

TITLE PARCEL ONE
PARCEL B, BLOCK A
SECTION ONE, WALNUT HILL
P.B. 54 PLAT NO. 4267

LANDS OF
WALNUT HILL LLC
LIBER 53737 FOLIO 284
TM: FS63 00 00 9
ACCT: 00794560

TOTAL AREA:
360,477 S.F.
OR 8.275 AC.

TITLE PARCEL TWO
LANDS OF
WALNUT HILL LLC
LIBER 53737 FOLIO 284
TM: FS63 00 00 9
ACCT: 00794571

LEGEND

LIMIT OF DISTURBANCE

SAWCUT

0 20 40
 1" = 40'

CITY OF GAITHERSBURG
DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT

APPLICATION NO. SWM-XXXX-XXXX

CONCEPT PLAN PRELIMINARY PLAN

APPROVAL DATE _____

BY _____

A MARYLAND REGISTERED PROFESSIONAL ENGINEER OR ARCHITECT SEAL AND SIGNATURE ON PLANS WILL BE ACCEPTED AS PRIMA FACIE EVIDENCE THAT PLANS ARE IN COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS.

DISCLAIMER:
 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR HAVE ANY QUESTIONS OR CONCERNS REGARDING THE DRAWINGS OR SPECIFICATIONS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS SHOWN BY THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF GAITHERSBURG.

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
 LAND SURVEYING
 PROGRAM MANAGEMENT
 FIRE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	ISSUED BY	RECORDED BY

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THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: M08220075.00
 DRAWN BY: SJA
 CHECKED BY: NBS
 DATE: 12/29/2022
 CAD ID: _____

CONCEPT STORMWATER MANAGEMENT PLAN

FOR

GRANITE PARTNERS WALNUT HILL

PROPOSED DEVELOPMENT

16529 S FREDERICK AVENUE
 MONTGOMERY COUNTY
 GAITHERSBURG, MD 20877
 TM: FS63, PARCEL: B, BLOCK: A

BOHLER

16701 MELFORD BLVD., SUITE 310
 BOWIE, MARYLAND 20715
 Phone: (301) 800-4500
 Fax: (301) 800-4501
 MD@BohlerEng.com

NICHOLAS B. SPEACH

PROFESSIONAL ENGINEER
 License No. 17167 (2021)
 PROFESSIONAL CERTIFICATION

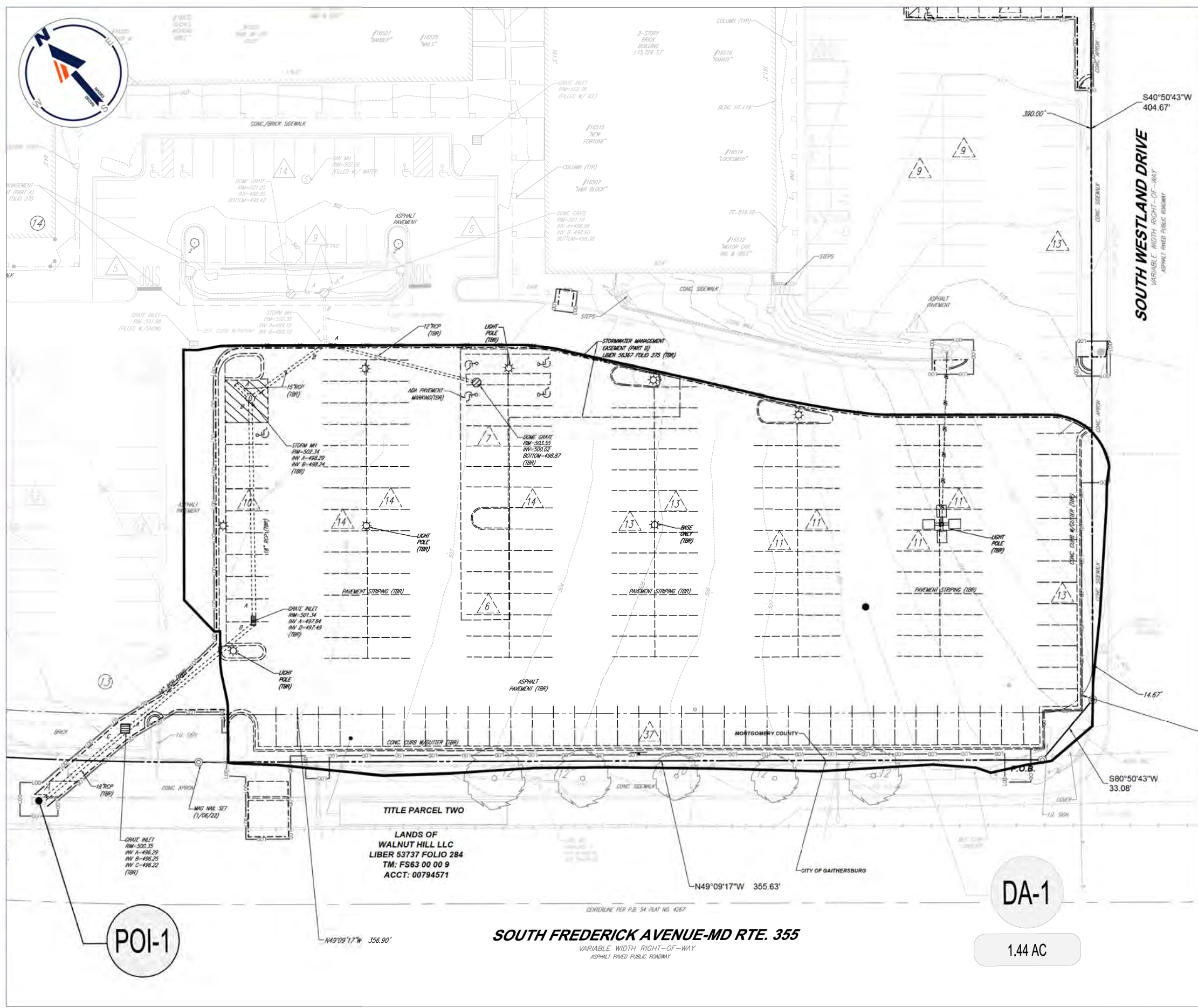
I, NICHOLAS B. SPEACH, CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17167, EXPIRATION DATE: 12/31/2023.

SHEET TITLE:

OVERALL EXISTING CONDITIONS / DEMOLITION PLAN

SHEET NUMBER:
121-2

ORG. DATE - 12/29/2022



LEGEND	
LIMIT OF DISTURBANCE	———
PROPOSED SAWCUT	- - - - -
DRAINAGE DIVIDE	—————

EXISTING DRAINAGE AREA SUMMARY TABLE		
DRAINAGE AREA	IMPERVIOUS AREA	TOTAL AREA
DA-1	1.34 AC	1.44 AC

PRE-DEVELOPMENT 10-YR SUMMARY TABLE	
POI	10-YR FLOW
POI-1	7.19 CFS

LEGEND	
LIMIT OF DISTURBANCE	———
SAWCUT	- - - - -

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PROJECT No.: MD6220079.00
 DRAWN BY: SJA
 CHECKED BY: NBS
 DATE: 12/29/2022
 CAD ID.:

CONCEPT STORMWATER MANAGEMENT PLAN
 FOR
GRANITE PARTNERS WALNUT HILL
 PROPOSED DEVELOPMENT
 16529 S FREDERICK AVENUE
 MONTGOMERY COUNTY
 GAITHERSBURG, MD 20877
 TM: FS63, PARCEL: B, BLOCK: A

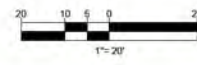
BOHLER
 16701 MELFORD BLVD., SUITE 310
 BOWIE, MARYLAND 20715
 Phone: (301) 809-4500
 Fax: (301) 809-4501
 MD@BohlerEng.com

NICHOLAS B. SPEACH
 PROFESSIONAL ENGINEER
 License No. 12167 (2021)
 REGISTERED PROFESSIONAL CIVIL ENGINEER
 License No. 12167 (2021)
 I warrant that I am a duly qualified and licensed professional engineer under the laws of the State of Maryland, License No. 12167, Expiration Date: 8/31/2025.

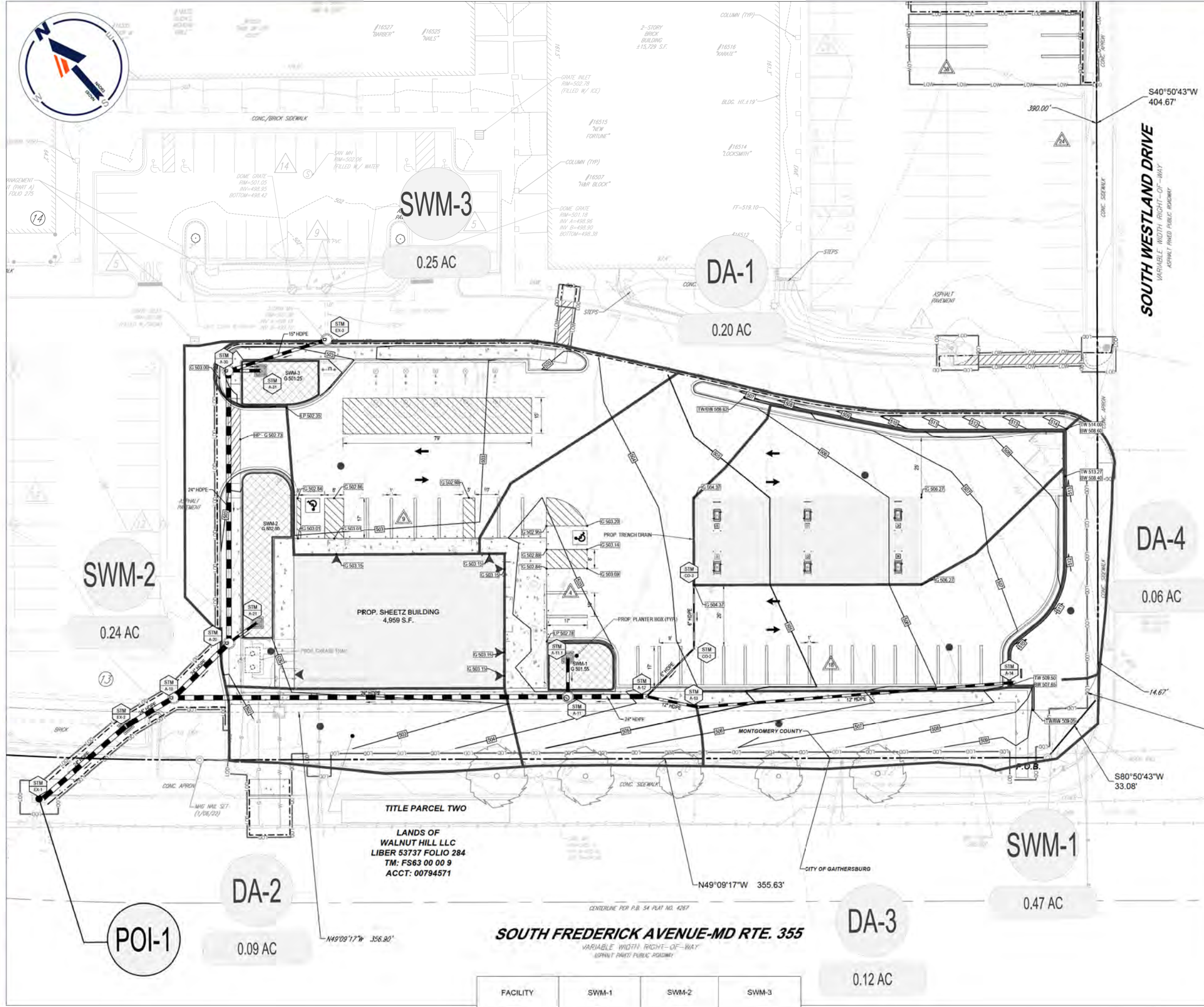
CITY OF GAITHERSBURG
 DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT
 APPLICATION NO: SWM-XXXX-XXXX
 CONCEPT PLAN PRELIMINARY PLAN
 APPROVAL DATE: _____
 BY: _____

SHEET TITLE:
EXISTING CONDITIONS / DEMOLITION PLAN
 SHEET NUMBER:
121-3
 ORG. DATE - 12/29/2022

A MARYLAND REGISTERED PROFESSIONAL ENGINEER OR ARCHITECT SEAL AND SIGNATURE ON PLANS WILL BE ACCEPTED AS PRIMA FACIE EVIDENCE THAT PLANS ARE IN COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS.



GENERAL NOTE:
 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS SHOWN BY THE DRAWINGS AND ALL CONDITIONS NOTICED ON SITE. APPROVED FOR CONSTRUCTION.



LEGEND

LIMIT OF DISTURBANCE	---
PROPOSED SAWCUT	---
DRAINAGE DIVIDE	---
PROPOSED CONCRETE SIDEWALK	---
PROPOSED MICRO-BIORETENTION	---

PROPOSED DRAINAGE AREA SUMMARY TABLE

DRAINAGE AREA	IMPERVIOUS AREA	TOTAL AREA
SWM-1	0.40 AC	0.47 AC
SWM-2	0.20 AC	0.24 AC
SWM-3	0.23 AC	0.25 AC
DA-1	0.19 AC	0.20 AC
DA-2	0.02 AC	0.10 AC
DA-3	0.02 AC	0.12 AC
DA-4	0.00 AC	0.06 AC

POST-DEVELOPMENT 10-YR SUMMARY TABLE

POI	10-YR FLOW
POI-1 (UNCONTROLLED)	6.23 CFS
POI-1 (CONTROLLED)	4.99 CFS

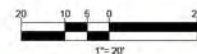
STORM STRUCTURE SCHEDULE

NAME	INVERTS
A-10	INV IN = 494.93' (24") INV IN = 494.93' (24") INV OUT = 494.83' (24")
A-11	INV IN = 495.85' (15") INV IN = 495.95' (24") INV OUT = 495.75' (24")
A-11.1	INV OUT = 496.02' (15")
A-12	INV IN = 496.12' (6") INV IN = 496.12' (12") INV OUT = 496.12' (24")
A-13	INV IN = 496.45' (12") INV OUT = 496.35' (12")
A-14	INV IN = 496.45' (12") INV OUT = 497.78' (12")
A-20	INV IN = 495.19' (24") INV IN = 495.29' (12") INV OUT = 495.09' (24")
A-21	INV OUT = 496.75' (12")
A-30	INV IN = 497.01' (15") INV IN = 495.85' (15") INV OUT = 495.75' (24")
A-31	INV OUT = 496.00' (15")
CO-2	INV IN = 496.69' (6") INV OUT = 496.69' (6")
CO-3	INV IN = 497.23' (6")
EX-1	INV IN = 494.38' (24")
EX-2	INV IN = 494.71' (24") INV OUT = 494.61' (24")
EX-3	INV OUT = 499.10' (15")

STORM SEWER PIPE SCHEDULE

FROM	FROM INV	TO	TO INV	PIPE LENGTH	SLOPE (%)	DIAMETER (IN.)	MATERIAL
A-10	494.83'	EX-2	494.71'	23.31'	0.50%	24"	HDPE
A-11	495.75'	A-10	494.93'	165.37'	0.50%	24"	HDPE
A-11.1	496.02'	A-11	495.85'	16.30'	1.00%	15"	HDPE
A-12	496.12'	A-13	496.35'	22.28'	1.03%	12"	HDPE
A-12	496.12'	A-11	495.95'	32.91'	0.51%	24"	HDPE
A-13	496.45'	A-14	497.78'	132.78'	1.00%	12"	HDPE
A-20	495.09'	A-10	494.93'	32.63'	0.50%	24"	HDPE
A-21	496.75'	A-20	495.29'	14.67'	9.95%	12"	HDPE
A-30	495.85'	A-31	496.00'	13.50'	1.00%	15"	HDPE
A-30	495.75'	A-20	495.19'	114.26'	0.50%	24"	HDPE
CO-2	496.69'	A-12	496.12'	38.28'	2.02%	8"	HDPE
CO-3	497.23'	CO-2	496.69'	26.73'	2.02%	6"	HDPE
EX-2	494.61'	EX-1	494.38'	46.20'	0.50%	24"	HDPE
EX-3	499.10'	A-30	497.01'	43.27'	4.84%	15"	HDPE

FACILITY	SWM-1	SWM-2	SWM-3
SURFACE AREA	497 SF	1,031 SF	543 SF
ESD _{WQV} PROVIDED	1,273 SF	1,882 SF	1,167 SF
DRAINAGE AREA	0.47 AC	0.24 AC	0.25 AC



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**CITY OF GAITHERSBURG
DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT**

APPLICATION NO. SWM-XXXX-XXXX
 CONCEPT PLAN PRELIMINARY PLAN
 APPROVAL DATE _____
 BY _____

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PROJECT NO.: MDR220079.00
 DRAWN BY: S.J.L.
 CHECKED BY: N.B.S.
 DATE: 12/29/2022
 CAD ID.: _____

CONCEPT STORMWATER MANAGEMENT PLAN
 FOR
GRANITE PARTNERS WALNUT HILL
 PROPOSED DEVELOPMENT
 16529 S. FREDERICK AVENUE
 MONTGOMERY COUNTY
 GAITHERSBURG, MD 20877
 TM: FS63, PARCEL: B, BLOCK: A

BOHLER
 16701 MELFORD BLVD., SUITE 310
 BOWIE, MARYLAND 20715
 Phone: (301) 809-4500
 Fax: (301) 809-4501
 MD@BohlerEng.com

NICHOLAS B. SPEACH
 PROFESSIONAL ENGINEER
 MARYLAND LICENSE NO. 17167 (2023)
 FOR PROFESSIONAL CERTIFICATION
 I, NICHOLAS B. SPEACH, CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME, AND THAT I AM A duly licensed professional engineer under the laws of the State of Maryland, LICENSE NO. 17167, EXPIRES DATE: 12/31/2023

STORMWATER MANAGEMENT PLAN
 SHEET TITLE:
 SHEET NUMBER:
121-5
 ORG. DATE - 12/29/2022

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