



- LEGEND**
- LIMIT OF DISTURBANCE
 - DRAINAGE AREA TO BMP
 - MICRO-BIoretENTION
 - DRY WELL
 - DRY WELL UNDER DRAIN
 - SIDEWALK AND DRIVEWAY
 - BUILDING FOOTPRINT
 - BORING LOCATION

- DRYWELL SPECIFICATIONS:**
- SETBACKS**
DRYWELLS SHALL SET BACK AT LEAST 20 FEET FROM BUILDING FOUNDATIONS. IF THE STRUCTURE IS SLAB ON GRADE THE SET BACK MAY BE REDUCED TO 10 FEET. REFER TO THE DRY WELL STANDARD DETAILS FOR OTHER SET BACK REQUIREMENTS. WHILE IT IS PREFERABLE TO LOCATE DRY WELLS DOWN GRADIENT FROM BUILDING FOUNDATIONS, IT IS NOT A REQUIREMENT IN ALL CASES.
 - OVERFLOW DESIGN CRITERIA**
IN ORDER TO PREVENT BACKUP OF WATER IN THE DOWNSPOUT, AN OVERFLOW DOWNSPOUT SURCHARGE PIPE MUST BE PROVIDED AS SHOWN ON THE DRY WELL DETAIL. DISCHARGE FROM THE DOWNSPOUT SURCHARGE PIPE MUST BE DIRECTED TO AN ABOVE GROUND SPLASH BLOCK AND CONVEYED IN A NON-EROSIVE MANNER TO A STABLE OUTFALL. IN SOME CASES IT MAY BE DESIRABLE TO ADD AN ADDITIONAL OVERFLOW PIPE OR POP UP EMITTER DIRECTLY OUT OF THE DRY WELL. THIS SHALL BE IN ADDITION TO THE REQUIRED SPLASH BLOCK OVERFLOW. THE FLOW FROM THE ADDITIONAL OVERFLOW PIPE OR EMITTER MUST BE DIRECTED TO A SAFE LOCATION THAT IS UNLIKELY TO CONTRIBUTE TO NUISANCE DRAINAGE. PROBLEMS SUCH AS A WET LAWN AREA OR SEEPAGE ACROSS SIDEWALKS.
 - STONE**
DRYWELLS SHALL BE FILLED WITH CLEAN 1.5-3.0 INCH DIAMETER STONE MEETING ASTM D445, SIZE NO. 1. FILTER FABRIC SHALL BE PLACED ON THE TOP AND SIDES OF THE FACILITY AS SHOWN ON THE DRY WELL DETAIL. NO GEOTEXTILE OR FILTER FABRIC IS ALLOWED TO BE PLACED ON THE BOTTOM OF THE FACILITY OR IN ANY OTHER LOCATION NOT CALLED FOR SPECIFICALLY ON THE DETAIL.
 - SAND BED**
A 12-INCH LAYER OF FINE AGGREGATE SAND SHALL BE PROVIDED AT THE BOTTOM OF THE EXCAVATION. CLEAN ASTM C33 OR ASHITO M66 FINE AGGREGATE CONCRETE SAND IS REQUIRED PER MONTGOMERY COUNTY SAND SPECIFICATIONS.
 - OBSERVATION WELL**
THE DRY WELL MUST INCORPORATE AN OBSERVATION WELL IN ACCORDANCE WITH THE STANDARD DETAIL.

- SURVEY NOTES:**
- HORIZONTAL DATUM = NAD 83 - MARYLAND STATE PLANE
 - VERTICAL DATUM = NAVD 88
 - CONTOUR INTERVAL IS 2 FOOT
 - THIS SURVEY WAS PERFORMED BY LEGGEE SURVEYS, INC.
 - UNDERGROUND UTILITY MARKINGS PERFORMED BY MASS UTILITY

FIELD INFILTRATION TESTING SUMMARY

Boring No.	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8
Infiltration Rate (in/hr)	2.16	0.48	1.19	3.12	2.16	1.56	2.04	1.68

GENERAL NOTES & ZONING ANALYSIS

- PROJECT NAME: RUBY SENIOR HOMES, BOYDS MONTGOMERY COUNTY, MARYLAND
- OWNER / DEVELOPER: WORLDSHINE HOME, LLC 9200 CORPORATE BLVD, SUITE 330 ROCKVILLE, MD 20850 PHONE: (301) 261-6678
- CIVIL ENGINEER: ENDESCO, INC. 12345 SHADY GROVE RD, SUITE 335 ROCKVILLE, MD 20850 CONTACT: MR. KEVIN HUANG, PHONE: (301) 987-8776, FAX: (301) 987-8777
- LEGAL DESCRIPTION: MUSGROVE'S ADDITION TO NEELSVILLE LOT 1, LOT 2, & LOT 3
- SURVEY: ORIGINAL TOPOGRAPHIC SURVEY PREPARED BY LEGGEE SURVEYS, INC. IN OCTOBER 2018
- PROPOSED USE: CONDITIONAL USE - GROUP HOMES
- CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY: TWO ENTRANCE ROADS AND UTILITY CONNECTIONS
- STORMWATER MANAGEMENT: STORMWATER MANAGEMENT IS BEING PROVIDED IN ACCORDANCE WITH MCDPS REQUIREMENTS.
- NOTIFY MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION AND MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES 48 HOURS BEFORE BEGINNING CONSTRUCTION OF PROPOSED IMPROVEMENTS.
- WSSC 200 SCALE SHEET NO. 230NW12
- NRI / PSD PLAN 6420191830
- PUBLIC UTILITY COMPANIES: WATER AND SANITARY SEWER: WSSC PHONE: 800-623-6349 ELECTRICITY: PEPCO PHONE: 202-633-7500 NATURAL GAS: WASHINGTON GAS PHONE: 703-750-1000
- WATERSHED: LITTLE SENeca CREEK
- ROADWAY AND PAVEMENT SECTION IS PER MC DOT STANDARD MC-211.03

SWM Concept Summary Table:

Contact Information for Design Engineer (for technical issues): Kevin Huang, kevinhuang@endescoinc.com

General Property Information:

SHA 2012.2

Type of Concept: Preliminary Water Quality Plan

MHC/RP/C Process/No. Conditional Use: CU202311

Property Address: Ruby Drive, Bojds, 900 20461

Site Name: Ruby Senior Homes Addition to Neelsville, PT 12345, NPPC, HAMP DT 3

Property Size (ac. [sq. ft.]): 4.66 (202,899)

Total Concept Area (ac. [sq. ft.]): 5.48 (234,099)

Zoning: R-200

Watershed(s) and Stream Class: Little Seneca Creek / Class W

Special Protection Area: Chesapeake Bay

100 YR Floodplain: Zone X (FEMA Map 2403(C)1600-9/29/2006)

Ex. % Impervious/Redevelopment or New Development: 7% - New Development

SWM Summary:

Target P₁/Proposed P₁: 1.0/NA

Target ESDw/Provided ESDw: 11,570 cu./ft./ 12,582 cu./ft.

ESD Measures: MD 151 and DW 110

Structural Storage Required/Provided: No

Structural Measures: No

Waiver Request(s)/CN/Revol: No

Provided ESDw + Structural Storage Provided + Requested to be Waived = 12,582 cu.ft.

BMP-1 Provided ESDw: CF 1.794 (Micro-Bioretention)

BMP-2 Provided ESDw: CF 1.870 (Micro-Bioretention)

BMP-3 Provided ESDw: CF 1.172 (Micro-Bioretention)

BMP-4 Provided ESDw: CF 2.675 (Micro-Bioretention)

BMP-5 Provided ESDw: CF 2.298 (Micro-Bioretention)

12 Dry Wells Provided ESDw: CF 2.774

Other Information: N/A

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, LICENSED NO. 23093, EXPIRATION DATE 05/06/2025

WATER QUALITY SHEET #1 OF 2

ENDESCO, INC.
ENGINEERS, DESIGNERS & CONSULTANTS
12345 SHADY GROVE RD
SUITE 335
ROCKVILLE, MD 20850
TEL: (301) 987-8776
FAX: (301) 987-8777



PT LOT 1, LOTS 2 AND 3
RUBY SENIOR HOMES
MONTGOMERY COUNTY, MARYLAND

NO.	DATE	REVISIONS DESCRIPTION
1.		
2.		
3.		
4.		

DATE	TITLE	DRAWN:	DESIGNED:	CHECKED:
OCT 2023	PRELIMINARY WATER QUALITY PLAN	GJ	GJ	KH
SHEET	SCALE 1"=40'			
CPP-11				