

APPROVED MARCH 5, 2020, HOWARD COUNTY PLANNING BOARD

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE: 3-13-20

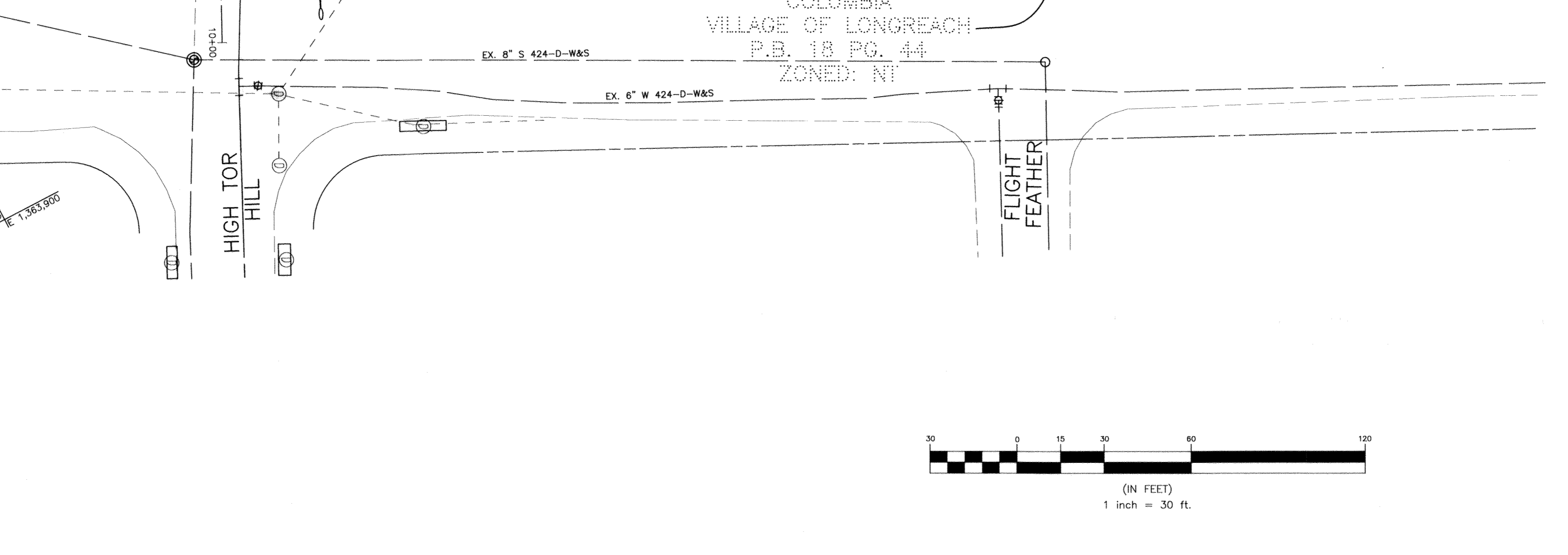
DATE: 6/17/20

CHIEF, DIVISION OF LAND DEVELOPMENT

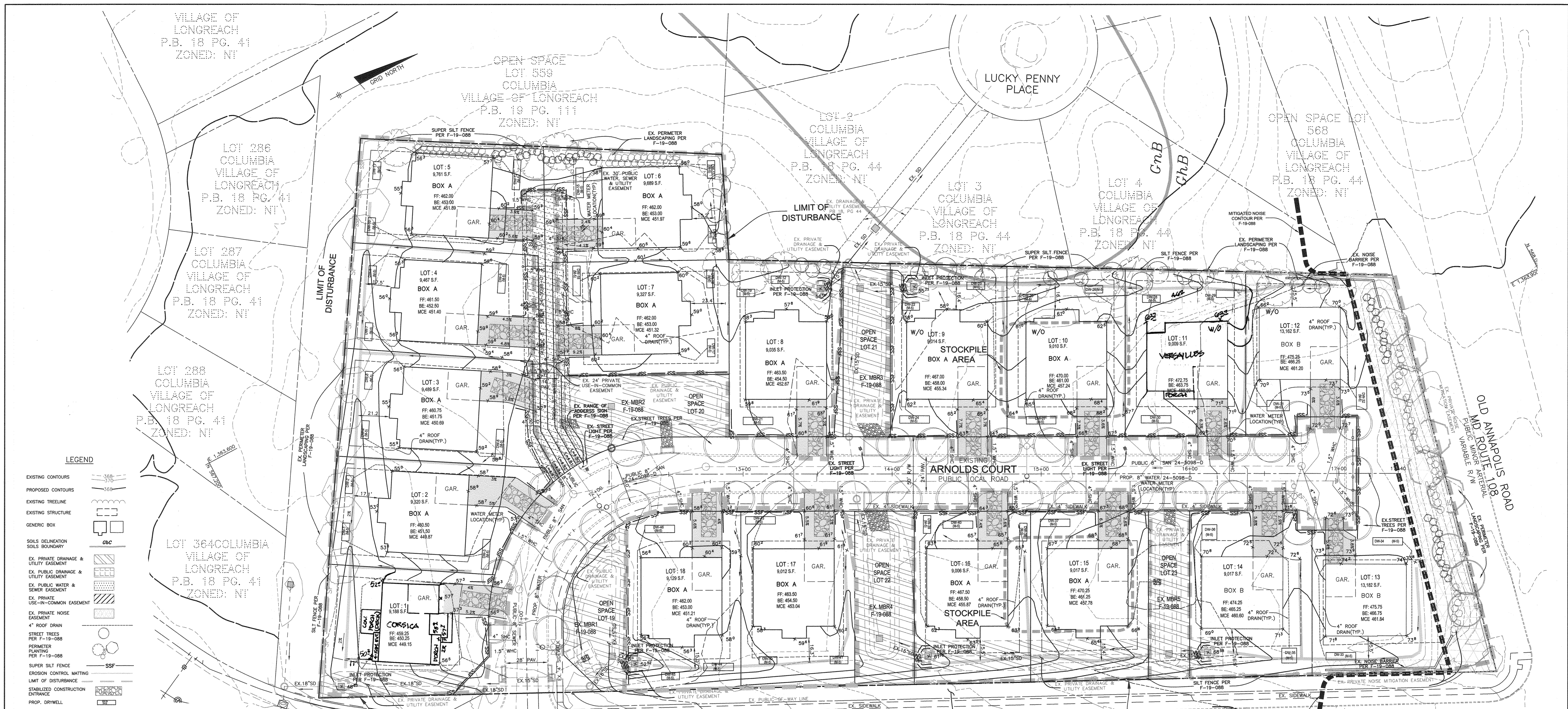
CHIEF, DEVELOPMENT ENGINEERING DIVISION

LEGEND

EXISTING CONTOURS	368	370
PROPOSED CONTOURS	368	
EXISTING TREELINE		
EXISTING STRUCTURE		
GENERIC BOX		
SOILS DELINEATION		
SOILS BOUNDARY		
EX. PRIVATE DRAINAGE & UTILITY EASEMENT		
EX. PUBLIC DRAINAGE & UTILITY EASEMENT		
EX. PUBLIC WATER & SEWER EASEMENT		
EX. PRIVATE USE-IN-COMMON EASEMENT		
EX. PRIVATE NOISE EASEMENT		



<p>1 10-20-20 ADD CORSICA MODEL TO LOT 1 WITH COVERED PORCH</p>		
NO.	DATE	REVISION
<p>BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS, INC.</p> <p>8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043</p> <p>(P) 410-465-4100 (F) 410-465-6644</p> <p>WWW.BEI-CHILENGINEERING.COM</p>		
<p>OWNER:</p> <p>ARNOLDS CORNER, LLC 308 MAGNOTY ROAD SEVERNA PARK, MD 21146 240.319.1735</p>		<p>ARNOLDS CORNER</p> <p>LOTS 1-18</p>
<p>DEVELOPER:</p> <p>RYAN HOMES 9720 PATUKENT WOODS DRIVE COLUMBIA, MD 21046 410.379.5956</p>		<p>TAX MAP: 30 GRID 24 PARCEL: 462</p> <p>ZONED: NT</p> <p>ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND</p> <p>A RESIDENTIAL SITE DEVELOPMENT PLAN</p> <p>SITE LAYOUT PLAN</p>
DESIGN: JCO	DRAFT: JCO	<p>DATE: APRIL 2020</p> <p>SCALE: AS SHOWN</p> <p>BEI PROJECT NO. 2978</p> <p>SHEET 2 OF 6</p>



LEGEND

- EXISTING CONTOURS: 356, 370
- PROPOSED CONTOURS: 356
- EXISTING TREELINE
- EXISTING STRUCTURE
- GENERIC BOX
- SOILS DELINEATION
- SOILS BOUNDARY
- EX. PRIVATE DRAINAGE & UTILITY EASEMENT
- EX. PUBLIC DRAINAGE & UTILITY EASEMENT
- EX. PUBLIC WATER & SEWER EASEMENT
- EX. PRIVATE USE-IN-COMMON EASEMENT
- EX. PRIVATE NOISE EASEMENT
- 4" ROOF DRAIN
- STREET TREES PER F-19-088
- PERMETER PLANTING PER F-19-088
- SUPER SILT FENCE
- EROSION CONTROL MATTING
- LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- PROP. DRYWELL

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Cl Malagan 4-21-20
 ENGINEER DATE

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
John L. Robertson 4-21-20
 DEVELOPER DATE

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John L. Robertson 5/13/20
 HOWARD SCD DATE

APPROVED MARCH 5, 2020, HOWARD COUNTY PLANNING BOARD

Shirley Green 8-13-20
 APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Clark 6/17/20
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

ENGINEERING CERTIFICATE
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Shirley Green 8-13-20
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Chad Clark 6/17/20
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

NOTE: A MAXIMUM SLOPE OF 21% FOR THE FIRST 4' ADJACENT TO A HOUSE IS REQUIRED.

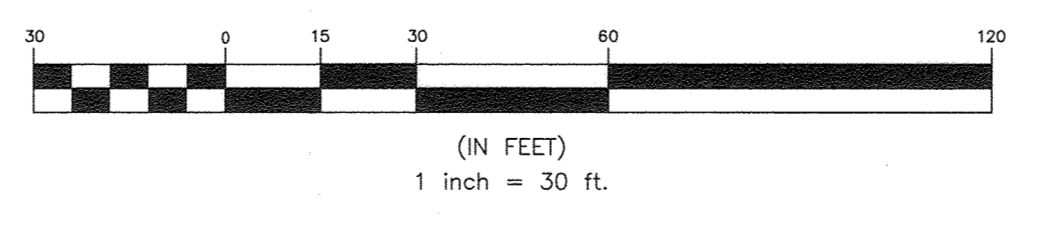


CHART TABLE

LOT	FF ELEV.	FIN. @ MAIN	SHC LENGTH (FT)	SHC SLOPE (%)	SHC MAX. SLOPE (%)	SHC MIN. SLOPE (%)	SHC MAX. LENGTH (FT)	2.50 FT. BELOW CELLAR (ELEV. (M.S.L.))	MIN. CELLAR ELEV. (M.S.L.)	CONNECTION TYPE
1	489.28	448.00	20.00	2.0%	485.01	2.0%	82.00	448.18	448.25	STD SHC
2	480.00	445.15	20.00	2.0%	445.61	2.0%	88.00	445.87	450.00	STD SHC
3	480.75	448.01	11.83	2.0%	446.28	2.0%	87.00	446.08	450.75	STD SHC
4	481.50	448.80	11.83	2.0%	447.18	2.0%	87.00	447.00	451.50	STD SHC
5	482.00	447.28	12.00	2.0%	447.51	2.0%	84.00	447.89	452.00	STD SHC
6	482.00	447.28	18.00	2.0%	447.69	2.0%	81.00	447.87	452.00	STD SHC
7	482.00	446.49	20.74	2.0%	446.00	2.0%	88.00	446.32	452.00	STD SHC
8	483.50	448.24	20.70	2.0%	446.05	2.0%	78.00	452.07	453.00	STD SHC
9	487.00	450.91	20.70	2.0%	451.32	2.0%	78.00	458.34	457.00	STD SHC
10	470.00	452.81	20.70	2.0%	453.22	2.0%	78.00	457.24	460.00	DROP TYPE A
11	472.75	454.77	20.70	2.0%	455.18	2.0%	78.00	456.20	460.75	DROP TYPE A
12	475.25	456.45	20.70	2.0%	456.86	2.0%	82.00	457.20	465.25	DROP TYPE A
13	475.75	456.68	47.00	2.0%	457.62	2.0%	85.00	459.64	465.75	DROP TYPE A
14	474.25	455.78	31.00	2.0%	456.38	2.0%	85.00	456.00	464.25	DROP TYPE A
15	470.25	453.14	31.00	2.0%	453.78	2.0%	78.00	457.78	460.25	STD SHC
16	467.50	451.23	31.00	2.0%	451.85	2.0%	78.00	456.87	457.50	STD SHC
17	463.50	448.41	30.70	2.0%	449.02	2.0%	78.00	453.04	453.00	STD SHC
18	462.00	446.57	27.07	2.0%	447.11	2.0%	80.00	451.21	452.00	STD SHC

BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS
 ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 A ELICOTT CITY, MARYLAND 21043
 (P) 410-455-5105 (F) 410-455-5444
 WWW.BE-ONLINEENGINEERING.COM

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 508 MAGDOOTHY ROAD
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DEVELOPER:
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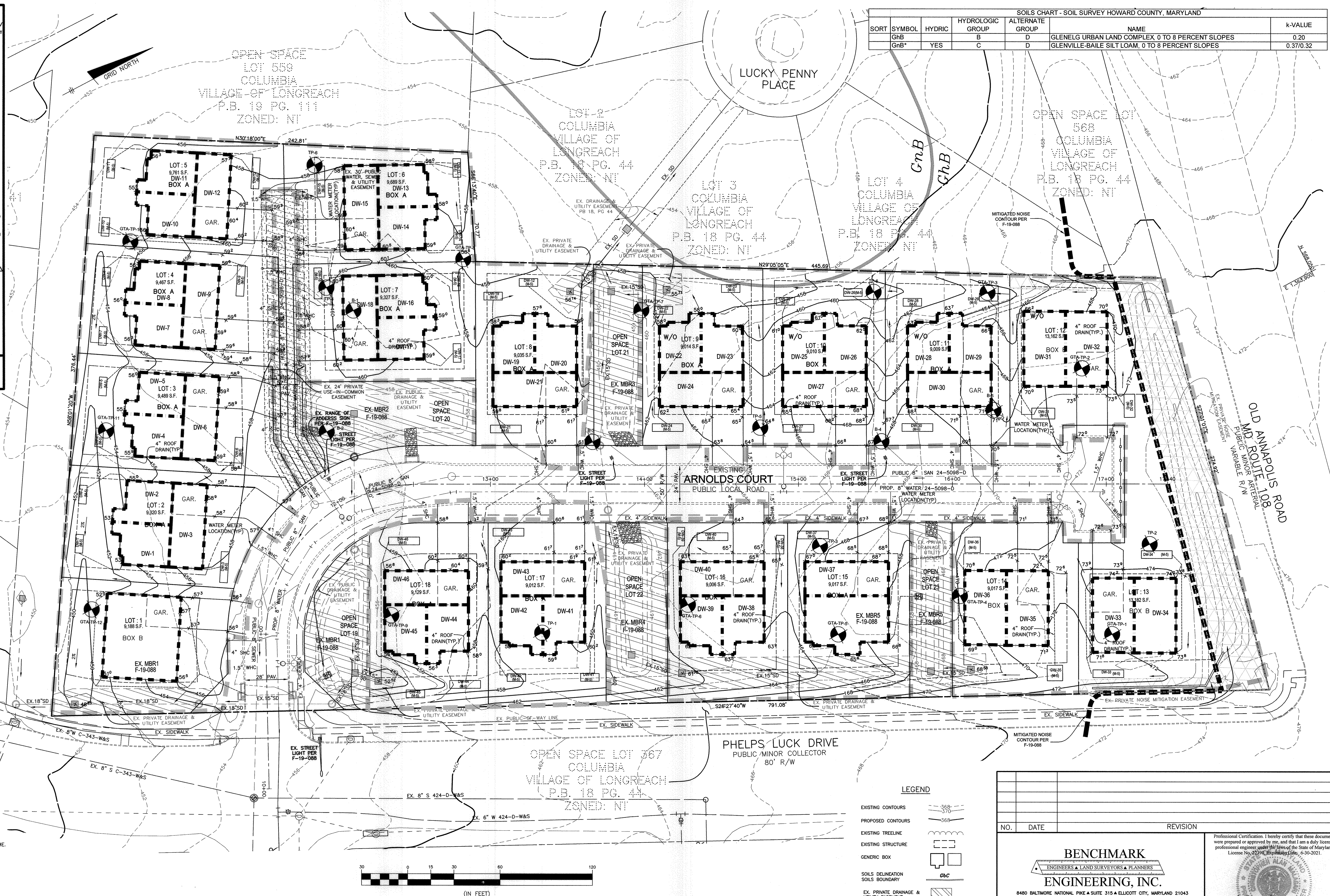
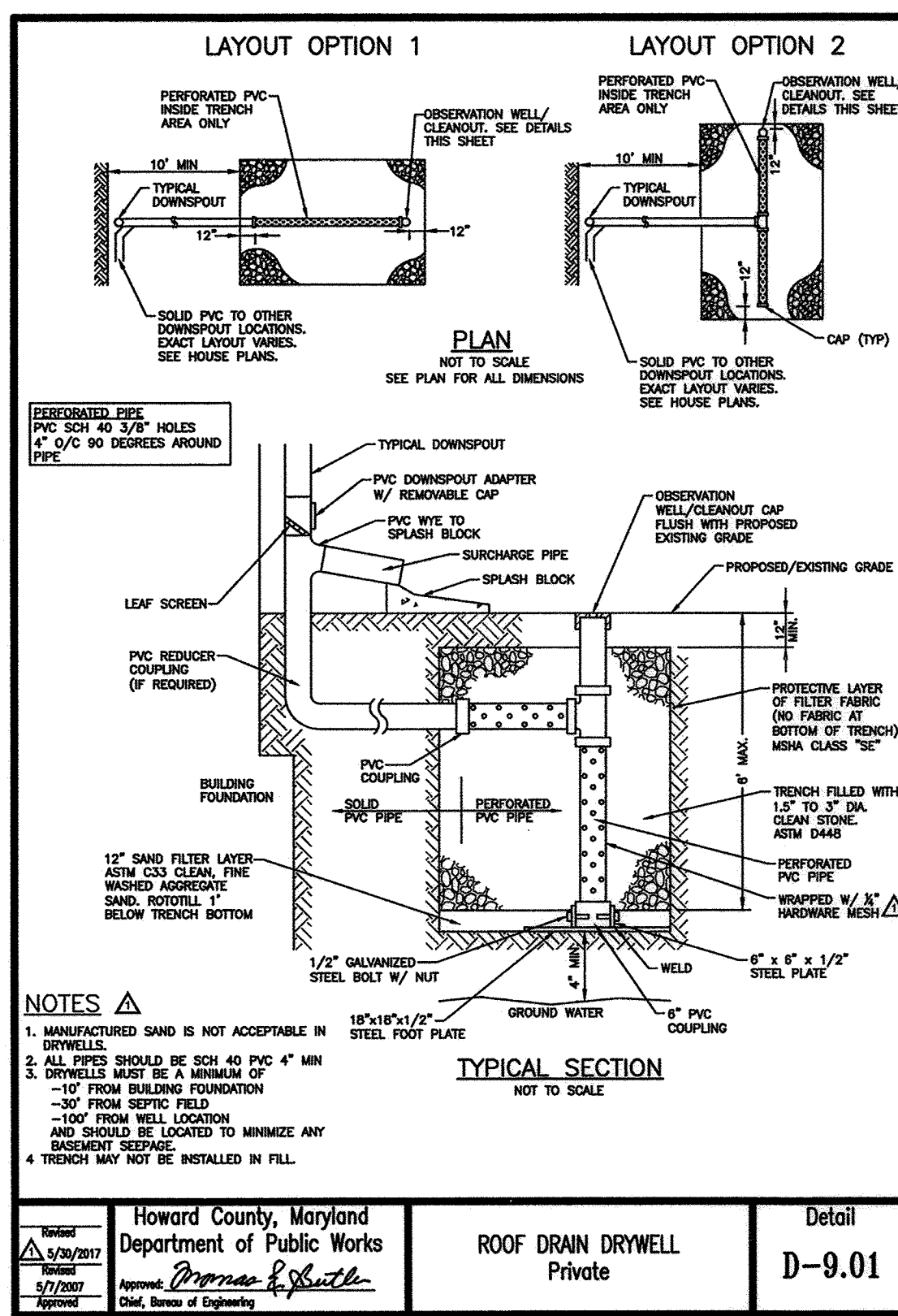
ARNOLDS CORNER
 LOTS 1-18

TAX MAP: 30 DRG. 24 PARCEL: 462
 ZONED: NT
 ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND

A RESIDENTIAL SITE DEVELOPMENT PLAN
GRADING, SEDIMENT & EROSION
CONTROL PLAN

DATE: APRIL 2020 BEI PROJECT NO. 2978
 DESIGN: JCO DRAFT: JCO SCALE: AS SHOWN SHEET 3 OF 6

SDP-20-031



DRYWELL SIZING CHART(M-5)

Lot No.	Drywell No.	Length (ft)	Width (ft)	Stone Depth (ft)	Grade	Top of Stone	Bottom of Stone
2	DW-1	12.00	5.00	5.00	450.5	449.5	444.8
2	DW-2	12.00	5.00	5.00	451.0	450.0	445.0
2	DW-3	20.00	5.00	5.00	457.0	456.0	451.0
3	DW-4	12.00	5.00	5.00	452.0	451.0	446.0
3	DW-5	12.00	5.00	5.00	453.0	452.0	447.0
3	DW-6	20.00	5.00	5.00	458.5	457.5	452.5
4	DW-7	12.00	5.00	5.00	453.0	452.0	447.0
4	DW-8	12.00	5.00	5.00	454.0	453.0	448.0
4	DW-9	20.00	5.00	5.00	549.0	548.0	543.0
5	DW-10	12.00	5.00	5.00	455.0	454.0	449.0
5	DW-11	12.00	5.00	5.00	455.0	454.0	449.0
5	DW-12	20.00	5.00	5.00	457.5	456.5	451.5
6	DW-13	12.00	5.00	5.00	458.0	457.0	452.0
6	DW-14	12.00	5.00	5.00	458.0	457.0	452.0
6	DW-15	20.00	5.00	5.00	458.0	457.0	452.0
7	DW-16	12.00	5.00	5.00	458.0	457.0	452.0
7	DW-17	12.00	5.00	5.00	458.0	457.0	452.0
7	DW-18	20.00	5.00	5.00	459.0	458.0	453.0
8	DW-19	12.00	5.00	5.00	457.0	456.0	451.0
8	DW-20	12.00	5.00	5.00	457.5	456.5	451.5
8	DW-21	20.00	5.00	5.00	459.5	458.5	453.5
9	DW-22	12.00	5.00	5.00	457.0	456.0	451.0
9	DW-23	12.00	5.00	5.00	457.0	456.0	451.0
9	DW-24	20.00	5.00	5.00	462.0	461.0	456.0
10	DW-25	12.00	5.00	5.00	458.0	457.0	452.0
10	DW-26	12.00	5.00	5.00	459.0	458.0	453.0
10	DW-27	20.00	5.00	5.00	465.0	464.0	459.0
11	DW-28	12.00	5.00	5.00	461.0	460.0	455.0
11	DW-29	12.00	5.00	5.00	463.5	462.5	457.5
11	DW-30	20.00	5.00	5.00	469.0	468.0	463.0
12	DW-31	15.00	7.00	5.00	471.0	470.0	465.0
12	DW-32	15.00	7.00	5.00	471.0	470.0	465.0
13	DW-33	20.00	5.00	5.00	471.0	470.0	465.0
13	DW-34	20.00	5.00	5.00	473.0	472.0	467.0
14	DW-35	10.00	10.00	5.00	470.5	469.5	464.5
14	DW-36	10.00	10.00	5.00	471.0	470.0	465.0
15	DW-37	20.00	5.00	5.00	466.0	465.0	460.0
16	DW-38	12.00	5.00	5.00	465.0	464.0	459.0
16	DW-39	12.00	5.00	5.00	463.0	462.0	457.0
16	DW-40	20.00	5.00	5.00	464.0	463.0	458.0
17	DW-41	12.00	5.00	5.00	459.0	458.0	453.0
17	DW-42	12.00	5.00	5.00	458.0	457.0	452.0
17	DW-43	20.00	5.00	5.00	460.0	459.0	454.0
18	DW-44	12.00	5.00	5.00	457.0	456.0	451.0
18	DW-45	12.00	5.00	5.00	456.0	455.0	450.0
18	DW-46	20.00	5.00	5.00	458.5	457.5	452.5

NOTE: DRYWELL BOX DIMENSIONS/LOCATIONS MAY VARY FROM LOT TO LOT, VOLUME MUST REMAIN THE SAME.

APPROVED MARCH 5, 2020, HOWARD COUNTY PLANNING BOARD

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT

CHIEF, DEVELOPMENT ENGINEERING DIVISION

8-13-20

6-28-20

6-17-20

MATERIALS & SPECIFICATIONS FOR DRY WELLS

MATERIAL	SPECIFICATION	SIZE	NOTES:
GEOTEXTILE (CLASS "C")	AASHTO M 43	N/A	PE TYPE 1 NONWOVEN
GRAVEL		1 1/2" TO 2 1/2"	
UNDERDRAIN PIPING	F758, TYPE PS28 OR AASHTO M-278	4" TO 6" RIGID SCH.40 PVC, SDR35 OR HOPE	3/8" PERF. 6" O/C, 4 HOLES PER ROW; MINIMUM OF 2" OF GRAVEL OVER PIPES.
SAND	AASHTO M-6 OR ASTM-C-33	.02" TO .04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NT ROCK DUST CAN BE USED FOR SAND.

SEE SHEET 6 FOR SWM BORING LOGS

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

1. THE MONITORING WELLS AND STRUCTURES SHALL BE INSPECTED ON A QUARTERLY BASIS AND AFTER EVERY LARGE STORM EVENT.
2. WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS SHALL BE RECORDED OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE.
3. A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
4. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN THE 72 HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
5. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
6. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

BENCHMARK ENGINEERING, INC.

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ARNOLDS CORNER

LOTS 1-18

TAX MAP: 30 GRID: 24 PARCEL: 462
ZONED: NT
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND

**A RESIDENTIAL SITE DEVELOPMENT PLAN
STORMWATER MANAGEMENT PLAN**

OWNER: ARNOLDS CORNER, LLC
308 MARGOTH ROAD
SEVERNA PARK, MD 21146
240.319.1735

DEVELOPER: RYAN HOMES
9720 PATUXENT WOODS DRIVE
COLUMBIA, MD 21046
410.379.5956

DATE: APRIL 2020
SCALE: AS SHOWN

BEI PROJECT NO. 2978
SHEET 5 OF 6

