GENERAL NOTES

1.) THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.

2.) BOUNDARY IS BASED ON A FIELD RUN MONUMENTED SUBURBAN BOUNDARY SURVEY PERFORMED BY JOHN A. MILDENBERG IN MARCH, 2006.

3.) THE EXISTING TOPOGRAPHY SHOWN ONSITE IS BASED ON AN AERIAL TOPOGRAPHIC SURVEY PERFORMED BY WINGS AERIAL MAPPING CO., INC. FLOWN ON OR ABOUT JANUARY, 2006.

4.) THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 16E1 AND 0012 WERE USED FOR THIS PROJECT.

5.) WATER IS PUBLIC. THE CONTRACT NUMBER IS 24-4551-D. THE DRAINAGE AREA IS LITTLE PATUXENT. 6.) SEWER IS PUBLIC. THE CONTRACT NUMBER IS 24-4551-D. THE DRAINAGE AREA IS LITTLE PATUXENT

7.) STORMWATER MANAGEMENT QUALITY AND QUANTITY CONTROL IS PROVIDED WITHIN SWMF #1 (EXTENDED DETENTION FACILITY WITH MICROPOOL), AND OFFLINE RECHARGE CHAMBER #1; CONSTRUCTED UNDER VILLAGES AT TURF VALLEY PHASE 1, SECTION 1 (F-10-027) THE POND SHALL BE PRIVATELY OWNED AND JOINTLY MAINTAINED. THE RECHARGE CHAMBER SHALL BE PRIVATELY OWNED AND PRIVATELY MAINTAINED.

8.) EXISTING UTILITIES SHOWN ARE BASED ON CONTRACT DRAWINGS, AERIAL AND FIELD SURVEYED LOCATIONS. 9.) THERE IS NO 100-YEAR FLOODPLAIN LOCATED WITHIN THE LIMITS OF VILLAGES AT TURF VALLEY, PHASE 4 10.) A NOISE STUDY IS NOT REQUIRED FOR VILLAGES AT TURF VALLEY, PHASE 4 SINCE IT IS NOT WITHIN

1000' OF AN ARTERIAL ROADWAY. 11.) A GEOTECHNICAL REPORT IS NOT REQUIRED FOR VILLAGES AT TURF VALLEY, PHASE 4.

12.) THE SUBJECT PROPERTY IS ZONED PGCC PER THE 2-2-2004 COMPREHENSIVE ZONING PLAN AND THE "COMP LITE" ZONING AMENDMENTS EFFECTIVE 7-28-2006.

13.) TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO BURIAL GROUNDS, CEMETERIES OR HISTORIC STRUCTURES LOCATED ON THIS SITE.

14.) THERE ARE NO WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS LOCATED WITHIN THE LIMITS OF VILLAGES OF TURF VALLEY, PHASE 4.

15.) THIS PROJECT IS LOCATED WITHIN THE METROPOLITAN DISTRICT.

16.) THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.

17.) DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS: WIDTH - 12' (16' SERVING MORE THAN ONE RESIDENCE).

B) SURFACE - 6" OF COMPACT CRUSHER RUN BASE WITH 1-1/2" MIN. TAR AND CHIP COATING. C) GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE & MIN. 45' TURNING RADIUS. D) STRUCTURES(CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOAD) E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY. F) STRUCTURE CLEARANCES - MINIMUM 12 FEET.

G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.

18.) FOR LOTS SERVED BY ALLEYWAYS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE ALLEYWAY AND ROAD RIGHT-OF-WAY LINE AND NOT ONTO HE ALLEYWAY DRIVEWAY.

19.) LANDSCAPING FOR THIS SUBDIVISION IS PROVIDED IN ACCORDANCE WITH A CERTIFIED LANDSCAPE PLAN INCLUDED WITH THIS ROAD CONSTRUCTION PLAN SET IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED PERIMETER LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT FOR PHASE 4 IN THE AMOUNT OF \$20,400.00.

20.) THIS PROJECT IS EXEMPT FROM HOWARD COUNTY FOREST CONSERVATION REQUIREMENTS UNDER SECTION 16.1202(b)(1)(IV) OF THE COUNTY CODE SINCE IT IS A PLANNED UNIT DEVELOPMENT UNDER S-86-13. 21.) THERE ARE EXISTING STRUCTURES LOCATED ON NON-BUILDABLE BULK PARCEL BB TO BE REMOVED

22.) RESERVATION OF PUBLIC UTILITY EASEMENTS DEVELOPER RESERVES UNTO ITSELF, ITS SUCCESSORS AND ASSIGNS, ALL EASEMENTS SHOWN ON THIS PLAT FOR WATER, SEWER, STORM DRAINAGE, OTHER PUBLIC UTILITIES, LOCATED IN, ON, OVER AND THROUGH LOTS 177 THRU 199, AND OPEN SPACE LOTS 200 THRU 202, ANY CONVEYANCES OF THE AFORESAID LOTS/PARCELS SHALL BE SUBJECT TO THE EASEMENTS HEREIN RESERVED, WHETHER OR NOT EXPRESSLY STATED IN THE DEED(S) CONVEYING SAID LOT(S)/PARCELS. UPON COMPLETION OF THE PUBLIC UTILITIES AND THEIR ACCEPTANCE BY HOWARD COUNTY, THE COUNTY SHALL ACCEPT THE EASEMENTS AND RECORD THE DEED(S) OF EASEMENT IN THE LAND RECORDS OF HOWARD COUNTY.

23.) THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.

24.) THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

25.) STREET LIGHT PLACEMENT AND TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)." A MINIMUM SPACING OF 20 FEET SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE.

26.) TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO PLACEMENT OF ANY ASPHALT.

27.) ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE)-3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.

28.) THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS EFFECTIVE APRIL 13, 2004. PER SECTION 126(H)(1), PLANNING BOARD APPROVAL IS REQUIRED FOR THE SITE DEVELOPMENT PLAN FOR THIS PROJECT.

29.) WP-08-009, A WAIVER PETITION TO SECTION 16.145(a) AND 16.146 (a) WHICH REQUIRES A SUBMISSION OF A SKETCH PLAN AND PRELIMINARY PLAN, RESPECTIVELY TO ALLOW THE ADDITION OF 21 UNITS TO THIS PROJECT WAS APPROVED ON 12-12-2007 WITH THE FOLLOWING CONDITIONS:

1. PETITIONER SHALL COMPLY WITH ALL RELEVANT PARKING REGULATIONS AT THE TIME OF SITE DEVELOPMENT PLAN SUBMISSION FOR ALL DEVELOPMENT PROPOSED ON LOT 103 OF "VILLAGES AT TURF VALLEY, PHASE 2" (F-08-084).

2. PETITIONER SHALL COMPLY WITH ALL RELEVANT STORMWATER MANAGEMENT REGULATIONS AT THE TIME OF SITE DEVELOPMENT PLAN SUBMISSION FOR PROPOSED DEVELOPMENT OF LOT 103 OF "VILLAGES AT TURF VALLEY, PHASE 2" (F-08-084).

30.) THIS PROJECT IS SUBJECT TO THE TRAFFIC STUDY PREPARED BY THE TRAFFIC GROUP, INC. UNDER S-86-13, AND UPDATED IN MARCH 2004.

31.) THE PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 16.129 OF THE HOWARD COUNTY CODE. 32.) PARKING REQUIREMENTS AS PER ZONING SECTION 133.D(3):

2 SPACES PER SFA DWELLING UNIT

REQUIRED: 23 UNITS $\times 2 = 46$

33.) THE VILLAGES AT TURF VALLEY SUBDIVISION (PHASES 1-4) CONSTITUTED 241 TOTAL UNITS (145 SFA, 35 SFD, AND 61 CONDOMINIUM), WHICH MET THE SKETCH PLAN MILESTONE DATE OF JANUARY 1, 2001 THROUGH JUNE 30, 2002 FOR BOTH PHASE IVA (131 UNITS) & IVB (110 UNITS) AS ESTABLISHED BY THE REVISED PHASING PLAN DATED JUNE 21, 2000. UNDER P-06-013, 42 CONDOMINIUM UNITS THAT WERE APPROVED WERE USED FOR OAKMONT AT TURF VALLEY (F-02-082). THESE 42 CONDOMINIUM UNITS WERE NOT PREVIOUSLY INCLUDED WITH THE OAKMONT AT TURF VALLEY (F-02-82) PLANS. IN ORDER TO RECEIVE BUILDING ALLOCATIONS, THESE 42 CONDOMINIUM UNITS WERE SHOWN AND APPROVED ON THE PRELIMINARY PLAN FOR THE VILLAGES AT TURF VALLEY (P-06-013). THE SECOND AMENDMENT TO THE TURF VALLEY MULTI-USE FINAL DEVELOPMENT PLAN WAS RECORDED ON NOVEMBER 30, 2007 (PLAT NO. 19578-19580). INCREASING THE PROJECTED UNITS IN THE OAKMONT AT TURF VALLEY AREA FROM 150 TO 200. AS A RESULT, THOSE 42 UNITS ARE NO LONGER A PART OF THE VILLAGES AT TURF VALLEY WHICH LEAVES UNIT TOTAL AT 199. HOWEVER, WITH THE APPROVAL OF WP-08-009 AN ADDITIONAL 21 UNITS WERE ADDED TO THE VILLAGES AT TURF VALLEY. THE FINAL UNIT TOTAL FOR THIS SUBDIVISION COMES TO 220.

34.) THE PROPOSED ALLEY SERVING UNITS WITH REAR LOAD GARAGES (LOTS 185 thru 194) IS PRIVATE. IT WILL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION. 35.) PROPERTIES DEPICTED ON THESE PLANS ARE ZONED "PGCC" UNLESS OTHERWISE NOTED.

36.) OPEN SPACE DEDICATION FOR LOTS 200 thru 202:

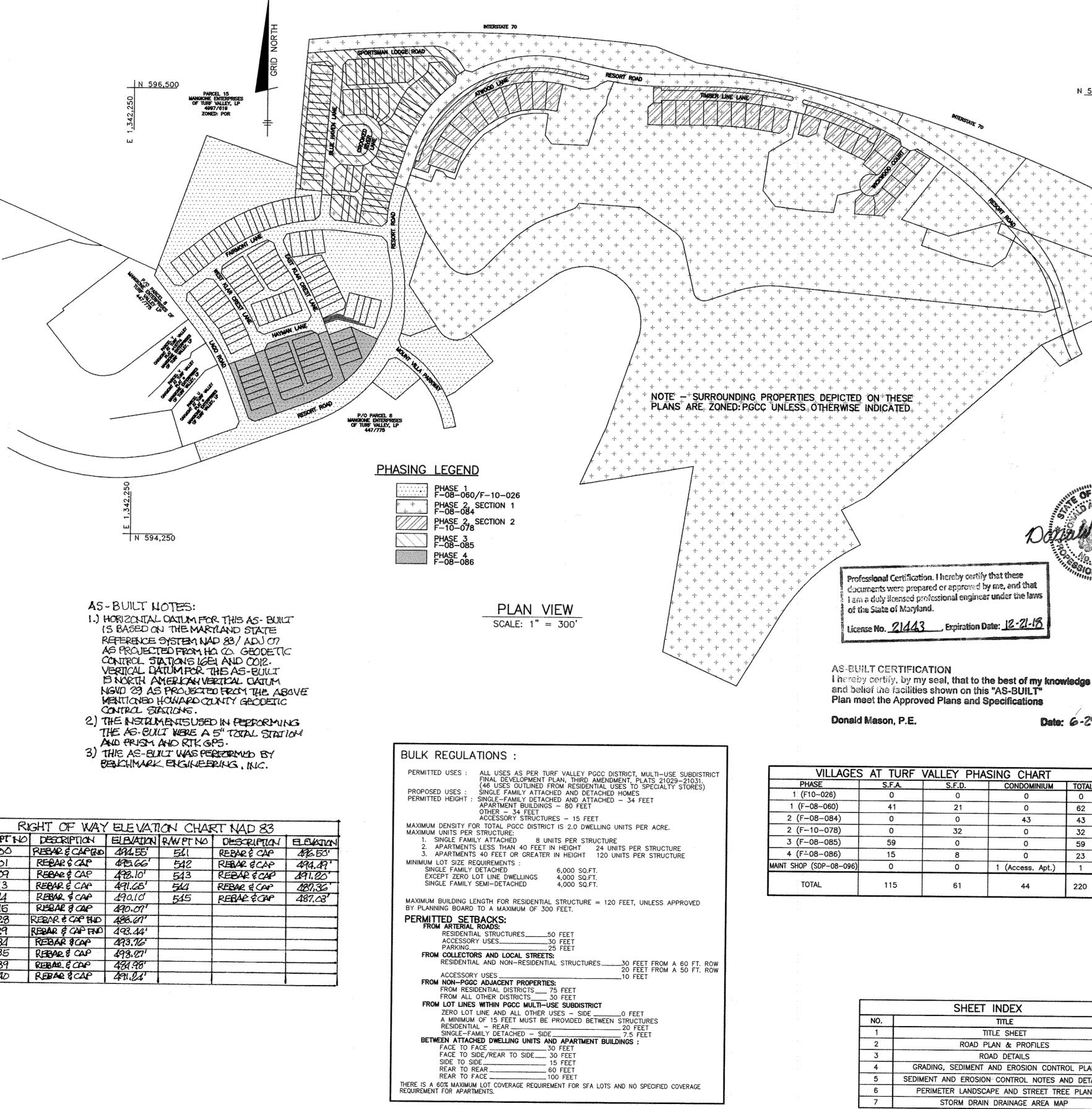
THE OPEN SPACE SHOWN HEREON IS HEREBY DEDICATED TO A PROPERTY OWNERS ASSOCIATION FOR THE RESIDENTS OF THIS SUBDIVISION AND RECORDING REFERENCES OF THE ARTICLES OF INCORPORATION AND RESTRICTIONS ARE SHOWN HEREON.

37.) ALL FILL AREAS SHALL BE AT 95% COMPACTION IN ACCORDANCE WITH AASHTO T-180 STANDARDS

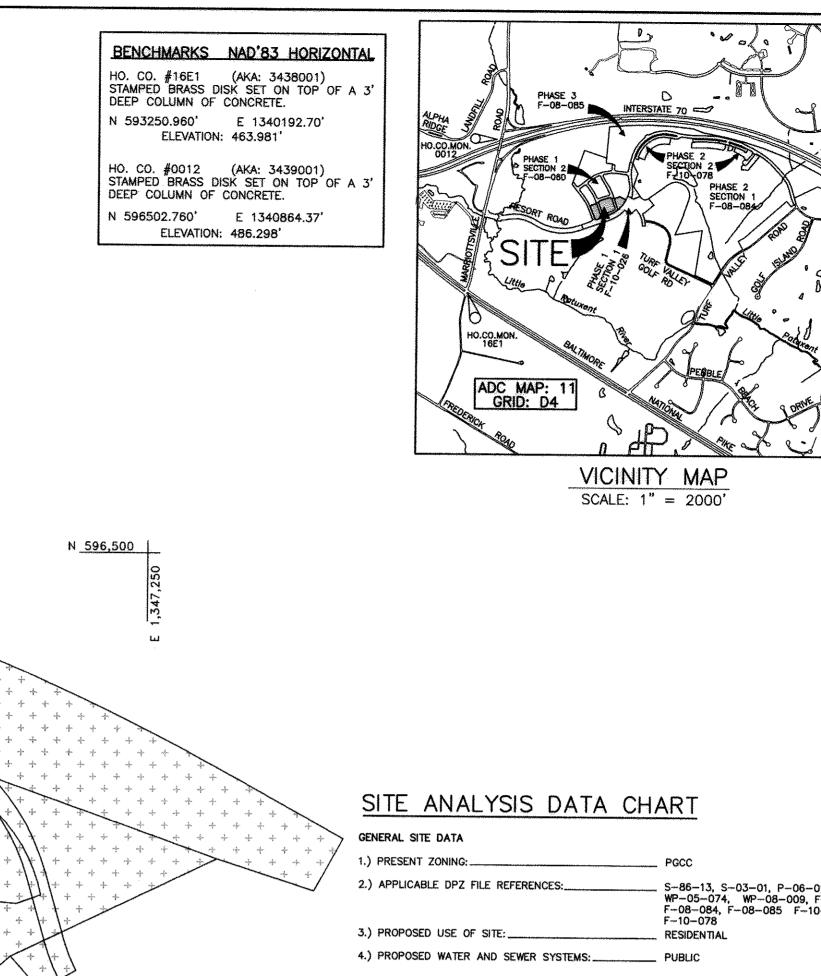
APPROVED: DEPARTMENT OF PUBLIC WORKS	S
CHIEF, BUREAU OF HIGHWAYS	2-27-14 DATE
APPROVED: DEPARTMENT OF PLANNING AND	
Katalalunden	3/ouliu
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
Chief Edwaln	2.28.14
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE

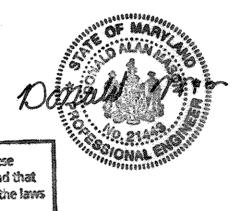
VILLAGES AT TURF VALLEY PHASE 4 ROADS, STORMWATER MANAGEMENT AND

STORM DRAIN CONSTRUCTION PLANS



	GHT OF WAY		ION CHAT	RT NA
R/WPT NO		ELEVATION	RAVETNO	DESC
200	REBARECAPRID	494.55	541	REBAR
201	REPARECAP	495.66'	542	REBAR
209	REBAR & CAP	498.10'	543	REBA
213	RECAR & CAP	491.65'	514	REBAR
214	REBAR & CAP	490.10	545	REBAR
215	REBAR & CAP	490.07		· · · · · · · · · · · · · · · · · · ·
228	REBAR & CAP THO	486.61'		
229	REBAR & CAP FND	493.44'		
534	REBAR SCAP	49.3.76		-
535	REBAR & CAP	498.27'		
539	REBALECAP	484.98'	· · · · · · · · · · · · · · · · · · ·	
540	REBARECAP	491.24'		





Date: 6-29-17

TOTAL
0
62
43
32
59
23
1
220

IN	DEX	,
TI	ſLΕ	
TTLE	SHEET	
PLAN	& PROFILES	
OAD	DETAILS	
AND	EROSION CONTROL PLA	AN
N C	NTROL NOTES AND DET	FAILS
APE	AND STREET TREE PLAN	V
N DR	AINAGE AREA MAP	

2.) APPLICABLE DPZ FILE REFERENCES: S-86-13, S-03-01, P-06-013, WP-05-074, WP-08-009, F-08-060, F-08-064, F-08-085 F-10-027, F-10-078 3.) PROPOSED USE OF SITE: RESIDENTIAL 4.) PROPOSED WATER AND SEWER SYSTEMS: PUBLIC AREA TABULATION 1.) GROSS TRACT AREA 4.73 AC.± 2.) AREA WITHIN 100-YEAR FLOODPLAIN 0.00 AC.± 3.) TOTAL AREA OF 25% OR GREATER STEEP SLOPES 0.00 AC.± 3.) TOTAL AREA OF 25% OR GREATER STEEP SLOPES 0.00 AC.± 4.) NET TRACT AREA 4.73 AC.± 5.) TOTAL NUMBER OF LOTS ALLOWED PER ZONING N/A 6.) TOTAL NUMBER OF RESIDENTIAL UNITS/LOTS 23 7.) AREA OF BUILDABLE LOTS 2.69± AC. AREA OF NON-BUILDABLE BULK PARCELS 0.00± AC. AREA OF PUBLIC RIGHT-OF-WAY 1.02± AC.	1.) FRESENT ZONING:	PGCC
AREA TABULATION 1.) GROSS TRACT AREA 4.73 AC.± 2.) AREA WITHIN 100-YEAR FLOODPLAIN 0.00 AC.± 3.) TOTAL AREA OF 25% OR GREATER STEEP SLOPES 0.00 AC.± 3.) TOTAL AREA OF 25% OR GREATER STEEP SLOPES 0.00 AC.± 4.) NET TRACT AREA 4.73 AC.± 5.) TOTAL NUMBER OF LOTS ALLOWED PER ZONING N/A 6.) TOTAL NUMBER OF RESIDENTIAL UNITS/LOTS 23 7.) AREA OF BUILDABLE LOTS 2.69± AC. AREA OF OPEN SPACE LOTS 1.02± AC. AREA OF NON-BUILDABLE BULK PARCELS 0.00± AC.		WP-05-074, WP-08-009, F-08-060, F-08-084, F-08-085 F-10-027, F-10-078
1.) GROSS TRACT AREA	4.) PROPOSED WATER AND SEWER SYSTEMS:	PUBLIC
2.) AREA WITHIN 100-YEAR FLOODPLAIN 0.00 AC.± 3.) TOTAL AREA OF 25% OR GREATER STEEP SLOPES 0.00 AC.± AREA NOT IN FLOODPLAIN (FOR NTA CALC) 0.00 AC.± 4.) NET TRACT AREA 4.73 AC.± 5.) TOTAL NUMBER OF LOTS ALLOWED PER ZONING N/A 6.) TOTAL NUMBER OF RESIDENTIAL UNITS/LOTS PROPOSED ON THIS SUBMISSION 23 7.) AREA OF BUILDABLE LOTS 2.69± AC. AREA OF OPEN SPACE LOTS 1.02± AC. AREA OF NON-BUILDABLE BULK PARCELS 0.00± AC.	AREA TABULATION	
3.) TOTAL AREA OF 25% OR GREATER STEEP SLOPES 0.00 AC.± AREA NOT IN FLOODPLAIN (FOR NTA CALC) 0.00 AC.± 4.) NET TRACT AREA 4.73 AC.± 5.) TOTAL NUMBER OF LOTS ALLOWED PER ZONING N/A 6.) TOTAL NUMBER OF RESIDENTIAL UNITS/LOTS PROPOSED ON THIS SUBMISSION 23 7.) AREA OF BUILDABLE LOTS 2.69± AC. AREA OF OPEN SPACE LOTS 1.02± AC. AREA OF NON-BUILDABLE BULK PARCELS 0.00± AC.	1.) GROSS TRACT AREA	4.73 AC.±
 4.) NET TRACT AREA	2.) AREA WITHIN 100-YEAR FLOODPLAIN	0.00 AC.±
 5.) TOTAL NUMBER OF LOTS ALLOWED PER ZONING N/A 6.) TOTAL NUMBER OF RESIDENTIAL UNITS/LOTS PROPOSED ON THIS SUBMISSION 23 7.) AREA OF BUILDABLE LOTS 2.69± AC. AREA OF OPEN SPACE LOTS 1.02± AC. AREA OF NON-BUILDABLE BULK PARCELS 0.00± AC. 	3.) TOTAL AREA OF 25% OR GREATER STEEP SLOPES AREA NOT IN FLOODPLAIN (FOR NTA CALC) 4.) NET TRACT AREA	0.00 AC.± 0.00 AC.± 4.73 AC.±
PROPOSED ON THIS SUBMISSION 23 7.) AREA OF BUILDABLE LOTS 2.69± AC. AREA OF OPEN SPACE LOTS 1.02± AC. AREA OF NON-BUILDABLE BULK PARCELS 0.00± AC.		
AREA OF OPEN SPACE LOTS 1.02± AC. AREA OF NON-BUILDABLE BULK PARCELS 0.00± AC.		23
	AREA OF OPEN SPACE LOTSAREA OF NON-BUILDABLE BULK PARCELS	1.02± AC. 0.00± AC.

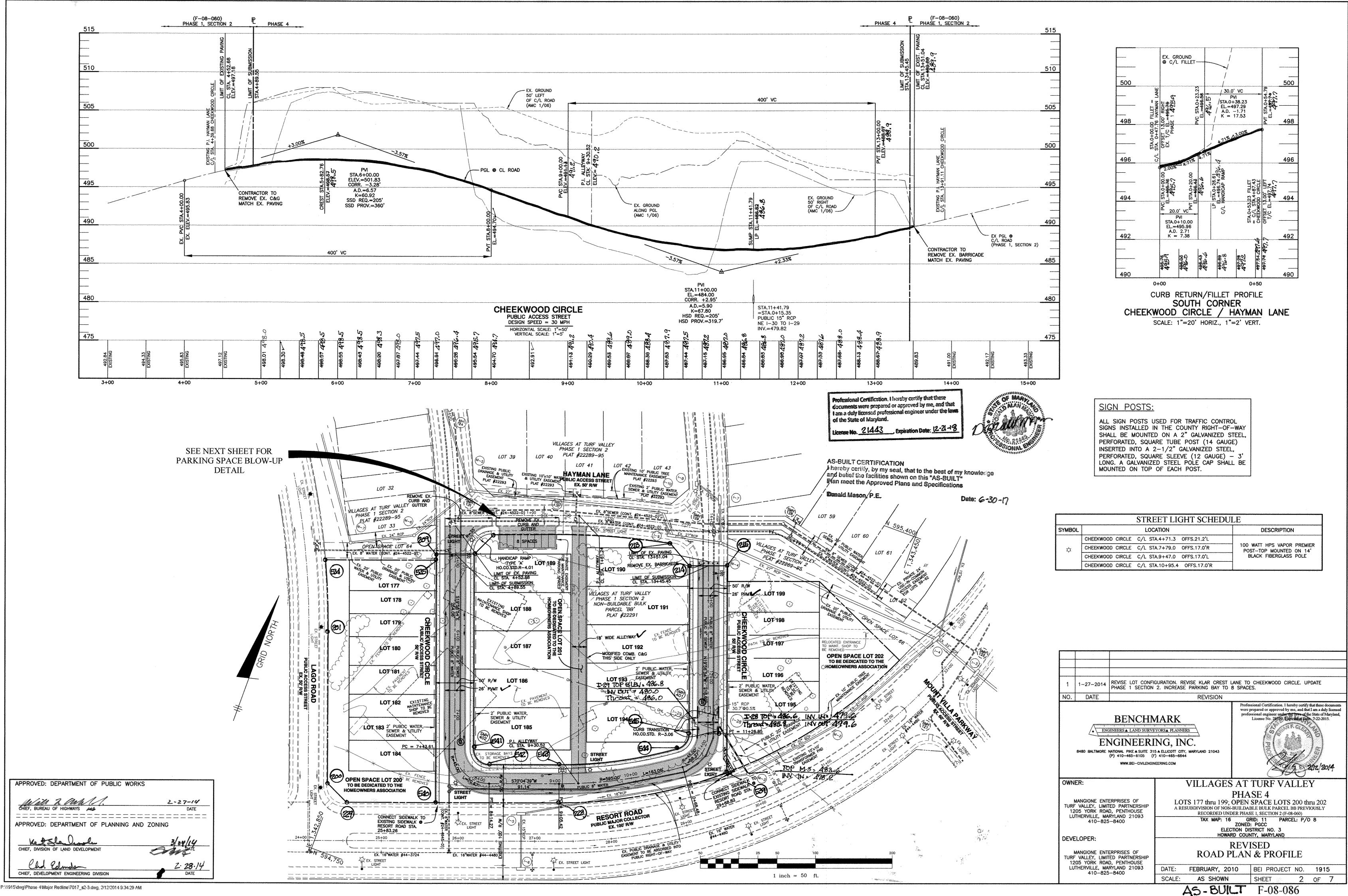
	OPEN SPA	CE CALCULAT	IONS	**************************************	
	Phase 1 Section 1	Phase 1 Section 2*	Phase 2 Section 1**	Phase 4	Total
Gross Area	6.25	27.75	157.59	NA	191.59
Open Space Required 5% of gross	0.94	4.16	23.64	NA	28.74
Open Space Provided	2.58	5.32	124.96	1.02	133.88
Ion-Credited (less than 35' in width)	0.00	0.65	0.35	0.57	1.57
otal Credited	2.58	4.67	124.61	0.45	132.31
Open Spaces Provided	1.64	0.51	100.97	0.45	103.57

* This includes area for Phase 4 (Non-Builable Bulk Parcel BB) ** This includes area for Phase 2, Section2 (Non-Builable Bulk Parcels DD-1, EE-1 & FF-1) and area for Phase 3 (Non-Buildable Bulk Parcel CC-1)

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1		UPDATE THE PHAS NOTE 35 BASED (ING CHART, IN REVISED	OPEN SPACE CALCS, LOT LAYOUT. REMOVE	SITE DATA	ANALYSIS, BU NOTES #23 A	ILK REG	38, AND (7.	GEN
NO.	DATE			REVISION			·····	······	7
BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS ENGINEERS MALAND SURVEYORS & PLANNERS BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM			NC. TY, MARYLAND 21043 44	were prepar profession Lice	al Certification. I hern ared or approved by m nal engineer americ fine ense No 28559, Expi	me, and that to laws of the interference of the second sec	at I am a duly li he State of Mar	licensed ryland,	
OWNE	ER:	1		VILLAGES	ATTI	URF VA	LLE	Y	
MANGIONE ENTERPRISES OF TURF VALLEY, LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093) TS 177 thru 199; (PHASE OPEN SPA- BUILDABLE I DER PHASE 1,	E 4 ACE LOTS 2 BULK PARCEL B SECTION 2 (F-08	200 th BB PREV 3-060)	TOUSLY		
EL					GRID: ZONED: PG TION DISTRIC RD COUNTY,	GCC ICT NO. 3	EL: P/C) 8	
M TURF 12(MANGIONE ENTE VALLEY, LIMITE 05 YORK ROAD	ED PARTNERSHIP D, PENTHOUSE		T	REVISE TLE SH		1,7-1,7 a		
LUI	THERVILLE, MAR 410-825-		DATE:	FEBRUARY, 201	IO BE	EI PROJECT	NO.	1915	
410-020-0400			SCALE:	AS SHOWN	Sł	HEET	1	OF 7	7

AS RILL T

F-08-086



	STREET LIGHT SCHEDULE					
SYMBOL		LOCATION		DESCRIPTION		
	CHEEKWOOD CIRCLE	C/L STA.4+71.3	OFFS.21.2'L			
ά	CHEEKWOOD CIRCLE	C/L STA.7+79.0	OFFS.17.0'R	100 WATT HPS VAPOR PREMIER POST-TOP MOUNTED ON 14'		
5	CHEEKWOOD CIRCLE	C/L STA.9+47.0	OFFS.17.0'L	BLACK FIBERGLASS POLE		
	CHEEKWOOD CIRCLE	C/L STA.10+95.4	OFFS.17.0'R			

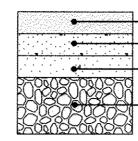
	CENTERLINE	CONTROL	DATA	
STREET NAME	DESCRIPTION	STATION	NORTH	EAST
CHEEKWOOD CIRCLE	INT. @ HAYMAN LANE	4+39.68	595,221.2431	1,342,876.9153
CHEEKWOOD CIRCLE	PT - 975.00'R	4+44.90	595,216.3434	1,342,878.7085
CHEEKWOOD CIRCLE	EOP PHASE 1 = POB	4+52.69	595,209.0278	1,342,881.3637
CHEEKWOOD CIRCLE	BOUNDARY PHASE 1/4	4+89.55	595,174.3733	1,342,893.9415
CHEEKWOOD CIRCLE	HP	5+82.76	595,086.7568	1,342,925.7420
CHEEKWOOD CIRCLE	PC - 45.00'R	7+43.61	594,935.5595	1,342,980.6191
CHEEKWOOD CIRCLE	PT - 45.00'R	8+14.27	594,908.6054	1,343,038.2528
CHEEKWOOD CIRCLE	PC - 565.00'R	9+05.42	594,939.6623	1,343,123.9414
CHEEKWOOD CIRCLE	C/L ALLEYWAY	9+30.52 (NR)	594,948.7112	1,343,147.3545
CHEEKWOOD CIRCLE	PCC - 565.00'R/45.00'R	10+68.48	595,015.4065	1,343,267.7649
CHEEKWOOD CIRCLE	PT - 45.00'R	11+26.85	595,067.3377	1,343,283.8538
CHEEKWOOD CIRCLE	LP	11+41.79	595,081.3812	1,343,278.7568
CHEEKWOOD CIRCLE	BOUNDARY PHASE 1/4	13+45.45	595,272.8220	1,343,209.2733
CHEEKWOOD CIRCLE	EOP PHASE $1 = END$	13+51.04	595,278.0802	1,343,207.3648

	CENTER	LINE CU	JRVE D	ATA	11	na odinana za 1999 y 1994 da digi da digi da diyani	and and an
STREET NAME	STATION	RADIUS	ARC	DELTA	TANGENT	CHORD	
CHEEKWOOD CIRCLE	PC=7+43.61 PT=8+14.27	45.00'	70.67	89*58'27"	44.98'	S64*56'08"E	63.63'
CHEEKWOOD CIRCLE	PC=9+05.42 PCC=10+68.48	595.00'	163.06'	15'42'07"	82.04'	N62'13'36"E	162.55'
CHEEKWOOD CIRCLE	PCC=10+68.48 PT=11+26.85	45.00'	58.37'	74*19'26"	34.11'	N17'12'49"E	54.37'

CE	INTERLINE BEARING	DATA	ىنىيە يەرىپىرىيە ئۇرىرى بۇرىيە بىلانىيە يەرىپىرىكە يەرىپىرىكە يەرىپىرىكە يەرىپىرىكە يەرىپىرىكە يەرىپىرىكە يەرىپ يەرىپىرى
STREET NAME	STATION	BEARING	LENGTH
CHEEKWOOD CIRCLE	PT=4+44.90 PC=7+43.61	S19*56'54"E	298.71'
CHEEKWOOD CIRCLE	PT=8+14.27 PC=9+05.42	N70'04'39"E	91.14'
CHEEKWOOD CIRCLE	PT=11+26.85 EOP=13+51.04	N19'56'54"W	224.19'

ROAD INFORMATION CHART						
STREET NAME	CLASSIFICATION	DESIGN SPEED	PAVING TYPE	STATION LIMITS		
CHEEKWOOD CIRCLE	PUBLIC ACCESS STREET	30 MPH	P-2	POB 4+52.69 TO 13+51.04 END (PHASE 4)		

APPROVED: DEPARTMENT OF PUBLIC WORKS	nnik Misini, fan de Wille de line en er et te de
CHIEF, BUREAU OF HIGHWAYS	2-27-14 DATE
APPROVED: DEPARTMENT OF PLANNING AND Z	
CHIEF, DIVISION OF LAND DEVELOPMENT	3/04/14 DATE
Chief, DEVELOPMENT ENGINEERING DIVISION	<u>L·28·14</u> DATE



HMA SUPERPAVE FINAL SURFACE HMA SUPERPAVE INTERMEDIATE SURFACE

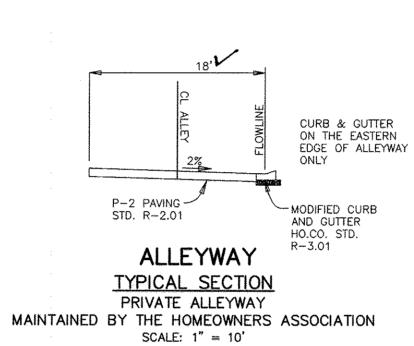
HMA SUPERPAVE BASE

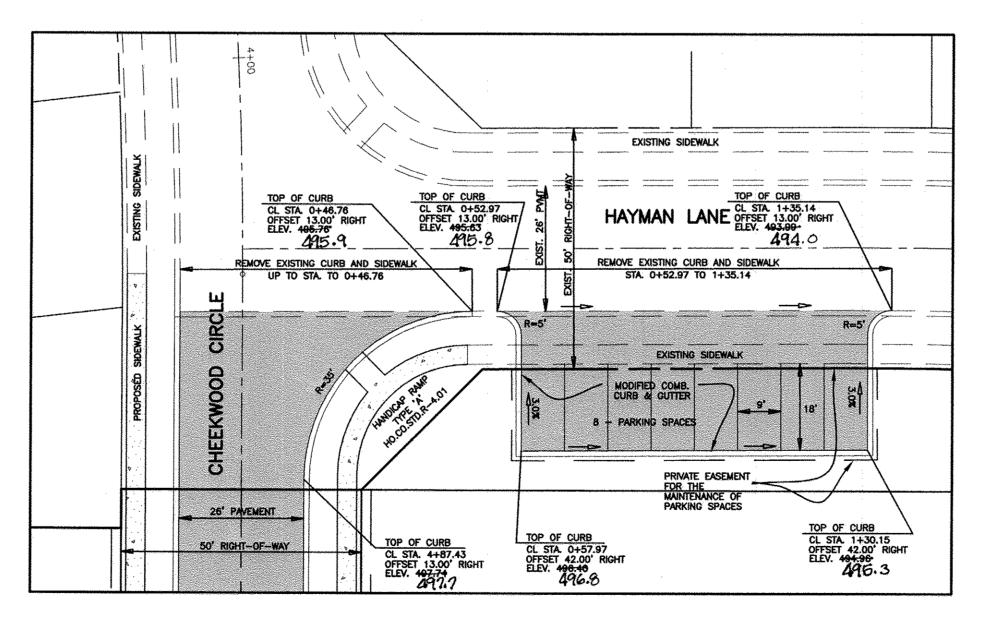
GRADED AGGREGATE BASE (GAB)

SCHEMATIC PAVING DETAIL NOT TO SCALE

SECTION	CALIFORNIA BEARING RATIO (CBI		3 to <5	5 to <7	≥7	3 to
NUMBER	ROAD AND STREET CLASSIFICATION	PAVEMENT MATERIAL (INCHES)	MIN.	I GAB	НМА	
	PARKING DRIVE AISLES:	HMA SUPERPAVE FINAL SURFACE 9.5 MM PG 64-22, LEVEL 1 (LOW ESAL)	1.5	1.5	1.5	1.5
P-2	RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS: ACCESS PLACE, ACCESS STREET CUL-DE-SAC: RESIDENTIAL	HMA SUPERPAVE INTERMEDIATE SURFACE 9.5 MM PG 64-22, LEVEL 1 (LOW ESAL)	1.0	1.0	1.0	1.0
P-2		HMA SUPERPAVE BASE 9.0 MM PG 64-22, LEVEL 1 (LOW ESAL)	2.0	2.0	2.0	3.5
		GRADED AGGREGATE BASE (GAB)	8.0	4.0	3.0	4.0

PAVING SPECIFICATIONS (HO.CO. STD R-2.01)



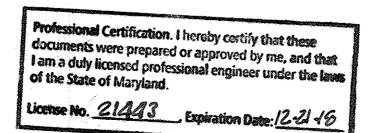


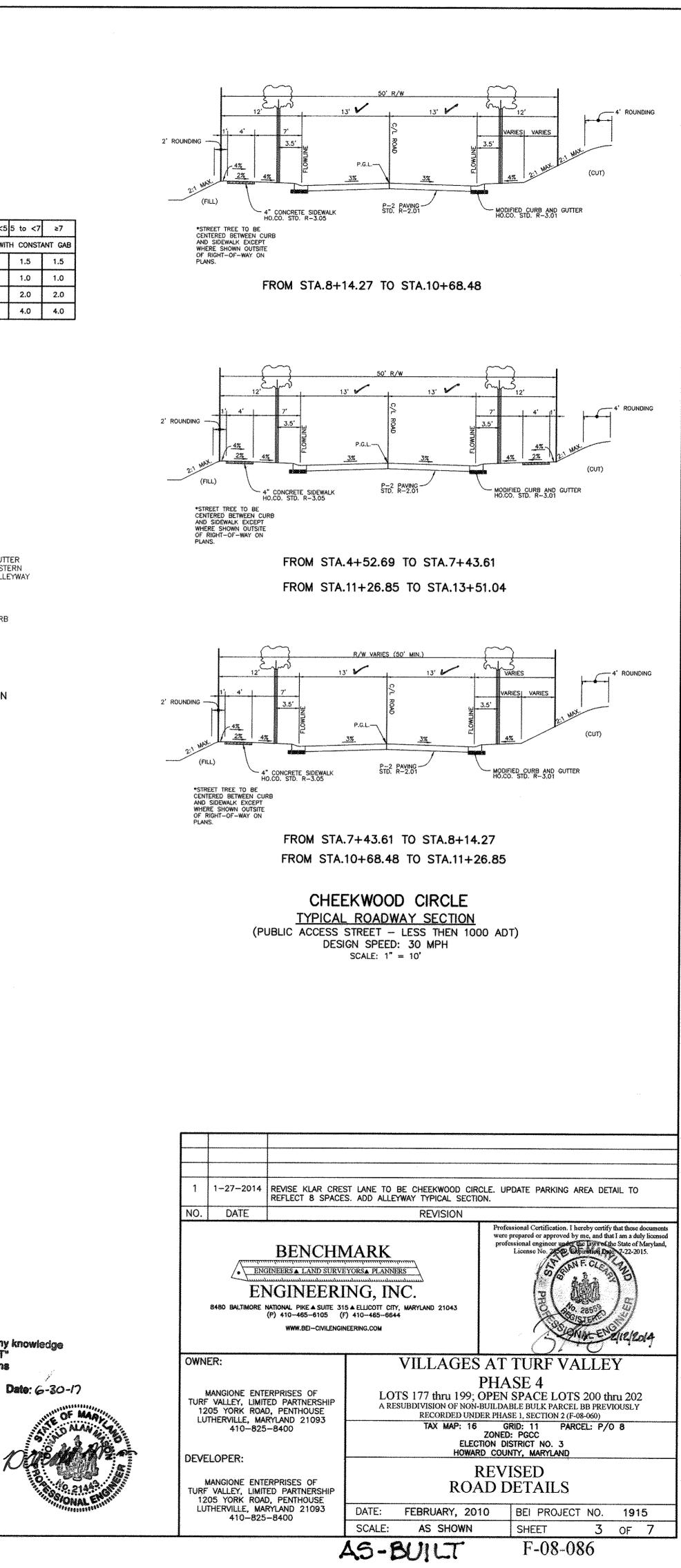
PARKING AREA & PAVING IMPROVEMENTS DETAIL SCALE: 1'' = 10'

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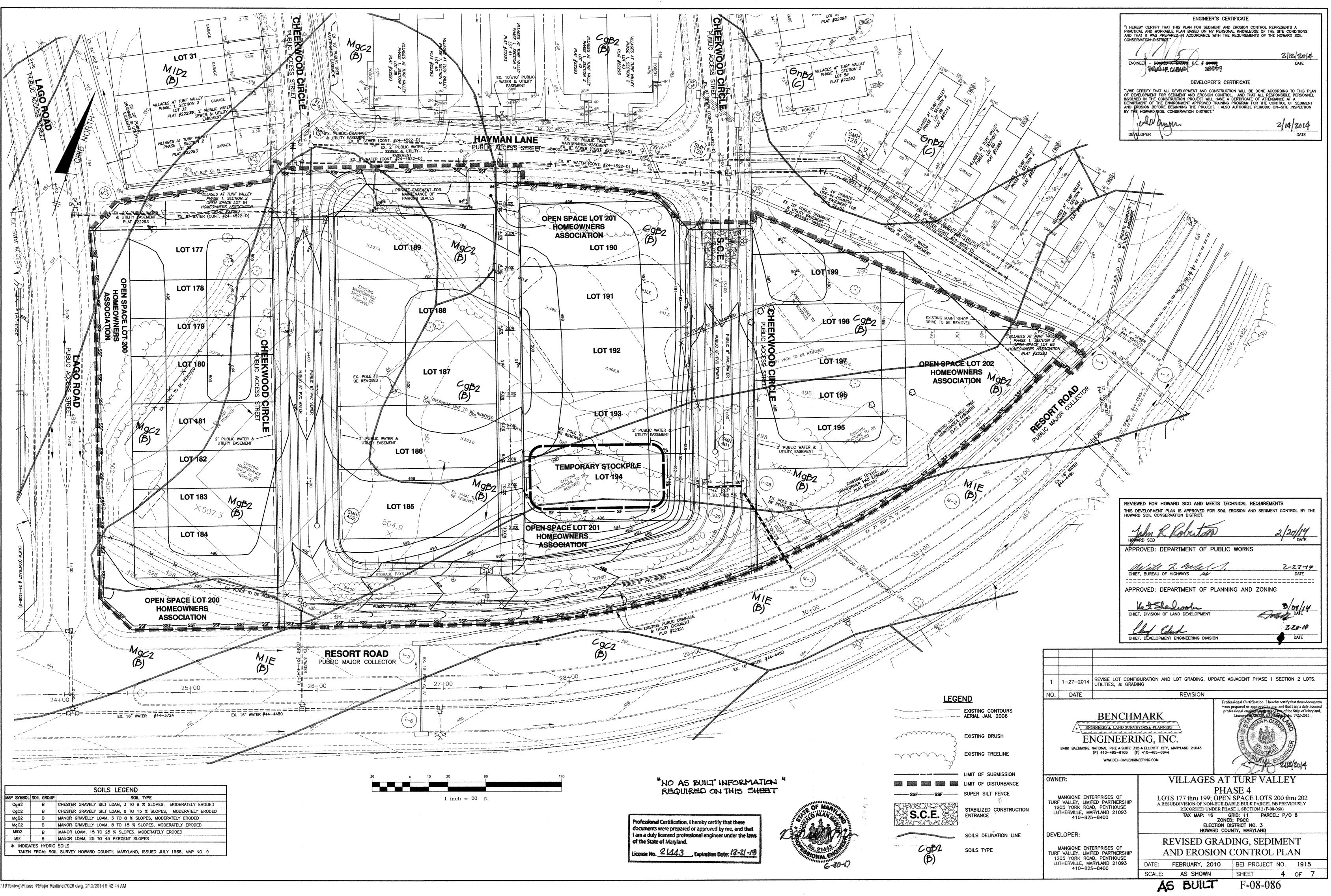
AS-BUILT CERTIFICATION I bereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications

Donald Mason, P.E.





o <55 to <7 ≥7 WITH CONSTANT GAE 1.5 1.5 1.0 1.0 5 2.0 2.0 4.0 4.0 4.0

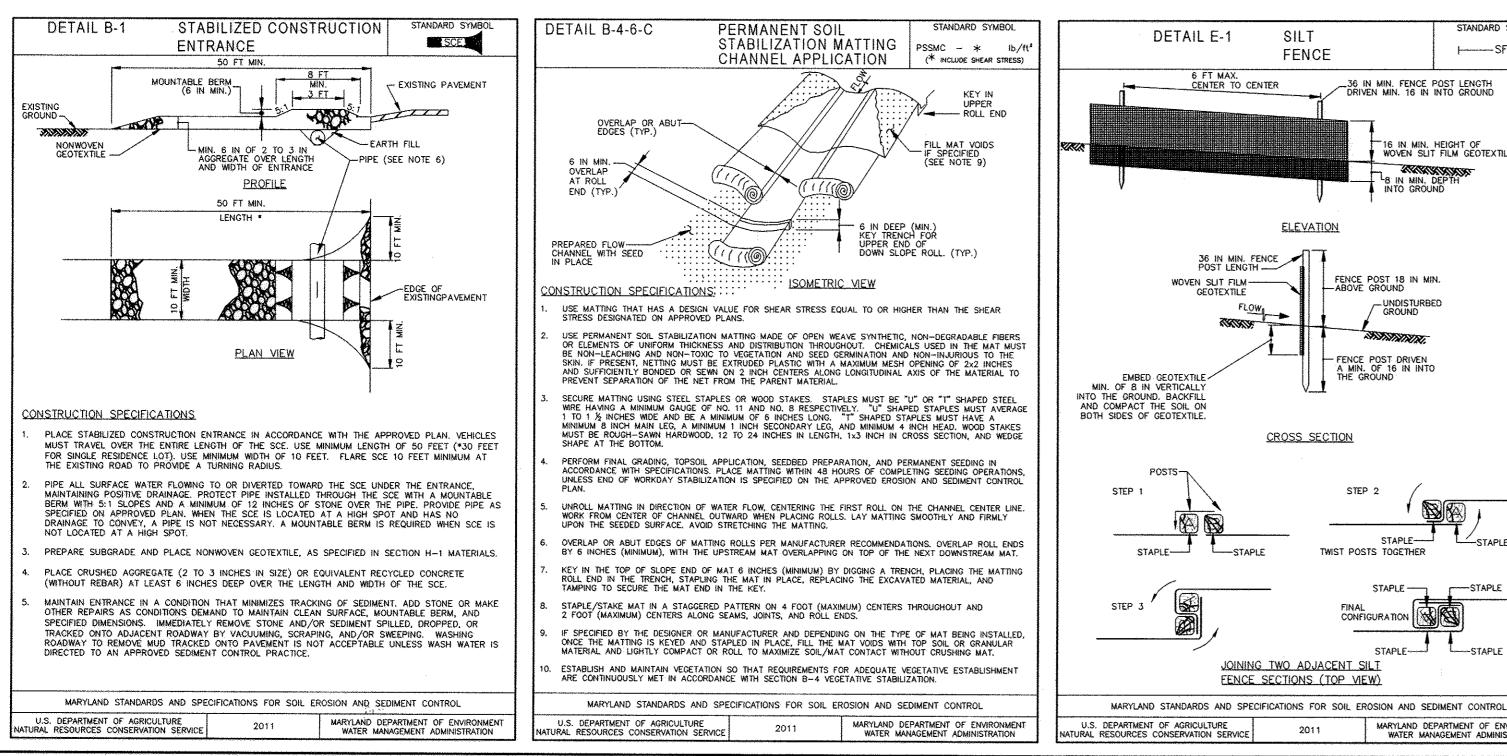


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-						
	B-4 STANDARDS AND SPECIFICATIONS				B-4-2 STANDARDS AND SPECIFICATIONS	
	FOR				FOR	
	VEGETATIVE STABILIZATION Definition				SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS Definition	
:	Using vegetation as cover to protect exposed soil from erosion.	The p	rocess	ofpr	eparing the soils to sustain adequate vegetative stabilization.	The application of see
	Purpose	T a	ى مەر		Purpose	The approanon of see
	To promote the establishment of vegetation on exposed soil. Conditions Where Practice Applies	to pro	wide a	suita	ble soil medium for vegetative growth. Conditions Where Practice Applies	To protect disturbed s
	On all disturbed areas not stabilized by other methods. This specification is divided into sections on	Where	vegel	tative	stabilization is to be established.	To the surface of all p
					Criteria	to the surface of all p
	stabilization; soil preparation, soil amendments and topsoiling; seeding and mulching; temporary stabilization;	Α,	Soil P 1		ation porary Stabilization	A. Seeding
	and permanent stabilization.			a.	Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of	1. Specifications a. All see
	Effects on Water Quality and Quantity				suitable agricultural or construction equipment, such as disc harrows or chisel plows or	a. Air see Su
	Stabilization practices are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall,				rippers mounted on construction equipment. 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	tes
	thereby				be tracked with ridges running parallel to the contour of the slope.	an av
	reducing sediment loads and runoff to downstream areas.			b.	Apply fertilizer and lime as prescribed on the plans.	b. Mulch
	Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of			C.	Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.	fro
	runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Over time, vegetation	1	2.	Perm	nanent Stabilization	c. Inocula cu
	will increase organic matter content and improve the water holding capacity of the soil and subsequent plant			a .	A soil test is required for any earth disturbance of 5 acres or more. The minimum soil	no
	growth.				conditions required for permanent vegetative establishment are: i. Soil pH between 6.0 and 7.0.	dir
	Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to				ii. Soluble salts less than 500 parts per million (ppm),	No ab
	receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present				iii. Soil contains less than 40 percent clay but enough fine grained material (greater than	eff
	within the root zone.				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	d. Sod or
	Sediment control practices must remain in place during grading, seedbed preparation, seeding, mulching,				plus clay) would be acceptable.	ch pe
	and vegetative establishment. Adequate Vegetative Establishment				iv. Soil contains 1.5 percent minimum organic matter by weight.	2. Application
	Inspect seeded areas for vegetative establishment and make necessary repairs, replacements, and			b.	 v. Soil contains sufficient pore space to permit adequate root penetration. Application of amendments or topsoil is required if on-site soils do not meet the above 	a. Dry Se
	reseedings within the				conditions.	1, 1
	planting season. 1. Adequate vegetative stabilization requires 95 percent groundcover.			C.	Graded areas must be maintained in a true and even grade as specified on the	ij.,
	2. If an area has less than 40 percent groundcover, restabilize following the original recommendations			d.	approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches. Apply soil amendments as specified on the approved plan or as indicated by the results	
	for lime, fertilizer, seedbed preparation, and seeding.				of a soil test.	to Dailt or
	3. If an area has between 40 and 94 percent groundcover, over-seed and fertilize using half of the rates originally specified.			e.	Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable	b. Drill or i. (
	4. Maintenance fertilizer rates for permanent seeding are shown in Table B.6.				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	i
	B-4-1 STANDARDS AND SPECIFICATIONS				permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment	н. 4
	FOR				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	c. Hydros
	INCREMENTAL STABILIZATION Definition				unnecessary on newly disturbed areas.	fer i, l
	Establishment of vegetative cover on cut and fill slopes.		Topso			1. 1
	Purpose				wil is placed over prepared subsoil prior to establishment of permanent vegetation. The ose is to provide a suitable soil medium for vegetative growth. Soils of concern have low	
	To provide timely vegetative cover on cut and fill slopes as work progresses. Conditions Where Practice Applies			mois	ture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil	¥.
	Any cut or fill slope greater than 15 feet in height. This practice also applies to stockpiles.		2.	grada		¥. 1
	Criteria				oil salvaged from an existing site may be used provided it meets the standards as set in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type	
	A. Incremental Stabilization - Cut Slopes 1. Excavate and stabilize cut slopes in increments not to exceed 15 feet in height. Prepare seedbed			can t	be found in the representative soil profile section in the Soil Survey published by	
	and apply seed and mulch on all cut slopes as the work progresses.		3.		A-NRCS. wiling is limited to areas having 2:1 or flatter slopes where;	ıı. ۱۷.
	2. Construction sequence example (Refer to Figure B.1):		J .	a.	The texture of the exposed subsoil/parent material is not adequate to produce	B. Mulching
	 Construct and stabilize all temporary swales or dikes that will be used to convey runoff around the excavation. 				vegetative growth.	1. Muich Materia a. Straw
	b. Perform Phase 1 excavation, prepare seedbed, and stabilize.			b.	The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.	bri
	c. Perform Phase 2 excavation, prepare seedbed, and stabilize. Overseed Phase 1 areas as			C.	The original soil to be vegetated contains material toxic to plant growth.	Ma
	necessary. d. Perform final phase excavation, prepare seedbed, and stabilize. Overseed previously			d.	The soil is so acidic that treatment with limestone is not feasible.	No b. Wood
	seeded areas as necessary.				s having slopes steeper than 2:1 require special consideration and design. oil Specifications: Soil to be used as topsoil must meet the following criteria:	pro
	Note: Once excavation has begun the operation should be continuous from grubbing through the		0.	a.	Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy	•
	completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate				sand. Other soils may be used if recommended by an agronomist or soil scientist and	
	the application of temporary stabilization.				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,	
1	3. Incremental Stabilization - Fill Slopes				stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than	
	 Construct and stabilize fill slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all slopes as the work progresses. 				1½ inches in diameter.	
	2. Stabilize slopes immediately when the vertical height of a lift reaches 15 feet, or when the grading			b.	Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack	
	operation ceases as prescribed in the plans.			C.	grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil	
	At the end of each day, install temporary water conveyance practice(s), as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.				scientist and approved by the appropriate approval authority, may be used in lieu of	
	4. Construction sequence example (Refer to Figure B.2):		6.	Tone	natural topsoil. Ioil Application	
	a. Construct and stabilize all temporary swales or dikes that will be used to divert runoff around		Ų.	a,	Erosion and sediment control practices must be maintained when applying topsoil.	
	the fill. Construct silt fence on low side of fill unless other methods shown on the plans address this area.			b.	Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum	
	b. At the end of each day, install temporary water conveyance practice(s), as necessary, to				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	
	intercept surface runoff and convey it down the slope in a non-erosive manner.				irregularities in the surface resulting from topsoiling or other operations must be	
	 c. Place Phase 1 fill, prepare seedbed, and stabilize. d. Place Phase 2 fill, prepare seedbed, and stabilize. 				corrected in order to prevent the formation of depressions or water pockets.	
	e. Place final phase fill, prepare seedbed, and stabilize. Overseed previously seeded areas as			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	2. Application
	necessary.				to proper grading and seedbed preparation.	a. Apply r
	Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any	C.	Soil A	mend	ments (Fertilizer and Lime Specifications)	b. When a uni
	nterruptions in the operation or completing the operation out of the seeding season will necessitate the		1.	Soil t	ests must be performed to determine the exact ratios and application rates for both lime fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be	SO
â	application of temporary stabilization.			perfo	imed by a recognized private or commercial laboratory. Soil samples taken for	ap
ł	Figure B.			engir	neering purposes may also be used for chemical analyses.	c. Wood o aci
					izers must be uniform in composition, free flowing and suitable for accurate application by oppriate equipment. Manure may be substituted for fertilizer with prior approval from the	of
				appro	opriate approval authority. Fertilizers must all be delivered to the site fully labeled	3. Anchoring
					rding to the applicable laws and must bear the name, trade name or trademark and	a. Perforr

	a organization ministry and accurate international and addition of production approaches
	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.
З.	Lime materials must be ground limestone (hydrated or burnt lime may be substituted except
	when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus

magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #20 mesh sieve. 4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.

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



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B-4-3 STANDARDS AND SPECIFICATIONS FOR

SEEDING AND MULCHING

Definition eed and mulch to establish vegetative cover.

Purpose

- soils from erosion during and at the end of construction. Conditions Where Practice Applies
- I perimeter controls, slopes, and any disturbed area not under active grading. Criteria

ons

- 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 or 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. Ich 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 thaws. ulants: 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 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. Seeding: This includes use of conventional drop or broadcast spreaders.
- . Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.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. or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil. . 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 ii. Apply seed in two directions, perpendicular to each other. Apply half the
- seeding rate in each direction roseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer
- 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; P2O5 (phosphorous), 200 pounds per acre; K2O (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 hydroseedin
- ili. Mix seed and fertilizer on site and seed immediately and without interruption. iv. When hydroseeding do not incorporate seed into the soil.

erials (in order of preference)

w consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Marvland Seed Law and not musty, moldy, caked, decaved, or excessively dusty Note: Use only sterile straw mulch in areas where one species of grass is desired od Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose

- processed into a uniform fibrous physical state. i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the
- uniformly spread slurry. ii. WCFM, including dye, must contain no germination or growth inhibiting factors.
- iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must
- cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings. iv. WCFM material must not contain elements or compounds at concentration levels that will be phyto-toxic. 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.

ly mulch to all seeded areas immediately after seeding.

SILT

6 FT MAX. CENTER TO CENTER

6 IN MIN. FENCE

ANNIN Y

-STAPLE

WOVEN SLIT FILM-

GEOTEXTILE

FENCE

ELEVATION

CROSS SECTION

JOINING TWO ADJACENT SILT

FENCE SECTIONS (TOP VIEW)

en 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

- application rate to 2.5 tons per acre d 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.
 - ili. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited.
 - 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 long.

_36 IN MIN. FENCE POST LENGTH DRIVEN MIN. 16 IN INTO GROUND

TIG IN MIN, HEIGHT OF WOVEN SLIT FILM GEOTEXTILE

-----STAPLE

-STAPLE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

1 OF 2

XXXXXXXXXXX

8 IN MIN. DE

FENCE POST 18 IN MIN.

ANNANAN

STAPLE-

STAPLE ------

FINAL CONFIGURATION

STAPLE-

FENCE POST DRIVEN A MIN. OF 16 IN INTO

STEP 2

TWIST POSTS TOGETHER

STANDARD SYMBOL

----- SF------I

- **B-4-5 STANDARDS AND SPECIFICATIONS** PERMANENT STABILIZATION
- To stabilize disturbed soils with permanent vegetation.
- Purpose To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils. Conditions Where Practice Applies Exposed soils where ground cover is needed for 6 months or more.

A. Seed Mixtures

- 1. General Use a Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan. b Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or
- for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guild, Section 342 - Critical Area Planting. c For sites having disturbed areas 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 ½ pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.
- 2. Turforass Mixtures a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites
- which will receive a medium to high level of maintenance. b. Select one or more of the species or mixtures listed below based on 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 on the plan.
- 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 weights
- ii, 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 full sun to medium shade. Recommended mixture includes: Certified Tail Fescue Cultivars 95 to 100 percent. Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended v. Kentucky Bluegrass/Fine Rescue: 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: 1, 1/2 to 3 pounds per 1000 square feet. Notes: 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 line. c. Ideal Times of Seeding for Turf Grass Mixtures
- Western MD: March 15 to June 1, August 1 to 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) d. 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 1 1/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose
- no difficulty. e. 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 are firmly established. This is not especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.
- B. Sod: to provide quick cover on disturbed areas (2:1 grade or flatter), 1. General Specifications
- a. Class of turfgrass 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 % inch, plus or minus % 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 acceptable. 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. 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 laving 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 drving of the roots. . Wherever possible, lay sod with the long edges parallel to the contour and with staggering joint 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 the operations of laying, tamping and irrigating for any piece of sod within eight hours. 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.

STANDARD SYMBOL

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.

- Soil tests are not required for Temporary Seeding.

A mound or pile of soil protected by appropriately designed erosion and sediment control measures. To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns. Conditions Where Practice Applies

- Stockpile areas are utilized when it is necessary to salvage and store soil for later use
- 1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
- accordance with Section B-3 Land Grading
- Runoff from the stockpile area must drain to a suitable sediment control practice. 4. Access the stockpile area from the upgrade side.

- 8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile
- impermeable sheeting.

The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3 Land Grading.

Purpose To prevent blowing and movement of dust from exposed soil surfaces to reduce on and off-site damage including health and traffic hazards.

- prevent blowing. Vegetative Cover: See Section B-4-4 Temporary Stabilization. Tillage: Till to roughen surface and bring clods to the surface. Begin plowing on windward
- not be irritated to the point that runoff occurs.
- material can be used to control air currents and soil blowing. review authority

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT. (DAY 1)

4. UPON APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, INSTALL STORM DRAINS, WATER MAINS, SEWER MAINS AND SWALES. (DAY 20-30) 5. PAVE ROADWAYS, INSTALL CURB & GUTTER AND SIDEWALKS (DAY 30-35) 6. COMPLETE MASS GRADING OF SITE AND STABLIZE DISTURBED AREAS IN ACCORDANCE WITH

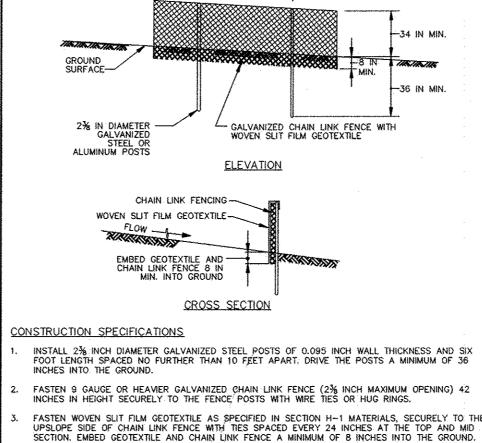
7. UPON APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. REMOVE SEDIM CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS IN ACCORDANCE WITH THE PERMANEN SEEDBED NOTES; FLUSH EXISTING AND INSTALLED STORM DRAIN SYSTEM FROM I-30 TO E-3 REMOVE SEDIMENTS; AFTER FLUSHING, CONVERT TSWM BASIN #1 INTO EXTENDED DETENTION SWMF#1 AS PER PHASE 1 F-08-060 (DAY 41-60)

THE LIMIT OF DISTURBANCE FOR THIS PROJECT EXCEEDS 2.0 ACRES; TEMPORARY STORMWATER MANAGEMENT IS PROVIDED WITHIN SEDIMENT BASIN #1 CONSTRUCTED & COMPUTED UNDER VILLAGES AT TURF VALLEY PHASE 1. SECTION 1 (F-10-027)

"NO AS BUILT INFORMATION REQUIRED ON THIS SHEET

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 21443 Expiration Date: 12-21-19



SUPER SILT

10 FT MAX.

FENCE

DETAIL E-3

U.S. DEPARTMENT OF AGRICULTURE URAL RESOURCES CONSERVATION SERVICE

- FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE
- 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 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
- PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS 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, REINSTAL CHAIN LINK FENCING AND GEOTEXTILE. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

2011

MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION

B-4-4 STANDARDS AND SPECIFICATIONS

TEMPORARY STABLIZATION

To stabilize disturbed soils with vegetation for up to 6 months Purpose

1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.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

. 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.

B-4-8 STANDARDS AND SPECIFICATIONS

STOCKPILE AREA

Definition

Criteria

2. 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

5. Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner

6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge. 7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization.

to facilitate cleanup. Stockpiles containing contaminated material must be covered with Maintenance

H-5 STANDARDS AND SPECIFICATIONS

DUST CONTROL

Controlling the suspension of dust particles from construction activities.

Conditions Where Practice Applies Areas subject to dust blowing and movement where on and off-site damage is likely without treatment Specification Mulches: See Section B-4-2 Soil Preparation, Topsoiling, and Soil Amendments, Section B-4-3

Seeding and Mulching, and Section B-4-4 Temporary Stabilization. Mulch must be anchored to

side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment that may produce the desired effect. Irrigation: Sprinkle site with water until the surface is molst. Repeat as needed. The site must

Barriers: Solid board fences, silt fences, snow fences, burlap fences, straw bales, and similar Chemical Treatment: Use of chemical treatment requires approval by the appropriate plan

NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF CONSTRU

2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND PERIMETER SEC CONTROL DEVICES (DA 3. UPON APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, BRING ROAD TO SUBGRADE AND STABILIZE SLOPES IN ACCORDANCE WITH TEMPORARY SEEDBED NOTES. UT DUST CONTROL METHODS. NO MORE THAN 20 AC. MAY BE UNSTABILIZED AT ANY TIME, (DAY

PERMANENT SEEDBED NOTES. (DAY 36-40)

NO. DATE

OWNER:

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SHEET

F-08-086

5 OF 7

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HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).

2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. 4. 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 PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

5. 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 HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

6. SITE ANALYSIS:

TOTAL AREA OF SITE:	4.73
AREA DISTURBED:	5.10
AREA TO BE ROOFED OR PAVED:	1.00
AREA TO BE VEGETATIVELY STABILIZED:	4.10
TOTAL CUT:	45,069
TOTAL FILL:	742

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SITE WITH APPROVED SDP AND OFFISTE WASTE/BORROW LOCATION: ACTIVE GRADING PERMIT

7. ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE

8. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR

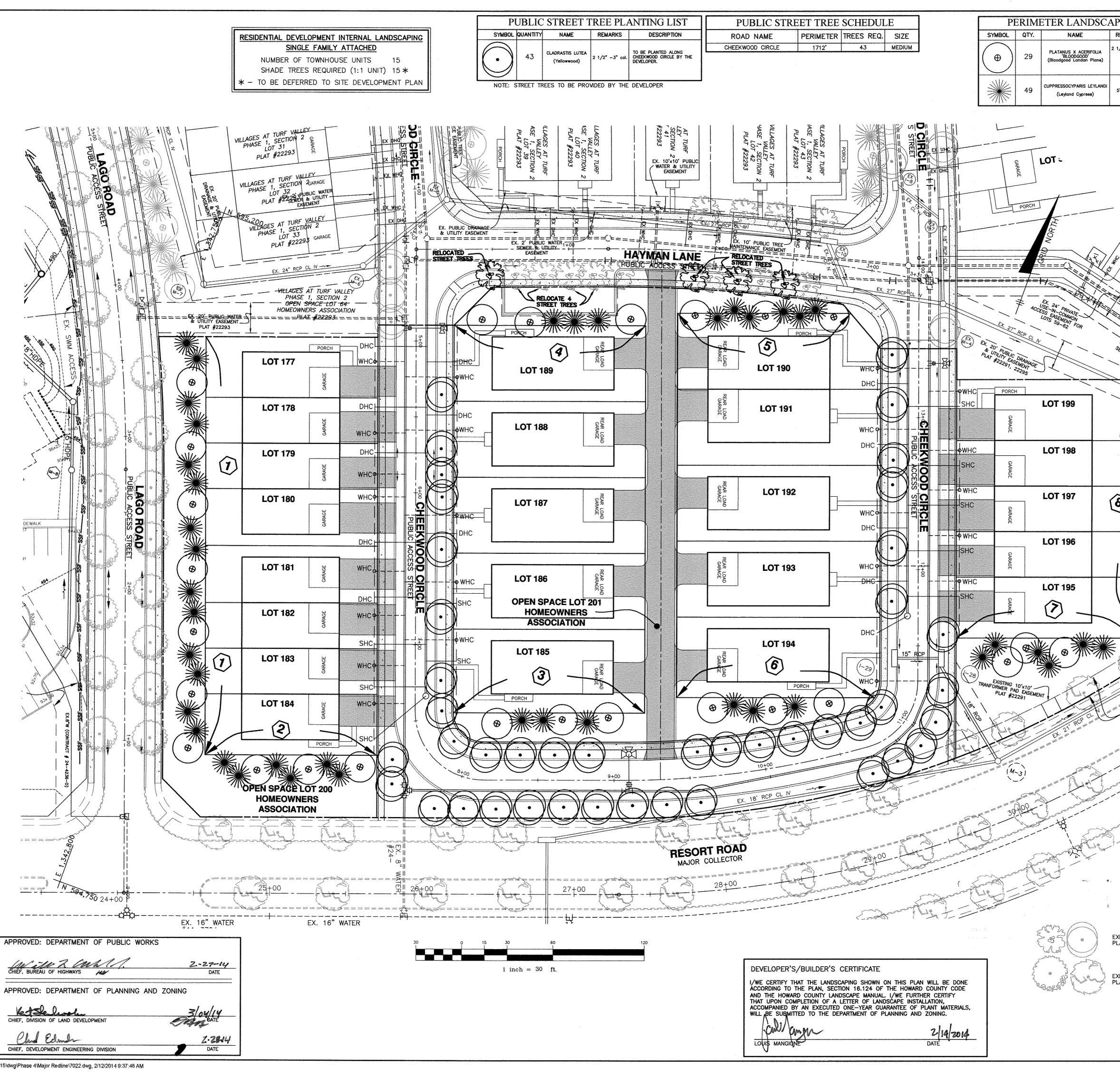
9. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF TH INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH ISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

10. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER

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

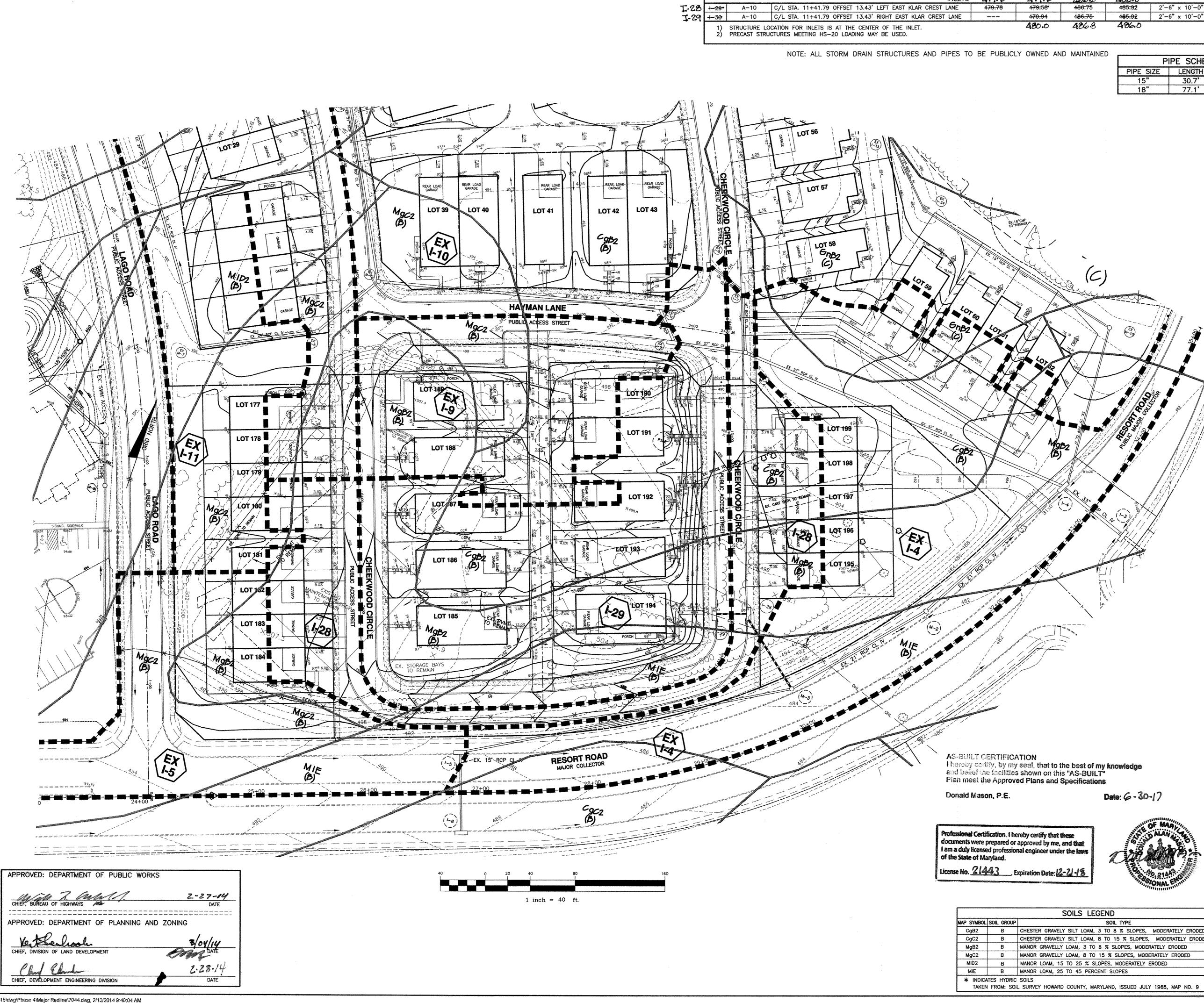
12. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 ACRES PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.

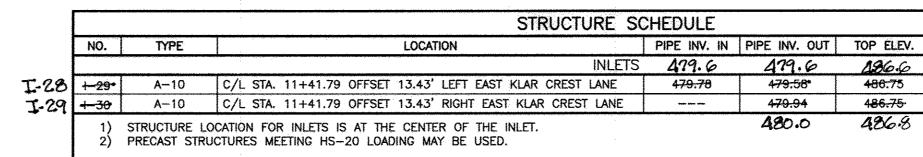
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	OF DEVI INVOLVE DEPARTI AND ER	ERTIFY THAT ALL DEVELOPMENT AND CO ELOPMENT FOR SEDIMENT AND EROSION D IN THE CONSTRUCTION PROJECT WILL VENT OF THE ENVIRONMENT APPROVED T OSION BEFORE BEGINNING THE PROJECT HOWARD SOIL CONSERVATION DISTRICT."	CONTROL HAVE A CL TRAINING PT . 1 ALSO A	AND THAT ALL RESPONSIBLE ERTIFICATE OF ATTENDANCE A ROGRAM FOR THE CONTROL	E PERSONNEL IT A OF SEDIMENT		
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RT OF CONSTRUCTION	this d	VED FOR HOWARD SCD AND MEE EVELOPMENT PLAN IS APPROVED FOR D SOIL CONSERVATION DISTRICT.			TROL BY THE		
ROL DEVICES (DAY 2-5) R, BRING ROAD BEDS		John R. Robert	M	2/	20/14		
EDBED NOTES. UTILIZE ANY TIME. (DAY 6-20)		ROVED: DEPARTMENT OF P	UBLIC	WORKS	DATE		
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i	CHIEI	F, BUREAU OF HIGHWAYS	<u></u>	<i>L</i> ~	27-14 DATE		
CCORDANCE WITH THE	APPF	ROVED: DEPARTMENT OF P	LANNIN	G AND ZONING			
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1205 YORK ROAD, PENTHOL LUTHERVILLE, MARYLAND 21 410-825-8400		DATE: FEBRUARY, 20	10	BEI PROJECT NO.	1915		



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8	♥ ^ <u>5</u>	PHASE TI TURE VALLEY OPEN SPACE LOT SECTION 2 PLAT #22293 66 95,250		A 1. STREE DISTANCE PLANTED	BETWEEN TH	BE CENTER	ND SIDEWALK	IS 6 FEET	OR GREATE	ALK WHERE R. WHEN TR D A MINIMU INTED WITHIN	EES ARE
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existing tre Planted un	EES DER F-08-060	OWNER:			V	ILLAC		T TUR ASE 4			₽
EXISTING TRE PLANTED UN	EES DER F-10-027	MANGIONE ENTERP TURF VALLEY, LIMITED 1205 YORK ROAD, I LUTHERVILLE, MARYL 410-825-84	PARTNERSH PENTHOUSE AND 21093		LOTS A RESUB	DIVISION O	199; OPE F NON-BUIL D UNDER PI P: 16	N SPAC DABLE BUL HASE 1, SEC GRID: 11	E LOTS K PARCEL I TION 2 (F-08	200 thru 2 BB PREVIOUS -060) EL: P/0 8	202 LY
		DEVELOPER:			REVIS		ELECTION HOWARD CO		RYLAND		
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		TURF VALLEY, LIMITED 1205 YORK ROAD, I LUTHERVILLE, MARYL 410-825-84	PARTNERSH PENTHOUSE AND 21093		······	ET TRE			TES &	DETAI	





NOTE: ALL STORM DRAIN STRUCTURES AND PIPES TO BE PUBLICLY OWNED AND MAINTAINED

HROAT ELEV.	INSIDE DIMENSIONS	HO. CO. STD.
485.8		
485.92	2'-6" x 10'-0"	D-4.03
485.92	2'-6" x 10'-0"	D-4.03

P	IPE SCHEE	JULE		
PIPE SIZE	LENGTH		TYPE	
15"	30.7'	RCP	CLASS	IV
18"	77.1'	RCP	CLASS	١V

			EX. M-3		
HO. CO. STD.	510	(1-29) (1-28)	(M-3) _510	_
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D-4.03	en e				
	505			505	
		EAST KLAR CREST LANE	OPEN SPACE	RESORT ROAD	
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			R #24-4552-D	(F-10-027) INV. OUT=478.94	
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	475	and the second	ž ************************************	475	
	15" RCP CLAS 30.7' @ 0.5	S22 1 1	"RCP CLASS IV 77.1 9 0.5%		
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1 Store	470 Sf = 0.2384		Sf = 0.3554%	470	
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£41 ♥ 141		STORM DR	AIN PROFILE		
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	4 1-		DRAIN DATA IMPERVIOUS SOIL CL 87 B 76 B	ASS ZONING C FACTOR PGCC 0.66 PGCC 0.48	
			·····		
1 1-27-2014	revise lot configuratior and pipe schedule to	n, grading, drainage ar	eas. add stormd rian	profile, structure schedule	 9
NO. DATE	and pipe schedule IO	This sheet. REVISIO	N		
	BENCHMA INTERS & LAND SURVEYORS INFERS & LAND SURVEYORS INFERIM IGINEERING (P) 410-465-6105 (F) 410 WWW.BEI-CIVILENGINEERIN	RK PLANNERS G, INC. LICOTT CITY, MARYLAND 21043 -465-6644	Professional Certifivere prepared or a professional engine License No	ication. I hereby certify that these docume pproved by me, and that I am a duly licen cer tinder the laws of the State of Marylar 28559 Expiring Date: 7-22-2015.	nsed and,
			ES AT TURI		_

Date: 6 - 30-17

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	ENC ENC 8480 BALTIMORE I	BENCHN SINEERS & LAND SURVE NGINEERI NATIONAL PIKE & SUITE 31 (P) 410-465-6105 (F WWW.BEI-CIVILENGIN	YORSA PLANNE NG, IN 5 A ELLICOTT CITY) 410-465-664	IC. 7. MARYLAND 21043 4	ional Certification. I hereby certify that these documents opared or approved by me, and that I am a duly licensed ional engineer that is laws of the State of Maryland, icense 190, 28509, Espiraton Date: 7-22-2015.				
OWN	ER:	· · · · · · · · · · · · · · · · · · ·		VILLAGES	SAT	TURF VA	LLE	Y	
TURF 12	205 YORK ROA	ED PARTNERSHIP D, PENTHOUSE RYLAND 21093	PHASE 4 LOTS 177 thru 199; OPEN SPACE LOTS 200 thru 202 A RESUBDIVISION OF NON-BUILDABLE BULK PARCEL BB PREVIOUSLY RECORDED UNDER PHASE 1, SECTION 2 (F-08-060) TAX MAP: 16 GRID: 11 PARCEL: P/O 8 ZONED: PGCC						
					ECTION DISTRICT NO. 3 ARD COUNTY, MARYLAND				
TURF	ELOPER: MANGIONE ENTI VALLEY, LIMIT 205 YORK ROAI	ED PARTNERSHIP	REVISED STORM DRAIN DRAINAGE AREA MAP						
	THERVILLE, MA 410-825	RYLAND 21093	DATE:	FEBRUARY, 20	10	BEI PROJECT	NO.	1915	5
	- 4		SCALE:	AS SHOWN		SHEET	7	QF	7
			A5 - 6	30115		F-08-08	6		