GENERAL NOTES THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE. THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING AT&T BGE (CONSTRUCTION SERVICES) ____ 410-637-8713 BGE (EMERGENCY) ___ 410-685-0123 BUREAU OF UTILITIES ___ 410-313-4900 COLONIAL PIPELINE CO. MISS UTILITY STATE HIGHWAY ADMINISTRATION VERIZON _____ ___1-800-743-0033 THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE. THIS SDP PLAN IS SUBJECT TO THE FOLLOWING DPZ FILES: WP-99-139, WP-04-095, F-05-040, CONTRACT NO. 14-3529-D, ECP-15-030, WP-16-160, WP-17-019, WP-17-100, WP-18-087, F-16-085 F-22-031 THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY ROBERT H. VOGEL ENGINEERING INC., DATED JANUARY 2014 AND ENGINEERING DRAWINGS OF RECORD OFFSITE TOPOGRAPHY AND HOWARD COUNTY GIS. THE PROJECT BOUNDARY SHOWN HEREON IS BASED ON A BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED JANUARY 2014. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK 10. 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. ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS, CEMETERIES, OR HISTORIC STRUCTURES 13. STORMWATER MANAGEMENT FOR THE PROJECT IS PROVIDED BY THE USE OF MICRO-SCALE PRACTICES IN ACCORDANCE WITH ENVIRONMENTAL SITE DESIGN CRITERIA. MICRO-SCALE PRACTICES INCLUDE MICRO-BIORETENTION (M-6) FACILITIES, BIO-SWALES (M-8) AS WELL AS GRAVEL TRENCHES ALONG THE USE-IN-COMMON DRIVEWAY THESE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED. 14. THE PROPOSED UNITS SHALL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM. 15. SHC ELEVATIONS ARE LOCATED AT THE PROPERTY LINE/EDGE OF EASEMENT. 16. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. WATER FOR THIS PROJECT SHALL BE FROM AN EXTENSION OF CONTRACT NO. 14-3529-D. SEWER FOR THIS PROJECT SHALL BE FROM THE EXTENSION OF CONTRACT NO. 14-3529-D. PUBLIC EXTENSION SHALL BE COMPLETED UNDER THE HOWARD COUNTY ADD PROCESS UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH ALL HOWARD COUNTY VOLUME II AND IV DETAILS. THE CONTRACTOR SHALL NOTIFY HOWARD COUNTY - UTILITIES, 48 HOURS IN ADVANCE OF WORK (410)-313-4958. WATER AND SEWER SERVICE WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE. ALLOCATIONS WILL BE GRANTED AT TIME OF ISSUANCE OF BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT - ALL WATER HOUSE CONNECTIONS SHALL BE OUTSIDE METER SETTING UNLESS OTHERWISE NOTED ON THE PLANS OR IN SPECIFICATIONS. 17. DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION, OR BUILDING AND GRADING PERMITS. 18. THE SUBJECT PROPERTY IS ZONED "R-20" IN ACCORDANCE WITH THE OCTOBER 2013 COMPREHENSIVE ZONING PLAN AND IS SUBJECT TO THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE 10/2/03 PER COUNCIL BILL 75-2003. THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT. 20. EXISTING UTILITIES ARE BASED ON ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND AND SEWER EXTENSION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. 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. 37C3 & 38A4 WERE USED FOR THIS 22. NO RARE, THREATENED OR ENDANGERED SPECIES OR THEIR HABITATS WERE OBSERVED ON THE PROPERTY 23. THERE IS NO "FLOODPLAIN" LOCATED ONSITE AS PER FEMA DFIRM MAPS APPROVED BY FEMA AND EFFECTIVE FOR COUNTY DEVELOPMENT RESTRICTIONS AS OF MAY 6, 2013. 24. FOREST STAND DELINEATION PLAN PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. C/O MR. JOHN CANOLES, IN AUGUST 2014. MR. CANOLES NOTED 4 SPECIMEN TREES ON THE PROJECT SITE. SPECIMEN TREE #1 WAS APPROVED FOR REMOVAL UNDER WP-16-160. 25. THERE ARE TWO AREAS OF WETLANDS PRESENT ON THE SITE. SYSTEM 'A' RUNS THROUGH THE CENTER OF THE SITE AND SYSTEM 'B' ENCROACHES ON THE EASTERN SIDE OF THE PROPERTY, PER ECO-SCIENCE PROFESSIONALS, INC. C/O MR. JOHN CANOLES, AUGUST 2014. 26. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS. SEE NOTE 25 AND 52. 27. APPROXIMATELY 0.15 AC. OF WETLANDS AND THEIR BUFFERS WILL BE IMPACTED BY THE CONSTRUCTION OF THE SITE. 28. A NOISE STUDY WAS PROVIDED AND APPROVED UNDER F-16-085. 29. A TRAFFIC STUDY IS NOT REQUIRED FOR THIS PROJECT. THIS PROJECT IS EXEMPT FROM AN ADEQUATE ROADS FACILITIES TEST STUDY. AS IT IS A MINOR SUBDIVISION 30. THERE ARE NO AREAS OF 25% STEEP SLOPES OR 15%-24,99% MODERATE SLOPES GREATER THAN 20,000 S.F. LOCATED ONSITE. 31. FOREST CONSERVATION REQUIREMENTS AS SET FORTH IN SECTION 16.1202 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED. THE FOREST CONSERVATION OBLIGATION TO BE FULFILLED BY THE PLACEMENT OF 1.45 ACRES INTO A RETENTION EASEMENT. THE REMAINING FOREST CONSERVATION OBLIGATIONS HAVE BEEN MET BY A FEE-IN-LIEU PAYMENT OF \$2,614,00 UNDER, F-16-085 32. A LANDSCAPE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED IN THE AMOUNT OF \$8,550.00 FOR THE REQUIRED 2 SHADE TREES (10 PERIMETER AND 2 WP-16-160 REPLACEMENT SPECIMEN TREES), 32 EVERGREEN AND 5 SHRUBS (TRASH PAI FINANCIAL SURFTY SHALL BE POSTED WITH THE BUILDERS GRADING PERMIT. SEE NOTE 34. 33. REPLACEMENT SPECIMEN TREE PLANTINGS ARE PROVIDED FOR THIS PROJECT IN ACCORDANCE WITH WP-16-160. SPECIMEN TREE REPLACEMENT FINANCIAL SURETY FOR THE REQUIRED 2 SHADE TREES SHALL BE POSTED AS PART OF THE BUILDERS GRADING PERMIT. SEE NOTE 32 34. LANDSCAPING SURETY BREAKDOWN BY LOT -LOT 5: 5 SHADE (\$1,500), 32 EVERGREENS (\$4,800) AND 5 SHRUBS (\$150) -LOT 6: 2 SHADE TREES (\$600) -LOT 7: 5 SHADE TREES (\$1,500) SEE NOTE 32. 35. ALL DRIVEWAY ENTRANCES SHALL UTILIZE HOWARD COUNTY STANDARD DETAIL NO. R-6.06. 36. DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS a) WIDTH- 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE). b) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING. (1-1 1/2" MIN.) c) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% CHANGE AND MINIMUM OF 45-FOOT TURNING RADIUS. d) STRUCTURES (CULVERT/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING). e) DRAINAGE ELEMENTS-CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE. f) STRUCTURE CLEARANCES-MINIMUM 12 FEET. g) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE. 37. RUXTON DRIVE IS CLASSIFIED AS A LOCAL ROAD. SITE ACCESS SHALL BE VIA A USE-IN-COMMON DRIVEWAY. EXISTING DRIVEWAY ENTRANCE SHALL BE UTILIZED. 38. LOTS 5&6 WILL UTILIZE A USE-IN-COMMON DRIVEWAY. A USE-IN-COMMON MAINTENANCE AGREEMENT FOR THE SHARED DRIVEWAY WAS RECORDED SIMULTANEOUSLY WITH THE FINAL PLAN (F-16-085). 39. FLAG AND PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE FOR LOTS 5&6 ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT ONTO THE PIPESTEM LOT DRIVEWAY. TRASH & RECYCLING COLLECTION WILL BE AT THE COUNTY ROADWAYS WITHIN FIVE FEET (5') OF THE COUNTY ROADWAY. 40. A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT TH DRIVEWAY ACCESS POINT ONTO RUXTON DRIVE AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES. THE R1-1 (STOP) SIGN AND THE STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED. 41. ALL WATER HOUSE CONNECTIONS SHALL BE OUTSIDE METER SETTING UNLESS OTHERWISE NOTES ON THE PLANS OR IN SPECIFICATIONS. 42. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE 43, SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST. 44. CERTIFIED TEST PITS HAVE BEEN PROVIDED TO VERIFY THAT GROUNDWATER AND ROCK ARE NOT PRESENT AT RAIN GARDEN AND MICRO-BIORETENTION LOCATIONS. OPEN TEST PITS WERE OBSERVED BY ROBERT H. VOGEL ENGINEERING ON JULY, 2015 AND INFORMATION REGARDING THE FINDINGS IS LOCATED IN THE SWM REPORT AND ON THE TEST PIT PLAN. 45. IN ACCORDANCE WITH SECTION 16.121(A)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THI OPEN SPACE REQUIREMENTS FOR THIS R-20 PROJECT (20,000 SF LOT) IS 6% OF GROSS AREA (4.20 AC. GROSS AREA X 6% = 0.252 AC.). OPEN SPACE PROVIDED UNDER F-16-085. 46. A PRE-SUBMISSION COMMUNITY MEETING WAS HELD ON AUGUST 24, 2015 AT THE ELKRIDGE LIBRARY MEETING ROOM. 47. THE ENVIRONMENTAL CONCEPT PLAN (ECP-15-030) WAS APPROVED PER LETTER DATED MAY 28, 2015. 48. THE FINAL PLAN (F-16-085) WAS APPROVED PER LETTER DATED MARCH 22, 2017. 49. IN ACCORDANCE WITH DESIGN MANUAL-VOLUME 3, CHAPTER 2 - SECTION 2.9.B. PARKING IS REQUIRED AT TWO (2) SPACES PER UNIT OFF STREET PARKING TO INCLUDE GARAGE SPACE, DRIVEWAY AND PARKING PADS. GARAGES COUNT AS A FULL SPACE. THE ONE (1) GARAGE SPACE MAY NOT BE CONVERTED TO LIVING SPACE AND SHALL ONLY BE UTILIZED FOR VEHICULAR PARKING SPACE, REFER TO PARKING TABULATION. 50. IN ACCORDACNE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS. BAY WINDOWS. CHIMNEYS OR FXTERIOR STAIRWAYS NOT MORE THAN 16 FFFT IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHÉS OR DECKS

OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK

3 X 10% OR 1 UNITS SHALL BE PROVIDED FOR THIS PROJECT UNDER THIS SDP-20-076.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

LOPMENT ENGINEERING DIVISION 🗘

CHIEF, DIVISION OF LAND DEVELOPMENT IN

In ana

MIHU'S ARE REQUIRED FOR THIS PROJECT. AT LEAST 10% OF DWELLINGS SHALL BE MODERATE INCOME HOUSING UNITS (MIHU).

1-800-252-1133

_410-795-1390

1-800-257-777

TOTAL SURETY= \$ 6,450

TOTAL SURETY= \$ 1,500

NOTES

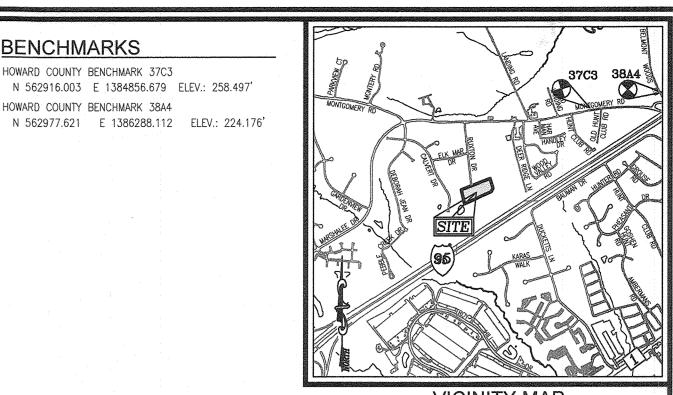
1. ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED, REFER TO HOWARD COUNTY DETAILS W-3.28 OUTSIDE METER SETTINGS.

SITE DEVELOPMENT PLAN FERRON PROPERTY

HOWARD COUNTY, MD

	COORDINATE TABLE								
	NO. NORTH EAST								
्ट्र	1745	560946.3447	1382163.2286						
	1746	561194.1981	1382729.2956						
	10026	561239.1848	1382095.2354						
	10036	561469.1743	1382704.3873						
	10038	561267.1602	1382759.1626						

MINIMUM LOT SIZE CHART



VICINITY MAP SCALE: 1"=2000' ADC MAP COORDINATE: 35/B2

SHEET INDEX						
DESCRIPTION	SHEET NO.					
COVER SHEET	1 OF 8					
SITE LAYOUT PLAN & HOUSE DETAILS	2 OF 8					
GRADING, SOIL EROSION AND SEDIMENT CONTROL PLAN	3 OF 8					
SOIL EROSION AND SEDIMENT CONTROL PLAN - NOTES & DETAILS	4 OF 8					
SITE DETAILS AND UTILITY NOTES AND PROFILES	5 OF 8					
LANDSCAPE & NOISE WALL PLAN	6 OF 8					
STORMWATER MANAGEMENT DRAINAGE AREA MAP	7 OF 8					
ESD STORMWATER MANAGEMENT NOTES & DETAILS	8 OF 8					

MIHU AGREEMENT PLEASE NOTE THAT ALL NEW LOTS/RESIDENTIAL UNITS IN THIS SUBDIVISION (LOTS 5-7) 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

MODERATE INCOME HOUSING UNITS (MIHU) ALLOCATION EXEMPTIONS TRACKING								
TOTAL NUMBER OF LOTS/UNITS PROPOSED	3							
NUMBER OF MIHU REQUIRED	10% OF 1 UNIT							
NUMBER OF MIHU PROVIDED ONSITE (EXEMPT FROM APFO ALLOCATIONS)	0							
NUMBER OF APFO ALLOCATIONS REQUIRED (REMAINING LOTS/UNITS)	3							
MIHU FEE-IN-LIEU (INDICATE LOT/UNIT NUMBERS)	LOTS 5-7							

OWNERS LOT 6 KARL FERRON MEGAN FERRON 1019 W LEXINGTON ST BALTIMORE, MD 21223

DEVELOPER JANICE MONTAGUE 4 BEASMAN CT 7004 BARNETT LANE, UNIT 321

OWNERS AVA MONTAGUE

LOT 7 JANICE MONTAGUE KOREY JACKSON 7004 BARNETT LANE, UNIT 32

ELKRIDGE, MARYLAND 21075 RANDALLSTOWN, MD 21133 ELKRIDGE, MARYLAND 21075

> SITE DEVELOPMENT PLAN **COVER SHEET**

REVISION

FERRON PROPERTY LOTS 5 - 7

TAX MAP 37 BLOCK 12 1ST ELECTION DISTRICT

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: DRAWN BY:

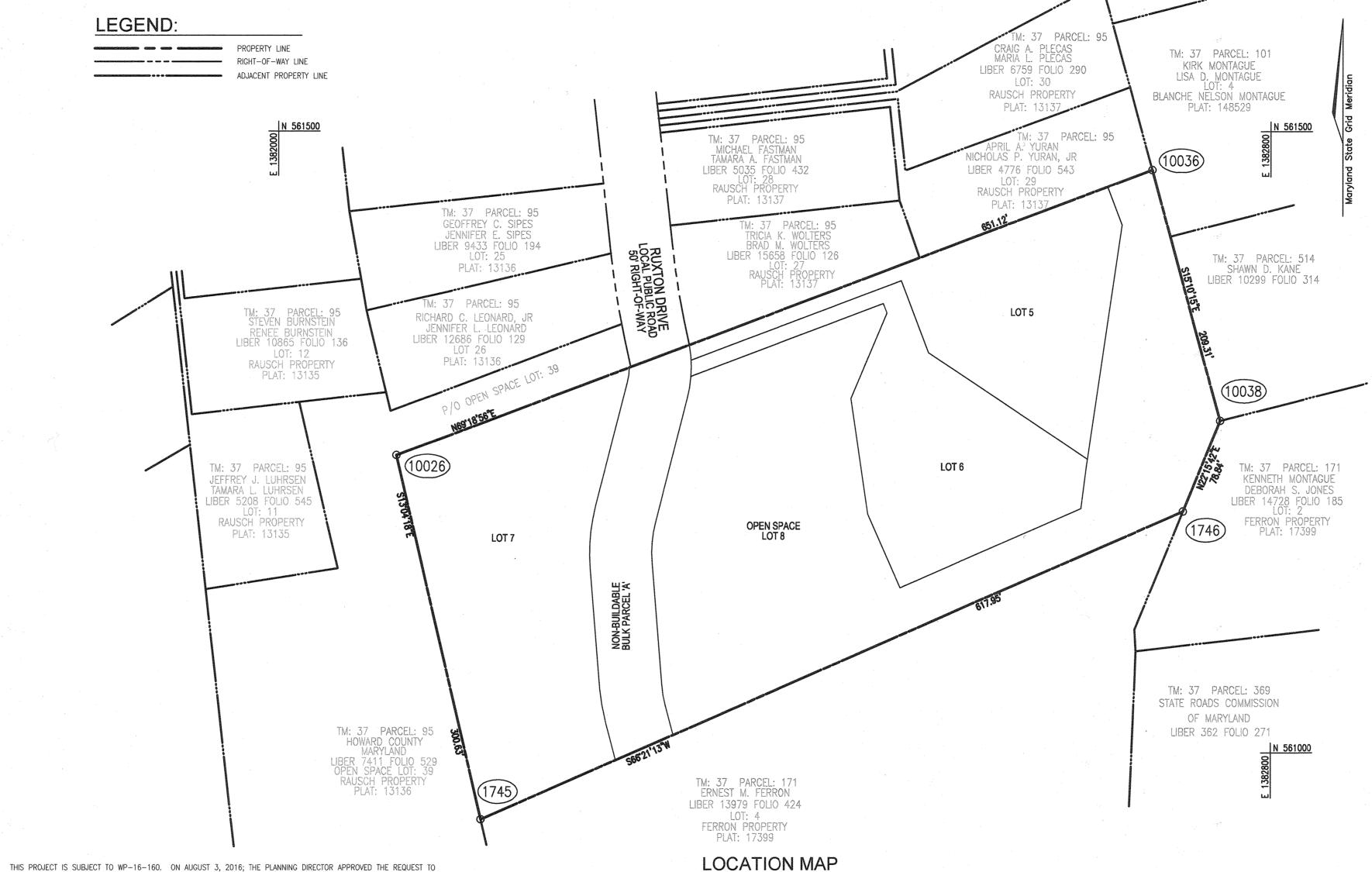
CHECKED BY: SCALE:

DATE: OCTOBER 2021 AS SHOWN W.O. NO.: 13-28

OT GROSS AREA PIPESTEM AREA NET AREA MIN. LOT SIZE 25,170 SF 2,159 SF 23,011 SF 20,000 SF 26,532 SF 2,204 SF 24,328 SF 20,000 SF **BENCHMARKS**

HOWARD COUNTY BENCHMARK 37C3

HOWARD COUNTY BENCHMARK 38A4



WAIVE SECTION 16.1205(A)(7) TO ALLOW FOR THE REMOVAL OF ONE (1) SPECIMEN TREE WHICH HAS BEEN IDENTIFIED TO BE LOCATED WITHIN THE BOUNDARY OF THIS SITE AND SECTION 16.116(A)(I) WHICH PROHIBITS GRADING, REMOVAL OF VEGETATIVE COVER AND TREES, PAVING AND NEW STRUCTURES WITHIN 25 FEET OF A WETLAND AND THEIR BUFFERS. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS 1. REMOVAL OF ONE SPECIMEN TREE AND PROVIDE TWO 3" CALIPER NATIVE TREES ALONG THE NORTHERN PROPERTY

LINE IN THE VICINITY OF RAUSCH PROPERTY SUBDIVISION LOT 29 (SECTION 16.1205 (a)(7)).

2. THE DEVELOPER IS REQUIRED TO OBTAIN ALL REQUIRED AUTHORIZATIONS AND PERMITS FROM THE U.S. ARMY CORPS OF ENGINEERS AND/OR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT. 3. NO DISTURBANCE IS PERMITTED BEYOND THE LIMIT OF DISTURBANCE AS SHOWN ON THE ALTERNATIVE COMPLIANCE EXHIBIT UNLESS IT CAN BE DEMONSTRATED BY THE APPLICANT TO BE JUSTIFIED. BEST MANAGEMENT PRACTICES FOR

GRADING AND DRIVEWAY CONSTRUCTION SHALL BE USED BY THE CONTRACTOR TO LIMIT THE DISTURBANCE (SECTION 16.116(a)(i)). THIS PROJECT IS SUBJECT TO WP-17-019. ON OCTOBER 11, 2016; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR AN ALTERNATIVE COMPLIANCE OF SECTION 16.127(c)(4)(i) WHICH REQUIRES A SHARED USE-IN-COMMON DRIVEWAY FOR ALL PROPOSE RESIDENTIAL INFILL LOTS, AND FROM SECTION16.144(r)(3) WHICH REQUIRES THE SUBMISSION OF ADDITIONAL INFORMATION

WITHIN 45 DAYS OF THE REQUEST. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: THE REVISED PLANS MUST BE SUBMITTED WITHIN 30-DAYS, ON OR BEFORE NOVEMBER 10, 2016. ON THE FINAL PLAN (F-16-085) AND ALL SUBSEQUENT PLANS AND/OR PLATS, PROVIDE A BRIEF DESCRIPTION OF ALTERNATIVE COMPLIANCE, WP-17-019, AS A GENERAL NOTE TO INCLUDE REQUESTS, SECTIONS OF REGULATIONS,

GENERAL ACTION AND DATE 54. THIS PROJECT IS SUBJECT TO WP-17-100. ON APRIL 11, 2017; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR AN ALTERNATIVE COMPLIANCE OF SECTION 14.144(p) WHICH REQUIRES THE POSTING OF FINANCIAL OBLIGATIONS AND PAVEMENT OF FEES WITHIN 120 DAYS OF APPROVAL; AND FROM SECTION 16.144(a) WHICH REQUIRES THE SUBMISSION OF THE ORIGINAL MYLARS WITHIN 180-DAYS OF APPROVAL. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

THE DEVELOPER'S AGREEMENT AND PAYMENT OF FEES MUST BE COMPLETED ON OR BEFORE (90-DAYS FROM THE APPROVAL OF THIS LETTER) ON OR BEFORE JULY 10, 2017. 2. THE ORIGINAL FINAL PLAT MUST BE SUBMITTED FOR SIGNATURE APPROVAL AND RECORDATION ON OR BEFORE (90-DAYS FROM THE APPROVAL DATE OF THIS LETTER) ON OR BEFORE JULY 10, 2017.

ON THE FINAL PLAN (F-16-085) AND ALL SUBSEQUENT PLANS AND/OR PLATS, PROVIDE A BRIEF DESCRIPTION OF ALTERNATIVE COMPLIANCE, WP-17-100, AS A GENERAL NOTE TO INCLUDE REQUESTS, SECTIONS OF THE REGULATIONS, ACTION AND DATE. THIS PROJECT IS SUBJECT TO WP-18-087. ON MARCH 28, 2018: THE PLANNING DIRECTIOR APPROVED THE REQUEST FOR AN ALTERNATIVE COMPLIANCE OF SECTION 16.144(q) WHICH REQUIRES THE SUBMISSION OF THE ORIGINAL MYLARS WITHIN 180-DAYS OF APPROVAL, AND SECTION 16.144(r)(6) WHICH VOIDS THE FINAL PLAT IF THE PLANS ARE NOT SUBMITTED WITHIN 180 DAYS OF THE FINAL

PLAN APPROVAL. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: THE RED-LINE TO THE SUPPLEMENTAL PLAN MUST BE COMPLETED ON OR BEFORE APRIL 30, 2018. A GENERAL NOTE SHOULD BE ADDED ON BOTH THE SUPPLEMENTAL PLAN AND TEH FINAL PLAT THAT EXPLAINS THE REASON FOR THE CHANGE IN THE ACCESS, AND THAT NON-BUILDABLE BULK PARCEL A AND THE 50' USE-IN-COMMON ACCESS EASEMENT AREA MAY BE CONVERTED TO A PUBLIC ROAD UPON THE RESUBDIVISION OF LOT 4, OR IF A PUBLIC ROAD IS NOT BUILT FOR A RESUBDIVISION OF LOT 4 THAT THE MINIMUM PIPESTEM FRONTAGE STRIPS BE CREATED AT THAT TIME FOR FERRON PROPERTY LOTS 5, 6 AND 7 ONTO RUXTON DRIVE.

THE ORIGINAL FINAL PLAT MUST BE SUBMITTED FOR SIGNATURE APPROVAL AND RECORDATION ON OR BEFORE JUNE 7, 2018. ON THE FINAL PLAN (F-16-085) AND ALL SUBSEQUENT PLANS AND/OR PLATS, PROVIDE A BRIEF DESCRIPTION OF ALTERNATIVE COMPLIANCE, WP-18-087, AS A GENERAL NOTE TO INCLUDE REQUESTS, SECTIONS OF THE REGULATIONS, ACTION AND DATE. 56. THIS PROJECT IS SUBJECT TO A DESIGN MANUAL WAIVER (DMW). ON APRIL 19, 2022, THE DIVISION CHIEF OF THE DEPARTMENT OF PUBLIC WORKS, UTILITY DESIGN DIVISION CONDITIONALLY APPROVED THE REQUEST TO WAIVE THE GRAVITY CELLAR SERVICE REQUIREMENT OF DESIGN MANUAL VOLUME 11 SEC. 4.3. b. FOR FERRON PROPERTY LOTS 5 AND 6.

SITE ANALYSIS DATA CHART

A. TOTAL PROJECT AREA: B. AREA OF PLAN SUBMISSION: 2.15 AC. C. LIMIT OF DISTURBED AREA: 2.00 AC. D. PRESENT ZONING DESIGNATION; R-20 E. PROPOSED USES FOR SITE AND STRUCTURES: RESIDENTIAL SINGLE FAMILY DETACHED (SFD) HOMES F. FLOOR SPACE ON EACH LEVEL

OF BUILDING PER USE: G. TOTAL NUMBER OF UNITS ALLOWED 3 (LOTS 5-7) 3 BUILDABLE (LOTS 5-7) H. TOTAL NUMBER OF UNITS PROPOSED: I. MAXIMUM NUMBER OF EMPLOYEES, TENANTS ON SITE PER USE:

BY HO.CO. ZONING REGULATIONS SEE TABULATION HEREON K. NUMBER OF PARKING SPACES PROVIDED SEE PARKING TABULATION HEREON

J. NUMBER OF PARKING SPACES REQUIRED

Q. FLOOR AREA RATIO:

6% OF 4.20 AC. (0.252 AC.) (F-16-085) L. OPEN SPACE ON SITE: M. AREA OF RECREATION OPEN SPACE

REPOLIED BY SUBDIVISION & LAND DEVELOPMENT REGULATIONS N. BUILDING COVERAGE ON SITE; WP-99-139. WP-04-095, F-05-040, O. DPZ FILE REFERENCES: CONT. 14-3529-D, ECP-15-030 F-16-085, WP-16-160, WP-17-019

WP-17-100, WP-18-087, F-22-031 P. ANY OTHER INFORMATION WHICH MAY TAX MAP 37, BLOCK 12, PARCEL 171 1ST ELEVTION DISTRICT

SCALE: 1"= 60'

SCALE 1"=60'

PARKING TABULATION: TOTAL NUMBER OF DWELLING UNITS PROPOSED: 3 (LOTS 5-7)

TOTAL PARKING REQUIRED: 8 (3 X 2.5)

OFF-STREET PARKING SPACES REQUIRED: 6 (2 SPACES PER UNIT) VISITOR / GUEST PARKING SPACES REQUIRED: 2 (0.5 SPACES PER UNIT) PARKING SPACES PROVIDED: SFD = 2 GARAGE/2 DRIVEWAY

2 SPACE IN GARAGE = 2 SPACES (FOR 1 UNITS) 2 SPACES ON DRIVEWAY = 6 SPACES (FOR 3 UNITS) TOTAL PARKING SPACES PROVIDED: = 8 SPACES OFF-STREET VISITOR / GUEST PARKING SPACES PROVIDED: REFER TO PROVIDED EXCESS ABOVE (0.5 PROVIDED PER UNIT)

PERMIT INFORMATION CHART LOTS/PARCEL # SECTION/AREA FFRRON PROPERTY 5-7 / 171 N/A TAX MAP | ELECT. DIST. | CENSUS TR. PLAT # OR L/F | BLOCK NO. | ZONE 601103 1ST 24727-24729 **26074-26075**

LOT 8 O.S. LOT 8 - RUXTON DR. (1) BIO-SWALE (M-8), (1) GRAVEL TRENCH (M-5)

STORMWATER MANAGEMENT PRACTICE CHART

ESD PRACTICE

1) MICRO BIO-RETENTION (M-6)

) MICRO BIO-RETENTION (M-6)

MICRO BIO-RETENTION (M-6)

STREET ADDRESS

LOT 6 6467 RUXTON DRIVE

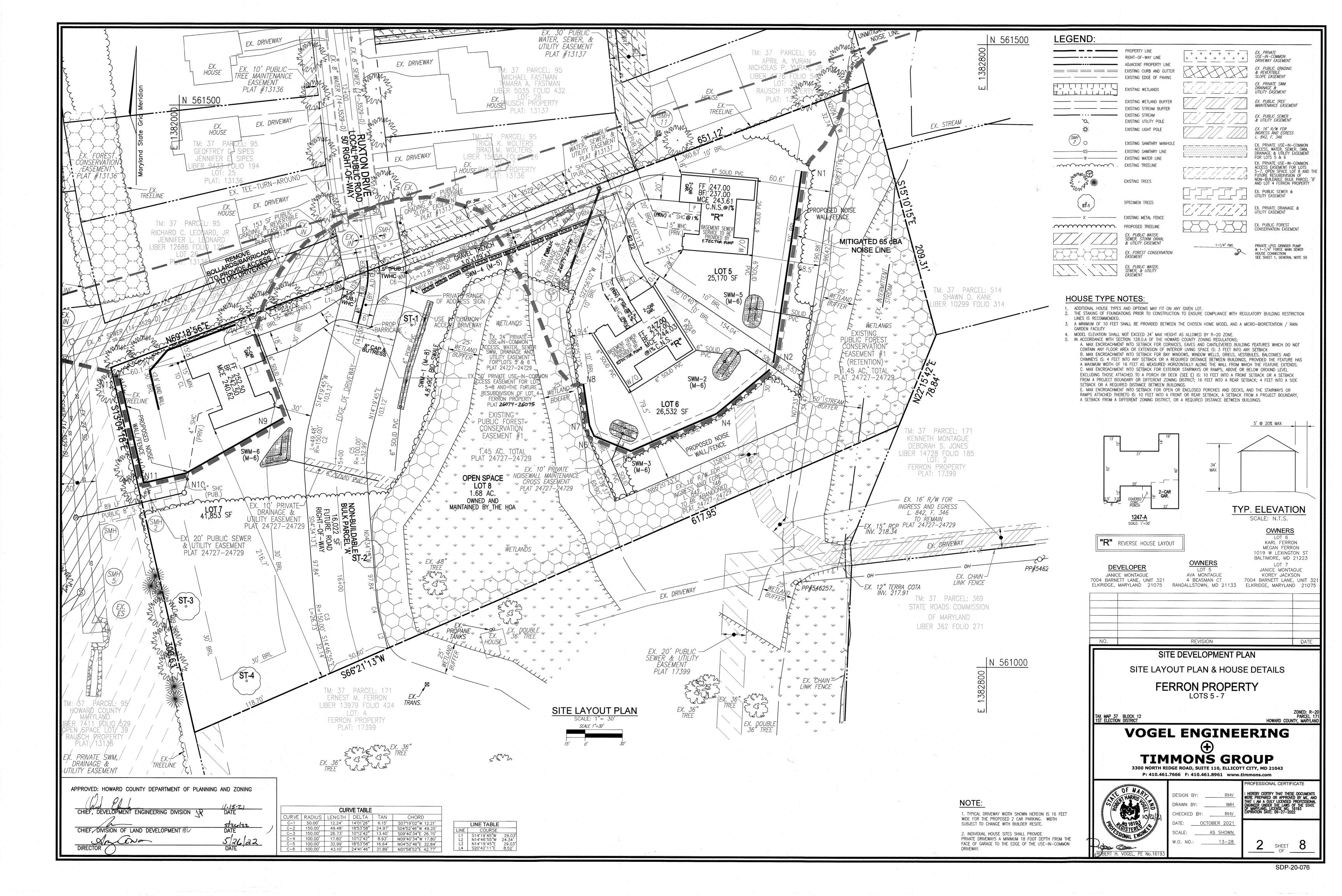
LOT 7 6460 RUXTON DRIVE

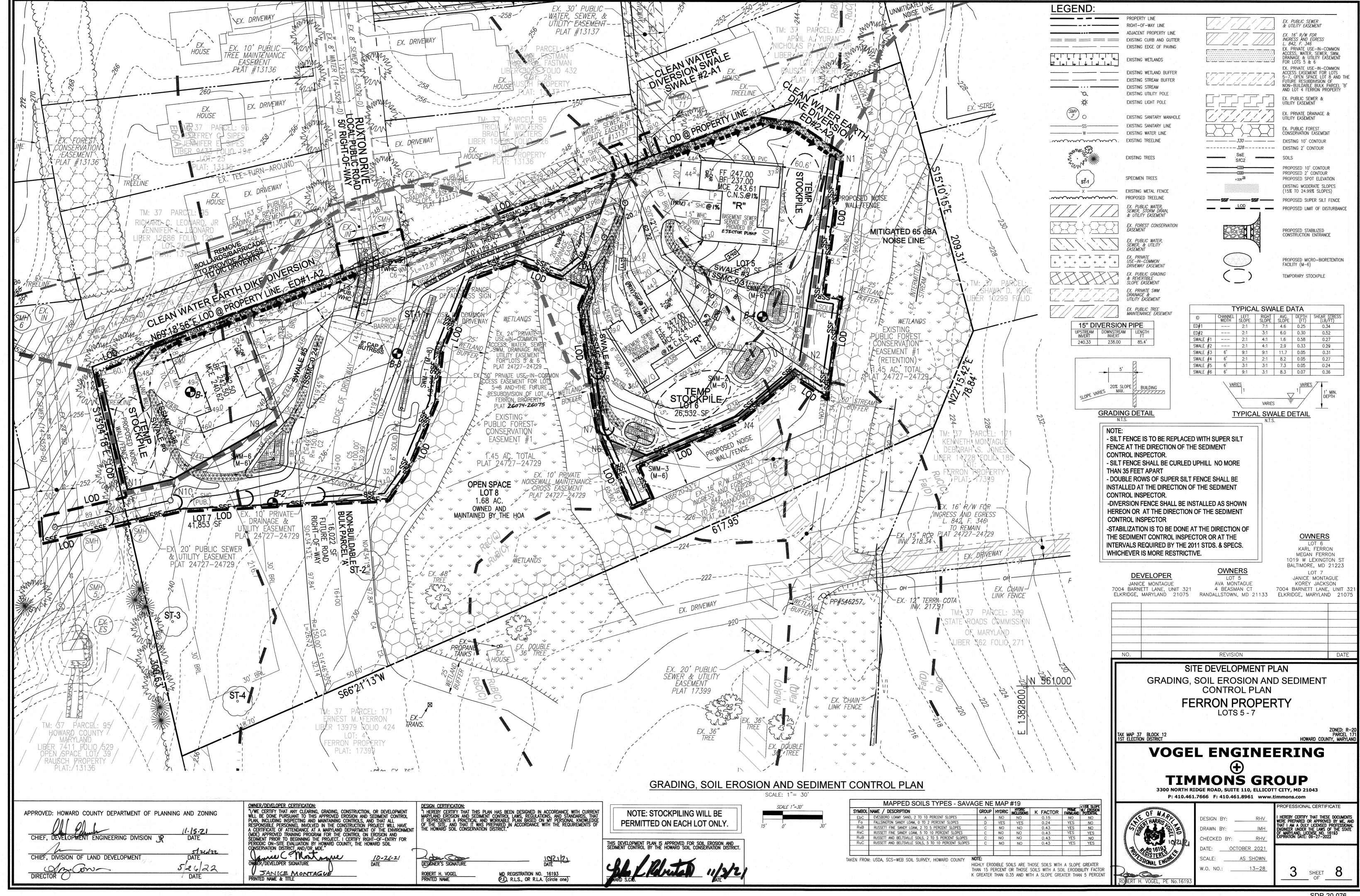
6463 RUXTON DRIVE

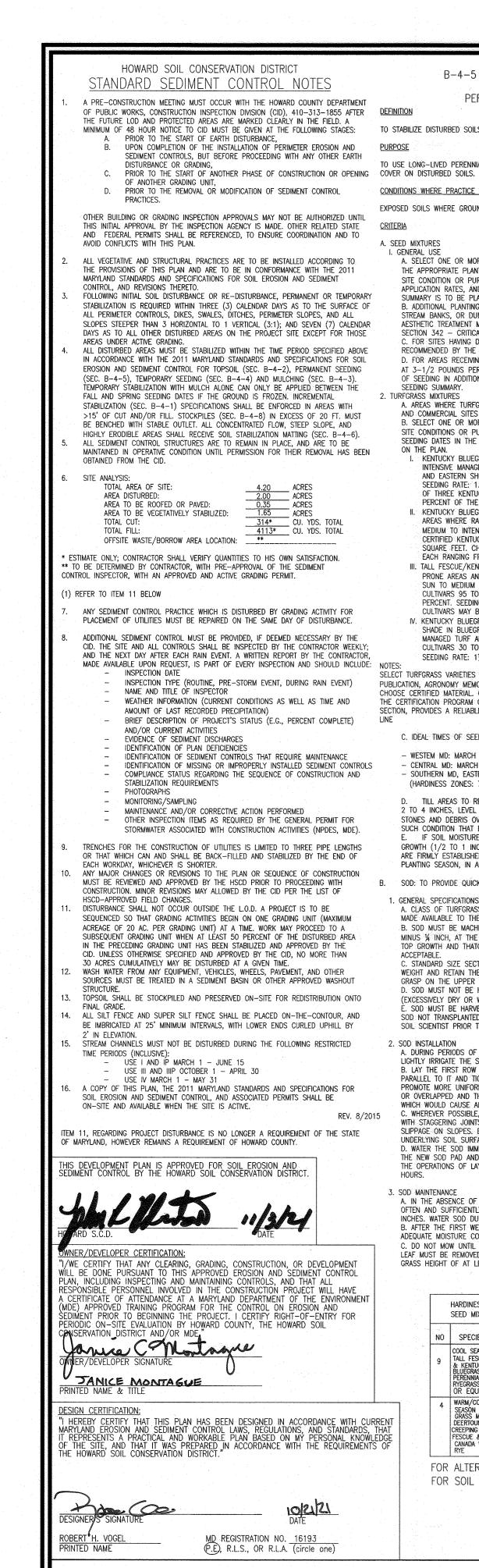
SHEET

HOWARD COUNTY, MARYLA

DATE







* ESTIMATE ONLY; CONTRACTOR SHALL VERIFY QUANTITIES TO HIS OWN SATISFACTION ** TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE CID. THE SITE AND ALL CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CONTRACTOR MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE: NOTES: INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT) WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, MDE). TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE HSCD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR REVISIONS MAY ALLOWED BY THE CID PER THE LIST OF DISTURBANCE SHALL NOT OCCUR OUTSIDE THE L.O.D. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A INT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE CID LINIESS OTHERWISE SPECIFIED AND APPROVED BY THE CID, NO MORE THAN WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR, AND BE IMBRICATED AT 25' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED A COPY OF THIS PLAN. THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND ASSOCIATED PERMITS SHALL BE ITEM 11, REGARDING PROJECT DISTURBANCE IS NO LONGER A REQUIREMENT OF THE STATE "I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL AN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

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B-4-5 STANDARDS AND SPECIFICATIONS FAR PERMANENT STABILIZATION

TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION

TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND

CONDITIONS WHERE PRACTICE APPLIES

EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE 8.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE 8.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE 8.2. ENTER SELECTED MIXTURE(S APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN. B. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING

. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY D. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3-1/2 POUNDS PER 1000 SQUARE FEFT (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT

A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THI SITE CONDITIONS OR PURPOSE ENTER SELECTED MIXTURE(S) APPLICATION RATES AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED

KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE RECOMMENDED CERTIFIED KENTUCKY BLUECRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT. I. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN

AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/ CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT. III. TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FUI SUN TO MEDIUM SHADE RECOMMENDED MIXTURE INCLUDES CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED. IV. KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH

SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT SEEDING RATE: 11/2 TO 3 POUNDS PER 1000 SQUARE FEET.

SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND" THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC

C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES

WESTEM MD: MARCH 15 TO JUNE 1, AUGUST ITO OCTOBER 1 (HARDINESS ZONES: 5B, 6A) - CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B) SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15

TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES. LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 11/4 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) LINTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

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

I. GENERAL SPECIFICATIONS A. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR B. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH, PLUS OR MINUS 14 INCH, AT THE TIME OF CUTTING, MEASUREMENT FOR THICKNESS MUST EXCLU TOP GROWTH AND THATCH, BROKEN PADS AND TOM OR UNEVEN ENDS WILL NOT BE

STANDARD SIZE SECTIONS OF SOD MUST BE STRONG FNOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION. D. SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL. SOD MUST BE HARVESTÉD, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR

SOIL SCIENTIST PRIOR TO ITS INSTALLATION. 2. SOD INSTALLATION

A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD. B. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED Parallel to it and tightly wedged against each other. Stagger Lateral Joints to PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS. C. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE. . WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT

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

HARDINESS ZONE (FROM FIGURE B.3): ZONE 6b

K.B. 40 LB / AC AUG 15 TO

SEED MIXTURE (FROM TABLE B.3):

NO SPECIES RATE (LB/AC) SEEDING DATES

COOL SEASON T.F. 60 LB / AC MAR 1 TO

P.R. 20 LB / AC

WARM/COOL DT 15 LB / AC MAR 1

SEASON CRF 20 LB / AC MAY 16 TO

CREEPING RED FESCUE & CANADA WILD RYE

5/26/22

5/26/22

GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED. PERMANENT SEEDING SUMMARY

JUNE 15

FOR SOIL EROSION AND SEDIMENT CONTROL - PAGES B.26 - B.32

SEEDING

FOR ALTERNATES, REFER TO THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS

EITHER PERMANENT OR TEMPORARY

SEDIMENT CONTROL NOTES AND/OR

INSPECTOR REGARDLESS OF

SEEDING SPECIFICATIONS.

DAYS/DATES IN THE STANDARD

STABILIZATION IS TO BE APPLIED AT THE

DIRECTION OF THE SEDIMENT CONTROL

45 LB/AC 90 LB/AC 90 LB/AC 2 TONS/AC

1000 SF) 1000 SF) 1000 SF) 1000 SF)

11/4-1/2 IN. (1 LB PER (2 LB PER (2 LB PER (90 LB PER

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

THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION <u>Purpose</u>

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

CONDITIONS WHERE PRACTICE APPLIES WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

A. SOIL PREPARATION

. TEMPORARY STABILIZATION A. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION FOUIPMENT AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT N THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS

C. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

A. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE: I. SOIL PH BETWEEN 6.0 AND 7.0. HE SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL

À MODERATE AMOUNT OF MOISTURE. AN EXCÉPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION B. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET

(GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD

THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES. D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST E. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDRED PREPARATION, TRACK SLOPES 3:1 OR FLATTER WITH TRACKED FOLIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR

C. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON

SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

THE ABOVE CONDITIONS

TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCEM HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-

OF THE SLOPE, LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE.

3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE: A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH. 3. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH O SUPPORT PLANTS OR FLIRNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT

C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH. D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE, 4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND 5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING

A. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SHIT LOAM, SANDY CLAY LOAM OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS TRASH, OR OTHER MATERIALS LARGER THAN 11/2 INCHES IN DIAMETER. B. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY. THISTLE, OR OTHERS . TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED

AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL. 6. TOPSOIL APPLICATION A. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING R. UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT. TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS C. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR

C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS I. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE, SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY, SOIL SAMPLES TAKEN FOR FINGINFFRING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES. . FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE B. MULCHING APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND

MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT

MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

WARRANTY OF THE PRODUCER. 3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE. 4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. 5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

B-4-3 STANDARDS AND SPECIFICATIONS SEEDING AND MULCHING

THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

CONDITIONS WHERE PRACTICE APPLIES TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE

A. SEEDING 1.SPECIFICATIONS

DEFINITION

A. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON AN PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE. B. MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SFFDING DATES ONLY IF THI GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND C. INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIFS.

DETAIL B-1 STABILIZED CONSTRUCTION

ENTRANCE

INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER, ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEFDING, NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE LINTH USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE D. SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO

PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS. A. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS. I. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TARLE 8.1 PERMANENT SEEDING TARLE 8.3 OR SITE-SPECIFIC SEEDING SHAMADIE II. APPLY SEED IN TWO DIRECTIONS. PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDIN

RATE IN EACH DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD B. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SC I. CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING, SEEDBED MUST BE FIRM AFTER PLANTING

II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION. C. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND I. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT

EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN: P205 (PHOSPHOROUS), 200 POUNDS PER ACRE; K20 (POTASSIUM), 200 POUNDS PER ACRE. II LIME USE ONLY GROUND AGRICULTURAL LIMESTONE (UP 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 III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION. IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

I. MULCH MATERIALS (IN ORDER OF PREFERENCE) A. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, LYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED. B. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE

PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE. I. WCFM IS TO 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 SLURRY. II. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS. III. WCFM MATERIALS ARE TO 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 MUST FORM A BLOTTER-LIKE GROUND COVER. ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS. IV. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE

V. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.

2 APPLICATION A. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING. B. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE. C. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

ANCHORING

A. PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON THE SIZE OF THE AREA AND EROSION HAZARD I. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR II. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

III. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II. TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IV. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET B-4-4 STANDARDS AND SPECIFICATIONS TEMPORARY STABILIZATION

TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

DEFINITION

DETAIL B-4-6-A

CONSTRUCTION SPECIFICATIONS

STABILIZATION MATTING

CHANNEL APPLICATION

ISOMETRIC VIEW

USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.

USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM)
NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC), MAT MUST HAVE UNIFORM THICKNESS AND
DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT
MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMIATION AND NON-INJURIOUS
TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF

SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES AUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1/2 INCHES WIDE AND BE A MINIMUM OF INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH

SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOI 2 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.

PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING

UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTERLINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MAT SMOOTHL' AND FIRMLY ON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.

OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS, OVERLAP ROLL ENDS B 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MA

STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

KEY-IN UPSTREAM END OF EACH MAT ROLL BY DIGGING A 6 INCH (MINIMUM) TRENCH AT UPSTREAM END OF THE MATTING, PLACING THE ROLL END IN THE TRENCH, STAPLING THE PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END.

OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND

2×2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONG THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.

SCE SCE

- EXISTING PAVEMENT

1

-EARTH FILL

-PIPE (SEE NOTE 6)

5.1

MIN. 6 IN OF 2 TO 3 IN AGGREGATE OVER LENGTH AND WIDTH OF ENTRANCE

50 FT MIN.

LENGTH

PROFILE

PLAN VIEW

PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN, VEHICLES

PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE, PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE, PROVIDE PIPE A SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINA TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.

PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.

MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR

TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

2011

REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.

PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT

ST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEE

TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS. CONDITIONS WHERE PRACTICE APPLIES

EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE 8.1 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. IF THIS SUMMARY IS NOT PUT ON THE PLAN

AND COMPLETED, THEN TABLE 8.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN. 2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY 3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.B AND MAINTAIN LINTIL THE NEXT SEEDING SEASON

TEMPORARY SEEDING SUMMARY

	HARDINESS Z SEED MIXTUR	FERTILIZER RATE	LIME RATE				
NO	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	(10-20-20)		
1	COOL SEASON ANNUAL RYEGRASS OR EQUAL	40 LB / AC	MAR 1 TO MAY 15 AUG 1 TO OCT 15	1/2 IN.	436 LB/AC (10 LB PER 1000 SF)	2 TONS/AC (90 LB PER 1000 SF)	
2	WARM SEASON FOXTAIL MILLET OR EQUAL	30 LB / AC	MAY 16 TO JUL 31	1/2 IN.			

FOR ALTERNATES, REFER TO THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL PAGE B.20, TABLE B.1. SHOWN ON SHEET X B-4-8 STANDARDS AND SPECIFICATIONS

FOR STOCKPILE AREA

A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES.

PURPOSE TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE

CONDITIONS WHERE PRACTICE APPLIES

STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL

THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN. THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO. STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING. RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT

CONTROL PRACTICE. ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING

CONCENTRATED FLOW IN A NON-EROSIVE MANNER. WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE. STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY

STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL TABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION. IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE SHEETING.

THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE MAINTAINED AT NO STEEPER THAN A 2:1 RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2:1 SLOPES, 30 FEET FOR 3:1 SLOPES, OR 40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.

SEQUENCE OF CONSTRUCTION

CONSTRUCTION NOTES

OBTAIN HOWARD COUNTY GRADING PERMIT. (WEEK 1) NOTIFY HOWARD COUNTY AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. (2 DAYS) CONDUCT A PRE-CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR PRIOR TO ANY LAND DISTURBANCE. (1 WEEK)

DETAIL E-3 SUPER SILT FENCE

CHAIN LINK FENCING -

WOVEN SLIT FILM GEOTEXTILE-

10 FT MAX.

ELEVATION

CROSS SECTION

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

GALVANIZED CHAIN LINK FENCE WITH WOVEN SLIT FILM GEOTEXTILE

INSTALL STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM, (1 DAY) WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB FOR INSTALLATION OF PERIMETER CONTROLS ONLY. (2 DAYS)

INSTALL TEMPORARY CLEAN WATER DIVERSION DIKES #1 AND #2, PUMP AROUND PRACTICE PIPE WITH FILTER BAG AND CLEAN WATER DIVERSION SWALES #1 AND #2. (1 WEEK) INSTALL SEDIMENT RIP RAP OUTFALL PAD AND END SECTION ES-1 AND CONSTRUCT THE 15" CULVERT, WORKING FROM DOWNSTREAM END TO UPSTREAM END. INSTALL INLET I-1 AND FLOW-THRU INLET PROTECTION (NOT BLOCKING) TO ALLOW FLOW OF WATER BUT PREVENT SEDIMENT FROM ENTERING CULVERT. (1 WEEK)

7. WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB REMAINDER OF SITE. (3 WEEKS) 8. BEGIN SITE GRADING FOR USE-IN COMMON DRIVEWAY AND LOTS AS SHOWN ON GRADING PLAN. BRING HOUSE PADS TO GRADE. (2 WEEKS)

1. INSTALL WATER, SEWER AND OTHER UTILITIES. (2 WEEKS) CONSTRUCT BASE COURSE PAVING FOR USE-IN-COMMON AND PRIVATE DRIVEWAYS. (3 WEEKS) AFTER ALL MAJOR SITE GRADING AND CONTRUCTION ARE STABILIZED. AND WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR. BEGIN INSTALLATION OF BIORETENTION FACILITIES AND PIPE SYSTEM. INCLUDING ROOF DRAIN LEADERS AND UNDERDRAINS. PROTECT BIORETENTION FACILITIES FROM SEDIMENTATION WITH SILT FENCE ON THE UPHILL SIDE. (4 WEEKS)

INSTALL LANDSCAPING. (2 WEEKS) FINE GRADE AND PERMANENTLY STABILIZE ALL DISTURBED AREAS WITHIN 7 DAYS, INCLUDING ANY EXPOSED EARTH AREAS OUTSIDE THE LOD. REMOVE ALL TRASH JUNK AND DEBRIS FROM ENTIRE

PL: REMOVE ALL SEDIMENT CONTROL MEASURES AFTER RECEIVING APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR. (4 WEEKS)

DURING GRADING AND AFTER EACH RAINFALL, CONTRACTOR WILL INSPECT AND FOLLOWING INITIAL SOIL DISTURBANCES OR REDISTURBANCE PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A. 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL

B. 7 CALENDAR DAYS FOR ALL OTHER DISTURBED AREAS. 3. PROPOSED HOMES ARE NOT TO BE CONSTRUCTED USING THIS DRAWING.

PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR

CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING RATE.

REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST, SPREAD THE DEWATERED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY, RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE DEVICE.

USE NONWOVEN GEOTEXTILE WITH DOUBLE STITCHED SEAMS USING HIGH STRENGTH THREAD. SIZE SLEEVE TO ACCOMMODATE A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE BAG MUST B MANUFACTURED FROM A NONWOVEN GEOTEXTILE THAT MEETS OR EXCEEDS MINIMUM AVERAGE ROLL

REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES DISPLACED.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

2011

ASTM D-4632

70 GAL/MIN/FT

STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A

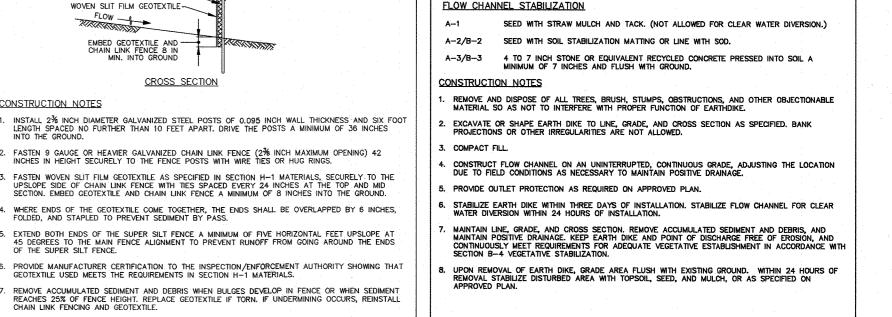
STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES FROM EDGES OF BAG

VALUES (MARV) FOR THE FOLLOWING:

APPARENT OPENING SIZE (AOS) 0.15-0.18 MM

FLOW RATE

SEAM STRENGTH



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

DETAIL C-1 EARTH DIKE

CROSS SECTION

2:1 SLOPE OR FLATTER-

CONTINUOUS GRADE 0.5% MIN. TO 10% MAX. SLOPE

PLAN VIEW

2:1 SLOPE OR FLATTER

LACE DESIGNATION (e.g. A-1) IN FLOW CHANNEL SIDE OF DIKE

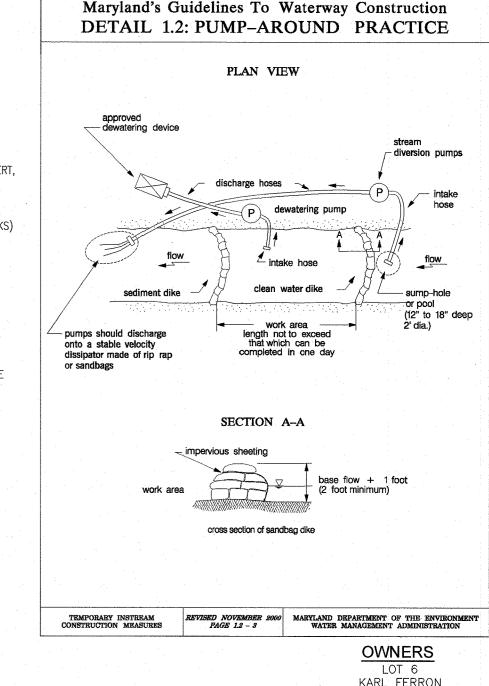
DIKE TYPE

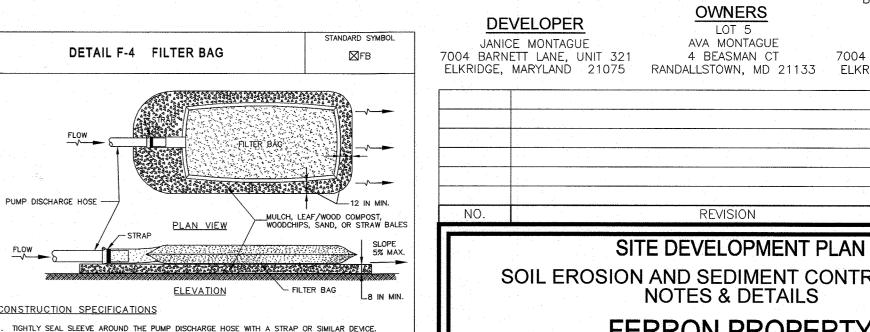
a - DIKE HEIGHT 18 IN MIN. 30 IN MIN.

b - DIKE WIDTH 24 IN MIN. 36 IN MIN.

c - FLOW WIDTH 4 FT MIN. 6 FT MIN.

d - FLOW DEPTH 12 IN MIN. 24 IN MIN.

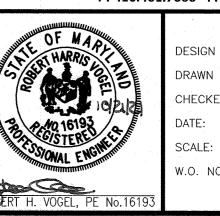




SOIL EROSION AND SEDIMENT CONTROL PLAN NOTES & DETAILS **FERRON PROPERTY**

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



AX MAP 37 BLOCK 1 ST ELECTION DISTRICT

DESIGN BY: DRAWN BY: CHECKED BY: RHV DATE: OCTOBER 2021 ____AS SHOWN W.O. NO.:

ROFESSIONAL CERTIFICATE I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AN SHEET

MEGAN FERRON

1019 W LEXINGTON ST

LOT 7

JANICE MONTAGUE

KOREY JACKSON

7004 BARNETT LANE, UNIT 3

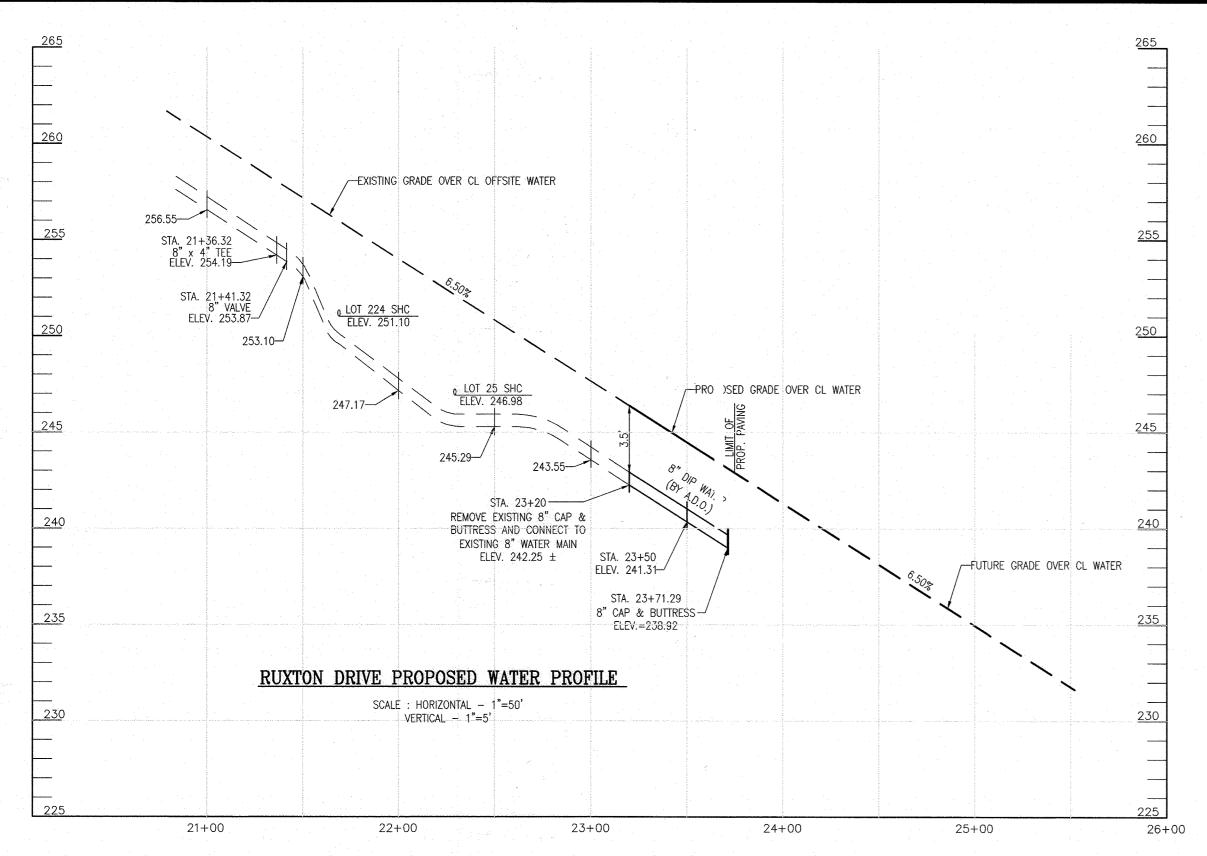
ELKRIDGE, MARYLAND 21075

DATE

HOWARD COUNTY, MARYLAN

BALTIMORE, MD 21223

SDP-20-076



WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAILS W-3.28, W-3.32 OUTSIDE METER SETTINGS.

EX. 30' PUBLIC WATER, SEWER, STORM DRAIN & UTILITY EASEMENT PLAT #13136 TOP=242.00 (SMH) 245 EX. 8" PVC-INV. 236.32 EX. 8" PVC I 235 INV. 236.30 (OUT) 8" PVC @ 0.50%

SEWER PROFILE

VERTICAL - 1"=5"

SCALE: HORIZONTAL - 1"=50"

CONSTRUCTION NOTES FOR ADVANCE DEPOSIT ORDER (A.D.O.) WORK IN THE PUBLIC WATER & UTILITY EASEMENT

PART 1 GENERAL CONSTRUCTION NOTES

1. For details not shown on the drawing, and for materials and construction methods, use Howard County Design Manual, Volume IV, Standard Specifications and Details for Construction (Latest Edition). The contractor shall have a copy of

2. The A.D.O. construction work must be performed under the continuous inspection of the Howard County Bureau of Utilities. The contractor shall notify the Bureau of Utilities (Mr. Harry Zellmer at 410-313-4942 or Mr. Don Campbell at 410-313-1438) at least five (5) days prior to the start of any construction for this A.D.O.

3. Clear all utilities by a minimum of 12 inches. Clear all poles by 5'0" minimum or tunnel as required unless otherwise noted. The contractor shall coordinate with the utility companies to schedule the bracing of the poles. 4. The contractor shall notify all utilities and agencies and Miss Utility at least two (2) working days before starting work

5. Existing utilities in the vicinity of the proposed work for which test pits have not been dug shall be located by the contractor in advance of construction operations at his own expense.

6. The contractor shall notify the Howard County Bureau of Highways, 410-313-7450, at least five working days before open cutting or boring/jacking of any County road for laying water or sewer mains or service connections. 7. Work performed within Maryland State Highway Administration (MSHA) right-of-way shall be performed in accordance with the MSHA permit issued for the contract. The contractor shall notify the Maryland State Highway Administration, 410-313-5533, at least five (5) working days before excavating within the Maryland State Highway right-of-way for laying

water or sewer mains or service connections. 8. Excavations must be supported for the protection of workers, the construction work area and adjacent property. Refer to Temporary Excavation Support Systems under Section 1000.03.03 of the Standard Specifications.

9. Excavations must be kept well drained at all times. Dewatering, drainage and pumping is required during construction. Refer to Dewatering, Drainage and Pumping under Section 1000.03.03 of the Standard Specifications. Pumps must be the proper type and capacity to maintain a dry work area.

10. The use of steel plates to protect the trench and roadway shall be as specified under Section 1000.03.05, Section 104 and Standard Detail Plate G-4.02 of the Standard Specifications.

11. Temporary and permanent repair of roadway openings shall be as specified under Section 1000.03.08 and Standard Detail Plate G-4.01 of the Standard Specifications unless otherwise specified by Permit from the authority having jurisdiction. Temporary paving shall consist of not less than 12 (twelve) inches of crushed stone and 2 (two) inches of bituminous cold patch material.

MCE CHART DROP THRU SLAB = 2.5' LOT# | EL@MAIN | TYPE | DIST. TO R/W | EL@R/W | DIST. R/W TO HOUSE | EL@HOUSE | MCE | B.F. | C.N.S. 241.11 @ 1% 243.61 237.00 YES 239.80 240.05 106 12 241.53 @ 1% 244.03 **237.00** YES 239.74 239.98 12 155 236.90 237.12 238.12 @ 1% 240.62 242.50 11 100

NOTE: I, IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME II WATER & SEWER, CHAPTER 5, SECTION 5.4.C.2. VERTICAL CLEARANCE BETWEEN THE WHC AND SEWER HOUSE CONNECTION (SHC) SHALL BE 1 FOOT MINIMUM.

3. C.N.S. (CELLAR NOT SERVICED)

WHC ABOVE SHC. 2. THE REQUIRED 1.5' MINIMUM HORIZONTAL CLEARANCE SHALL BE MET.

*EJECTOR PUMP REQUIRED TO PROVIDE BASEMENT SEWER SERVICE TO PUBLIC SHOW EX. 20' PUBLIC

WATER, SEWER, & UTILITY EASEMENT PLAT #13137.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION 5/26/22 DATE CHIEF, DIVISION OF LAND DEVELOPMENT 5/26/22

NOTES

1. THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:

1-800-257-7777 1-410-954-6281 VERIZON TELEPHONE COMPANY: HOWARD COUNTY BUREAU OF UTILITIES: 410-313-2366 AT&T CABLE LOCATION DIVISION: 1-800-393-3553 B.G.&E. CO. CONTRACTOR SERVICES: 410-850-4620 B.G.&E. CO. UNDERGROUND DAMAGE CONTROL: 410-787-4620

STATE HIGHWAY ADMINISTRATION: 410-531-5533 THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK. -THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF

ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK -THE CONTRACTOR SHALL NOTIFY HOWARD COUNTY - UTILITIES, 48 HOURS IN ADVANCE OF WORK (410)-313-4958. ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND AND SEWER EXTENSION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

PART II WATER CONSTRUCTION NOTES

1. All water mains shall be D.I.P., Class 54 minimum, or AWWA C900/C905 P.V.C. pipe, Class DR18 minimum. 2. Tops of all water pipes shall have not less than 4'0" of cover unless otherwise noted. 3. Valves adjacent to tees shall be strapped to tees.

4. Fire hydrants shall be set to the bury line elevations shown on the Plans. All fire hydrants shall be installed in accordance with Standard Details. The soil around the fire hydrant shall be compacted in accordance with Sections 1000 and 1005 of the Standard Specifications.

5. All fittings shall be buttressed or anchored with concrete in accordance with Standard Details unless otherwise provided for on the drawings.

6. The contractor shall notify the Bureau of Utilities at least 48 hours in advance of scheduled shutdowns of the existing water main. Shutdowns of the existing water main for new connections and removal of existing service connections shall be as specified under Section 1002.06 — Connections of the Standard Specifications. 7. The contractor shall not operate any water main valves on the existing water system. 8. Water service connections shall be as specified under Section 1004-Water House Service and Appurtenances of the Standard Specifications and Standard Detail Plate

The minimum size of a single residential WHC for new residential construction is 1-1/2 inch diameter with 1-inch meter. Installation of the water meter is not part of the A.D.O. construction work. Water service connections include pressure and leak testing, disinfection and bacteriological testing.

9. [For commercial meters] The new water meter assembly shall be the (type) per Howard County Detail Plate W-3.24. Installation of the water meter is not part of the A.D.O. construction work. 10. If the existing water meter will be moved to the new meter connection inside the building, the contractor shall contact the Meter Division of the Bureau of Utilities at 410-313-4948 to schedule relocation of the

11. The abandonment of existing water service connections shall be as specified under Section 1015.03 of the Standard Specifications. Removal of the existing corporation stop or tapping saddle requires a scheduled shutdown of the water main. The existing corporation stop shall be removed from the water main and the pipe repaired with a County approved stainless steel full circle repair clamp such as Ford Meter FS2, Mueller 550 or Romac SS2 series.

12. Tracer wire and continuity test stations shall be installed on all water mains in accordance with Detail Plate G-8.21 of the Standard Specifications.

13. Proper Assembly of Gasketed PVC Pipe Joints. The manufacturer's insertion line of gasketed PVC pipe joints indicates the maximum depth of insertion of the spigot into the bell. After assembly of the joint, the line shall remain visible. Dual insertion lines on gasketed PVC pipe indicate the maximum and minimum depth of insertion of the spigot into the bell.

14. Tees, crosses, bends greater than 5 degrees, and similar fittings for use with C-900 PVC water pipe shall be ductile iron conforming to AWWA C153.

15. All changes in horizontal or vertical direction of PVC water pipe shall be made with high-deflection couplings, 5 degree sweeps or standard bends. No bending of pipe or deflection of PVC pipe joints is

16. Seventeen (17) pound sacrificial anodes shall be installed on all valves and metallic fittings used with PVC water mains in accordance with the Standard Specifications and Details. Magnesium anodes shall be installed on all iron valves and ductile iron fittings including restraints and harnesses. Zinc anodes shall be installed on all stainless steel fittings and saddles used with PVC water mains.

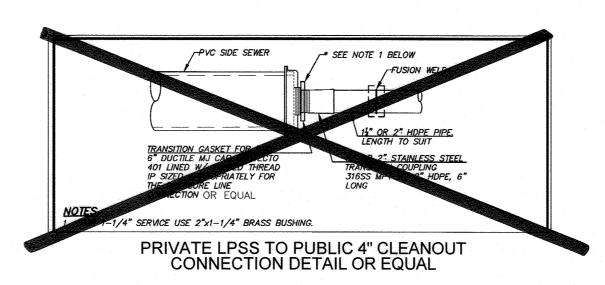
PART III SEWER CONSTRUCTION NOTES

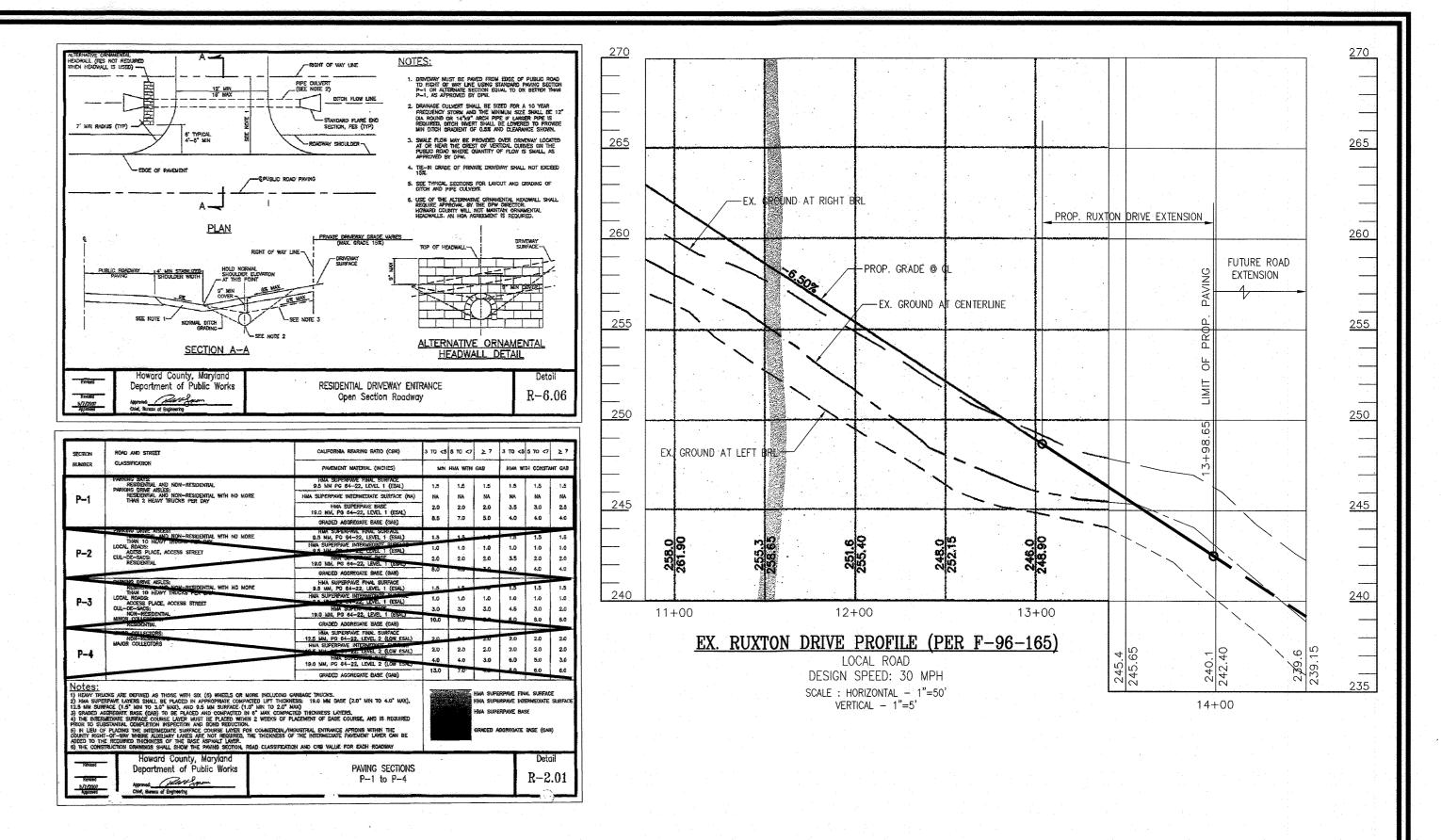
1. All sewer mains shall be D.I.P. or P.V.C. unless otherwise noted. 2. All manholes shall be 4'0" inside diameter unless otherwise noted.

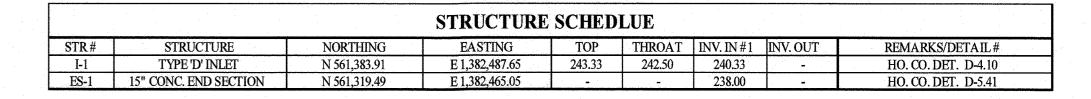
3. Sewer force mains shall be D.I.P. unless otherwise noted.

4. Sewer house connections shall be as specified under Section 1009.03 of the Standard Specifications and

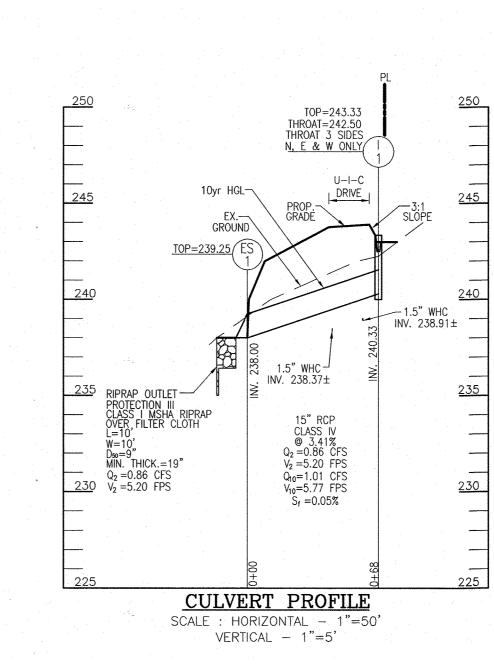
5. House(s) with the symbol "C.N.S." indicates that the cellar cannot be served by a gravity sewer service

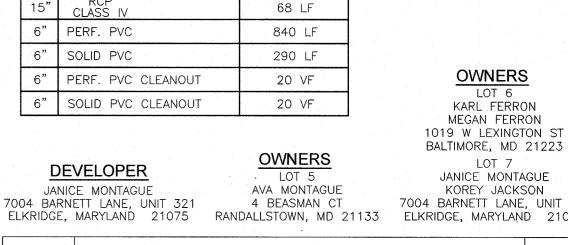


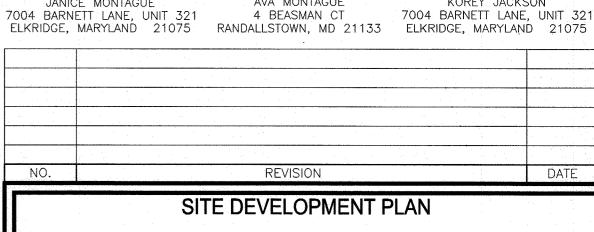




PIPE SCHEDULE





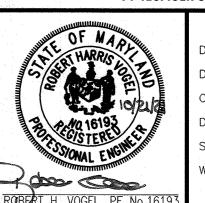


TOTAL LENGTH

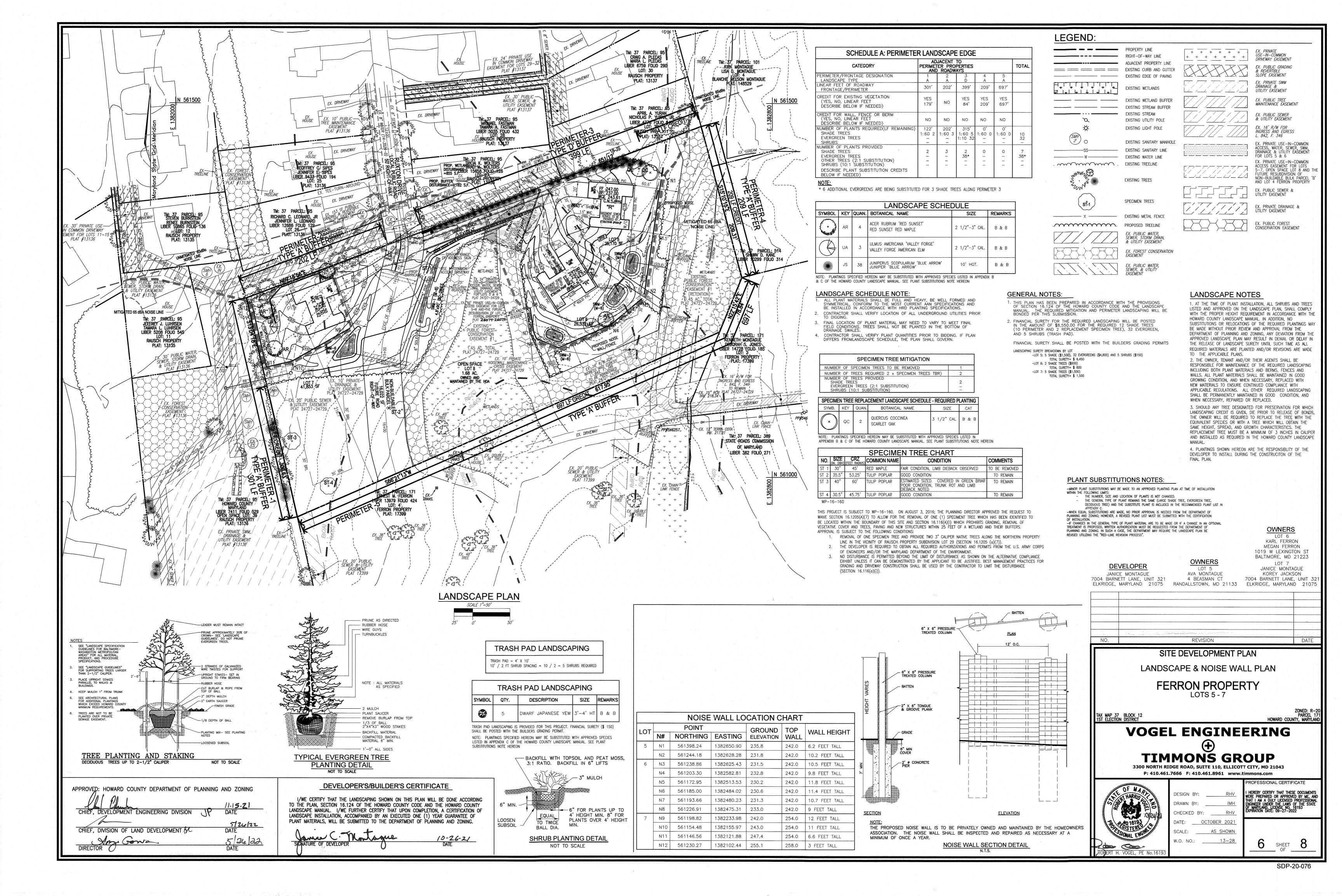
SITE DETAILS AND UTILITY NOTES AND PROFILES FERRON PROPERTY

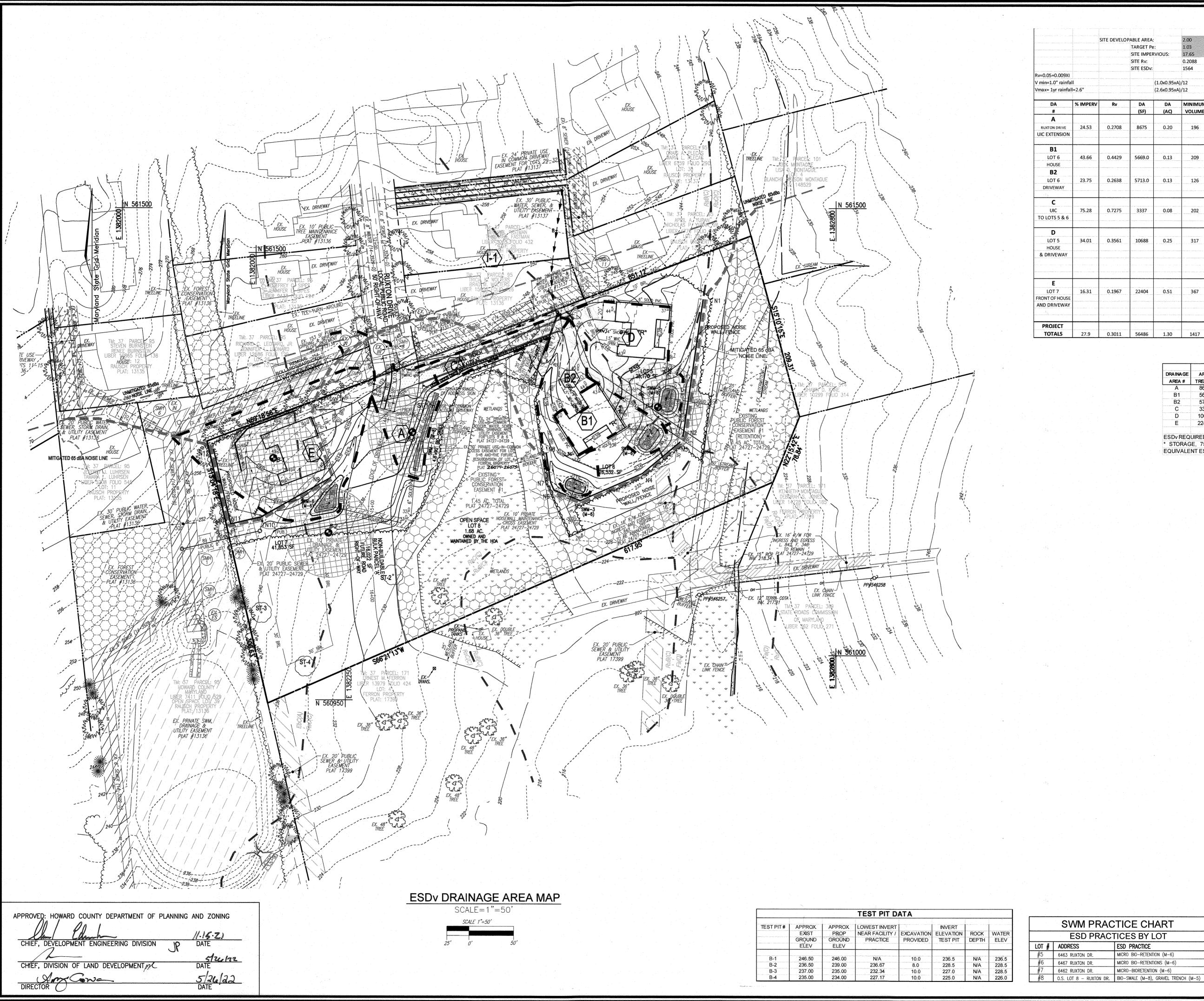
ZONED: R-20 PARCEL 171 HOWARD COUNTY, MARYLAND AX MAP 37 BLOCK 12 IST ELECTION DISTRICT **VOGEL ENGINEERING**

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
SIGN BY: RHV	I HEREBY CERTIFY THAT THESE DOCUM WERE PREPARED OR APPROVED BY ME
AWN BY:IMH_	THAT I AM A DULY LICENSED PROFESS ENGINEER UNDER THE LAWS OF THE S OF MARYLAND LICENSE NO. 16193
IECKED BY: RHV	OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2022
TE: OCTOBER 2021	
ALE: AS SHOWN	
0. NO.: <u>13–28</u>	5 curr 8





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AND DRIVEWAY		etan nitrana kanja sistembi aparesi.					 State of the state of the state	Physical period in the first high shows a side shows the sugar dispersion.	gardina liberal mannes mandelmanne adelle en la Barrilana mala liberal en la companya en la compa			
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PROJECT					<u> </u>							
TOTALS	27.9	0.3011	56486	1.30	1417	3685	1460	2477	15760	0.36	0.93	

			ENVI	RONMENT	AL SITE DES	IGN PRAC	TICE VOL	JMES PRO	OVIDED		
DRAINA GE	AREA	FACILITY	PERMEABLE	BIO	LANDSCAPE	GREEN	BIO	GRAVEL	X	X	ESDv
AREA#	TREATED	NUM BER	PAVEMENT	RETENTION	NFILTRATION	ROOF	SWALE	TRENCH	X	X	VOLUME
Α	8675	1	0	0	0	0	288	0	0	0	288
B1	5669	2	0	493	0	. 0	0	0	0	0	493
B2	5713	3	0	160	0	0	0	0	0	0	160
С	3337	. 4	0	0	0	. 0	0	504	0	0	504
D	10688	5	0	473	0	0	0	0	0	0	473
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EQUIVALE	NT ESDV PI	ROVIDED		2247	CF	ingles with the mention restricted to the service of	Consideration for the control of resources to the control of the c		e a marine Company de marine de mari	Santa and the sa	, and a time appropriate and appropriate of a

 DRAINAGE AREA SUMMARY											
AREA	A (ac.)	IMPERVIOUS	PERVIOUS	% IMP.							
A	0.20	0.049	0.151	24.53							
 B1	0.13	0.057	0.073	43.66							
 B2	0.13	0.031	0.099	23.75							
 C	0.08	0.060	0.02	75.28							
D	0.25	0.085	0.165	34.01							
E	0.51	0.083	0.427	16.31							
1-1	0.56	0.168	0.392	30.00							

MEGAN FERRON 1019 W LEXINGTON ST BALTIMORE, MD 21223

7004 BARNETT LANE, UNIT 321 ELKRIDGE, MARYLAND 21075

LOT 7 JANICE MONTAGUE KOREY JACKSON AVA MONTAGUE 4 BEASMAN CT 7004 BARNETT LANE, UNIT 32 RANDALLSTOWN, MD 21133 ELKRIDGE, MARYLAND 21075

REVISION SITE DEVELOPMENT PLAN

> STORMWATER MANAGEMENT DRAINAGE AREA MAP FERRON PROPERTY LOTS 5 - 7

TAX MAP 37 BLOCK 12 1ST ELECTION DISTRICT

VOGEL ENGINEERING

TIMMONS GROUP 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043

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ESD PRACTICES BY LOT

MICRO BIO-RETENTIONS (M-6)

MICRO-BIORETENTION (M-6)

