

GENERAL NOTES CONTINUED

REFER TO SHEFT 13, NOTE 5

- 46. THIS PROJECT IS SUBJECT TO WP-16-038. ON DECEMBER 5, 2016; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR ALTERNATIVE COMPLIANCE TO SECTION 16.1205(A)(7)&(10) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, WHICH REQUIRES THE RETENTION OF STATE CHAMPION TREES, TREES 75% OF THE DIAMETER OF STATE CHAMPION TREES, AND TREES 30" IN DIAMETER OR LARGER. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 - 1. APPROVAL IS TO REMOVE 41 SPECIMEN TREES IDENTIFIED ON THE ALTERNATIVE COMPLIANCE EXHIBIT. A SEPARATE ALTERNATIVE COMPLIANCE REQUEST MUST BE SUBMITTED AND APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING FOR ANY OTHER SPECIMEN TREE TO BE REMOVED, UNLESS OTHERWISE NOTED IN THESE CONDITIONS OF APPROVAL. 2. SPECIMEN TREES WHERE THE CRITICAL ROOT ZONE IS IMPACTED BY THE LIMIT OF DISTURBANCE WILL REQUIRE PRE, DURING, AND POST CONSTRUCTION PRACTICES AND MEASURES TO MINIMIZE IMPACT TO THE TREES. THESE SPECIFIC PRACTICES WILL BE IDENTIFIED WITHIN THE
 - FINAL SUBDIVISION PLAN AND SHALL BE IMPLEMENTED AND/OR SUPERVISED IN THE FIELD BY A CERTIFIED ARBORIST. 3. SPECIMEN TREES WHERE THE CRITICAL ROOT ZONE IS IMPACTED BY THE LIMIT OF DISTURBANCE, AND INDICATED IN THE ALTERNATIVE COMPLIANCE EXHIBIT TO BE IN POOR OR FAIR CONDITION, MAY BE REMOVED UNDER THIS ALTERNATIVE COMPLIANCE REQUEST IF A CERTIFIED ARBORIST DETERMINES SURVIVAL OF THE TREE IS IMPROBABLE OR THE TREE MAY BE A POTENTIAL HAZARD TO THE DEVELOPMENT. PRIOR TO REMOVING THE TREE, THE APPLICANT SHALL SUBMIT A REPORT FROM THE CERTIFIED ARBORIST TO THE DEPARTMENT OF PLANNING AND ZONING DETAILING THE TREES CONDITION, THE PRACTICES EXAMINED TO SAVE THE TREE, AND THE REASONING FOR THE TREE'S
 - 4. REMOVAL OF THE 41 SPECIMEN TREES WILL REQUIRE MITIGATION AS ADDITIONAL LANDSCAPE PLANTINGS OR 1" CALIPER FOREST CONSERVATION PLANTINGS, OR A COMBINATION THEREOF. MITIGATION WILL BE DETERMINED BY THE DEPARTMENT OF PLANNING AND ZONING

F-18-041 MET THE OBLIGATION BY PROVIDING 1" CALIPER FOREST CONSERVATION PLANTINGS.

47. IN ACCORDANCE WITH SECTION 121.0 OF THE 10/06/13 COMPREHENSIVE ZONING REGULATIONS, AND THE BULK REGULATIONS APPROVED UNDER HOWARD COUNTY ZONING BOARD CASE ZB-1104-M BULK REGULATIONS, THIS SUBDIVISION IS SUBJECT TO MODERATE INCOME HOUSING UNITS. AT LEAST 10% OF THE DWELLINGS SHALL BE MODERATE INCOME HOUSING UNITS (MIHU). 184 X 10% = 19 UNITS OR THE EQUIVALENT SHALL BE PROVIDED FOR THIS PROJECT. -PHASE 1 REQUIRES 13 MIHU UNITS (129 X 10% = 12.9 UNITS)

DURING THE REVIEW OF THE PRELIMINARY PLAN OR FINAL PLAN WHEN SITE DESIGN IS FURTHER ENGINEERED.

--PHASE 2 REQUIRES 6 MIHU UNITS (\$5 X 10% = 5.5 UNITS)
-- IN ACCORDANCE WITH CEF-R REGULATIONS, 19 SFA UNITS SHALL BE DESIGNATED AS MIHU UNITS.
-- A MIHU AGREEMENT WAS RECORDED SIMULTANEOUSLY WITH THE RECORDING OF PLAT

ALL 19 MODERATE INCOME HOUSING UNITS ARE PROPOSED WITH SDP-19-057, REFER TO L.19101 F. 344.

48. THIS PROJECT IS SUBJECT TO WP-17-108. ON JULY 20, 2017; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR ALTERNATIVE COMPLIANCE WITH SUBSECTION 16.144(G) OF THE CODE, REQUIRING A PRELIMINARY PLAN FOR PHASE 2: APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS APPLICANT SHALL SUBMIT A FINAL PLAN APPLICATION BASED ON P-17-002, ONCE APPROVED, AND SHALL RECORD A SUBDIVISION PLAT

WITH THE LAND RECORDS OFFICE OF HOWARD COUNTY BASED ON SAID FINAL PLAN. THE FINAL PLAT SHALL INDICATE PHASE 1 AND PHASE 2 OF THE SIMPSON OAKS SUBDIVISION. THE PHASE 1 FINAL PLAN WILL INCLUDE BUILDING LOTS, NON-BUILDABLE BULK PARCELS, OPEN SPACE LOTS AND ROAD CONSTRUCTION DRAWINGS FOR THE ENTIRE PROJECT. THE PHASE 2 FINAL PLAN WILL ONLY SHOW THE RESUBDIVISION OF NON-BUILDABLE PARCELS INTO THE REMAINING BUILDABLE LOTS. THE GROUNDWATER USE RESTRICTION AREA (APPROXIMATE) SHOWN HEREON (LOT 31) AS TAKEN FROM THE PREVIOUS PLAT OF GRACE TECH PARK -

PARCELS 'B-1' & 'C' (PLAT #23334-23337) IS DESCRIBED IN A TITLE NOTICE DATED APRIL 7, 2008 AND RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND IN LIBER 11163 FOLIO 568. THE TITLE NOTICE DECLARES THAT THE AREA IS SUBJECT TO A RESOURCE CONSERVATION AND RECOVERY CORRECTIVE ACTION PERMIT AND THE PROHIBITION AGAINST THE DEVELOPMENT OF ONSITE WELLS FOR DRINKING IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK (APPLIES FOR RESIDENTIAL SDP'S).

IN ACCORDANCE WITH SECTION 121.0 OF THE HOWARD COUNTY ZONING REGULATIONS AND THE BULK REGULATIONS APPROVED UNDER HOWARD COUNTY ZÓNING BOARD CASE ZB-1104-M BULK REGULATIONS, THE OPEN SPACE REQUIREMENTS FOR THIS CEF-R PROJECT IS 33% OF GROSS AREA.

-OPEN SPACE LOTS 130-141 SHALL BE OWNED AND MAINTAINED BY THE H.O.A. -PARCEL C-1 SHALL BE OWNED AND MAINTAINED BY W.R. GRACE. IN ACCORDANCE WITH SECTION 121.0 OF THE HOWARD COUNTY ZONING REGULATIONS AND THE BULK REGULATIONS APPROVED UNDER HOWARD COUNTY ZONING BOARD CASE ZB-1104-M BULK REGULATIONS, THE RECREATION OPEN SPACE FOR THIS CEF-R PROJECT IS 1,000 SF / UNIT. SEE TABULATION HEREON. -THE OVERALL REQUIREMENT SHALL BE MET PER REGULATION IN COMBINATION WITH THE JUNE 2012 POLICY REGARDING THE ALLOWANCE OF A MAXIMUM 50% CREDIT FOR RECREATIONAL OPEN SPACE IN LIEU OF LAND AREA.

ALL SIDEWALKS ADJACENT TO PUBLIC STORMWATER MANAGEMENT EASEMENTS SHALL BE TRAFFIC BEARING FOR THE LIMITS OF THE PUBLIC EASEMENT. REINFORCEMENT SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DETAIL R-6.03. REFER TO F-18-041 TRAFFIC CONTROL DEVICES: A. THE R1-1(STOP) SIGNS AND STREET NAME SIGN (SNS) ASSEMBLIES FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETE.

B. THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES. C. ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE 'MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' (MDMUTCD). D. ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, ("QUICK PUNCH") SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE - 3' LONG). THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON THE

TOP OF EACH POST. STREET LIGHTING IN ACCORDANCE WITH SECTION 16.135 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, THE HOWARD COUNTY DESIGN MANUAL AND THE ZONING BOARD DECISION AND ORDER, ZB-1104-M HAS BEEN PROVIDED UNDER F-18-041. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III, SECTION 5.5.A. A MINIMUM OF 20 FEET SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.

NO STREET TREE CAN BE PLANTED WITHIN 30' OF A PROPOSED "STOP" SIGN LOCATION (APPROACH DIRECTION). THE DEVELOPER WILL BE RESPONSIBLE FOR CONSTRUCTING A NATURAL SURFACE TRAIL AND SUSPENSION BRIDGE FROM THIS SUBDIVISION THROUGH OPEN SPACE LOT 140 TO THE ROBINSON NATURE CENTER. SEE SDP-19-025 FOR DETAILS.

THIS PROJECT IS SUBJECT TO WP-20-010. ON SEPTEMBER 12 2019; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR ALTERNATIVE COMPLIANCE TO SECTION 16.144(p) WHICH REQUIRES THE DEVELOPER TO PAY ALL REQUIRED FEES TO THE COUNTY WITHIN 120 DAYS OF RECEIVING APPROVAL OF THE FINAL PLAN; AND, IF SUBJECT TO A DEVELOPER AGREEMENT OR MAJOR FACILITY AGREEMENT, SHALL POST ALL MONIES AND FILE APPROPRIATE SURETY COVERING THE DEVELOPER'S FINANCIAL OBLIGATIONS FOR THE REQUIRED PUBLIC OR PRIVATE IMPROVEMENTS THE PLANNING DIRECTOR ALSO APPROVED THE REQUIRED FOR AN ALTERNATIVE COMPLIANCE OF SECTION 16.144(q) WHICH REQUIRES THE DEVELOPER TO SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION WITHIN 180 DAYS OF FINAL PLAN APPROVAL. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

THE DEVELOPER SHALL PAY ALL REQUIRED FEES TO THE COUNTY; AND, IF SUBJECT TO A DEVELOPER AGREEMENT OR MAJOR FACILITY AGREEMENT, SHALL POST ALL MONIES AND FILE APPROPRIATE SURETY COVERING THE DEVELOPER'S FINANCIAL OBLIGATIONS FOR THE REQUIRED PUBLIC OR PRIVATE IMPROVEMENTS AS INDICATED WITHIN THE EMAIL FROM KENT SHEUBROOKS, DIVISION CHIEF; DIVISION OF LAND DEVELOPMENT, DATED JULY 11, 2019, WITHIN 60 DAYS OF THE PREVIOUS DEADLINE DATE OF AUGUST 18, 2019 (OR UNTIL OCTOBER 17, 2019).

THE DEVELOPER SHALL SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION AS INDICATED WITHIN THE EMAIL FROM KENT SHEU.BROOKS, DIVISION CHIEF, DIVISION OF LAND DEVELOPMENT, DATED JULY 11, .2019, WITHIN 60 DAYS OF THE PREVIOUS DEADLINE DATE OF SEPTEMBER 17, 2019 (OR UNTIL NOVEMBER 16, 2019).

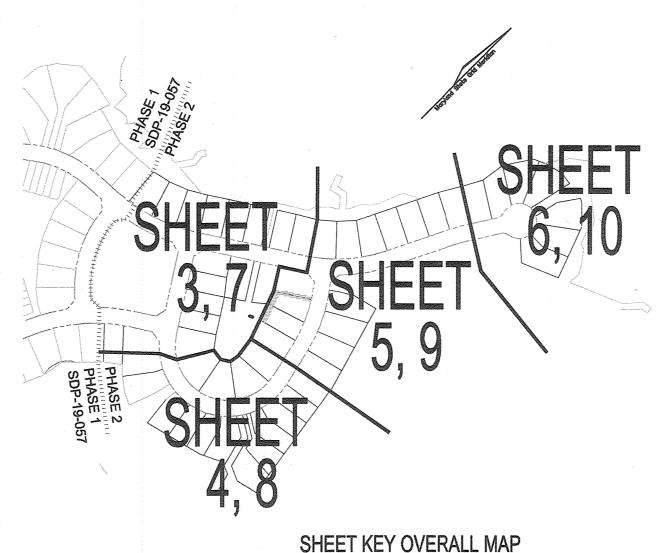
F-18-109, CEDAR CREEK- PHASE 2 THE DEVELOPER SHALL SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION AS INDICATED WITHIN THE DPZ TECHNICALLY COMPLETE LETTER DATED APRIL 11, 2019, WITHIN 60 DAYS OF THE PREVIOUS DEADLINE DATE OF OCTOBER 8, 2019 (OR UNTIL DECEMBER 7, 2019).

THIS PROJECT IS SUBJECT TO WP-20-035. ON OCTOBER 18 2019; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR ALTERNATIVE COMPLIANCE TO SECTION 16.144(p) WHICH REQUIRES THE DEVELOPER TO PAY ALL REQUIRED FEES TO THE COUNTY WITHIN 120 DAYS OF RECEIVING APPROVAL OF THE FINAL PLAN; AND, IF SUBJECT TO A DEVELOPER AGREEMENT OR MAJOR FACILITY AGREEMENT, SHALL POST ALL MONIES AND FILE APPROPRIATE SURETY COVERING THE DEVELOPER'S FINANCIAL OBLIGATIONS FOR THE REQUIRED PUBLIC OR PRIVATE IMPROVEMENTS THE PLANNING DIRECTOR ALSO APPROVED THE REQUEST FOR AN ALTERNATIVE COMPLIANCE OF SECTION 16.144(q) WHICH REQUIRES?THE DEVELOPER TO SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION WITHIN 180 DAYS OF FINAL PLAN APPROVAL. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

F-18-041, CEDAR CREEK - PHASE 1 1. THE DEVELOPER SHALL PAY ALL REQUIRED FEES TO THE COUNTY; AND, IF SUBJECT TO A DEVELOPER AGREEMENT OR MAJOR FACILITY AGREEMENT, SHALL POST ALL MONIES AND FILE APPROPRIATE SURETY COVERING THE DEVELOPER'S FINANCIAL OBLIGATIONS FOR THE REQUIRED PUBLIC OR PRIVATE IMPROVEMENTS AS INDICATED WITHIN THE ALTERNATIVE COMPLIANCE APPROVAL LETTER FROM KENT SHEUBROOKS, DIVISION CHIEF; DIVISION OF LAND DEVELOPMENT, DATED SEPTEMBER 12, 2019, WITHIN 60 DAYS OF THE PREVIOUS DEADLINE DATE OF OCTOBER 17, 2019 (OR UNTIL DECEMBER 16, 2019).

THE DEVELOPER SHALL SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION AS INDICATED WITHIN THE ALTERNATIVE COMPLIANCE APPROVAL LETTER FROM KENT SHEUBROOKS, DIVISION CHIEF, DIVISION OF LAND DEVELOPMENT, DATED SEPTEMBER 12, 2019, WITHIN 60 DAYS OF THE PREVIOUS DEADLINE DATE OF NOVEMBER 16, 2019 (OR UNTIL JANUARY 15, 2020).

F-18-109, CEDAR CREEK- PHASE 2 THE DEVELOPER SHALL SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION AS INDICATED WITHIN THE ALTERNATIVE COMPLIANCE APPROVAL LETTER FROM KENT SHEUBROOKS, DIVISION CHIEF, DIVISION OF LAND DEVELOPMENT, DATED SSEPTEMBER 12, 2019, WITHIN 60 DAYS OF THE PREVIOUS DEADLINE DATE OF DECEMBER 7, 2019 (OR UNTIL FEBRUARY 5, 2020). ADDITIONAL OPEN SPACE IS BEING PROVIDED ON THE VILLAGE OF HICKORY RIDGE - SECTION 3 AREA 14 - PARCEL A - PARCEL A - PLAT MOR NO. 13640. PARCEL A SHALL BE DEDICATED TO HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS BY W.R.GRACE. PARCEL 'A' IS KNOWN AS TAX MAP 35, PARCEL 412. PARCEL 412 (PARCEL 'A') IS CONVEYING 31.39 ACRES OF OPEN SPACE TO THE "CEDAR CREEK" PROJECT.



PROPERTY LINE --- RIGHT-OF-WAY LINE

OT NO		PROMITE THE STATE OF THE STATE
	STREET ADDERESS	FACILITY TYPE & MDE NO.
142	The second secon	ROOFTOP DISCONNECT (N-1)
143	7719 CROSS CREEK DRIVE	ROOFTOP DISCONNECT (N-1)
144	7723 CROSS CREEK DRIVE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
145	7727 CROSS CREEK DRIVE	DRYWELL (M-5)
146	7731 CROSS CREEK DRIVE	DRYWELL (M-5)
147	7735 CROSS CREEK DRIVE	DRYWELL (M-5)
148	7743 CROSS CREEK DRIVE	RAIN BARREL (M-1)
149	7747 CROSS CREEK DRIVE	RAIN BARREL (M-1)
150	7751 CROSS CREEK DRIVE	RAIN BARREL (M-1)
151	7755 CROSS CREEK DRIVE	RAIN BARREL (M-1)
152	7759 CROSS CREEK DRIVE	
153	7763 CROSS CREEK DRIVE	
154	7767 CROSS CREEK DRIVE	DRYWELL (M-5)
155	7771 CROSS CREEK DRIVE	DRYWELL (M-5)
156	7775 CROSS CREEK DRIVE	DRYWELL (M-5)
157	7779 CROSS CREEK DRIVE	DRYWELL (M-5)
158	7783 CROSS CREEK DRIVE	DRYWELL (M-5)
159	7787 CROSS CREEK DRIVE	DRYWELL (M-5)
160	7791 CROSS CREEK DRIVE	DRYWELL (M-5)
161	7798 CROSS CREEK DRIVE	DRYWELL (M-5)
162	7802 CROSS CREEK DRIVE	DRYWELL (M-5)
163	7806 CROSS CREEK DRIVE	DRYWELL (M-5)
164	7984 LAWNDALE CIRCLE	RAIN BARREL (M-1)
165	7980 LAWNDALE CIRCLE	RAIN BARREL (M-1)
166	7976 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
167	7972 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
168	7968 LAWNDALE CIRCLE	DRYWELL (M-5)
169		
	7964 LAWNDALE CIRCLE	DRYWELL (M-5)
170	7960 LAWNDALE CIRCLE	DRYWELL (M-5)
171	7956 LAWNDALE CIRCLE	DRYWELL (M-5)
172	7952 LAWNDALE CIRCLE	DRYWELL (M-5)
173	7948 LAWNDALE CIRCLE	DRYWELL (M-5)
174	7940 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
175	7936 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
176	7932 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
177	7928 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
178	7924 LAWNDALE CIRCLE	RAIN BARREL (M-1), ROOFTOP DISCONNECT (N-1)
179	7920 LAWNDALE CIRCLE	RAIN BARREL (M-1), ROOFTOP DISCONNECT (N-1)
180	7916 LAWNDALE CIRCLE	RAIN BARREL (M-1), ROOFTOP DISCONNECT (N-1)
181	7268 MAINSTREAM WAY	RAIN BARREL (M-1), ROOFTOP DISCONNECT (N-1)
182	7901 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
183	7905 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
184	7909 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
185	7913 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
186	7917 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
187	7925 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
188	7933 LAWNDALE CIRCLE	DRYWELL (M-5)
189	7941 LAWNDALE CIRCLE	DRYWELL (M-5)
190	7945 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
191	7949 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
192	7953 LAWNDALE CIRCLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1)
193	7973 LAWNDALE CIRCLE	RAIN BARREL (M-1), ROOFTOP DISCONNECT (N-1)
194	7977 LAWNDALE CIRCLE	RAIN BARREL (M-1), ROOFTOP DISCONNECT (N-1)
	7744 CROSS CREEK DRIVE	DRYWELL (M-5)
195		Control of the Section Associated Section 1997 (1997)

NOIE:

ON-LOT DOC EXECUTED WITH THIS PLAN (SDP-20-055).

THE FOLLOWING ARE PERMITTED ACCESSORY USES IN THIS CEF-R DISTRICT. MORE THAN ONE ACCESSORY USE SHALL BE PERMITTED ON A LOT, PROVIDED THAT THE COMBINATION OF ACCESSORY USES REMAINS SECONDARY, INCIDENTAL, AND SUBORDINATE TO THE PRINCIPAL USE. 1. ANY USE NORMALLY AND CUSTOMARILY INCIDENTAL TO SINGLE FAMILY DETACHED DWELLINGS. ACCESSORY STRUCTURES ARE SUBJECT TO THE REQUIREMENT OF HOWARD COUNTY ZONING REGULATIONS SECTION 128.0.A. 2. THE HOUSING BY A RESIDENT FAMILY OF: NOT MORE THAN FOUR NON-TRANSIENT ROOMERS OR BOARDERS: OR NOT MORE THAN EIGHT MENTALLY AND/OR PHYSICALLY DISABLED PERSON OR PERSON 62 YEARS OF AGE OR OLDER, PROVIDED THE USE IS REGISTERED, LICENSED OR CERTIFIED BY THE STATE OF MARYLAND, OR c. A COMBINATION OF A AND B ABOVE, PROVIDED THAT THE TOTAL NUMBER OF PERSONS HOUSED IN ADDITION TO THE RESIDENT FAMILY DOES 3. HOME OCCUPATIONS, SUBJECT TO THE REQUIREMENTS OF HOWARD COUNTY ZONING REGULATIONS SECTION 128.0.C. 4. HOME CARE, PROVIDED THAT IF HOME CARE IS COMBINED WITH HOUSING OF MENTALLY OR PHYSICALLY DISABLED PERSONS OR PERSONS 62 YEARS OF AGE OR OLDER, AS ALLOWED BY PARAGRAPH 2.B ABOVE, THE TOTAL NUMBER OF PERSONS RECEIVING HOME CARE AT ANY ONE TIME PLUS THE NUMBER SMALL WIND ENERGY SYSTEM, BUILDING MOUNTED, ON SINGLE FAMILY DETACHED DWELLINGS, SUBJECT TO THE REQUIREMENTS OF HOWARD COUNTY ZONING REGULATIONS SECTION 128.O.L. 6. ACCESSORY SOLAR COLLECTORS C. GENERAL BULK REGULATIONS (PARCEL 145, B-1 & C ONLY): REQUIRED
2.75 DWELLING UNITS/ 2.75 DWELLING UNITS/ 2. PRINCIPAL STRUCTURE (SEE ITEM I): a. FROM EXTERNAL PROPERTY LINES(ADJACENT TO SFD UNITS); b. FROM EXTERNAL PROPERTY LINES(ADJACENT TO ALL OTHER):__ c. FROM EXTERNAL RIGHTS-OF-WAYS:
3. MINIMUM DISTANCE BETWEEN SINGLE FAMILY ATTACHED BUILDINGS AND SINGLE FAMILY DETACHED BUILDINGS: a. FACE TO FACE: b. FACE TO SIDE/REAR TO SIDE; d. REAR TO REAR e. REAR TO FACE D. SINGLE FAMILY DETACHED BULK REGULATIONS (PARCEL 145, B-1 & C ONLY): MINIMUM WIDTH AT BUILDING RESTRICTION LINES: . BUILDING SETBACKS (SEE ITEM I) b. SIDE (CORNER LOTS): i. FROM RIGHT-OF-WAY ii. TOTAL OF BOTH SIDE YARDS: c. SIDE (INTERIOR LOTS): ii. TOTAL OF BOTH SIDE YARDS: d. REAR - PRINCIPAL STRUCTURE: e. REAR - ACCESSORY STRUCTURE: 4. USE* SETBACK: *USES INCLUDE DRIVEWAYS, PATIOS, AND LANDSCAPE STRUCTURES (PERGOLAS AND ARBORS INCLUDED) MAXIMUM HEIGHT: a. PRINCIPAL STRUCTURE: (HOWEVER, THE MAXIMUM HEIGHT FOR PRINCIPAL STRUCTURES WITH GABLE, HIP, OR GAMBREL ROOFS SHALL BE 40') ACCESSORY STRUCTURES: E. OPEN SPACE: PARCEL 145, B-1: 30.69 AC. PARCEL 412 - PARCEL A (W.R. GRACE TO HOWARD COUNTY): 31.39 AC. PARCEL 145, C-1 - (W.R. GRACE): F. ONSITE AMENITY AREA/RECREATIONAL AREA: ____1,000 SF/UNIT (4.22 AC.)___ $(184 \text{ UNITS } \times 1,000 \text{ SF} = 184,000 \text{ SF or } 4.22 \text{ ACRES})$ G. MIHU (MODERATE INCOME HOUSING UNITS) NUMBER OF UNITS TO BE MIHU: __10% (19 UNITS)_____ _____10% (19 SFA UNITS) REFER TO F-18-041 & SDP-19-057. H. CERTAIN EXCEPTIONS TO SETBACKS ARE APPLICABLE PURSUANT TO HOWARD COUNTY ZONING REGULATIONS, SECITON 128.0.A.1

CEF-R REGULATIONS:

-SINGLE FAMILY DETACHED DWELLING UNITS

PERMITTED USES:

OWNER / DEVELOPER T.M. 35 - P.145 (PARCEL B-1) SIMPSON OAKS CRP3, LLC 4750 OWINGS MILLS BOULEVARD OWINGS MILLS, MARYLAND 2111

410-356-9900

NVR HOMES 9720 PATUXENT WOODS DRIVE COLUMBIA, MD 21046

REVISE THE HOUSE TYPE AND GRADING ON LOTS 144, 149, 174 AND 178, REVISE THE 1-13-22 grading on Lots 148,150 and 151, and the davenport and Landon Grande HOUSE TYPES AND CORRECT THE ADDRESSES FOR LOTS 181,182 AND 194

SITE DEVELOPMENT PLAN

OVERALL SITE LAYOUT PLAN & DETAILS

CEDAR CREEK - PHASE 2

PLAT# 25377-25383

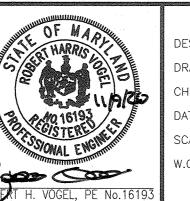
ZONED: CEF-R

TAX MAP 35 GRID 21 -----

---- P/O PARCFI 1 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING

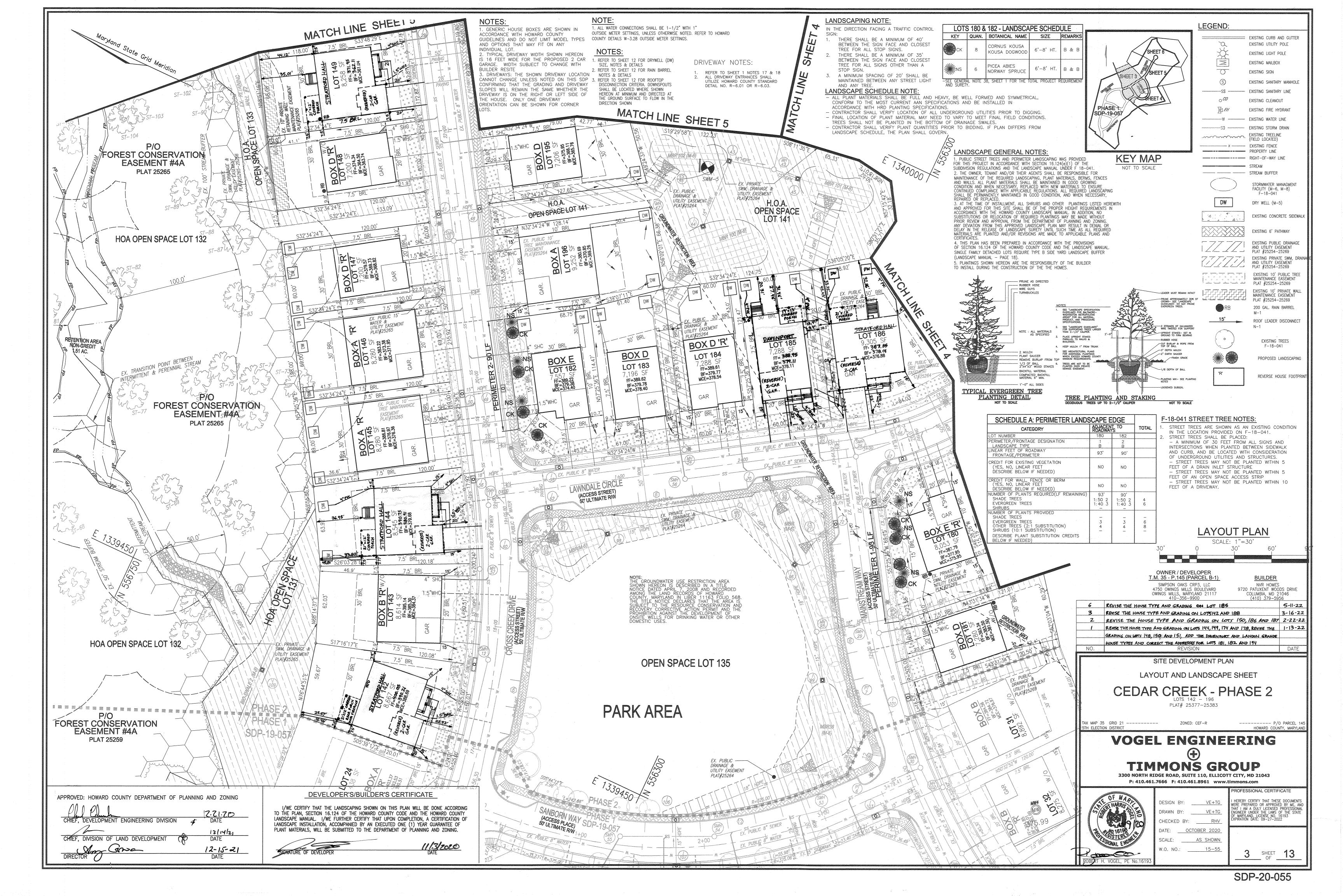
TIMMONS GROUP 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043 P: 410.461.7666 F: 410.461.8961 www.timmons.com

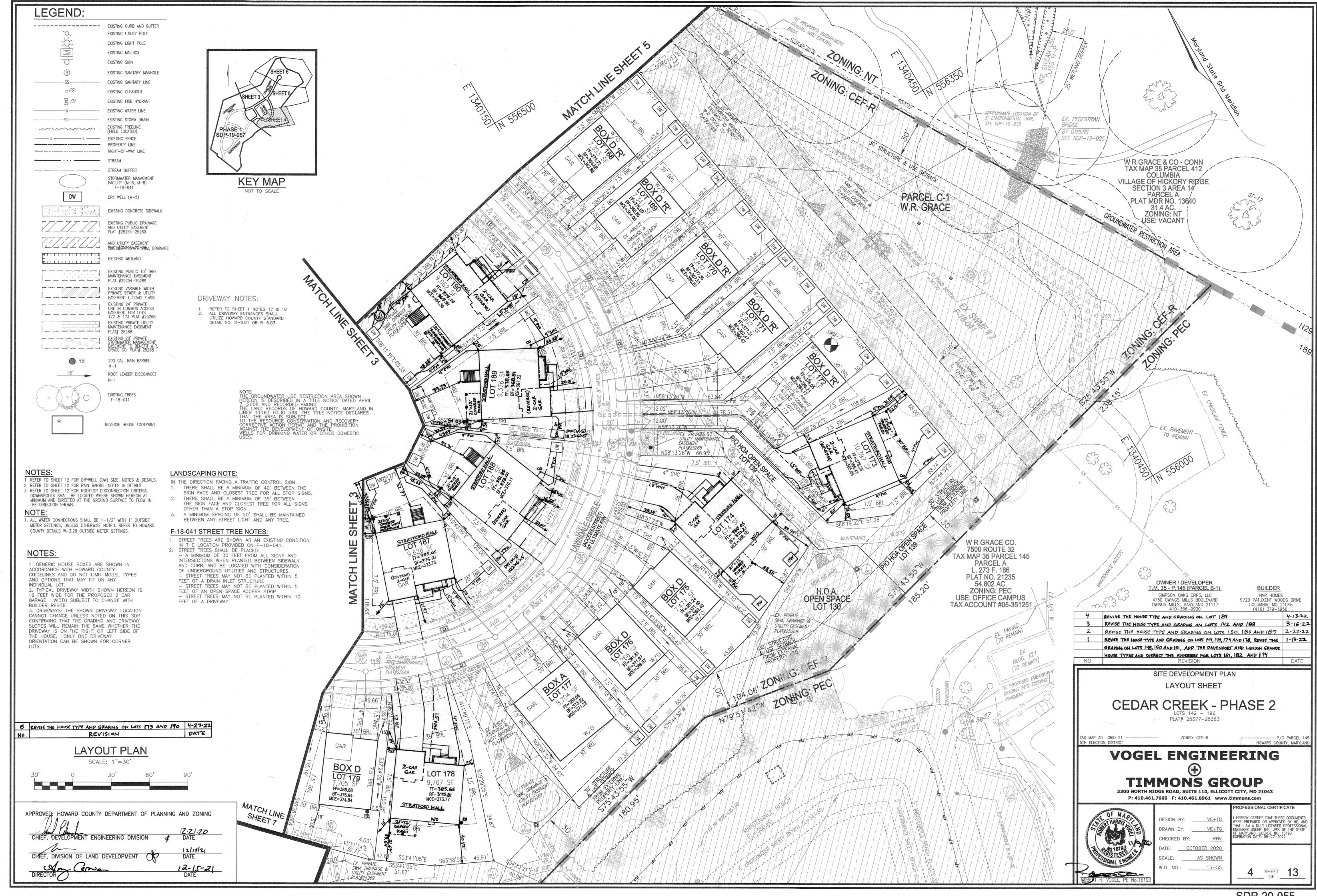


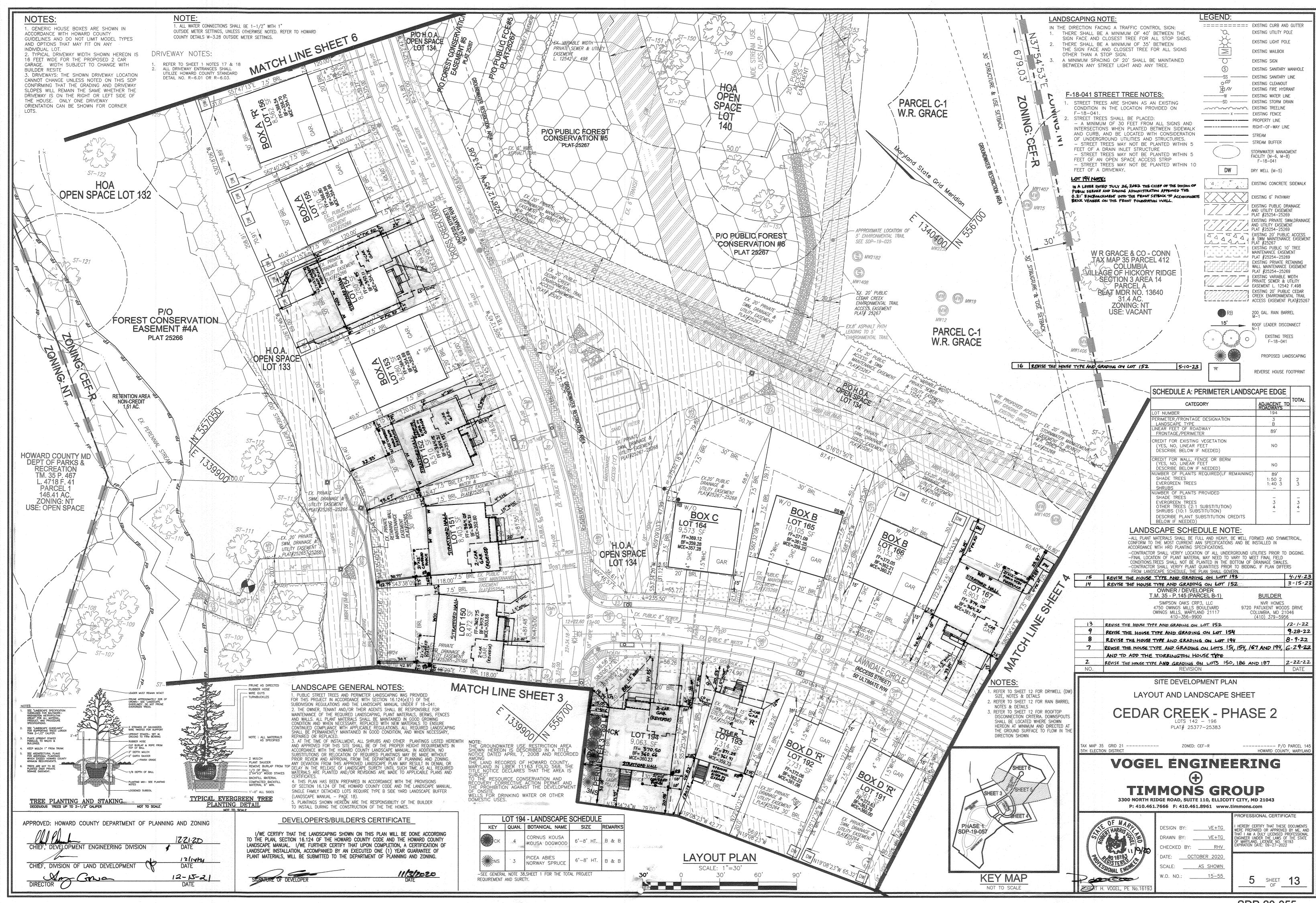
DESIGN BY: VE+TG VE+TG DRAWN BY: CHECKED BY: RHV DATE: OCTOBER 2020 W.O. NO.: 15-55

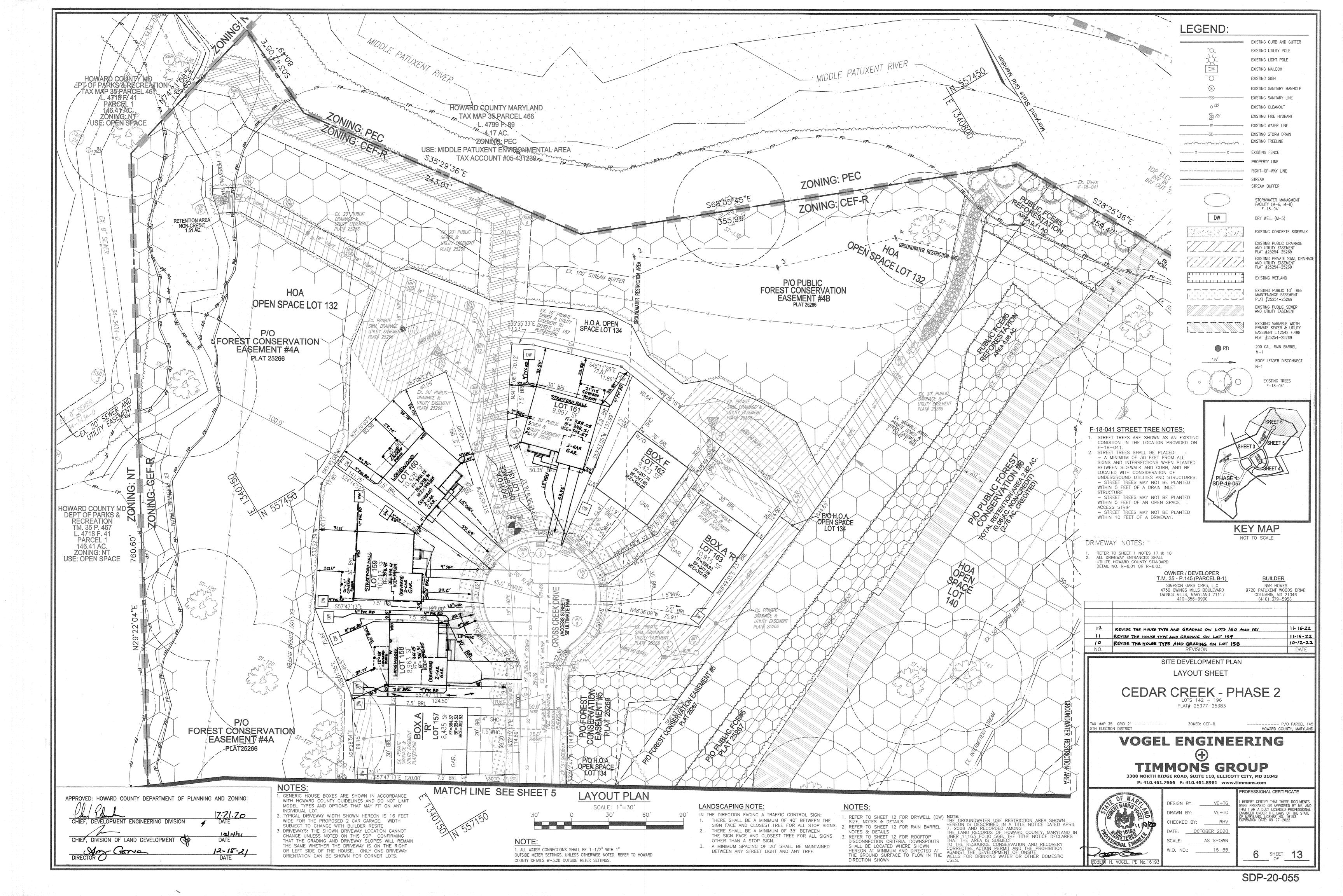
I HEREBI CERTIFI THAI THESE DUCUMENTS
WERE PREPARED OR APPROVED BY ME, AND
THAT I AM A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE
OF MARYLAND, LICENSE NO. 16193
EXPIRATION DATE: 09-27-2022

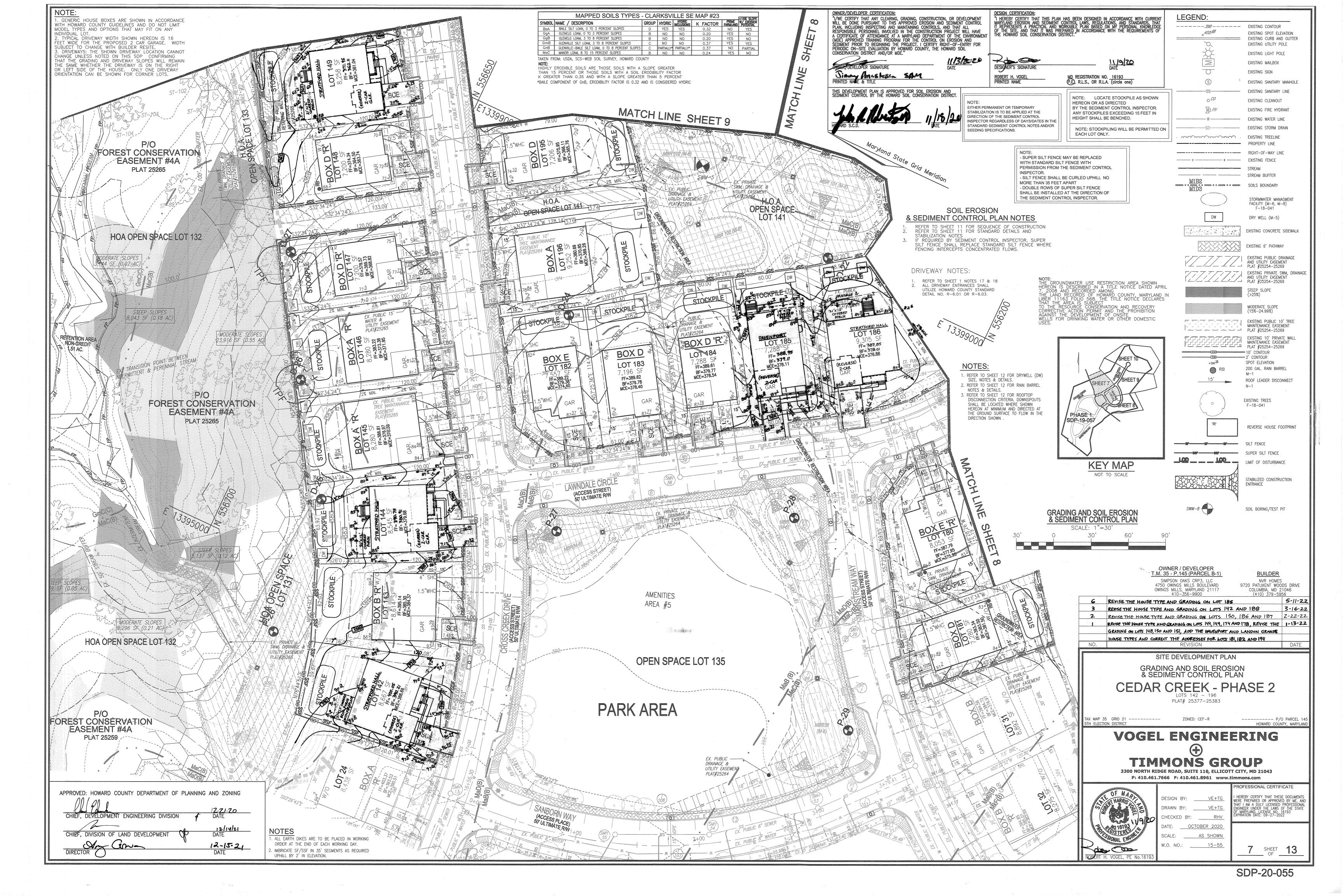
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING THIEF, DEVELOPMENT ENDINEEDING DIVISION

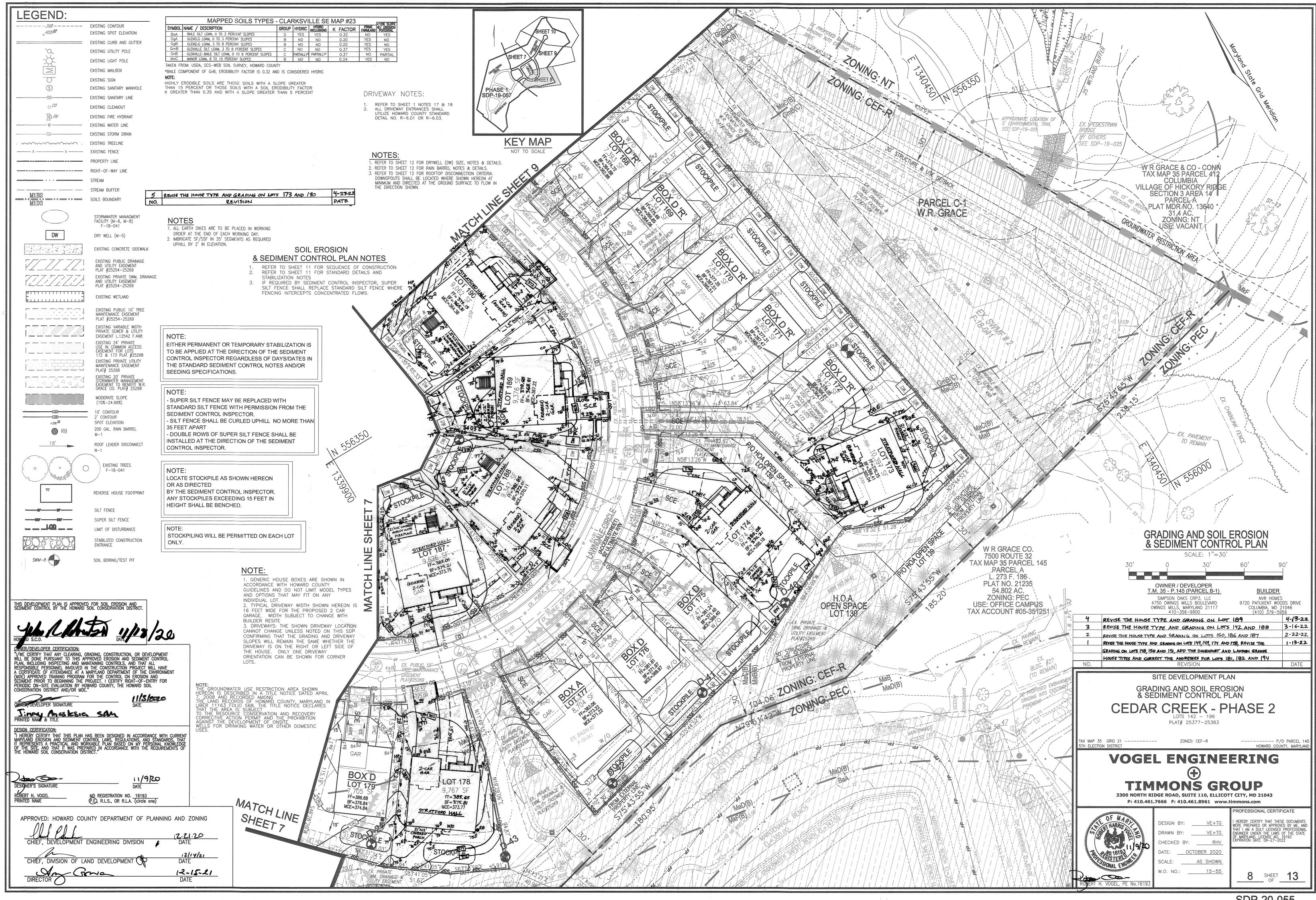


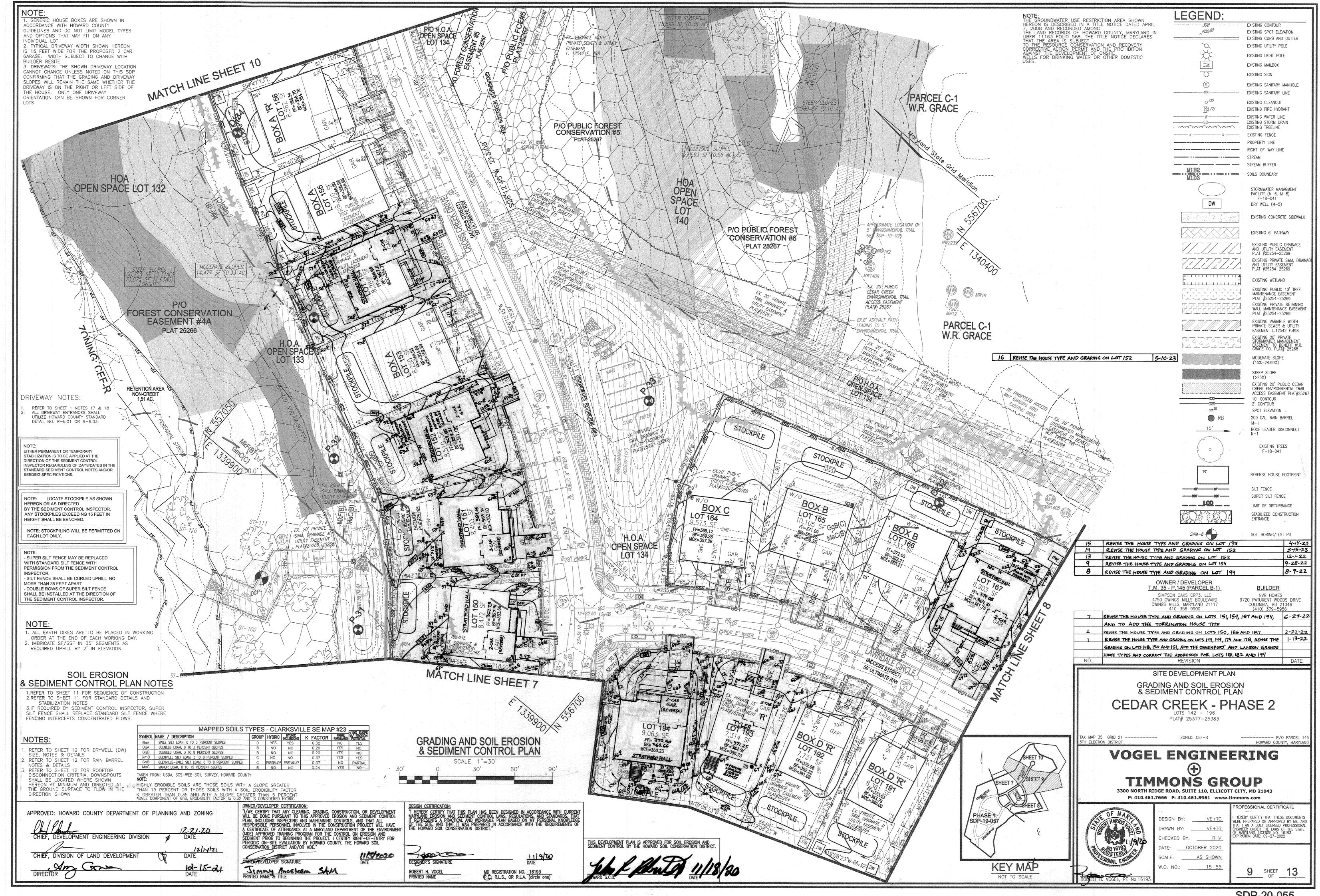


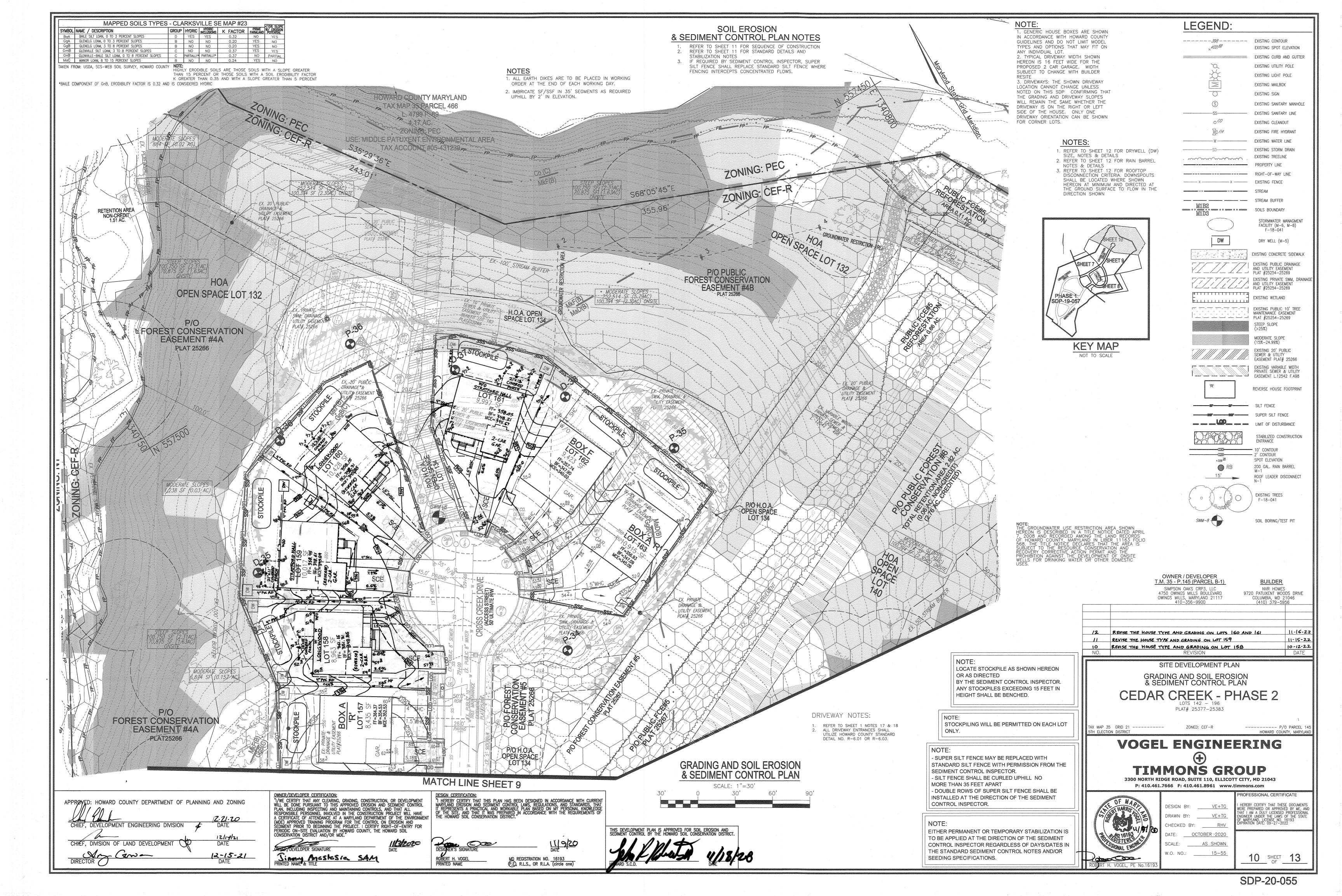












HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT

OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410–313–1855 AFTER DEFINITION THE FUTURE LOD AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIFLD. 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 DISTURBANCE OR GRADING.

PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT D. 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

CONTROL, AND REVISIONS THERETO 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 MULCHING (SEC. B-4-3) EMPORARY 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 OUTLET. ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE 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 OBTAINED FROM THE CID.

> TOTAL AREA OF SITE AREA DISTURBED _ ACRES AREA TO BE ROOFED OR PAVED. ACRES AREA TO BE VEGETATIVELY STABILIZED: ACRES OFFSITE WASTE/BORROW AREA LOCATION: F18-041

(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 D, 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 DATE

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 DISCHARGE IDENTIFICATION OF PLAN DEFICIENCIES 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

PHOTOGRAPHS 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 PROCEFDING WITH CONSTRUCTION. MINOR REVISIONS MAY ALLOWED BY THE CID PER THE LIST OF HSCD-APPROVED FIELD 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 UBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA N THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE

CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE CID, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME. WASH WATER FROM ANY FOLIPMENT VEHICLES WHEELS PAVEMENT SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT

13. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE. 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 16. A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR

OF MARYLAND, HOWEVER REMAINS A REQUIREMENT OF HOWARD COUNTY.

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

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 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 GROUNE COVER ON DISTURBED SOILS. CONDITIONS WHERE PRACTICE APPLIES

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

A. SEED MIXTURES I. GENERAL USE

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. T 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. C. 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

A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUND 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

KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE, RECOMMENDED CERTIFIED KENTUCKY BLUFGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEFT, CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35

PERCENT OF THE TOTAL MIXTURE BY WEIGHT. . 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 FULI 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 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" CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. HE 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) UNTIL THEY ARÉ 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 UNIFORM SOIL THICKNESS OF 3/4 INCH, PLUS OR 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 MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL. SOD MUST BE HARVESTED DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOLDS OD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.

A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOIL 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. 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 HE 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.

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

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

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

P.R. 20 LB / AC

WARM/COOL DT 15 LB / AC MAR 1 TO MAY 15 <><> GRASS MIX OFFERTOLINGE OF TO MAY 16 TO

SPECIES RATE (LB/AC) SEEDING SEEDING DEPTHS

K.B. 40 LB / AC AUG 15 TO

SEED MIXTURE (FROM TABLE B.3):

CREEPING RED FESCUE & CWR. 5 LB / AC

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

(10-20-20)

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

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

1000 SF) 1000 SF) 1000 SF) 1000 SF

IMF RATE

DESIGN CERTIFICATION:

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

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.

A. SOIL PREPARATION

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 SMOOTH 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 EXCEPTION: 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 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

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 SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THI 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.

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. 2. 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 PRODUCE VEGETATIVE GROWTH 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 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, 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 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 AS SPECIFIED. 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. 6. TOPSOIL APPLICATION A. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING

B. 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) . 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 2. 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 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. 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.

DETAIL B-1 STABILIZED CONSTRUCTION SCE S ENTRANCE EXISTING PAVEMENT 1 -PIPE (SEE NOTE 6) **PROFILE** 50 FT MIN. LENGTH PLAN VIEW CONSTRUCTION NOTES

. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS. 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 MATERIALS. PLACE CRUSHED AGGRÉGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (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 PECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR RACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRÁPING, AND/OR SWEEPING. WASHING OADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

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.SPECIFICATION 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 ANY 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 MAKI 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. 2. APPLICATION A. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.

 INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE 8.1, PERMANENT SEEDING TABLE 8.3, OR SITE-SPECIFIC SEEDING SUMMARIES. 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 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.

B. MULCHING 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.

IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

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. I. 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 SFED. 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.

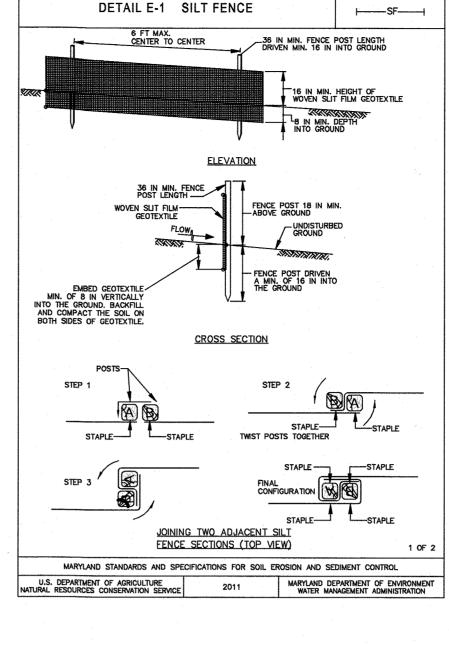
APPLICATION A. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING B. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING

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 SLICH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET TERRA TAX II. TERRA TACK AR OR OTHER APPRÒVED 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



SECURE FENCE BOTTOM.

B-4-4 STANDARDS AND SPECIFICATIONS

TEMPORARY STABILIZATION

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

TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS.

IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES,

1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE 8.1

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

RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY

2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED

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

TEMPORARY SEEDING SUMMARY

MAR 1 T

AUG 1 TO

MAY 16 TO

FOR ALTERNATES, REFER TO THE 2011 MARYLAND STANDARDS AND

SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

SEEDING SEEDING (10-20-20)
DATES DEPTHS

1/2 IN.

FERTILIZER

1/2 IN. | (10 LB PER | (90 LB PER

436 LB/AC 2 TONS/AC

1000 SF) 1000 SF

FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM

FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

DEFINITION

CONDITIONS WHERE PRACTICE APPLIES

MAINTAIN UNTIL THE NEXT SEEDING SEASON.

SEED MIXTURE (FROM TABLE B.1):

NO SPECIES RATE (LB/AC)

COOL SEASON

WARM SEASON

FOXTAIL MILLET OR EQUAL

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

APPLICATION

40 LB / AC

30 LB / AC

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

HIGHLY VISABLE FLAGGING

MAXIMUM 8 FEET

BLAZE ORANGE PLASTIC MESH

TYPICAL TREE PROTECTION FENCE DETAIL

FOREST PROTECTION DEVICE ONLY.
 RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.

4. ROOF DAMAGE SHOULD BE AVOIDED.

-ANCHOR POSTS SHOULD BE

USE 2" X 4" LUMBER FOR CROSS BEARING

--- ANCHOR POSTS MUST BE

B-4-8 STANDARDS AND SPECIFICATIONS

STOCKPILE AREA

A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND

TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT

CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE

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

1. 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

RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT

CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE

WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN

APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO

STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL

BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES

CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE

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

DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING

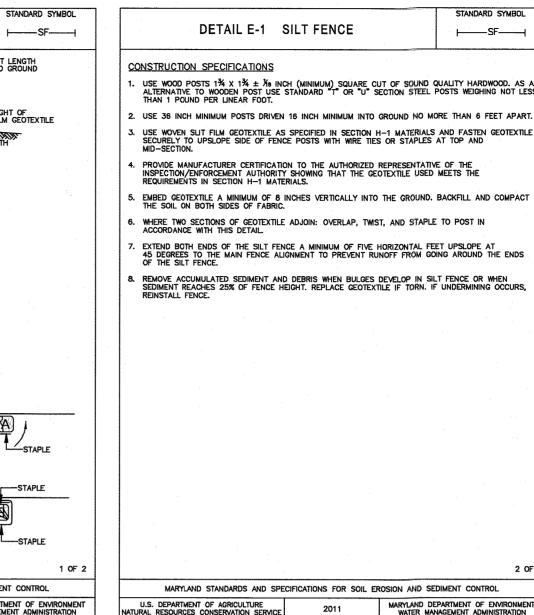
STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY

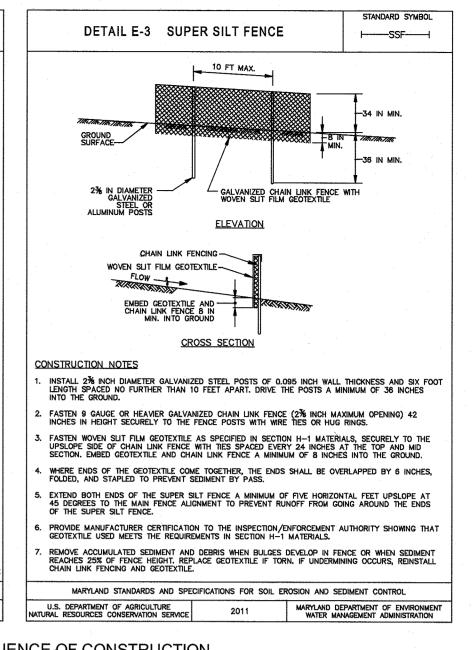
STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION.

ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE.

CONCENTRATED FLOW IN A NON-EROSIVE MANNER.

OR 2" X 2" TIMBER, 6' IN LENGTH





SEQUENCE OF CONSTRUCTION

ORTAIN GRADING PERMIT (1 DAY) NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410-313-1880) AT

LEAST 24 HOURS BEFORE STARTING ANY WORK. (1 DAY) DRY UTILITIES (CABLE, GAS ELECTRIC) MUST BE INSTALLED AFTER ROAD CONSTRUCTION AND PRIOR TO THE INSTALLATION OF THE F-18-041 MICRO BIO RETENTION AND BIOSWALE FACILITIES.

ANY F-18-041 STORMWATER MANAGEMENT FACILITIES IN PLACE SHALL BE PROTECTED FROM RECEIVING SEDIMENT LADEN WATERS FROM HOME CONSTRUCTION ACTIVITIES.

STAKEOUT LIMITS OF DISTURBANCE. (1 DAY)

INSTALL STABILIZED CONSTRUCTION ENTRANCE. (1 DAY) IN ACCORDANCE WITH DETAILS HEREON, INSTALL SEDIMENT CONTROL MEASURES AS SHOWN IN PLAN VIEW.

EXISTING GRADES SHOWN HEREON ARE THE PROPOSED GRADES FROM F-18-041 F-18-041 BASINS AND/OR TRAPS IN PLACE SHALL BE UTILIZED UNTIL THEY ARE

BACKFILLED. CONTRACTOR SHALL UTILIZE ONLOT CONTROLS SHOWN HEREON ONCE THE F-18-041 BASINS AND TRAPS HAVE BEEN BACKFILLED. (1 DAY)

AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED, ROUGH GRADE INDIVIDUAL LOT FOR HOUSE CONSTRUCTION. (1 DAY) STOCKPILING SHALL BE LIMITED TO ONLOT OR AS SHOWN HEREON. STOCKPILES SHALL

BE STABILIZED AS DETAILED HEREON. (1 DAY) CONSTRUCT HOUSES. 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 PROJECT (1 DAY)

UPON COMPLETION OF HOME CONSTRUCTION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, COMPLETE ANY REMAINING FINE GRADING, INSTALL ONLOT STORMWATER MANAGEMENT FACILITIES TO INCLUDE: DRYWELLS, RAIN BARRELS & ROOFTOP DISCONNECTIONS. INSTALL ROOF GUTTER DOWNSPOUTS TO DIRECT ROOFTOP RUNOFF AS DIRECTED. LOT GRADING WHERE ROOFTOP DISCONNECTIONS ARE PROPOSED SHALL BE 5% OR LESS FOR THE DETAILED LENGTH FOR PROPER "DISCONNECTION CREDIT".

12. 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 AFOREMENTIONED DISTURBANCES WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. (1 DAY)

NOTE: ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION



PLAT# 25377-25383 IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD

MAINTENANCE

SEDIMENT CONTROL MEASURES

CONDITIONS WHERE PRACTICE APPLIES

SECTION B-3 LAND GRADING

INTERCEPT THE DISCHARGE.

CONTROL PRACTICE.

<u>PURPOSE</u>

FOR LATER USE.

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 HFIGHT 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.

GRADING AND SOIL EROSION, AND SEDIMENT CONTROL PLAN - DETAILS **CEDAR CREEK - PHASE 2** AX MAP 35 GRID 21 --------- P/O PARCEL ZONED: CEF-R HOWARD COUNTY MARYLAN **VOGEL ENGINEERING** TIMMONS GROUP

P: 410.461.7666 F: 410.461.8961 www.timmons.com SCALE:

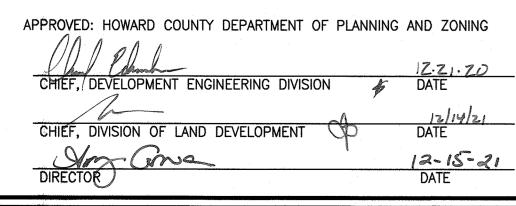
ROBERT H. VOGEL, PE No.161

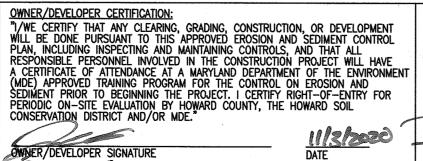
ROFESSIONAL CERTIFICATE DESIGN BY: RE PREPARED OR APPROVED BY ME, AND DRAWN BY: VE+TG CHECKED BY: RHV

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

AT I AM A DULY LICENSED PROFESSIONAL GINEER UNDER THE LAWS OF THE STATE MARYLAND, LICENSE NO. 16193 PIRATION DATE: 09-27-2022 OCTOBER 2020 AS SHOWN 15-55 W.O. NO.: SHEET 13

SDP-20-055

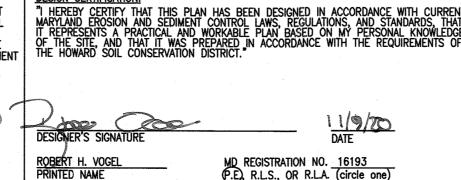


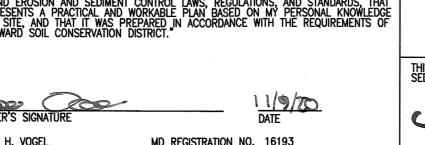


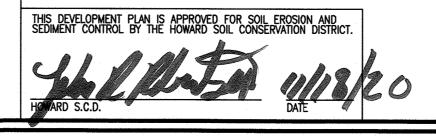
Arestorie SAM

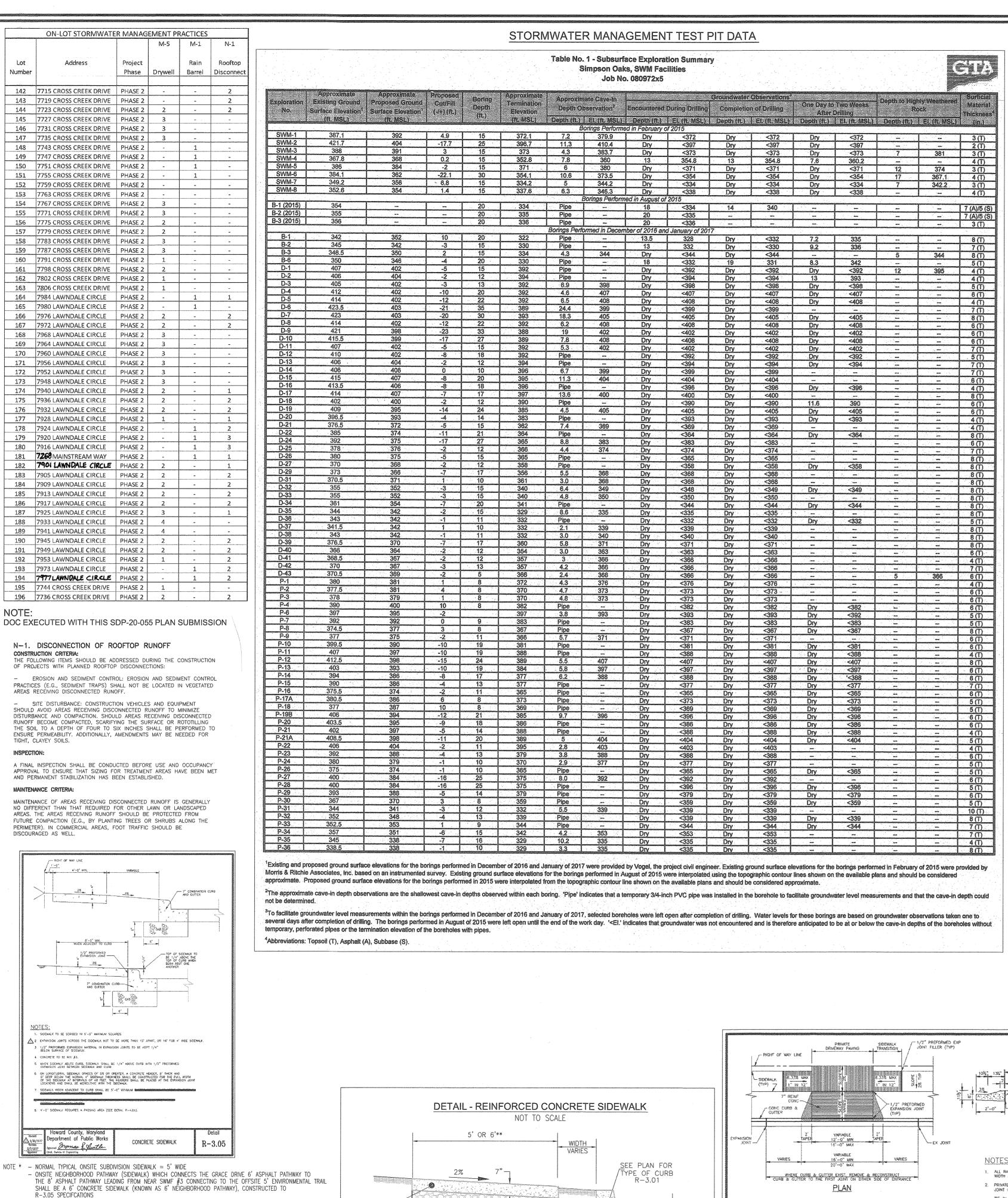
FOR ALTERNATES, REFER TO THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS

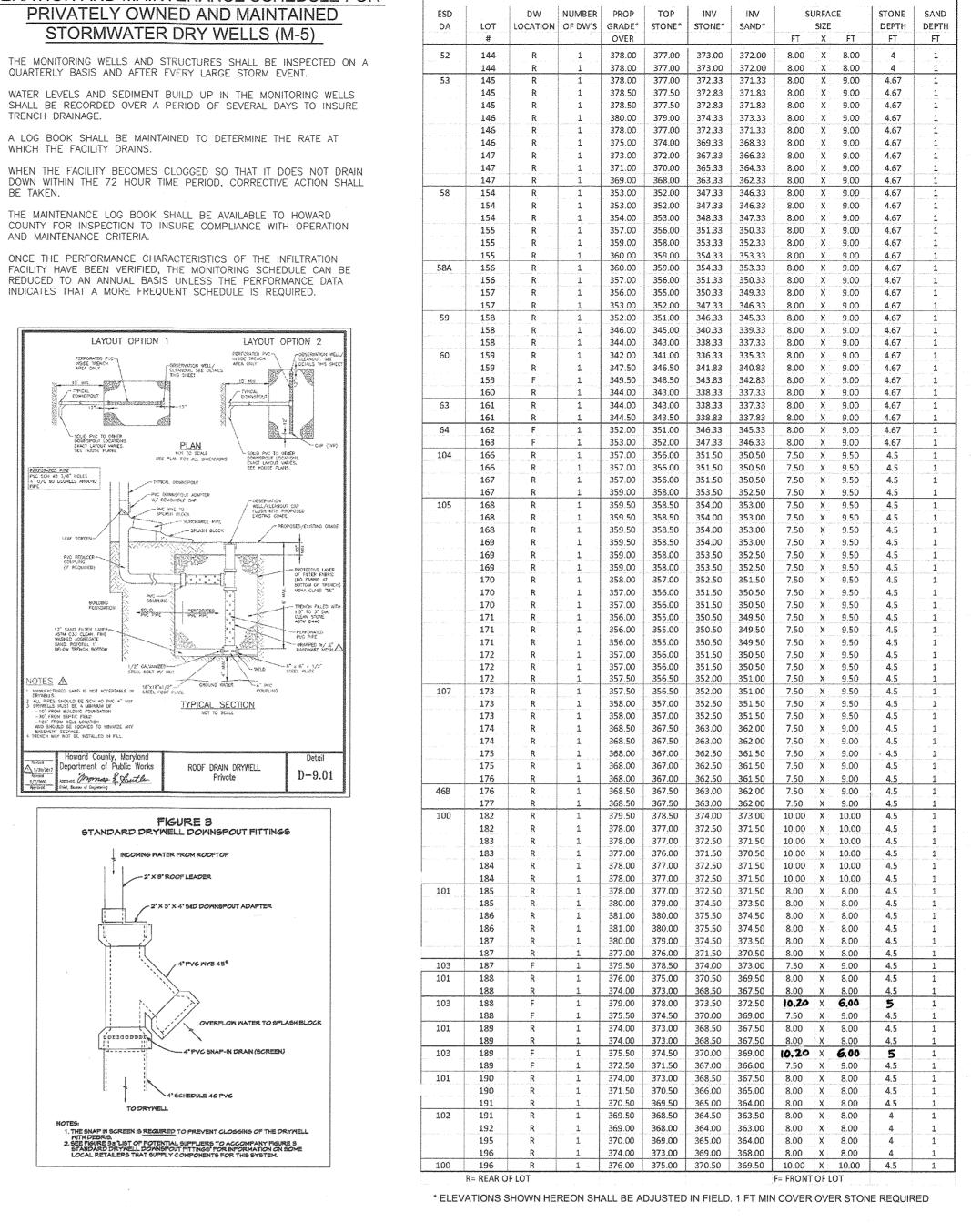
FOR SOIL EROSION AND SEDIMENT CONTROL - PAGES B.26 - B.32











ON-LOT DRYWELL - SIZING CHART

OPERATION AND MAINTENANCE SCHEDULE FOR

STORMWATER DRY WELLS (M-5)

QUARTERLY BASIS AND AFTER EVERY LARGE STORM EVENT.

INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

CLEANING, SEE DETAILS THIS SHEET

PVC TRUMNSFOUT ADAPTER W/ REMOVABLE CAP

- Sept - Profession

FIGURE 3 STANDARD DRYMELL DOWNSPOUT FITTINGS

- 2" X 3" X 4" SED DOWNSPOUT ADAPTER

OVERFLOW WATER TO SPLASH BLOC

- RIGHT OF WAY LINE

---- 4" PVC SNAP-IN DRAIN (SCREEN)

4" SCHEDULE 40 PVC

1. THE SNAP IN SCREEN IS REQUIRED TO PREVENT CLOSGING OF THE DRYMELL

MITH DEBMED.

SEE FISHER 53 "LIST OF POTENTIAL SUPPLIERS TO ACCOMPANY FIGURE 3
STANDARD DRYMELL DOWNSPOUT FITTINGS" FOR INFORMATION ON SOM
LOCAL RETALLEST THAT SUPPLY COMPONENTS FOR THIS SYSTEM.

INCOMING WATER FROM ROOFTO

2' X 8' ROOF LEADER

GROUND WATER

TYPICAL SECTION

ROOF DRAIN DRYWELL

1/2" GALVANIZED STEEL BOLT W/ NU!

MANUFACTURED SAND IS NOT ACCEPTABLE IN STEEL FOOT PLATE

-30' FROM SEPTIC FELD
-130' FROM WELL LOCATION
AND SKOULD SE LOCATED TO MINIMOZE ANY
BASEMENT SEEPAGE.
RENCH MAY NOT SE INSTALLED IN FEL.

17/2001 Regions Inomas & Butle

SPLASH BLOCK

- PVC WYE TO SPLASH BLOCK

LAYOUT OPTION 2

PERFORATED PUG PIPE

LAYOUT OPTION

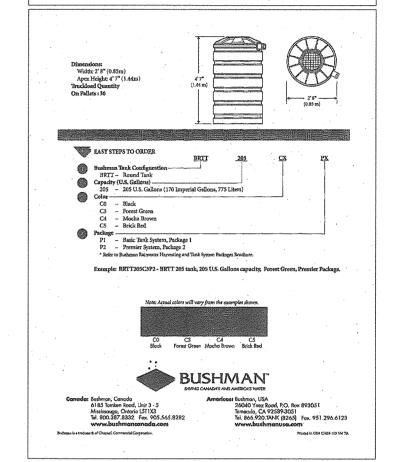
WHICH THE FACILITY DRAINS.

AND MAINTENANCE CRITERIA

PERFORATED FIPE
PVC SCH 40 3/8" HOLES
" 0/C 90 DEGREES AROUND

BE TAKEN.

DETAIL OF STONE SAND BUSHMAN RAIN HARVESTING SYSTEM OR EQUIVALENT 200 GALLON RAIN BARRE NOT TO SCALE color fading. The BRTT205 can be ordered as a basic tank or with additional pa Features & Benefits Water capacity of four 50 gallon rain barrels added wall strength Inlet strainer with mosquito screen and cover



OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED RAINWATER HARVESTING (M-1)

- A. THE OWNER SHALL EMPTY BARRELS ON A MONTHLY BASIS AND CLEAN BARREL WITH A HOSE.
- THE OWNER SHALL VERIFY INTEGRITY OF LEAF SCREENS, GUTTERS, DOWNSPOUTS, SPIGOTS, AND MOSQUITO SCREENS, AND CLEAN AND REMOVE ANY DEBRIS.
- THE OWNER SHALL REPLACE DAMAGED COMPONENTS AS NEEDED.
 THE OWNER SHALL ALLOW THE BARREL TO DRAIN BY BOTTOM SPIGOT

OWNER / DEVELOPER T.M. 35 - P.145 (PARCEL B-1) SIMPSON OAKS CRP3, 110 4750 OWINGS MILLS BOULEVARI OWINGS MILLS, MARYLAND 21117

BUILDER NVR HOMES 9720 PATUXENT WOODS DRIVE COLUMBIA, MD 21046

4-13-22 REVISE THE HOUSE TYPE AND GRADING ON LOT 189 3-16-22 REVISE THE HOUSE TYPE AND GRADING ON LOTS 142 AND 188 REVISE THE HOUSE TYPE AND GRADING ON LOTS 144, 149, 174 AND 178, REVISE THE 1-13-22 GRADING ON LOTS 148, 150 AND 151, ADD THE DAVENPORT AND LANDON GRANDE HOUSE TYPES AND CORRECT THE ADDRESSES FOR LOTS 181, 182 AND 194 DATE

> SITE DEVELOPMENT PLAN STORMWATER MANAGEMENT **NOTES & DETAILS**

CEDAR CREEK - PHASE 2

PLAT# 25377-25383

TAX MAP 35 GRID 21 -----ZONED: CEF-R TH 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



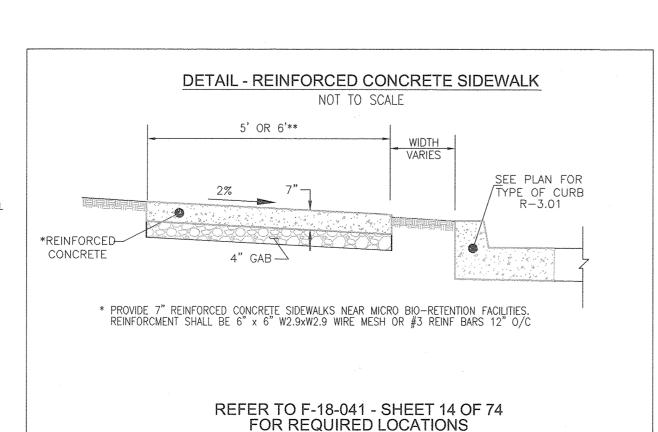
DESIGN BY: VE+TG DRAWN BY: CHECKED BY: RHV DATE: OCTOBER 2020 SCALE: _____15-55 WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2022

----- P/O PARCEL

Detail R-6.01W.O. NO.:

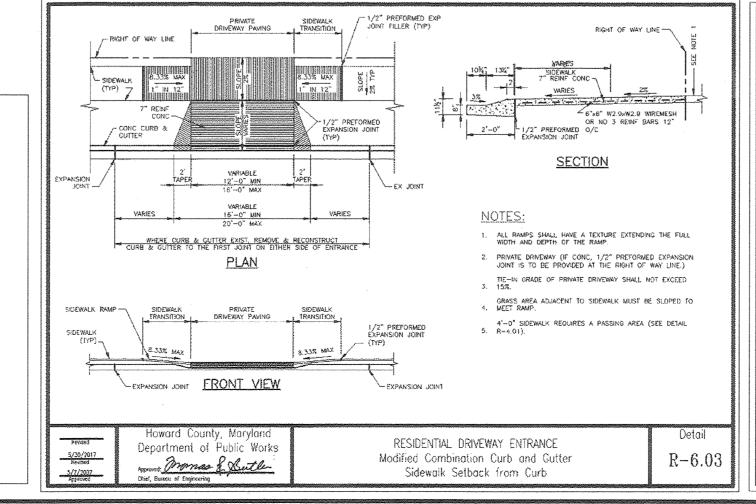
RIGHT OF WAY LINE -

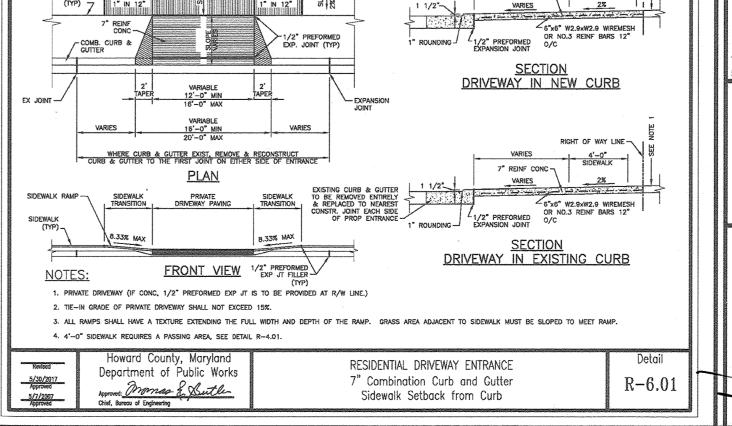
7" REINF CONC -



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION





12 SHEET 13

