

LOCATION MAP
 COPYRIGHT ADC THE MAP PEOPLE
 PERMIT USE NO. 2082153-5
 SCALE: 1"=200'
 ADC MAP COORDINATES: 24/65

BENCHMARK

GEODETIC SURVEY CONTROL - 43BA ELEV. 209.471' N 551,876.350 E 1,378,108.488	GEODETIC SURVEY CONTROL - 43BB ELEV. 209.012' N 550,534.184 E 1,378,905.389
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COORDINATE TABLE

POINT #	NORTHING	EASTING
1	549768.7398	1377961.6478
2	549696.5721	1378271.3095
3	549616.4751	1378619.1560
4	548679.6389	1378057.7209
5	548923.9205	1377995.3560
6	549145.2605	1377254.8107

SPECIMEN TREES

ID #	SPECIES NAME	SIZE	CRZ	CONDITION	SPECIMEN TREES TO REMAIN
2	TULIP POPLAR	34" x 51"		GOOD	YES
3	AMERICAN SYCAMORE	36" x 54"		GOOD	YES
4	AMERICAN SYCAMORE	37" x 55.5"		GOOD	YES
5	AMERICAN SYCAMORE	36" x 54"		GOOD	YES
6	TULIP POPLAR	40" x 6"		GOOD	YES
7	TULIP POPLAR	43" x 64.5"		GOOD	YES

SITE ANALYSIS DATA / TABULATION

TOTAL PROJECT AREA	18.86 AC.
IMPERVIOUS COVER	7.04 AC.
AREA OF WETLANDS AND BUFFER	0.74 AC.
AREA OF 100-YR FLOODPLAIN	7.18 AC.
AREA OF FOREST	8.08 AC.
AREA OF STEEP SLOPES (15% OR GREATER)	0.00 AC.
AREA OF DEDICATION (ROAD R/W)	0.47 AC.
INTERMITTENT STREAM & 50' BUFFER	3.67 AC.
HIGHLY ERODIBLE SOILS (< 0.35)	18.86 AC.
LIMIT OF DISTURBED AREA	7.49 AC.
PRESENT ZONING DESIGNATION	M-2 & SW
PROPOSED USE:	RECYCLING CENTER

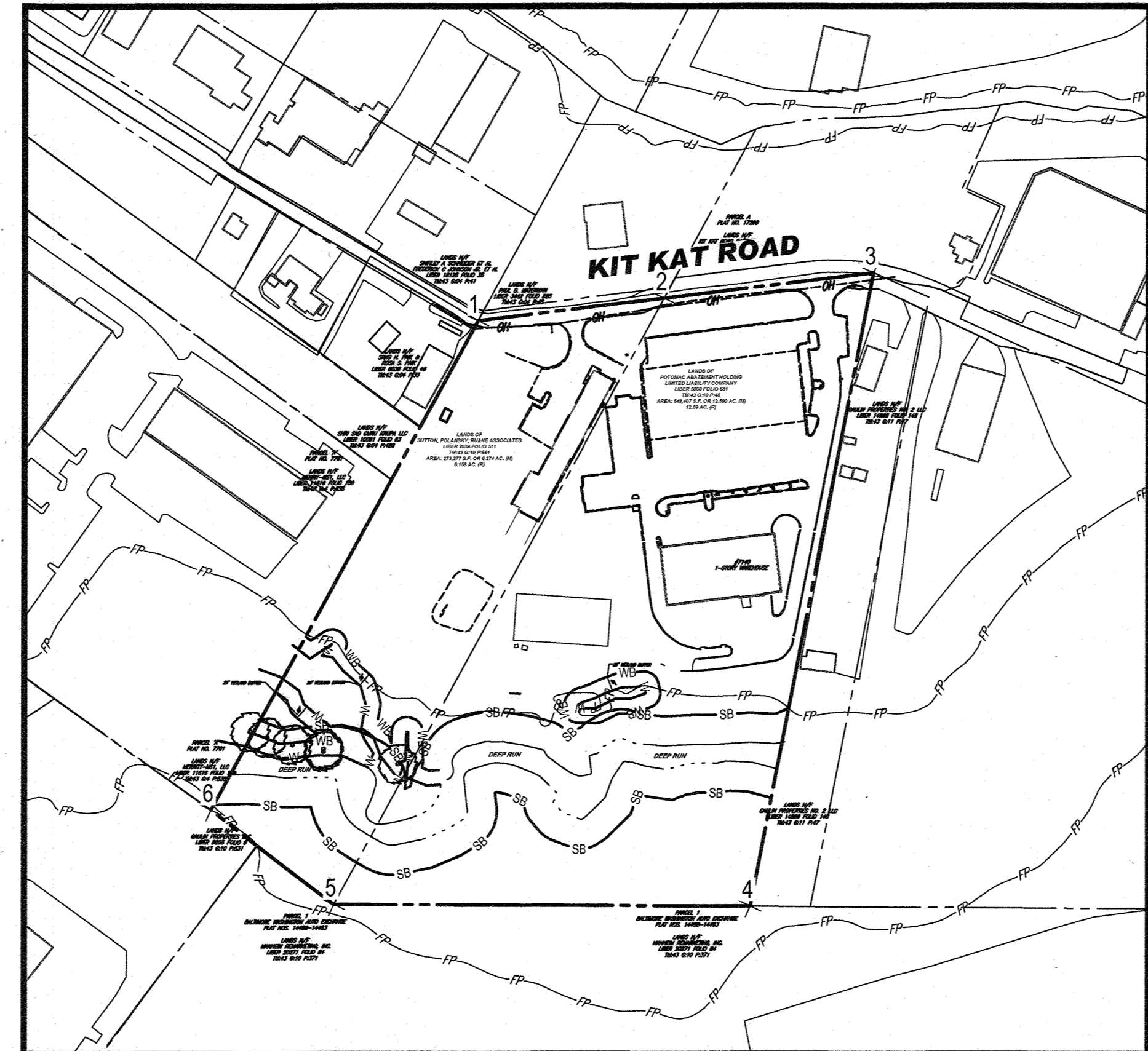
NOTE: THE TOTAL PROPERTY AREA IS 18.865 ACRES. 100-YR FLOODPLAINS, FORESTED AREAS, AREAS OF STEEP SLOPES, AND ERODIBLE SOILS HAVE BEEN IDENTIFIED WITHIN THE PROJECT AREA.

ENVIRONMENTAL CONCEPT PLANS

FOR

GRANDVIEW - KIT KAT PARCELS 46 & 661

LOCATION OF SITE
 7110 & 7130 KIT KAT ROAD
 1ST ELECTION DISTRICT
 TAX MAP 43, GRID 10, PARCELS 661 & 46
 ELKRIDGE,
 HOWARD COUNTY, MARYLAND



PLAN VIEW
 SCALE: 1" = 200'

PREPARED BY

BOHLER //

CONTACT: BRANDON ROWE, P.E.

GENERAL NOTES

- THE SUBJECT PROPERTY IS ZONED M-2 AND SW PER THE HOWARD COUNTY ZONING MAP.
- THE PROPERTY BOUNDARY AND ON-SITE EXISTING TOPOGRAPHY IS BASED ON AN ALT/NSPS LAND TITLE SURVEY PREPARED BY BOHLER, TITLED: KIT KAT ROAD PROPERTIES, 7110 & 7130 KIT KAT ROAD, 1ST ELECTION DISTRICT, HOWARD COUNTY, MARYLAND, PROJECT NO. SD212054, DATED: 08/25/21, LAST REVISED 10/29/21.
- EXISTING OFFSITE TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY GIS.
- A WETLAND DELINEATION REPORT WAS COMPLETED FOR THIS PROJECT BY ECO-SCIENCE PROFESSIONALS, INC. ON 10/14/21 AND A FOREST STAND DELINEATION REPORT WAS COMPLETED BY ECO-SCIENCE PROFESSIONALS, INC. ON 10/14/21.
- A CRITICAL FLOODPLAIN REPORT HAS NOT BEEN COMPLETED FOR THIS PROJECT. FLOODPLAINS FOR THIS SITE HAVE BEEN MAPPER PER MAP ENTITLED "FIRM FLOOD INSURANCE RATE MAP, HOWARD COUNTY, MARYLAND AND INCORPORATED AREAS, PANEL 170 OF 235", MAP NUMBER 2402701200, WITH A MAP EFFECTIVE DATE OF NOVEMBER 18, 2013. THE PROPERTY IS LOCATED IN OTHER AREAS ZONE 4 (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AND SPECIAL FLOOD HAZARDS AREAS (SFHAS) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD ZONE AE (BASE FLOOD ELEVATIONS DETERMINED)).
- THERE IS NO DISTURBANCE TO ENVIRONMENTALLY SENSITIVE AREAS.
- THERE ARE NO KNOWN CEMETERIES OR HISTORICAL FEATURES KNOWN ON-SITE.
- PLAN FILE NUMBERS ASSOCIATED WITH THIS ECP ARE: SDP-83-150, SDP-84-222, SDP-99-130
- APPROVAL OF THE ECP DOES NOT CONSTITUTE APPROVAL OF SUBSEQUENT OR ASSOCIATED SUBDIVISION PLANS, SITE DEVELOPMENT PLANS OR RED-LINE REVISIONS. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN, SITE DEVELOPMENT PLAN OR RED-LINE REVISION REVIEW STAGE. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- ALL DRAINAGE AREAS GREATER THAN 2.0 ACRES WILL BE REQUIRED TO PROVIDE TEMPORARY STORMWATER MANAGEMENT DURING CONSTRUCTION.
- THE SITE IS LOCATED WITHIN THE METROPOLITAN DISTRICT. WATER AND SEWER WILL BE PROVIDED BY PUBLIC WATER CONT# 36WS&, & PUBLIC SEWAGE SYSTEM CONT# 292-S & 579-S.
- DESIGN MANUAL WAIVER: NONE REQUESTED
- ALTERNATIVE COMPLIANCE: NONE REQUESTED
- NECESSARY DISTURBANCE: NONE REQUESTED
- THE SITE, IN ITS CURRENT CONDITIONS, HAS EXISTING ENVIRONMENTAL FEATURES INCLUDING STREAMS, WETLANDS AND THEIR ASSOCIATED BUFFERS AS WELL AS EXISTING FLOODPLAINS AND SPECIMEN TREES.
- AN ADVANCE DEPOSIT ORDER WILL BE REQUIRED FOR CONSTRUCTION OF THE WATER AND SEWER LINES.
- THE PROPERTY WILL BE CONSOLIDATED TO ONE PARCEL AS PART OF THIS SITE DEVELOPMENT.

DESIGN NARRATIVE

THIS REPORT HAS BEEN PREPARED FOR GRANDVIEW PARTNERS FOR THE PROPOSED DEVELOPMENT OF THE GRANDVIEW, KIT KAT PROPERTY. THIS REPORT CONTAINS DESIGN AND SUBMITTAL WETLAND AND DESIGN CALCULATIONS AND AN ESD SUMMARY TABLE HAS ALSO BEEN PROVIDED. ADDITIONALLY, THIS REPORT PROVIDES QUANTITY MANAGEMENT CALCULATIONS.

GRANDVIEW PARTNERS PROPOSES TO CONSTRUCT A RECYCLING CENTER ON THE SUBJECT PROPERTIES. THE RECYCLING CENTER WILL BE SERVED BY HOWARD COUNTY PUBLIC WATER AND SEWER. OTHER IMPROVEMENTS INCLUDE THE CONSTRUCTION OF CURB AND GUTTER, LANDSCAPED AREAS, STORMWATER MANAGEMENT QUALITY MEASURES, STORMWATER MANAGEMENT QUALITY MEASURES, SITE UTILITIES, AND OTHER ASSOCIATED IMPROVEMENTS.

AS THE SITE EXISTS TODAY, THERE IS AN ABOVE GROUND SWM FACILITY AND UNDERGROUND STORAGE FACILITY IN PLACE FOR TREATING STORMWATER RUNOFF. THE SITE CONSISTS OF TYPE 'A', 'C' AND 'D' HYDROLOGIC GROUP SOILS AND IS LOCATED WITHIN THE DEEP RUN WATERSHED. THE SITE IS SOUTHEAST OF THE INTERSECTION OF KIT KAT ROAD AND WASHINGTON BLVD. THE RUNOFF FOR THE SITE IS CURRENTLY FLOWING IN A SOUTHEASTERLY DIRECTION AND INTO THE DEEP RUN STREAM LOCATED ON SITE.

THE SITE IS SPLIT WITHIN ZONE M-2, MANUFACTURING HEAVY AND SW, SOLID WASTE ZONING. THE RUNOFF FOR THE MAJORITY OF THE SITE CURRENTLY FLOWS IN A SOUTHEASTERLY DIRECTION AND DISCHARGES INTO DEEP RUN STREAM. AS IT EXISTS TODAY, THE SITE IS DEVELOPED WITH THREE EXISTING BUILDINGS, PAVED AREAS, AND WOODS. TWO OF THE EXISTING BUILDINGS ARE PROPOSED TO BE RAZED. SLOPES VARY GREATLY ACROSS THE SITE. SLOPES ARE VERY STEEP WITHIN THE STREAM BUFFER. OUTSIDE THE BUFFER, SLOPES ARE GENERALLY BETWEEN 1.00% AND 31.00%. UNDER PROPOSED CONDITIONS THE EXISTING STORMWATER MANAGEMENT STORAGE FACILITY (CMP PIPE ARRAY) WILL REMAIN IN PLACE AND THE CONTINGENT OF THE DRAINAGE AREA WILL BE SLIGHTLY LESS THAN IT EXISTS TODAY. A PROPOSED SUBMERGED GRAVEL WETLAND IS SIZED TO PROVIDE FULL QUALITY MANAGEMENT AS REQUIRED AND ALSO A PORTION OF THE REQUIRED QUANTITY MANAGEMENT FOR THE SUBJECT PROPERTY. AS THE SITE IS WITHIN THE DEEP RUN WATERSHED, THE TWO FACILITIES ARE SIZED TO APPROPRIATELY MANAGE WITH 15-YEAR AND 100-YEAR STORM EVENTS.

THE CALCULATIONS ARE PREPARED UTILIZING THE SITE AREA (LIMIT OF DISTURBANCE) OF 7.49 ACRES, BASED UPON THE PRE-DEVELOPMENT CONDITIONS THE SITE IS COMPRISED OF APPROXIMATELY 3.04 ACRES OR 40.6% OF IMPERVIOUS COVERAGE. THE POST-DEVELOPMENT CONDITIONS ARE COMPRISED OF 6.80 ACRES OR 77.4% OF IMPERVIOUS COVERAGE. THEREFORE SINCE THE EXISTING DEVELOPMENT EXCEEDS 40% IMPERVIOUS COVERAGE, THE PROPOSED SUBDIVISION WILL BE REGULATED AS REDEVELOPMENT PER THE 2007 MARYLAND STORMWATER DESIGN MANUAL WITH AN INCREASE OF IMPERVIOUS AREA.

THE REDEVELOPMENT SWM REGULATIONS STATE THAT THE PROPOSED DEVELOPMENT MUST PROVIDE ENVIRONMENTAL SITE DESIGN (ESD) FEATURES TO THE MAXIMUM EXTENT PRACTICABLE (BEP) FOR THE 1-YEAR RAINFALL EVENT. THIS DEVELOPMENT PROPOSED PROVIDES APPROXIMATELY 5.80 ACRES OF IMPERVIOUS SURFACES OR 77.4% OF IMPERVIOUS COVERAGE OF WHICH 4.28 ACRES IS REQUIRED TO BE TREATED. THE COMBINED TARGET FOR BOTH REDEVELOPMENT TREATMENT AREA OF 1.52 ACRES (PE OF 1.00') AND NEW DEVELOPMENT TREATMENT AREA OF 2.76 ACRES (PE OF 2.42') IS A PE OF 1.92'. ESD MEASURES HAVE BEEN DESIGNED TO TREAT THE 1-YEAR RAINFALL EVENT.

THE FOLLOWING IS AN OUTLINE OF HOW EACH ENVIRONMENTAL SITE DESIGN (ESD) MEASURE WAS IMPLEMENTED TO THE MAXIMUM EXTENT PRACTICABLE (MEP) OR REASONS WHY THE ESD COULD NOT BE USED FOR THE SUBJECT SITE.

STORMWATER QUALITY MANAGEMENT

IN ORDER TO MEET THE REDEVELOPMENT CRITERIA, THE PROPOSED DEVELOPMENT IS REQUIRED TO TREAT THE 4.28 ACRES OF IMPERVIOUS AREA WHICH RESULTS IN A REQUIRED ESD VOLUME OF 28,280 C.F.

BASED UPON THE ABOVE EVALUATION OF THE VARIOUS ESD TECHNIQUES, A SUBMERGED GRAVEL WETLAND FACILITY WITH IMPERMEABLE LINER HAS BEEN PROVIDED. THE SITE HAS BEEN DESIGNED SUCH THAT 4.28 ACRES OF IMPERVIOUS AREA WILL BE TREATED BY THE BEFORE MENTIONED ESD MEASURE. ESD TO THE MEP HAS BEEN ACHIEVED THROUGH THE USE OF A SUBMERGED GRAVEL WETLAND TO PROVIDE A PE OF 2.50' FOR THE SITE. THE SUBMERGED GRAVEL WETLAND WILL ADEQUATELY TREAT THE REQUIRED WATER QUALITY BEFORE DISCHARGING TO THE EXISTING DRAINAGE PATTERNS. OVERFLOW STRUCTURES ARE BEING PROPOSED, WHICH WILL CAPTURE ANY OVERFLOW AND PROVIDE SAFE CONVEYANCE OF THE 100-YEAR STORM. THE ESD VOLUME BEING PROVIDED IS 37,575.04 CF.

STORMWATER QUANTITY MANAGEMENT

QUANTITY MANAGEMENT WILL BE MET FOR THIS SITE BY COMBINING THE EXISTING UNDERGROUND STORAGE FACILITY AND SUBMERGED GRAVEL WETLANDS.

THE EXISTING UNDERGROUND STORAGE FACILITY CONSISTS OF 10-72" CMP PIPES AND IS CURRENTLY DESIGNED TO STORE A MAX. OF 0.87 AF. IN EXISTING CONDITIONS, A 5.94 AC. DRAINAGE AREA IS FLOWING TO THE FACILITY. IN THE 100-YR STORM CONDITION, THE FACILITY WILL STORE 0.75 AF OF RUNOFF WITH A PEAK ELEVATION OF 162.22'. IN THE 10-YR STORM CONDITION, THE FACILITY WILL STORE 0.56 AF OF RUNOFF WITH A PEAK ELEVATION OF 159.91'. THE EXISTING CONTROL STRUCTURE CONSISTS OF A 4' RECTANGULAR WEIR AND 15' LOW FLOW GRIDDLE OUT FALLING THROUGH A 36" CMP PIPE TO AN EXISTING HEADWALL WITH A DISCHARGE OF 8.93 CFS IN THE 10-YR STORM AND 24.59 CFS IN THE 100-YR STORM.

IN PROPOSED CONDITIONS, THE DRAINAGE AREA TO THE EXISTING UNDERGROUND FACILITY IS REDUCED TO 3.02 AC. IN THE 100-YR STORM CONDITION, THE FACILITY WILL STORE 0.547 AF OF RUNOFF WITH A PEAK ELEVATION OF 160.95'. IN THE 10-YR STORM CONDITION, THE FACILITY WILL STORE 0.215 AF OF RUNOFF WITH A PEAK ELEVATION OF 159.12'. THE EXISTING OUTFALL STRUCTURE AND 36" CMP PIPE WILL REMAIN WITH A 10-YR DISCHARGE OF 10.78 CFS AND A 10-YR DISCHARGE OF 17.24 CFS.

THE SUBMERGED GRAVEL WETLAND WILL HAVE A DRAINAGE AREA OF 5.76 AC. IN THE 100-YR STORM CONDITION THE FACILITY WILL STORE 1.725 AF OF RUNOFF ABOVE THE ESD VOLUME OF 160.40'. IN THE 10-YR STORM CONDITION THE FACILITY WILL STORE 1.47 AF OF RUNOFF WITH A PEAK ELEVATION OF 159.96' A 48" OUTLET STRUCTURE WITH A 24" OUTFALL PIPE HAS BEEN DESIGNED TO CONTROL DISCHARGE FROM THE FACILITY. THE FACILITY WILL DISCHARGE 10.47 CFS IN THE 100-YR STORM CONDITION AND 0.16 CFS IN THE 10-YR STORM CONDITION.

IN THE 100-YR STORM CONDITION, THE TWO SYSTEMS COMBINED WILL MANAGE 2,339 AF OF STORAGE AND WILL CONNECT TO A PROPOSED MANHOLE ALONG THE EXISTING 36" CMP PIPE, OUT FALLING AT THE EXISTING HEADWALL. THE EXISTING 36" CMP PIPE HAS AN EXISTING DISCHARGE RATE OF 24.59 CFS. IN PROPOSED CONDITIONS THE TOTAL DISCHARGE RATE WILL BE REDUCED TO 17.24 CFS IN THE 10-YR STORM CONDITION, THE TWO SYSTEMS COMBINED WILL MANAGE 1,688 AF OF STORAGE. THE EXISTING 36" CMP PIPE HAS AN EXISTING DISCHARGE RATE OF 8.93 CFS. IN PROPOSED CONDITIONS THE TOTAL DISCHARGE RATE WILL BE REDUCED TO 7.24 CFS.

SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-101
EXISTING CONDITIONS PLAN	C-201 - C-202
SCHEMATIC GRADING AND STORMWATER MANAGEMENT PLAN	C-301 - C-302
SCHEMATIC EROSION & SEDIMENT CONTROL PLAN	C-303 - C-304

ESD SUMMARY TABLE

'SITE AREA'	7.49 AC.
ESDv	28,280 C.F. (REQUIRED), 37,575 C.F. (PROVIDED)
Rev	1,265 C.F. (REQUIRED), 4,659 C.F. (PROVIDED)
CPv	INCLUDED IN ESDv
QP(10)	EX: 8.93 CFS, PROP: 7.24 CFS
QP(100)	EX: 24.59 CFS, PROP: 21.16 CFS
EX IMP AREA	3.40 AC.
PROP IMP AREA	2.76 AC.
TOTAL IMP AREA	5.80 AC.

OWNERS:
 PARCEL 46
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 400
 ARLINGTON, VA 22209
 PHONE: (703) 522-9502

DEVELOPER:
 PARCEL 661
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 400
 ARLINGTON, VA 22209
 PHONE: (703) 522-9502

CONTACT: JEFF USAS
 PHONE: (703) 522-9502

TAX MAP: 43 **GRID:** 10 **ZONED:** M-2 & SW
PARCELS: 661 & 46
 1ST ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

BOHLER //

SITE CIVIL AND CONSULTING ENGINEERING
 PROGRAM MANAGEMENT
 LANDSCAPE ARCHITECTURE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRANSPORTATION SERVICES

1530 WILSON BLVD., SUITE 400
 ARLINGTON, VA 22209
 PHONE: (703) 522-9502
 WWW.BOHLERENG.COM

REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY
1	5/10/22	PER COUNTY COMMENTS	RLB	MP

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PROJECT No.: MD212054
DRAWN BY: RLB
CHECKED BY: MP
DATE: 2/4/22
CAD I.D.: CND5-1

ENVIRONMENTAL CONCEPT PLAN

FOR

GRANDVIEW KIT KAT

PARCELS 46 & 661

7110 & 7130 KIT KAT ROAD
 1ST ELECTION DISTRICT
 TAX MAP 43, GRID 10, PARCELS 661 & 46
 ELKRIDGE,
 HOWARD COUNTY, MARYLAND

BOHLER //

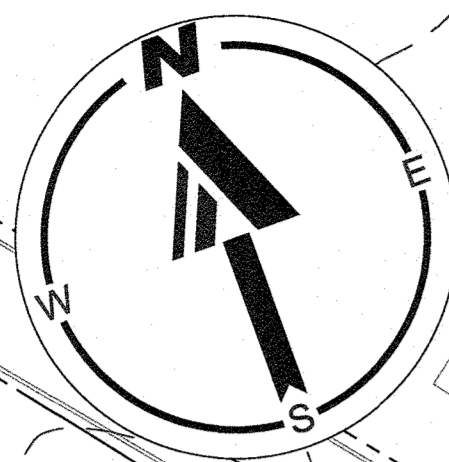
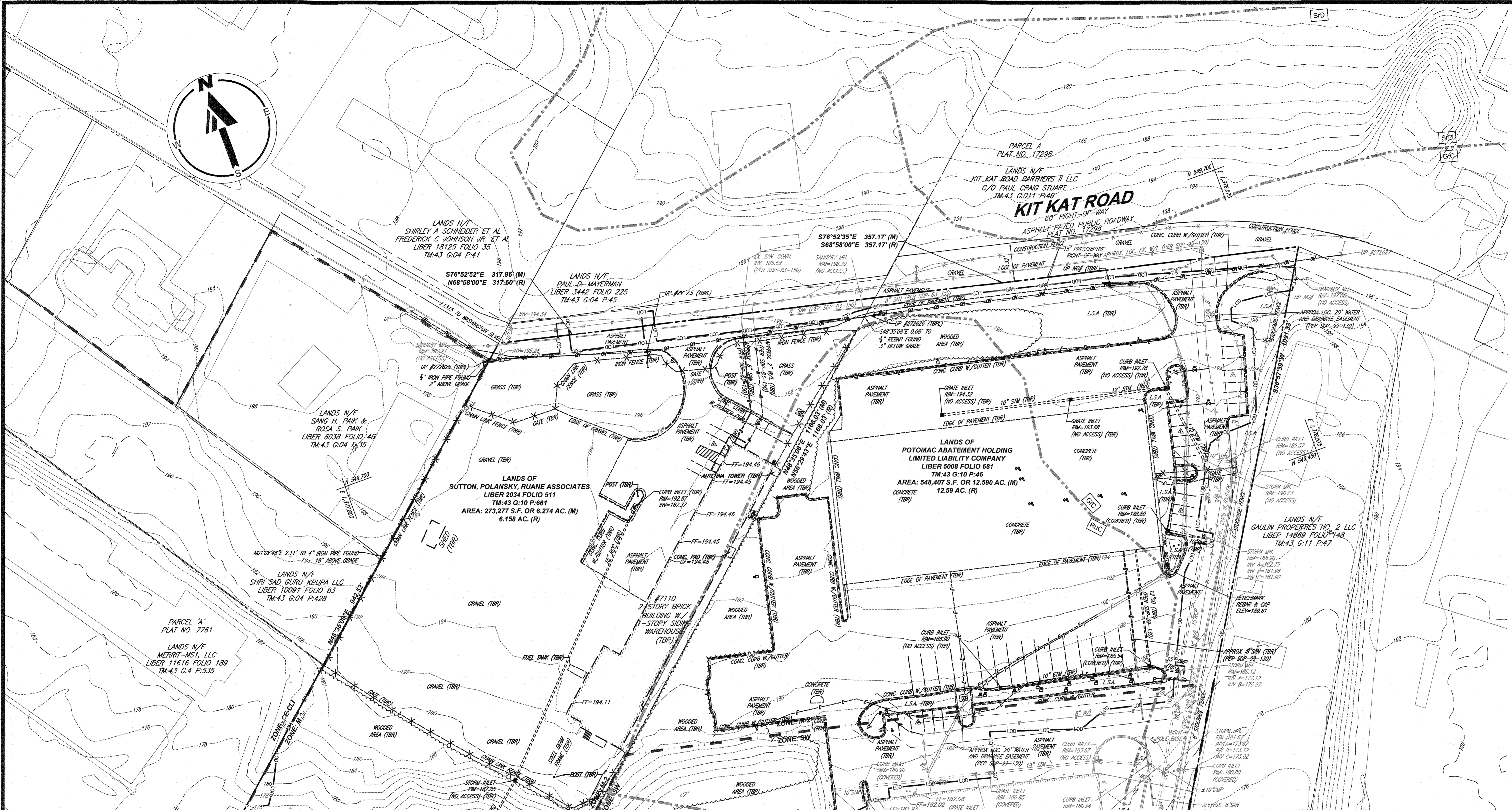
901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

B.R. ROWE
 PROFESSIONAL ENGINEER
 LICENSE NO. 40018, EXPIRATION DATE 7/30/23

COVER SHEET

SHEET NUMBER: 1 of 7
C-101

REVISION 1 - 5/10/22



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 SITE CIVIL AND CONSULTING ENGINEERING
 LAND SURVEYING
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ENVIRONMENTAL CONCEPT PLAN
 FOR
GRANDVIEW KIT KAT
 PARCELS 46 & 61
 7110 & 7130 KIT KAT ROAD
 1ST ELECTION DISTRICT
 TAX MAP 43, GRID 10 PARCELS 661 & 46
 ELKRIDGE, HOWARD COUNTY, MARYLAND

BOHLER //
 901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

B. R. ROWE
 PROFESSIONAL ENGINEER
 LICENSE NO. 15676
 EXPIRES 09/30/2023

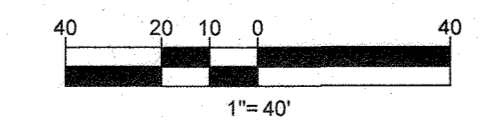
EXISTING CONDITION PLAN
 SHEET NUMBER: 2 of 7
C-201
 REVISION 1 - 5/10/22

MAPPED SOIL TYPES

MAP SYMBOL	HYDROLOGIC SOIL GROUP	DESCRIPTION	HYDRIC (Y/N)	K VALUE
G/C	A	GLADSTONE-URBAN LAND COMPLEX, 8 TO 15 PERCENT SLOPES	N	
Ha	D	HATBORO-CORDUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	Y	0.37
RSD	C	RUSSET FINE SANDY LOAM, 10 TO 15 PERCENT SLOPES	N	0.28
RUC	C	RUSSET AND BELTSVILLE SOILS, 5 TO 10 PERCENT SLOPES	N	0.28

- LEGEND**
- PROPERTY LINE
 - - - - EXISTING RIGHT-OF-WAY LINES
 - 000 — 000 — LIMIT OF DISTURBANCE
 - - - - EXISTING CONTOUR
 - W — W — WETLAND BOUNDARY
 - WB — WB — WETLAND BUFFER
 - SB — SB — STREAM BUFFER
 - — — — SOILS BOUNDARY
 - — — — EXISTING TREE LINE
 - — — — EXISTING FLOODPLAIN
 - WETLANDS
 - ○ ○ ○ SPECIMEN TREES
 - ▨ STEEP SLOPES 15-24.99%
 - ▩ STEEP SLOPES 25% +

MATCHLINE - SHEET C-202



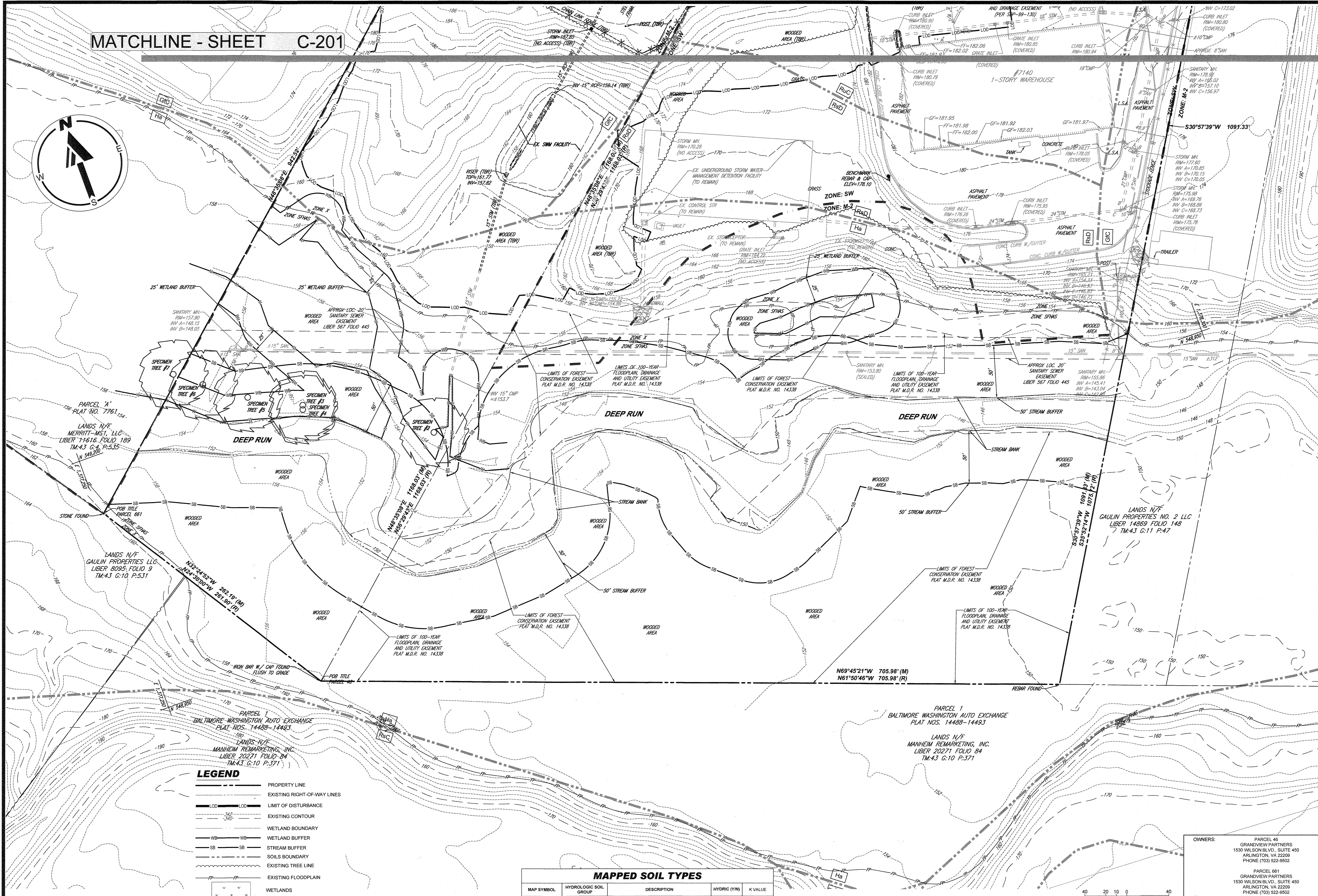
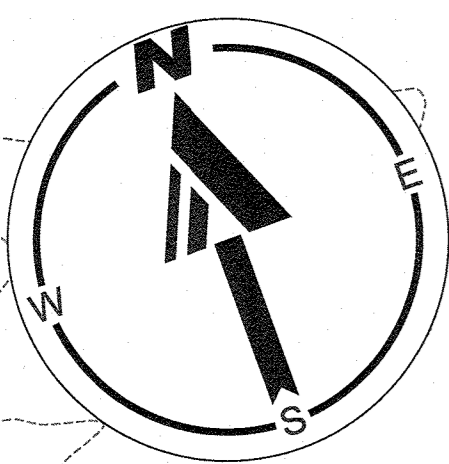
SUBDIVISION NAME: TBO SECTION/AREA: N/A DEED # 2034/511, 5008/681

PREVIOUS FILE No.: SDP-04-22 SDP-83-150 SDP-69-130

OWNERS:
 PARCEL 46
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 450
 ARLINGTON, VA 22209
 PHONE (703) 522-6602
 PARCEL 61
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 TAX MAP: 43 GRID: 10 ZONED: M-2 & SW
 PARCELS: 661 & 46
 1ST ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 8/26/22
 DATE: 8/18/22

JUL 06, 2022 14:20:02 D:\2024\CAD\DRAWINGS\PLANS\SETS\SEP\MD212054 - EXST - 1.dwg (PLOT) C:\01 - EXISTING CONDITIONS PLAN

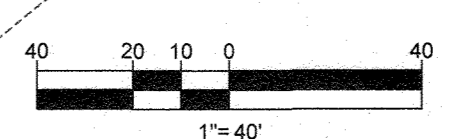


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APPROVED: [Signature] DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 8/25/22
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 8/18/22

SUBDIVISION NAME: TBD
 SECTION/VAREA: NA
 DEED # 2034/511, 5008/681

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 SDP-89-130

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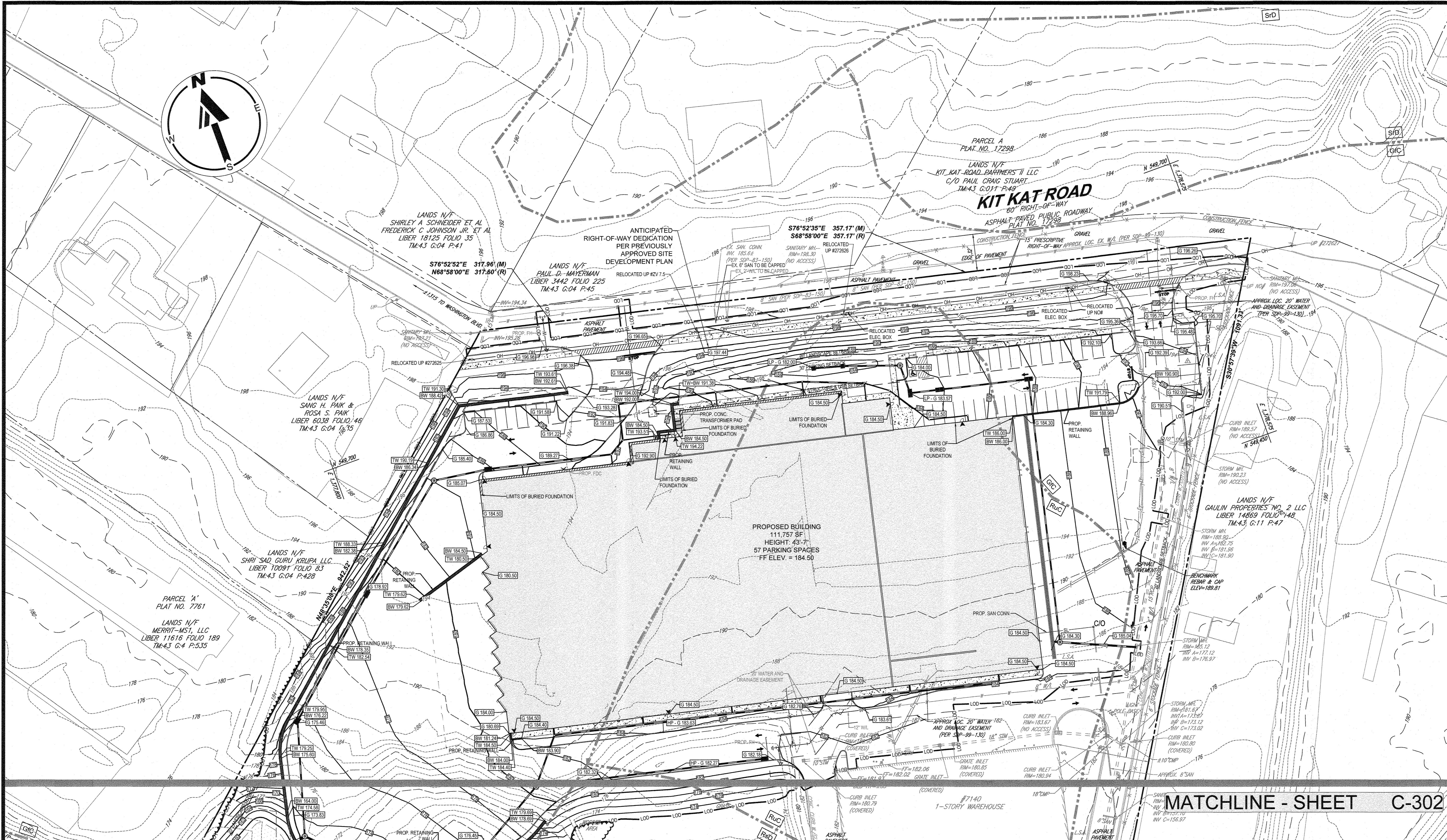
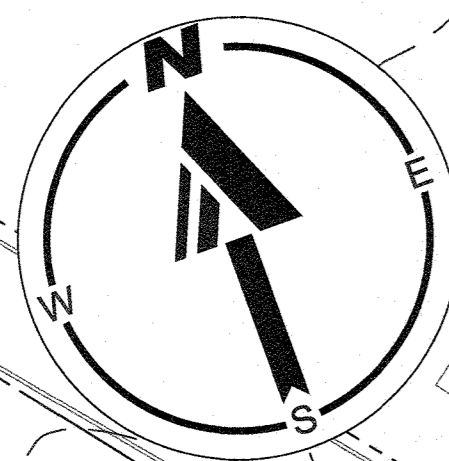
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 7110 & 7130 KIT KAT ROAD
 1ST ELECTION DISTRICT
 TAX MAP 43, GRID 10, PARCELS 661 & 46
 EL KRIDGE,
 HOWARD COUNTY, MARYLAND

BOHLER//
 901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

B.R. ROWE
 PROFESSIONAL ENGINEER
 LICENSE NO. 11663
 STATE OF MARYLAND
 LICENSE NO. 408, EXPIRATION DATE: 7/30/23

EXISTING CONDITIONS PLAN
 SHEET NUMBER: 3 of 7
C-202
 REVISION 1 - 5/10/22



BOHLER //
 SITE CIVIL AND CONSULTING ENGINEERING
 PROGRAM MANAGEMENT
 LANDSCAPE ARCHITECTURE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY
1	5/10/22	PER COUNTY COMMENTS	RLB	MP

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PROJECT No.: MD212054
 DRAWN BY: RLB
 CHECKED BY: MP
 DATE: 2/4/22
 CAD I.D.: PROP-1

ENVIRONMENTAL CONCEPT PLAN
 FOR
GRANDVIEW KIT KAT
 PARCELS 46 & 61
 7110 & 7130 KIT KAT ROAD
 1ST ELECTION DISTRICT
 TAX MAP 43, GRID 10, PARCELS 661 & 46
 HOWARD COUNTY, MARYLAND

BOHLER //
 901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

B.R. ROWE
 PROFESSIONAL ENGINEER
 LICENSE NO. 15400
 EXPIRATION DATE 7/30/23

LEGEND

	PROPERTY LINE		SPECIMEN TREES
	EXISTING RIGHT-OF-WAY LINES		STEEP SLOPES 15-24.99%
	PROPOSED RIGHT-OF-WAY LINES		STEEP SLOPES 25% +
	LIMIT OF DISTURBANCE		SWM FACILITY
	EXISTING CONTOUR		FIRE HYDRANT
	PROPOSED CONTOUR		
	WETLAND BOUNDARY		
	WETLAND BUFFER		
	STREAM BUFFER		
	SOILS BOUNDARY		
	EXISTING TREE LINE		
	PROPOSED TREE LINE		
	EXISTING FLOODPLAIN		
	PROPOSED STORM DRAIN		
	PROPOSED SANITARY LINE		
	PROPOSED WATER LINE		
	WETLANDS		

MAPPED SOIL TYPES

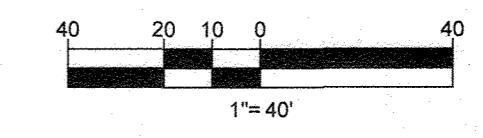
MAP SYMBOL	HYDROLOGIC GROUP	DESCRIPTION	HYDRIC (YN)	K VALUE
G/C	A	GLADSTONE-URBAN LAND COMPLEX, 8 TO 15 PERCENT SLOPES	N	
Hs	D	HATBORO-CORONUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	Y	0.37
RsD	C	RUSSET FINE SANDY LOAM, 10 TO 15 PERCENT SLOPES	N	0.28
RuC	C	RUSSET AND BELTSVILLE SOILS, 5 TO 10 PERCENT SLOPES	N	0.28

STORMWATER MANAGEMENT NOTES

THE LOCATION OF THE EXISTING STORMWATER MANAGEMENT FACILITY IS SHOWN AND LABELED ON THIS ENVIRONMENTAL CONCEPT PLAN. AN INSPECTION OF THIS FACILITY SHALL BE COMPLETED PRIOR TO ANY SUBSEQUENT PLAN APPROVALS.

FOR THE CONSTRUCTION OF THE SUBMERGED GRAVEL WETLAND, A 30-MIL PVC POLYMER LINER WILL BE REQUIRED ON ALL SIDES AND BOTTOM OF THE SUBMERGED GRAVEL WETLAND WITH A 2' MIN. OVERLAP.

MATCHLINE - SHEET C-302



APPROVED: DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 8/25/22
 DATE: 8/19/22

OWNERS:
 PARCEL 46
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 400
 ARLINGTON, VA 22209
 PHONE: (703) 522-9502

PARCEL 61
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 400
 ARLINGTON, VA 22209
 CONTACT: JEFF USAS
 PHONE: (703) 522-9502

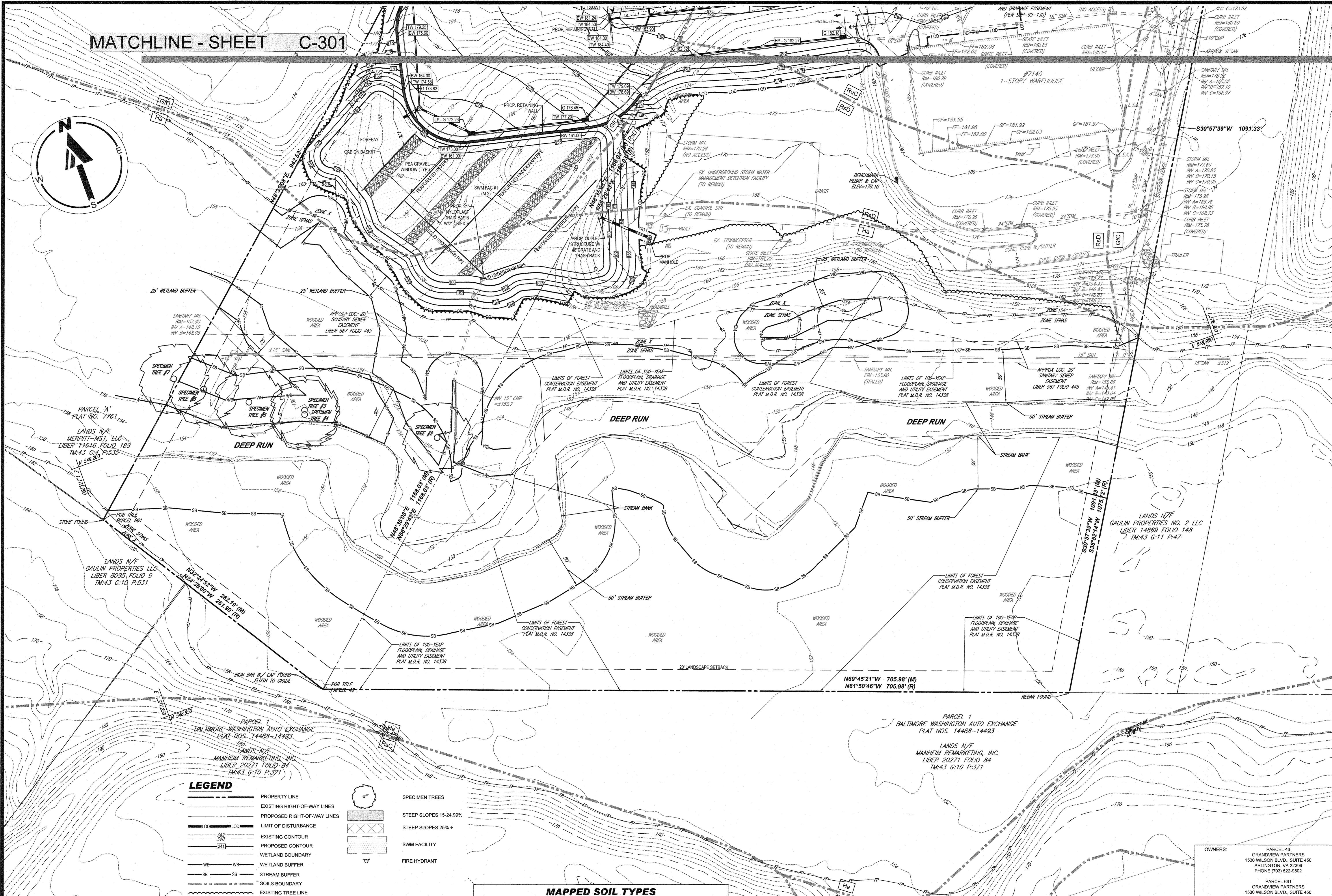
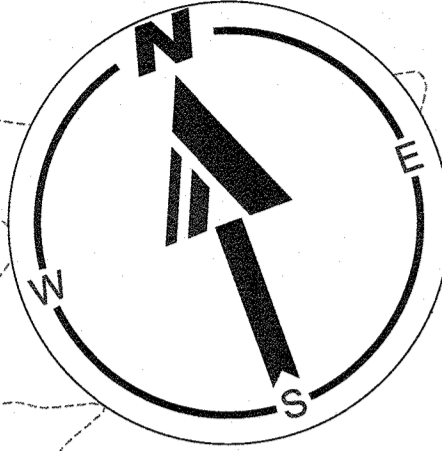
DEVELOPER:
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 400
 ARLINGTON, VA 22209

TAX MAP: 43 GRID: 10 ZONED: M-2 & SW
 PARCELS: 661 & 46
 1ST ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SHEET TITLE:
SCHEMATIC GRADING & STORMWATER MANAGEMENT PLAN
 SHEET NUMBER: 4 of 7
C-301
 REVISION 1 - 5/10/22

ECP-22-046

MATCHLINE - SHEET C-301



LEGEND

- PROPERTY LINE
 - EXISTING RIGHT-OF-WAY LINES
 - PROPOSED RIGHT-OF-WAY LINES
 - LIMIT OF DISTURBANCE
 - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - WETLAND BOUNDARY
 - WETLAND BUFFER
 - STREAM BUFFER
 - SOILS BOUNDARY
 - EXISTING TREE LINE
 - PROPOSED TREE LINE
 - EXISTING FLOODPLAIN
 - PROPOSED STORMDRAIN
 - PROPOSED SANITARY LINE
 - PROPOSED WATER LINE
 - WETLANDS
- SPECIMEN TREES
 - ▨ STEEP SLOPES 15-24.99%
 - ▩ STEEP SLOPES 25% +
 - ▧ SWM FACILITY
 - ▣ FIRE HYDRANT

MAPPED SOIL TYPES

MAP SYMBOL	HYDROLOGIC SOIL GROUP	DESCRIPTION	HYDRIC (Y/N)	K VALUE
G/C	A	GLADSTONE-URBAN LAND COMPLEX, 6 TO 15 PERCENT SLOPES	N	
Ha	D	HATBORO-CORDUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	Y	0.37
Rd	C	RUSSET FINE SANDY LOAM, 10 TO 15 PERCENT SLOPES	N	0.28
R/c	C	RUSSET AND BELTSVILLE SOILS, 5 TO 10 PERCENT SLOPES	N	0.28

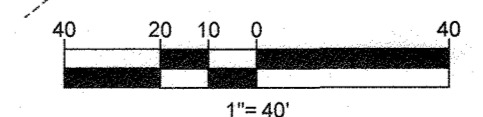
STORMWATER MANAGEMENT NOTES

THE LOCATION OF THE EXISTING STORMWATER MANAGEMENT FACILITY IS SHOWN AND LABELED ON THIS ENVIRONMENTAL CONCEPT PLAN. AN INSPECTION OF THIS FACILITY SHALL BE COMPLETED PRIOR TO ANY SUBSEQUENT PLAN APPROVALS.

FOR THE CONSTRUCTION OF THE SUBMERGED GRAVEL WETLAND, A 30-MIL PVC POLYLINER WILL BE REQUIRED ON ALL SIDES AND BOTTOM OF THE SUBMERGED GRAVEL WETLAND WITH A 2' MIN. OVERLAP.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT

DATE: 8/25/22
 DATE: 8/18/22



SUBDIVISION NAME: TBD
 SECTION/AREA: NW
 DEED # 2034/511, 5008/981

PREVIOUS FILE NO.
 SDP-84-22
 SDP-83-150
 SDP-66-130

OWNERS:
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 450
 ARLINGTON, VA 22209
 PHONE: (703) 522-9502

DEVELOPER:
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 450
 ARLINGTON, VA 22209
 CONTACT: JEFF USAIS
 PHONE: (703) 522-9502

TAX MAP: 43 GRID: 10 ZONED: M-2 & SW
 PARCELS: 861 & 46
 1ST ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SHEET TITLE:
SCHEMATIC GRADING & STORMWATER MANAGEMENT PLAN

SHEET NUMBER: 5 of 7
C-302

REVISION 1 - 5/10/22

REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	5/10/22	PER COUNTY COMMENTS	RLB MP

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PROJECT No.: MD212054
 DRAWN BY: RLB
 CHECKED BY: MP
 DATE: 2/4/22
 CAD I.D.: PROP-1

ENVIRONMENTAL CONCEPT PLAN

FOR

GRANDVIEW KIT KAT

PARCELS 46 & 661

7110 & 7130 KIT KAT ROAD
 1ST ELECTION DISTRICT
 TAX MAP 43, GRID 10, PARCELS 861 & 46
 ELK RIDGE,
 HOWARD COUNTY, MARYLAND

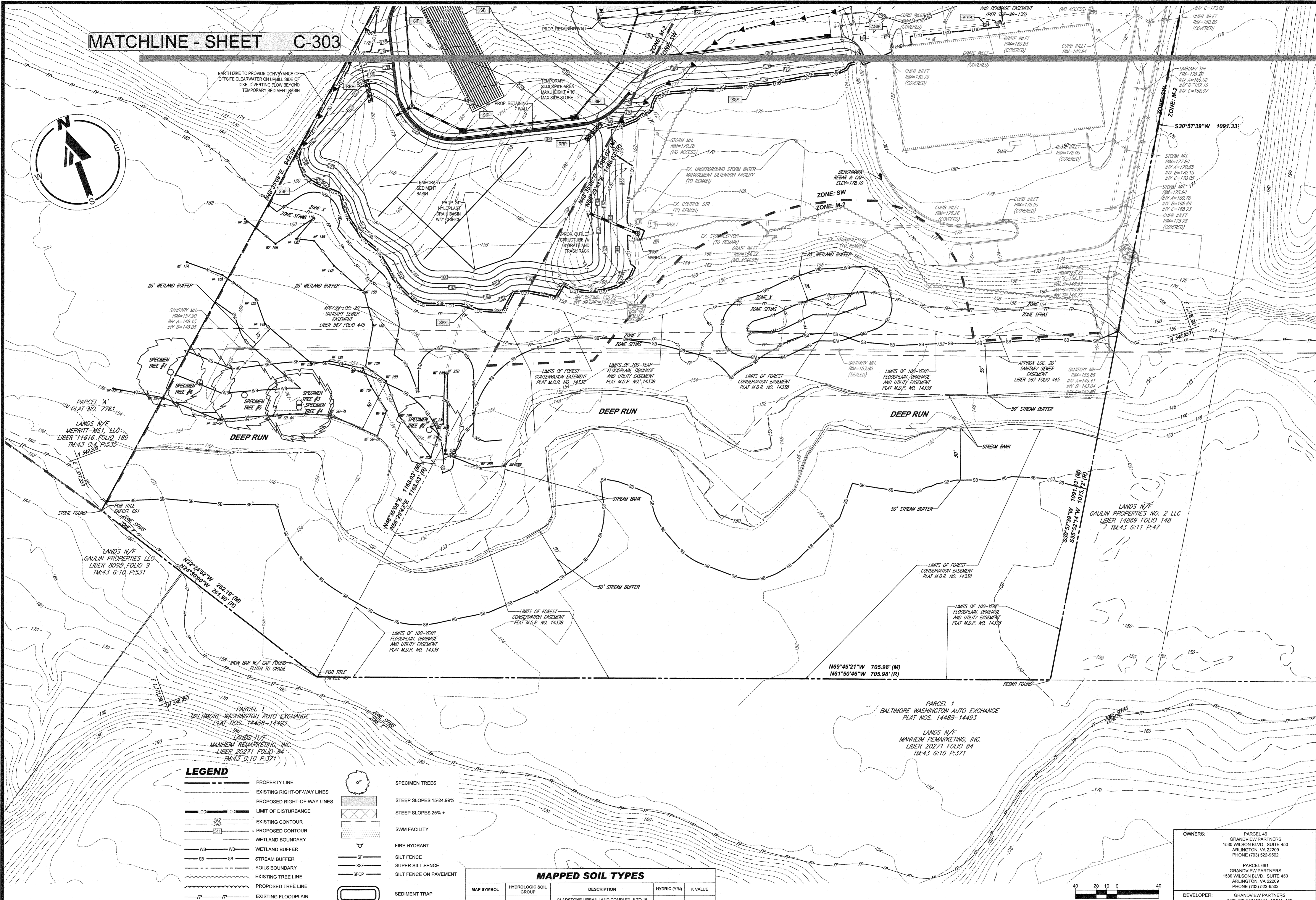
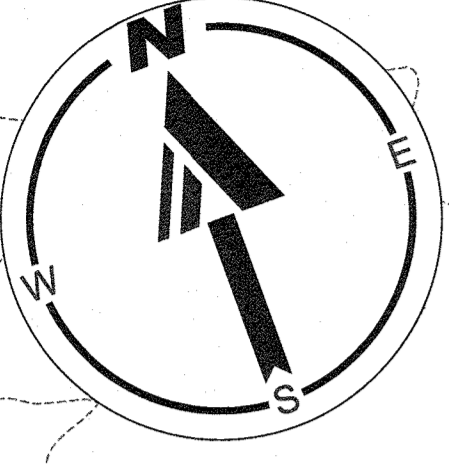
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901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

B.R. ROWE
 PROFESSIONAL ENGINEER
 LICENSE NO. 40818, EXPIRATION DATE: 7/30/2023

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

MATCHLINE - SHEET C-303

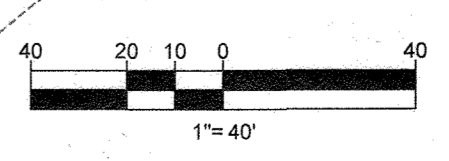


LEGEND

- P — PROPERTY LINE
- E — EXISTING RIGHT-OF-WAY LINES
- PR — PROPOSED RIGHT-OF-WAY LINES
- L — LIMIT OF DISTURBANCE
- C — EXISTING CONTOUR
- PC — PROPOSED CONTOUR
- WB — WETLAND BOUNDARY
- W — WETLAND BUFFER
- SB — STREAM BUFFER
- S — SOILS BOUNDARY
- ETL — EXISTING TREE LINE
- PTL — PROPOSED TREE LINE
- F — EXISTING FLOODPLAIN
- SF — PROPOSED STORM DRAIN
- SL — PROPOSED SANITARY LINE
- WL — PROPOSED WATER LINE
- W — WETLANDS

MAPPED SOIL TYPES

MAP SYMBOL	HYDROLOGIC SOIL GROUP	DESCRIPTION	HYDRIC (Y/N)	K VALUE
G/C	A	GLADSTONE-URBAN LAND COMPLEX, 6 TO 15 PERCENT SLOPES	N	
H _a	D	HATBORO-CORDUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	Y	0.37
R ₁ D	C	RUSSET FINE SANDY LOAM, 10 TO 15 PERCENT SLOPES	N	0.28
R ₂ C	C	RUSSET AND BELTSVILLE SOILS, 5 TO 10 PERCENT SLOPES	N	0.28



APPROVED: DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 8/1/22

JUL 05, 2022
 14:27:02 \\CADD\DRAWINGS\PLANS\SET\SEP2022\C-303 - EROSION SEDIMENT CONTROL PLAN

BOHLER//
 SITE CIVIL AND CONSULTING ENGINEERING
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 PERMITTING SERVICES
 TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY
1	5/10/22	PER COUNTY COMMENTS	RLB	MP

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 PROJECT No.: MD212054
 DRAWN BY: RLB
 CHECKED BY: MP
 DATE: 2/4/22
 CAD I.D.: PROP-1

ENVIRONMENTAL CONCEPT PLAN
 FOR
GRANDVIEW KIT KAT
 PARCELS 46 & 61
 7110 & 7130 KIT KAT ROAD
 1ST ELECTION DISTRICT
 TAX MAP 43, GRID 10, PARCELS 661 & 46
 ELK RIDGE,
 HOWARD COUNTY, MARYLAND

BOHLER//
 901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

B.R. ROWE
 PROFESSIONAL ENGINEER
 LICENSE NO. 10888, EXPIRATION DATE 7/3/2023

OWNERS:
 PARCEL 46
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 450
 ARLINGTON, VA 22209
 PHONE (703) 522-9502
 PARCEL 61
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 450
 ARLINGTON, VA 22209
 CONTACT: JEFF USAS
 PHONE: (703) 522-9502

DEVELOPER:
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 450
 ARLINGTON, VA 22209
 CONTACT: JEFF USAS
 PHONE: (703) 522-9502

TAX MAP: 43 **GRID:** 10 **ZONED:** M-2 & SW
 PARCELS: 661 & 46
 1ST ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SHEET TITLE:
SCHEMATIC EROSION AND SEDIMENT CONTROL PLAN
 SHEET NUMBER: 7 of 7
C-304
 REVISION 1 - 5/10/22