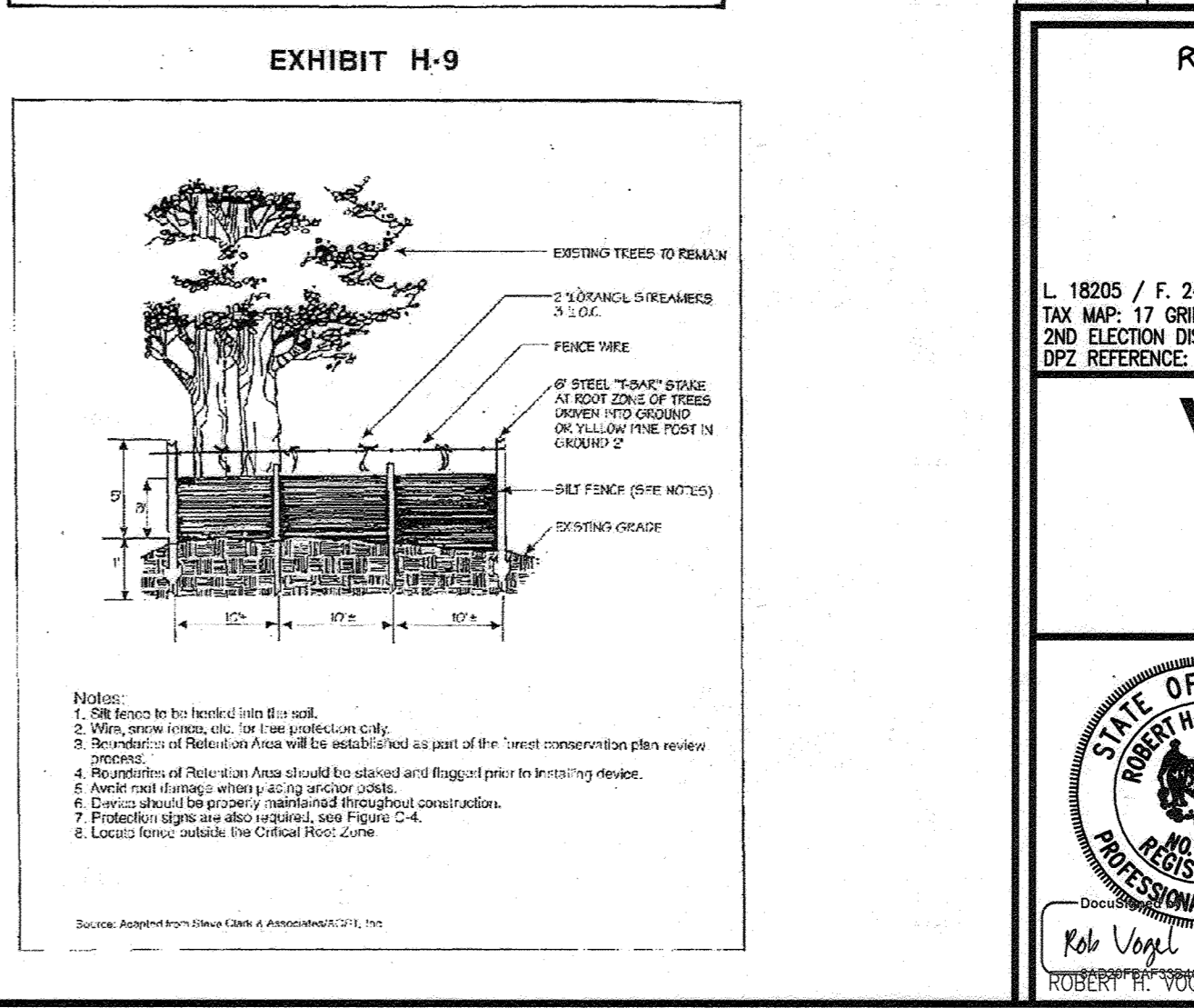
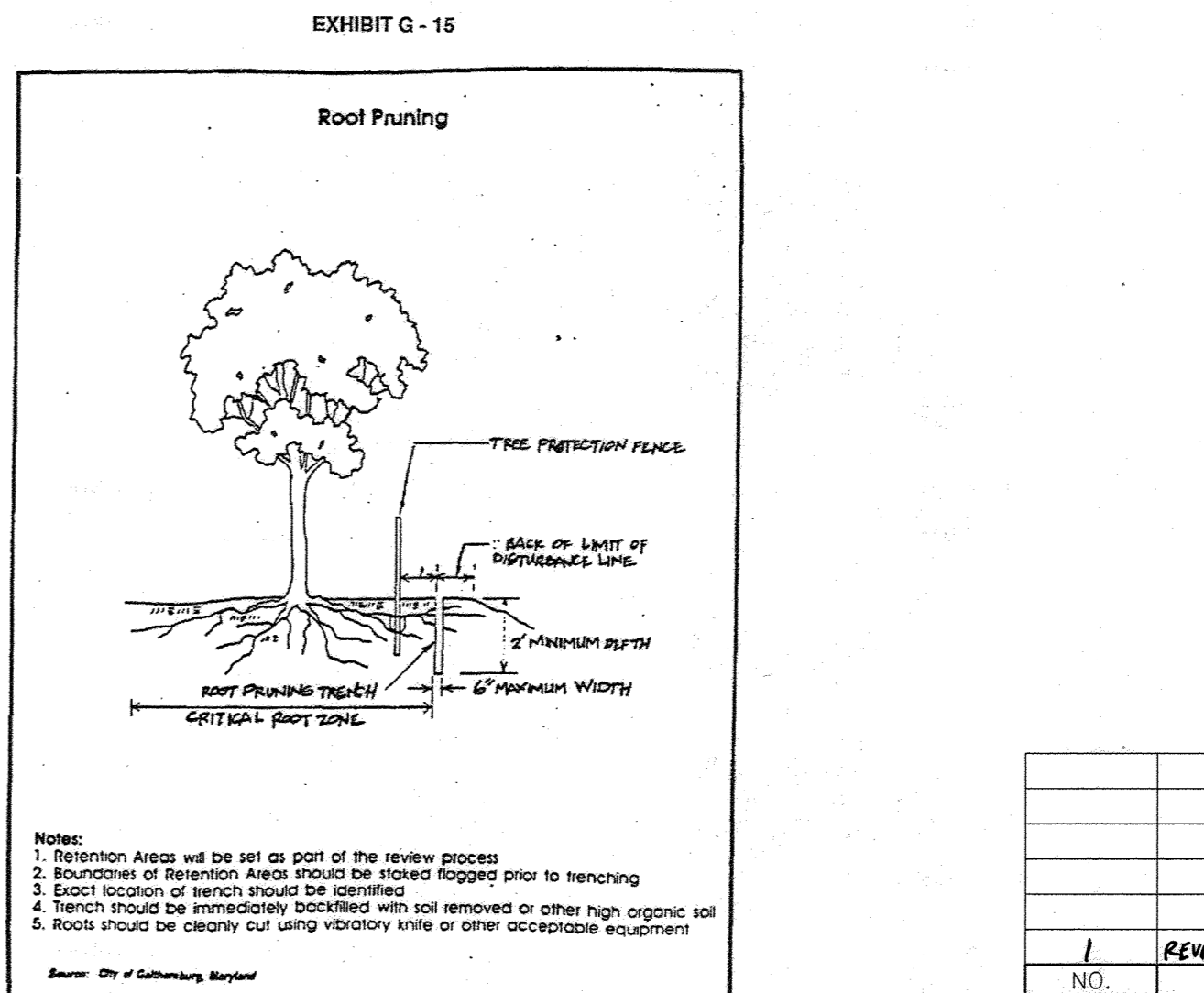


Table with columns for Section Number, Road and Street Classification, California Bearing Ratio (CBR), and various material specifications for different sections (P-1 to P-4).

NOTES: 1. HEAVY TRUCKS ARE DEFINED AS THOSE WITH 60,000 LB OR MORE INCLUDING SURFACE TRUCKS. 2. SUPERFINE ASPHALT MIX FINIAL SURFACE: 1.5% MIN. SUPERFINE ASPHALT MIX WITH COARSE SAND.



RESIDENTIAL DRIVEWAY ENTRANCE. 7" Combination Curb and Gutter. Sidewalk Abutting Curb. Detail R-6.02.



TEE TURN-AROUND Offset Private. Detail R-9.02.

HOWARD COUNTY, MARYLAND Department of Public Works. Department of Public Works. Department of Public Works. Department of Public Works.

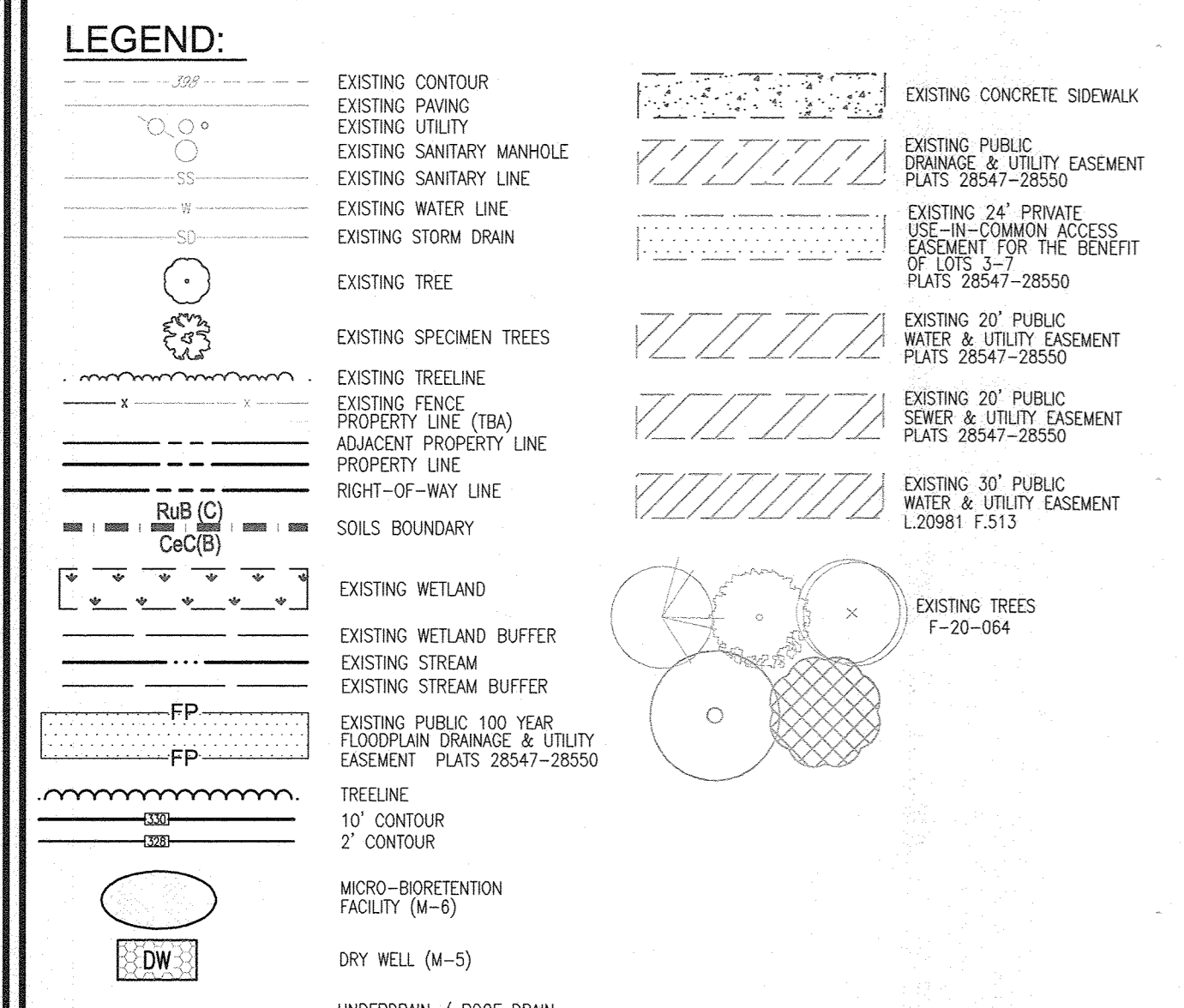
OWNER/DEVELOPER: P.R. HOGAN, INC. 157 MARCHELLES CHANNE RD, SUITE 300 EDGESTOWN, MD 21037 (301) 407-2600.

Table with columns for NO., REVISION, and DATE. Revision 1: REVISE THE HOUSE TYPE, SWIM AND GRADING ON LOTS 1-7. DATE: 6-30-23.

REVISED SITE DEVELOPMENT PLAN. GRADING AND SOIL EROSION AND SEDIMENT CONTROL - NOTES AND DETAILS, AND CONSTRUCTION DETAILS. RIVER BIRCH MANOR LOTS 1-7.

VOGEL ENGINEERING + TIMMONS GROUP. 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043. P: 410.461.7666 F: 410.461.8961 www.timmons.com.

DESIGN BY: RHV. DRAWN BY: ES. CHECKED BY: RH. DATE: MARCH 2023. SCALE: AS SHOWN. W.O. NO.: 41656. SHEET 9 OF 9.



SWM DRAINAGE AREA MAP



APPENDIX B.4.C SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDEN, LANDSCAPE INFILTRATION & INFILTRATION BERMS

1. MATERIAL SPECIFICATIONS
THE ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.4.1.
2. FILTERING MEDIA OR PLANTING SOIL
THE SOIL SHALL BE A UNIFORM MIX...

3. COMPACTION
IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF BIORETENTION PRACTICES AND THE REQUIRED BACKFILL...
4. PLANT MATERIAL
RECOMMENDED PLANT MATERIAL FOR MICRO-BIORETENTION PRACTICES CAN BE FOUND IN APPENDIX A, SECTION A.2.3.

5. PLANT INSTALLATION
COMPOST IS A BETTER ORGANIC MATERIAL SOURCE...
6. UNDERDRAINS
UNDERDRAINS SHOULD MEET THE FOLLOWING CRITERIA...

7. MISCELLANEOUS
THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.

OPERATION AND MAINTENANCE SCHEDULE FOR LANDSCAPE INFILTRATION (M-3), MICRO-BIORETENTION (M-6), RAIN GARDENS (M-7), BIoretENTION SWALE (M-8), AND ENHANCED FILTERS (M-9)

1. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY...
2. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR...
3. THE OWNER SHALL INSPECT THE MULCH EACH SPRING...
4. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS...

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED STORMWATER DRY WELLS (M-5)

1. THE MONITORING WELLS AND STRUCTURES SHALL BE INSPECTED ON A QUARTERLY BASIS...
2. WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS SHALL BE RECORDED...
3. A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS...

RIVER BIRCH MANOR - FINAL ESDv COMPUTATIONS

Summary table with columns: SITE DEVELOPABLE AREA, TARGET Pe, SITE IMPERVIOUS, SITE Rv, SITE ESDv, AC, IN, PERCENT, CF +/-, 150466 SF.

Main ESDv computation table with columns: DA #, % IMPERV, Rv, DA (SF), DA (AC), MINIMUM VOLUME, MAXIMUM VOLUME, 1.60" VOLUME PROVIDED, IMPERV (SF), IMPERV (AC), GREEN AREA, REMARKS.

OWNER/DEVELOPER
D.R. HORTON, INC.
137 MICHELLS CHANCE RD.
SUITE 300
EDGEWATER, MD 21037
(301) 407-2600

Revision table with columns: NO., REVISION, DATE.

REVISED SITE DEVELOPMENT PLAN
STORMWATER MANAGEMENT DRAINAGE AREA MAP, NOTES AND DETAILS
RIVER BIRCH MANOR
LOTS 1-7

L 18205 / F 247
TAX MAP: 17 GRID: 20
2ND ELECTION DISTRICT
02P REFERENCE: SEE SITE DATA

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

Professional Engineer seal for Robert H. Vogel, PE No. 16193, State of Maryland.

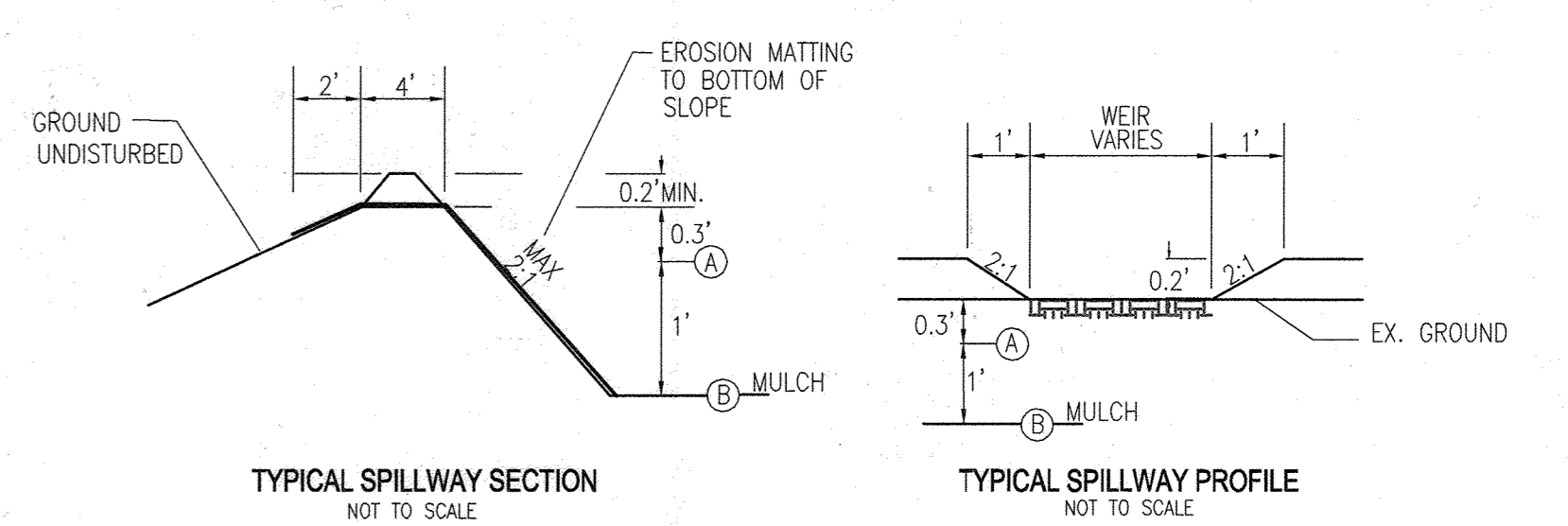
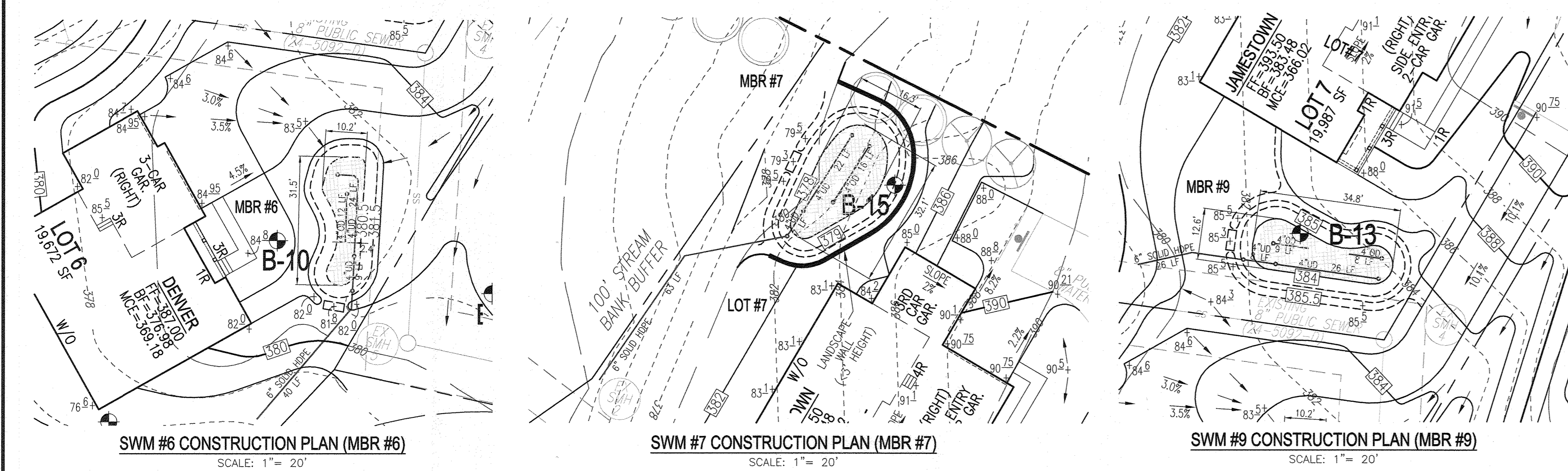
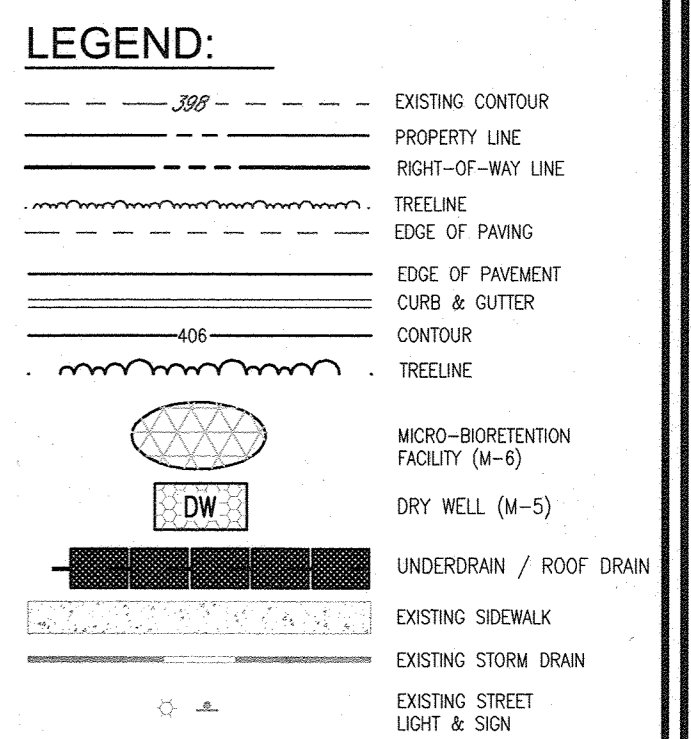
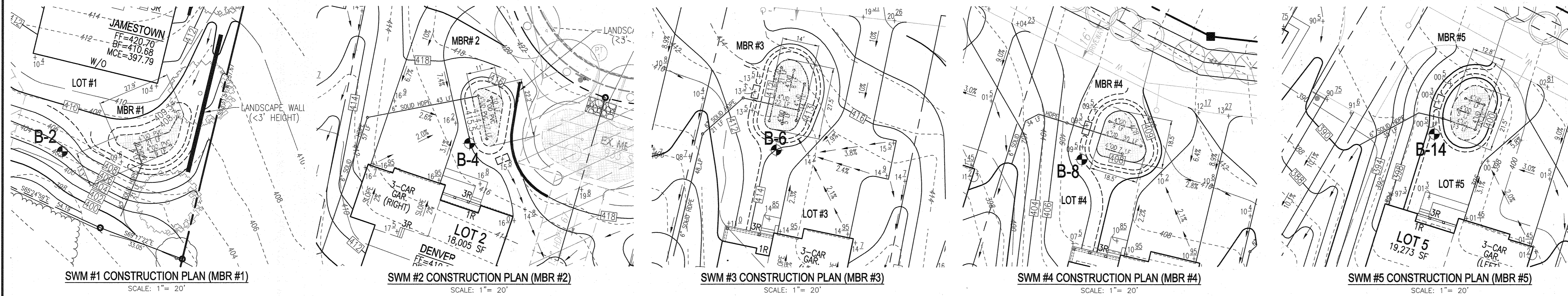
DESIGN BY: RHV
DRAWN BY: ES
CHECKED BY: RHV
DATE: MARCH 2023
SCALE: AS SHOWN
W.C. NO.: 41656

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...

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chief, Development Engineering Division
Chief, Division of Land Development
Director

ON-LOT DRYWELL - SIZING CHART table with columns: ESD, DA, LOT, LOCATION, DW NUMBER, OF DW'S, SURFACE SIZE, STONE DEPTH, SAND DEPTH.

R=REAR OF LOT
F=FRONT OF LOT



DETAILS OF WEIR OUTLET MICRO-BIORETENTION

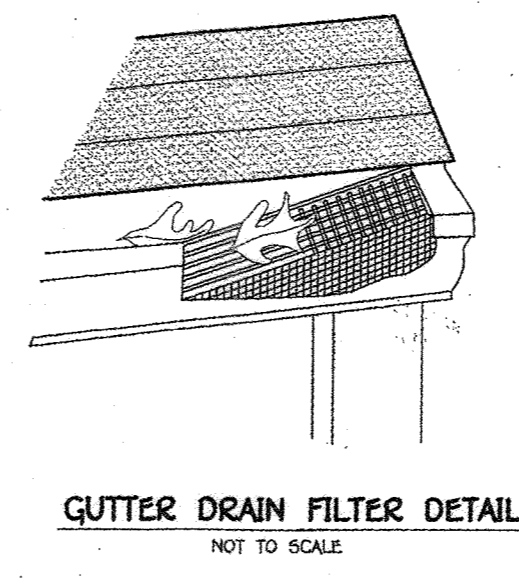
TEST PIT #	DEPTH	NOTES
B-1	11 FT	NO ROCK OR WATER
B-2	11 FT	NO ROCK OR WATER
B-3	11 FT	NO ROCK OR WATER
B-4	11 FT	NO ROCK OR WATER
B-5	11 FT	NO ROCK OR WATER
B-6	11 FT	NO ROCK OR WATER
B-7	11 FT	NO ROCK OR WATER
B-8	11 FT	NO ROCK OR WATER
B-9	11 FT	NO ROCK OR WATER
B-10	11 FT	NO ROCK OR WATER
B-11	11 FT	NO ROCK OR WATER
B-12	11 FT	NO ROCK OR WATER
B-13	11 FT	NO ROCK OR WATER
B-14	11 FT	NO ROCK OR WATER
B-15	11 FT	NO ROCK OR WATER

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

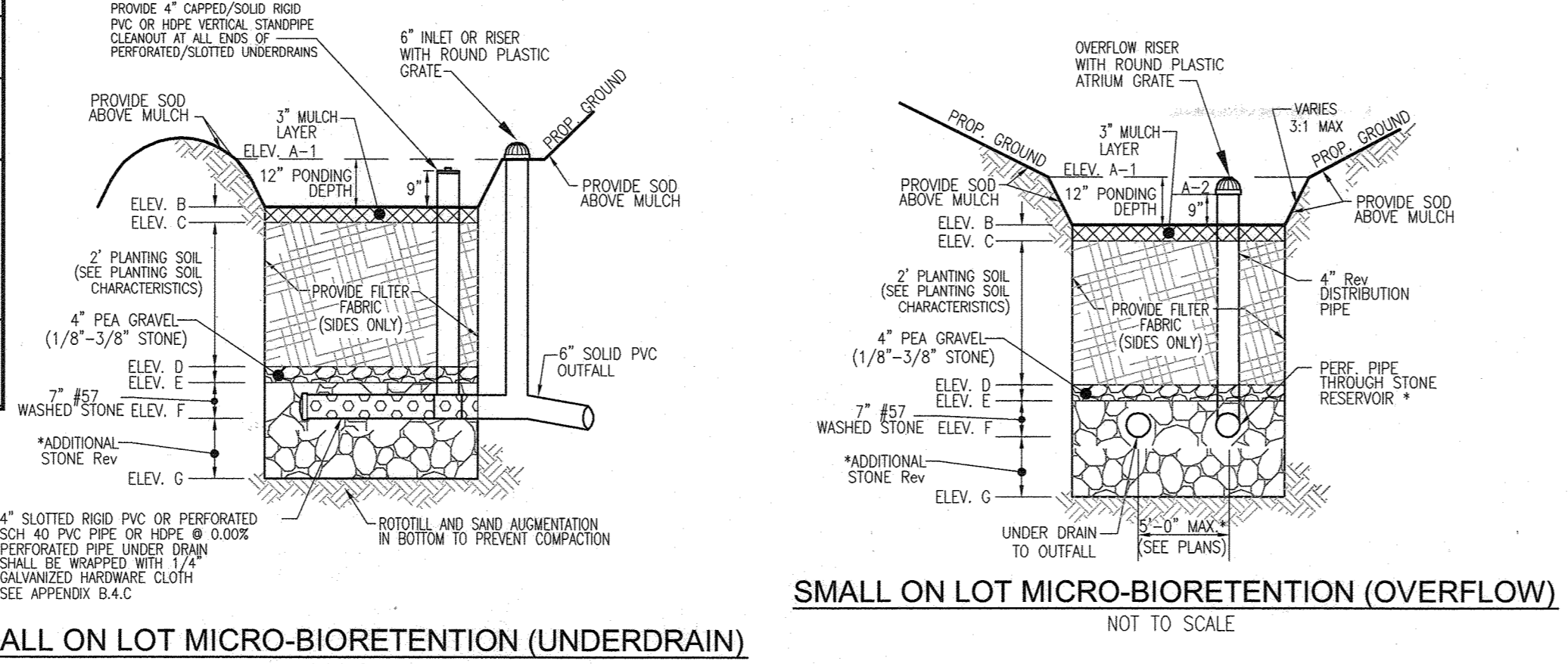
Material	Specification	Size	Notes
Plantings	see Appendix A, Table A.4	n/a	plantings are site-specific
Planting soil (2" to 4" deep)	loamy sand (60-65%) & compost (35-40%) or sandy loam (30%), coarse sand (30%) & compost (40%)	n/a	USDA soil types loamy sand or sandy loam; clay content < 5%
Organic content	Min. 10% by dry weight (ASTM D 2974)	n/a	
Mulch	shredded hardwood	n/a	aged 6 months, minimum to pine or wood chips
Pea gravel diaphragm	pea gravel; ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
Curtain drain	ornamental stone; washed cobbles	stone: 2" to 5"	
Geotextile		n/a	PE Type I nonwoven
Gravel (underdrains and infiltration berms)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" to 3/4")	
Underdrain piping	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/4-inch saturated hardware cloth.
Poured in place concrete (if required)	MSHA Mix No. 3; f'c = 3500 psi @ 28 days, normal weight, air-entrained, reinforcing to meet ASTM A615-60	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved State or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACT Code 350.R.89; vertical loading (14-10 or H-20); allowable horizontal loading (based on soil pressure); and analysis of potential cracking.
Sand	AASHTO M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonate or dolomite sand substitutions are acceptable. No "rock dust" can be used for sand.

MBR FACILITY #	ESD WSEL A	TOP MULCH B	TOP PLANT SOIL C	BOTTOM PLANT SOIL D	BOTTOM PEA GRAVEL E	INV PIPE (1) F	INV STONE G	SURFACE AREA SF	APPROX DIM	OWNER PRIVATE/PUBLIC	MAINTENANCE PRIVATE/PUBLIC/JOINT
1	409.30	408.30	408.05	406.05	405.72	405.14	404.39	226	SEE PLAN	PUBLIC	PRIVATE
2	415.50	414.50	414.25	412.25	411.92	411.34	410.59	180	SEE PLAN	PUBLIC	PRIVATE
3	413.00	412.00	411.75	409.75	409.42	408.84	408.09	332	SEE PLAN	PUBLIC	PRIVATE
4	409.00	408.00	407.75	405.75	405.42	404.84	404.09	271	SEE PLAN	PUBLIC	PRIVATE
5	400.00	399.00	398.75	396.75	396.42	395.84	395.09	227	SEE PLAN	PUBLIC	PRIVATE
6	381.50	380.50	380.25	378.25	377.92	377.34	376.59	233	SEE PLAN	PUBLIC	PRIVATE
7	379.00	378.00	377.75	375.75	375.42	374.84	374.09	388	SEE PLAN	PUBLIC	PRIVATE
*8	419.50	418.50	418.25	416.25	415.92	415.34	414.59	*	SEE PLAN	PUBLIC	JOINT
9	385.00	384.00	383.75	381.75	381.42	380.84	380.09	327	SEE PLAN	PUBLIC	PRIVATE

* EXISTING FACILITY CORRECTED UNDER F-20-064



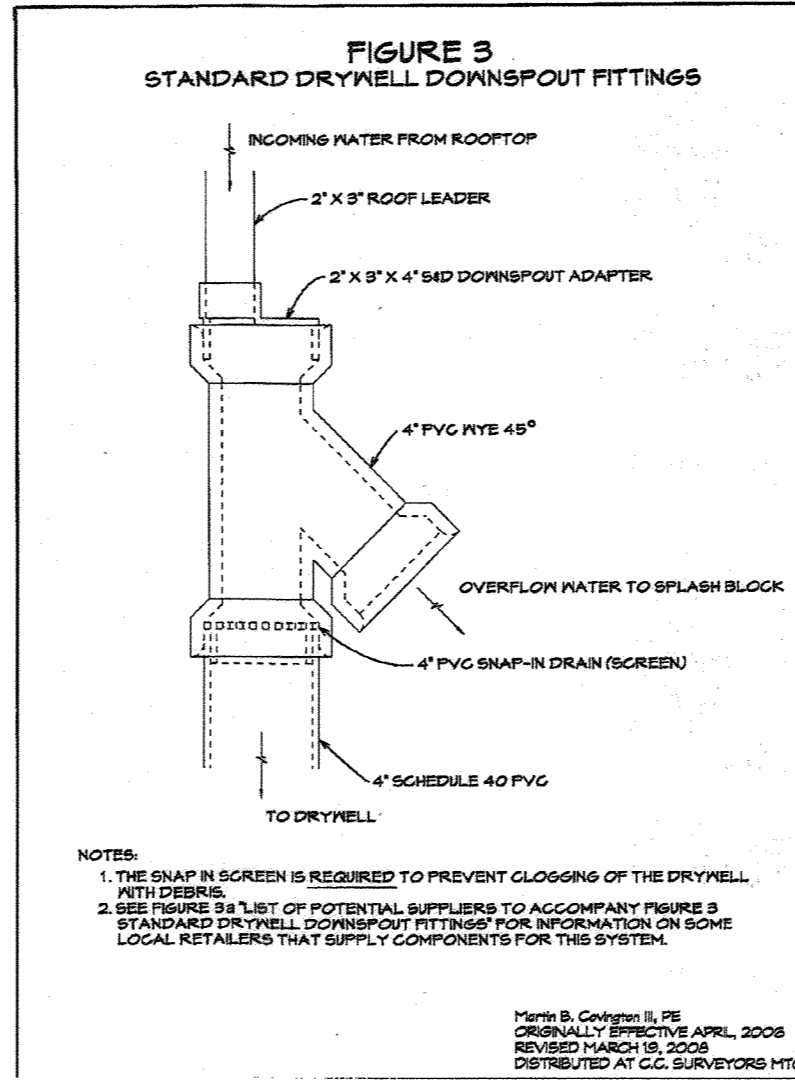
GUTTER DRAIN FILTER DETAIL NOT TO SCALE



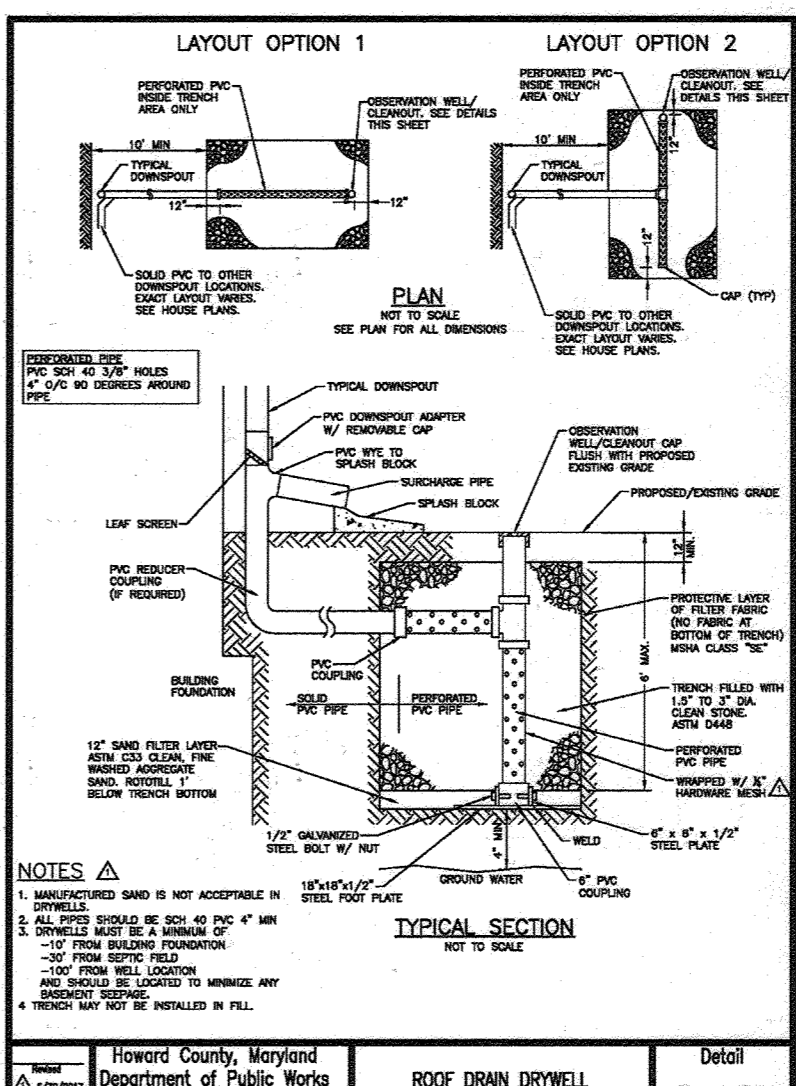
SMALL ON LOT MICRO-BIORETENTION (UNDERDRAIN) NOT TO SCALE *ADDITIONAL STONE AS APPLICABLE

SMALL ON LOT MICRO-BIORETENTION (OVERFLOW) NOT TO SCALE

- MICRO BIORETENTION NOTES:**
- ONLY THE SIDES OF MICRO BIORETENTION ARE TO BE WRAPPED IN FILTER FABRIC. FILTER FABRIC BETWEEN LAYER OR AT THE BOTTOM OF THE MICRO BIORETENTION WILL CAUSE THE MBR TO FAIL, AND THEREFORE SHALL NOT BE INSTALLED.
 - WRAP A PERFORATED MBR UNDERDRAIN PIPE WITH 1/4" MESH (4x4) OR SMALLER GALVANIZED HARDWARE CLOTH. SEE APPENDIX B.4.C.6, FOR SPEC. AND OPTIONS.
 - PROVIDE 5" MINIMUM SPACING BETWEEN UNDER DRAIN AND PERFORATED PIPE THROUGH STONE RESERVOIR OR SPACE PIPE EQUALLY ACROSS BOTTOM FOR SMALL BIOS. (SEE PLANS)



NOTES:
 1. THE SNAP IN SCREEN IS REQUIRED TO PREVENT CLOSING OF THE DRYWELL WITH DEBRIS.
 2. SEE FIGURE 3 LIST OF POTENTIAL SUPPLIERS TO ACCOMPANY FIGURE 3 STANDARD DRYWELL DOWNPOUT FITTING FOR INFORMATION ON SOME LOCAL RETAILERS THAT SELL COMPONENTS FOR THIS DEVICE.



REVISED SITE DEVELOPMENT PLAN
 STORMWATER MANAGEMENT
 MICRO-BIORETENTION
 CONSTRUCTION PLAN AND DETAILS
 RIVER BIRCH MANOR
 LOTS 1-7

L 18205 / F. 247
 TAX MAP: 17 GRID: 20
 2ND ELECTION DISTRICT
 DPZ REFERENCE: SEE SITE DATA

ZONED: R-20
 PARCEL: 0385
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

DESIGN BY: RHV
 DRAWN BY: ES
 CHECKED BY: RHV
 DATE: MARCH 2023
 SCALE: AS SHOWN
 W.O. NO.: 41656

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: 08-27-2024

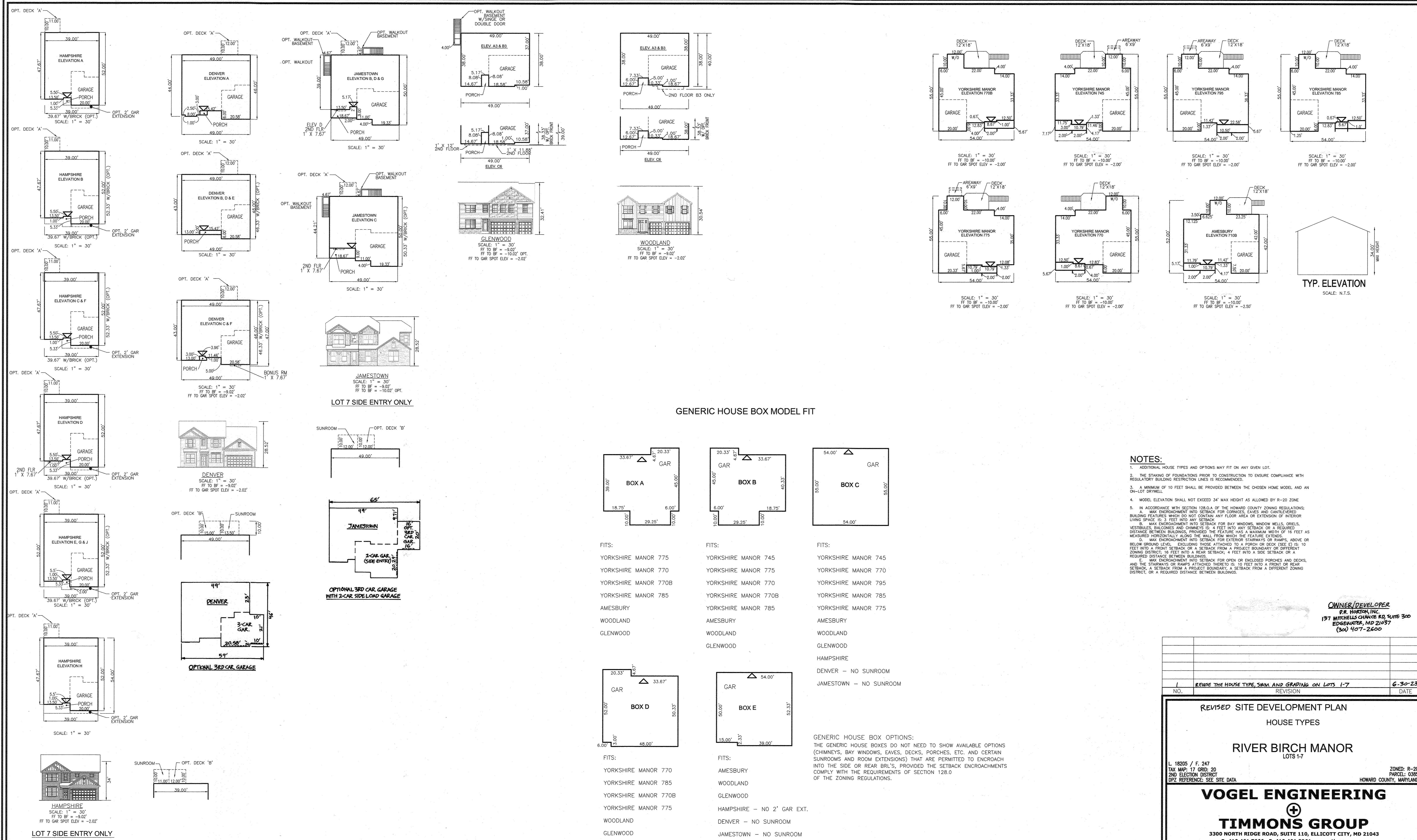
7 SHEET OF 9

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 8/17/23
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 8/21/23
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 8/21/23
 DIRECTOR DATE



NOTES:

- ADDITIONAL HOUSE TYPES AND OPTIONS MAY FIT ON ANY GIVEN LOT.
- THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTION LINES IS RECOMMENDED.
- A MINIMUM OF 10 FEET SHALL BE PROVIDED BETWEEN THE CHOSEN HOME MODEL AND AN ON-LOT DRYWELL.
- MODEL ELEVATION SHALL NOT EXCEED 34' MAX HEIGHT AS ALLOWED BY R-20 ZONE.
- IN ACCORDANCE WITH SECTION 128.0.A OF THE HOWARD COUNTY ZONING REGULATIONS, BUILDING FEATURES SHALL NOT ENCRUMB ANY FLOOR AREA OR EXTENSION OF INTERIOR LIVING SPACE IS 3 FEET INTO ANY SETBACK.
 - MAX ENCROACHMENT INTO SETBACK FOR BAY WINDOWS, WINDOW WELLS, ORIELS, VESTIBULES, BALCONIES AND CHIMNEYS IS: 4 FEET INTO ANY SETBACK OR A REQUIRED DISTANCE BETWEEN BUILDINGS, PROVIDED THE FEATURE HAS A MAXIMUM WIDTH OF 16 FEET AS MEASURED HORIZONTALLY ALONG THE WALL FROM WHICH THE FEATURE EXTENDS.
 - MAX ENCROACHMENT INTO SETBACK FOR EXTERIOR STAIRWAYS OR RAMPS, ABOVE OR BELOW GROUND LEVEL, EXCLUDING THOSE ATTACHED TO A PORCH OR DECK (SEE E) IS: 10 FEET INTO A FRONT SETBACK OR A SETBACK FROM A PROJECT BOUNDARY OR DIFFERENT ZONING DISTRICT; 16 FEET INTO A REAR SETBACK; 4 FEET INTO A SIDE SETBACK OR A REQUIRED DISTANCE BETWEEN BUILDINGS.
 - MAX ENCROACHMENT INTO SETBACK FOR OPEN OR ENCLOSED PORCHES AND DECKS, AND THE STAIRWAYS OR RAMPS ATTACHED THERE TO IS: 10 FEET INTO A FRONT OR REAR SETBACK; A SETBACK FROM A PROJECT BOUNDARY; A SETBACK FROM A DIFFERENT ZONING DISTRICT; OR A REQUIRED DISTANCE BETWEEN BUILDINGS.

OWNER/DEVELOPER
 P.R. HORTON, INC.
 137 MITCHELLS CHANCE RD, SUITE 300
 EDgewater, MD 21037
 (301) 407-2600

NO.	REVISION	DATE
1	REVISE THE HOUSE TYPE, SWM AND GRADING ON LOTS 1-7	6-30-23

REVISED SITE DEVELOPMENT PLAN
 HOUSE TYPES
RIVER BIRCH MANOR
 LOTS 1-7
 L: 18205 / F: 247
 TAX MAP: 17 GRID: 20
 2ND ELECTION DISTRICT
 OPZ REFERENCE: SEE SITE DATA
 ZONED: R-20
 PARCEL: 0385
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
 +
TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 16193 EXPIRATION DATE 08-27-2024

DESIGN BY: RHV
 DRAWN BY: ES
 CHECKED BY: RHV
 DATE: MARCH 2023
 SCALE: AS SHOWN
 W.O. NO.: 41656

9 SHEET OF 9

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: Paul Dimarco, DATE: 4/27/2023

Chief, Division of Land Development: DATE: 4/27/2023

Director: DATE: 5/1/2023