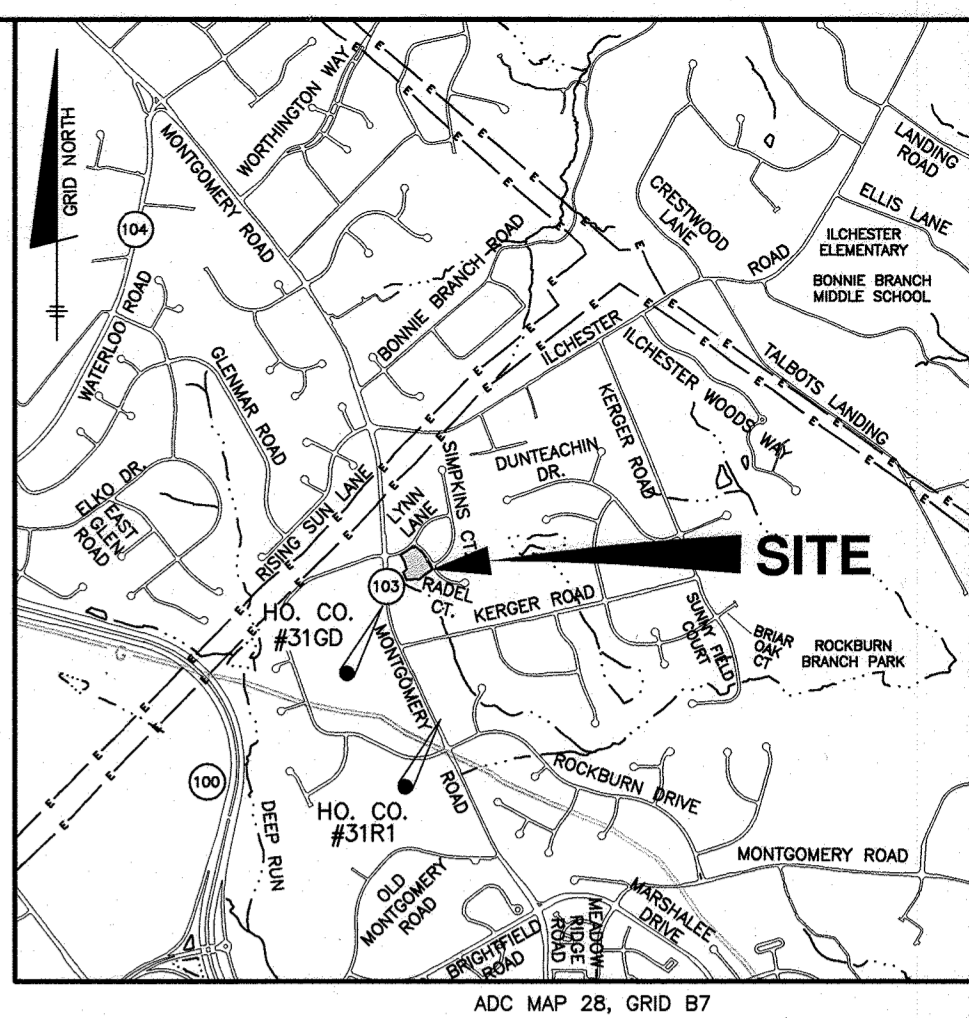
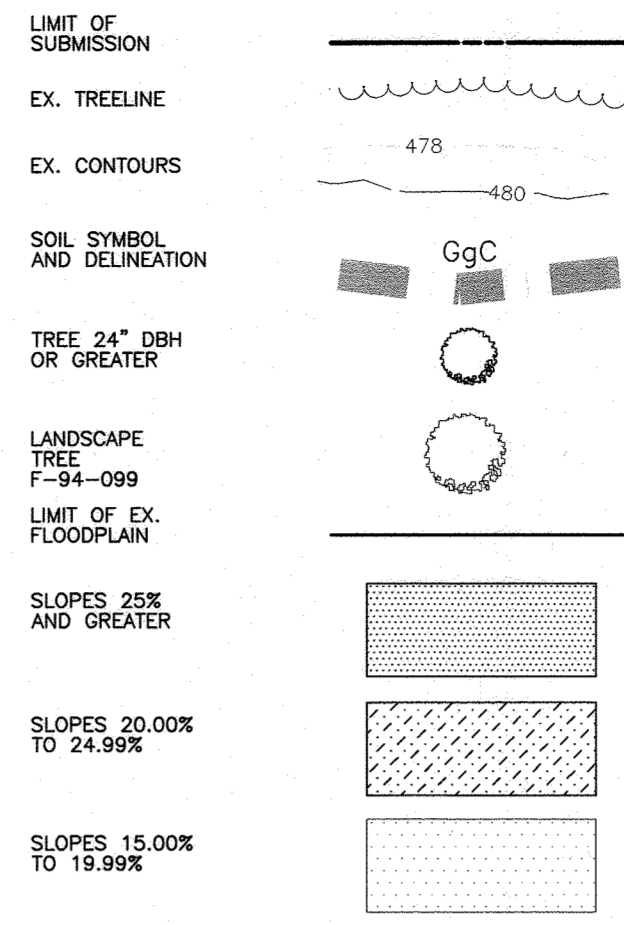


**NOTES:**

- EXISTING ZONING: R-20, DEED REFERENCE: BOOK 21943, PAGE 298
- SITE ANALYSIS DATA:
  - A. TOTAL AREA OF SITE: 1.67 AC.
  - B. EXISTING IMPERVIOUS AREA: 0.14 AC.
  - C. EXISTING GREEN AREA: 1.53 AC.
  - D. EXISTING FORESTED AREA: 0.38 AC.
  - E. EXISTING SITE USE: SINGLE FAMILY DETACHED DWELLING
  - F. SLOPES: 15% TO 24.99% 0.05 AC.
  - G. 20% OR GREATER 0.04 AC.
  - H. 25% OR GREATER 0.02 AC.
  - I. HIGHLY ERODIBLE SOILS 0.07 AC.
  - J. AREA OF PLAN SUBMISSION: 1.67 AC.
  - K. LIMIT OF DISTURBANCE: 0.98 AC.
  - L. IMPERVIOUS AREA: 0.23 AC.
  - M. REVEGETATED AREA: 0.78 AC.
- PROPOSED USE: RETAIN EXISTING DWELLING AND CREATE TWO NEW DWELLINGS
- PREVIOUS SUBMITTAL: P-93-001, F-94-099
- THIS LOT WILL UTILIZE A CUSTOM SEDIMENT AND EROSION PLAN.
- STORMWATER MANAGEMENT FOR THIS PROPOSAL IS PROVIDED WITH THE APPROVAL OF THE ENVIRONMENTAL CONCEPT PLAN AND MAY BE REVISED WITH THE FINAL PLANS, SITE DEVELOPMENT PLANS, & BUILDING PERMIT.
- THERE IS ONE EXISTING DWELLING ON THIS SITE. IT IS TO REMAIN, TO THE BEST OF OUR KNOWLEDGE AND BELIEF THERE ARE NO CEMETERIES OR HISTORIC STRUCTURES ON SITE.
- THE ASSOCIATED FOREST STAND DELINEATION WILL BE REVIEWED FOR COMPLIANCE WITH THE FOREST CONSERVATION ACT AT THE SUBDIVISION PLAN, SITE DEVELOPMENT PLAN OR GRADING PERMIT PLAN STAGES. FOREST CONSERVATION OBLIGATION FOR THIS LOT WAS PREVIOUSLY PROVIDED ON F-94-099, PLAT NUMBER 11674. THE DEED OF FOREST CONSERVATION WAS RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND, AT LIBER 4941, FOLIO 0467, DATED NOVEMBER 1, 1999.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITION AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- IT IS ANTICIPATED THAT THIS DEVELOPMENT WILL NEED A WAIVER FOR SEWER SERVICES TO THE LOWEST FLOOR DUE TO THE ELEVATION OF THE PUBLIC SEWER MAIN AND THE PROPOSED HOUSES.
- LYNN LANE AND RADEL COURT ARE EXISTING NEIGHBORHOOD WIDE STREETS. THE LAND USE CONTEXT IS SUBURBAN AND THE TRANSPORTATION CLASSIFICATION IS LOCAL ROAD. THE EXISTING RIGHTS-OF-WAY ARE 50', THE LANE WIDTH IS APPROXIMATELY 12' AND THERE ARE EXISTING SIDEWALKS ALONG THE FRONTAGES. THERE IS ON-STREET PARKING AREAS IN THE VICINITY OF THE PROJECT. THE POSTED SPEED IS 25 MPH AND THERE ARE NUMEROUS DRIVEWAYS TO BIGHORWAD MASTER PLAN. THE HOWARD COUNTY INTERACTIVE MAP DO NOT INCLUDE ANY RECOMMENDATIONS FOR LYNN LANE OR RADEL COURT.

**LEGEND**



SHEET INDEX	
SHEET	TITLE
1	ENVIRONMENTAL CONCEPT PLAN COVER SHEET AND SITE PLAN
2	ENVIRONMENTAL CONCEPT PLAN EXISTING CONDITIONS PLAN
3	ENVIRONMENTAL CONCEPT PLAN STORMWATER MANAGEMENT AND DRAINAGE AREA MAP
4	ENVIRONMENTAL CONCEPT PLAN SEDIMENT AND EROSION CONTROL PLAN AND DRAINAGE AREA MAP

**STORMWATER MANAGEMENT DESIGN NARRATIVE:**

**Summary**  
Environmental site design, ESD, is provided by fulfilling the requirements of chapter 5 of the 2000 Maryland Stormwater Design Manual, volumes I & II, revised May, 2009, and chapter 5 of volume I of the Howard County Design Manual.

This development is considered as being "in-fill" for the purposes of stormwater management.

The development of this site will include several strategies to fulfill the design manuals, these practices include:

- natural resource protections;
- use of multiple existing discharge locations;
- techniques for reduced impervious cover;
- integration of sediment control into the stormwater plan;
- use of ESD practices and methods.

**Natural resources protections:**

- Specimen trees are present. Specimen trees will be shown on the plan and their critical root zone will be protected. At this time, none of the two specimen trees will be cleared.
- Wetlands and stream bank buffers do exist on site and they will not be disturbed. There is existing platted floodplain on the site, it will not be disturbed. There are no steep slopes that exceed 20,000:1 on site. The small area of slopes greater than 25% are due to the construction of the existing house, they are not naturally occurring.
- Environmentally sensitive areas are to be placed in an open space lot.
- There is a small amount of forest on site. Disturbance to forest resources is kept to a minimum.

**Use of existing discharge locations:**

Existing flow patterns shall be maintained under ultimate conditions. The approved plans for the original subdivision of Abbeyfield Estates (F-99-094) shows three drainage areas overlapping this lot. The largest area flows from the southern and western portion of the site, and includes half the existing house and the area between the house and the floodplain. This area flows to the channel flowing from the storm drain under Lynn Lane and the perennial stream that flows from the storm drain under Route 103. The second largest area on the F-99-094 drainage area map is the eastern portion of the lot. This area containing the other half of the existing house and the area between the house and Radel Court. The smallest drainage area on the F-99-094 drainage area map is the area that flows from the northern portion of the site to Lynn Lane.

These three discharge areas are used for the developed conditions drainage areas. It appears that some of the rooftop from the existing house was routed to the southern boundary line at some point. A roof leader was installed, diverting a portion of the rooftop from draining to Radel Court.

Flow from the existing house discharges to the southern boundary line location, partially by a roof drain. The existing driveway discharges to the western boundary line. The existing driveway is going to be replaced by a new driveway that will be treated and still flow to the western boundary line.

The new impervious areas will be split between the three existing discharge locations.

The largest drainage area will be developed as two new residential lots and a new driveway to the existing house. The new impervious areas will be treated by micro-bioretentation facilities and grass swales, each will be provided a distinct discharge location. The flow will continue to be to the western and southern boundary lines. A large portion of the existing impervious to be removed, the existing driveway, is within this drainage area. The pervious areas that do not flow to the microscale practices will continue to sheet flow to the boundary unless a swale is deemed necessary.

The development within the drainage areas that flow to the existing road rights-of-way, within the second and third largest existing drainage areas, is limited to small portions of the new driveways. These minor flows will go to the existing storm drain. These areas are very small and do not change the flow characteristics of the existing storm drain. The existing rights-of-way should have been analyzed as impervious in the F-99-094 stormwater design calculations. A small portion of the existing impervious to be removed, the existing driveway, is within the drainage area that flows to Lynn Lane. Pervious portions of the site will continue to discharge at these locations.

Most impervious flow is directed to best management practices prior to discharge from the site. A

portion of the driveway areas are not treatable by any environmental site design practices.

Techniques for reduced impervious cover:  
This development is considered as being "in-fill" for the purposes of stormwater management.

Design methods were utilized to curtailed the proposed new impervious cover. The driveways are designed to be short, no longer than necessary. Parking spaces are provided within the individual driveways in front of the garages, limiting the pavement. The proposed house boxes are designed to match the existing houses within the Abbeyfield Estates development and are no larger than what would be necessary to provide a building footprint that would match the neighborhood.

The existing untreated driveway is to be removed and replaced with a driveway that will be treated for SWM.

No roadway improvements are proposed.

These are all design considerations that reduce the impervious areas.

**Integration of sediment control into the stormwater plan:**  
Sediment and erosion control shall be provided by a custom plan that will be reviewed by Howard Soil Conservation District. A schematic concept is shown within this plan set. It is anticipated that it will consist mainly of silt fences, super silt fences, and temporary traps. A stabilized construction entrance at the public roadway access for each new lot is proposed. Erosion control matting shall be used for swales if necessary. The location of the temporary trap were selected to coincide with location of bypass swale and at the limit of the disturbed area. The drainage areas are designed to drain to this location during site disturbance to allow for settling of sediment. The drainage areas are designed to flow to the micro-scale practices after construction to allow for stormwater treatment. The stormwater management design and sediment controls are designed to utilize the same natural discharge locations and the same location.

**Use of ESD practices and methods:**  
The target Pe is 1.43'; the target ESDv is 1,362 cf; the available ESDv by best management practices shown on this concept plan is 1,730 cf.

The required rev volume is 144 cf, the rev available by this design is 295 cf. Full groundwater recharge is available.

See Stormwater Management Report for additional details.

The development has been designed to minimize the impact to the forested area on site. The two specimen trees are to remain.

The developer has proposed treatment of the ESDv and the treatment of impervious surfaces. The existing discharge points have been utilized. The developer has reduced the proposed impervious area. For the effective area the amount of impervious being treated is 94% of the new impervious area. The 6% of new impervious not being treated is the portion of the new driveways that drain directly to the existing roadways. No treatment options are available for these areas due to their location and the required design slopes. Overall storage available is well above the amount required by the effective area.

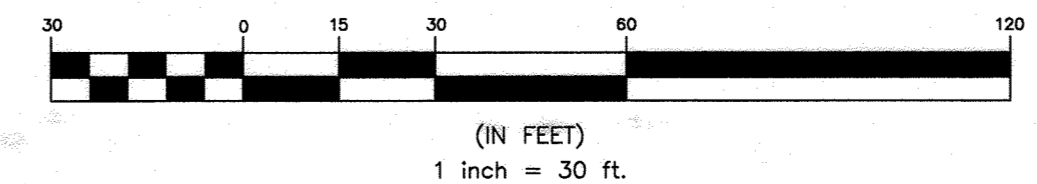
Therefore, this project can be considered to be treated to the maximum extent practical.

Site Analysis Data Sheet	
Gross Area	1.67 ac
100% Floodplain	0.02 ac
Slopes 15% to 24.99%	0.05 ac
Slopes 25% or greater	0.02 ac
Slopes 20% or greater	0.04 ac
Wetlands (outside of floodplain)	0.00 ac
Wetlands Buffer (outside of floodplain)	0.04 ac
Stream	0.00 ac
Stream Buffer (outside floodplain)	0.04 ac
Forested Area	0.38 ac
Erodible Soils	0.07 ac
Limit of Disturbance (inc. Rights-of-Way)	0.98 ac
Impervious Area	0.23 ac
Green Space (within LOD)	0.75 ac

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 11/1/23  
 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature]  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

SYMBOL	HYDRIC	HYDROLOGIC GROUP	NAME	K-VALUE	Whole Soil
Fa*	YES	I	FALLSINGEN SANDY LOAM, 0 TO 2 PERCENT	0.24	
SaB	NO	II	SASSAFRAS LOAM, 2 TO 5 PERCENT SLOPE	0.32	

\*\* HIGHLY ERODIBLE, K>0.35, AND STEEPER THAN 5% OR 15% AND GREATER SLOPES TAKEN FROM THE NROS WEB SOIL SURVEY MAY 2022, MAP 10.

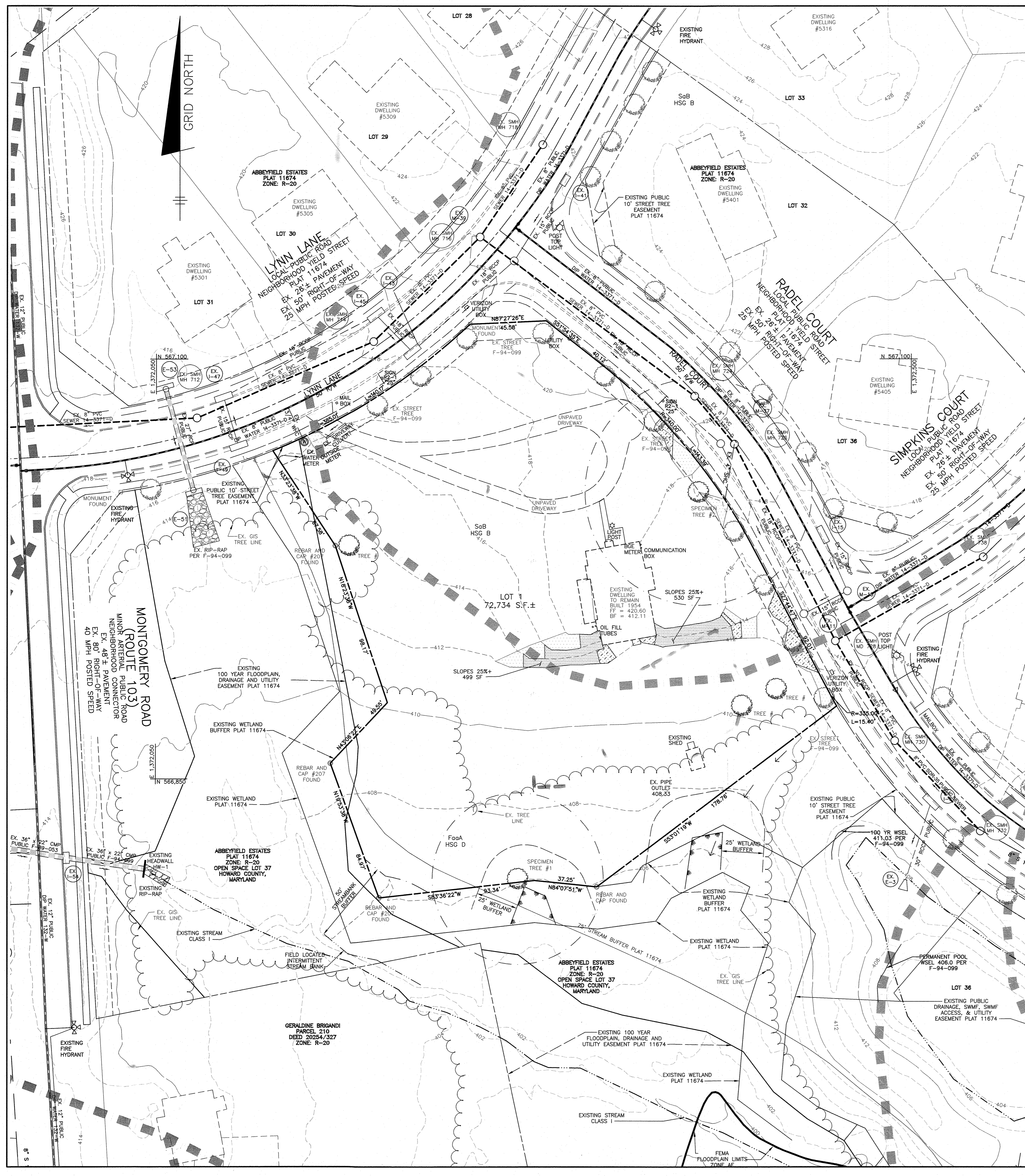


NO.	DATE	REVISION

**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
3300 NORTH ROBE ROAD & SUITE 140 A ELICOTT CITY, MARYLAND 21043  
(P) 410-465-8105 (F) 410-465-8644  
WWW.BEI-CIVILENGINEERING.COM

12/29/23  
[Signature]

OWNER: RAINMAKER DEVELOPMENT, INC. 2101 MILLERS MILL ROAD COOKSVILLE, MD 21723 443-829-9222	DEVELOPER: RAINMAKER DEVELOPMENT, INC. 2101 MILLERS MILL ROAD COOKSVILLE, MD 21723 443-829-9222	<p><b>ABBNEYFIELD ESTATES</b> A RESUBDIVISION OF LOT 1, PLAT 11674 CREATING LOTS 41-43 &amp; OPEN SPACE LOT 44 R-20 SINGLE FAMILY DETACHED</p> <p>TAX MAP: 31, GRID: 21, PARCEL: 206 ZONED: R-20 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p> <p><b>ENVIRONMENTAL CONCEPT PLAN</b> COVER SHEET AND SITE PLAN</p>
DATE: DECEMBER, 2023	BEI PROJECT NO. 3147	
DESIGN: JC	DRAFT: JC	SCALE: AS SHOWN
		SHEET 1 OF 4



SOILS CHART WEBSOIL SURVEY 2.0 4/20/2023

SYMBOL	HYDRIC	HYDROLOGIC GROUP	NAME	K-VALUE (Whole Soil)
Fa*	YES	D	FALLSINGTON SANDY LOAM, 0 TO 2 PERCENT	0.24
Gsb		B	SASSAFRAS LOAM, 2 TO 5 PERCENT	0.32

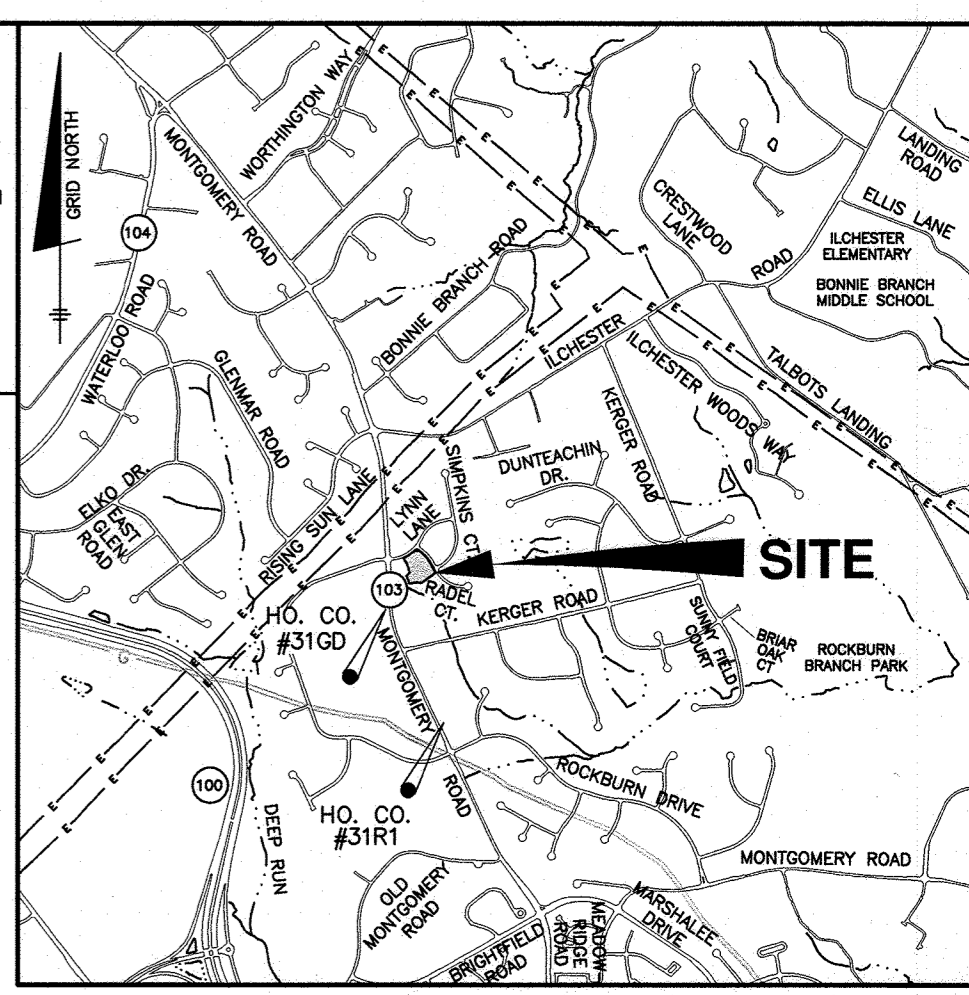
\*\* HIGHLY ERODIBLE, K>0.35, AND STEEPER THAN 5% OR 15% AND GREATER SLOPES TAKEN FROM THE NRCS WEB SOIL SURVEY MAY 2022, MAP 10.

**LEGEND**

- LIMIT OF SUBMISSION
- EX. TREELINE
- EX. CONTOURS
- SOIL SYMBOL AND DELINEATION
- TREE 24" DBH OR GREATER
- LANDSCAPE TREE F-94-099
- LIMIT OF EX. FLOODPLAIN
- SLOPES 25% AND GREATER
- SLOPES 20.00% TO 24.99%
- SLOPES 15.00% TO 19.99%

**BENCH MARKS NAD '83**

HO_CO_3102	ELEV. 419.340
STAMPED DISC ON CONCRETE MONUMENT, MONTGOMERY ROAD WEST OF KERGER ROAD	
N 566,299.852	E 1,3372,014.021
HO_CO_3181	ELEV. 400.938
3/4" REBAR, MONTGOMERY ROAD 275' NORTH OF ROCKBURN DRIVE.	
N 565,303.479	E 1,372,517.790



**Specimen Tree Chart**

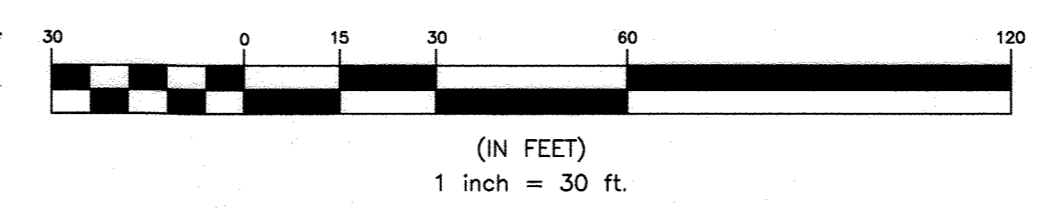
Key (x#)	Species	Size (in. dbh)	CRZ 1:1.5 (feet radius)	Condition (good unless otherwise noted)	State Champion (in. dbh)
1	Red Maple	34	51		86.9
2	Red Maple	45	67.5	Odd branching pattern a bh, measure below branch collar	86.9

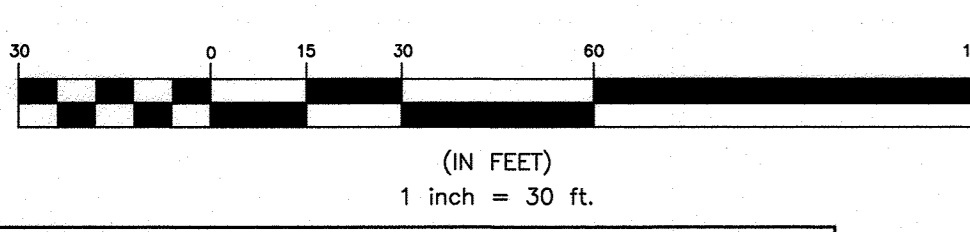
APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LANDS DEVELOPMENT *[Signature]* 1/16/24 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION *[Signature]* 1/25/24 DATE

NO.	DATE	REVISION
<p><b>BENCHMARK ENGINEERING, INC.</b></p> <p>3300 NORTH RIDGE ROAD SUITE 140A ELICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM</p>		<p>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. 45577, Expiration Date: 06-08-2024.</p> <p><i>[Signature]</i> 1/29/23 Professional Engineer</p>
OWNER:	<p><b>ABBEYFIELD ESTATES</b> A RESUBDIVISION OF LOT 1, PLAT 11674 CREATING LOTS 41-43 &amp; OPEN SPACE LOT 44 R-20 SINGLE FAMILY DETACHED</p> <p>TAX MAP: 31, GRID: 21, PARCEL: 206 ZONED: R-20 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p>	
DEVELOPER:	<p><b>RAINMAKER DEVELOPMENT, INC.</b> 2101 MILLERS MILL ROAD COOKSVILLE, MD 21723 443-829-9222</p>	
DESIGN: JC	DRAFT: JC	<p>DATE: DECEMBER, 2023 BEI PROJECT NO. 3147</p> <p>SCALE: AS SHOWN SHEET 2 OF 4</p>





APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 11/1/24  
 1:25:24

SYMBOL	HYDROLOGIC GROUP	NAME	S-V VALUE	WHOLE SOIL
Fa	YES	FALLSINGTON SANDY LOAM, 0 TO 2 PERCENT	0.24	
SaB	IB	SASSAFRAS LOAM, 2 TO 5 PERCENT SLOPE	0.32	

\*\* HIGHLY ERODIBLE, K>0.35, AND STEEPER THAN 5% OR 15% AND GREATER SLOPES TAKEN FROM THE NRCS WEB SOIL SURVEY MAY 2022, MAP 10.

LEGEND

- LIMIT OF SUBMISSION
- EX. TREELINE
- EX. CONTOURS
- SOIL SYMBOL AND DELINEATION
- TREE 24" DBH OR GREATER
- LANDSCAPE TREE F-94-099
- LIMIT OF EX. FLOODPLAIN
- SLOPES 25% AND GREATER
- SLOPES 20.00% TO 24.99%
- SLOPES 15.00% TO 19.99%
- STORMWATER MANAGEMENT DRAINAGE DIVIDE
- STORMWATER MANAGEMENT EFFECTIVE AREA

PROJECT: <b>Abbeyfield Estates</b>	DATE: 12/13/23
Facility Summary	
Pe (LOTS): 1.43	inches

BIORETENTION FACILITIES (M-6 AND F-6)													
Facility	Drainage Area	Impervious	I (%)	Rv	ESDv Req'd (cf)	Req'd Pondered Storage (75%)	Pondered Volume Provided (cf)	Req'd Stone Storage (cf)	Stone Storage Provided (cf)	Total ESDv	Pe Prov.	Rev (cf)	Notes
MBR-1 (M-6)	6,902	3,772	55%	0.54	445	334	379	111	114	620	1.99	114.4	
MBR-2 (M-6)	5,466	1,380	25%	0.28	180	135	223	45	51	348	2.76	50.8	
MBR-3 (M-6)	3,660	2,250	61%	0.60	263	197	287.5	66	69	453	2.46	69.2	
MBR-4 (M-6)	3,017	1,455	48%	0.48	174	130	132.5	43	44	221	1.81	44.1	
<b>TOTALS</b>	<b>8,857</b>	<b>580</b>	<b>17%</b>	<b>88</b>	<b>1061</b>	<b>1022</b>	<b>1502</b>	<b>278</b>	<b>278</b>	<b>1641</b>	<b>1.99</b>	<b>278</b>	

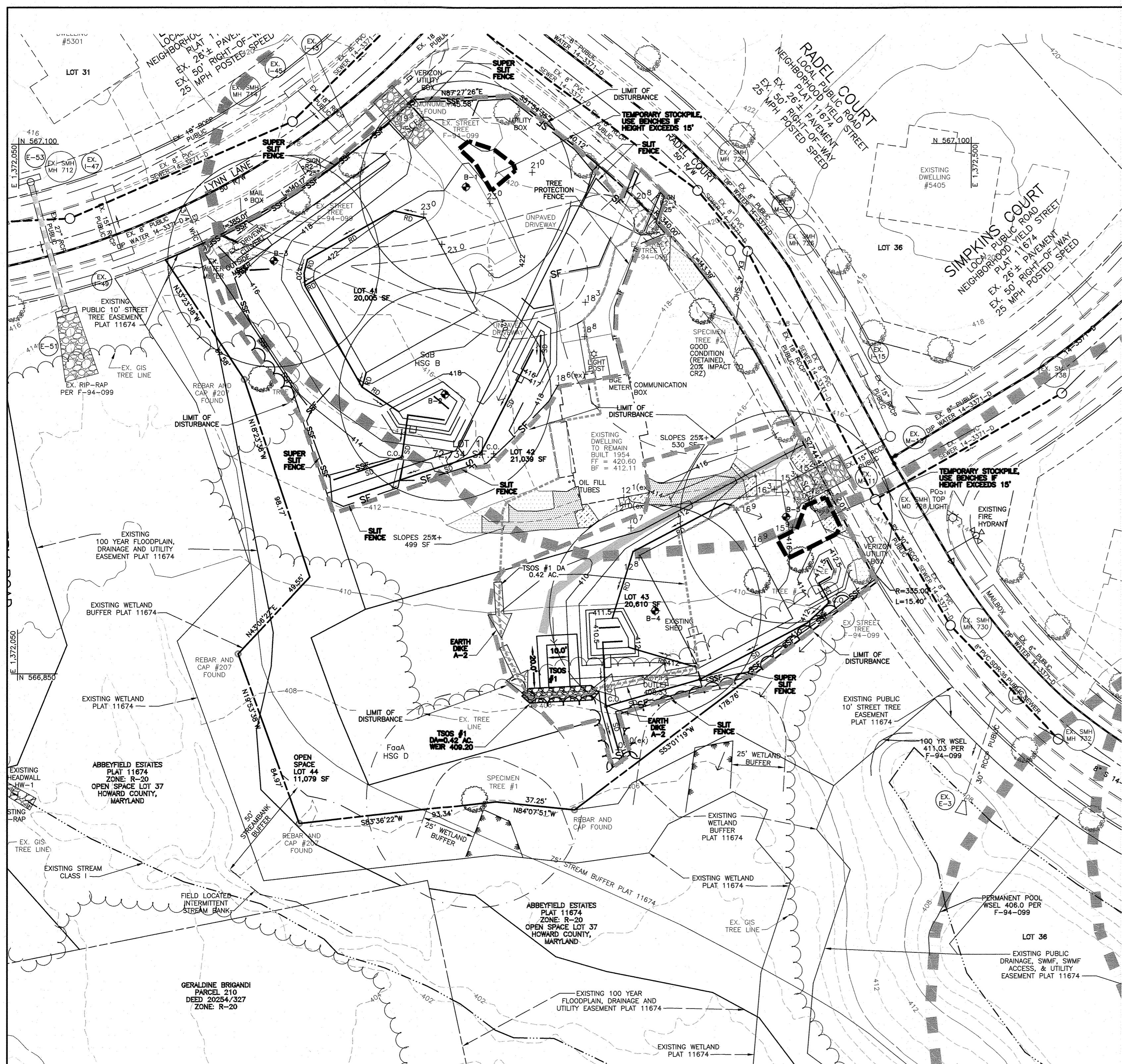
GRASS SWALE FACILITY (M-8)												
Facility	Drainage Area	Impervious	Volumetric Runoff	ESDv Req. (CF)	Length (ft)	Width (ft)	Slope (ft/ft)	Velocity (fps)	Flow Depth (inches)	ESDv Provided	Rev Provided	Notes
GS-1 (M-8)	4,430	580	17%	88	86	4	0.030	0.18	0.48	88	16	
<b>TOTALS</b>	<b>4,430</b>	<b>580</b>	<b>17%</b>	<b>88</b>	<b>86</b>	<b>4</b>	<b>0.030</b>	<b>0.18</b>	<b>0.48</b>	<b>88</b>	<b>16</b>	

Uncaptured new impervious 615  
 The total ESDv provided by this design is: 1730 CF 368 CF EXCESS  
 The total Rev provided by this design is: 295 CF 150 CF EXCESS

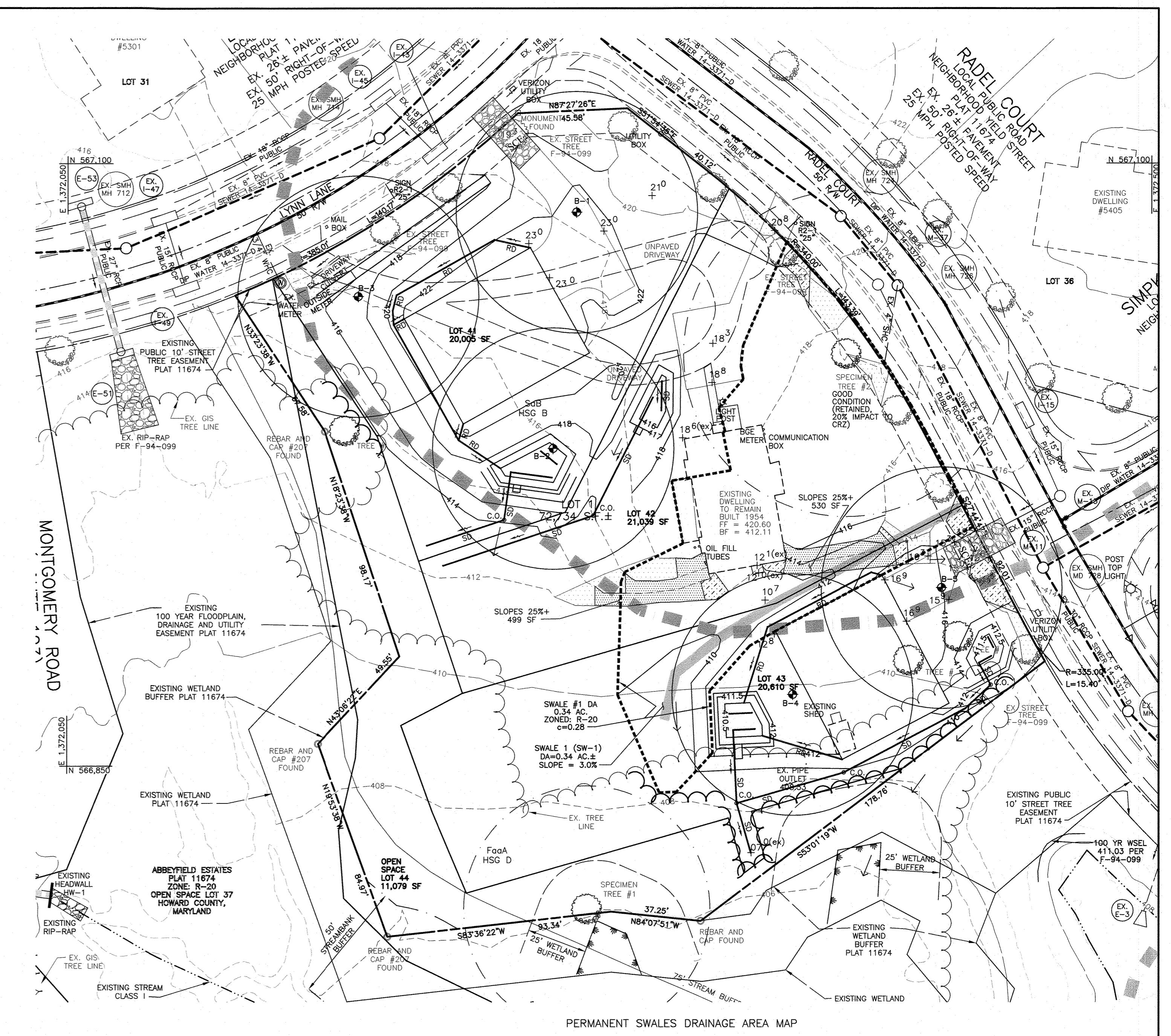
\*The ESDv summary table portrays storage in excess of that required for Environmental Site Design requirements.

Date:	Project:	Abbeyfield lots 41-43
<b>(M-8) Swale #1 GS 1 lot 41</b>		
DA = 4,430 sf	ok Check	Drainage Area = GS 1
Imp = 580 sf Impervious	R <sub>v</sub> = 0.17 Runoff Coefficient	
I = 13% Percent Impervious	A <sub>(t=reg)</sub> = 88.6 SF (Eqn. 5.2)	
PE <sub>(target)</sub> = 1.43 Rainfall in Inches	A <sub>(t=prov)</sub> = 344.0 SF ok	
ESD <sub>v</sub> = 88 CF Calc.	A <sub>(t=prov)</sub> % = 7.8% ok Check	
s = 0.030 ft/ft	v = 0.18 ft/s PASS	
w = 4 ft	d = 0.48 inches PASS	
l = 86 ft	Actual <sub>v</sub> = 88 CF Storage Prov	
sides = 3:1 H/V	Storage = 100% ok Check	

NO.	DATE	REVISION
 3300 NORTH RIDGE ROAD & SUITE 140A ELICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BE-CIVILENGINEERING.COM		
OWNER: RAINMAKER DEVELOPMENT, INC. 2101 MILLERS MILL ROAD COOKSVILLE, MD 21723 443-829-9222		ABBEYFIELD ESTATES/ A RESUBDIVISION OF LOT 1, PLAT 11674 CREATING LOTS 41-43 & OPEN SPACE LOT 44 R-20 SINGLE FAMILY DETACHED TAX MAP: 31, GRID: 21, PARCEL: 206 ZONED: R-20 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: RAINMAKER DEVELOPMENT, INC. 2101 MILLERS MILL ROAD COOKSVILLE, MD 21723 443-829-9222		ENVIRONMENTAL CONCEPT PLAN STORMWATER MANAGEMENT PLAN AND DRAINAGE AREA MAP DATE: DECEMBER, 2023 BEI PROJECT NO. 3147
DESIGN: JC	DRAFT: JC	SCALE: AS SHOWN SHEET 3 OF 4



SEDIMENT AND EROSION CONTROL PLAN WITH TEMPORARY FEATURES DRAINAGE AREA MAP



PERMANENT SWALES DRAINAGE AREA MAP

swale	A	B	C	Q2	V2	d2	Q10	V10	d10
	ft	ft		cfs	fps	ft	cfs	fps	ft
SW-1	1.00	2.00	3:1	0.45	1.76	0.11	0.67	1.98	0.15
SWM GS-1	1.00	4.00	3:1	0.13	0.79	0.04	0.19	0.92	0.05
				n=0.030			n=0.030		

SOILS CHART WEBSOIL SURVEY 2.0 4/20/2023

SYMBOL	HYDRIC	HYDROLOGIC GROUP	NAME	k-VALUE Whole Soil
Fa*	YES	D	FALLSINGTON SANDY LOAM 0 TO 2 PERCENT	0.24
SsB	NO	S	SASSAPARA LOAM 2 TO 5 PERCENT SLOPE	0.32

\*\* HIGHLY ERODIBLE, K>0.35, AND STEEPER THAN 5% OR 15% AND GREATER SLOPES TAKEN FROM THE NRCS WEB SOIL SURVEY MAY 2022, MAP 10.

Temporary Stone/Gabion Outlet Structure												
Designation	Drainage Area SF	Acres	Practice	Volume Required	Ground Elev.	Embankment Elev.	Weir Elev.	Pond Bottom	Bottom Width at Weir	Bottom Length Uphill of Weir	Volume Provided	Adequate Volume?
#1	18186	0.42	TSOS	751	408.20	409.70	409.20	406.95	10.00	20.00	845	Yes

- LEGEND**
- LIMIT OF SUBMISSION
  - EX. TREELINE
  - EX. CONTOURS
  - SOIL SYMBOL AND DELINEATION
  - TREE 24" DBH OR GREATER
  - LANDSCAPE TREE F-94-099
  - LIMIT OF EX. FLOODPLAIN
  - SLOPES 25% AND GREATER
  - SLOPES 20.00% TO 24.99%
  - SLOPES 15.00% TO 19.99%

- LIMIT OF DISTURBANCE
- EARTH DIKE
- SUPER SILT FENCE
- SILT FENCE
- STABILIZATION MATTING
- TEMPORARY STONE OR GABION OUTLET SEDIMENT TRAP
- STABILIZED CONSTRUCTION ENTRANCE WITH BERM
- TREE PROTECTION FENCE
- PERMANENT DRAINAGE AREA
- TEMPORARY DRAINAGE AREA

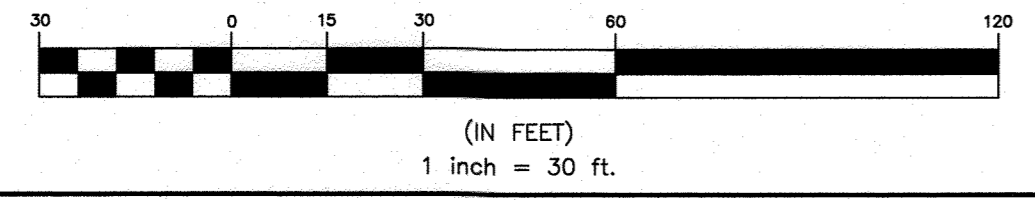
APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 11/24

DATE 1-25-24

CHIEF, DEVELOPMENT ENGINEERING DIVISION



NO.	DATE	REVISION
<b>BENCHMARK ENGINEERING, INC.</b> 3300 NORTH RIDGE ROAD SUITE 140 A ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-8644 WWW.BEI-CIVILENGINEERING.COM		
OWNER:	<b>ABBEYFIELD ESTATES</b> A RESUBDIVISION OF LOT 1, PLAT 11674 CREATING LOTS 41-43 & OPEN SPACE LOT 44 R-20 SINGLE FAMILY DETACHED	
DEVELOPER:	RAINMAKER DEVELOPMENT, INC. 2101 MILLERS MILL ROAD COOKSVILLE, MD 21723 443-829-9222	
DESIGN: JC	DRAFT: JC	DATE: DECEMBER, 2023
SCALE: AS SHOWN	SHEET 4 OF 4	BEI PROJECT NO. 3147