### GENERAL NOTES: SITE DEVELOPMENT PLAN BENCHMARKS THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT HOWARD COUNTY BENCHMARK 3511 (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK. N 557,110.385 £ 1,344,893.672 ELEV.: 400.048 THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK. HIDDEN RIDGE HOWARD COUNTY BENCHMARK 35FI ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS ALTERNATIVE COMPLIANCE REQUESTS N 557,787.369 E 1,345,217.326 ELEV.: 400.452' THE SUBJECT PROPERTY IS ZONED R-SC IN ACCORDANCE WITH THE 2013 COMPREHENSIVE ZONING PLAN. THE EXISTING ON-SITE TOPOGRAPHY IS BASED ON A TOPOGRAPHIC SURVEY BY MID-ATLANTIC PROFESSIONAL SURVEYS DATED DECEMBER 3, 2015. OFF SITE AREAS HAVE BEEN SUPPLEMENTED WITH HO CO GIS TOPOGRAPHICAL INFORMATION. EXISTING CONTOURS ONSITE ASSUME PROPOSED GRADES FROM F-18-087 HAVE BEEN ESTABLISHED. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS LOTS 1 - 12 NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND (SFA RESIDENTIAL) STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS BM 35FA AND BM 35F1 WERE USED FOR THIS PROJECT. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE HOWARD COUNTY, MARYLAND DEVELOPMENT PLAN, ALTERNATIVE COMPLIANCE, OR BUILDING AND GRADING PERMITS. STORMWATER MANAGEMENT WAS REVIEWED AND APPROVED UNDER F-18-087. STORMWATER MANAGEMENT FOR THIS PROJECT IS PROVIDED BY THE USE OF ON-LOT NON STRUCTURAL PRACTICES & MICRO-SCALE PRACTICES IN ACCORDANCE WITH ENVIRONMENTAL SITE DESIGN CRITERIA. ON-LOT MICRO-SCALE PRACTICES INCLUDE DRYWELLS, ON-LOT FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED. PRIOR TO SIGNATURE APPROVAL OF THIS SITE DEVELOPMENT PLAN, THE BUILDER/DEVELOPER SHALL EXECUTE THE DECLARATION OF COVENANTS FOR THE CONSTRUCTION OF THE ON-LOT PRACTICES AND A MAINTENANCE AGREEMENT. -REFER TO THE STORMWATER MANAGEMENT INFORMATION CHART FOR FACILITIES CONSTRUCTED UNDER F-18-087 AND THE STORMWATER MANAGEMENT PRACTICE CHART FOR THE FACILITIES TO BE CONSTRUCTED UNDER THIS PLAN. CENIER N/F PROPERTY THE PROPOSED UNITS SHALL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM. EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES LIBER 4911 FOLIO 425 ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AUTUMN PLAT Nos. 14704 & 14705 DR. (PRIVATE) SPLENDOR AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. LOT 1 ZONING: R-20 ANY DAMAGE TO THE COUNTY'S RIGHTS-OF-WAY, PAVING, OR EXISTING UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. 13. SHC ELEVATIONS ARE LOCATED AT THE PROPERTY LINE/EDGE OF EASEMENT. 14. THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING VILLAGE OF HICKORY RIDGE 1-800-252-1133 BGE (CONSTRUCTION SERVICES) 410-637-8713 SECTION 1, AREA 1 BGE (EMERGENCY) 410-685-0123 PB023--d7 BUREAU OF UTILITIES 410-313-4900 COLONIAL PIPELINE CO 410-795-1390 MISS UTILITY 1-800-257-7777 STATE HIGHWAY ADMINISTRATION 410-531-5533 1-800-743-0033 VFRIZON . SHEET INDEX THERE ARE NO EXISTING DWELLING/STRUCTURES LOCATED ON THIS SITE. HIDDEN RIDGE DR DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE DESCRIPTION FOLLOWING MINIMUM REQUIREMENTS: A) WIDTH - 12 FEET (16 FEET IF SERVING MORE THAN ONE RESIDENCE) P/O OPEN SPACE LOT 13 B) SURFACE -6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.) TO BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION HOUSE TYPES. SITE DETAILS. STORMWATER MANAGEMENT - NOTES AND DETAILS C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE, AND MINIMUM 45 FOOT TURNING RADIUS SOILS MAP, GRADING AND SOIL EROSION & SEDIMENT CONTROL PLAN D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING) SOIL EROSION & SEDIMENT CONTROL PLAN - NOTES & DETAILS E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD EVENTS WITH NO MORE THAN 1 FOOT DEPTH OVER HIDDEN RIDGE DR F) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE . -DRIVEWAY ENTRANCES ALONG 7" COMBINATION CURB & GUTTER LINED ROADWAYS/UIC DRIVES SHALL UTILIZE HOWARD COUNTY STANDARD -DRIVEWAY ENTRANCES ALONG MODIFIED COMBINATION CURB & GUTTER LINED ROADWAYS SHALL UTILIZE HOWARD COUNTY STANDARD DETAIL NO. R-6.03. 18. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED SITE ANALYSIS DATA WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN. 19. TRASH & RECYCLING COLLECTION WILL BE AT THE COUNTY ROADWAYS WITHIN FIVE FEET (5') OF THE COUNTY ROADWAY 20. THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT. A. TOTAL PROJECT AREA: ABIDING SAVIOR AREA OF PLAN SUBMISSION: TOTAL NET AREA: LIMIT OF DISTURBANCE: -WATER SERVICE CONNECTIONS (WHC) FOR THIS PROJECT ARE FROM PUBLIC CONTRACT NO. 24-5007-D THERAN CHURCH -SEWER SERVICE CONNECTIONS (SHC) FOR THIS PROJECT ARE FROM PUBLIC CONTRACT NO. 24-5007-D. WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE. PRESENT ZONING DESIGNATION: 22. PUBLIC WATER AND SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT PROPOSED USES FOR SITE AND STRUCTURES: 23. ALL WATER HOUSE CONNECTIONS SHALL BE OUTSIDE METER SETTING UNLESS OTHERWISE NOTED ON THE PLANS OR IN SPECIFICATIONS. G. FLOOR SPACE ON EACH LEVEL 24. TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS OR CEMETERIES LOCATED ON THIS PROPERTY OF BUILDING PER USE: H. TOTAL NUMBER OF UNITS ALLOWED 25. HIDDEN RIDGE DRIVE IS CLASSIFIED AS A PRIVATE ACCESS PLACE. 26. THE WETLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY CHRISTOPHER CONSULTANTS PER THE APPROVED PLAT# 20653 FOR PROJECT AS SHOWN ON FINAL PLAT: 12 BUILDABLE LOTS (THIS SDP) TOTAL NUMBER OF UNITS PROPOSED: (F-08-123) DATED, JULY 02, 2009, REPORT DATED AUGUST 30, 2006. A RE-EVALUATION WAS PERFORMED BY THI ENVIRONMENTAL INC. ON ON THIS SUBMISSION: NOVEMBER 14, 2017 AND APPROVED ON JANUARY 19, 2018. J. MAXIMUM NUMBER OF EMPLOYEES, FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE TENANTS ON SITE PER USE: HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY FOREST CONSERVATION MANUAL. K. NUMBER OF PARKING SPACES REQUIRED TOTAL FOREST CONSERVATION OBLIGATION OF THIS PROJECT HAS BEEN FULFILLED AND RECORDED UNDER F-08-123, AND AMENDED UNDER F-19-084 BY HO.CO. ZONING REGULATIONS: NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT NUMBER OF PARKING SPACES PROVIDED PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE LENHART TRAFFIC CONSULTING, INC. DATED 01-05-2017, AND APPROVED ON JANUARY 19, 2018. P/O OPEN SPACE LOT 13 M. OPEN SPACE ON SITE: 29. A NOISE STUDY HAS BEEN COMPLETED BY STRAUGHAN ENVIRONMENTAL, INC DATED JANUARY 2017 AND APPROVED ON JANUARY 19, 2018. TO BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION AREA OF RECREATION OPEN SPACE 30. THE 65dba NOISE LINE ESTABLISHED BY HOWARD COUNTY IS TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEHIND REQUIRED BY SUBDIVISION & LAND MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT. **DEVELOPMENT REGULATIONS:** 31. THE GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY MAFI AND ASSOCIATES, INC, DATED DECEMBER 19, 2015, AND WAS APPROVED ON O. BUILDING COVERAGE OF SITE: APPLICABLE DPZ FILE REFERENCES: 32. THE PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON FEBRUARY 08, 2017 33. THE ENVIRONMENTAL CONCEPT PLAN (ECP-16-043) WAS APPROVED ON NOVEMBER 2016. P. ANY OTHER INFORMATION WHICH MAY 34. PERIMETER LANDSCAPING FOR THIS PROJECT WAS APPROVED WITH F-18-087 AND ON-LOT LANDSCAPING IS PROPOSED UNDER THIS SDP. A LANDSCAPE PLAN WAS PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. THE FINANCIAL SURETY FOR PERIMETER LANDSCAPING WAS POSTED AS PART OF THE F-18-087 DEVELOPER'S Q. FLOOR AREA RATIO: AGREEMENT. THE FINANCIAL SURETY IN THE AMOUNT OF \$3,600.00 FOR THE 12 SHADE TREES, FOR THE SINGLE FAMILY ATTACHED INTERNAL LANDSCAPING 35. A PRELIMINARY PLAN (SP-17-008) RECEIVED SIGNATURE APPROVAL MARCH, 2018 36. SOIL TYPES SHOWN HEREON ARE IN ACCORDANCE WITH THE SOIL SURVEY HOWARD COUNTY, MARYLAND. N19°30'47"W 727.67 37. THE FLOODPLAIN STUDY FOR THIS PROJECT WAS PREPARED BY MASER CONSULTING P.A., DATED JANUARY 5, 2017 AND APPROVED ON JANUARY 19, 2018. 38. STEEP SLOPES OVER 20,000 SF CONTIGUOUS ARE SHOWN HEREON. 39. IN ACCORDANCE WITH DESIGN MANUAL-VOLUME 3, CHAPTER 2 - SECTION 2.9.B. PARKING IS REQUIRED AT TWO (2) SPACES PER UNIT OFF LLG LIMITED PARTNERSHIP STREET PARKING TO INCLUDE GARAGE SPACE, DRIVEWAY AND PARKING PADS. GARAGES COUNT AS A FULL SPACE. MAP 35 PARCEL 109 THE ONE (1) GARAGE SPACE MAY NOT BE CONVERTED TO LIVING SPACE AND SHALL ONLY BE UTILIZED FOR VEHICULAR PARKING SPACE. LIBER 3754 FOLIO 194 REFER TO PARKING TABULATION. 40. THE HOMEOWNERS ASSOCIATION DOCUMENTS HAVE BEEN RECORDED WITH THE MARYLAND STATE DEPARTMENT OF ASSESSMENTS AND TAXATION AS ZONING: POR RECORDING REFERENCE NUMBER F-18-087 ON D19716042. 2019. HOMEOWNERS ASSOCIATION COVENANTS AND RESTRICTIONS WERE RECORDED SIMULTANEOUSLY WITH F-18-087 AS LIBER 19156 FOLIO 190, ON January 31,2020, 2018. THE MODERATE INCOME HOUSING UNIT REQUIREMENT (COUNCIL BILL 35-2013) SHALL BE FULFILLED. 12 TOWNHOUSES x 10% = 1.2 UNITS. THE DEVELOPER WILL PROVIDE 2 UNITS TO FULFILL THE REQUIREMENT. 42. THIS PROJECT IS SUBJECT TO WP-17-099. ON NOVEMBER 27, 2017 THE DIRECTOR APPROVED AN ALTERNATIVE COMPLIANCE OF SECTION 16.120(C)(4), 16.120(B)(6)(VI), 16.134(A)(1), 16.1205(A)(7), 16.134(a)(1) AND 110(D)(1)(3) SUBJECT TO THE FOLLOWING CONDITIONS: 1.) THE PRIVATE ROAD SHALL BE OWNED AND MAINTAINED BY THE HOA FOR THE COMMUNITY AND COMMON ACCESS EASEMENT SHALL BE RECORDED 2.) AN ADEQUATE T-TURNAROUND OR SIMILAR DESIGN AS APPROVED BY DED, DPW, DFRS SHALL BE LOCATED AT THE END OF THE PRIVATE ROAD FOR EMERGENCY VEHICLES, TRASH HAULING SERVICES AND OTHER LARGE VEHICLES THAT NEED TURNAROUND SPACE. THE TURNAROUND SPACE SHALL BE SIGNED TO NOT ALLOW PARKING BY RESIDENTS IN THIS AREA. LOCATION MAP 3.) THE DEVELOPER SHALL WORK WITH THE AUTUMN SPLENDOR COMMUNITY TO PLANT LANDSCAPING ON THEIR PROPERTY ADJACENT TO THE NEW PRIVATE ROAD TO FURTHER SCREEN THE ROAD. SCALE: 1"=60' 4.) THE DEVELOPER SHALL WORK WITH ABIDING SAVIOR CHURCH TO PROVIDE LANDSCAPING ON ITS PROPERTY TO BUFFER THE NEW PRIVATE ROAD. 5.) THE SPECIMEN TREE TO BE REMOVED SHALL BE REPLACED WITH THE PLANTING OF TWO NEW RED OAK TREES ON THE PROPERTY AS MITIGATION. 6.) ANY FENCE TO THE NORTH OF THE PRIVATE ROAD WILL REQUIRE A MAINTENANCE EASEMENT ON THE ADJOINING PROPERTY. PLEASE NOTE THAT ALL LOTS (LOTS 1-12) IN THIS SUBDIVISION ARE SUBJECT TO THE MIHU REQUIREMENT. 12 TOWNHOUSE 43. OPEN SPACE LOT 13 SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION. UNITS X 10% = 1.2 UNITS. THE DEVELOPER WILL PROVIDE 2 UNITS TO FULFILL THE REQUIREMENT. 44. ON APRIL 4, 2017 THE CHIEF OF DEVELOPMENT ENGINEERING DIVISION APPROVED A DESIGN MANUAL WAIVER, VOLUME III, APPENDIX A, NOTE# 5 APPROVED, DATED MARCH 17, 2017, REDUCTION IN PAVEMENT WIDTH FROM 26' TO 24' SUBJECT TO THE FOLLOWING CONDITIONS: a. 24' WIDTH FOR THE ACCESS ROAD FROM OWEN BROWN ROAD TO THE END OF THE PIPESTEM PORTION OF THE PROPERTY (280'±) WHERE THE DRIVEWAY SHALL BE TRANSITIONED TO 26' FOR THE REMAINING PART OF THE DEVELOPMENT DUE TO THE 25' WIDTH OF THE PIPESTEM. MODERATE INCOME HOUSING UNIT (MIHU) CHART . THE PROPOSED CURVES FROM THE PIPESTEM SHALL MEET THE MINIMUM 45' RADIUS FOR EMERGENCY VEHICLES ACCESS. c. A TURNAROUND SHALL BE PROVIDED AT THE END OF THE ROAD. THE ENTIRE ROAD SHALL HAVE CURB AND GUTTER ALONG BOTH SIDES FOR THE SIDES WITH NUMBER OF DWELLING UNITS GARAGE UNITES, THE CURB AND GUTTER CAN BE THE MODIFIED COMBINATION CURB AND GUTTER (R-3.01). 10 % MIHU REQUIREMENT THE ENTRANCE CURB, WHERE THE PROPOSED ROAD MEETS OWEN BROWN ROAD, SHALL MEET CURRENT RADII REQUIREMENTS. IF THE CURB AND GUTTER ENCROACHES ONTO THE ADJACENT PROPERTIES, THE APPROPRIATE PRIVATE ACCESS EASEMENTS SHALL BE OBTAINED PRIOR TO THE APPROVAL OF THE SITE DEVELOPMENT PLAN. . THE ONSITE ROAD SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE HOA. NO PUBLIC MAINTENANCE SHALL BE PROVIDED FOR THE ROAD IN THIS DEVELOPMENT 45. WP-17-132, A CONSIDERATION TO AN EXTENSION FOR RESUBMITTAL DUE TO EXTRAORDINARY HARDSHIP OR PRACTICAL DIFFICULTIES, IMPLEMENTATION OF ALTERNATIVE PARKING TABULATION ADDRESS CHART AND PROPOSAL, DETRIMENT TO THE PUBLIC INTERESTS AND NULLIFIES THE INTENT OR PURPOSE OF THE REGULATION WAS APPROVED BY THE DIRECTOR OF PLANNING AND ZONING ON AUGUST 15, 2017 SUBJECT TO THE FOLLOWING CONDITIONS: TOTAL NUMBER OF DWELLING UNITS PROPOSED: 12 STORMWATER MANAGEMENT PRACTICES KEY SITE DEVELOPMENT PLAN TOTAL PARKING REQUIRED: 30 (12 X 2.5) . THE REVISED PRELIMINARY EQUIVALENT SKETCH PLAN MUST BE SUBMITTED (90 DAYS FROM THE ORIGINAL SUBMITTAL DATE OF JUNE 30,M 2017) ON OR BEFORE TOTAL PARKING PROVIDED: 48 SEPTEMBER 28, 2017. COVER SHEET & MDE NO. THE NEW INFORMATION REQUESTED FOR THE ALTERNATIVE COMPLIANCE REQUEST WP-17-099 MUST BE SUBMITTED 90 DAYS FROM THE RESUBMISSION DEADLINE OF JUNE OFF-STREET PARKING SPACES REQUIRED: 2 SPACES PER UNIT = 23, 2017. CORRESPONDENCE OF EXTENSION MUST BE INCLUDED WITH RESUBMISSION MATERIAL. 10700 HIDDEN RIDGE DRIVE (2) DRY WELL (M-5) . INCLUDE ALTERNATIVE COMPLIANCE REQUEST NUMBER, DESCRIPTION AND DECISION ON ALL ASSOCIATED AND FUTURE PLANS. 10702 HIDDEN RIDGE DRIVE (1) DRY WELL (M-5 PARKING SPACES PROVIDED: HIDDEN RIDGE 46. FOR STORMWATER MANAGEMENT SOIL BORING LOGS SEE FINAL PLAN F-18-087, SHEET 14. 10704 HIDDEN RIDGE DRIVE (1) DRY WELL (M-5 SFA = 2 GARAGE/2 DRIVEWAY 47. THIS PROJECT IS SUBJECT TO WP-20-009. ON SEPTEMBER 26, 2019 THE DIRECTOR APPROVED AN ALTERNATIVE COMPLIANCE OF SECTION 16.144(p), 16.144(r)(5), 2 SPACES IN GARAGE(\*) = 24 SPACES (FOR 12 UNITS) 10706 HIDDEN RIDGE DRIVE (1) DRY WELL (M-5 16.144(q)&(r)(6) SUBJECT TO THE FOLLOWING CONDITIONS: 2 SPACES ON DRIVEWAY = 24 SPACES (FOR 12 UNITS) TOTAL PARKING SPACES PROVIDED: = 48 SPACES OFF-STREET 10708 HIDDEN RIDGE DRIVE DRY WELL (M-5) 1.) THE DEVELOPER'S AGREEMENT AND PAYMENTS OF FEES AND SURETY RELATED TO F-18-087, HIDDEN RIDGE MUST BE SUBMITTED AND PAID WITHIN 60 DAYS OF 10710 HIDDEN RIDGE DRIVE 1) DRY WELL (M-5) THE ORIGINAL DEADLINE OF AUGUST 16, 2019 (ON OR BEFORE OCTOBER 15, 2019). PLEASE PROVIDE DOCUMENTATION OF THE APPROVAL FOR THIS ALTERNATIVE OVERFLOW / GUEST PARKING SPACES REQUIRED: 10714 HIDDEN RIDGE DRIVE (1) DRY WELL (M-5) COMPLIANCE WITH THE SUBMISSION OF THE DEVELOPER AGREEMENTS AND THE PAYMENT OF FEES. 0.5 SPACES PER SFA UNIT X 12 = 6 SPACES REQUIRED 10716 HIDDEN RIDGE DRIVE I) DRY WELL (M-5 TAX MAP 35 GRID 18 5TH ELECTION DISTRICT 2.) THE PLAT MUST BE SUBMITTED WITHIN 60 DAYS OF THE ORIGINAL DEADLINE OF OCTOBER 15, 2019 (ON OR BEFORE DECEMBER 14, 2019). PLEASE PROVIDE TOTAL OVERFLOW PARKING SPACES PROVIDED: 10718 HIDDEN RIDGE DRIVE DOCUMENTATION OF THE APPROVAL FOR THIS ALTERNATIVE COMPLIANCE WITH THE SUBMISSION OF THE PLAT ORIGINALS FOR RECORDATION. DRY WELL (M-5) = 24 SPACES (DRIVEWAY) REFER TO OFF-STREET EXCESS. 3.) ADD A NOTE REGARDING THIS ALTERNATIVE COMPLIANCE REQUEST TO ALL PLANS FOR THIS PROJECT WHICH INCLUDES THE SECTIONS SPECIFIED, DECISION DATE, 10720 HIDDEN RIDGE DRIVE (1) DRY WELL (M-5) \*THE H.O.A SHALL BE RESPONSIBLE FOR ENFORCING THE PARKING VOGEL ENGINEERING 10722 HIDDEN RIDGE DRIVE REQUIREMENTS ON EACH RESIDENTIAL LOT. GARAGE SPACE(S) 12 10724 HIDDEN RIDGE DRIVE SHALL REMAIN OPEN FOR VEHICLE PARKING USE. THE GARAGE SPACE MAY NOT BE CONVERTED TO LIVING SPACE AND SHALL ONLY 1. DECLARATION OF COVENANTS WERE RECORDED WITH F-18-087 BE UTILIZED FOR VEHICULAR PARKING SPACE **TIMMONS GROUP** 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043 P: 410.461.7666 F: 410.461.8961 www.timmons.com DEVELOPER **BUILDER** KB COMPANIES, INC RYAN HOMES 7 OLD CISTERN COURT CATONSVILLE, MD 21228 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 9720 PATUXENT WOODS DRIVE COLUMBIA, MD 21046 DESIGN BY: 703-556-9569 410-379-5956 DRAWN BY: CHIEF, DEVELOPMENT ENGINEERING DIVISION CHECKED BY: PERMIT INFORMATION CHART DATE: DECEMBER 2019 2/20/2020 SUBDIVISION NAME SECTION/AREA LOTS/PARCEL CHIEF, DIVISION OF LAND DEVELOPMENT AM SCALE: HIDDEN RIDGE N/A PLAT # OR L/F | BLOCK NO. | ZONE | TAX MAP | ELECT. DIST. CENSUS TR 2-27-2020 W.O. NO.:

DATE

R-SC

5TH

605602

NO.

REVISION

18

25300-25301

HOWARD COUNTY, MARYLAND

VICINITY MAP

SCALE: 1" = 2000'

0.552 AC (LOTS 1-12)

SINGLE FAMILY ATTACHED

12 BUILDABLE LOTS (THIS SDP)

SEE PARKING TABULATION HEREON

REFER TO F-18-087 = 4,800 SF

5TH ELECTION DISTRICT

MIHU AGREEMENT

VTG

RHV

1000 CO30

ROBERT H. VOGEL, PE No.1619

2 GARAGE & 2 DRIVEWAY SPACES PER SFA REFER TO F-18-087 = 4.21 AC

SP-17-008, ECP-16-043, SDP-08-067,

F-08-123, WP-17-099, WP-17-132, F-18-087, F-19-084, WP-20-009.

ADC MAP COORDINATE: 4934 - J9

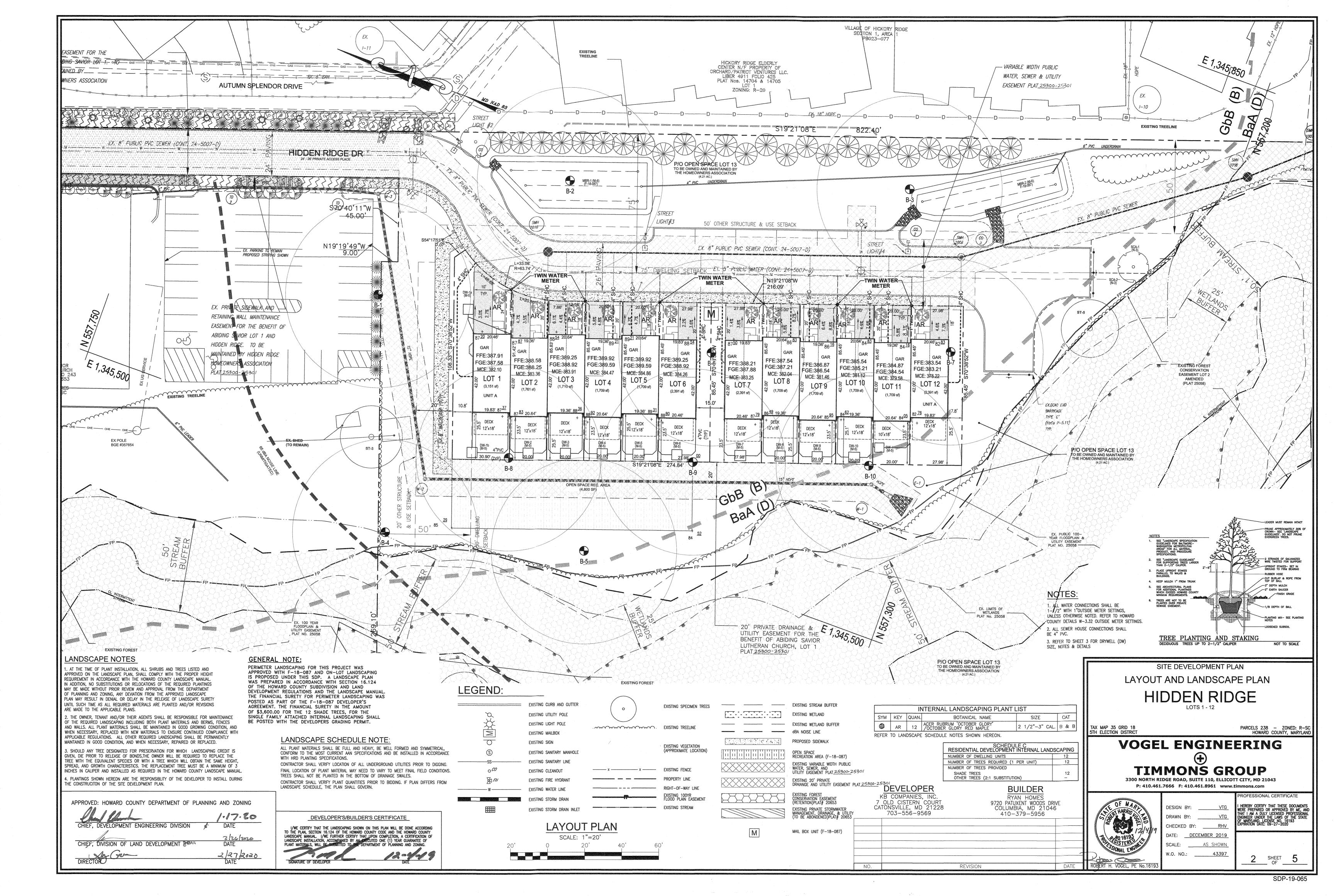
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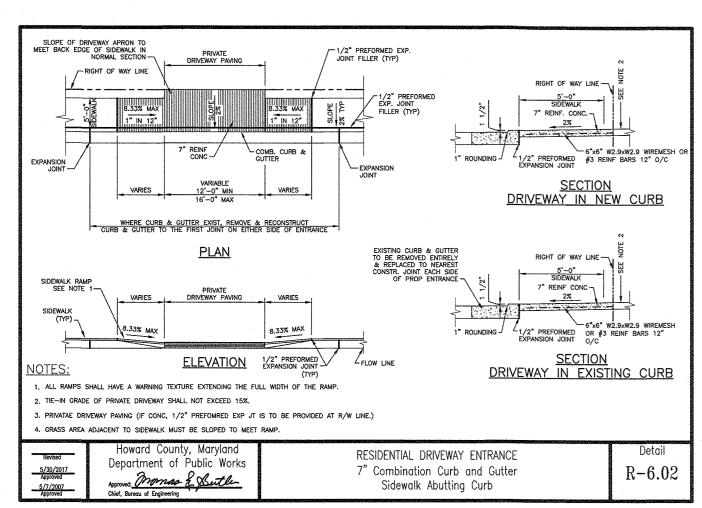
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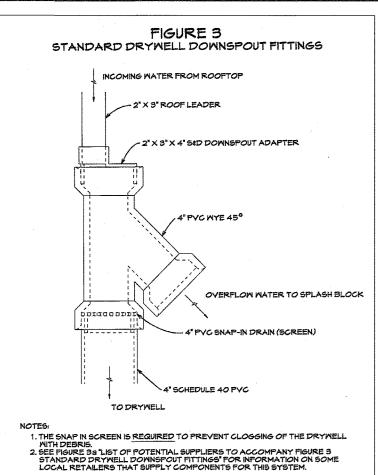
3 OF 5

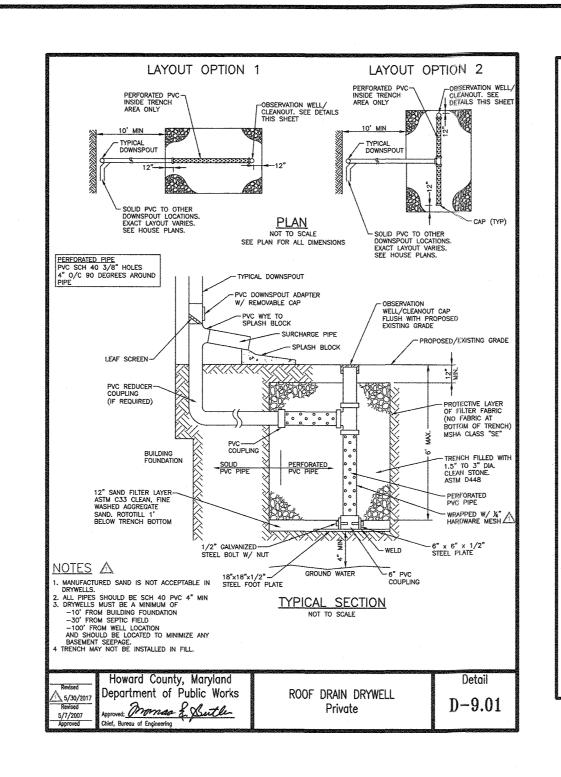
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### OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED STORMWATER DRY WELLS (M-5)

- 1. THE MONITORING WELLS AND STRUCTURES SHALL BE INSPECTED ON A QUARTERLY BASIS AND AFTER EVERY LARGE STORM EVENT.
- 2. WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS SHALL BE RECORDED OVER A PERIOD OF SEVERAL DAYS TO INSURE
- 3. A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.

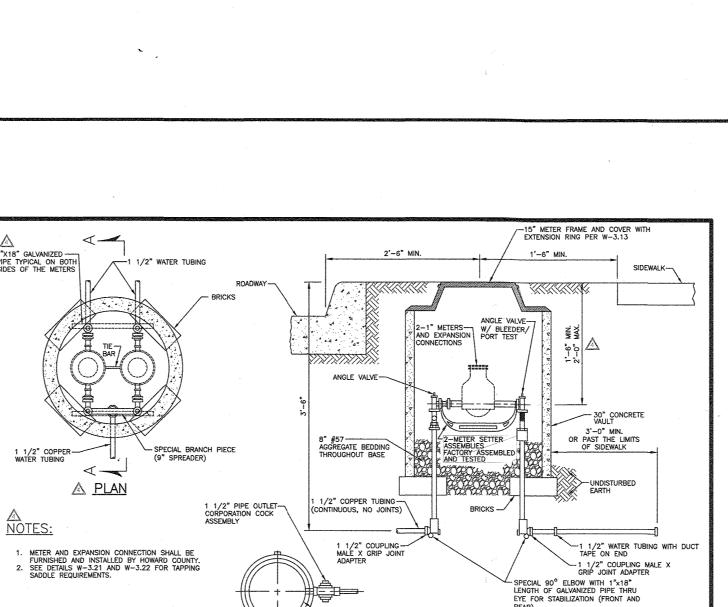
BE TAKEN.

- WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN THE 72 HOUR TIME PERIOD, CORRECTIVE ACTION SHALL
- 5. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- 6. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

385.00 | 384.00 | 379.00 | 378.00 | 5.33x5.33 | 5

384.00 383.00 378.00 377.00 5.42x5.42 5

383.50 | 382.50 | 377.50 | 376.50 | 5.00x5.00 | 5



(END UNIT ONLY)

OPT. 12'x18'
CANTILEVERED DECK

INTERIOR

UNIT

19:36

6.25'x4.125'

CONC. STOOP

NOTES:

1. ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1"

COUNTY DETAILS W-3.32 OUTSIDE METER SETTINGS. 2. ALL SEWER HOUSE CONNECTIONS SHALL BE 4" PVC.

OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD

UNIT

OPT. 12'x18'
CANTILEVERED DECK

OPT. BAY WINDOW

(END UNIT ONLY)

INTERIOR

UNIT

6.25'x4.125'

CONC. STOOP

UNIT

# Howard County, Maryland 7/29/2011 Revised WATER METER Department of Public Works Twin 1" 6/30/2011 Revised W-3.32Approved: mornas & Sutle Outside Meter Settings

BUILDINGS.

**HOUSE TYPE NOTES:** 

OPT. 12'x18'
CANTILEVERED DECK

(END UNIT ONLY)

19.83

INTERIOR

UNIT

8.25'x4.125'

CONC. PORCH

ELEV. L & M

8.25'x4.125'

CONC. PORCH

r-----

! GARAGE

- 1. THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTION LINES IS RECOMMENDED.
- 2. A MINIMUM OF 10 FEET SHALL BE PROVIDED BETWEEN THE CHOSEN HOME MODEL AND A MICRO-BIORETENTION / RAIN

**STRAUSS** 

\*LOT 11 OPTIONAL CANTILEVERED DECK MUST BE REDUCED TO 10'x18' FOR MIN DRYWELL

ALL ELEVATIONS AND OPTIONS FIT LOTS 1-12.\*

- GARDEN OR DRYWELL ESD STORMWATER FACILITY MODEL ELEVATION SHALL NOT EXCEED 34' MAX HEIGHT AS ALLOWED
- 4. IN ACCORDANCE WITH SECTION 128.0.A OF THE HOWARD COUNTY
- ZONING REGULATIONS: A. MAX ENCROACHMENT INTO SETBACK FOR CORNICES, EAVES
- AND CANTILEVERED BUILDING FEATURES WHICH DO NOT CONTAIN ANY FLOOR AREA OR EXTENSION OF INTERIOR LIVING SPACE IS: 3 FEET INTO ANY SETBACK
- B. 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.
- C. 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
- D. MAX ENCROACHMENT INTO SETBACK FOR OPEN OR ENCLOSED PORCHES AND DECKS, AND THE STAIRWAYS OR RAMPS ATTACHED THERETO IS: 10 FEET INTO A FRONT OR REAR SETBACK, A SETBACK FROM A PROJECT BOUNDARY, A SETBACK FROM A BUILDINGS.

### ON-LOT DRYWELL - DESIGN ELEVATION CHART DRYWELL LOT DW DRAINAGE AREA IMPERVIOUS AREA ESDV REQUIRED ESDV PROVIDED **ADDRESS** LOCATION NO. GRADE\* STONE\* STONE\* SAND\* SIZE DEPTH DEPTH FT X FT 1A 1 10700 HIDDEN RIDGE DRIVE 430 387.00 | 386.00 | 381.00 | 380.00 | 5.42'x5.42' | 5 430 57.9 1B 1 10700 HIDDEN RIDGE DRIVE 420 420 56.5 58.8 379.50 5.42'x5.42' 420 420 33.3 387.00 | 386.00 | 381.00 | 380.00 | 5.33x5.33 | 5 56.8 3 | 10704 HIDDEN RIDGE DRIVE 421 421 56.7 387.50 | 386.50 | 381.50 | 380.50 | 5.33x5.33 | 5 56.8 4 4 10706 HIDDEN RIDGE DRIVE 420 56.5 420 388.00 | 387.00 | 382.00 | 381.00 | 5.33x5.33 56.8 5 5 10708 HIDDEN RIDGE DRIVE 421 421 56.7 56.8 388.50 | 387.50 | 382.50 | 381.50 | 5.33x5.33 | 5 6 6 10710 HIDDEN RIDGE DRIVE 424 58.8 388.00 | 387.00 | 382.00 | 381.00 | 5.42x5.42 | 5 7 7 10712 HIDDEN RIDGE DRIVE 423 56.9 386.50 385.50 380.50 379.50 5.33x5.33 5 56.8 421 56.7 386.00 | 385.00 | 380.00 | 379.00 | 5.33x5.33 | 5 421 56.8

56.5

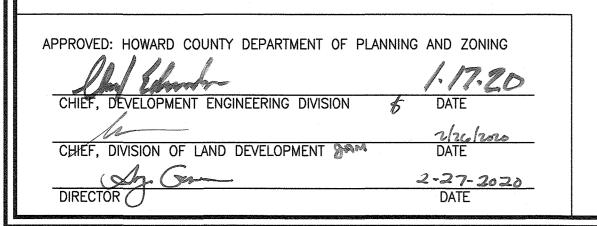
56.7

56.5

56.8

58.8

F= FRONT OF LOT



9 9 10716 HIDDEN RIDGE DRIVE

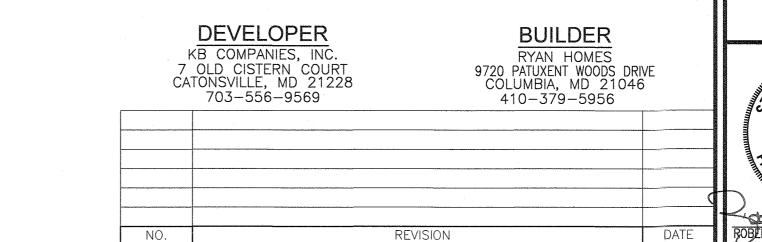
10 10 10718 HIDDEN RIDGE DRIVE

11 11 10720 HIDDEN RIDGE DRIVE 420 \* ELEVATIONS ARE APPROXIMATE AND MAY VARY BASED ON OVERLOT FINE GRADING R= REAR OF LOT

420

421

420



SITE DEVELOPMENT PLAN HOUSE TYPES, SITE DETAILS, STORMWATER MANAGEMENT - NOTES AND DETAILS

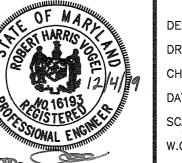
# HIDDEN RIDGE

TAX MAP 35 GRID 18 5TH ELECTION DISTRICT

PARCELS 238 — ZONED: R—SO HOWARD COUNTY, MARYLANI **VOGEL ENGINEERING** 

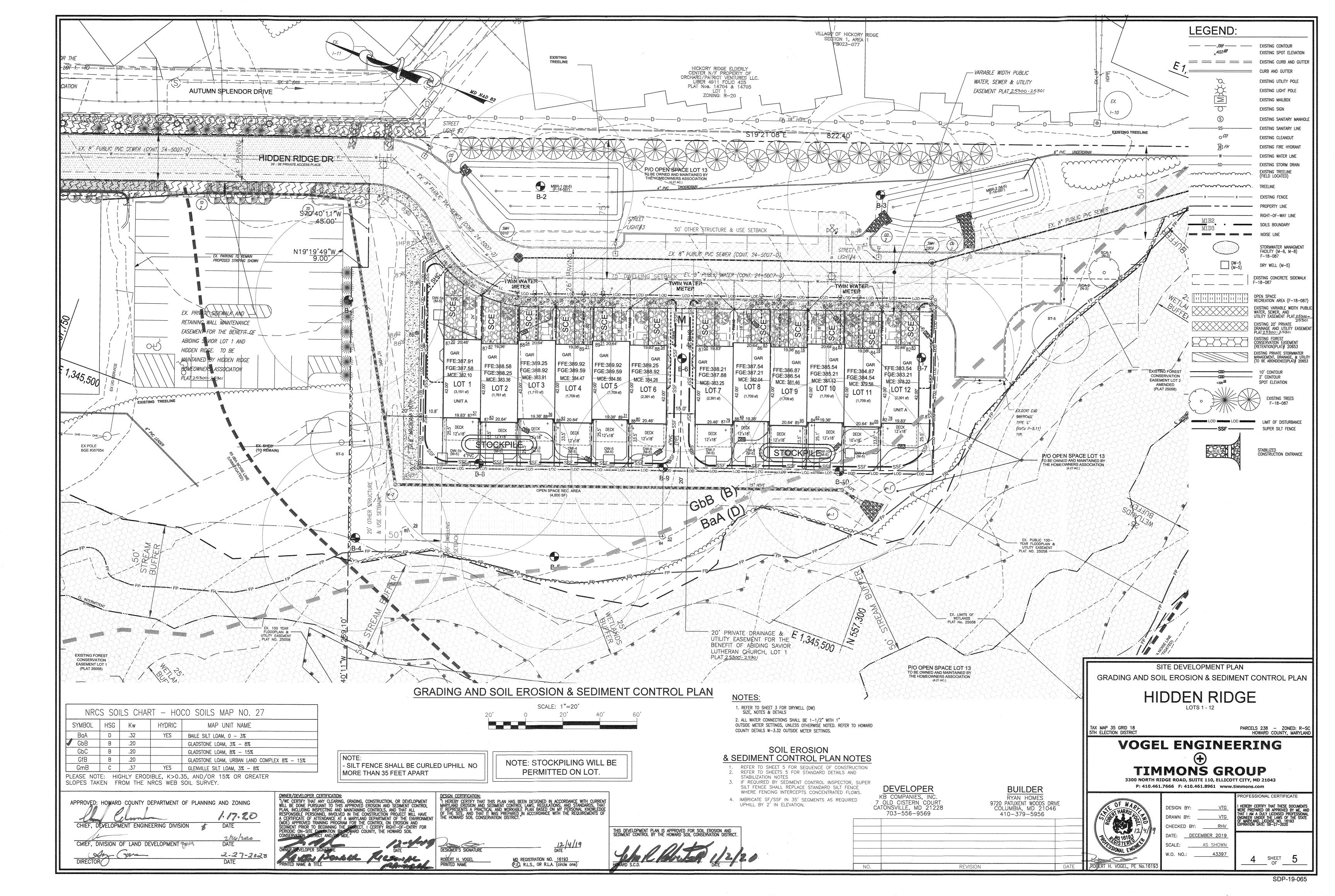
## **TIMMONS GROUP**

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



DESIGN BY:	VTG
DRAWN BY:	VTG
CHECKED BY:	RHV
DATE: <u>DECI</u>	EMBER 2019
SCALE:	AS SHOWN
W.O. NO.:	43397

3 SHEET OF



### HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 AFTER THE FUTURE LOD AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES: PRIOR TO THE START OF EARTH DISTURBANCE.
- UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH

A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT

PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING F ANOTHER GRADING UNIT. PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL

OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE OTHER RELATED STATE AND FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO

ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT

AVOID CONFLICTS WITH THIS PLAN.

- CONTROL, AND REVISIONS THERET FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE
- AREAS UNDER ACTIVE GRADING. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2). PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MUI CHING (SEC. B-4-3 TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH >15' OF CUT AND/OR FILL. STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT. MUST
- BE BENCHED WITH STABLE OLITLET, ALL CONCENTRATED FLOW STEEP SLOPE AND HIGHLY ERODIRI F AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN
- SITE ANALYSIS: TOTAL AREA OF SITE: 4.769 ACRES AREA DISTURBED ACRES ACRES AREA TO BE ROOFED OR PAVED: AREA TO BE VEGETATIVELY STABILIZED: TOTAL FILL OFFSITE WASTE/BORROW AREA LOCATION: ONSITE F-18-087

### (1) REFER TO ITEM 11 BELOW

- 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: INSPECTION DAT
  - INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT) NAME AND TITLE OF INSPECTOR WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND
  - AMOUNT OF LAST RECORDED PRECIPITATION) BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES
  - EVIDENCE OF SEDIMENT DISCHARGES IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE
  - IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS
  - MONITORING/SAMPLING
  - 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 EACH WORKDAY, WHICHEVER IS SHORTER.
- 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 HSCD-APPROVED FIFLD CHANGES
- 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 SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING LINIT HAS BEEN STABILIZED AND APPROVED BY THE CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE CID, NO MORE THAN
- O ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT
- 13. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO 14. 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
- 2' IN ELEVATION. . STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE): USE I AND IP MARCH 1 - JUNE 15
- USE III AND IIIP OCTOBER 1 APRIL 30 USE IV MARCH 1 - MAY 31 16. A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND ASSOCIATED PERMITS SHALL BE

ON-SITE AND AVAILABLE WHEN THE SITE IS ACTIVE. ITEM 11, REGARDING PROJECT DISTURBANCE IS NO LONGER A REQUIREMENT OF THE STATE

OF MARYLAND, HOWEVER REMAINS A REQUIREMENT OF HOWARD COUNTY.

EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.

APPROVED; HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DEVELOPMENT ENGINEERING DIVISION

CHIÉF, DIVISION OF LAND DEVELOPMENT

## B-4-5 STANDARDS AND SPECIFICATIONS PERMANENT STABILIZATION

TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION

TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS. CONDITIONS WHERE PRACTICE APPLIES

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

### I. GENERAL US

- 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. TH 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 FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT TURFGRASS MIXTURFS
- A. ARFAS WHERE TUREGRASS MAY BE DESIRED INCLUDE LAWNS PARKS PLAYCROLINGS 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 THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED
  - I. 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 BLUEGRASS 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. II. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUI
- 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 BLUFGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT. III. TALL FESCUE/KENTUCKY BUJECRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FUL SUN TO MEDIUM SHADE, RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUR 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 TURE AREA. MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUFGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1½ 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" CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. 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 (HARDINESS ZONES: 7A, 7B)
- 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.
- SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).
- 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 LINIFORM SOIL THICKNESS OF 3/4 INCH. PLUS OR MINUS 1/4 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TOM OR UNEVEN ENDS WILL NOT BE C. STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM
- GRASP ON THE UPPER 10 PERCENT OF THE SECTION D. SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTLIRE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
  E. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT 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 D. WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET, COMPLETE HE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT 3. SOD MAINTENANCE A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS
- OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES, WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING. B. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT. C. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

### PERMANENT SEEDING SUMMARY

HARDINESS ZONE (FROM FIGURE B.3): ZONE 6b SEED MIXTURE (FROM TABLE B.3):			FERTILIZER RATE (10-20-20)			LIME RATE		
NO	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P <sub>2</sub> 0 <sub>5</sub>	к <sub>2</sub> 0	
9	COOL SEASON TALL FESCUE	T.F. 60 LB / AC	MAR 1 TO MAY 15	1/4-1/2 IN.				2 TONS/AC
	& KENTUCKY BLUEGRASS PERENNIAL	K.B. 40 LB / AC	AUG 15 TO OCT 15	, , ,,	,	,	1000 SF )	`
	RYEGRASS OR EQUAL	P.R. 20 LB / AC						
4	WARM/COOL SEASON	DT 15 LB / AC	MAR 1 TO MAY 15 <><>					
	GRASS MIX DEERTOUNGE	CRF 20 LB / AC	MAY 16 TO					
	CREEPING RED FESCUE & CANADA WILD RYE	CWR. 5 LB / AC	JUNE 15*				`	

FOR ALTERNATES, REFER TO THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL - PAGES B.26 - B.32

"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
PERIODIC ON-SITE EVALUATION BY TOWARD COUNTY, THE HOWARD SOIL
CONSERVATION DISTRICT AND/OF MDE."

### R-4-2 STANDARDS AND SPECIFICATIONS

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS

## DEFINITION

THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

## TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

CONDITIONS WHERE PRACTICE APPLIES

### WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

RE ACCEPTABLE.

- 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 EQUIPMEN AFTER THE SOIL IS LOOSENED. IT MUST NOT BE ROLLED OR DRAGGED \$MOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
  - B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS. C. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. 2. PERMANENT STABILIZATION A. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE
  - MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE: I. SOIL PH BETWEEN 6.0 AND 7.0. II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM). III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCÉPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD
  - IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT. /. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION B. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS. C. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO
  - 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 SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE, LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY

- I. 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-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 B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO 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 . TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING A. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SURSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS TRASH OR OTHER MATERIALS LARGER THAN 1% INCHES IN DIAMETER 3. 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 C. 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. 3. TOPSOIL APPLICATION . EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING 3. 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 SOIL 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 MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.
- 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 ENGINEERING 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 ALITHORITY FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND 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 FVFNLY 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.

"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."

REGISTRATION NO. 16193 (P.E), R.L.S., OR R.L.A. (circle one)

## - STABILIZED-DETAIL E-1 SILT CONSTRUCTION SCE 2 FENCE ENTRANCE \_36 IN MIN. FENCE PUST LENGTH DRIVEN MIN. 16 IN INTO GROUND PROFILE ELEVATION PLAN\_VIEW CROSS SECTION 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 AS SPECIFIED ON APPROVED PLAN WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE 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 PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCR (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE. 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, DROPPEE OR TRACKED ONTO ADJACENT ROADWAY BY VACULIMING, SCRAPING, AND/OR SWEEPING, WASHII ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH JOINING TWO ADJACENT S FENCE SECTIONS (TOP VIEW)

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

## DEFINITION

A. SEEDING

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. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT 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 SEEDING DATES ONLY IF THE 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 SPECIES. 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 HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL 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 SURSOIL AT THE RATES PRESCRIRED ON TEMPORARY SEEDING
- II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT. B. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL 1. 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

TABLE 8.1. PERMANENT SEEDING TABLE 8.3. OR SITE-SPECIFIC SEEDING SUMMARIES

- 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 STAT 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 SULIRRY
- 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
- 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

PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.

- 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.
- 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, PETROSE

TERRA TAX I, 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

DEFINITION

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 SEFDING 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 UNTIL THE NEXT SEEDING SEASON.

HARDINESS ZONE (FROM FIGURE B.3): ZONE 6b SEED MIXTURE (FROM TABLE B.1):				FERTILIZER RATE	LIME RATE	
NO	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	(10-20-20)	27772 1712
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

## B-4-8 STANDARDS AND SPECIFICATIONS STOCKPILE AREA

- 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 THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO
- RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE
- 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.
- STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION. BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES

HE 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 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

# TEMPORARY STABILIZATION

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

### TEMPORARY SEEDING SUMMARY

HARDINESS ZONE (FROM FIGURE B.3): ZONE 6b SEED MIXTURE (FROM TABLE B.1):				FERTILIZER RATE	LIME RATE	
NO	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	(10-20-20)	BATTER STATE
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.		

PAGE B.20, TABLE B.1, SHOWN ON SHEET X

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

- MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
- STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.
  - STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE

OF A DIVERSION DEVICE SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR

RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL ACCORDANCE WITH SECTION B-3 LAND GRADING.

DEVELOPER

KB COMPANIES, INC

7 OLD CISTERN COURT CATONSVILLE, MD 21228

703-556-9569

STANDARD INLET

PROTECTION

DETAIL E-1

CONSTRUCTION SPECIFICATIONS

DETAIL E-9-1

SILT

USE WOOD POSTS 1 $\frac{1}{4}$  X 1 $\frac{1}{4}$   $\pm$   $\frac{1}{6}$  INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "I" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.

USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET

USE WOVEN SLIT FILM GEOTEXTHE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTHE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.

PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF The

INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE 10 POST IN ACCORDANCE WITH THIS CETAIL.

EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEEL UFSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE

**FENCE** 

\_\_\_\_SF-\_\_\_

TYPE B TYPE A ISOMETRIC\_VIEW EDGE OF ROADWAY OR

SECTION FOR TYPE A AND B

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SHUMENT CONTROL

ONSTRUCTION SPECIFICATIONS USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18 INCHES BELOW THE NOTCH FOR TYPE A, USE NOMINAL 2 INCH X 4 INCH CONSTRUCTION GRADE LUMBER POSTS, DRIVEN 1 FOC INTO THE GROUND AT EACH CORNER OF THE INLET, PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2XA FRAWE AS SHOWN, STRETCH ½ INCH GALVANIZED HARDWARE CLOTH TICHTLY "ARGUND THE FRAME AND FASTEN SECURELY, FASTEN GEOTEXTILE SECURELY TO THE HARDWARE CLOTH WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND HARDWARE CLOTH A MINIMUM OF 18 INCHES BELOW THE WEIR CREST, THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED TO THE POST. FOR TYPE B, USE 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND 6 FOOT LENGTH, DRIVEN A MINIMUM OF 36 INCHES BELOW THE WEIR CREST AT EACH CORNER OF THE STRUCTURE. FASTEN 9 GAUGE OR HEAVER CHAIN LINK FENCE, 42 INCHES IN HEIGHT, SECURELY TO THE FENCE POSTS WITH WIRE TIES. FASTEN GEOTEXTILE SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 18 INCHES BELOW THE WEIR CREST. BACKFILL AROUND THE INLET IN LOOSE 4 INCH LIFTS AND COMPACT UNTIL SOIL IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING, IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL

SUPER SILT

GALVANIZED CHAIN LINK FENCE WITH WOVEN SLIT FILM GEOTEXTILE

FENCE

ELEVATION

INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART, DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND,

FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECUREL TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.

FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.

WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.

EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT

PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEET. THE REQUIREMENTS IN SECTION H-1 MATERIALS.

REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE, HEIGHT, REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL

STANDARD INLET

PROTECTION

CROSS SECTION

H-SSF---

DETAIL E-3

WOVEN SLIT FILM GEOTE

CONSTRUCTION NOTES

DETAIL E-9-1

COW -

### SEQUENCE OF CONSTRUCTION

- A. OBTAIN GRADING PERMIT. (1 DAY) B. OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (1 DAY) STAKEOUT LIMITS OF DISTURBANCE. (3 DAYS) INSTALL STABILIZED CONSTRUCTION ENTRANCE. IN ACCORDANCE WITH DETAILS HEREON, INSTALL SEDIMENT CONTROL MEASURES
- AS SHOWN IN PLAN VIEW. EXISTING GRADES SHOWN HEREON ARE THE PROPOSED GRADES FROM F-18-087 CONTRACTOR SHALL UTILIZE THE EXISTING CONTROLS INSTALLED UNDER F-18-087 AS APPLICABLE.
- AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED ROUGH GRADE INDIVIDUAL LOT FOR HOUSE CONSTRUCTION. (1 DAY) STOCKPILES SHALL BE STABILIZED AS DETAILED HEREON. (1 DAY)
- CONSTRUCT ATTACHED HOUSES ON LOTS 1-12. THE FIRST FLOOR ELEVATIONS CANNOT BE MORE THAN 1' HIGHER OR 0.2' LOWER THAN THE ELEVATIONS SHOWN ON THIS PLAN. (6 MONTHS)
  FINE GRADE LOT AS DETAILED HEREIN AND PER SPOT ELEVATIONS AS SHOWN TO BE IN CONFORMANCE WITH STORMWATER MANAGEMENT SCHEME APPROVED FOR THE
- UPON COMPLETION OF HOME CONSTRUCTION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, COMPLETE ANY REMAINING FINE GRADING, INSTALL ONLOT STORMWATER MANAGEMENT DRYWELLS.
- ADD TOPSOIL PER THE SPECIFICATIONS SHOWN HEREON. (1 DAY) WITH ALL ONLOT DISTURBANCES COMPLETED, STABILIZE WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH OR EQUAL STABILIZATION. (1 DAY) AFTER PERMISSION HAS BEEN GIVEN BY SEDIMENT CONTROL INSPECTOR, REMOVE ANY REMAINING E/S CONTROLS AND STABILIZE THE DISTURBED AREAS FROM THE

REVISION

MULCH, (1 DAY) NOTE: ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND

BUILDER

RYAN HOMES

9720 PATUXENT WOODS DRIVE

COLUMBIA, MD 21046

410-379-5956

AFOREMENTIONED DISTURBANCES WITH PERMANENT SEEDING MIXTURE AND STRAW

APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION

SITE DEVELOPMENT PLAN GRADING AND SOIL EROSION. & SEDIMENT CONTROL PLAN - DETAILS HIDDEN RIDGE

**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



ROBERT H. VOGEL, PE No.16193

DESIGN BY: VTG DRAWN BY: CHECKED BY: DATE: <u>DECEMBER 2019</u> SCALE: 43397 W.O. NO.:

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2020 SHEET \_\_\_ OF \_\_

ROFESSIONAL CERTIFICATE

PARCELS 238 - ZONED: R-S

HOWARD COUNTY, MARYLAN