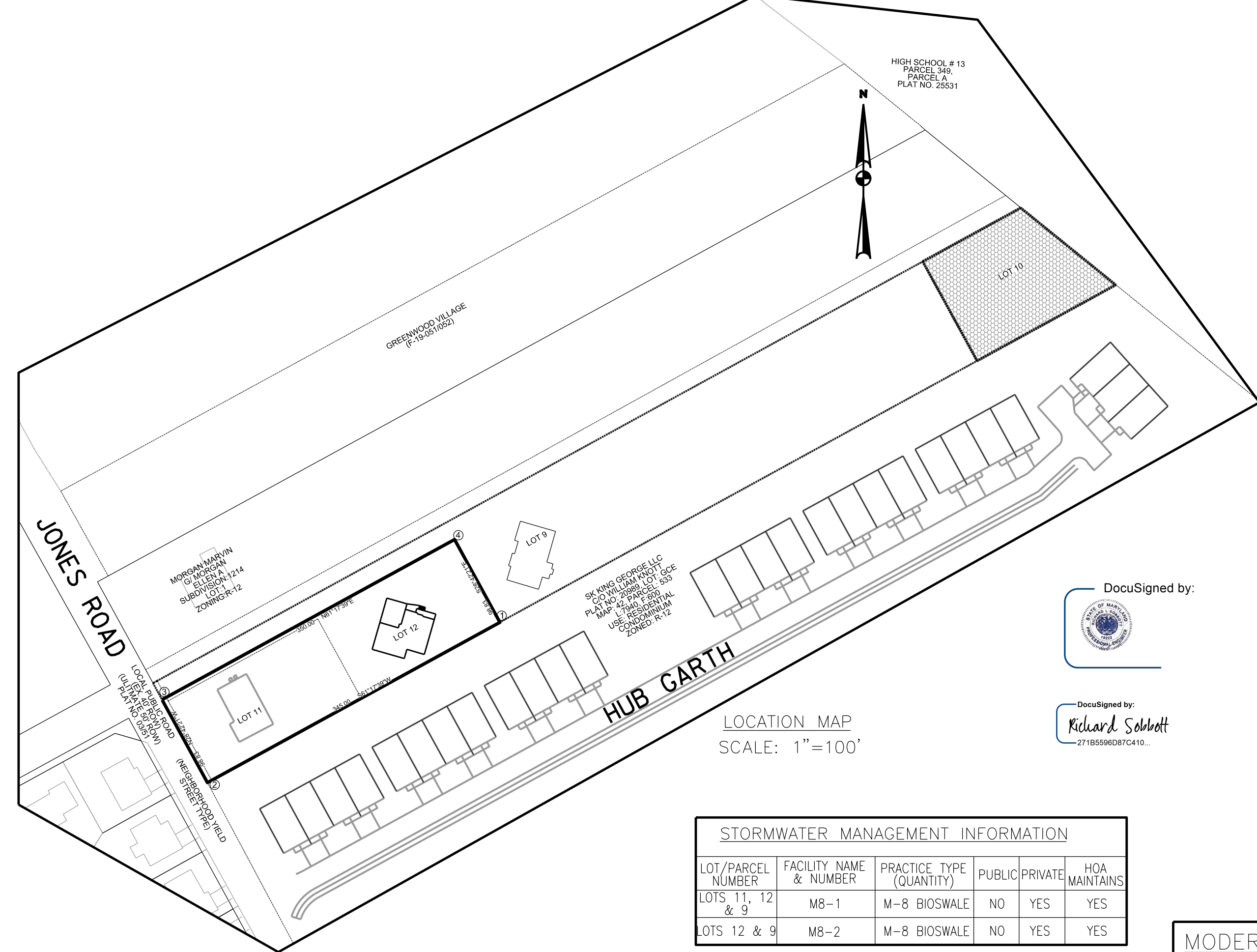


GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATION OF HOWARD COUNTY PLUS MDSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE(5) WORKING DAYS PRIOR TO THE START OF WORK...
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. EXISTING TOPOGRAPHIC CONTOURS BASED ON BOUNDARY & TOPOGRAPHY SURVEY PERFORMED BY DCI ENGINEERS ON 05/18/2021.
5. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
a.) THE R1-1 "STOP" STREET NAME SIGN (SNS) ASSEMBLY, AND/OR RANGE OF ADDRESS SIGN FOR THE DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
b.) THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES.
c.) THE TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MDMUTCD).
d.) ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED "QUICK PUNCH" SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE)-3" LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON THE TOP OF EACH POST.
6. ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENT OF ZONING SECTION 134.
7. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 4218 AND 4219 ARE USED FOR THIS PROJECT.
4218 - N-542107.856 E-1363796.084
4219 - N-542368.884 E-1363076.043
8. WATER FOR THIS PROJECT TO BE PUBLIC EXTENSION OF CONTRACT NO. 24-5209-D PATUXENT RIVER (MIDDLE).
9. SEWER FOR THIS PROJECT TO BE PUBLIC EXTENSION OF CONTRACT NO. 24-5209-D.
10. EXISTING UTILITIES ARE BASED ON FIELD RUN SURVEY INFORMATION AND HOWARD COUNTY APPROVED CONSTRUCTION DRAWINGS. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE TO CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.
11. STORMWATER MANAGEMENT WILL BE PROVIDED ON-SITE BY THE FOLLOWING MEANS:
-WATER QUALITY VOLUME WILL BE PROVIDED BY USING TWO M-8 (BIOSWALES) AND FOUR M-5 (DRYWELLS). RECHARGE VOLUME IS PROVIDED USING THESE SAME FACILITIES. CHANNEL PROTECTION VOLUME IS BEING PROVIDED WHERE IT IS REQUIRED. THE 10-YEAR AND 100-YEAR STORM ATTENUATION IS NOT REQUIRED PER HOWARD COUNTY DUE TO NO DOWNSTREAM EROSION. THE STORMWATER FACILITIES WILL BE MAINTAINED BY THE HOMEOWNERS AND THE HOMEOWNERS ASSOCIATION.
12. NO CEMETERIES OR GRAVE SITES ARE LOCATED ON THE PROPERTY. THE SUBJECT PROPERTY DOES NOT CONTAIN A CEMETERY PER THE HOWARD COUNTY CEMETERY INVENTORY MAP.
13. THIS PLAN IS SUBJECT TO THE AMENDED, FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE 10/02/03. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION OR BUILDING/GRADING PERMIT APPLICATION.
14. IN ACCORDANCE WITH SECTION 12B OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOW, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR SETBACK (APPLIES FOR RESIDENTIAL SDP'S).
15. THE SUBJECT PROPERTY IS ZONED R-12 PER THE OCTOBER 6,2013 COMPREHENSIVE ZONING PLAN.
16. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
WIDTH-12' (18' SERVING MORE THAN ONE RESIDENCE)
SURFACE-6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-11/2" MIN)
GEOMETRY- MAX. 15% GRADE, MAX 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS
STRUCTURE (CULVERT/BRIDGES)-CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)
DRAINAGE ELEMENTS -SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
MAINTENANCE -SUFFICIENT TO INSURE ALL WEATHER USE
17. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS.
18. FLAG AND PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY AND NOT ONTO THE PIPESTEM LOT DRIVEWAY.
19. ROAD DEDICATION -REFERENCE THE DEDICATION AREA WITH THE FOLLOWING NOTE:
i. LAND DEDICATED TO HOWARD COUNTY, MARYLAND FOR PURPOSES OF A PUBLIC ROAD (0.014 ACRES).
ii. LAND DEDICATED TO STATE OF MARYLAND FOR PURPOSES OF A PUBLIC ROAD (0.00 ACRES).
20. THIS SUBDIVISION IS SUBJECT TO SECTION 18.122B OF THE HOWARD COUNTY CODE. PUBLIC WATER AND/OR SEWER SERVICE HAS BEEN GRANTED UNDER THE TERMS AND PROVISIONS, THEREOF, EFFECTIVE _____, ON WHICH DATE DEVELOPER AGREEMENT WAS FILED AND ACCEPTED.
21. THERE ARE TWO EXISTING DWELLING/STRUCTURE(S) LOCATED ON LOT(S) 9 AND 11 TO REMAIN, NO NEW BUILDINGS,EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING(S) ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATION REQUIREMENTS.
22. THE LANDSCAPE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED 9 SHADE TREES AND 6 SHRUBS, THE AMOUNT OF \$2,880.00 SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT FOR THIS SUBDIVISION.
23. THIS SUBDIVISION IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION WAS PREVIOUSLY ADDRESSED AS PART OF F-05-159
24. A FOREST CONSERVATION EASEMENT HAS ALREADY BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE FOREST CONSERVATION MANUAL. NO CLEARING,GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST EASEMENT ARE ALLOWED. THE REQUIRED FOREST CONSERVATION SHALL MEET THE INTENT OF SECTION 16.117 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. TOTAL FOREST CONSERVATION OBLIGATION OF THIS PROJECT TO BE FULFILLED BY ESTABLISHING A 0.386 ACRE FOREST RETENTION EASEMENT ON OPEN SPACE LOT 10.
25. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
26. THE ENVIRONMENTAL CONCEPT PLAN (ECP-22-008) WAS APPROVED ON 01/10/2022.
27. THERE IS NO 100 YEAR FLOODPLAIN LOCATED ON SITE.
28. NO STEEP SLOPES OVER 20,000 SF CONTIGUOUS ARE LOCATED ON SITE.
29. THERE ARE NO ON-SITE NON-TIDAL WETLANDS OR STREAMS.
30. A NOISE STUDY IS NOT REQUIRED.
31. JONES ROAD IS CLASSIFIED AS A LOCAL ROAD AND ALSO CAN BE DEFINED AS NEIGHBORHOOD YIELD STREET UNDER STREET TYPE CATEGORY. THERE IS ONE PROPOSED PRIVATE USE-IN-COMMON DRIVEWAY WHICH CAN BE DEFINED AS ALLEY.
32. THE SUBJECT PROPERTY IS NOT A HISTORIC SITE PER THE HOWARD COUNTY HISTORIC SITE MAP.
33. THE PROPOSED UNITS SHALL HAVE AN AUTOMATIC FIRE PROTECTIVE SPRINKLER SYSTEM.
34. AN ON-LINE PRE-SUBMISSION COMMUNITY MEETING WAS HELD ON 06/29/2021.
35. IN ACCORDANCE WITH SECTION 16.121(A)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, THE OPEN SPACE REQUIREMENTS FOR THIS R-12 PROJECT IS 10% OF GROSS AREA(2.90 AC.X10%=0.29 AC.). REFER TO PROPOSED OPEN SPACE TABULATION HERE ON.
36. IN ACCORDANCE WITH SECTION 16.121(G)(4) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS RECREATION OPEN SPACE TO THIS R-12 PROJECT IS NOT REQUIRED BECAUSE IT HAS LESS THAN 10 UNITS.
37. THE SUBJECT PROPERTY IS ELIGIBLE FOR A SINGLE LOT FAMILY MEMBER EXEMPTION PER SECTION 16-1107(b)(1)(vi) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. IN CONFORMITY WITH SECTION 16-1107(b)(1)(vi) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, UPON RECORDATION OF A PLAT CREATING AN ADDITIONAL BUILDING LOT ON THIS PROPERTY, THE OWNERS SHALL CONVEY THE NEWLY CREATED LOT TO BRONZWYN PALMER AND HER HUSBAND.
38. THIS PROJECT IS SUBJECT TO DESIGN MANUAL WAIVER TO DMV 02-22-2012. ON JANUARY 13, 2022 THE DEPARTMENT OF PUBLIC WORKS UTILITY DESIGN DIVISION CHIEF INDICATED THE TWO DESIGN ITEMS WOULD BE ADDRESSED DURING PRELIMINARY PLAN DEVELOPMENT. THESE WAIVER ITEMS ARE:
IN LIEU OF THE REQUIRED 10' WIDE PERMANENT STRUCTURE SETBACK, THE APPLICANT WOULD LIKE TO PROVIDE A 8.40' FROM BUILDING ON LOT 11, 0.9' FROM STORMWATER FACILITY M8-1, 0.6' FROM STORMWATER FACILITY M8-2, AND 6.15' FROM BUILDING ON LOT 9.
39. DEVELOPER IS RESPONSIBLE TO PAY THE COUNTY TO INSTALL A R1-1 ("STOP") SIGN AND PRIVATE STREET NAME SIGN AT THE ENTRANCE OFF JONES ROAD. REFER TO PLAN SHEET FOR DETAILS. CONTACT HOWARD COUNTY TRAFFIC AT 410-313-5752 TO ARRANGE FOR PAYMENT AND INSTALLATION.

FINAL SUBDIVISION PLAN
NORDAU, SECTION E-2, LOTS 11-12
A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8
HOWARD COUNTY, MARYLAND



LEGEND:
PROPERTY LINE
EXISTING PERENNIAL STREAMS
BUILDING RESTRICTION LINE
FEMA 100 YEAR FLOODPLAIN
EXISTING STORM DRAIN
PROP. STORM DRAIN W/ OUTFALL
PROPOSED CONCRETE PAVEMENT/ ASPHALT PAVING
PROPOSED CONCRETE PAVING
EXISTING DEDICATED RIGHT-OF-WAYS OR EASEMENT
EXISTING STRUCTURE
EASEMENT
EXISTING TREELINE
PROPOSED TREELINE
EXISTING WATER MAIN W/FIRE HYDRANT
PROPOSED WATER MAIN W/ FIRE HYDRANT
EXISTING SAN. SEWER
PROPOSED SAN. SEWER
15% - 25% SLOPES
> 25% SLOPES
CeC SOILS
R-12 ZONING MAP
EXIST. METAL FENCE
EXIST. WOOD FENCE
PROPOSED BUSH/SHRUBS
FIELD SURVEY
PROPOSED CONTOURS
EXISTING SPOT ELEVATION
SPOT ELEVATION
DIRECTION OF THE FLOW
LIMIT OF DISTURBANCE
DRAINAGE AREA

CONTROL POINTS table with columns: DCI-200, DCI-201, DCI-203, DCI-204, DCI-205, DCI-206, NORTHING, EASTING, ELEV.



LEGEND:
TRAVERSE CONTROL
EXISTING SANITARY SEWER MANHOLE
EXISTING TREE
EXISTING BUSH/SHRUBS
EXISTING ELECTRICAL MANHOLE
EXISTING STORMDRAIN MANHOLE
EXISTING TELEPHONE/COMM. MANHOLE
EXISTING GAS MANHOLE
EXISTING MANHOLE (UNKNOWN)
EXISTING WATER MANHOLE
EXISTING FIRE HYDRANT
EXISTING WATER VALVE
EXISTING WATER METER
EXISTING GAS METER
EXISTING GAS VALVE
EXISTING LIGHT/STREET POLE
EXISTING ELECTRIC/UTILITY POLE
EXISTING GUY POLE/WIRE
EXISTING JUNCTION/HAND BOX
EXISTING INLET
EXISTING CLEANOUT
EXISTING BOLLARD
FOREST PRESERVATION AREA
DRYWELL
MICRO BIO-RETENTION
EXISTING GIS CONTOUR
SWM EASEMENT
DIRECTION OF THE FLOW
LIMIT OF DISTURBANCE
DRAINAGE AREA

STORMWATER MANAGEMENT INFORMATION table with columns: LOT/PARCEL NUMBER, FACILITY NAME & NUMBER, PRACTICE TYPE (QUANTITY), PUBLIC, PRIVATE, HOA MAINTAINS.

MODERATE INCOME HOUSING UNIT (MIHU) APPLICATION EXEMPTION TRACKING table with columns: TOTAL NUMBER OF LOTS/UNIT PROPOSED, TOTAL NUMBER OF MIHU'S REQUIRED, NUMBER OF MIHU'S PROVIDED ONSITE, NUMBER OF APFO ALLOCATIONS REQUIRED, MIHU FEE-IN-LIEU.

COORDINATE CHART table with columns: POINT, NORTHING, EASTING.

ADDRESS CHART table with columns: LOT/PARCEL NUMBER, ADDRESS.

STORMWATER MANAGEMENT PRACTICE CHART BY LOT table with columns: LOT/PARCEL NUMBER, ADDRESS, ESD PRACTICE.

LOT INFORMATION table with columns: LOT TYPE, LOTS, MINIMUM LOT SIZE, MINIMUM LOT WIDTH AT FRONT BRL.

HYDROLOGIC SOIL GROUP table with columns: MAP UNIT SYMBOL, MAP UNIT NAME, RATING, K-VALUE.

SITE ANALYSIS DATA CHART table with columns: TOTAL PROJECT AREA (GROSS), AREA OF PLAN SUBMISSION, PRESENT ZONING DESIGNATION, TOTAL NO. OF UNITS ALLOWED, TOTAL NO. OF UNITS PROPOSED, AREA OF OPEN SPACE REQUIRED, MIN. LOT SIZE BASED ON 10% OPEN SPACE, AREA OF WETLAND AND BUFFER, AREA OF 100-YR FLOODPLAIN, AREA OF FOREST, AREA OF STEEP SLOPES (15% TO 25%), AREA OF STEEP (> 25% OR GREATER), HIGHLY ERODIBLE SOILS (K>0.25), NET TRACT AREA, LIMIT OF DISTURBANCE AREA, PROPOSED USE, IMPERVIOUS COVER, PROPOSED WATER SYSTEM, PROPOSED SEWER SYSTEM.

SHEET INDEX table with a list of sheet numbers and descriptions, including COVER SHEET, EXISTING CONDITION PLAN, SITE PLAN I, SITE PLAN II, SITE DETAIL, PRE CONSTRUCTION DRAINAGE AREA MAP, POST CONSTRUCTION DRAINAGE AREA MAP, BMP DRAINAGE AREA MAP, STORMWATER DETAILS, STORMWATER PRACTICE TABLES, E&S GENERAL NOTES AND DETAILS, EXISTING SEDIMENT AND EROSION CONTROL PLAN-I, EXISTING SEDIMENT AND EROSION CONTROL PLAN-II, PROPOSED SEDIMENT AND EROSION CONTROL PLAN-I, PROPOSED SEDIMENT AND EROSION CONTROL PLAN-II, LANDSCAPE PLAN-1, BMP LANDSCAPE PLAN & BORING LOGS, SIGHT INTERSECTION LINE PLAN.

COVER SHEET
NORDAU, SECTION E-2, LOTS 11-12
A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
6/8/2023
CHIEF, BUREAU OF HIGHWAYS
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
6/6/2023
CHIEF, DEVELOPMENT AND ENGINEERING DIVISION
6/8/2023
CHIEF, DIVISION OF LAND DEVELOPMENT

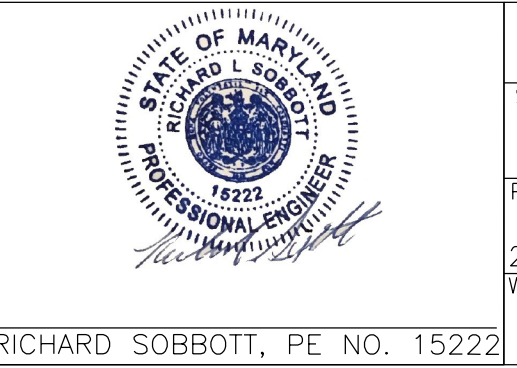
THE FOLLOWING COMPANIES WERE NOTIFIED BY MISS UTILITY (1-800-282-8555) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.

UTILITY COMPANY PHONE NUMBER table listing BGE ELECTRIC-USIC, BGE GAS-USIC, COLONIAL PIPELINE, HWD CO GOVT, HOWARD COUNTY WATER/SEWER, COMCAST/UTILIQUEST, COMCAST-FIBER/UTILIQUEST, VERIZON, AT&T.

BIO-SWALE TABLE table with columns: BS FACILITY #, WIDTH (FT.), LENGTH (FT.), OWNER (PRIVATE/PUBLIC), MAINTENANCE (PRIVATE/PUBLIC/JOINT).

NOTE:
1. HOUSES MAY NOT BE BUILT USING THIS PLAN.
2. ALL WATER CONNECTIONS SHALL BE 1.5" OR 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO COUNTY DETAIL W-3.28 OUTSIDE METER SETTINGS.

OPEN SPACE TABULATION
IN ACCORDANCE WITH SECTION 16.121(A)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS THE OPEN SPACE REQUIREMENTS FOR THIS R-12 PROJECT IS 10% OF GROSS AREA (2.885 AC. GROSS AREA x 10%=0.29 AC.)
OPEN SPACE PROVIDED CREDITED IS 0.386 AC.
O.S. LOT 10 0.386 AC.



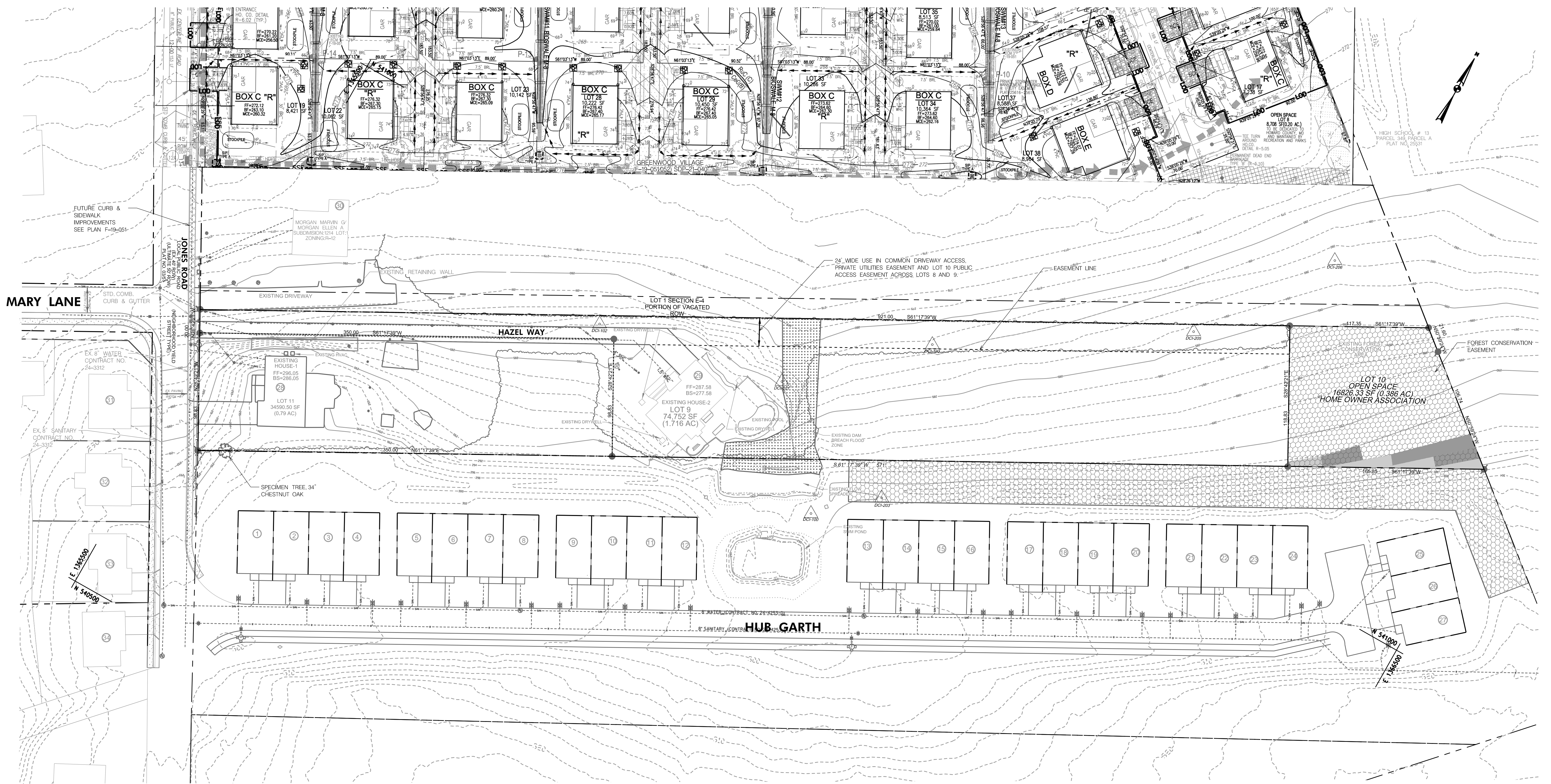
PERMIT INFORMATION CHART table with columns: Subdivision Name, Section/Area, Lot No., Parcel No., Plat #, Grid, Zoning, Tax Map No., Elect. District, Census Tract, Water Code, Sewer Code.

OWNER/DEVELOPER
LYN MYRICK CABASSA, MICHEL A. CABASSA JR., JESSUP MD, 20794 HOWARD COUNTY
JAMES ROBERT HUNT III, SHANNON M. HUNT, 7915 HAZEL WAY, JESSUP MD, 20794 HOWARD COUNTY
ATTN:jyncaba@gmail.com
PHONE:(301)725-3960

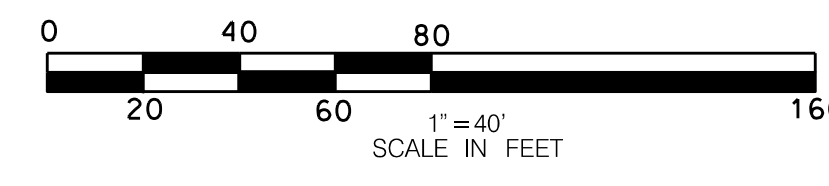
DCI DANIEL CONSULTANTS INC. CONSULTING ENGINEERS AND PLANNERS
8550 ROUTE 108 E., SUITE 229 COLUMBIA, MD 21043
TEL : 410-995-0090 FAX: 410-992-7038

DESIGN BY: BW
DRAWN BY: BW
CHECKED BY: RLS
SCALE: AS SHOWN
DATE: 11/01/2022
W. O. No.:
SHEET No. 01 OF 18

NOTE: FOR PROPERTY INFORMATION SEE SHEET 10.



EXISTING CONDITION PLAN
NORDAU, SECTION E-2, LOTS 11-12
A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8



APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 6/8/2023
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 6/6/2023
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DocuSigned by:
Richard Sobott
 2718559687C410...



RICHARD SOBBOTT, PE NO. 15222



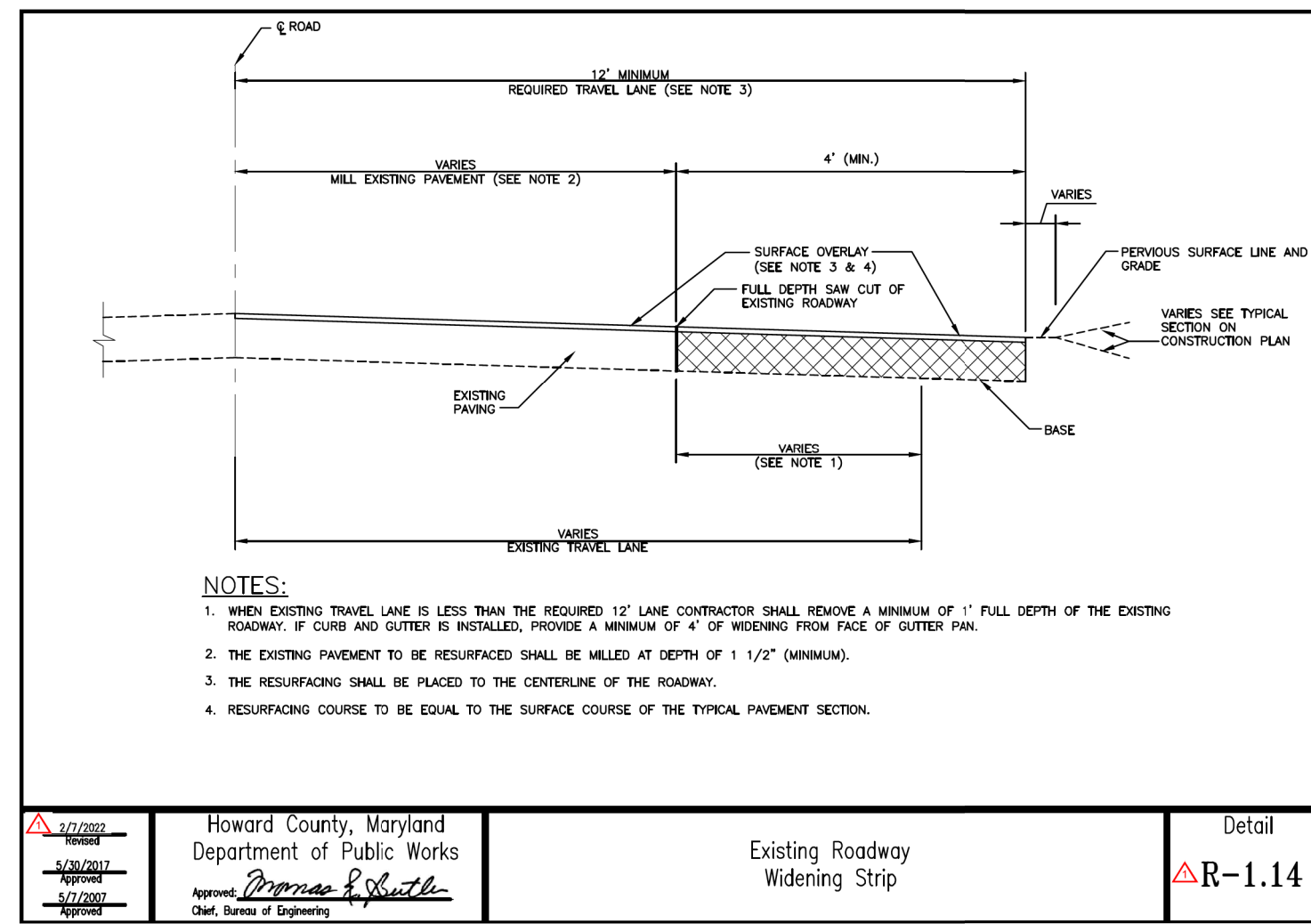
DANIEL L. CABASSA, PE NO. 18222

PERMIT INFORMATION CHART					
Subdivision Name:		Section/Area		Lot No.	Parcel No.
NORDAU		E-6		8,9,10	142
Plot #	Grid	Zoning	Tax Map No.	Elect. District	Census Tract
20317	0024	R-12	0042	SIXTH	606901
Water Code		Sewer Code			
		SIXTH			

OWNER/DEVELOPER
 LYN MYRICK CABASSA, SHANNON M. HUNT
 MIGUEL A. CABASSA JR., SHANNON M. HUNT
 8001 JONES ROAD, 7915 HAZEL WAY
 JESSUP MD, 20794 JESSUP MD, 20794
 HOWARD COUNTY, HOWARD COUNTY
 ATTN:lyncabassa@gmail.com
 PHONE:(301)725-3960



DESIGN BY: BW
 DRAWN BY: BW
 CHECKED BY: RLS
 SCALE: AS SHOWN
 DATE: 11/01/2022
 W. O. No.:
 SHEET No. 02 OF 18

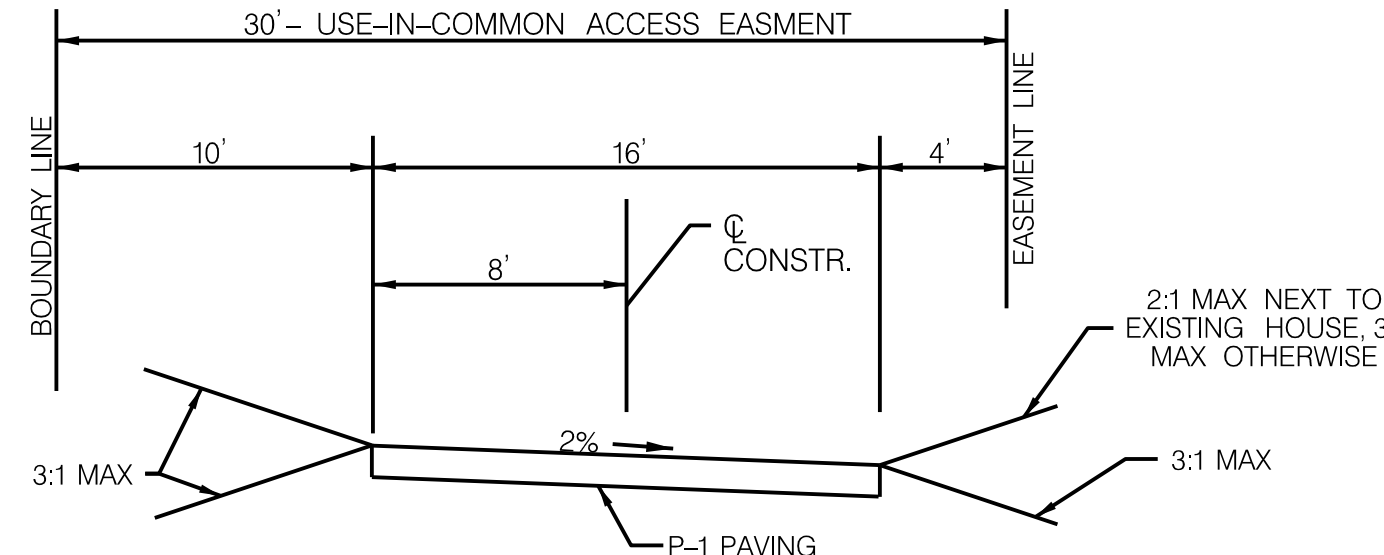


SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)	3 TO <5				5 TO <7				7 TO <9			
			MIN.	SUPERPAVE ASPHALT MIX WITH GAB	SUPERPAVE ASPHALT MIX WITH CONSTANT GAB	MIN.	SUPERPAVE ASPHALT MIX WITH GAB	SUPERPAVE ASPHALT MIX WITH CONSTANT GAB	MIN.	SUPERPAVE ASPHALT MIX WITH GAB	SUPERPAVE ASPHALT MIX WITH CONSTANT GAB	MIN.	SUPERPAVE ASPHALT MIX WITH GAB	SUPERPAVE ASPHALT MIX WITH CONSTANT GAB
P-1	PARKING BAYS; RESIDENTIAL AND NON-RESIDENTIAL PARKING DRIVE ASILES; RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY; USE-IN-COMMON DRIVEWAY	9.5 MM PG 64-22S, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
		19.0 MM PG 64-22S, LEVEL 1 (ESAL)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		19.0 MM PG 64-22S, LEVEL 1 (ESAL)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
		GRADED AGGREGATE BASE (GAB)	8.5	7.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
P-2	PARKING DRIVE ASILES; RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY; LOCAL ROADS; ACCESS DRIVEWAY; ACCESS STREET; CUL-DE-SACS; RESIDENTIAL	9.5 MM PG 64-22S, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
		19.0 MM PG 64-22S, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
		19.0 MM PG 64-22S, LEVEL 1 (ESAL)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
		GRADED AGGREGATE BASE (GAB)	8.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
P-3	PARKING DRIVE ASILES; RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY; LOCAL ROADS; ACCESS DRIVEWAY; ACCESS STREET; CUL-DE-SACS; MINOR RESIDENTIAL	9.5 MM PG 64-22S, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
		19.0 MM PG 64-22S, LEVEL 1 (ESAL)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
		19.0 MM PG 64-22S, LEVEL 1 (ESAL)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
		GRADED AGGREGATE BASE (GAB)	10.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		
P-4	MINOR COLLECTORS; NON-RESIDENTIAL MAJOR COLLECTORS	9.5 MM PG 64-22S, LEVEL 1 (ESAL)	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
		12.5 MM PG 64-22S, LEVEL 2 (LOW ESAL)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
		19.0 MM PG 64-22S, LEVEL 2 (LOW ESAL)	4.0	4.0	3.0	4.0	5.0	3.0	4.0	5.0	3.0	4.0		
		GRADED AGGREGATE BASE (GAB)	13.0	7.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		

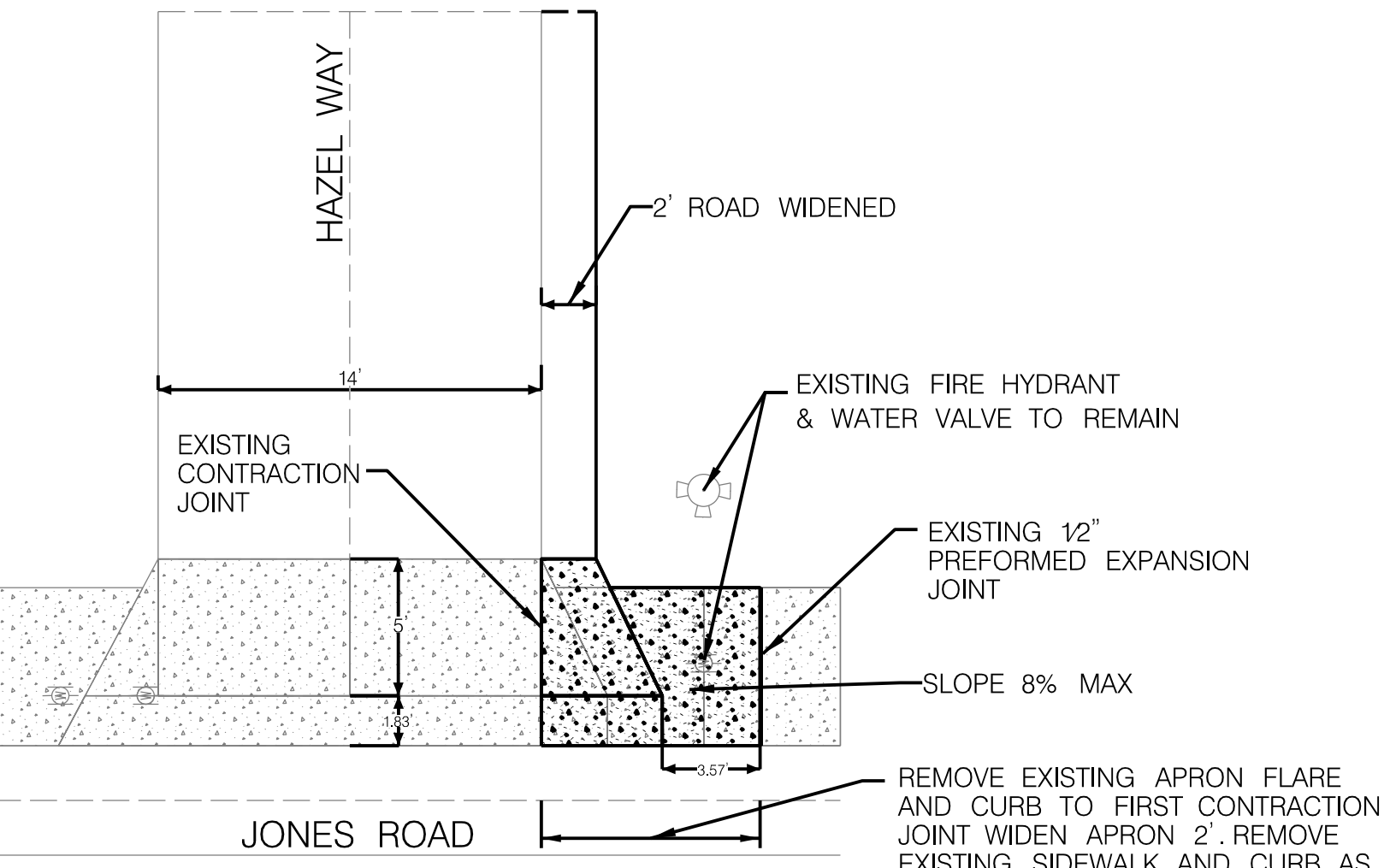
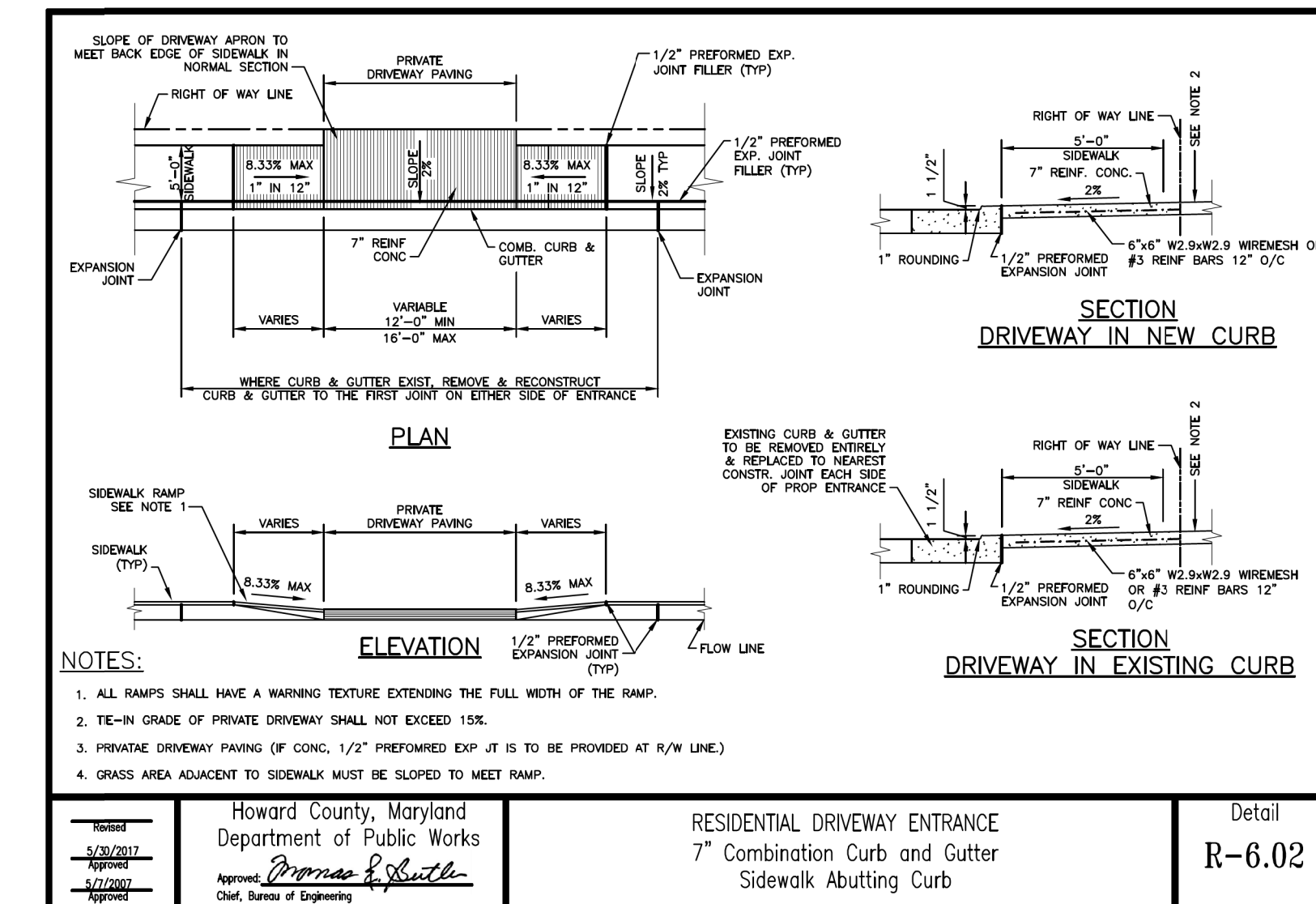
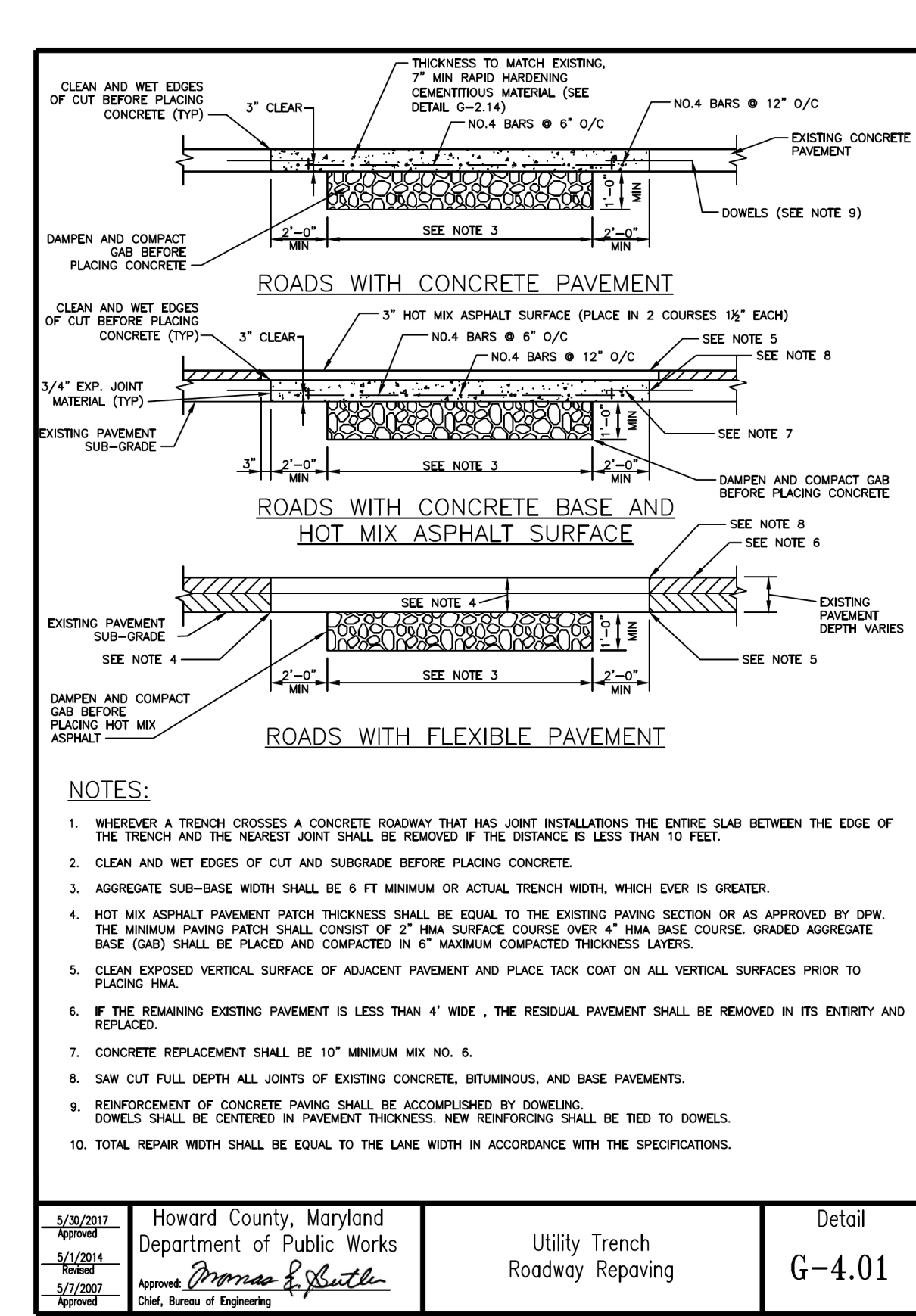
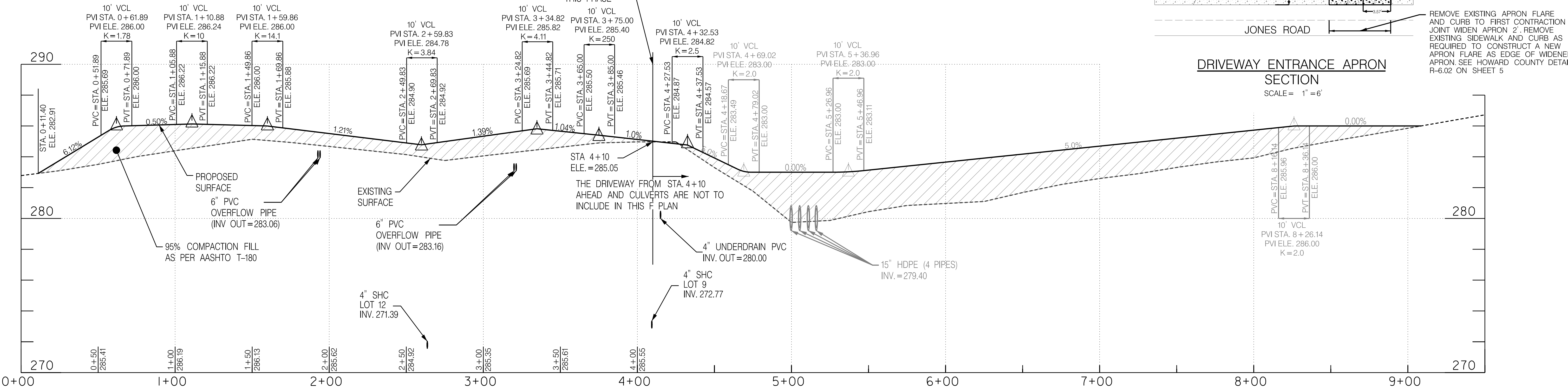
NOTES:

- HEAVY TRUCKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLUDING GARBAGE TRUCKS.
- SUPERPAVE ASPHALT MIX LAYERS SHALL BE PLACED IN APPROPRIATE COMPACTED LIFT THICKNESS: 19.0 MM BASE (2.0" MIN. TO 4.0" MAX.), 12.5 MM SURFACE (1.5" MIN. TO 3.0" MAX.), AND 9.5 MM SURFACE (1.0" MIN. TO 2.0" MAX.).
- GRADED AGGREGATE BASE (GAB) TO BE PLACED AND COMPACTED IN 6" MAX. COMPACTED THICKNESS LAYERS.
- THE INTERMEDIATE SURFACE COURSE LAYER MUST BE PLACED WITHIN 2 WEEKS OF PLACEMENT OF BASE COURSE, AND IS REQUIRED PRIOR TO SUBSTANTIAL COMPLETION INSPECTION AND BOND REDUCTION.
- IN LIEU OF PLACING THE INTERMEDIATE SURFACE COURSE LAYER FOR COMMERCIAL/INDUSTRIAL ENTRANCE APRONS WITHIN THE COUNTY RIGHT-OF-WAY WHERE AUXILIARY LANES ARE NOT REQUIRED, THE THICKNESS OF THE INTERMEDIATE PAVEMENT LAYER CAN BE ADDED TO THE REQUIRED THICKNESS OF THE BASE ASPHALT LAYER.
- THE CONSTRUCTION DRAWINGS SHALL SHOW THE PAVING SECTION, ROAD CLASSIFICATION AND CBR VALUE FOR EACH ROADWAY.

Howard County, Maryland
Department of Public Works
PAVING SECTIONS P-1 to P-4
Detail
R-2.01



USE-IN-COMMON DRIVEWAY TYPICAL ROADWAY SECTION SECTION NOT TO SCALE



DRIVEWAY ENTRANCE APRON SECTION SCALE = 1" = 6'

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
6/8/2023
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
6/6/2023
CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DIVISION OF LAND DEVELOPMENT

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Richard Sobott
2718589802C1410

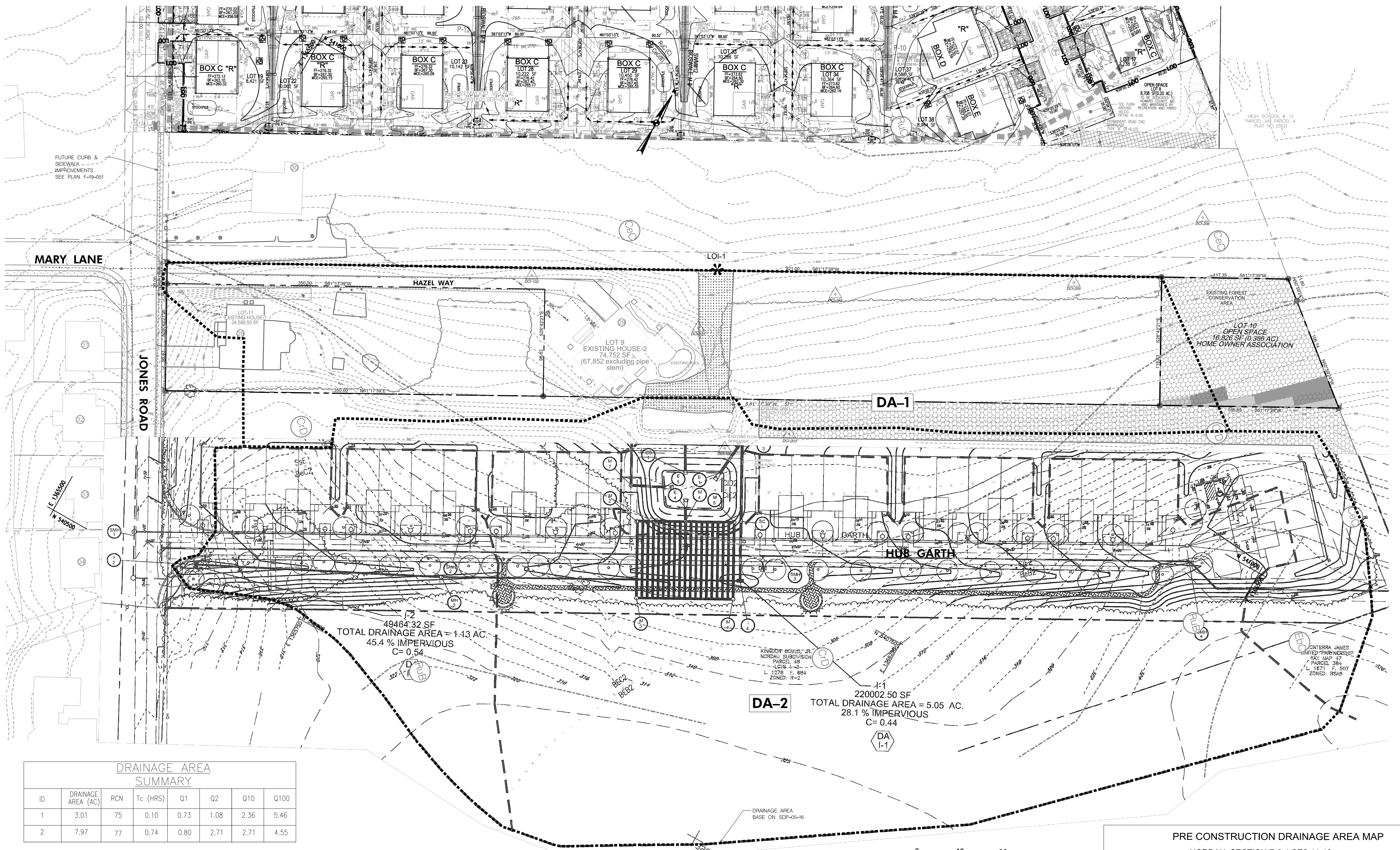
DocuSigned by:
RICHARD SOBBOTT, PE NO. 15222

PERMIT INFORMATION CHART			
Subdivision Name: NORDAU	Section/Area E-6	Lot No. 8,9,10	Parcel No. 142
Plot # 20317	Grid 0024	Zoning R-12	Tax Map No. 0042
Water Code	Elect. District SIXTH	Census Tract 606901	

OWNER/DEVELOPER
LYN MYRICK CABASSA, MIQUEL A. CABASSA JR., 8001 JONES ROAD, JESSUP MD, 20794 HOWARD COUNTY
JAMES ROBERT HUNT III, SHANNON M. HUNT, 7915 HAZEL WAY, JESSUP MD, 20794 HOWARD COUNTY
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8550 ROUTE 108 E., SUITE 229
COLUMBIA, MD 21043
TEL : 410-995-0090 FAX: 410-992-7038

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SHEET No. 05 OF 18



DRAINAGE AREA SUMMARY

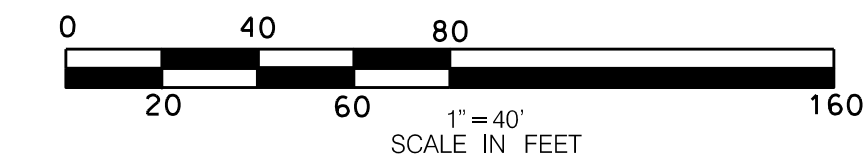
ID	DRAINAGE AREA (AC)	RCN	Tc (HRS)	Q1	Q2	Q10	Q100
1	3.01	75	0.10	0.73	1.08	2.36	5.46
2	7.97	77	0.74	0.80	2.71	2.71	4.55

PEAK FLOW SUMMARY (LOI 1)

ID	P1	P2	P10	P100
1	2.9	4.4	9.6	21.7
2	3.5	5.2	11.2	25.1
COMBINED	4.2	6.2	14.2	33.1

49464.32 SF
TOTAL DRAINAGE AREA = 1.43 AC.
45.4 % IMPERVIOUS
C = 0.54

220002.50 SF
TOTAL DRAINAGE AREA = 5.05 AC.
28.1 % IMPERVIOUS
C = 0.44



PRE CONSTRUCTION DRAINAGE AREA MAP
NORDAU, SECTION E-2, LOTS 11-12
A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

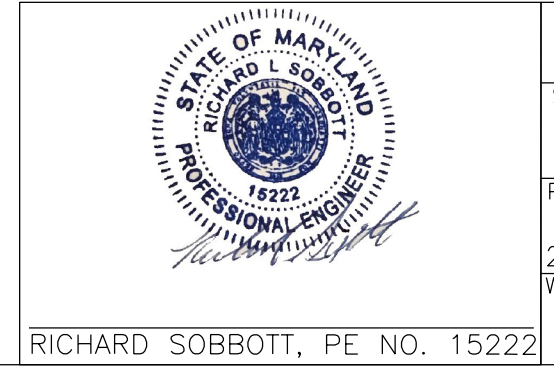
APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
6/8/2023
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
6/6/2023
CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DIVISION OF LAND DEVELOPMENT

DocuSigned by:
Richard Sobott
271859902C410

DocuSigned by:
[Signature]



PERMIT INFORMATION CHART

Subdivision Name: NORDAU	Section/Area E-6	Lot No. 8,9,10	Parcel No. 142
Plot # 20317	Grid 0024	Zoning R-12	Elect. District SIXTH
Water Code		Census Tract 606901	

OWNER/DEVELOPER

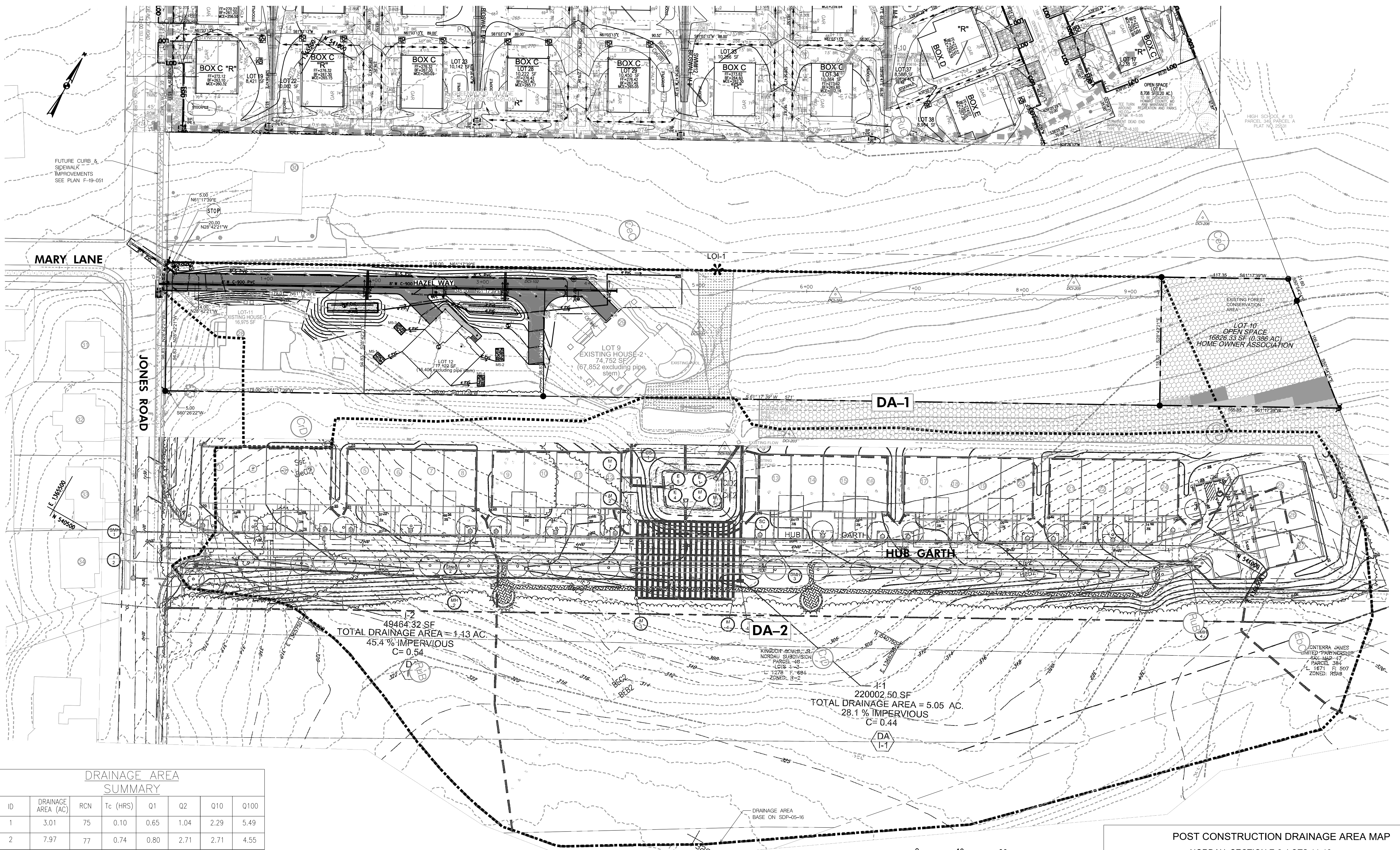
LYN MYRICK CABASSA, MIQUEL A. CABASSA JR., SHANNON M. HUNT
8001 JONES ROAD
JESSUP MD, 20794
HOWARD COUNTY

JAMES ROBERT HUNT III, 7915 HAZEL WAY
JESSUP MD, 20794
HOWARD COUNTY

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PHONE:(301)725-3960



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SHEET No. 06 OF 18



DRAINAGE AREA SUMMARY

ID	DRAINAGE AREA (AC)	RCN	Tc (HRS)	Q1	Q2	Q10	Q100
1	3.01	75	0.10	0.65	1.04	2.29	5.49
2	7.97	77	0.74	0.80	2.71	2.71	4.55

PEAK FLOW SUMMARY (LOI 1)

ID	P1	P2	P10	P100
1	2.9	4.4	9.6	21.7
2	3.5	5.2	11.2	25.1
COMBINED	4.2	6.2	14.2	33.1

DocuSigned by:

 Richard Sobott
 27185596817410

DocuSigned by:


PROFESSIONAL ENGINEER
 RICHARD SOBBOTT, PE NO. 15222

PERMIT INFORMATION CHART

Subdivision Name: NORDAU		Section/Area E-6	Lot No. 8,9,10	Parcel No. 142
Plot # 20317	Grid 0024	Zoning R-12	Elect. District 0042	Census Tract SIXTH
Water Code	0024	R-12	0042	606901

OWNER/DEVELOPER

LYN MYRICK CABASSA, MIQUEL A. CABASSA JR., 8001 JONES ROAD, JESSUP MD, 20794 HOWARD COUNTY

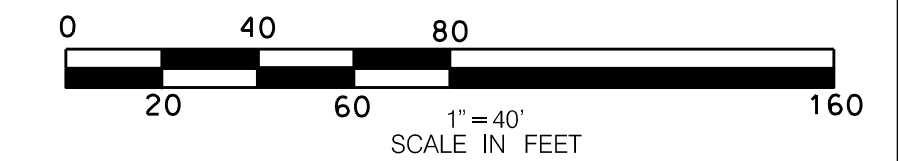
JAMES ROBERT HUNT III, SHANNON M. HUNT, 7915 HAZEL WAY, JESSUP MD, 20794 HOWARD COUNTY

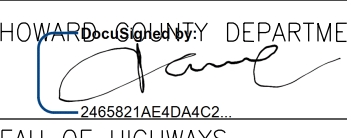
ATTN: lyncaba@gmail.com
 PHONE: (301) 725-3960

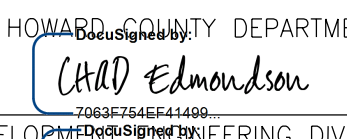


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 W. O. No.:
 SHEET No. 02 OF 18

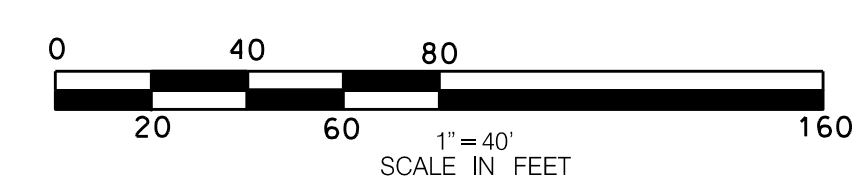
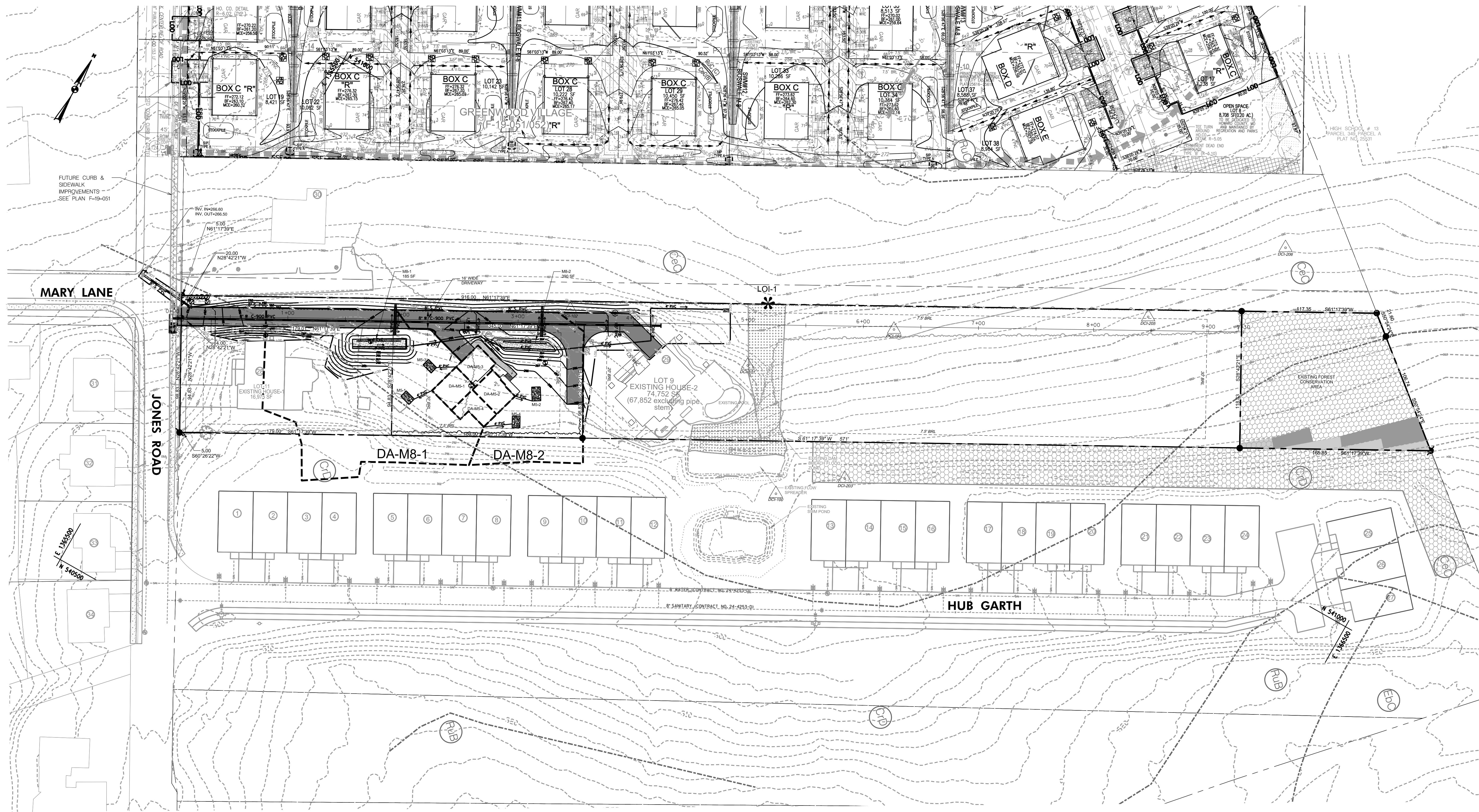
POST CONSTRUCTION DRAINAGE AREA MAP
 NORDAU, SECTION E-2, LOTS 11-12
 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8



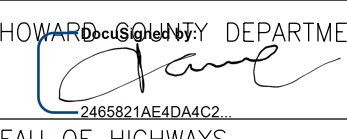
APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

 6/8/2023
 CHIEF, BUREAU OF HIGHWAYS

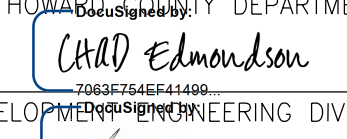
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 6/6/2023
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

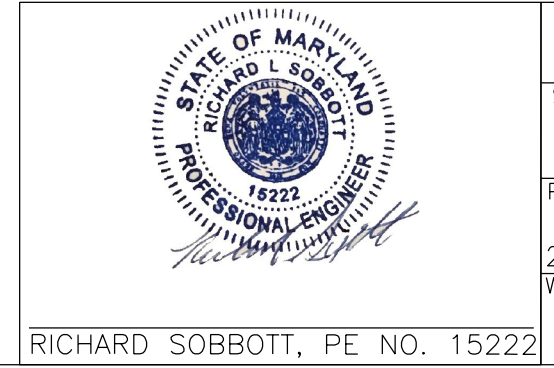
CHIEF, DIVISION OF LAND DEVELOPMENT



BMP DRAINAGE AREA MAP
 NORDAU, SECTION E-2, LOTS 11-12
 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

 6/8/2023
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 6/6/2023
 CHIEF, DEVELOPMENT ENGINEERING DIVISION, DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE



PERMIT INFORMATION CHART			
Subdivision Name:	Section/Area	Lot No.	Parcel No.
NORDAU	E-6	8,9,10	142
Plot #	Grid	Zoning	Tax Map No.
20317	0024	R-12	0042
Water Code	Elect. District	Census Tract	
	SIXTH	606901	
	Sewer Code		

OWNER/DEVELOPER
 LYN MYRICK CABASSA, MICHEL A. CABASSA JR., SHANNON M. HUNT
 8001 JONES ROAD, 7915 HAZEL WAY
 JESSUP MD, 20794 JESSUP MD, 20794
 HOWARD COUNTY, HOWARD COUNTY
 ATTN:lynecaba@gmail.com
 PHONE:(301)725-3960



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 DRAWN BY: BW
 CHECKED BY: RLS
 SCALE: AS SHOWN
 DATE: 11/01/2022
 W. O. No.:
 SHEET No. 08 OF 18

Appendix B.4. Construction Specifications for Environmental Site Design Practices

Table B.4.1 Materials Specifications for Micro-Bioretenion, Rain Gardens & Landscape Infiltration-

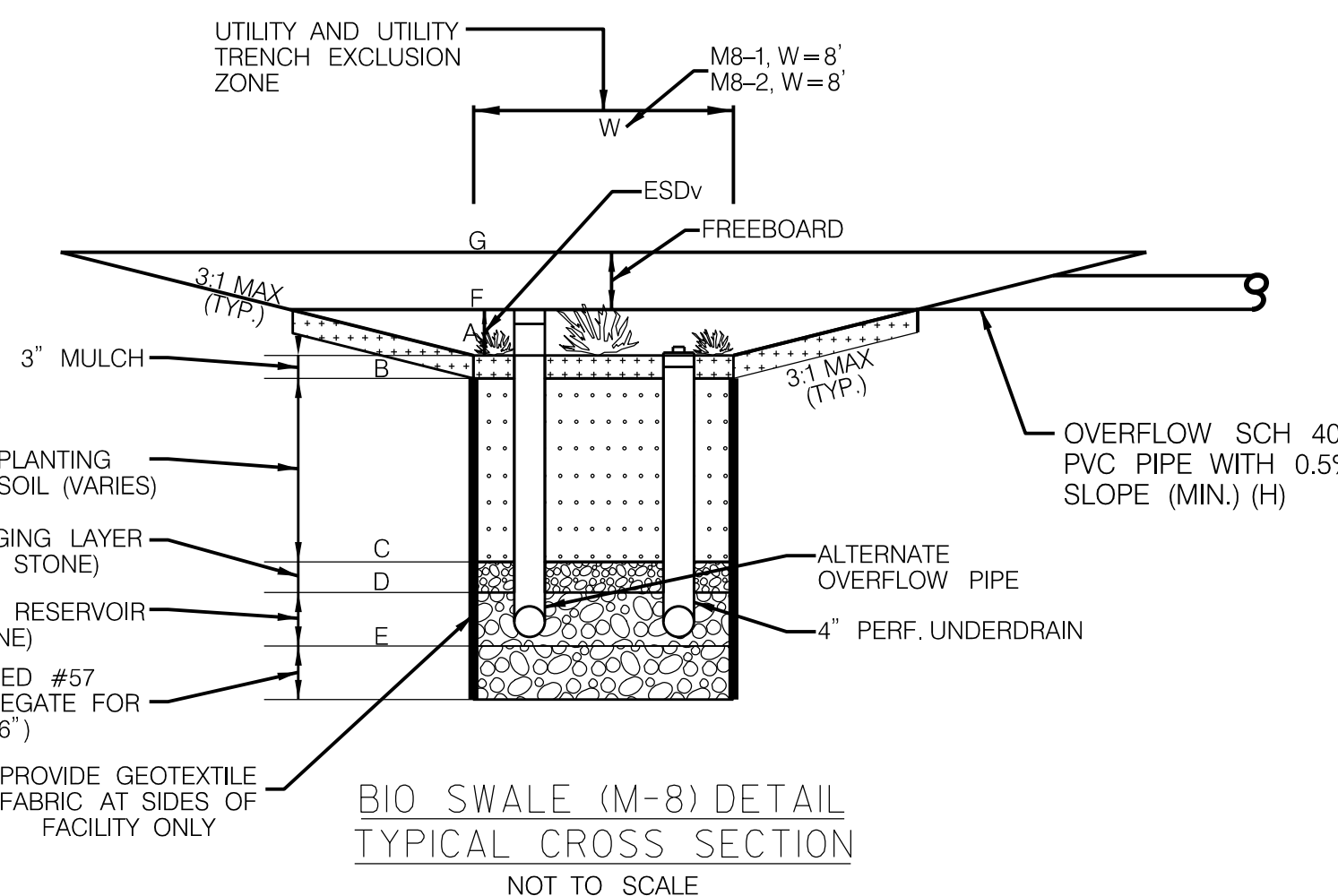
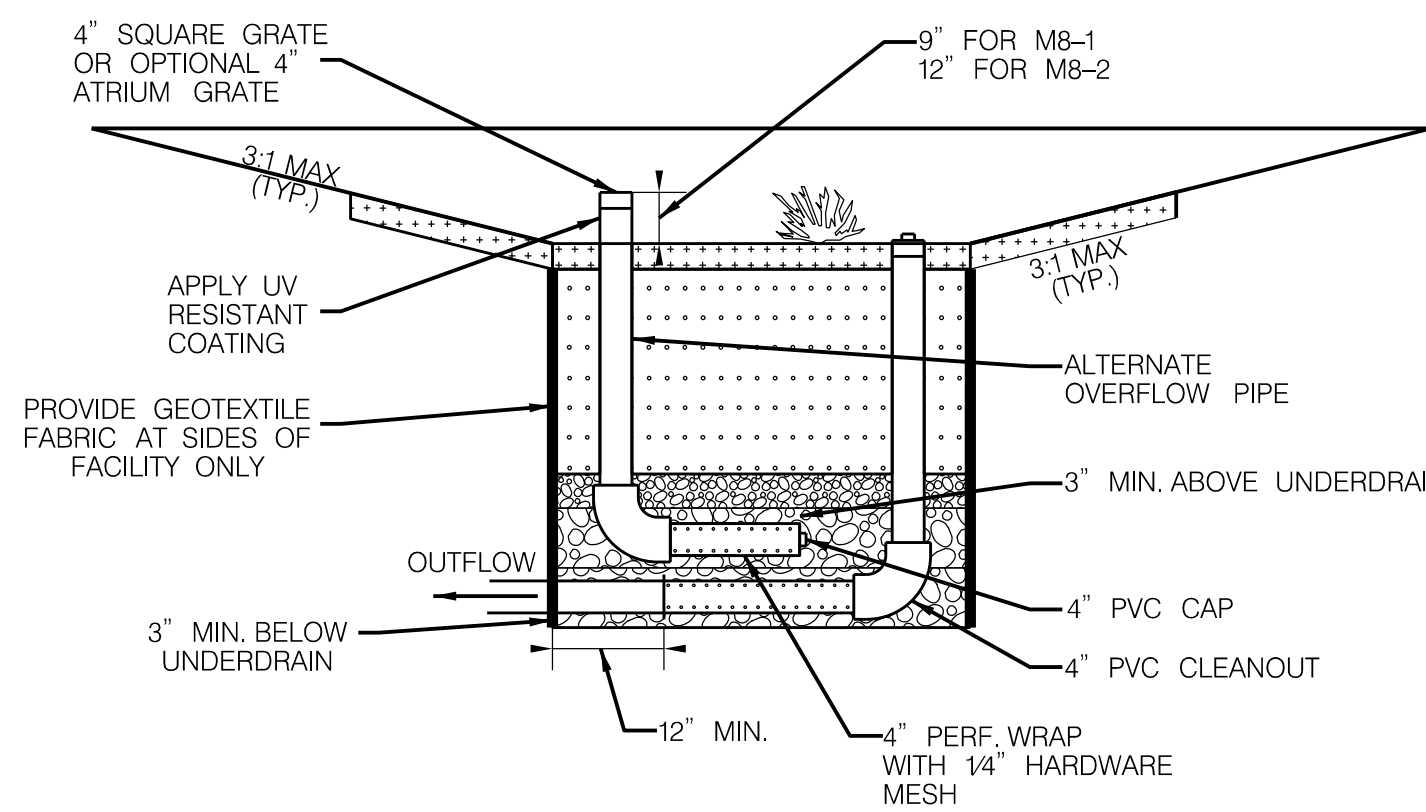
Material	Specification	Size	Notes
Plantings	see Appendix A, Table A.4	n/a	plantings are site-specific
Planting soil (2" to 4" deep)	loamy sand (60 - 65%) & compost (35 - 40%) or sandy loam (30%), coarse sand (30%) & compost (40%)	n/a	USDA soil types loamy sand or sandy loam; clay content < 5%
Organic content	Min. 10% by dry weight (ASTM D 2974)		
Mulch	shredded hardwood		aged 6 months, minimum; no pine or wood chips
Pea gravel diaphragm	pea gravel: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
Curtain drain	ornamental stone: washed cobbles	stone: 2" to 5"	
Geotextile		n/a	PE Type 1 nonwoven
Gravel (underdrains and infiltration berms)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" to 3/4")	
Underdrain piping	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/4-inch galvanized hardware cloth
Poured in place concrete (if required)	MSHA Mix No. 3; $f_c = 3500$ psi @ 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) <i>not using previously approved State or local standards</i> requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 350.R/89; vertical loading [H-10 or H-20]; allowable horizontal loading (based on soil pressures); and analysis of potential cracking
Sand	AASHTO-M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.

OPERATION AND MAINTENANCE SCHEDULE FOR BIO SWALE (M-8)

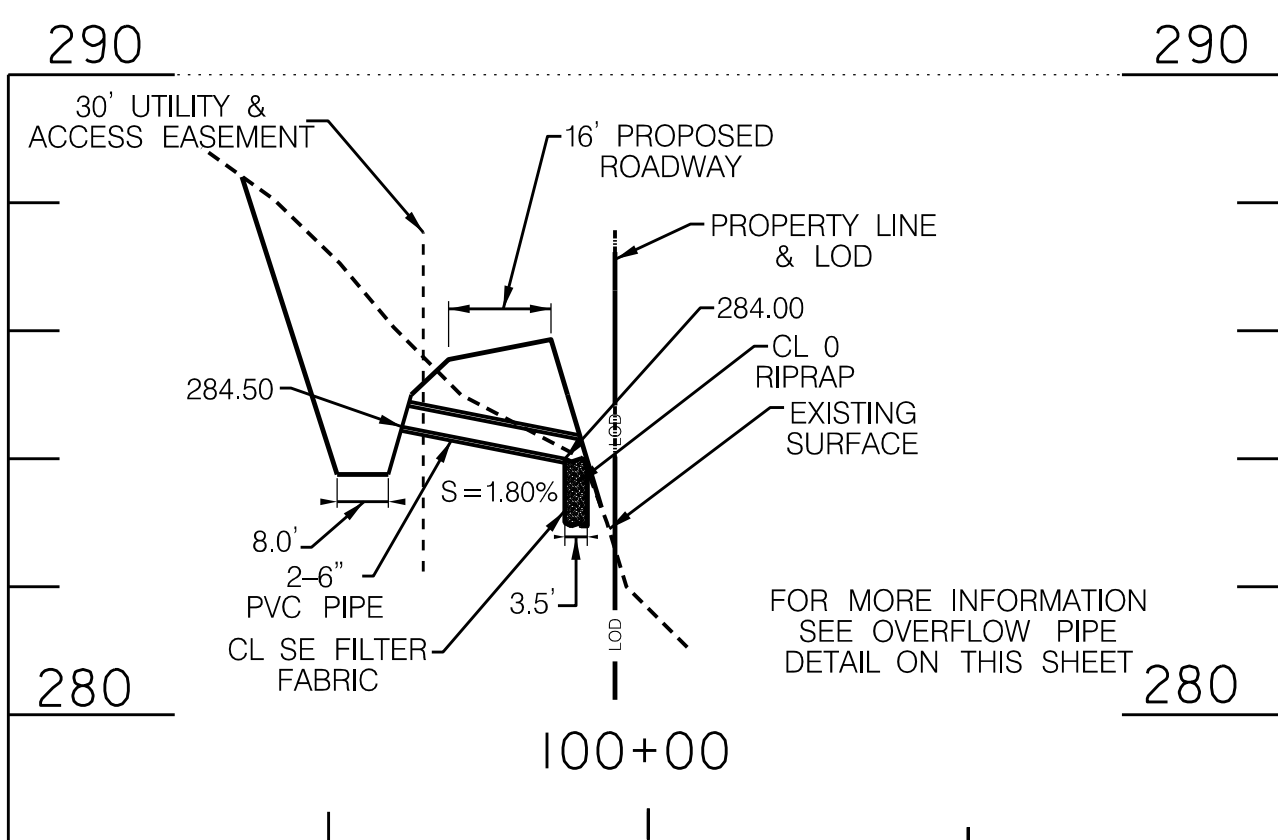
1. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUME II, TABLE A.4.1 AND 2.
2. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
3. THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
4. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

BIOSWALE FACILITY-DESIGN EVALUATION CHART

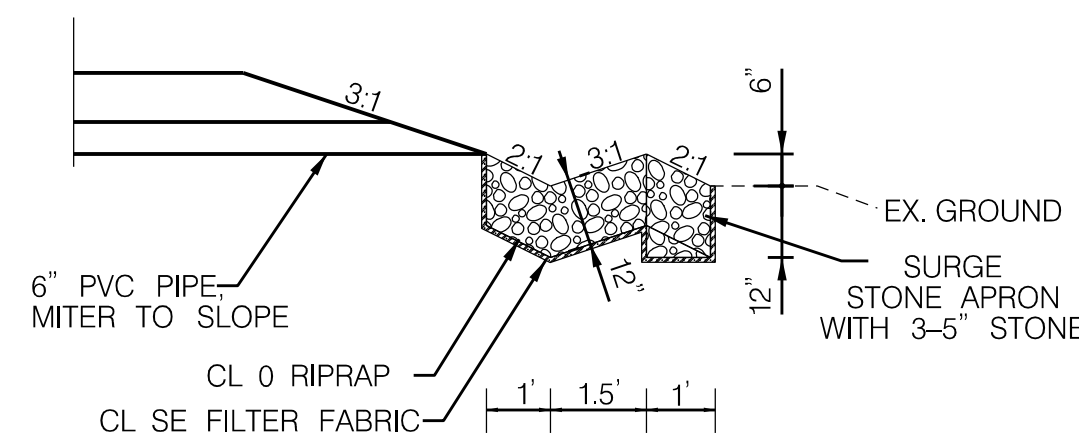
BS FACILITY #	ESD WSEL (F)	TOP MULCH (A)		TOP OF PLANTING SOIL (B)		TOP OF 4" BRIDGING LAYER (C)		TOP OF 7" STONE RESERVOIR (D)		TOP OF #57 AGGREGATE (E)		EDGE OF DRIVEWAY	LENGTH (FT.)	WIDTH (FT.)
		LOW END	HIGH END	LOW END	HIGH END	LOW END	HIGH END	LOW END	HIGH END	LOW END	HIGH END			
1	284.50	283.75	284.00	283.50	283.75	281.50	281.75	281.17	281.42	280.59	280.84	285.50	46	8
2	284.37	283.37	283.62	283.12	283.37	281.12	281.37	280.79	281.04	280.21	280.46	285.50	46	8



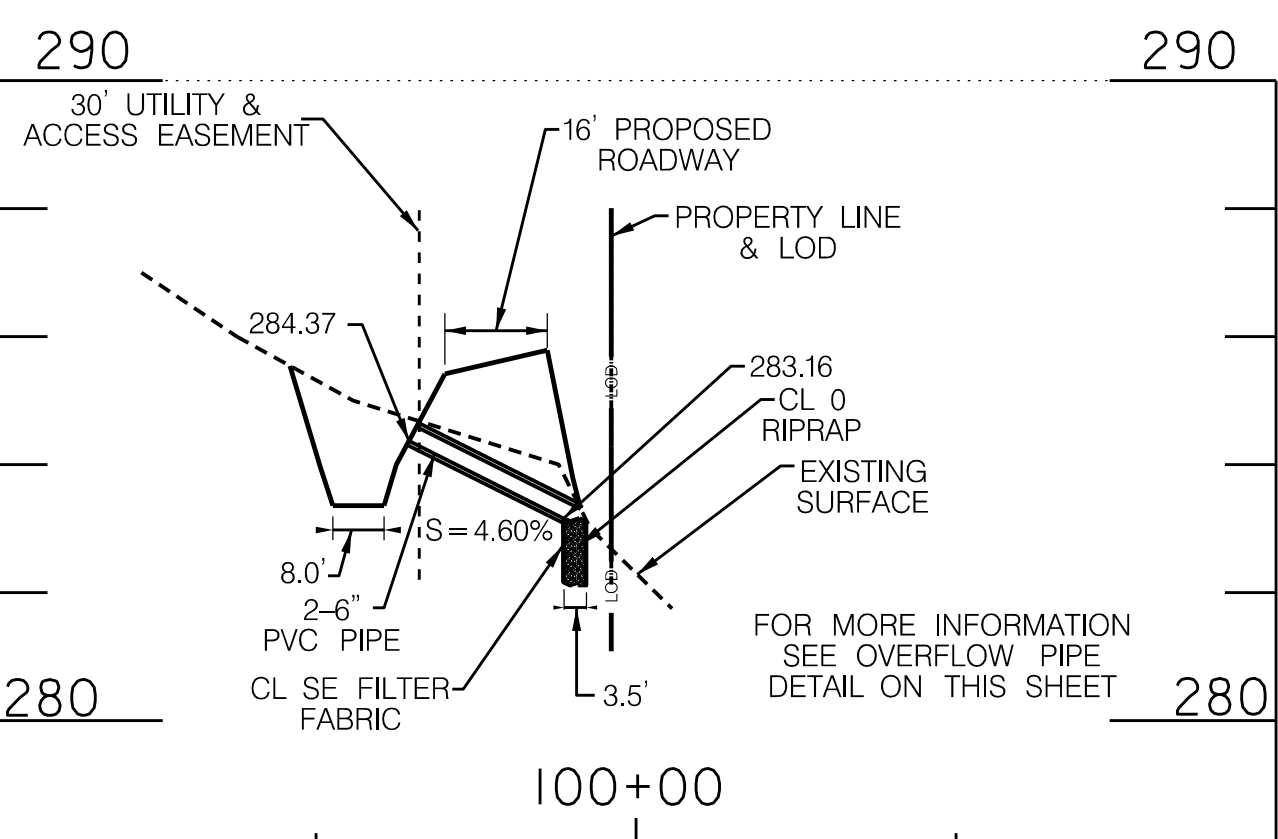
- NOTE:**
1. MINIMUM 5' DISTANCE NEED TO BE MAINTAINED BETWEEN CLEANOUT AND ALTERNATE OVERFLOW PIPE.
 2. UNDERDRAIN AND OVERDRAIN ARE SHOWN AT DIFFERENT ELEVATION FOR CLARITY, BUT THEY ARE TO BE CONSTRUCTED AT THE SAME ELEVATIONS.



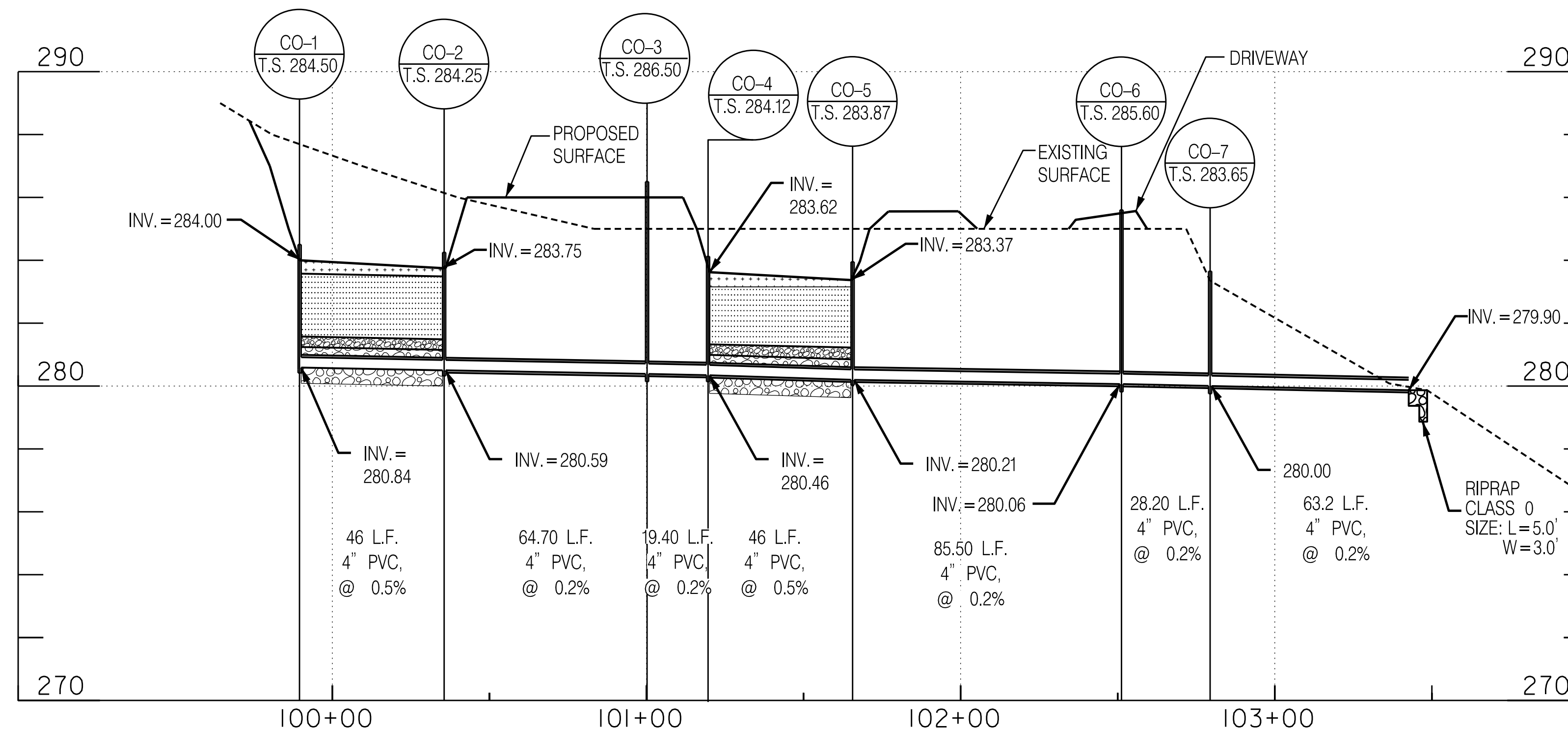
BIOSWALE (M8-1)
SCALE: 1"=50' HORIZ.
1"=5' VERT.



BMP PIPE OVERFLOW RIPRAP DETAIL
N.T.S.



BIOSWALE (M8-2)
SCALE: 1"=50' HORIZ.
1"=5' VERT.



UNDER DRAIN PROFILE
SCALE: 1"=30' HORIZ.
1"=3' VERT.

STORMWATER DETAILS
NORDAU, SECTION E-2, LOTS 11-12
A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
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6/6/2023
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CHIEF, DIVISION OF LAND DEVELOPMENT

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Richard Sobott
271855697C415

DocuSigned by:
Richard Sobott
271855697C415

RICHARD SOBBOTT, PE NO. 15222

PERMIT INFORMATION CHART			
Subdivision Name: NORDAU	Section/Area E-6	Lot No. 8,9,10	Parcel No. 142
Plot # 20317	Grid 0024	Zoning R-12	Tax Map No. 0042
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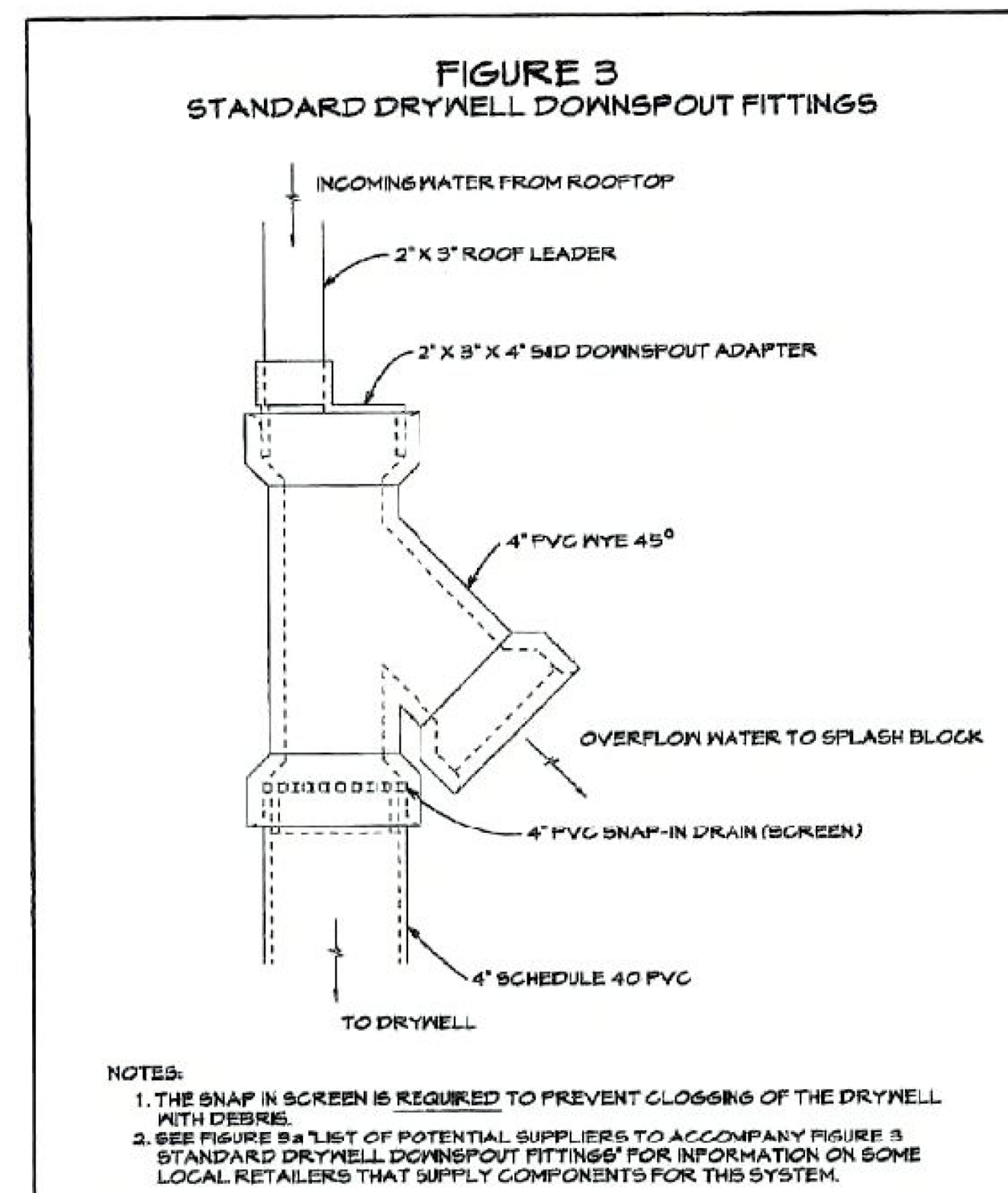
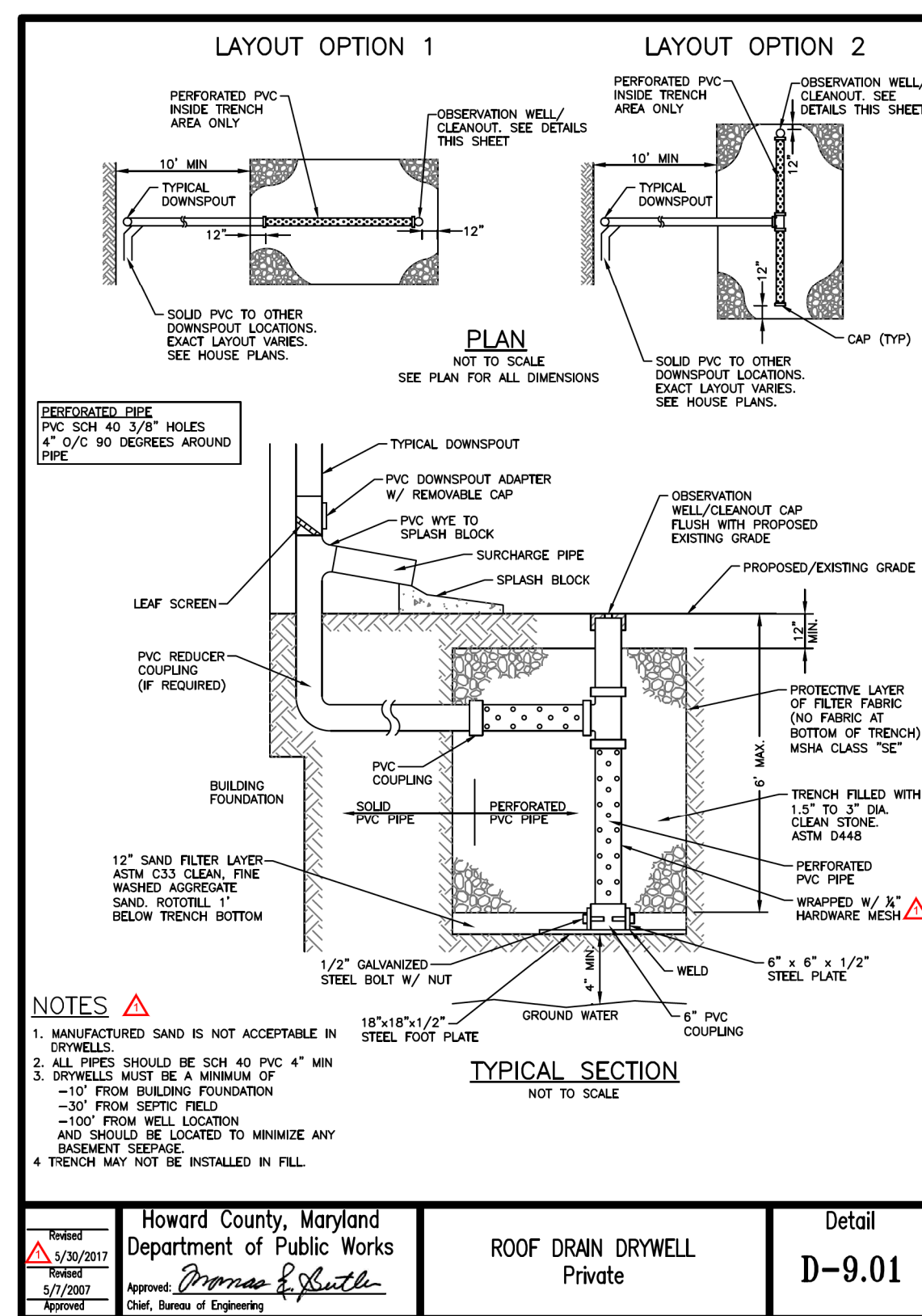
OWNER/DEVELOPER
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SHEET NO. 09 OF 18

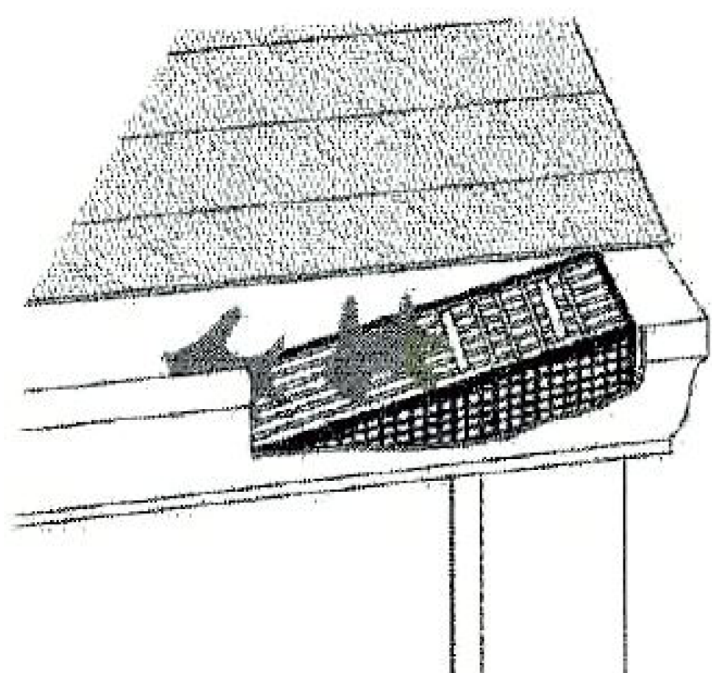
NO.	PROPERTY DESCRIPTION	NO.	PROPERTY DESCRIPTION	NO.	PROPERTY DESCRIPTION
1	BAKER CYNTHIA C/O WILLIAM KNOTT SUBDIVISION: 1209 LOT: UN1 PLAT NO: 20989 ZONING-R-12	12	BELGARD MARY C TR BEARD JENNIFER E TR ETAL SUBDIVISION: 1209 LOT: UN12 PLAT NO: 21007 ZONING-R-12	23	PALLARES MARIO ENRIQUE RAMIREZ RAMIREZ MARIA ELENA SUBDIVISION: 1209 LOT: UN23 PLAT NO: 21007 ZONING-R-12
2	AHLERS CLARKE F SUBDIVISION: 1209 LOT: UN2 PLAT NO: 20989 ZONING-R-12	13	HARVEY BRIAN K HARVEY DEBI SUBDIVISION: 1209 LOT: UN13 PLAT NO: 21007 ZONING-R-12	24	BROWNE CAMILLE J BROWNE CARMINE D SUBDIVISION: 1209 LOT: UN24 PLAT NO: 21007 ZONING-R-12
3	BULLINGER MARLENE A CARTER ROGER ETAL SUBDIVISION: 1209 LOT: UN3 PLAT NO: 20989 ZONING-R-12	14	WITHROW MITZ SUBDIVISION: 1209 LOT: UN14 PLAT NO: 21007 ZONING-R-12	25	SK KING GEORGE LLC C/O WILLIAM KNOTT SUBDIVISION: 1209 LOT: GEE PLAT NO: 21007 ZONING-R-12
4	ADEVOH ERNEST K ADEVOH PATRICIA M SUBDIVISION: 1209 LOT: UN4 PLAT NO: 20989 ZONING-R-12	15	WADE OLLIE SUBDIVISION: 1209 LOT: UN15 PLAT NO: 21007 ZONING-R-12	26	CAVANAGH KATHLEEN M CAVANAGH BRIAN SUBDIVISION: 1209 LOT: UN25 PLAT NO: 21007 ZONING-R-12
5	COBERT G WILLIAM COBERT KATHARINE J SUBDIVISION: 1209 LOT: UN5 PLAT NO: 20989 ZONING-R-12	16	PIPGRASS CAMDEN WEBSTER PAMELA SUE SUBDIVISION: 1209 LOT: UN16 PLAT NO: 21007 ZONING-R-12	27	LEWIS ROSA M SUBDIVISION: 1209 LOT: UN26 PLAT NO: 21007 ZONING-R-12
6	HIRTH JAMES HIRTH MARIA SUBDIVISION: 1209 LOT: UN6 PLAT NO: 20989 ZONING-R-12	17	D'ANTUONO LOUIS P SUBDIVISION: 1209 LOT: UN17 PLAT NO: 20989 ZONING-R-12	28	CABASSA MIGUEL A JR MYRICK CABASSA LYN T/E SUBDIVISION: 1214 LOT: 8 PLAT NO: 20317 ZONING-R-12
7	GUSDOFF BETTY WHIM TRUSTEE SUBDIVISION: 1209 LOT: UN7 PLAT NO: 20989 ZONING-R-12	18	LEE CHUN S LEE TAE B SUBDIVISION: 1209 LOT: UN18 PLAT NO: 21007 ZONING-R-12	29	HUNT JAMES ROBERT III HUNT SHANNON M ETAL J/T SUBDIVISION: 1214 LOT: 9 PLAT NO: 20317 ZONING-R-12
8	BEARD JENNIFER E BEARD STEPHEN F SUBDIVISION: 1209 LOT: UN8 PLAT NO: 20989 ZONING-R-12	19	FITZGERALD RONALD FITZGERALD MARGARET SUBDIVISION: 1209 LOT: UN19 PLAT NO: 21007 ZONING-R-12	30	MORGAN MARVIN G MORGAN ELLEN A SUBDIVISION: 1214 LOT: 1 ZONING-R-12
9	MCKINZEY JOANN SUBDIVISION: 1209 LOT: UN9 PLAT NO: 20989 ZONING-R-12	20	SURIN MARIE ST SUBDIVISION: 1209 LOT: UN20 PLAT NO: 21007 ZONING-R-12	31	LEATHERMAN IAN ANDREW LEATHERMAN LAURA EMILY SUBDIVISION: 1002 LOT: 2 PLAT NO: 20277 ZONING-R-12
10	RIDICK BELLAH MAE SUBDIVISION: 1209 LOT: UN10 PLAT NO: 20989 ZONING-R-12	21	CURTIN JAMES JOHN CURTIN BARBARA ANN SUBDIVISION: 1209 LOT: UN21 PLAT NO: 21007 ZONING-R-12	32	DAGOSTINO KEVIN DAGOSTINO KAITLIN SUBDIVISION: 1002 LOT: 3 PLAT NO: 20277 ZONING-R-12
11	BRUNNER CHRISTINE SANDRA SUBDIVISION: 1209 LOT: UN11 PLAT NO: 20989 ZONING-R-12	22	SCHAEFER ARLENE B SUBDIVISION: 1209 LOT: UN22 PLAT NO: 21007 ZONING-R-12	33	RAJPARA NILESH D RAJPARA DEEPAU N SUBDIVISION: 1002 LOT: 4 PLAT NO: 20277 ZONING-R-12
				34	MYERS JUSTIN MYERS MARY SUBDIVISION: 1002 LOT: 5 PLAT NO: 20277 ZONING-R-12

DRYWELL DIMENSIONS				
BMP NO.	DESIGN			
	LENGTH	WIDTH	DEPTH	
M5-1	10	6.6	5	
M5-2	10	6.9	5	
M5-3	10	7.1	5	
M5-4	10	6.2	5	



OPERATION AND MAINTENANCE SCHEDULE FOR DRY WELLS (M-5)

1. DRYWELLS SHALL BE INSPECTED AND CLEANED ANNUALLY. THIS INCLUDE PIPES, GUTTERS, DOWNSPOUTS AND ALL FILTERS.
2. PONDING, STANDING WATER OR ALGAE GROWTH ON THE TOP OF A DRYWELL MAY INDICATE FAILURE DUE TO SEDIMENTATION IN THE GRAVEL MEDIA.
3. IF WATER PONDING FOR MORE THAN 48 HOURS AFTER A MAJOR STORM OR MORE THAN 6" OF SEDIMENT HAS ACCUMULATED, THE GRAVEL MEDIA SHOULD BE EXCAVATED AND REPLACED.
4. PRIVATELY OWNED PRACTICES SHALL HAVE A MAINTENANCE PLAN AND SHALL BE PROTECTED BY EASEMENT, DEED RESTRICTION, ORDINANCE OR OTHER LEGAL MEASURES PREVENTING ITS NEGLECT, ADVERSE ALTERATION AND REMOVAL.



Gutter Drain Filter (Typical)

PROVIDE GUTTER DRAIN FILTER AT DOWNSPOUT LOCATIONS.

NORDAU SECTON E-2, LOTS 11-12 FINAL ESDV COMPUTATIONS													
SITE AREA:		0.75	AC	32618	SF								
IMPERVIOUS AREA		0.23		9836	SF								
TARGET Pe:		1.6	IN										
SITE IMPERVIOUS:		30%	PERCENT										
SITE Rv:		0.32											
SITE ESDv:		1397.8	CF										
S		0.13											
SITE REV		113.6	CF										
Rv=0.05+0.009*(% IMP)													
V min=1.0" rainfall		(1.0*Rv*A)/12											
V max=1 yr rainfall=2.6"		(2.6*Rv*A)/12											
Rev=ESDV*S													
DRAINAGE AREA	BMP ID	% IMPERVIOUS	Rv	DA (sf)	DA (ac)	MIN. VOL. (cf)	MAX. VOL. (cf)	Pe PROVIDED	ESDV VOL. PROVIDED (cf)	REV VOL. PROVIDED (cf)	IMPREV. (sf)	IMPERV. (ac)	GREEN AREA (ac)
LOT 12	M5-1	100	0.95	644	0.015	51.0	132.6	2.6	132.6	132.6	644	0.015	0.000
LOT 12	M5-2	100	0.95	671	0.015	53.1	138.1	2.6	138.1	138.1	671	0.015	0.000
LOT 12	M5-3	100	0.95	689	0.016	54.5	141.8	2.6	141.8	141.8	689	0.016	0.000
LOT 12	M5-4	100	0.95	601	0.014	47.6	123.7	2.6	123.7	123.7	601	0.014	0.000
LOT 11, 12, 9	M8-1	19	0.22	19689	0.452	358.0	930.9	1.1	379.9	-	3680	0.084	0.368
LOT 12, 9	M8-2	31	0.33	12,354	0.284	342.2	889.7	1.7	570.1	-	3,876	0.089	0.195
TOTAL				34648	0.795	906.4	2356.7		1486.2	536	10161	0.233	0.562

NOTE:
NO RECHARGE VOLUME (REV) PROVIDED IN BIOSWALES (M8).

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

 6/8/2023
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANING AND ZONING

 6/6/2023
 CHIEF, DEVELOPMENT ENGINEERING DIVISION, DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DocuSigned by:

 Richard Sobott
 2718596087410

DocuSigned by:

 RICHARD SOBBOTT, PE NO. 15222

PERMIT INFORMATION CHART

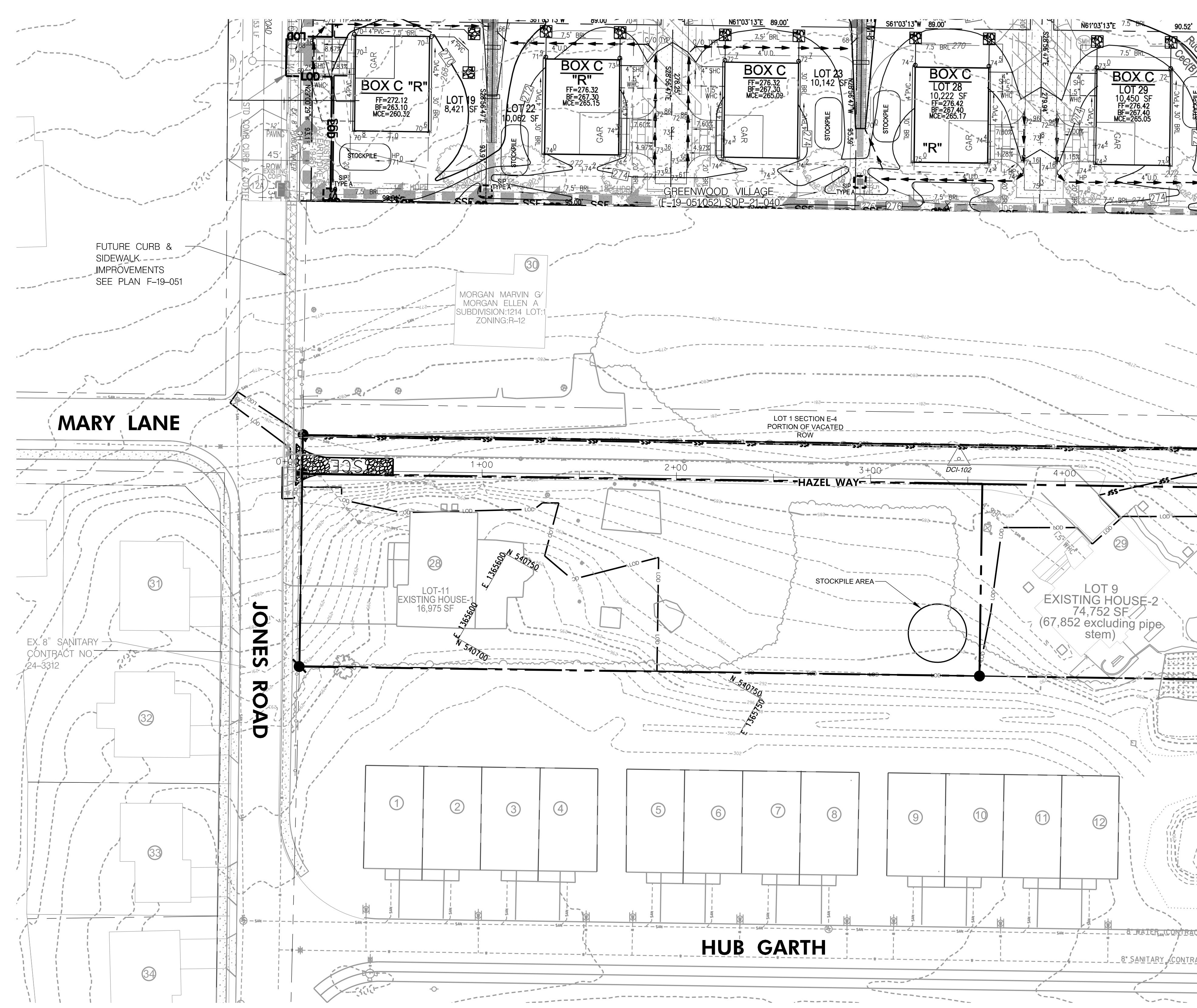
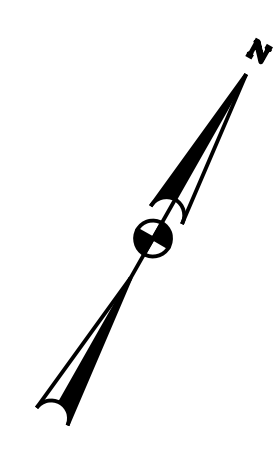
Subdivision Name: NORDAU	Section/Area E-6	Lot No. 8,9,10	Parcel No. 142
Plot # 20317	Grid 0024	Zoning R-12	Tax Map No. 0042
Water Code	Elect. District SIXTH	Census Tract 606901	Sewer Code

STORMWATER PRACTICE TABLE
 NORDAU, SECTION E-2, LOTS 11-12
 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

OWNER/DEVELOPER
 LYN MYRICK CABASSA, JAMES ROBERT HUNT III,
 MIGUEL A. CABASSA JR., SHANNON M. HUNT
 8001 JONES ROAD 7915 HAZEL WAY
 JESSUP MD, 20794 JESSUP MD, 20794
 HOWARD COUNTY HOWARD COUNTY
 ATTN:lyncaba@gmail.com
 PHONE:(301)725-3960

DCI
 DANIEL CONSULTANTS INC.
 CONSULTING ENGINEERS AND PLANNERS
 8550 ROUTE 108 E., SUITE 229
 COLUMBIA, MD 21043
 TEL : 410-895-0090 FAX: 410-892-7038

DESIGN BY: BW
 DRAWN BY: BW
 CHECKED BY: RLS
 SCALE: AS SHOWN
 DATE: 11/01/2022
 W. O. No.:
 SHEET No. 10 OF 18



HYDROLOGIC SOIL GROUP			
MAP UNIT SYMBOL	MAP UNIT NAME	RATING	K-VALUE
CeC	Chilium Loam, 5%-10% slope	C	0.43
CrD	Croom and Evesboro soils, 10%-15% slopes	C	0.32
EbC	Evesboro Loamy Sand, 2%-10% slopes	A	0.02
RuB	Russett and Beltsville soils, 2%-5% slopes	C	0.28
RuC	Russett and Beltsville soils, 5%-10% slopes	C	0.28

LEGENDS	
PROPOSED CONTOUR	—286—
LIMIT OF DISTURBANCE	—LOD—
STABILIZED CONSTRUCTION ENTRANCE	—SSC—
SUPER SILT FENCE	—SSF—
SILT FENCE	—SF—

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
 Signature: Alexander Bratovic
 Date: 6/6/2023
 Howard SCD 6664056968461

ENGINEER'S CERTIFICATE
 I hereby certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 Signature: Richard Sobott
 Date: 05/17/2023
 Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE
 We certify that all development and construction will be done according to this plan of development for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District.
 Signature: Bronwyn Palmer
 Date: 05/17/2023
 Signature of Developer (print name below signature) Date

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Signature: [Signature]
 Date: 6/8/2023
 CHIEF, BUREAU OF HIGHWAYS

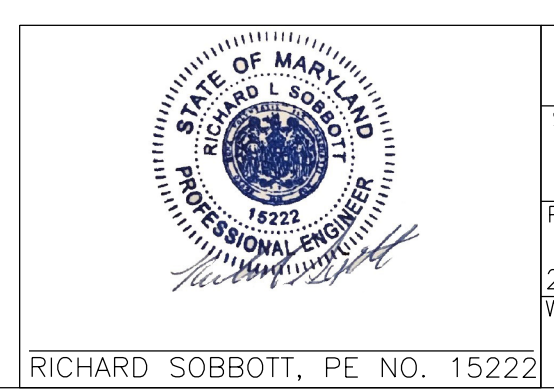
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Signature: [Signature]
 Date: 6/8/2023
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 Signature: [Signature]
 Date: 6/8/2023
 CHIEF, DIVISION OF LAND DEVELOPMENT

DESIGN CERTIFICATION:
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: Richard Sobott
 Date: 10/27/2022
 DESIGN SIGNATURE DATE
 RICHARD SOBBOTT MD REGISTRATION NO. 15222
 PRINTED NAME R.L.S., OR R.L.A. (circle one)

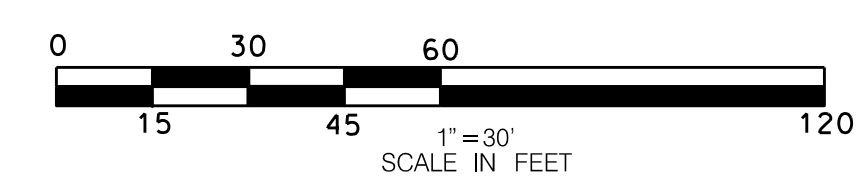
OWNER/DEVELOPER CERTIFICATION:
 I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE.
 Signature: Bronwyn Palmer
 Date: 10/12/2022
 OWNER/DEVELOPER SIGNATURE DATE
 Bronwyn M. Palmer, Owner David P. Lunden, President, Timberlake Building and Renovations, LLC
 PRINTED NAME & TITLE

DocuSigned by:
 Richard Sobott
 27185506087410

DocuSigned by:
 [Signature]



RICHARD SOBBOTT, PE NO. 15222



PERMIT INFORMATION CHART				
Subdivision Name:	Section/Area	Lot No.	Parcel No.	
NORDAU	E-6	8,9,10	142	
Plot #	Grid	Zoning	Tax Map No.	Elect. District
20317	0024	R-12	0042	SIXTH
Water Code			Census Tract	
			606901	
			Sewer Code	

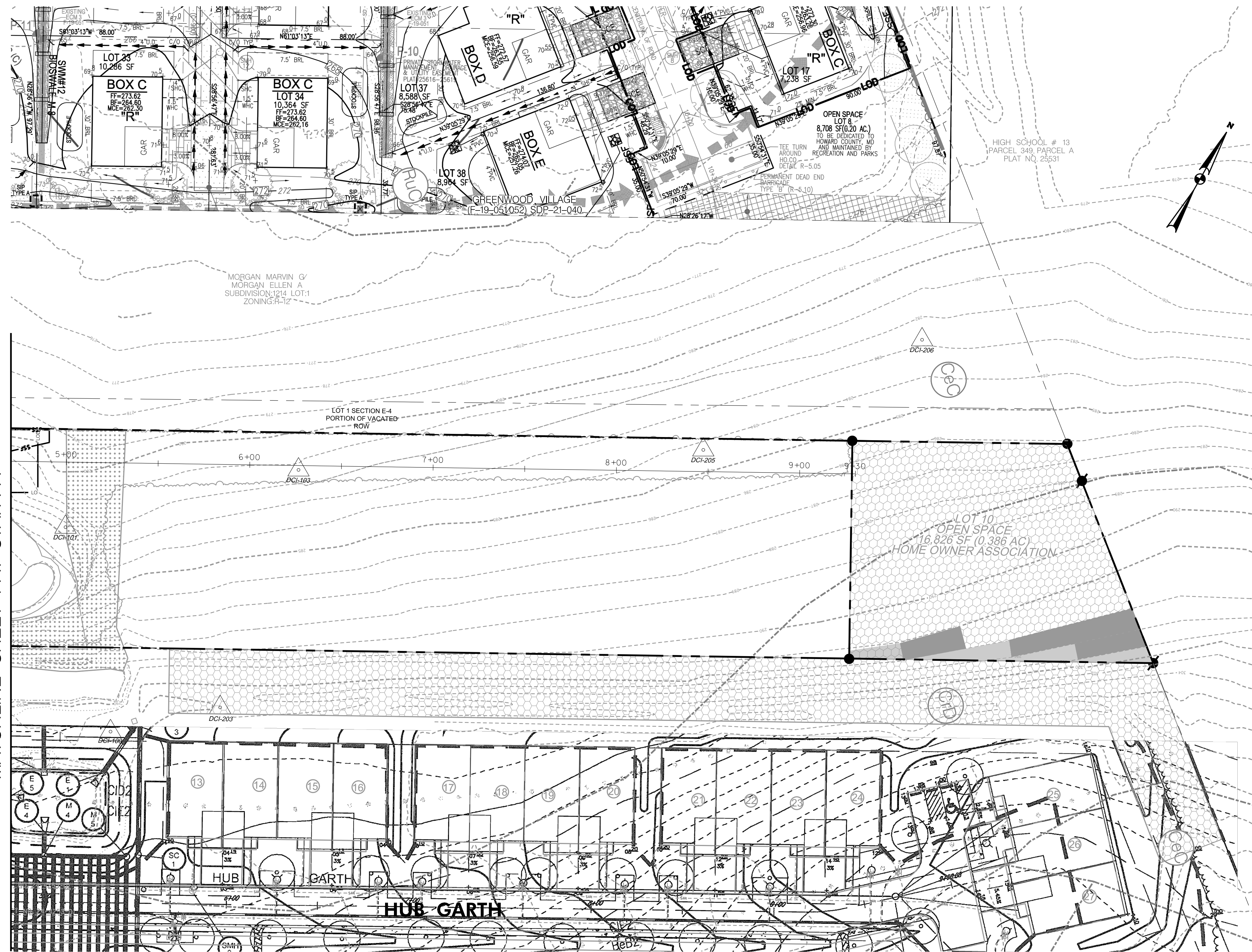
OWNER/DEVELOPER
 LYN MYRICK CABASSA, MICHEL A. CABASSA JR., 8001 JONES ROAD, JESSUP MD, 20794 HOWARD COUNTY
 JAMES ROBERT HUNT III, SHANNON M. HUNT, 7915 HAZEL WAY, JESSUP MD, 20794 HOWARD COUNTY
 ATTN:lyncaaba@gmail.com
 PHONE:(301)725-3960



DANIEL CONSULTANTS INC.
 CONSULTING ENGINEERS AND PLANNERS
 8550 ROUTE 108 E., SUITE 229
 COLUMBIA, MD 21043
 TEL: 410-895-0090 FAX: 410-892-7038

DESIGN BY: BW
 DRAWN BY: BW
 CHECKED BY: RLS
 SCALE: AS SHOWN
 DATE: 11/01/2022
 W. O. No.:
 SHEET No. 12 OF 18

MATCHLINE SHEET-2 AT STA. A-A



MATCHLINE SHEET-1 AT STA. A-A

HYDROLOGIC SOIL GROUP			
MAP UNIT SYMBOL	MAP UNIT NAME	RATING	K-VALUE
CeC	Chillum Loom, 5%-10% slope	C	0.43
CrD	Croom and Evesboro soils, 10%-15% slopes	C	0.32
EbC	Evesboro Loamy Sand, 2%-10% slopes	A	0.02
RuB	Russett and Beltsville soils, 2%-5% slopes	C	0.28
RuC	Russett and Beltsville soils, 5%-10% slopes	C	0.28

LEGENDS	
PROPOSED CONTOUR	—286—
LIMIT OF DISTURBANCE	—LOD—
STABILIZED CONSTRUCTION ENTRNACE	
SUPER SILT FENCE	—SSF—
SILT FENCE	—SF—

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT on 6/6/2023
 Howard SCD Date

ENGINEER'S CERTIFICATE
 "I hereby certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
 Signature of Engineer (print name below signature) Date 05/17/2023

DEVELOPER'S CERTIFICATE
 "We certify that all development and construction will be done according to this plan of development for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District."
 Signature of Developer (print name below signature) Date 05/17/2023

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF, BUREAU OF HIGHWAYS
 DATE 6/8/2023

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE 6/8/2023

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE

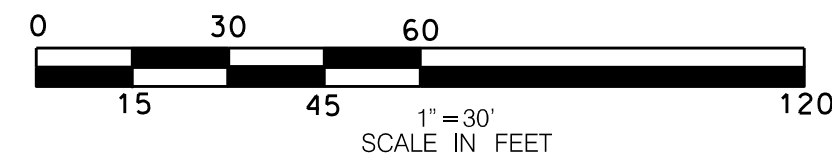
DESIGN CERTIFICATION:
 "I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 DESIGN SIGNATURE: Richard Sobott
 DATE: 10/27/2022
 RICHARD SOBBOTT
 PRINTED NAME
 MD REGISTRATION NO. 15222
 R.L.S. OR R.L.A. (circle one)

OWNER/DEVELOPER CERTIFICATION:
 "I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."
 OWNER/DEVELOPER SIGNATURE: Brangwyn Palmer
 DATE: 10/12/2022
 Brangwyn M. Palmer, Owner David P. Lunden, President, Timberlake Building and Renovations, LLC
 PRINTED NAME & TITLE

DocuSigned by:
 Richard Sobott
 271559007C410

DocuSigned by:

RICHARD SOBBOTT, PE NO. 15222



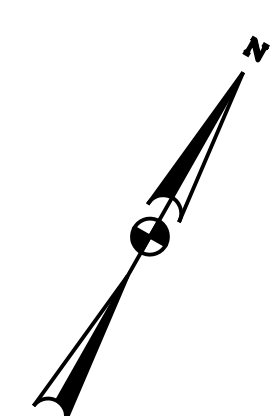
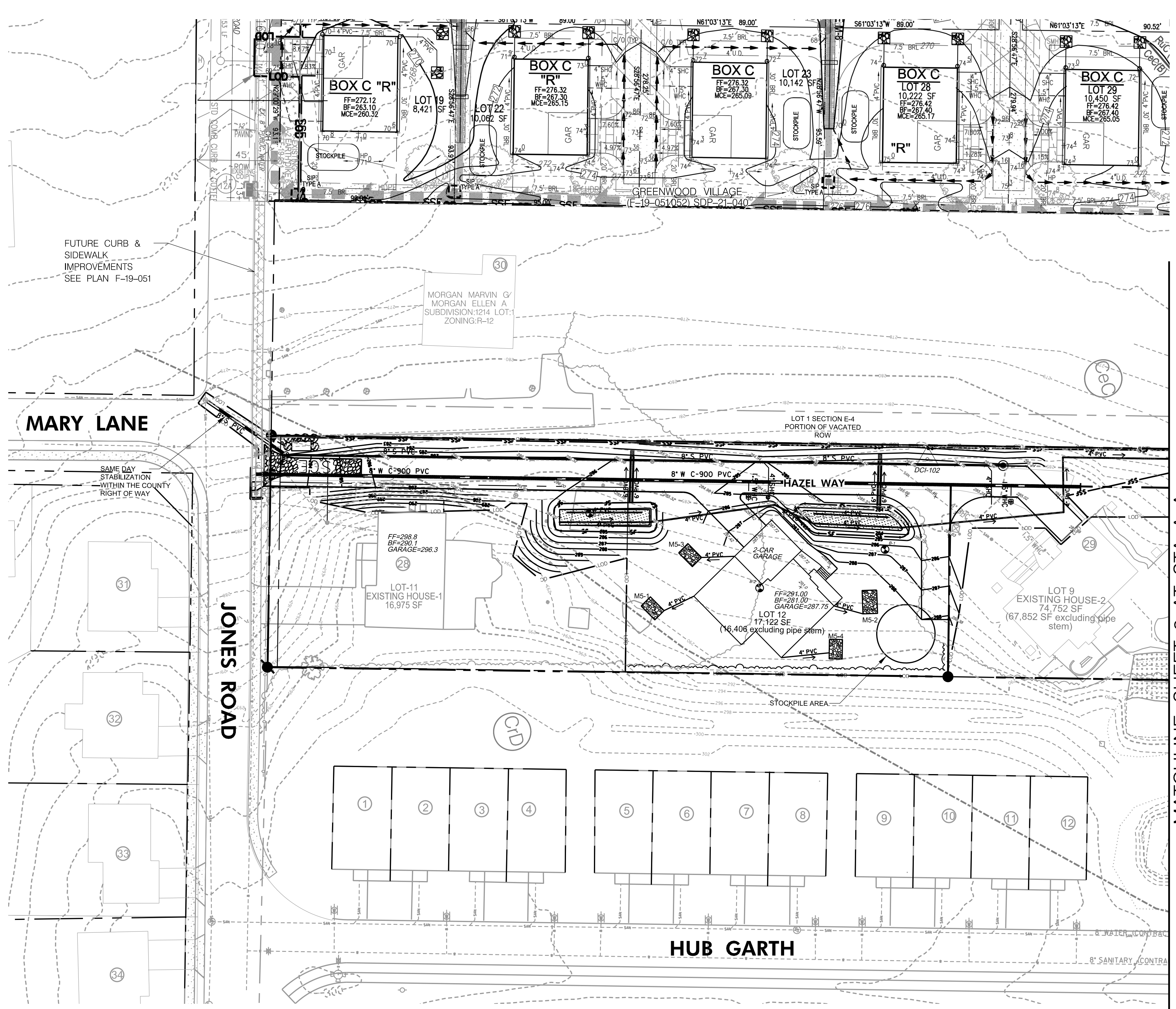
PERMIT INFORMATION CHART			
Subdivision Name: NORDAU	Section/Area E-6	Lot No. 8,9,10	Parcel No. 142
Plot # 20317	Grid 0024	Zoning R-12	Tax Map No. 0042
Water Code	Sewer Code	Elect. District SIXTH	Census Tract 606901

OWNER/DEVELOPER
 LYN MYRICK CABASSA, MIGUEL A. CABASSA JR., SHANNON M. HUNT
 8001 JONES ROAD, 7915 HAZEL WAY
 JESSUP MD, 20794 JESSUP MD, 20794
 HOWARD COUNTY HOWARD COUNTY
 ATTN:lyncaba@gmail.com
 PHONE:(301)725-3960



DESIGN BY: BW
 DRAWN BY: BW
 CHECKED BY: RLS
 SCALE: AS SHOWN
 DATE: 11/01/2022
 W. O. No.:
 SHEET No. 13 OF 18

EXISTING SEDIMENT AND EROSION CONTROL PLAN - II
 NORDAU, SECTION E-2, LOTS 11-12
 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8



- SEQUENCE OF CONSTRUCTION
 NOTE: HOUSES MAY NOT BE BUILT USING THIS PLAN.
1. OBTAIN GRADING PERMIT.- 1 DAY
 2. DEVELOPER/CONTRACTOR SHALL REQUEST A PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE ENFORCEMENT AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.- 1 DAY
 3. NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410-313-1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK.- 1 DAY
 4. STAKEOUT LIMITS OF DISTURBANCE.- 1 DAY
 5. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SSF, WHERE SHOWN HEREON.- 1 DAY
 6. COMPLETE ANY REQUIRED CLEARING AND GRUBBING ONSITE AREA FOR THE INSTALLATION OF PERIMETER CONTROLS.
 7. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROLS SHOWN HEREON AFTER EACH RAINFALL AND ON A DAILY BASIS.- 1 DAY
 8. INSTALL USE-IN-COMMON DRIVEWAY CULVERTS AND STABILIZE WITH RIPRAP.- 4 DAYS
 9. CONSTRUCT ESD MICRO-BIORETENTION FACILITIES, STABILIZE SIDE SLOPES WITH SOD AND SURROUND FACILITIES WITH SILT FENCE.- 5 DAYS
 10. BEGIN CONSTRUCTION OF INDIVIDUAL HOMES (REFER TO ASSOCIATED BUILDER SDP). PROTECT ANY INSTALLED ESD FACILITIES FROM RECEIVING DIRTY RUNOFF.
 11. UPON COMPLETION OF PROJECT HOME CONSTRUCTION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, COMPLETE ANY REMAINING FINE GRADING IN ACCORDANCE WITH STORMWATER MANAGEMENT CRITERIA, ADD TOPSOIL PER THE SPECIFICATIONS SHOWN HEREON, AND STABILIZE DISTURBED AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH.- 5 DAYS
 12. INSTALL LANDSCAPING.- 3 DAYS
 13. WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE ANY REMAINING PERIMETER EROSION AND SEDIMENT CONTROLS AND STABILIZE THESE DISTURBED AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH.- 7 DAYS

NOTE: ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.

NOTE:
 1. STABILIZATION IS TO BE DONE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE INTERVALS REQUIRED A THE 2011 STDS. & SPECS, WHICHEVER IS MORE RESTRICTIVE.
 2. LOCATE STOCKPILE AS SHOWN HEREON OR AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR. ANY STOCKPILES EXCEEDING 15 FEET IN HEIGHT SHALL BE BENCHED.
 3. SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
 4. SILT FENCE SHALL BE CURLED UPHILL NO MORE THAN 35 FEET APART.
 5. DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

NOTE:
 - HOUSE MAY NOT BE BUILT USING THIS PLAN.
 - THE HOWARD SCD STANDARD SEDIMENT CONTROL PLAN MAY NOT BE USED TO OBTAIN PERMITS FOR THIS PROJECT.

- EROSION AND SEDIMENT CONTROL NOTES:
 1. EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.
 2. AT NO TIME DURING CONSTRUCTION WILL FENCING BE ALLOWED TO INTERCEPT CONCENTRATION FLOWS.
 3. A DOUBLE ROW OF SSF MAY BE REQUIRED AT THE DOWNHILL BOUNDARY LINE.
 4. SOILS CONSIDERED HIGHLY ERODIBLE BY THE HOWARD SOIL CONSERVATIVE DISTRICT MAY REQUIRE MORE STRINGENT SEEDING AND STABILIZATION METHODS.

MATCHLINE SHEET-2 AT STA. A-A

HYDROLOGIC SOIL GROUP			
MAP UNIT SYMBOL	MAP UNIT NAME	RATING	K-VALUE
CeC	Chillum Loom, 5%-10% slope	C	0.43
CrD	Croom and Evesboro soils, 10%-15% slopes	C	0.32
EbC	Evesboro Loamy Sand, 2%-10% slopes	A	0.02
RuB	Russett and Beltsville soils, 2%-5% slopes	C	0.28
RuC	Russett and Beltsville soils, 5%-10% slopes	C	0.28

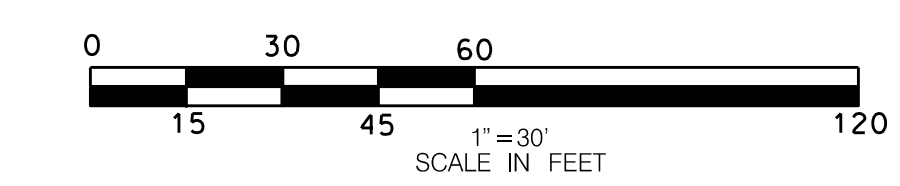
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT. **6/6/2023**
 Howard SCD Date

ENGINEER'S CERTIFICATE
 "I hereby certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
 Signature of Engineer (print name below signature) **05/17/2023**
 Date

DEVELOPER'S CERTIFICATE
 "We certify that all development and construction will be done according to this plan of development for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District."
 Signature of Developer (print name below signature) **05/17/2023**
 Date

LEGENDS

PROPOSED CONTOUR	—286—
LIMIT OF DISTURBANCE	—LOD—
STABILIZED CONSTRUCTION ENTRANCE	—SSF—
SUPER SILT FENCE	—SF—
SILT FENCE	—S—



PROPOSED SEDIMENT AND EROSION CONTROL PLAN - I
 NORDAU, SECTION E-2, LOTS 11-12, LOT 8
 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] **6/8/2023**
 CHIEF, BUREAU OF HIGHWAYS DATE

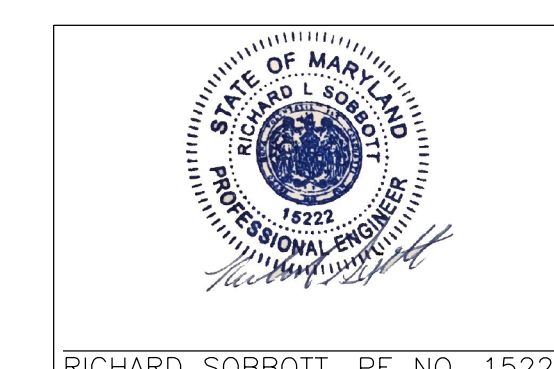
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] **6/6/2023**
 CHIEF, DEVELOPING ENGINEERING DIVISION, DATE

CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DESIGN CERTIFICATION:
 "I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 [Signature] **10/27/2022**
 DATE
 RICHARD SOBBOTT
 PRINTED NAME
 MD REGISTRATION NO. 15222
 R.L.S., OR R.L.A. (circle one)

OWNER/DEVELOPER CERTIFICATION:
 "I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."
 [Signature] **10/12/2022**
 DATE
 Richard Sobott
 PRINTED NAME & TITLE

DocuSigned by:
 Richard Sobott
 27185596081C410



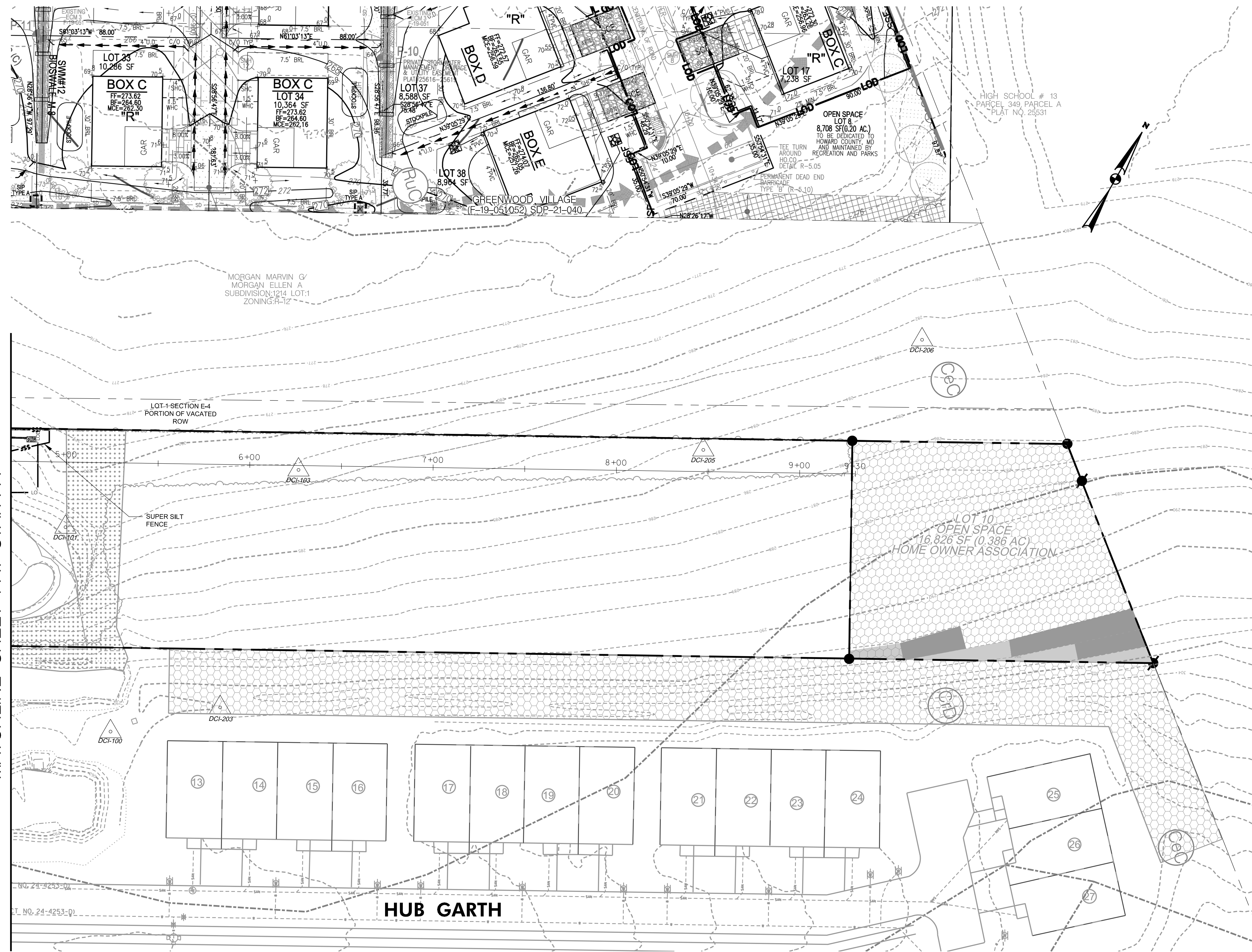
PERMIT INFORMATION CHART

Subdivision Name:	Section/Area	Lot No.	Parcel No.
NORDAU	E-6	8,9,10	142
Plot #	Grid	Zoning	Tax Map No.
20317	0024	R-12	0042
Water Code	Elect. District	Genus Tract	
	SIXTH	606901	
	Sewer Code		

OWNER/DEVELOPER
 LYN MYRICK CABASSA, SHANNON M. HUNT
 MICHEL A. CABASSA JR. 7915 HAZEL WAY
 8001 JONES ROAD JESSUP MD, 20794
 HOWARD COUNTY
 ATTN: lyncaba@gmail.com
 PHONE: (301) 725-3960



DESIGN BY: BW
 DRAWN BY: BW
 CHECKED BY: RLS
 SCALE: AS SHOWN
 DATE: 11/01/2022
 W. O. No.:
 SHEET No. 14 OF 18



MATCHLINE SHEET-1 AT STA. A-A

HYDROLOGIC SOIL GROUP			
MAP UNIT SYMBOL	MAP UNIT NAME	RATING	K-VALUE
CeC	Chillum Loam, 5%-10% slope	C	0.43
CrD	Croom and Evesboro soils, 10%-15% slopes	C	0.32
EbC	Evesboro Loamy Sand, 2%-10% slopes	A	0.02
RuB	Russett and Beltsville soils, 2%-5% slopes	C	0.28
RuC	Russett and Beltsville soils, 5%-10% slopes	C	0.28

LEGENDS	
PROPOSED CONTOUR	—286—
LIMIT OF DISTURBANCE	—LOD—
STABILIZED CONSTRUCTION ENTRANCE	—SF—
SUPER SILT FENCE	—SF—
SILT FENCE	—SF—

NOTE:
DEVELOPMENT SHOWN IN GREY AFTER STA 4+10
IS THE FUTURE EXTENSION WILL BE DEVELOPED IN
PHASE 2.

This development has been approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT. *Alexander Britton* 6/6/2023
Howard SCD Date

ENGINEER'S CERTIFICATE
"I hereby certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
Richard Sobott 05/17/2023
Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE
"I/we certify that all development and construction will be done according to this plan of development for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District."
Bronwyn Palmer 05/17/2023
Signature of Developer (print name below signature) Date

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 6/8/2023
CHIEF, BUREAU OF HIGHWAYS DATE

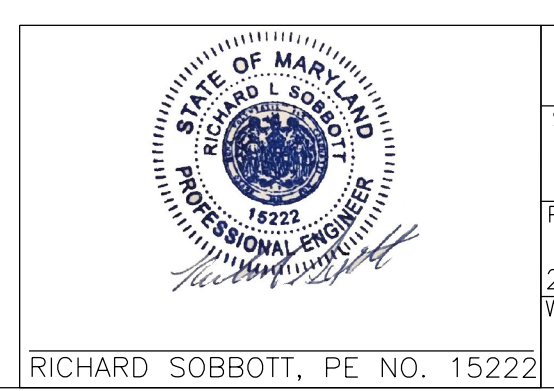
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
[Signature] 6/6/2023
CHIEF, DEVELOPMENT ENGINEERING DIVISION, DATE
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DESIGN CERTIFICATION:
"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
Richard Sobott 10/27/2022
DESIGN SIGNATURE DATE
RICHARD SOBBOTT MD REGISTRATION NO. 15222
PRINTED NAME (P.E.) R.L.S., OR R.L.A. (circle one)

OWNER/DEVELOPER CERTIFICATION:
"I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."
Bronwyn Palmer 10/12/2022
OWNER/DEVELOPER SIGNATURE DATE
Bronwyn M. Palmer, Owner David P. Lunden, President, Timberlake Building and Renovations, LLC
PRINTED NAME & TITLE

DocuSigned by:
Richard Sobott
27185596C82C410

DocuSigned by:
[Signature]



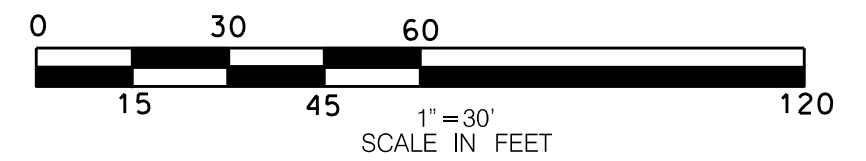
PERMIT INFORMATION CHART					
Subdivision Name: NORDAU		Section/Area E-6		Lot No. 8,9,10	Parcel No. 142
Plot # 20317	Grid 0024	Zoning R-12	Tax Map No. 0042	Elect. District SIXTH	Census Tract 606901
Water Code			Sewer Code		

OWNER/DEVELOPER
LYN MYRICK CABASSA, MIQUEL A. CABASSA JR., SHANNON M. HUNT
8001 JONES ROAD 7915 HAZEL WAY
JESSUP MD, 20794 JESSUP MD, 20794
HOWARD COUNTY HOWARD COUNTY
ATTN:lyncaba@gmail.com
PHONE:(301)725-3960



DESIGN BY: BW
DRAWN BY: BW
CHECKED BY: RLS
SCALE: AS SHOWN
DATE: 11/01/2022
W. O. No.:
SHEET No. 15 OF 18

PROPOSED SEDIMENT AND EROSION CONTROL PLAN - II
NORDAU, SECTION E-2, LOTS 11-12
A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

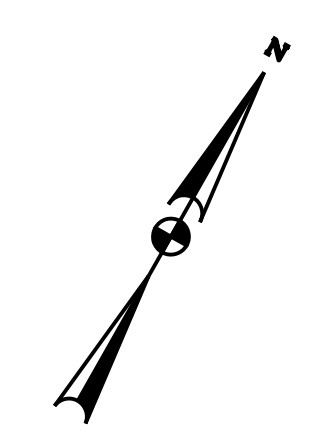
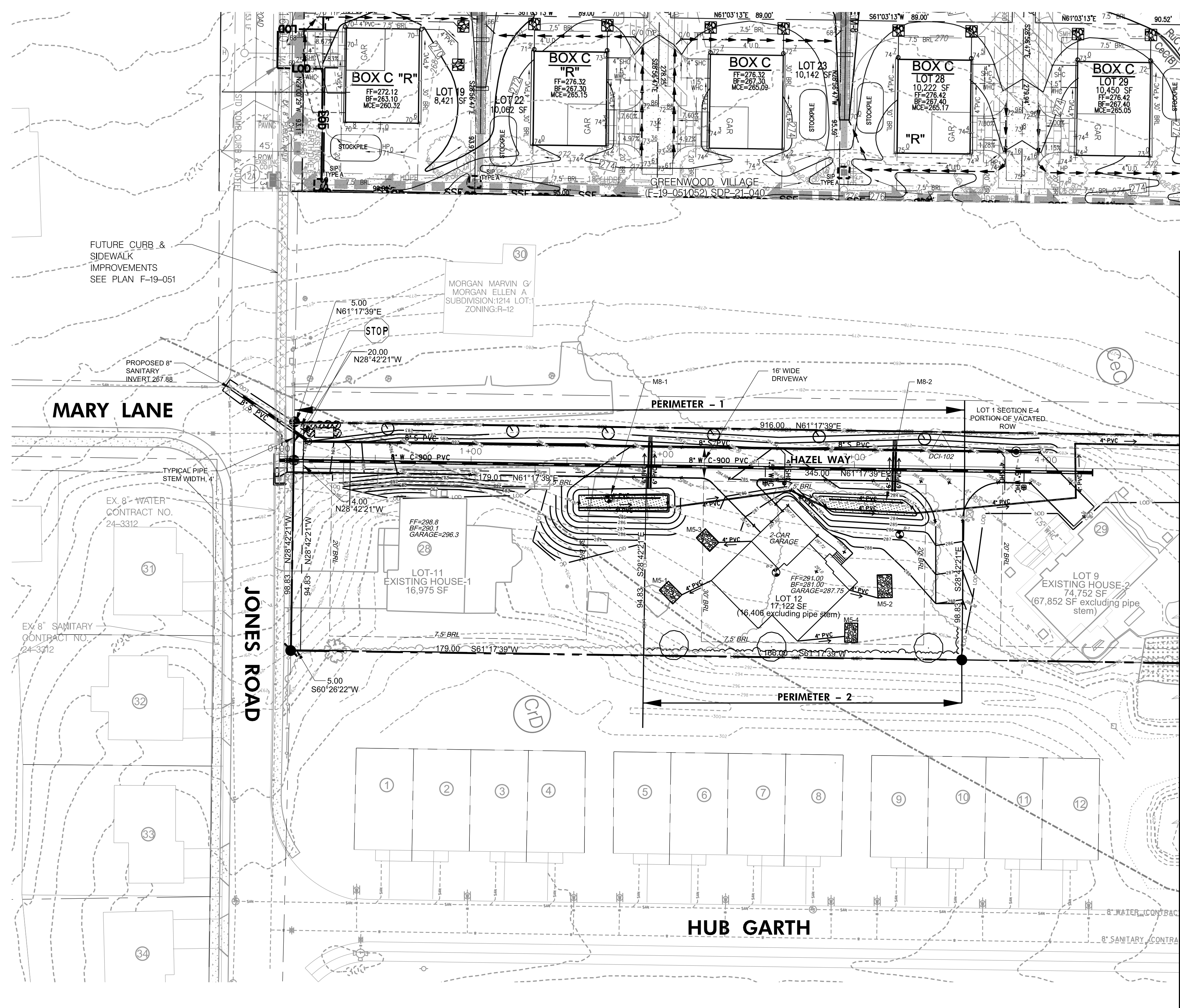


LANDSCAPE NOTES:

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.
- STREET TREE LOCATIONS:

 - WHEN THE DISTANCE BETWEEN THE CURB AND SIDEWALK IS 6 FEET OR GREATER, THE TREES SHALL BE LOCATED WITHIN THE RIGHT-OF-WAY AND SHALL BE CENTERED BETWEEN THE CURB AND SIDEWALK.
 - WHEN THE DISTANCE BETWEEN THE CURB AND SIDEWALK IS LESS THAN 6 FEET, TREES MAY BE PLANTED 3 FEET FROM THE SIDEWALK IN THE DIRECTION AWAY FROM THE ROAD. A 10-FOOT WIDE TREE MAINTENANCE EASEMENT SHALL BE REQUIRED IF THE RIGHT-OF-WAY IS LIMITED.

- TREES SHALL BE PLANTED 6 FEET BEHIND CURB WHEN THERE ARE NO SIDEWALKS.
- TREES TO BE PLANTED MINIMUM 30 FEET FROM SIGNS AND INTERSECTIONS WHEN PLANTED BETWEEN SIDEWALK AND CURB. TREES MAY NOT BE PLANTED WITHIN 5 FEET OF A STORM DRAIN INLET, OPEN SPACE ACCESS STRIP, OR 10 FEET OF A DRIVEWAY.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATIONS.
- THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIAL AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- THE LANDSCAPE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED 9 SHADE TREES AND 6 SHRUBS, THE AMOUNT OF \$2,880.00, SHALL BE POSTED AS PART OF THE BUILDERS GRADING PERMIT WITH THE FUTURE SITE DEVELOPMENT PLAN FOR SUBDIVISION.



SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES	
	1	2
PERIMETER/FRONTAGE DESIGNATION LANDSCAPE TYPE	A	A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	350'	166'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) REMAINING PERIMETER LENGTH	NO	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) REMAINING PERIMETER LENGTH	NO	NO
NUMBER OF PLANTS REQUIRED:		
SHADE TREES	1:60 6	1:60 3
EVERGREEN TREES	-	-
SHRUBS	-	-
NUMBER OF PLANTS PROVIDED:		
SHADE TREES	1:60 6	1:60 3
EVERGREEN TREES	-	-
OTHER TREES (2:1 SUBSTITUTION)	-	-
SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	-	-
OTHERS	-	-

PLANT LIST CHART

KEY	REQUIRED QUANTITY	BOTANICAL NAME	SIZE	ROOT
	6	ACRER RUBRUM RED MAPLE	2 1/2" - 3" CAL.	B & B
	3	QUERCUS RUBRA RED OAK	2 1/2" - 3" CAL.	B & B
	6	ILEX GLABRA INKBERRY	#2	CONTAINER GROWN

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE: 6/8/2023
 CHIEF, BUREAU OF HIGHWAYS

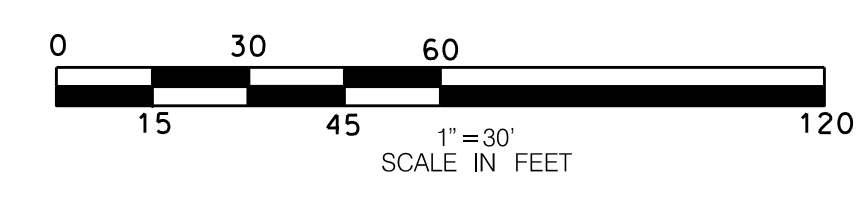
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 DATE: 6/6/2023
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DIVISION OF LAND DEVELOPMENT

DocuSigned by:
 Richard Sobbott
 27105500807C1410

DocuSigned by:

RICHARD SOBBOTT, PE NO. 15222



LANDSCAPE PLAN-1
 NORDAU, SECTION E-2, LOTS 11-12
 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

PERMIT INFORMATION CHART		OWNER/DEVELOPER	
Subdivision Name: NORDAU	Section/Area: E-6	Lot No. 8, 9, 10	Parcel No. 142
Plot # 20317	Grid 0024	Zoning R-12	Tax Map No. 0042
Water Code	Elect. District SIXTH	Census Tract 606901	Sewer Code
LYN MYRICK CABASSA, MIGUEL A. CABASSA JR., 8001 JONES ROAD, JESSUP MD, 20794 HOWARD COUNTY		JAMES ROBERT HUNT III, SHANNON M. HUNT, 7915 HAZEL WAY, JESSUP MD, 20794 HOWARD COUNTY	
ATTN: lyncaba@gmail.com PHONE: (301) 725-3960		 DANIEL CONSULTANTS INC. CONSULTING ENGINEERS AND PLANNERS 8550 ROUTE 108 E., SUITE 229 COLUMBIA, MD 21043 TEL: 410-995-0090 FAX: 410-992-7038	
DESIGN BY: BW		DRAWN BY: BW	
CHECKED BY: RLS		SCALE: AS SHOWN	
DATE: 11/01/2022		W. O. No.:	
SHEET No. 16 OF 18			

APPENDIX B.4.C SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDEN, LANDSCAPE INFILTRATION & INFILTRATION BERMS

- 1. MATERIAL SPECIFICATIONS**
THE ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.4.1.
- 2. FILTERING MEDIA OR PLANTING SOIL**
THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE MICRO-BIORETENTION PRACTICE THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVIDE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BERMAIDA GRASS, QUACKGRASS, JOHNSON GRASS, OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05.
THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:
• SOIL COMPONENT – LOAMY SAND OR SANDY LOAM (USDA SOIL TEXTURAL CLASSIFICATION).
• ORGANIC CONTENT – MINIMUM 10% BY DRY WEIGHT (ASTM D 2974). IN GENERAL, THIS CAN BE MET WITH A MIXTURE OF LOAMY SAND(50%-65%) AND COMPOST (35% TO 40%) OR SANDY LOAM (30%), COARSE SAND (30%), AND COMPOST (40%).
• CLAY CONTENT – MEDIA SHALL HAVE A CLAY CONTENT OF LESS THAN 5%.
• PH RANGE – SHOULD BE BETWEEN 6.5 – 7.0. AMENDMENTS (E.G., LIME, IRON SULFATE PLUS SULFUR) MAY BE MIXED IN TO THE SOIL TO INCREASE OR DECREASE PH. THERE SHALL BE AT LEAST ONE SOIL TEST PER PROJECT. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH, AND ADDITIONAL TESTS OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILED TOPSOIL. IF TOPSOIL IS IMPORTED, THEN A TEXTURE ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOPSOIL WAS EXCAVATED.

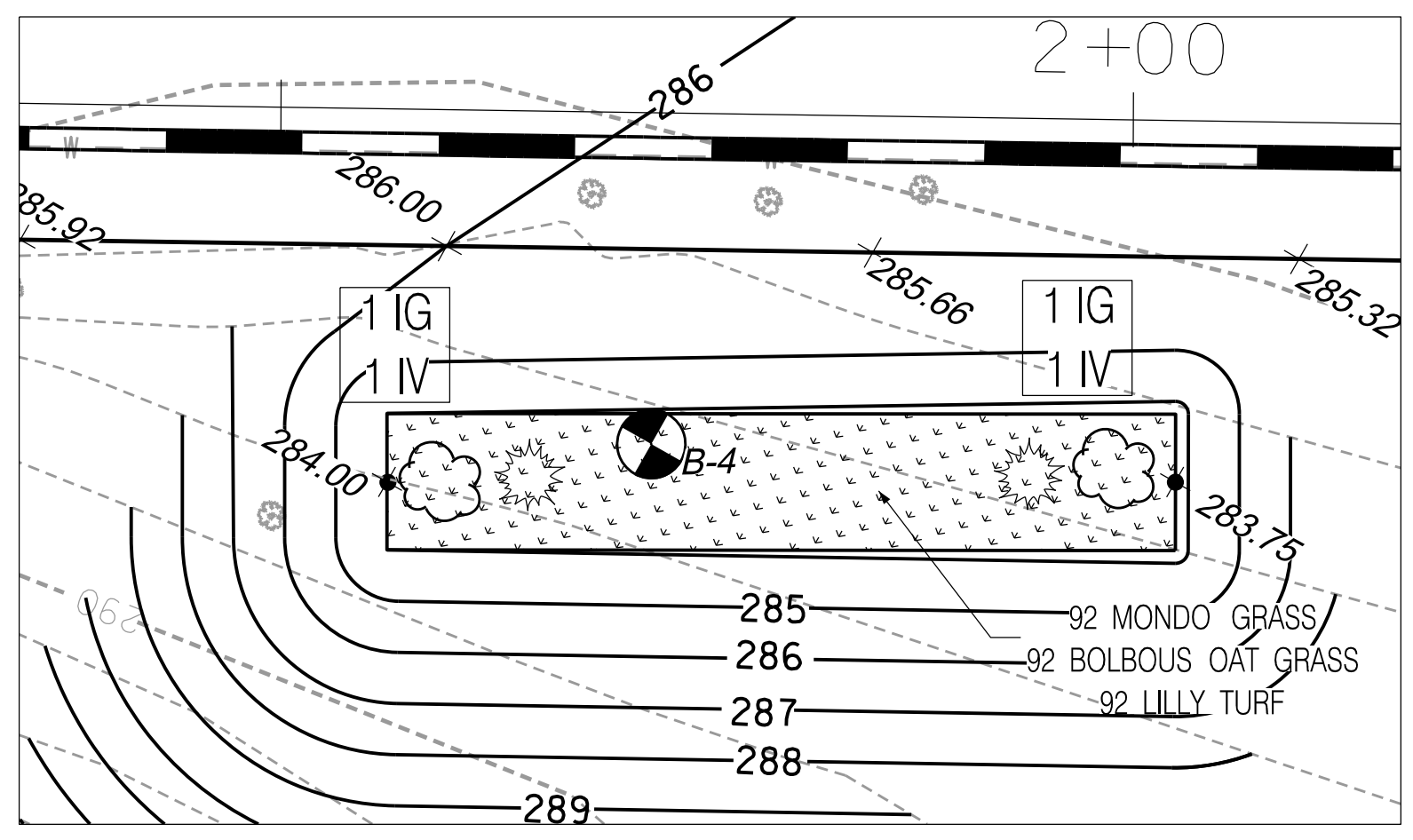
- 3. COMPACTION**
IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF BIORETENTION PRACTICES AND THE REQUIRED BACKFILL. WHEN POSSIBLE, USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL. IF PRACTICES ARE EXCAVATED USING LOADER, THE CONTRACTOR SHOULD USE WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF TYPE TIRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH-PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.
COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS CHESEL PLOW, RIPPER, OR SUBSOILER. THESE TILLING OPERATIONS ARE TO REFRACURE THE SOIL PROFILE THROUGHOUT THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM HEAVY EQUIPMENT.
ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACKFILLING THE OPTIONAL SAND LAYER. PUMP ANY PONDED WATER BEFORE PREPARING (ROTOTILLING) BASE.
WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE. WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN.
HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS.

- 4. PLANT MATERIAL**
RECOMMENDED PLANT MATERIAL FOR MICRO-BIORETENTION PRACTICES CAN BE FOUND IN APPENDIX A, SECTION A.2.3.

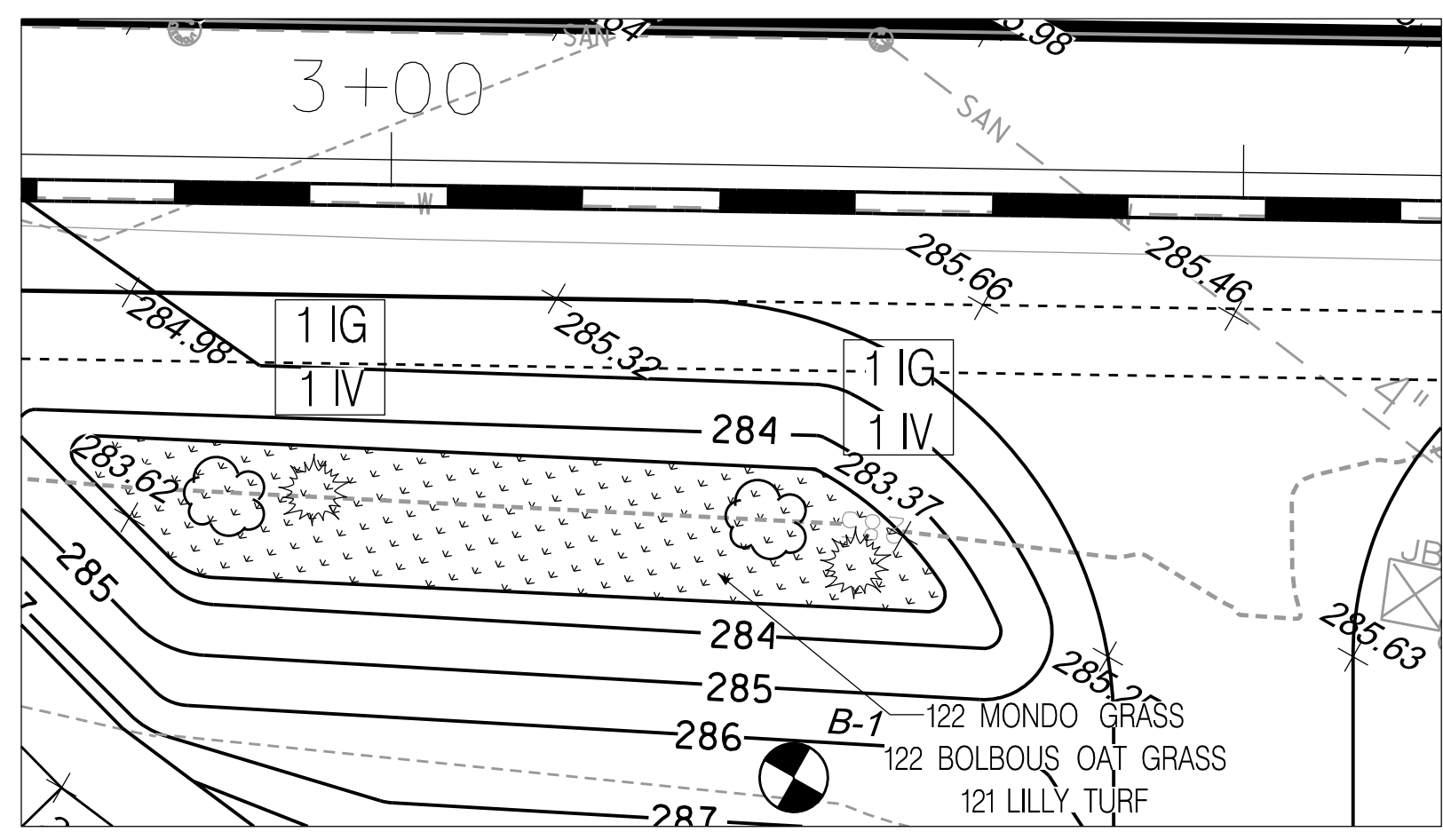
- 5. PLANT INSTALLATION**
COMPOST IS A BETTER ORGANIC MATERIAL SOURCE, IS LESS LIKELY TO FLOAT, AND SHOULD BE PLACED IN THE INVERT AND OTHER LOW AREAS. MULCH SHOULD BE PLACED IN SURROUNDING TO A UNIFORM THICKNESS OF 2" TO 3" SHREDDED OR CHIPPED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WILL FLOAT AND MOVE TO THE PERIMETER OF THE BIORETENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE. SHREDDED MULCH MUST BE WELL AGED (6 TO 12 MONTHS) FOR ACCEPTANCE.
ROOTSTOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE PLANT ROOT BALL SHOULD BE PLANTED SO 1/8TH OF THE BALL IS ABOVE FINAL GRADE SURFACE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL. SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS. THOROUGHLY WATER GROUND BED COVER AFTER INSTALLATION.
TREES SHALL BE BRACED USING 2" BY 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL.
GRASSES AND LEGUME SEED SHOULD BE DRILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLUGS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS. THE TOPSOIL SPECIFICATIONS PROVIDE ENOUGH ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY. ADDING FERTILIZERS DEFEATS, OR AT A MINIMUM, IMPEDES THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH ARE USED TO AMEND THE SOIL. ROTOTILL UREA FERTILIZER AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET.

- 6. UNDERDRAIN**
UNDERDRAINS SHOULD MEET THE FOLLOWING CRITERIA:
• PIPE – SHOULD BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTM 758, TYPE PS 28, OR AASHTO-M-278) IN A GRAVEL LAYER. THE PREFERRED MATERIAL IS SLOTTED, 4" RIGID PIPE (E.G., PVC OF HDPE).
• PERFORATIONS – IF PERFORATED PIPE IS USED, PERFORATIONS SHOULD BE 3/8" DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE SHALL BE WRAPPED WITH A 1/4" (NO. 4 OR 4x4) GALVANIZED HARDWARE CLOTH.
• GRAVEL – THE GRAVEL LAYER (NO. 57 STONE PREFERRED) SHALL BE AT LEAST 3" THICK ABOVE AND BELOW THE UNDERDRAIN.
• THE MAIN COLLECTOR PIPE SHALL BE AT A MINIMUM 0.5% SLOPE.
• A RIGID, NON-PERFORATED OBSERVATION WELL MUST BE PROVIDED (ONE PER EVERY 1,000 SQUARE FEET) TO PROVIDE A CLEAN-OUT PORT AND MONITOR PERFORMANCE OF THE FILTER.
• A 4" LAYER OF PEA GRAVEL (1/8" TO 3/8" STONE) SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND UNDERDRAIN TO PREVENT MIGRATION OF FINES IN TO THE UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF THE FILTER BED WHEN BED THICKNESS EXCEEDS 24".
THIS MAIN COLLECTOR PIPE FOR UNDERDRAIN SYSTEMS SHALL BE CONSTRUCTED AT A MINIMUM SLOPE OF 0.5%. OBSERVATION WELLS AND/OR CLEAN-OUT PIPES MUST BE PROVIDED (ONE MINIMUM PER EVERY 1000 SQUARE FEET OF SURFACE AREA).

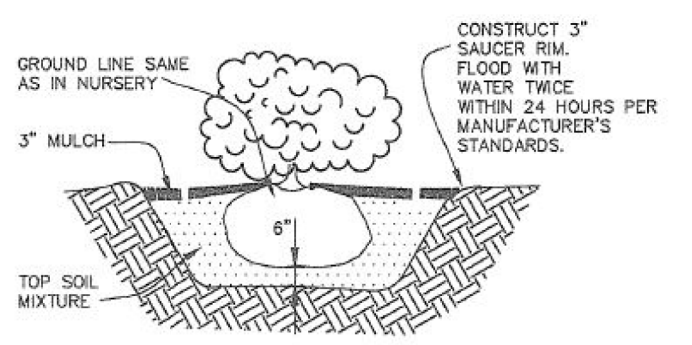
- 7. MISCELLANEOUS**
THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.



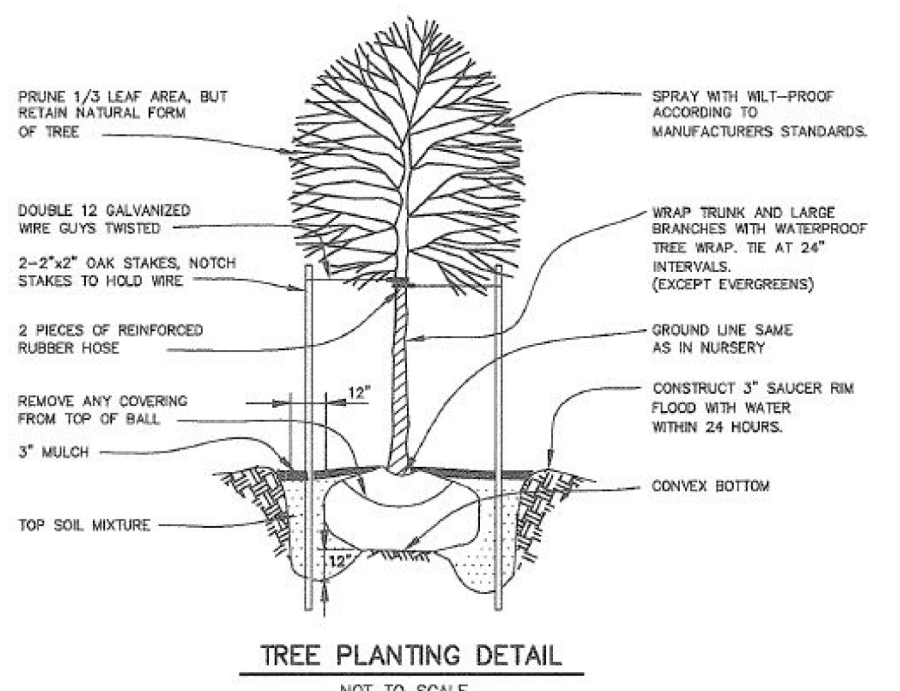
BS-1 PLANTING
SCALE: 1" = 10'



BS-2 PLANTING
SCALE: 1" = 10'



SHRUB PLANTING DETAIL
NOT TO SCALE



TREE PLANTING DETAIL
NOT TO SCALE

PLANTING SCHEDULE (SHRUB/ORNIMENTAL GRASSES)				
LEGEND/KEY	QTY	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
IG	4	ILEX GLABRA 'SHAMROCK' INKBERRY HOLLEY	1 GALLON	-
IV	4	ITEA VIRGINICA 'HENRY'S GARNETT' VIRGINIA SWEETSPIRE	1 GALLON	-

BIO-SWALE FACILITY				
PLANTING SCHEDULE (SHRUB/ORNIMENTAL GRASSES)				
SWALE FACILITY #	MULCH SF	PLANTING OR EQUAL SUBSTITUTION		
		MONDO GRASS NUMBER	BOLBOOUS OAT GRASS SF	LILY TURF SF
MB-1	276	92	92	92
MB-2	365	122	122	121
TOTAL	641	214	214	213

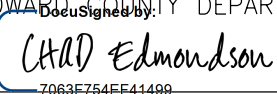
BIO-SWALE PLANTING SCHEDULE			
BOTANICAL NAME/ COMMON NAME	SIZE	REMARKS	
MONDO GRASS (OPHIPOGON JAPONICUS)	3" POT	1' O.C.	
BOLBOOUS OAT GRASS (ARRHENATHERUM EALTIUS BULBOSUM)	3" POT	1' O.C.	
LIRIOPE MUSCARI 'MAJESTIC' MAJESTIC LILY TURF	3" POT	1' O.C.	

BORING LOG											
PROJECT:		Palmer Subdivision		COMMISSION NO.:		2		DATE:		3/22/2022	
LOCATION:		Howard County, Maryland		BORING NO.:		B-1		PAGE:		01 OF 01	
BORING METHOD	HSA	HOLLOW STEM AUGERS	DS	DRIVEN SPLIT SPOON	SAMPLER TYPE		GROUND WATER DEPTH		AT COMPLETION		DRY FT.
BORING METHOD	HSA	SOLID STEM AUGERS	PT	PRESSED SHELBY TUBE	SAMPLER TYPE		GROUND WATER DEPTH		AFTER		24 HRS. DRY FT.
BORING METHOD	HSA	SOLID STEM AUGERS	D	DENISON	SAMPLER TYPE		GROUND WATER DEPTH		AFTER		HRS. FT.
BORING METHOD	HSA	SOLID STEM AUGERS	P	PITCHER	SAMPLER TYPE		GROUND WATER DEPTH		AFTER		N/A FT.
GROUND ELEV.	285.93	DC DRIVING CASING	D	DENISON	SAMPLER TYPE		GROUND WATER DEPTH		AFTER		HRS. FT.
COORDINATES:	1365782.26, 540886.50	DC DRIVING CASING	P	PITCHER	SAMPLER TYPE		GROUND WATER DEPTH		AFTER		N/A FT.
STRATA DEPTH	SAMPLE DEPTH	SAMPLE NO. BLOWS/6"		TYPE/SIZE		RECA/TT		DESCRIPTION (COLOR, DENSITY, MOISTURE, PROPORTION, ETC.)			
	0 TO 0.75 FT	0.4		0.4		0.4		Dark brown silt with 1/2" rounded quartz gravel.			
	0.75-2.5 FT	1.2		1.2		1.2		Yellow brown silt with coarse sand and 1/2" rounded quartz gravel.			
2 FT.	2.5-5.0 FT	2.0		2.0		2.0		Moist red brown sandy silt with fine sand and some pea gravel.			
4 FT.		2.4		2.4		2.4					
		2.8		2.8		2.8					
		3.2		3.2		3.2					
		3.6		3.6		3.6					
		4.0		4.0		4.0					
		4.4		4.4		4.4					
		4.8		4.8		4.8					
		5.2		5.2		5.2					
		5.6		5.6		5.6					
		6.0		6.0		6.0					
		6.4		6.4		6.4					
		6.8		6.8		6.8					
		7.2		7.2		7.2					
		7.6		7.6		7.6					
		8.0		8.0		8.0					
		8.4		8.4		8.4					
		8.8		8.8		8.8					
		9.2		9.2		9.2					
		9.6		9.6		9.6					
		10.0		10.0		10.0					

BORING LOG											
PROJECT:		Palmer Subdivision		COMMISSION NO.:		2		DATE:		3/22/2022	
LOCATION:		Howard County, Maryland		BORING NO.:		B-2		PAGE:		01 OF 01	
BORING METHOD	HSA	HOLLOW STEM AUGERS	DS	DRIVEN SPLIT SPOON	SAMPLER TYPE		GROUND WATER DEPTH		AT COMPLETION		DRY FT.
BORING METHOD	HSA	SOLID STEM AUGERS	PT	PRESSED SHELBY TUBE	SAMPLER TYPE		GROUND WATER DEPTH		AFTER		24 HRS. 5.8 FT.
BORING METHOD	HSA	SOLID STEM AUGERS	D	DENISON	SAMPLER TYPE		GROUND WATER DEPTH		AFTER		HRS. FT.
BORING METHOD	HSA	SOLID STEM AUGERS	P	PITCHER	SAMPLER TYPE		GROUND WATER DEPTH		AFTER		N/A FT.
GROUND ELEV.	288.15	DC DRIVING CASING	D	DENISON	SAMPLER TYPE		GROUND WATER DEPTH		AFTER		HRS. FT.
COORDINATES:	1365735.92, 540807.44	DC DRIVING CASING	P	PITCHER	SAMPLER TYPE		GROUND WATER DEPTH		AFTER		N/A FT.
STRATA DEPTH	SAMPLE DEPTH	SAMPLE NO. BLOWS/6"		TYPE/SIZE		RECA/TT		DESCRIPTION (COLOR, DENSITY, MOISTURE, PROPORTION, ETC.)			
	0-0.75 FT	0.4		0.4		0.4		Dark brown silt with large amount of organic matter.			
	0.75-3 FT	1.2		1.2		1.2		Yellow brown silt with coarse sand and 1/2" rounded quartz gravel.			
2 FT.		2.0		2.0		2.0					
		2.4		2.4		2.4					
		2.8		2.8		2.8					
		3.2		3.2		3.2					
		3.6		3.6		3.6					
		4.0		4.0		4.0					
		4.4		4.4		4.4					
		4.8		4.8		4.8					
		5.2		5.2		5.2					
		5.6		5.6		5.6					
		6.0		6.0		6.0					
		6.4		6.4		6.4					
		6.8		6.8		6.8					
		7.2		7.2		7.2					
		7.6		7.6		7.6					
		8.0		8.0		8.0					
		8.4		8.4		8.4					
		8.8		8.8		8.8					
		9.2		9.2		9.2					
		9.6		9.6		9.6					
		10.0		10.0		10.0					

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

 286521AE4D4C2
 CHIEF, BUREAU OF HIGHWAYS
 DATE: 6/8/2023

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANING AND ZONING

 7036724E614460
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 6/8/2023

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE:

DocuSigned by:

 27185598087C410

DocuSigned by:


RICHARD SOBBOTT, PE NO. 15222

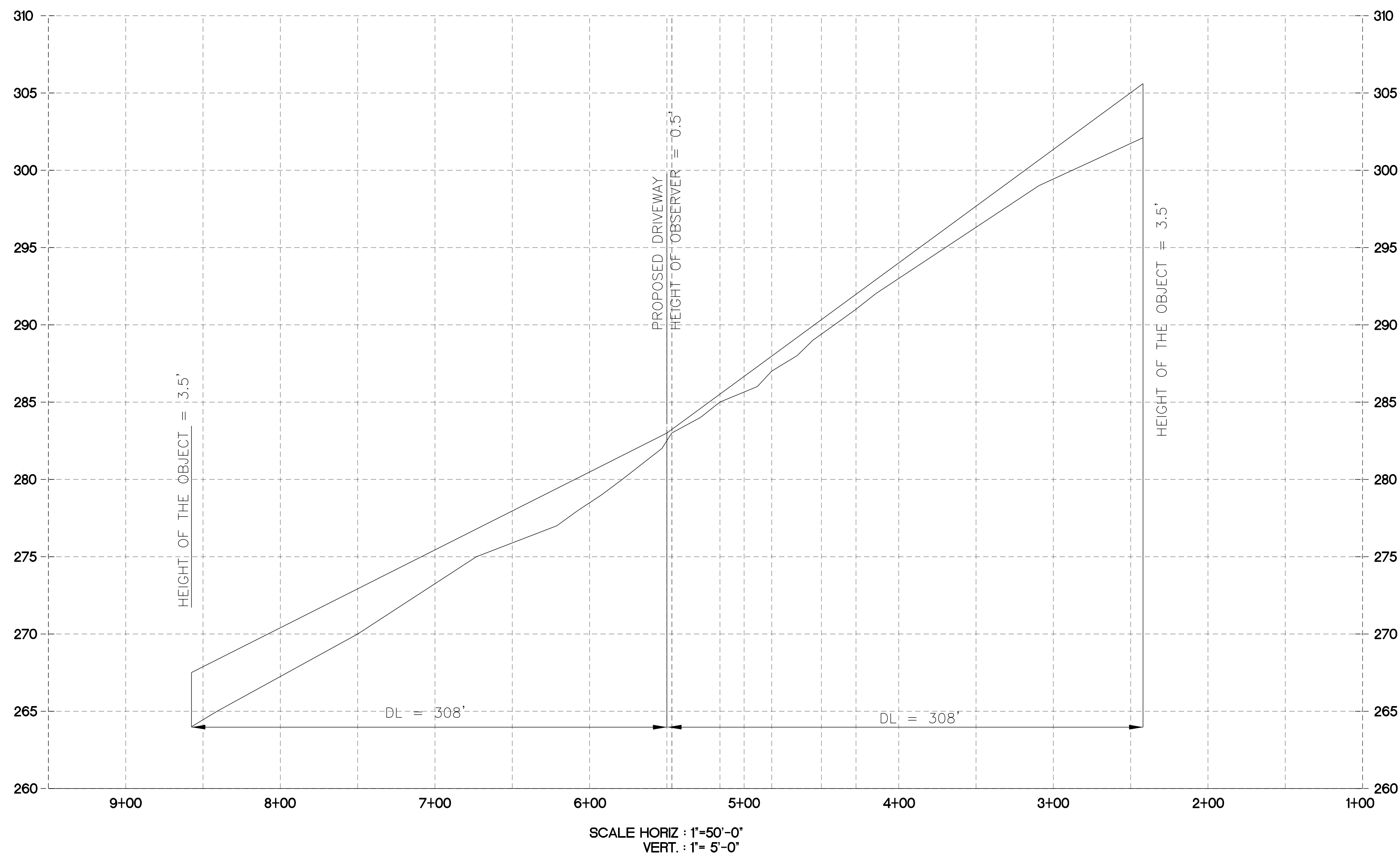
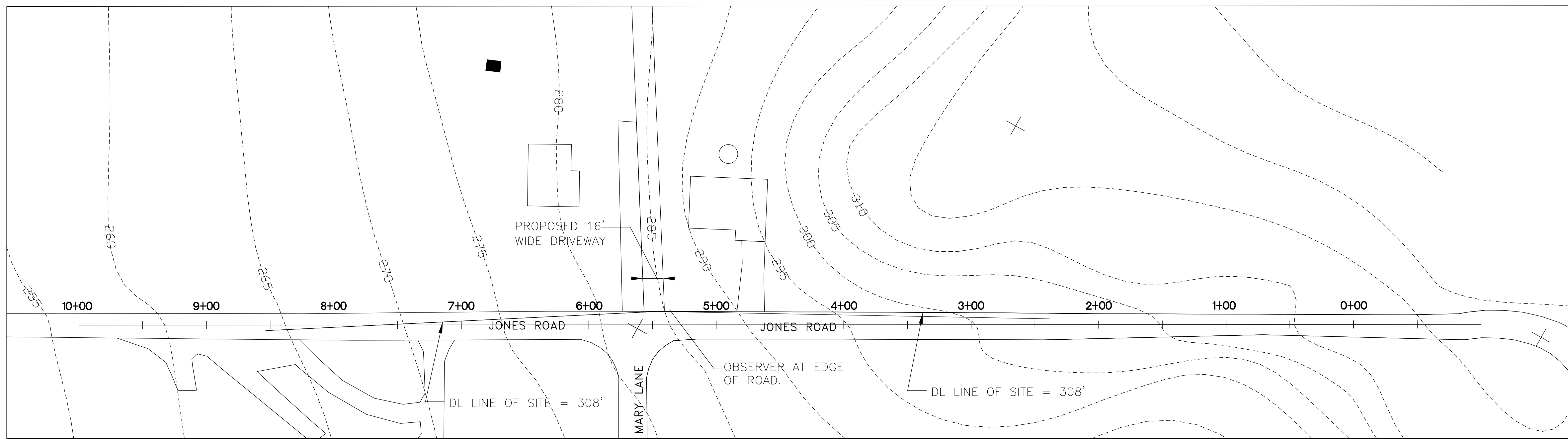
PERMIT INFORMATION CHART				
Subdivision Name:	NORDAU		Section/Area:	E-6
Lot No.:	8,9,10		Parcel No.:	142
Plot #	Grid	Zoning	Tax Map No.	Elect. District
20317	0024	R-12	0042	SIXTH
Water Code			Census Tract	606901
		Sewer Code		

OWNER/DEVELOPER
 LYN MYRICK CABASSA, MICHEL A. CABASSA JR., JESSUP MD, 20794 HOWARD COUNTY
 JAMES ROBERT HUNT III, SHANNON M. HUNT, 7915 HAZEL WAY, JESSUP MD, 20794 HOWARD COUNTY
 ATTN:lynecaba@gmail.com
 PHONE:(301)725-3960

DCI
 DANIEL CONSULTANTS INC.
 CONSULTING ENGINEERS AND PLANNERS
 8950 ROUTE 108 E., SUITE 229
 COLUMBIA, MD 21043
 TEL : 410-895-0090 FAX: 410-892-7038

DESIGN BY: BW
 DRAWN BY: BW
 CHECKED BY: RLS
 SCALE: AS SHOWN
 DATE: 11/01/2022
 W. O. No.:
 SHEET No. 17 OF 18

BMP LANDSCAPE PLAN & BORING LOGS
 NORDAU, SECTION E-2, LOTS 11-12
 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

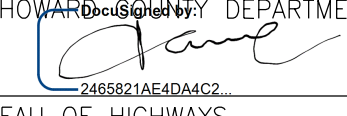


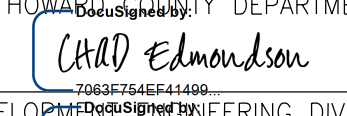
JONES ROAD
 COUNTY COLLECTOR - LOCAL ROAD - 2 LANE ROAD
 POSTED SPEED : 35 MPH
 OPERATING SPEED BASED ON THE 85th PERCENTILE SPEED

DIRECTION	85th PERCENTILE SPEED
EASTBOUND	38 MPH
WESTBOUND	38 MPH

38 MPH USED AS 85th PERCENTILE SPEED
 SINCE EXISTING ROAD HAS +4% AND -6% GRADE,
 THE GRADE ADJUSTMENT FACTORS MUST BE USED.
 THE REQUIRED STOPPING SIGHT DISTANCE IS PROVIDED:
 AS PER TABLE 2.02: 308 FT

SIGHT INTERSECTION LINE PLAN
 NORDAU, SECTION E-2, LOTS 11-12
 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

 2665823AE4D4C2 6/8/2023
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 7036F754E41469 6/8/2023
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DocuSigned by:

 27185580637C410

DocuSigned by:

 RICHARD SOBBOTT, PE NO. 15222

PERMIT INFORMATION CHART					
Subdivision Name: NORDAU		Section/Area E-6		Lot No. 8,9,10	Parcel No. 142
Plot # 20317	Grid 0024	Zoning R-12	Tax Map No. 0042	Elect. District SIXTH	Census Tract 606901
Water Code			Sewer Code		

OWNER/DEVELOPER
 LYN MYRICK CABASSA, MIGUEL A. CABASSA JR., JESSUP MD, 20794 HOWARD COUNTY
 JAMES ROBERT HUNT III, SHANNON M. HUNT, 7915 HAZEL WAY, JESSUP MD, 20794 HOWARD COUNTY
 ATTN:lyncaba@gmail.com
 PHONE:(301)725-3960



DESIGN BY: BW
 DRAWN BY: BW
 CHECKED BY: RLS
 SCALE: AS SHOWN
 DATE: 11/01/2022
 W. O. No.:
 SHEET No. 18 OF 18