

SOILS TABLE			
SYMBOL	NAME	HSG	Kw
FaaA	Fallingston sandy loams 0-2% slopes, northern coastal plain	C/D	0.24
JoB*	Jackland silt loam 3-8% slopes	D	0.37
Rsc	Russett fine sandy loam 5-10% slopes	C	0.28

Source: NRCS Web Soil Survey HOWARD SCD MAP # = 25
* Highly Erodible Soil on slopes >5%

- GENERAL NOTES**
- STORMWATER MANAGEMENT HAS BEEN PROVIDED USING "E2D TO THE MEP". SPECIFICALLY, RAINFALL HARVESTING WILL TREAT THE ROOF AREA, 80-SHALES AND SPILLWAY PRACTICES WILL ADDRESS THE DRIVEWAY AND SWM CREEKS ARE USED FOR THE WALKWAY AND THE DRIVEWAY ENTRANCE. REFER TO THE ESD SWM REPORT PREPARED BY CIVIL DESIGN SERVICES, LC.
 - THE PROPERTY BOUNDARY AND TOPOGRAPHIC SURVEY WAS PERFORMED IN APRIL 2021 BY SHAWBROKER & LAKE (ELICOTT CITY, MD). MOST OF THE TOPOGRAPHY SHOWN OUTSIDE THE BOUNDARY WAS TAKEN FROM HOWARD COUNTY AERIAL TOPO LOGGING MAPS.
 - APPROVAL OF THIS ESD DOES NOT CONSTITUTE APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION, SITE DEVELOPMENT, FOREST CONSERVATION, GRADING, OR BUILDING PERMIT PLAN. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN (E.G., LOCATION OF WALKWAY, DRIVEWAY, GRADING, LOTS, ETC.) AS THE PROJECT PROGRESSES THROUGH THE REVIEW PROCESS IN ACCORDANCE WITH THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
 - THERE ARE RELEASES LOCATED ON THIS PROPERTY. SEE ENVIRONMENTAL REPORT PREPARED BY EEO-SCIENCE PROFESSIONALS, DATED JUNE 11, 2021.
 - A DECLARATION OF INTENT WILL BE SUBMITTED TO SATISFY THE HOWARD COUNTY FOREST CONSERVATION REGULATIONS.
 - EXISTING VEGETATION ON THIS PROPERTY IS MOSTLY OPEN SPACE GRASS WITH TREES ALONG THE STREAM. THE SPEC SPEC CONTAINS THE COMMON USE DRIVEWAY/ROADWAY FRONTAGE ON KENNER ROAD.
 - THE PROPOSED STORMWATER PRACTICES WILL BE PRIVATELY OWNED AND MAINTAINED.
 - THE EXISTING UTILITY LOCATIONS ARE CONSIDERED APPROXIMATE AND WERE TAKEN FROM FIELD SURVEY, HOWARD GIS, AND INFORMATION OF RECORD.
 - THIS PLAN IS NOT FOR CONSTRUCTION AND IS FOR CONCEPTUAL PURPOSES ONLY. THIS PLAN WAS PREPARED TO EVALUATE ENVIRONMENTAL IMPACTS AND VERIFY THE FEASIBILITY OF THE PROPOSED STORMWATER MANAGEMENT DESIGN.
 - THERE ARE NO SPECIFIC TREES IN THIS PROPERTY THAT ARE FIELD VISIT BY EEO-SCIENCE PROFESSIONALS, INC., SEE REPORT PREPARED JUNE 11, 2021.

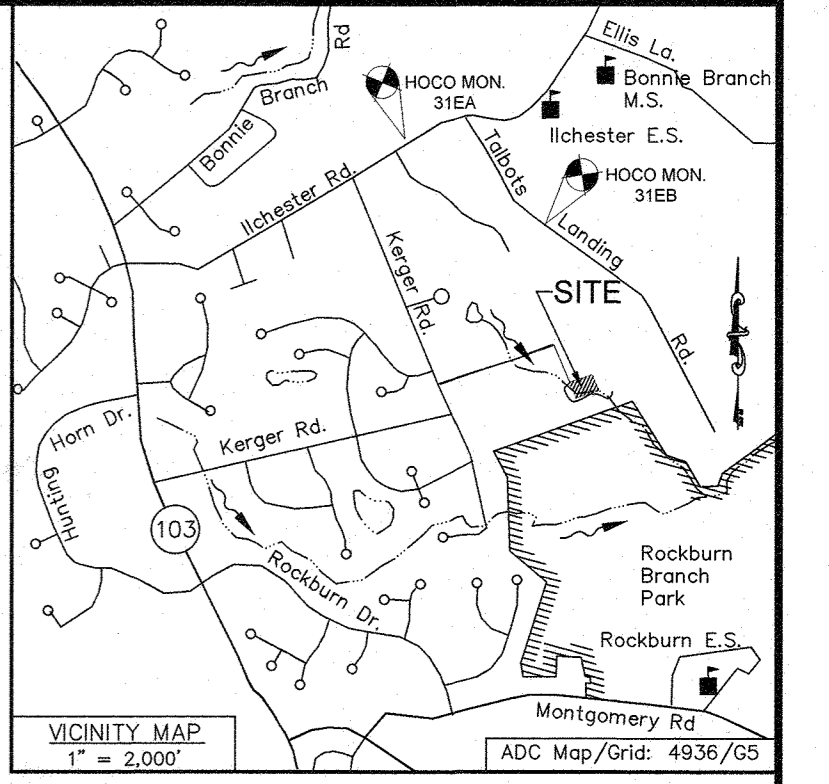
BENCH MARKS (NAD '83 & NAVD '88)
Monuments are stamped (brass or aluminum) disc set on top of a concrete column 1" or 2" below grade w/ iron to facilitate magnetic location.

HO. CO. #31EA ELEV. 468.877
N 569,641.138 E 1,374,816.086

HO. CO. #31EB ELEV. 452.657
N 568,730.995 E 1,376,273.635

DISTURBANCE AREA TABLE

Floodplain: 0.04 acre
Stream Buffer: 0.10 acre
Wetland Buffer: 0.04 acre



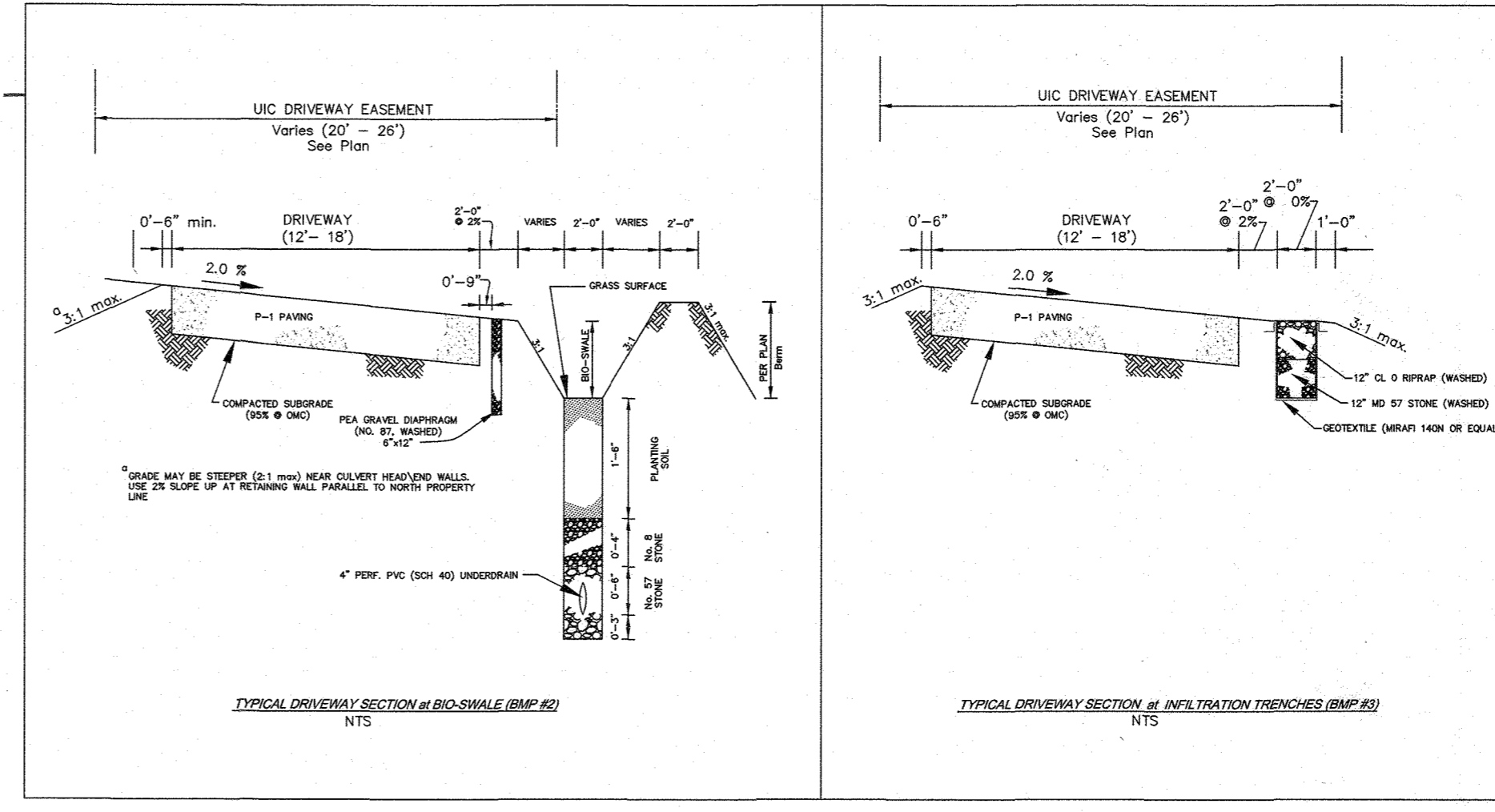
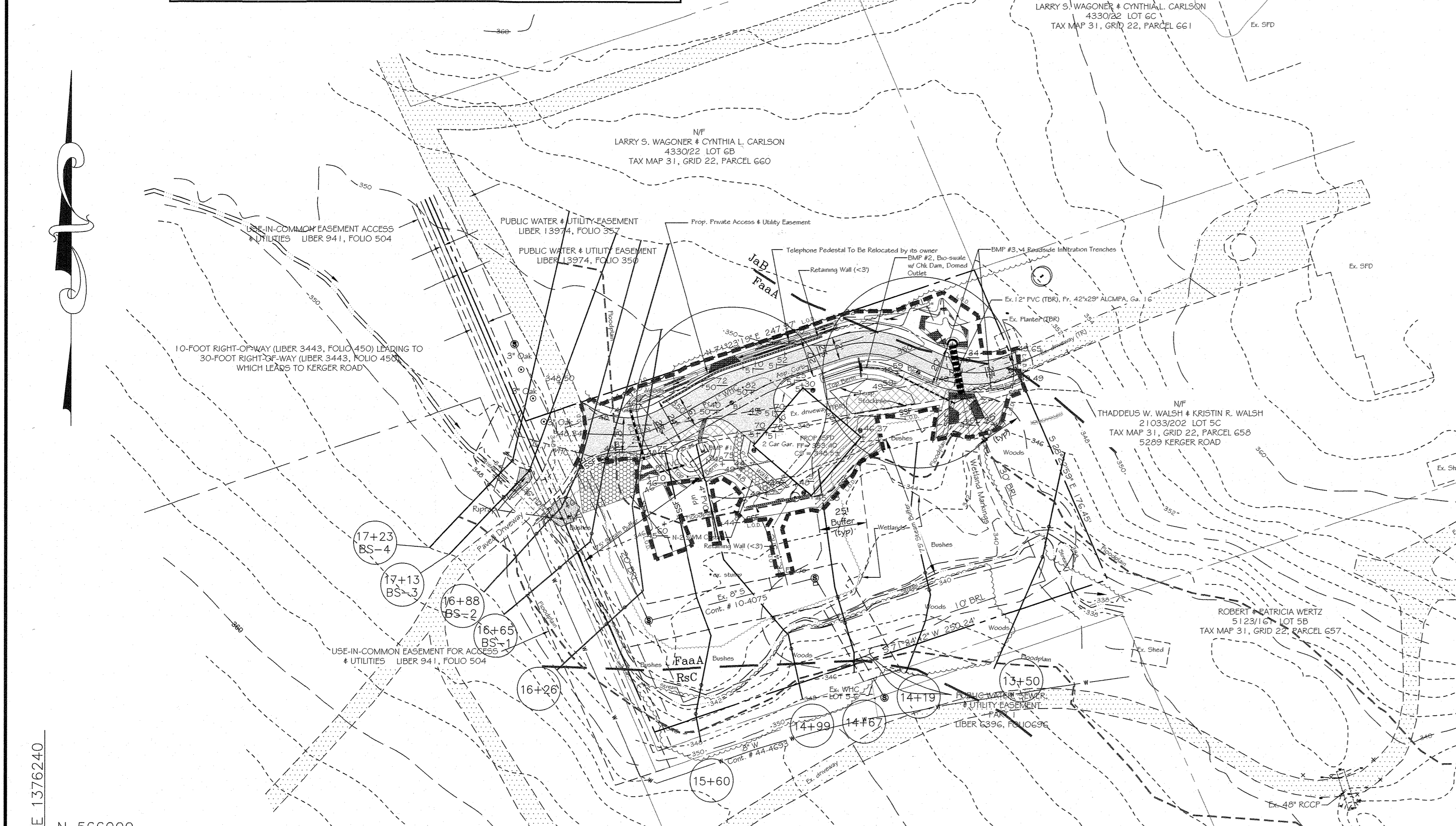
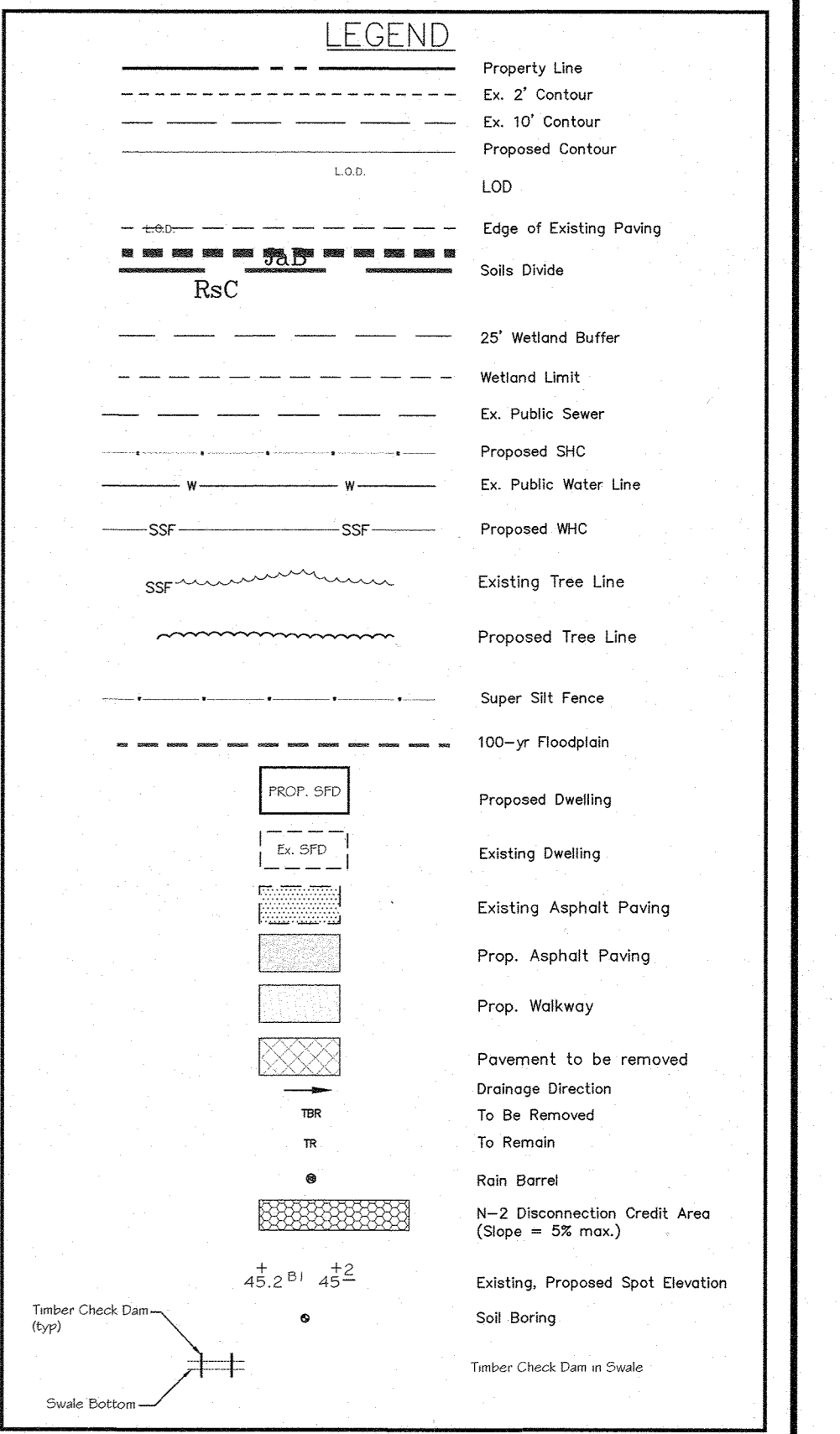
- CONCEPT EROSION & SEDIMENT CONTROL NOTES**
- The SDP will include an engineered E&S plan and will use a stabilized construction entrance and super silt fence along the LOD (except where drainage onto the site). Sheet flow conditions shall be maintained where possible.
 - Disturbed areas will be stabilized in accordance with N.R.C.S. methods and time frames.
 - A stockpile area to be within the LOD and such that runoff will be filtered when leaving the site.
 - For utility work outside of the SSF, all excavated soil shall be placed on the high side of trench/excavation. The contractor shall only construct that portion of a utility that can be backfilled and stabilized (i.e., seeded and mulched) in that same day.
 - The contractor shall use reasonable measures to keep sediment from entering the existing ditches, stream, and driveway surface using super silt fence, inlet protection, or other controls as necessary.
 - Sediment and erosion control devices shall be inspected daily and maintained in working conditions as per the standard details and specifications and to the satisfaction of the inspector.
 - Stone check dams and soil stabilization matting will be used in the ditch for the 12" HDPE driveway culvert outfall.
 - The SOC and diversion details will be provided to allow clean water diversion (Detail C-6) to construct the driveway culverts.

- ECP DESIGN NARRATIVE**
- Natural Resources Protection:** The chosen design yielded the least impacts from 2 alternatives plans. Impacts are minimized as much as reasonable to wetlands, floodplain, forests, steep slopes and associated buffers by developing only that area necessary. Groundwater recharge is provided with infiltration by drywells.
 - Maintenance of Natural Flow Patterns:** There is no significant on-site proposed grading that will alter drainage patterns. Stormwater generally flows to the same location after development as before development.
 - Reduction of Impervious Areas:** Through better site design, alternative surfaces, non-structural practices: The SWM concept is consistent with "E2D to the MEP" practices. The existing driveway is used to serve both the front and rear lots thereby saving additional impervious area for an adjacent parallel driveway.
 - Integration of E&S into SWM Strategy:** The E&S design will follow HSD standards & specifications and will meet the goal of keeping sediment from leaving the site. The practices will be integrated in SWM strategy by embracing sheet flow patterns where practicable and is a preferred ESD practice.
 - Implementation of ESD Planning Techniques and Practices:** Non-structural practices were incorporated where possible. Sheet flow is maintained where possible.
 - An Alternative Compliance (AC), Necessary Disturbance (ND) Request, and Design Manual Waiver will be required for this project.**

SITE DATA
Site (Property) Area: 1.1 acre ±
Wetland and Wetland Buffers: 0.077 ac. / 0.265 ac.
Floodplain: 0.5 acre
Forests: None
Steep Slopes: None
Erodible Soils: 0.04 ac ±; JoB > 5%
LOD: 0.37 acre
Proposed Site Use: Residential
File References: DPZ Buildable Lot Letter dated July 12, 2021.
Impervious Area: 0.14 acre ±
Green Open Area: 0.96 acre ±

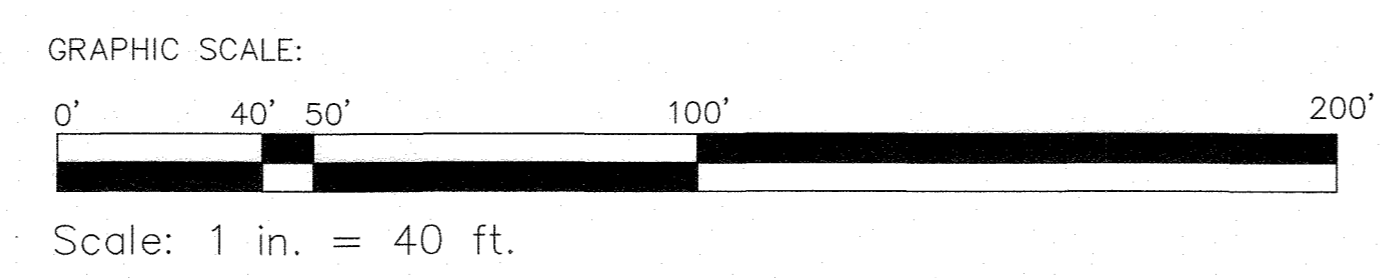
RANDAZZO PROPERTY ESDv SUMMARY TABLE

DRAINAGE AREA w/ MDE Designation & Location	DRAINAGE AREA (DA) (sf)	IMPERV. AREA (IA) (sf)	% Imperv.	Rv	PE (in)	REQ'D ESDv (cf)	ESDv PROVIDED (cf)	SWM NOTES
DA #1 (N-2) Drwy	1,424	611						n-1 disconnect credit
DA #2 (M-6) Drwy	2,453	1,511	61.6	0.604	1.00	92.7	103.7	micro-bioretenation
DA #3 (M-8) Drwy	1,643	756	46.0	0.464	1.00	47.7	61.1	2" w/g Bio-Swale @ 2.6% w/ 6" C&B Stone
DA #4 (M-5) Drwy	296	204	68.9	0.670	1.00	16.5	24	Infiltration Trench "Piano Keys"
DA #5 (M-6) Drwy	261	176	67.4	0.657	1.00	14.3	26	Infiltration Trench "Piano Keys"
DA #6 (M-1) Roof, NW	400	400	100.0	0.950	1.00	31.7	56	rain barrel (420 gal)
DA #7 (M-1) Roof, NE	400	400	100.0	0.950	1.00	31.7	56	rain barrel (420 gal)
DA #8 (M-1) Roof, SW	400	400	100.0	0.950	1.00	31.7	56	rain barrel (420 gal)
DA #9 (M-1) Roof, SE	400	400	100.0	0.950	1.00	31.7	56	rain barrel (420 gal)
DA #10 (N-2) Walk/Street	485	174						n-1 disconnect credit
DA #11a Driveway	n/a	373	Area not calculatable	Flow to floodplain/wetlands				Flow to Conservation Area
DA #11b Driveway	n/a	360	Area not calculatable	Flow to floodplain/wetlands				Flow to Conservation Area
TOTALS	5,765	298	5.17%			298	439	



FLOODPLAIN WSE SUMMARY TABLE

CROSS SECTION	EXISTING WSE
13+50	343.54
14+19	344.51
14+67	345.20
14+99	345.73
15+60	345.89
16+26	346.76
16+65	348.34
16+88	349.12
17+13	350.64
17+23	350.69



CIVIL DESIGN SERVICES, LC
6123 Holly Ridge Court, Columbia, Maryland 21044
240.755.0380; civildesign@comcast.net

I hereby certify that I prepared this plan and the seal signifies that I am a duly licensed professional engineer under the laws of the State of MD, License No. 15,838 w/expiration December 17, 2023.

Andrew A. Porter
ANDREW A. PORTER, P.E. DATE: May 18, 2022

NO.	REVISION	DATE

APPROVED: Department of Planning & Zoning

Chief, Division of Land Development *[Signature]* Date: 5/18/22

Chief, Development Engineering Division *[Signature]* Date: 6-8-22

OWNER/DEVELOPER
Mr. Anthony F. Randazzo
Ms. Laura L. Randazzo
109 Allegany Road
Stevensville, Maryland 21666
410.913.3807
odazzugi@gmail.com

PROJECT
Randazzo Property (L.3443/F.450) SECTION N/A LOT NO. 5-D

PLAT
BLOCK NO. 22 ZONE R-20 TAX/ZONE 31 ELEC. DIST. 1st CENSUS TR. 601104

ENVIRONMENTAL CONCEPT PLAN

RANDAZZO PROPERTY, LOT 5-D
5291 Kerger Road, Ellicott City, MD 21043
(A Single Family Dwelling)

Zoning: R-20

TAX MAP NO: 31 PARCEL NO.: 631 GRID NO.: 22
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

May 18, 2022

SHT 1 OF 1