

Specimen Tree Chart

Key (ST#)	Species	Size (in.dbh)	CRZ (feet radius)	Comments
1	White oak	54	81	
2	White oak	40.5	60.75	fair, trimmed
3	Hemlock	31.5	47.25	fair, one sided due to shading
4	Pignut hickory	40	60	
5	White oak	38.5	54.75	
6	White oak	40.5	60.75	fair, some rot noted
7	White oak	38.5	57.75	fair, limb damage noted
8	White oak	39	58.5	
9	White oak	49	73.5	very poor, major trunk rot
10	Norway maple	41	61.5	fair, not native
11	Sycamore	31	46.5	fair, some rot noted, limited crown
12	White oak	35.5	53.25	
13	American Beech	34	51	
14	White oak	40	60	fair, one sided canopy
15	White oak	40.5	60.75	fair, one sided canopy
16	White oak	34	51	fair, one sided canopy
17	White pine	33.5	50.25	
18	White oak	43	64.5	

LEGEND

SYMBOL	DESCRIPTION
---#---	EXISTING 2' CONTOURS
---#---	EXISTING 10' CONTOURS
---#---	PROPOSED CONTOUR
+362.5	SPOT ELEVATION
H.P.	HIGH POINT
---	SOILS LINES AND TYPE
---	PROPOSED TREELINE
---	EXISTING TREELINE
---	EXISTING TREES & SHRUBS
---	EXISTING TREES & SHRUBS (TO BE REMOVED)
T.B.R.	TO BE REMOVED OR RELOCATED
---	EXISTING FENCE LINE
---	EXISTING PAVING
---	PROPOSED PAVING
---	PUBLIC SEWER, WATER & UTILITY EASEMENT
---	LIMITS OF DISTURBANCE
---	FOREST/VEGETATION TO BE REMOVED
---	DRIVE/BUILDINGS TO BE REMOVED

SOILS LEGEND

SOIL	NAME	CLASS	"K" VALUE
GhB	Glenelg-Urban land complex, 0 to 8 percent slopes	B	0.28
GhC	Glenelg-Urban land complex, 8 to 15 percent slopes	C	0.32

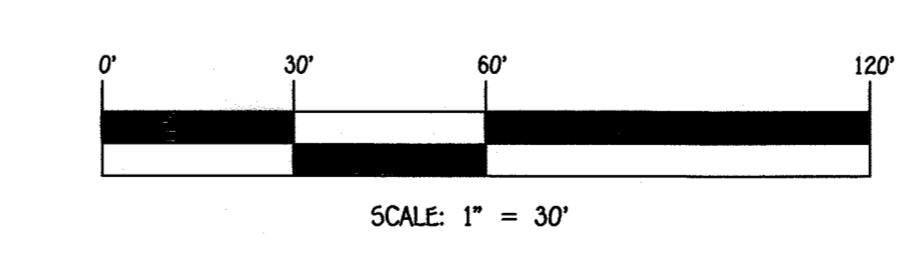
SOILS BOUNDARIES ARE BASED ON WEBSOIL SURVEY

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTONAL SQUARE OFFICE: PALE - 10272 BALTIMORE NATIONAL FILE
 ELKRIE CITY, MARYLAND 21072
 (410) 461-3995



PROFESSIONAL CERTIFICATION
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Frank Mankowski II
 FRANK MANKOWSKI II, L.S. 5/26/20
 DATE



OWNER
 ENL, LLC
 6800 DEERPATH ROAD #100
 ELKRIE, MD 21075
 (410)-579-1441

DEVELOPER
 ROCK REALTY, LLC
 C/O H&H ROCK COMPANIES
 6800 DEERPATH ROAD #100
 ELKRIE, MD 21075
 (410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 11/24/20
 Chief, Division of Land Development Date

[Signature] 11/9/20
 Chief, Development Engineering Division Date

[Signature] 11/12/20
 Director - Department of Planning and Zoning Date

PROJECT: EDEN BROOK PHASE: PARCEL NO.: 269

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
	7	R-12	42	6	605102

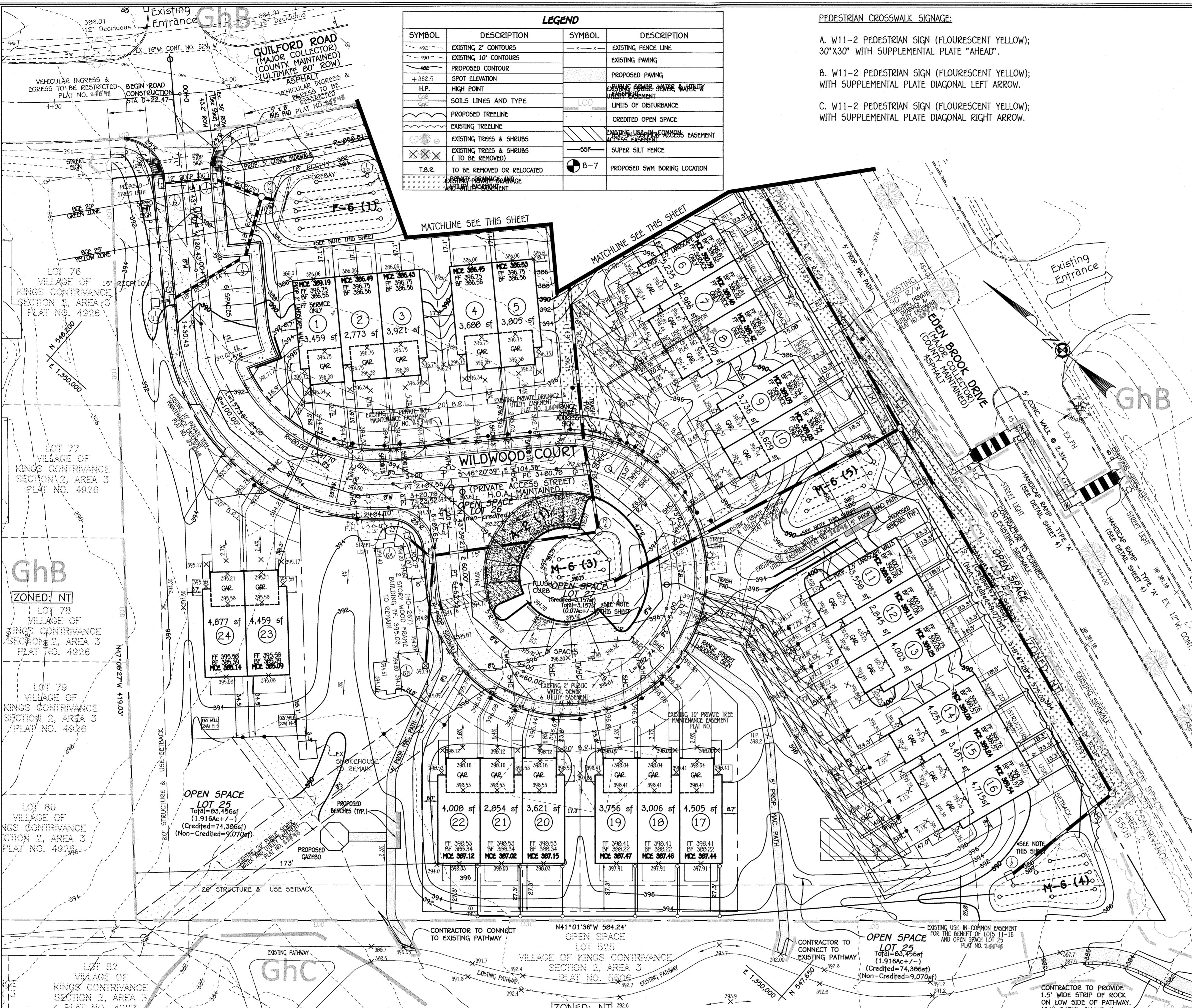
PREVIOUS HOWARD COUNTY FILES:
 BA-17-030C, ECP-18-051, WP-19-055, SP-18-003, F-20-011
 & CONTRACT NO.24-5081-0

EXISTING CONDITIONS, SOILS AND DEMOLITION PLAN

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

EDEN BROOK
 LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
 TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
 ZONED R-12
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: APRIL, 2020
 SHEET 2 OF 21 **SDP-20-009**

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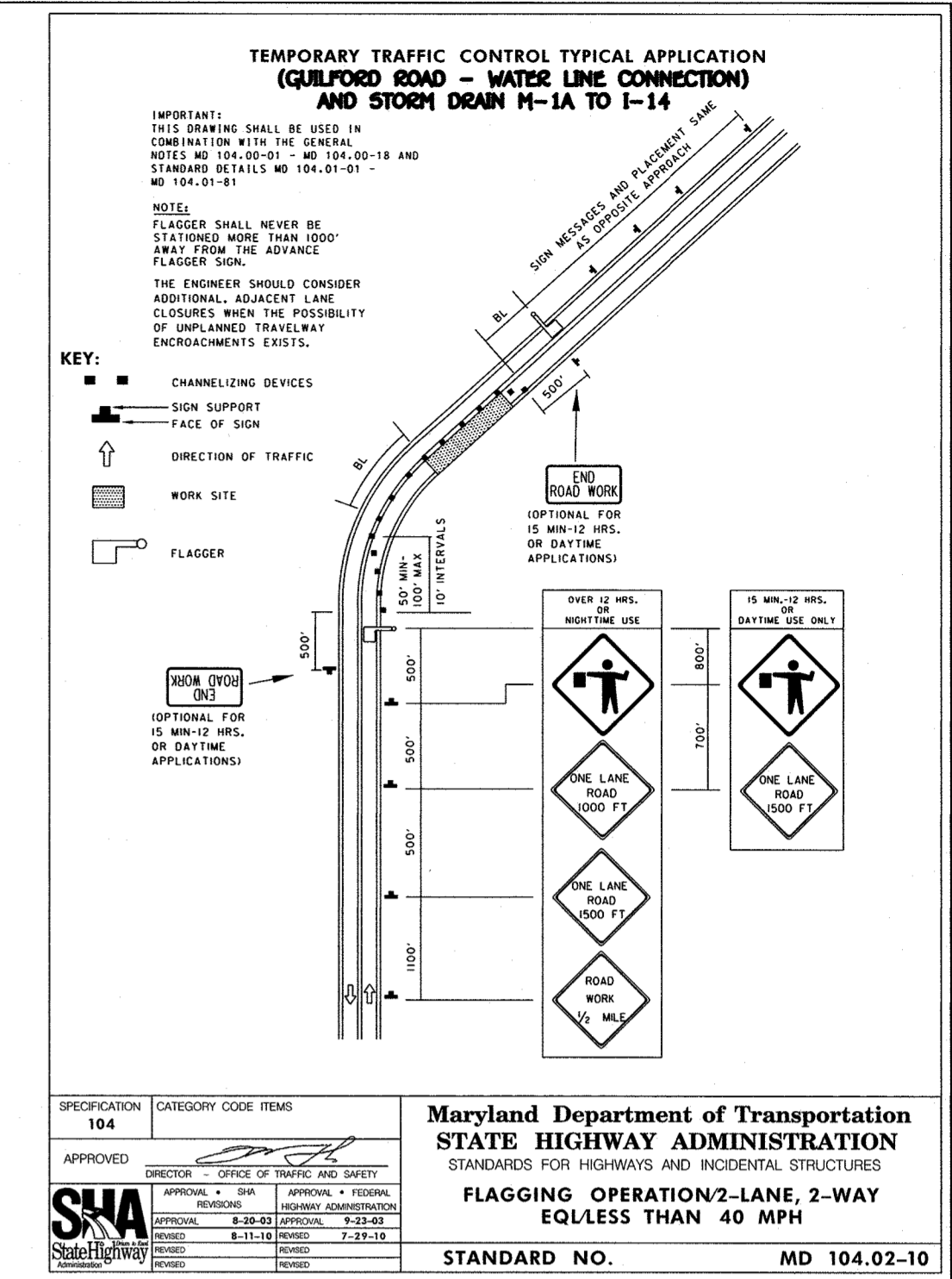
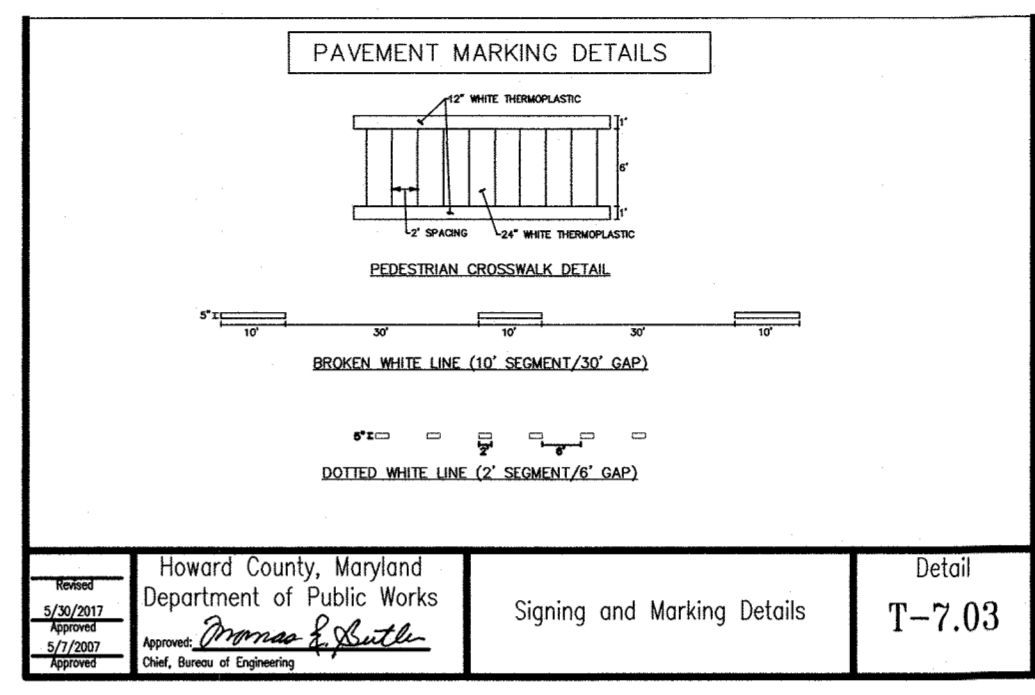
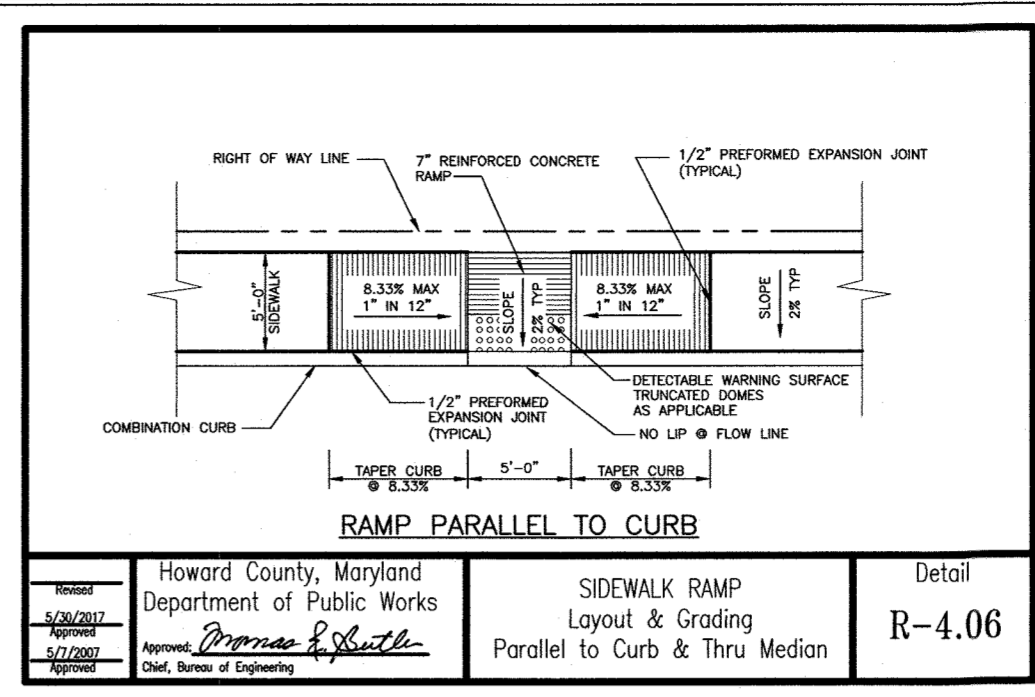
LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---492---	EXISTING 2" CONTOURS	---	EXISTING FENCE LINE
---490---	EXISTING 10" CONTOURS	---	EXISTING PAVING
---	PROPOSED CONTOUR	---	PROPOSED PAVING
+	SPOT ELEVATION	---	EXISTING CONC. DRIVEWAY
H.P.	HIGH POINT	---	LIMITS OF DISTURBANCE
G.S.	SOILS LINES AND TYPE	---	CREDITED OPEN SPACE
---	PROPOSED TREELINE	---	SYSTEMS USE IN COMMON
---	EXISTING TREES & SHRUBS	---	ACCESS EASEMENT
---	EXISTING TREES & SHRUBS (TO BE REMOVED)	---	SUPER SILT FENCE
T.B.R.	TO BE REMOVED OR RELOCATED	---	PROPOSED SWM BORING LOCATION

PEDESTRIAN CROSSWALK SIGNAGE:

A. W11-2 PEDESTRIAN SIGN (FLOURESCENT YELLOW); 30"x30" WITH SUPPLEMENTAL PLATE "AHEAD".

B. W11-2 PEDESTRIAN SIGN (FLOURESCENT YELLOW); WITH SUPPLEMENTAL PLATE DIAGONAL LEFT ARROW.

C. W11-2 PEDESTRIAN SIGN (FLOURESCENT YELLOW); WITH SUPPLEMENTAL PLATE DIAGONAL RIGHT ARROW.



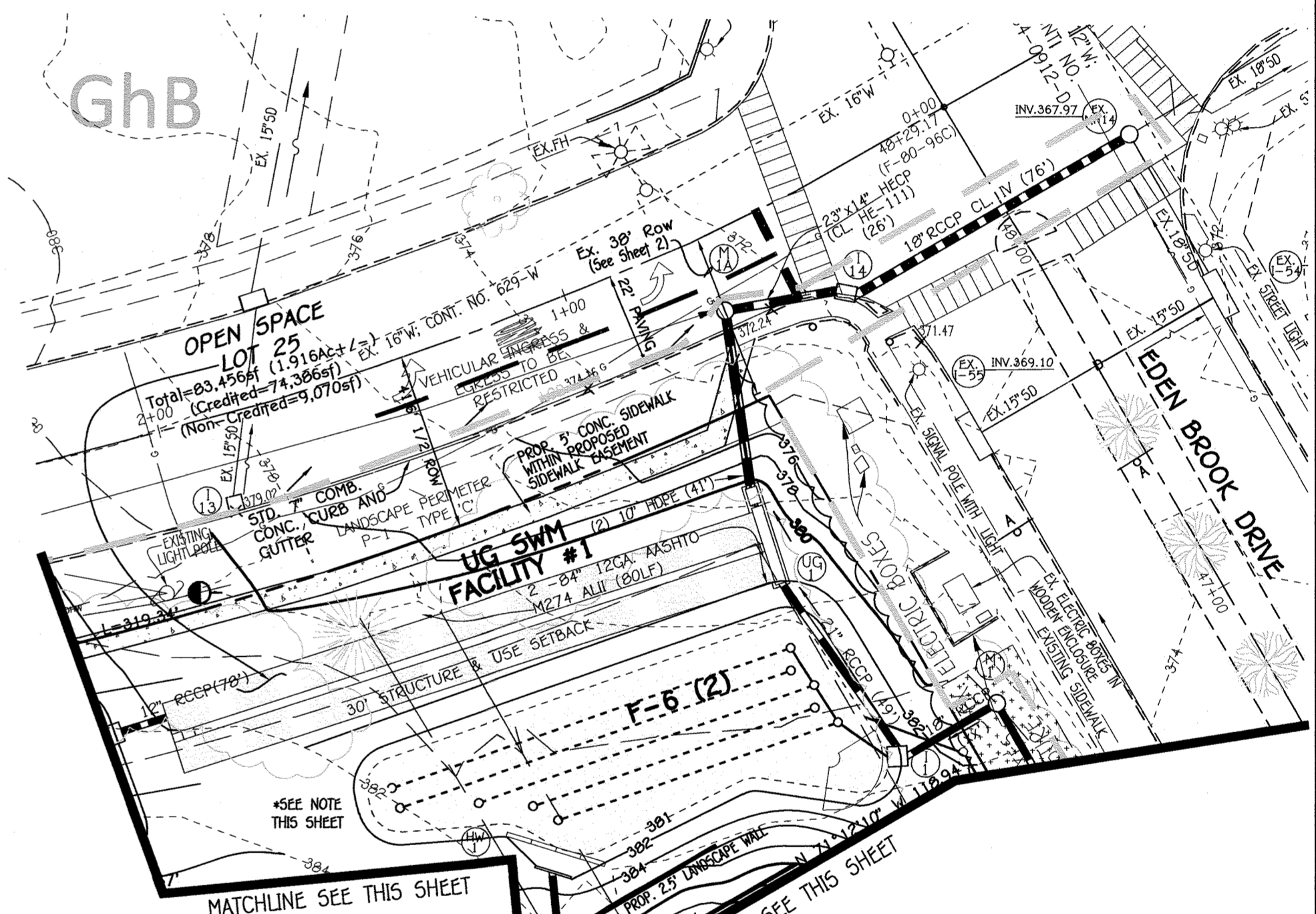
Howard County, Maryland
Department of Public Works
SIGNED: [Signature]
DATE: [Date]

SIDWALK RAMP
Layout & Grading
Parallel to Curb & Thru Median
Detail
R-4.06

Howard County, Maryland
Department of Public Works
SIGNED: [Signature]
DATE: [Date]

Signing and Marking Details
Detail
T-7.03

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
FLAGGING OPERATION 2-LANE, 2-WAY
EQL/LESS THAN 40 MPH
STANDARD NO. MD 104.02-10



NOTE: ALL ONSITE PATHWAYS AND THE OFFSITE COLUMBIA ASSOCIATION PATHWAY ARE ADA-COMPLIANT PER BA-17-030C.

NOTE: FOR BIO- AND MICRO BIO-RETENTION FACILITY DETAILS SEE SHEET 14

NOTE: IN ACCORDANCE WITH A DESIGN MANUAL WAIVER, APPROVED ON MARCH 16, 2020: LOTS 1, 6, 7, 8, 9 & 10 WILL BE FIRST FLOOR SEWER SEWER SERVICE ONLY. LOTS 2, 3, 4, 5, 17, 18, 23 & 24 WILL HAVE SEWER HOUSE CONNECTIONS AT 1% SLOPES

NOTE: ALL SEWER HOUSE CONNECTION ARE 4" IN SIZE AND ALL WATER HOUSE CONNECTIONS ARE 1 1/2" IN SIZE.

NOTE: TREES WITHIN CA PROPERTY DAMAGED OR REMOVED DURING PATHWAY CONSTRUCTION ARE TO BE REPLACED AT A 2:1 RATIO.

REPLACED TREES
EVERGREENS: 0 FT.
SHADE: 2.5" CALIPER

NO.	REVISION	DATE



PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/21.

Frank Manalansan II
FRANK MANALANSAN II, L.S.
9/11/20
DATE

SCALE: 1" = 30'

OWNER
ENLN, LLC
6800 DEERPATH ROAD #100
ELK RIDGE, MD 21075
(410)-579-1441

DEVELOPER
ROCK REALTY, LLC
C/O H&H ROCK COMPANIES
6800 DEERPATH ROAD #100
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(410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature]
Chief, Division of Land Development
11/19/20
Date

[Signature]
Chief, Development Engineering Division
11/19/20
Date

Director: Department of Planning and Zoning

PROJECT	PHASE	PARCEL NOS.
EDEN BROOK		269

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
	7	R-12	42	6	605102

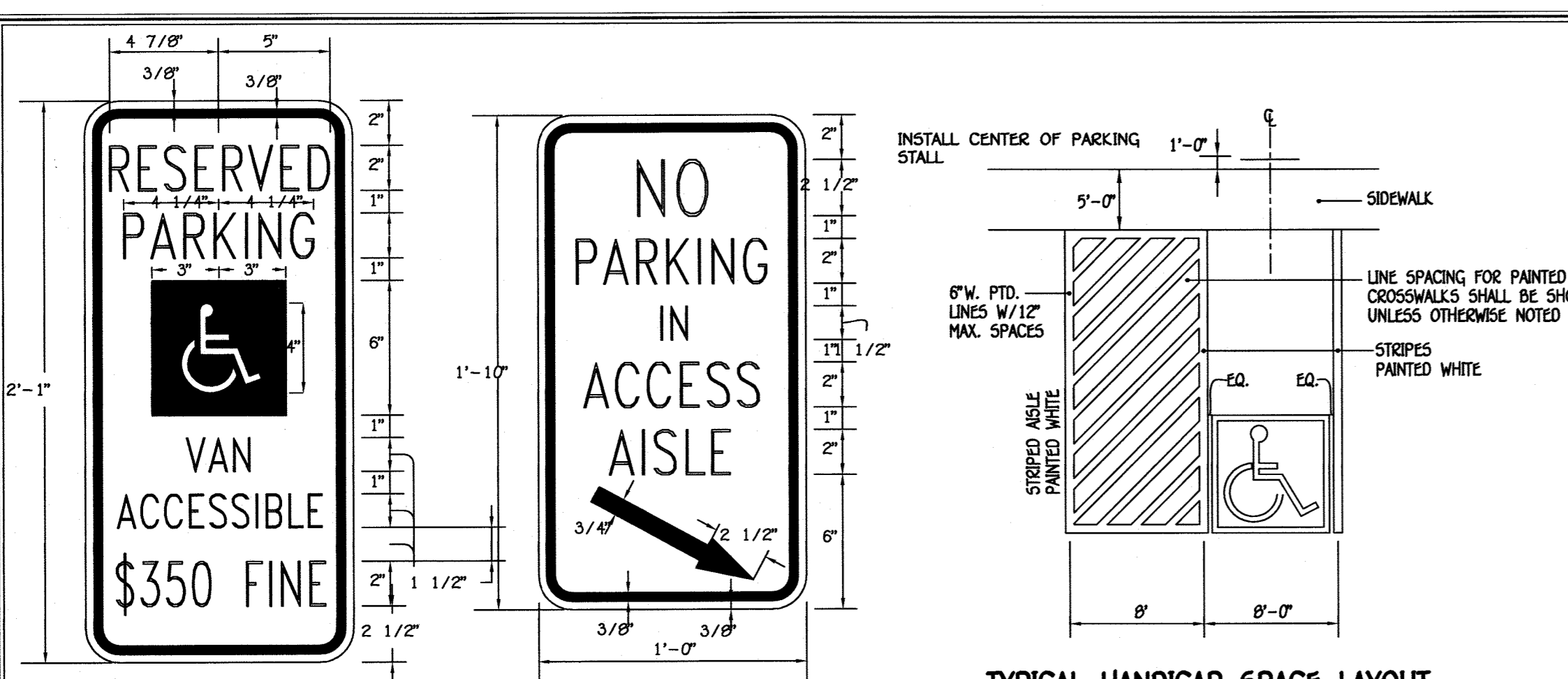
PREVIOUS HOWARD COUNTY FILES:
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& CONTRACT NO.24-5081-D

SITE DEVELOPMENT PLAN

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

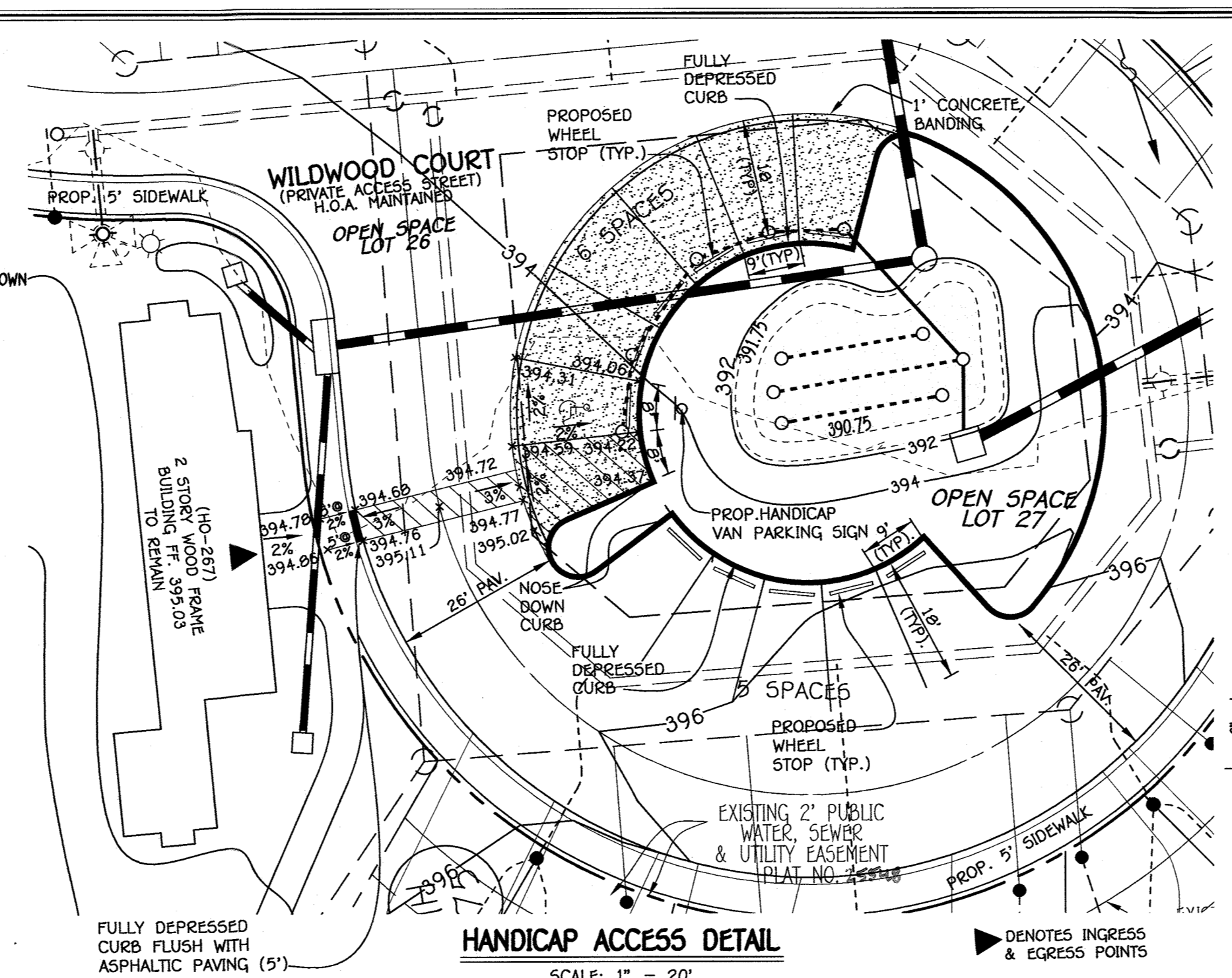
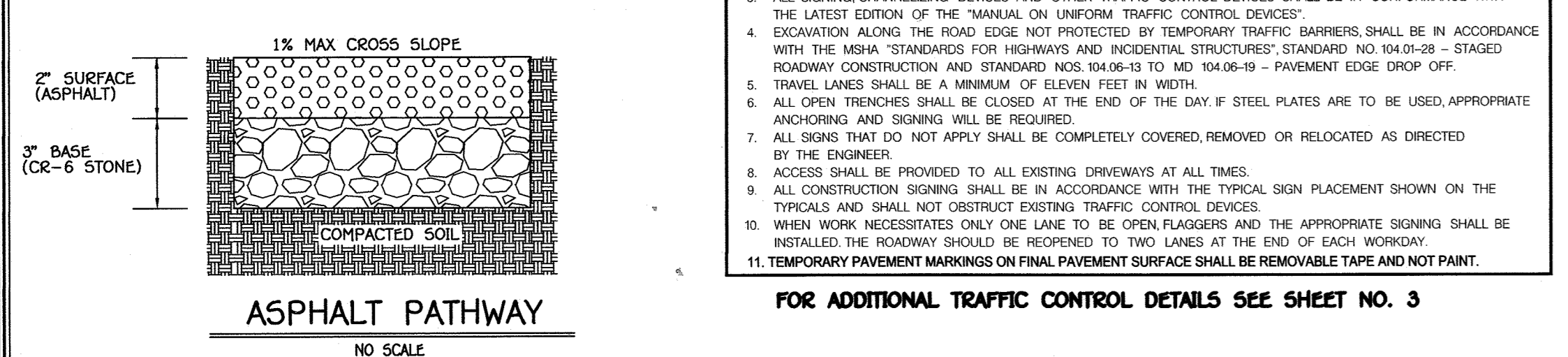
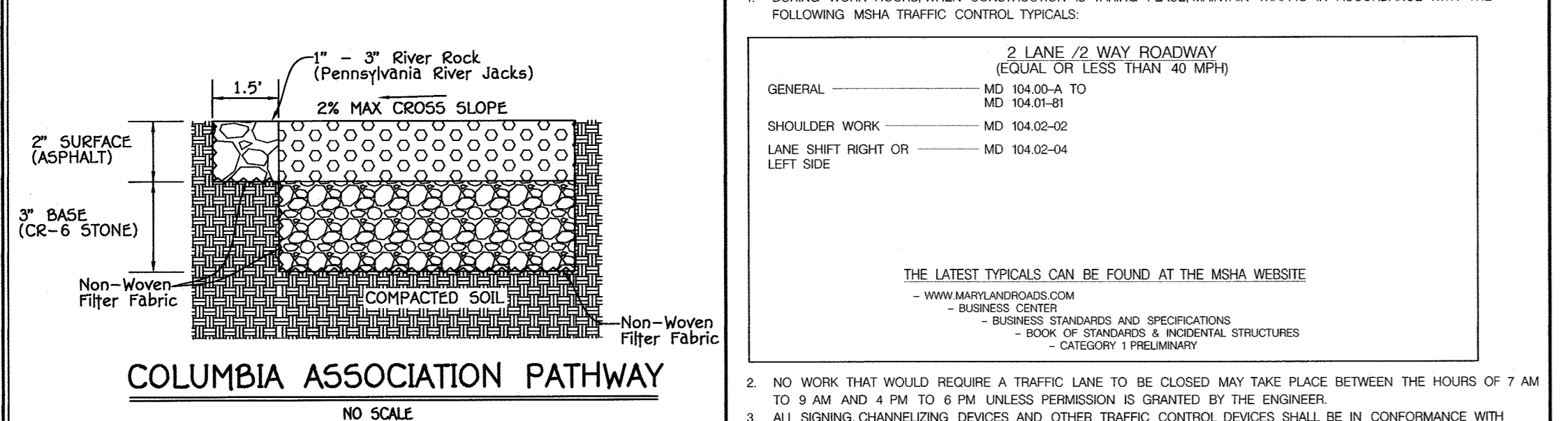
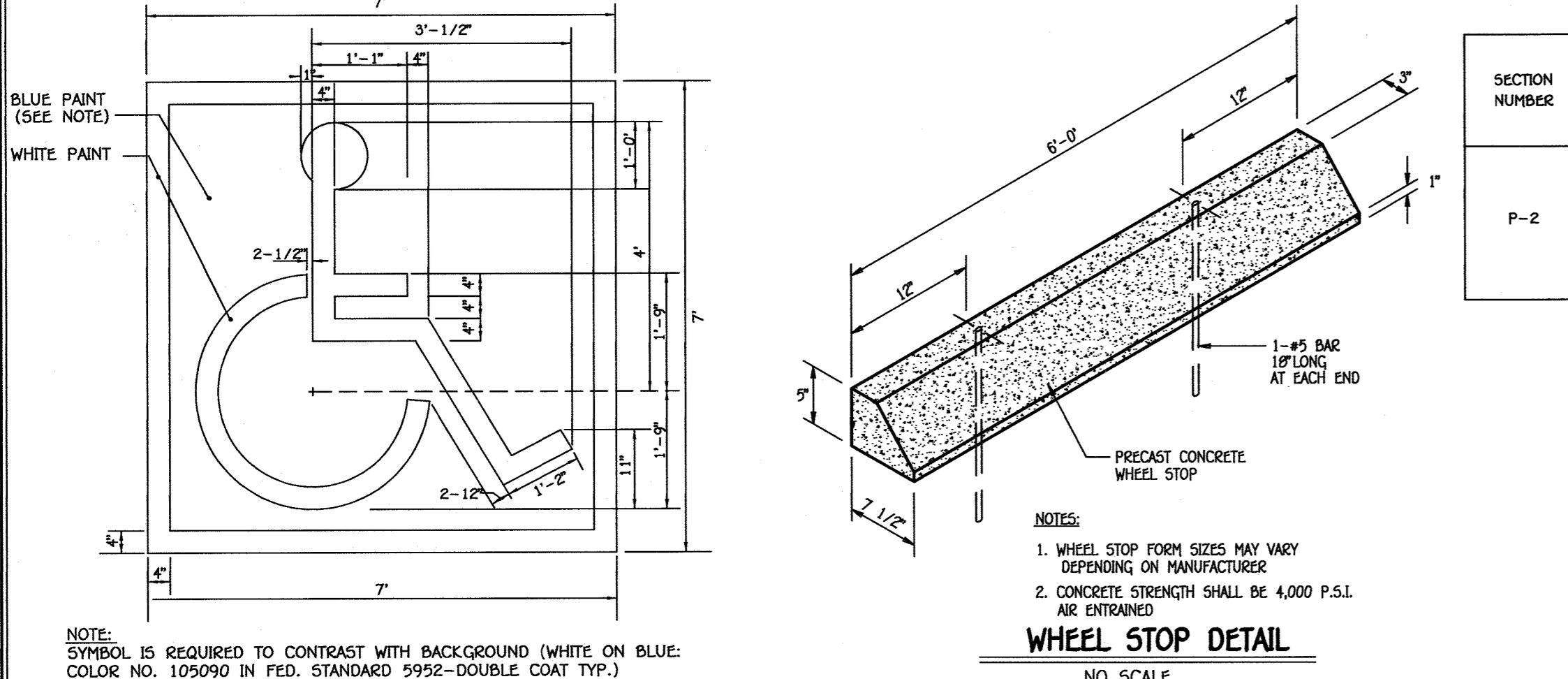
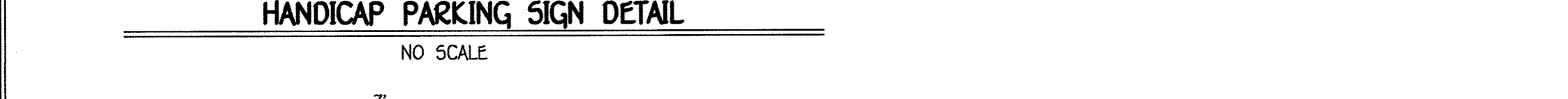
EDEN BROOK

LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
ZONED R-12
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: SEPTEMBER, 2020
SHEET 3 OF 21
SOP-20-009



TYPICAL HANDICAP SPACE LAYOUT
NO SCALE

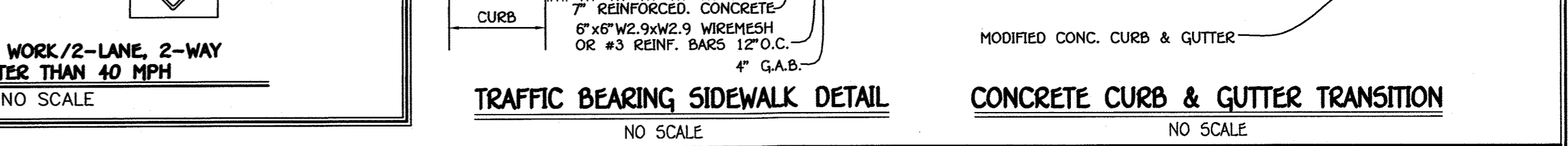
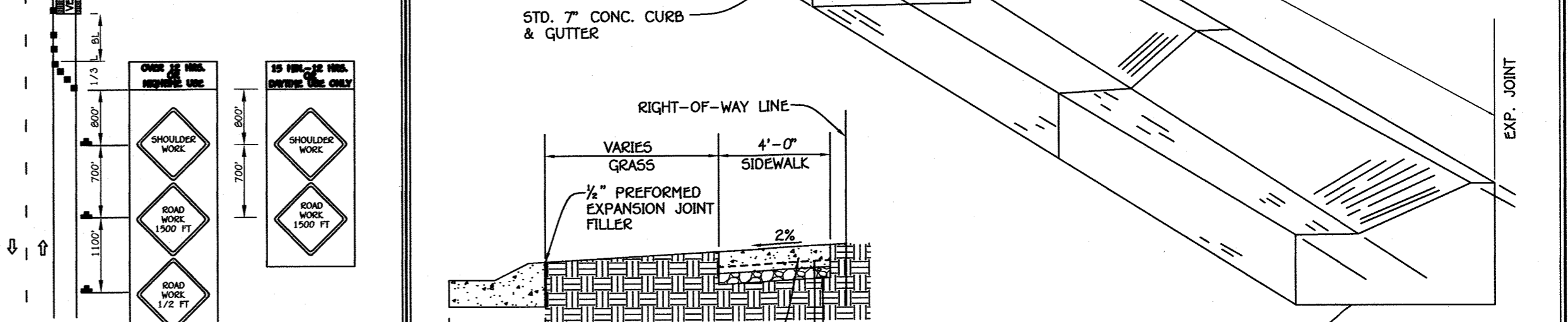
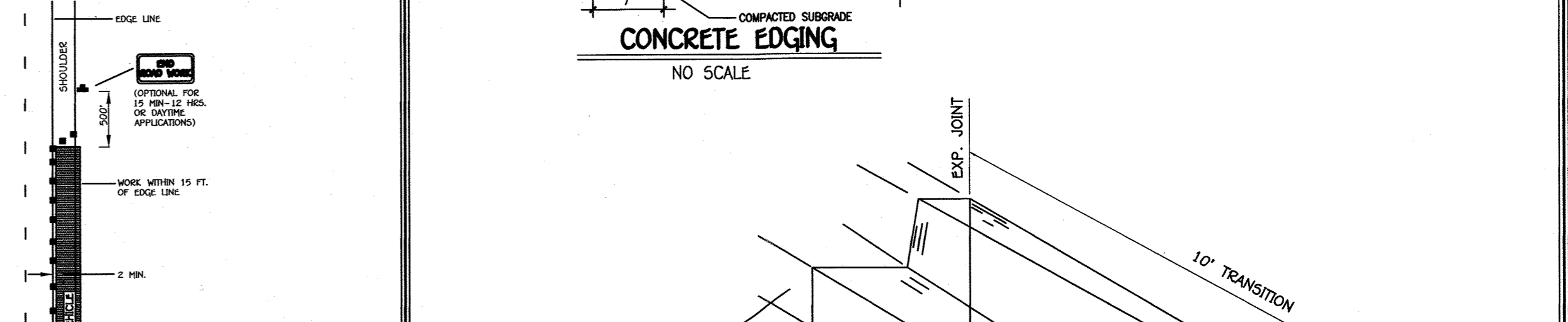
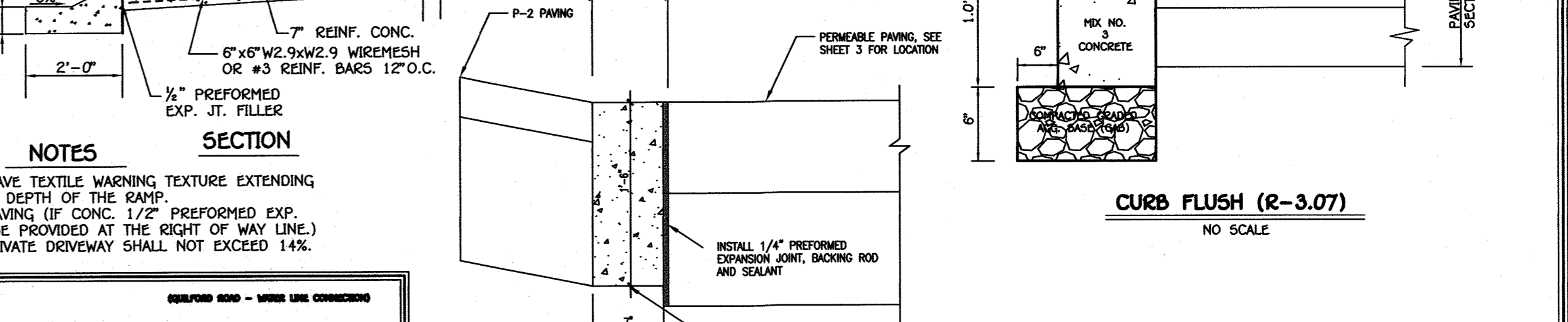
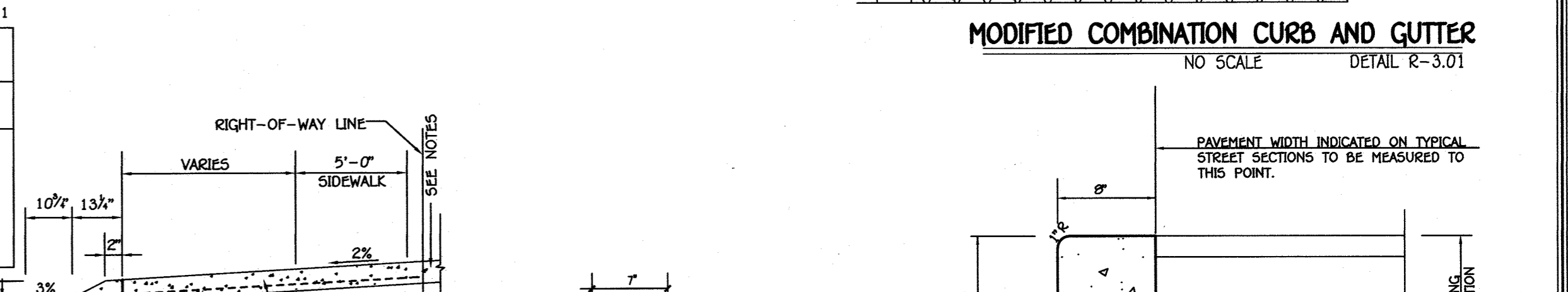
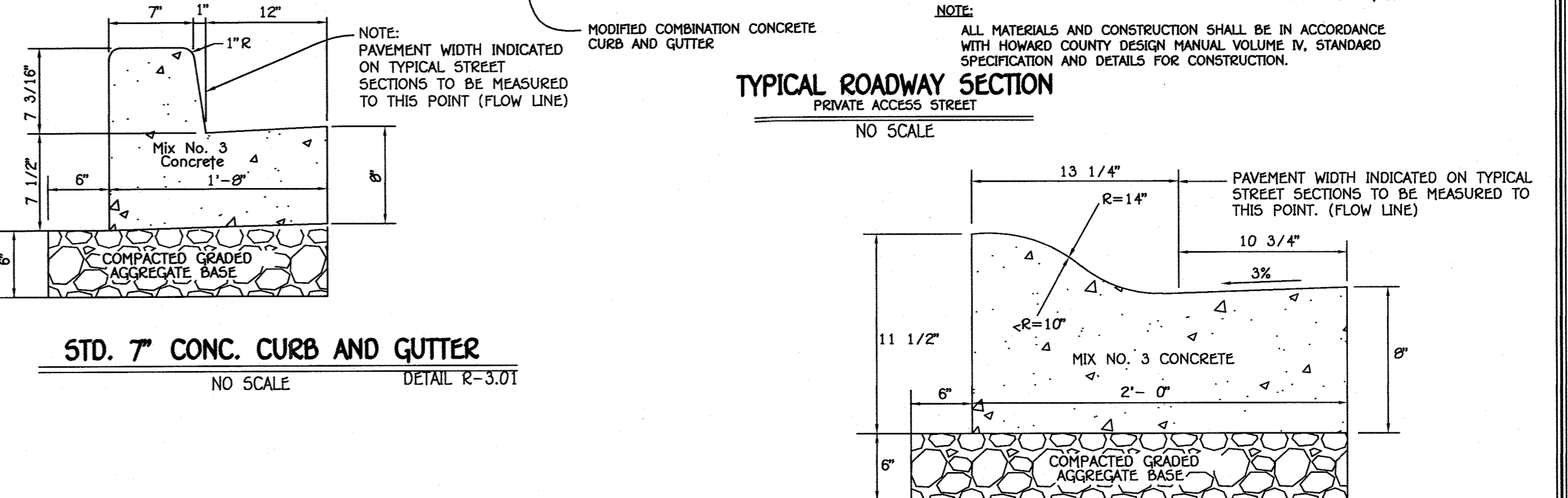
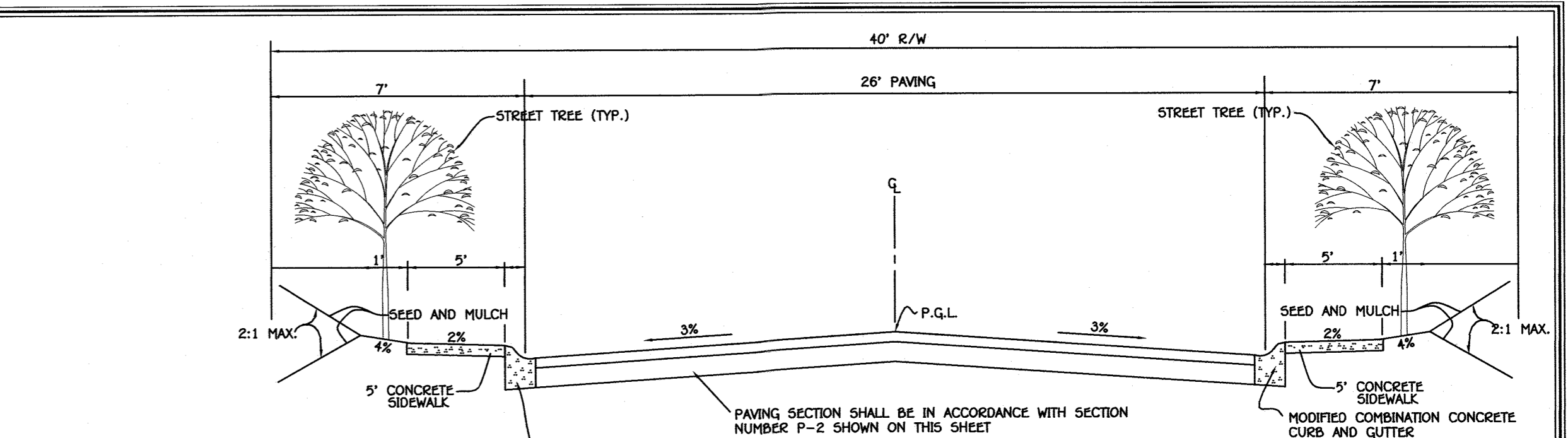
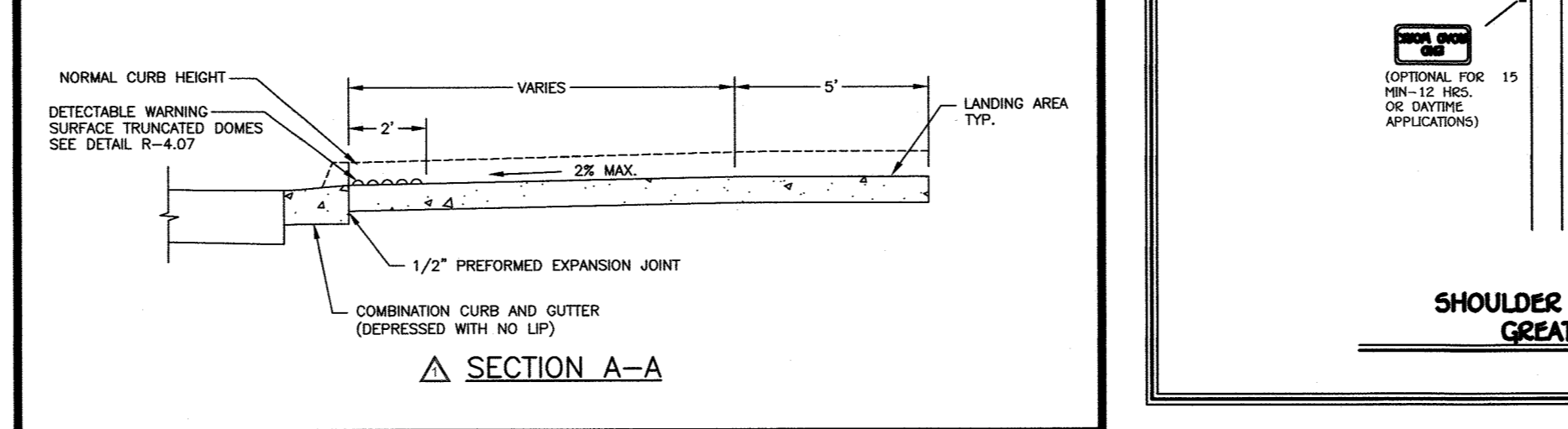
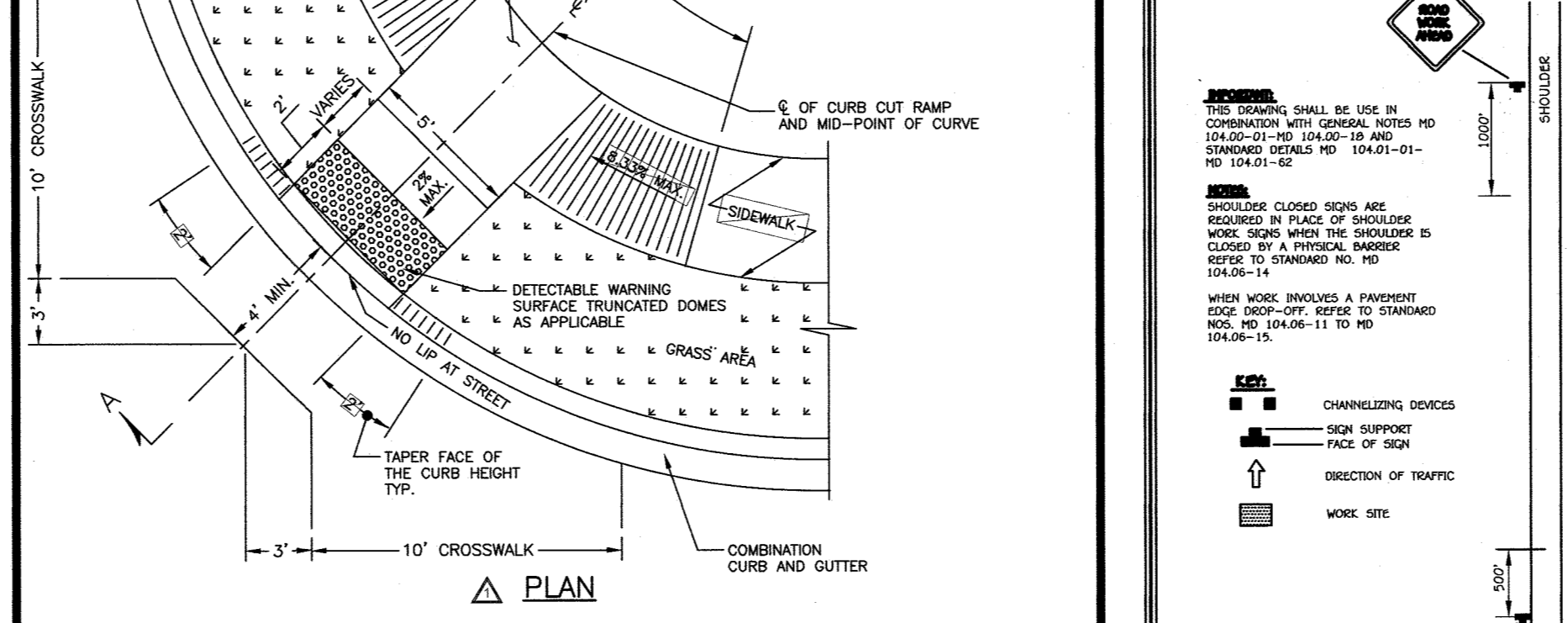
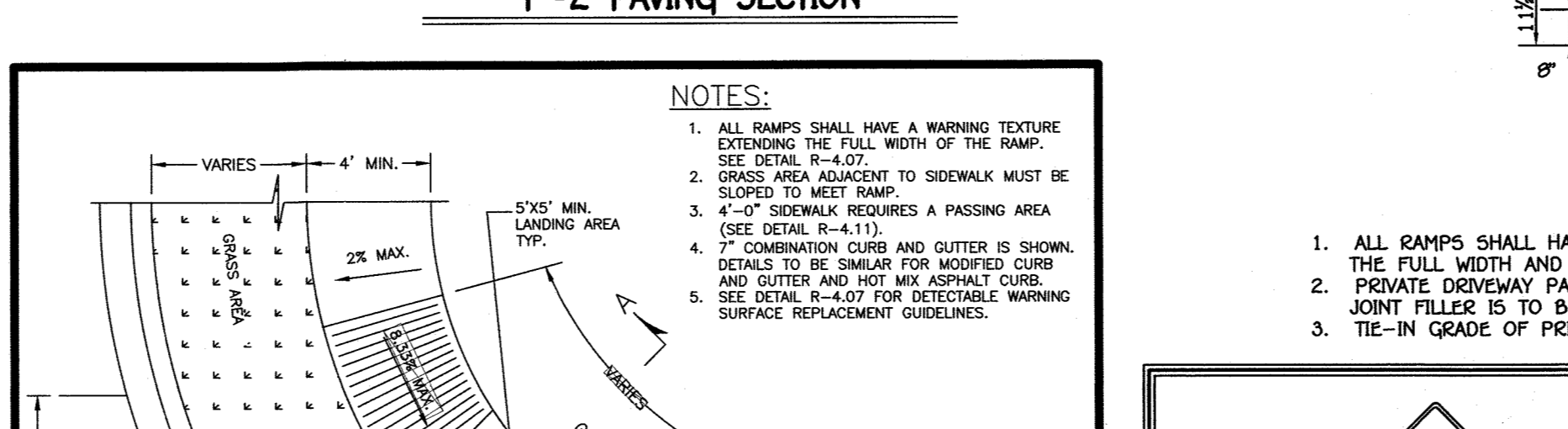
GENERAL NOTES:
 1. SIGNS SHALL MEET DESIGN STANDARDS OF THE FEDERAL HIGHWAY ADMINISTRATION AND CONFORM TO THE STATE OF MARYLAND STANDARD HIGHWAY SIGN BOOKLET DETAIL R7-8.
 2. ONE SIGN IS REQUIRED PER SPACE PLACED AS SHOWN ON SITE IMPROVEMENT PLAN.
 3. SIGNS SHALL BE POLE MOUNTED WITH HOT DIPPED GALVANIZED COUNTY APPROVED PERFORATED CHANNEL POSTS W/TOP OF SIGNS 9'-1" ABOVE FINISHED GRADE OR AS INDICATED ON SITE DRAWINGS.
 4. SIGN SHALL BE ATTACHED TO FLANGED SIDE OF POST. POST SHALL EXTEND INTO GROUND 2'-6" MIN.
 5. COLORS: LEGEND AND BORDER-GREEN SYMBOL-WHITE ON BLUE BACKGROUND BACKGROUND-WHITE
 6. CONTRACTOR SHALL COORDINATE ARROW DIRECTION WITH LOCATION OF ADJACENT AISLE.
 7. SPACE INDICATED ON SITE DEVELOPMENT PLANS AS "VAN ACCESSIBLE" SHALL BE SIGNED ACCORDINGLY.



P-2 PAVING SECTION

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)	3 TO <5			5 TO <7			7 TO <9		
			MIN	HMA WITH GAB	ASPH	MIN	HMA WITH CONSTANT GAB	ASPH	MIN	HMA WITH CONSTANT GAB	ASPH
P-2	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
	LOCAL ROADS: ACCESS PLACE, ACCESS STREET	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
	CUL-DE-SACS: RESIDENTIAL	2.0	2.0	2.0	3.5	2.0	2.0	2.0	2.0	2.0	
	STREET	8.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	

PAVEMENT MATERIAL: SUPERPAVE ASPHALT MIX FINAL SURFACE (9.5 MM, PG 64-225, LEVEL 1 (ESAL)), SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE (9.5 MM, PG 64-225, LEVEL 1 (ESAL)), SUPERPAVE ASPHALT MIX BASE (19.0 MM, PG 64-225, LEVEL 1 (ESAL)), GRADED AGGREGATE BASE (GAB)



MAINTENANCE OF TRAFFIC NOTES (GUILFORD ROAD WATER LINE CONNECTION)

1. DURING WORK HOURS WHEN CONSTRUCTION IS TAKING PLACE, MAINTAIN TRAFFIC IN ACCORDANCE WITH THE FOLLOWING MSHA TRAFFIC CONTROL TYPICALS:

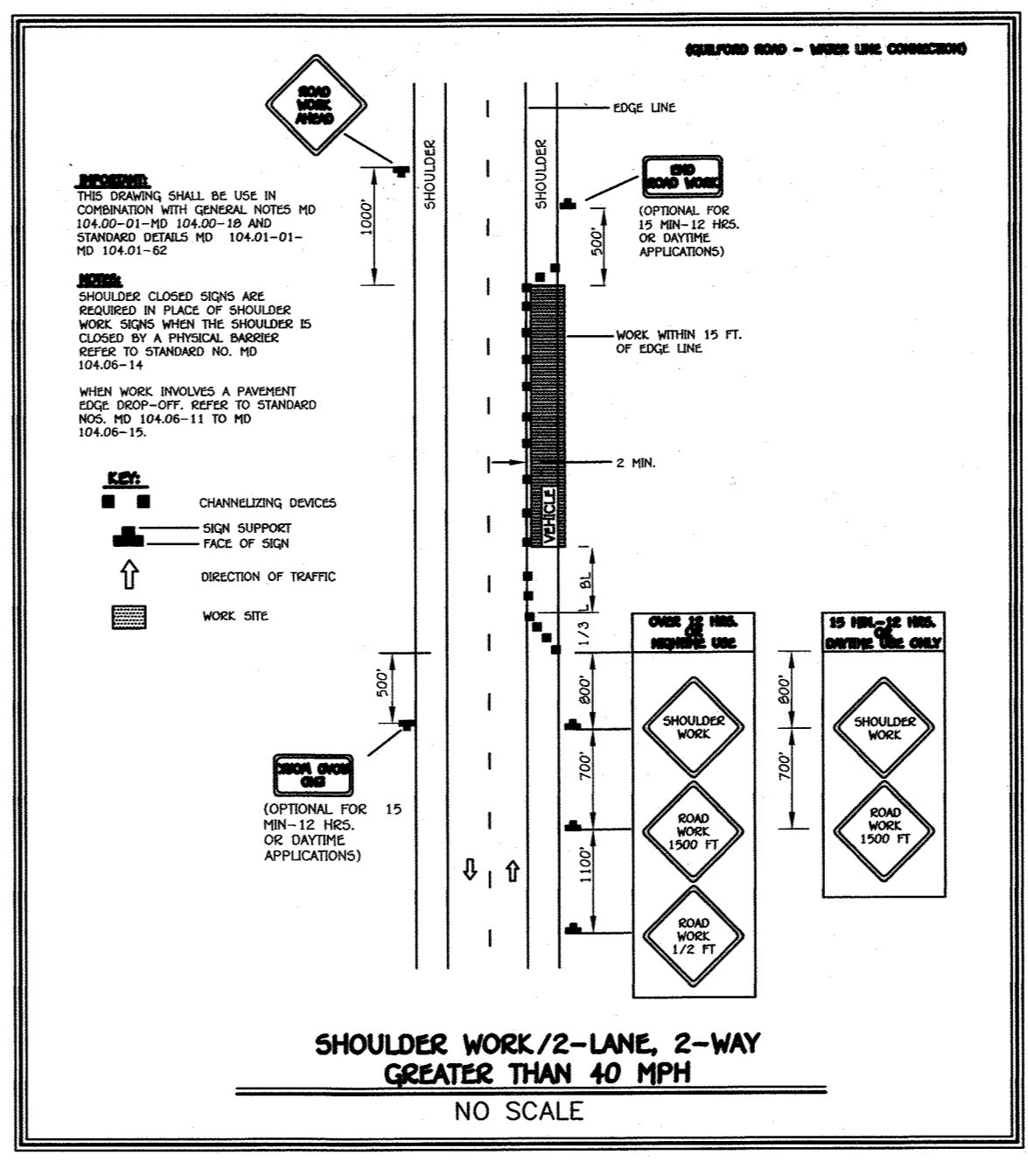
2 LANE 1/2 WAY ROADWAY (EQUAL OR LESS THAN 40 MPH)

GENERAL: MD 104.00-A TO MD 104.01-01
 SHOULDER WORK: MD 104.02-02
 LANE SHIFT RIGHT OR LEFT SIDE: MD 104.02-04

THE LATEST TYPICALS CAN BE FOUND AT THE MSHA WEBSITE
 WWW.MARYLANDROADS.COM
 - BUSINESS CENTER
 - BUSINESS STANDARDS AND SPECIFICATIONS
 - BOOK OF STANDARDS & INCIDENTAL STRUCTURES
 - CATEGORY 1 PRELIMINARY

2. NO WORK THAT WOULD REQUIRE A TRAFFIC LANE TO BE CLOSED MAY TAKE PLACE BETWEEN THE HOURS OF 7 AM TO 9 AM AND 4 PM TO 6 PM UNLESS PERMISSION IS GRANTED BY THE ENGINEER.
 3. ALL SIGNING CHANNELIZING DEVICES AND OTHER TRAFFIC CONTROL DEVICES SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
 4. EXCAVATION ALONG THE ROAD EDGE NOT PROTECTED BY TEMPORARY TRAFFIC BARRIERS, SHALL BE IN ACCORDANCE WITH THE MSHA "STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES" STANDARD NO. 104.01-28 - STAGED ROADWAY CONSTRUCTION AND STANDARD NOS. 104.06-19 TO MD 104.06-19 - PAVEMENT EDGE DROP OFF.
 5. TRAVEL LANES SHALL BE A MINIMUM OF ELEVEN FEET IN WIDTH.
 6. ALL OPEN TRENCHES SHALL BE CLOSED AT THE END OF THE DAY IF STEEL PLATES ARE TO BE USED, APPROPRIATE ANCHORING AND SIGNING WILL BE REQUIRED.
 7. ALL SIGNS THAT DO NOT APPLY SHALL BE COMPLETELY COVERED, REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER.
 8. ACCESS SHALL BE PROVIDED TO ALL EXISTING DRIVEWAYS AT ALL TIMES.
 9. ALL CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE TYPICAL SIGN PLACEMENT SHOWN ON THE TYPICALS AND SHALL NOT OBSTRUCT EXISTING TRAFFIC CONTROL DEVICES.
 10. WHEN WORK NECESSITATES ONLY ONE LANE TO BE OPEN FLAGGERS AND THE APPROPRIATE SIGNING SHALL BE INSTALLED. THE ROADWAY SHOULD BE REOPENED TO TWO LANES AT THE END OF EACH WORKDAY.
 11. TEMPORARY PAVEMENT MARKINGS ON FINAL PAVEMENT SURFACE SHALL BE REMOVABLE TAPE AND NOT PAINT.

FOR ADDITIONAL TRAFFIC CONTROL DETAILS SEE SHEET NO. 3



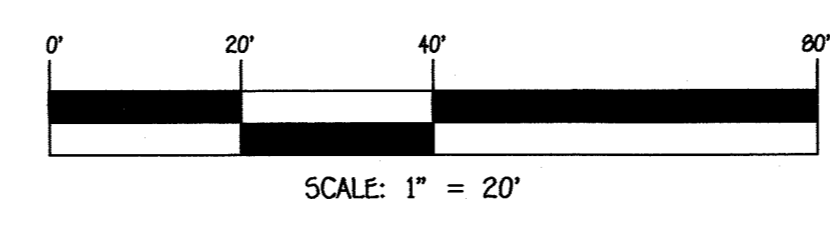
NO.	REVISION	DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10270 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
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Frank Mavalangan II
 FRANK MAVALANGAN II, L.S.
 5/26/20
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DEVELOPER
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 C/O H&H ROCK COMPANIES
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 (410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

David P. ...
 Chief, Division of Land Development
 Date: 11/12/20

David ...
 Chief, Development Engineering Division
 Date: 11/9/20

David ...
 Director - Department of Planning and Zoning
 Date: 11/12/20

PROJECT
 EDEN BROOK

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
7	7	R-12	42	6	605102

PREVIOUS HOWARD COUNTY FILES:
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 & CONTRACT NO.24-5081-0

HANDICAP AND ROAD NOTES AND DETAILS SHEET

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

EDEN BROOK
 LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
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 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: APRIL, 2020
 SHEET 4 OF 21

SDP-20-009

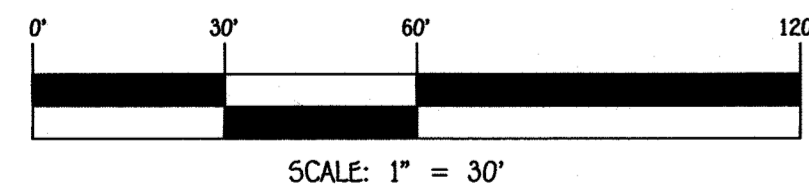


SOILS LEGEND			
SOIL	NAME	CLASS	K VALUE
GhB	Glennel-Urban land complex, 0 to 8 percent slopes	B	0.28
GhC	Glennel-Urban land complex, 8 to 15 percent slopes	C	0.32

SOILS BOUNDARIES ARE BASED ON WEBSOIL SURVEY

LEGEND	
SYMBOL	DESCRIPTION
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---	SOILS LINES AND TYPE
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⊗	EXISTING TREES & SHRUBS (TO BE REMOVED)
T.B.R.	TO BE REMOVED OR RELOCATED
---	EXISTING FENCE LINE
---	EXISTING PAVING
---	PROPOSED PAVING
---	EXISTING PUBLIC SEWER, WATER & UTILITY EASEMENT
---	LIMITS OF DISTURBANCE
---	CREDITED OPEN SPACE
---	EXISTING USE-IN-COMMON ACCESS EASEMENT
---	SUPER SILT FENCE
⊙	PROPOSED SWM BORING LOCATION
---	EXISTING PRIVATE DRAINAGE AND UTILITY EASEMENT

NOTE: THIS AREA TO BE CLEARED AND GRUBBED BEFORE CONSTRUCTION, THEN GRADED PER THE PLAN. RE-SPREAD WITH MINIMUM 6" TOPSOIL AND PLANT, SEED, OR SOD PER THESE SPECIFICATIONS. SEEDING ON LOT 525 SHALL BE DONE IN ACCORDANCE WITH LANDSCAPE CONTRACTOR ASSOCIATION (LCA) SPECIFICATION GUIDELINES PART 6. FOLLOW SPECIFICATIONS FOR FINAL GRADE PREPARATION WITH TOPSOIL. SEED SHALL BE MARYLAND CERTIFIED TURF TYPE TALL FESCUE. (SEE U OF MD TT-77). RATE SHALL BE 5-10 LBS. PER 1,000 SF. SOD CAN USE THE CURRENT H5CD SPECIFICATIONS.



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLETTT CITY, MARYLAND 21142
 (410) 461-1099

NO.	REVISION	DATE



PROFESSIONAL CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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: *Frank John Manalansan II* DATE: 5/26/20
 SIGNATURE OF LICENSED PROFESSIONAL FRANK JOHN MANALANSAN II DATE

BUILDER/DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, FOR SEDIMENT AND EROSION CONTROL AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: *Mark Levy* DATE: 4/20/2020
 SIGNATURE OF DEVELOPER MARK LEVY DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: *Frank John Manalansan II* DATE: 5/26/20
 HOWARD SOIL CONSERVATION DISTRICT

OWNER
 ENL, LLC
 6800 DEERPATH ROAD #100
 ELK RIDGE, MD 21075
 (410)-579-1441

DEVELOPER
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 ELK RIDGE, MD 21075
 (410)-567-1049

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Signature: *Michael J. Ac* DATE: 11/12/20
 Chief, Division of Land Development

Signature: *David Bunchadi* DATE: 11/19/20
 Chief, Development Engineering Division

Signature: *David G...* DATE: 11/12/20
 Director, Department of Planning and Zoning

PROJECT	PHASE	PARCEL NO.
EDEN BROOK		269

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
7		R-12	42	6	605102

PREVIOUS HOWARD COUNTY FILES:
 BA-17-030C, ECP-18-051, WP-19-055, SP-18-003, F-20-011
 & CONTRACT NO.24-5081-D

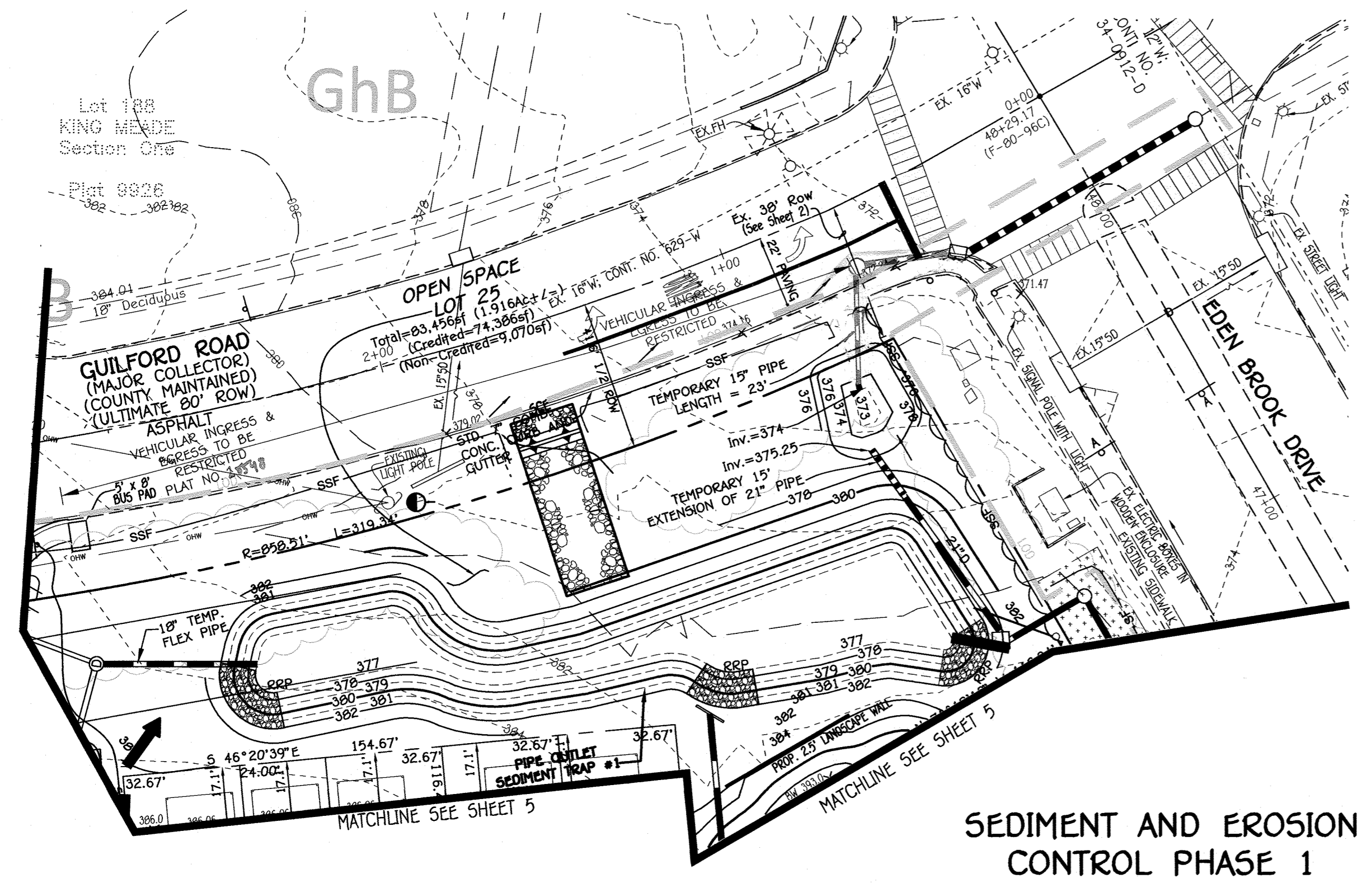
GRADING AND EROSION/SEDIMENT CONTROL PLAN

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

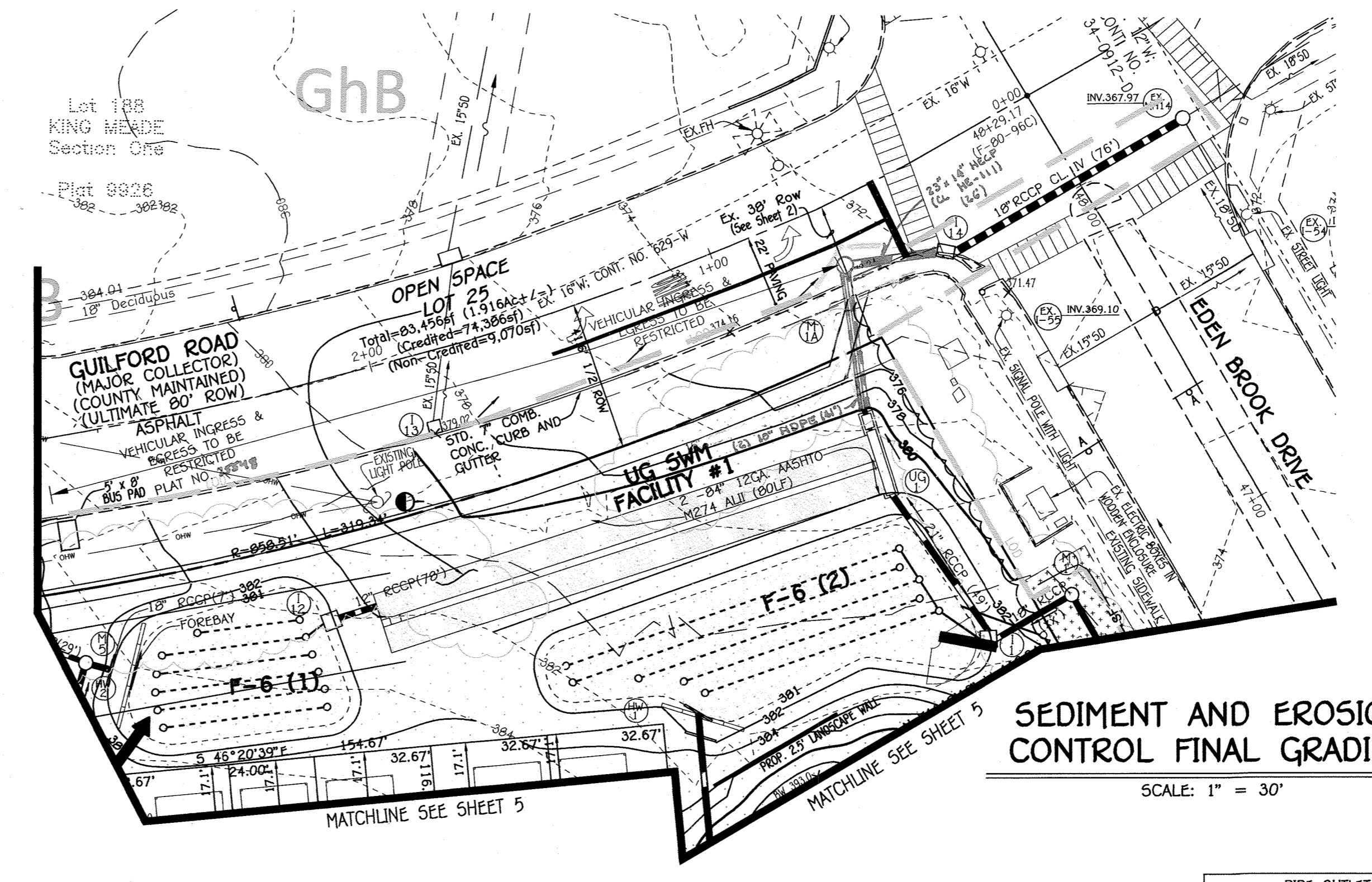
EDEN BROOK
 LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
 TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
 ZONED R-12
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: APRIL, 2020
 SHEET 5 OF 21

SDP-20-009

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SEDIMENT AND EROSION CONTROL PHASE 1
SCALE: 1" = 30'



SEDIMENT AND EROSION CONTROL FINAL GRADING
SCALE: 1" = 30'

LEGEND	
SYMBOL	DESCRIPTION
- - - - -	EXISTING 2' CONTOURS
- - - - -	EXISTING 10' CONTOURS
- - - - -	PROPOSED CONTOUR
+ 362.5	SPOT ELEVATION
HP	HIGH POINT
---	SOILS LINES AND TYPE
---	PROPOSED TREELINE
---	EXISTING TREELINE
---	EXISTING TREES & SHRUBS (TO BE REMOVED)
T.B.R.	TO BE REMOVED OR RELOCATED
---	EXISTING FENCE LINE
---	PROPOSED PAVING
---	EXISTING PUBLIC SEWER, WATER & UTILITY EASEMENT
---	LIMITS OF DISTURBANCE
---	CREDITED OPEN SPACE
---	EXISTING USE-IN-COMMON ACCESS EASEMENT
---	SUPER SILT FENCE
B-7	PROPOSED SWM BORING LOCATION
---	EXISTING PRIVATE DRAINAGE AND UTILITY EASEMENT

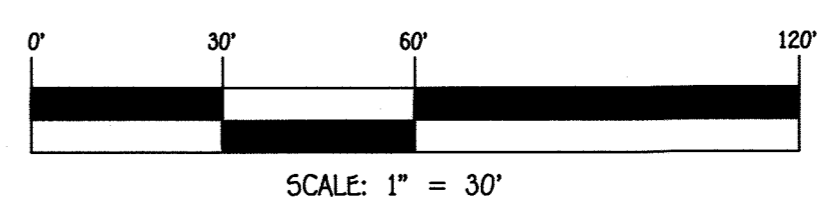
DETAIL G-1-1	PIPE OUTLET SEDIMENT TRAP ST-1	STANDARD SYMBOL
		ST-1
CONSTRUCTION SPECIFICATIONS		
1. CONSTRUCT TRAP IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE AVOIDED.		
2. CLEAR, GRUB, AND STRIP ANY VEGETATION AND ROOT MAT FROM THE AREA UNDER THE EMBANKMENT AND TRAP BOTTOM.		
3. PERFORATE THE RISER WITH 1 INCH DIAMETER HOLES SPACED 6 INCHES ON CENTER WITH THE LOWEST PERFORATIONS AT THE NET STORAGE ELEVATION OR PROVIDE A HORIZONTAL OR VERTICAL DRAW-DOWN DEVICE PERFORATED ACCORDING TO APPROVED PLAN. DO NOT PERFORATE THE RISER WITHIN 6 INCHES OF THE TOP OF THE HORIZONTAL BARREL.		
4. SET RISER/BARREL ASSEMBLY PRIOR TO EMBANKMENT CONSTRUCTION. MAKE ALL PIPE CONNECTIONS WATER-TIGHT. OFFSET RISER FROM EMBANKMENT TO ACCOMMODATE PLACEMENT OF THE TRASH RACK. ANCHOR THE RISER WITH EITHER A REINFORCED CONCRETE BASE OR STEEL PLATE BASE TO PREVENT FLOTATION. MAKE CONCRETE BASES AT LEAST TWICE THE RISER DIAMETER AND 18 INCHES THICK WITH THE RISER EMBEDDED 9 INCHES.		
5. USE FILL MATERIAL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL FOR THE EMBANKMENT.		
6. HAND COMPACT IN 4 INCH LAYERS FILL MATERIAL AROUND THE PIPE SPILLWAY. PLACE A MINIMUM OF 2 FEET OF HAND COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT.		
7. CONSTRUCT TOP OF EMBANKMENT 1 FOOT MINIMUM ABOVE RISER CREST. COMPACT THE EMBANKMENT BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.		
8. MAKE ALL CUT AND FILL SLOPES 2:1 OR FLATTER.		
9. WRAP THE RISER WITH 1/2 INCH GALVANIZED HARDWARE CLOTH THEN WRAP WITH NONWOVEN GEOTEXTILE. DO NOT WRAP WITH MORE THAN ONE LAYER OF GEOTEXTILE. EXTEND HARDWARE CLOTH AND GEOTEXTILE AT LEAST 6 INCHES ABOVE THE HIGHEST PERFORATIONS AND AT LEAST 6 INCHES BELOW THE LOWEST PERFORATIONS. OVERLAP, FOLD AND FASTEN WHERE ENDS OF GEOTEXTILE COME TOGETHER TO PREVENT BYPASS. REPLACE GEOTEXTILE AS NECESSARY TO PREVENT CLOGGING.		
10. USE STRAPS OR CONNECTING BANDS AT THE TOP AND BOTTOM OF THE GEOTEXTILE TO HOLD THE GEOTEXTILE AND HARDWARE CLOTH IN PLACE.		
11. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.		
12. STABILIZE THE EMBANKMENT AND INTERIOR SLOPES WITH SEED AND MULCH. STABILIZE POINTS OF CONCENTRATED INFLOW AS SHOWN ON APPROVED PLAN.		
13. CONSTRUCT AND MAINTAIN THE OUTLET ACCORDING TO THE APPROVED PLAN AND IN SUCH A MANNER THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.		
14. REMOVE SEDIMENT AND RESTORE TRAP TO ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO CLEANOUT ELEVATION (TOP OF WET STORAGE DEPTH). DEPOSIT REMOVED SEDIMENT IN AN APPROVED AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. KEEP POINTS OF INFLOW AND OUTFLOW AS WELL AS INTERIOR OF THE TRAP FREE FROM EROSION, AND REMOVE ACCUMULATED DEBRIS. MAINTAIN EMBANKMENTS TO CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. REMOVE ANY TREES, BRUSH, OR OTHER WOODY VEGETATION GROWING ON EMBANKMENT OR NEAR PRINCIPAL SPILLWAY. MAINTAIN LINE, GRADE, AND CROSS SECTION. MAINTAIN WATER TIGHT CONNECTIONS. REPLACE GEOTEXTILE AROUND PERFORATED RISER IF DRY STORAGE VOLUME DOES NOT DRAW DOWN WITHIN 10 HOURS.		
15. WHEN DEWATERING TRAP, PASS REMOVED WATER THROUGH AN APPROVED SEDIMENT CONTROL PRACTICE.		
16. UPON REMOVAL, GRADE AND STABILIZE THE AREA OCCUPIED BY TRAP.		
2 OF 3		
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL G-2-4	BAFFLE BOARDS	STANDARD SYMBOL
		BB
CONSTRUCTION SPECIFICATIONS		
BAFFLES ARE REQUIRED TO PROVIDE A FLOW LENGTH BETWEEN INFLOW POINT AND OUTLET EQUAL TO TWICE THE EFFECTIVE TRAP/BASIN WIDTH.		
SET ELEVATION AT 1/2 OF THE DRY STORAGE ELEVATION / 2) OR 6 IN BELOW WEIR CREST (OUTLET) WHICHEVER IS LOWER SHEETS OF 4 FT x 8 FT x 1/2 IN CDX EXTERIOR GRADE PLYWOOD OR EQUIVALENT POSTS MINIMUM 4 IN SQUARE OR 5 IN ROUND SET AT LEAST 3 FT INTO THE GROUND 4 FT CENTER TO CENTER BAFFLE DETAIL		
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

PIPE OUTLET SEDIMENT TRAP ST-1, TRAP NO. 1		
DRAINAGE AREA - INITIAL	2.40	ACRES
DRAINAGE AREA - INTERIM	---	ACRES
DRAINAGE AREA - FINAL	3.73	ACRES
TOTAL STORAGE REQUIRED	13,428	CF
TOTAL STORAGE PROVIDED	20,332	CF
WET STORAGE REQUIRED	6,714	CF
WET STORAGE PROVIDED	6,714	CF
DRY STORAGE REQUIRED (TSWM)	13,428	CF
DRY STORAGE PROVIDED (TSWM)	13,428	CF
TRAP BOTTOM ELEVATION	377.90	FT
TRAP BOTTOM DIMENSIONS (AVERAGE)	30 x 186	FT x FT
RISER CREST (DRY STORAGE) ELEVATION	380.80	FT
OUTLET (WET STORAGE) ELEVATION	379.55	FT
CLEANOUT ELEVATION	378.70	FT
TOP OF EMBANKMENT ELEVATION	381.90	FT
SIDE SLOPE	2	HV RATIO
EMBANKMENT TOP WIDTH	4	FT
PRINCIPAL SPILLWAY MATERIAL (BARREL, RISER, ANTI-SEEP COLLAR)	CHP METAL	
RISER DIAMETER	33	IN
BARREL DIAMETER	24	IN
TRASH RACK DIAMETER	48	IN
TRASH RACK HEIGHT	29	IN
ANTI-SEEP COLLAR DIMENSIONS	6.5 x 6.5	IN
OUTLET PROTECTION - LENGTH	STILLING BASIN	FT
OUTLET PROTECTION - WIDTH	STILLING BASIN	IN
OUTLET PROTECTION - DEPTH	STILLING BASIN	IN

SOILS LEGEND			
SOIL	NAME	CLASS	K'VALUE
GhB	Glenelg-Urbn land complex, 0 to 8 percent slopes	B	0.28
GhC	Glenelg-Urbn land complex, 8 to 15 percent slopes	C	0.32

SOILS BOUNDARIES ARE BASED ON WEBSOIL SURVEY



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PKE.
ELLECIPTI CITY, MARYLAND 21042
(410) 461 - 2995



PROFESSIONAL CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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: *Frank John Manalansan II* DATE: 5/26/20
SIGNATURE OF LICENSED PROFESSIONAL FRANK JOHN MANALANSAN II DATE

BUILDER/DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
Signature: *Mark Levy* DATE: 4/20/2022
SIGNATURE OF DEVELOPER MARK LEVY DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Signature: *John K. [unclear]* DATE: 5/27/20
HOWARD SOIL CONSERVATION DISTRICT

OWNER
ENLH, LLC
6800 DEERPATH ROAD #100
ELK RIDGE, MD 21075
(410)-579-1441

DEVELOPER
ROCK REALTY LLC
C/O H&H ROCK COMPANIES
6800 DEERPATH ROAD #100
ELK RIDGE, MD 21075
(410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Signature: *[unclear]* DATE: 11/12/20
Chief, Division of Land Development ES
Signature: *[unclear]* DATE: 11/9/20
Chief, Development Engineering Division NY
Signature: *[unclear]* DATE: 11/12/20
Director, Department of Planning and Zoning

PROJECT: EDEN BROOK PHASE: PARCEL NO.: 269
PLAT: BLOCK NO.: 7 ZONE: R-12 TAX/ZONE: 42 ELEC. DIST.: 6 CENSUS TR.: 605102

PREVIOUS HOWARD COUNTY FILES:
BA-17-030C, ECP-18-051, WP-19-055, SP-18-003, F-20-011 & CONTRACT NO.24-5081-0

GRADING AND EROSION/SEDIMENT CONTROL PLAN
SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING
EDEN BROOK
LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
ZONED R-12
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: APRIL, 2020
SHEET 6 OF 21
SDP-20-009

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SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

A. SOIL PREPARATION
1. TEMPORARY STABILIZATION
a. SOIL PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SURFACING AGGREGATE, CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CRUEL FLARES OR REVERSE MOUNTED ON CONSTRUCTION EQUIPMENT. IT MUST BE FOLLOWED BY PERMANENT SEEDING SUMMARY.

B. TOPSOILING
1. TOPSOIL IS PLACED OVER PREPARED SURFACE PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW HUMUS CONTENT, LOW NUTRIENT LEVELS, LOW pH, MATERIALS TOXIC TO PLANTS, OR OTHER UNDESIRABLE CHARACTERISTICS.

C. SOIL AMENDMENTS (FERTILIZER & LIME SPECIFICATIONS)
1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIO AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A LICENSED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES THAT REQUIRE FURTHER PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSIS.

PERMANENT SEEDING NOTES (B-4-3)

A. SEED MIXTURES
1. GENERAL USE
a. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDNESS ZONE FROM FIGURE B.3.1 AND BASED ON THE SITE CONDITIONS OR PURPOSES FOR TABLE B.3.2.

PERMANENT SEEDING SUMMARY table with columns: HARDNESS ZONE (FROM FIGURE B.3.1), FERTILIZER RATE (10-20-20), LIME RATE (SEED MIXTURE FROM TABLE B.3.1), NO. SPECIES, APPLICATION RATE (LB./AC.), SEEDING DATES, SEEDING DEPTH, P, K, O2, L, P, O2, 2-TON/AC. (100 LB/ 1000 SF)

B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).
1. GENERAL SPECIFICATIONS
a. CLASS OF TURFGRASS MUST BE MARYLAND STATE CERTIFIED. 500 LBS/AC. MUST BE MADE AVAILABLE TO THE CONTRACTOR.

C. DUST CONTROL
DEFINITION
CONTROLLING DUST BLOWING AND MOVEMENT ON CONSTRUCTION SITES AND ROADS.
PURPOSE
TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON AND OFF-SITE DAMAGE, HEALTH HAZARDS AND IMPROVE VISIBILITY.

STANDARD STABILIZATION NOTE
FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
a. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1 HORIZONTAL TO 1 VERTICAL (3:1).

TEMPORARY SEEDING NOTES (B-4-4)
DEFINITION
TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.
PURPOSE
TO FAST GROWING VEGETATION THAT PROMOTES COVER ON DISTURBED SOILS.
CONDITIONS WHERE PRACTICE APPLIES
EXPOSED SOILS WHERE SOIL BLOWING IS NEARLY CERTAIN FOR A PERIOD OF 6 MONTHS OR LESS, FOR LONGER DURATION OF THE PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

TEMPORARY SEEDING SUMMARY table with columns: HARDNESS ZONE (FROM FIGURE B.3.1), FERTILIZER RATE (10-20-20), LIME RATE (SEED MIXTURE FROM TABLE B.3.1), SPECIES, APPLICATION RATE (LB./AC.), SEEDING DATES, SEEDING DEPTH, P, K, O2, L, P, O2, 2-TON/AC. (100 LB/ 1000 SF)

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING & MULCHING

DEFINITION
THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.
PURPOSE
TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.
CONDITIONS WHERE PRACTICE APPLIES
TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING.

A. SEEDING
1. SPECIFICATIONS
a. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A LICENSED SEED LABORATORY PRIOR TO APPLICATION.
b. SEEDING MUST BE COMPLETED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOILING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.

B. MULCHING
1. MULCH MATERIALS (IN ORDER OF PREFERENCE)
a. STRAW CONSISTING OF THOROUGHLY THRESHED WHOLE, RYE, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEEDING LAW AND MUST BE CLEAN, DRY, AND EXCESSIVELY DUSTY.
b. WOOD CELLULOSE FIBER MULCH (MFCM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED IN UNIFORM PLEATED PHYSICAL STATE.

HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

1. A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-313-1895 after the future L.O.D and protected areas are marked clearly in the field. A minimum of 48 hours notice to CID must be given at the following stages:
a. Prior to the start of earth disturbance.
b. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other grading.
c. Prior to the start of another phase of construction or opening of another grading unit. d. Prior to the removal or modification of sediment control practices.

7. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
8. Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly, and the next day after each rain event. A written report by the contractor, made available upon request, is part of every inspection and should include:
• Inspection date
• Inspection type (routine, pre-storm event, during rain event)
• Name and title of inspector
• Weather information (current conditions as well as time and amount of last recorded precipitation)

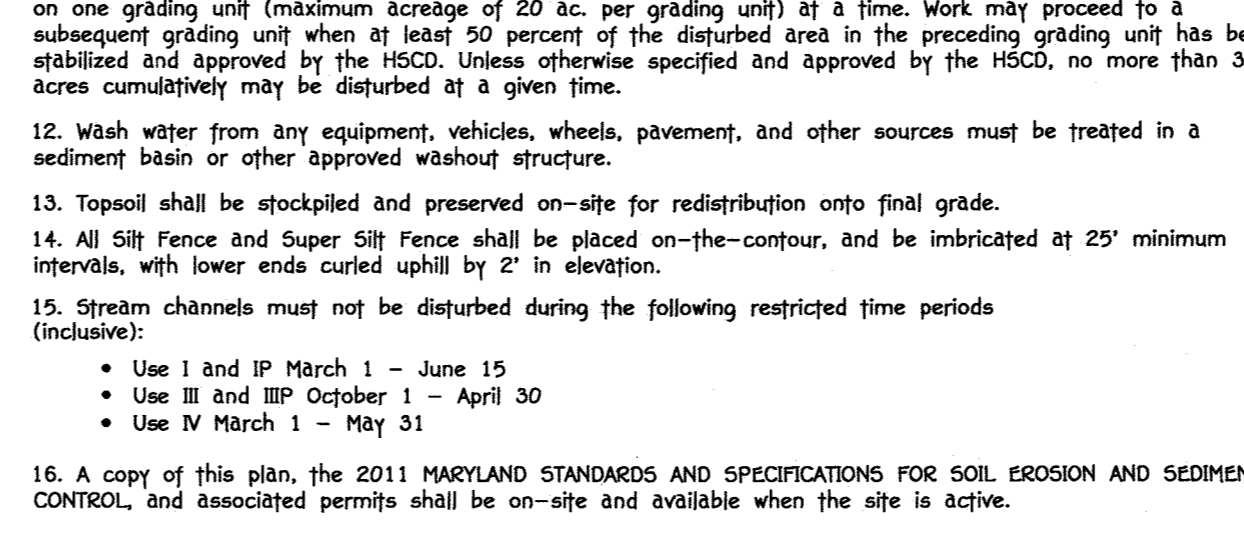
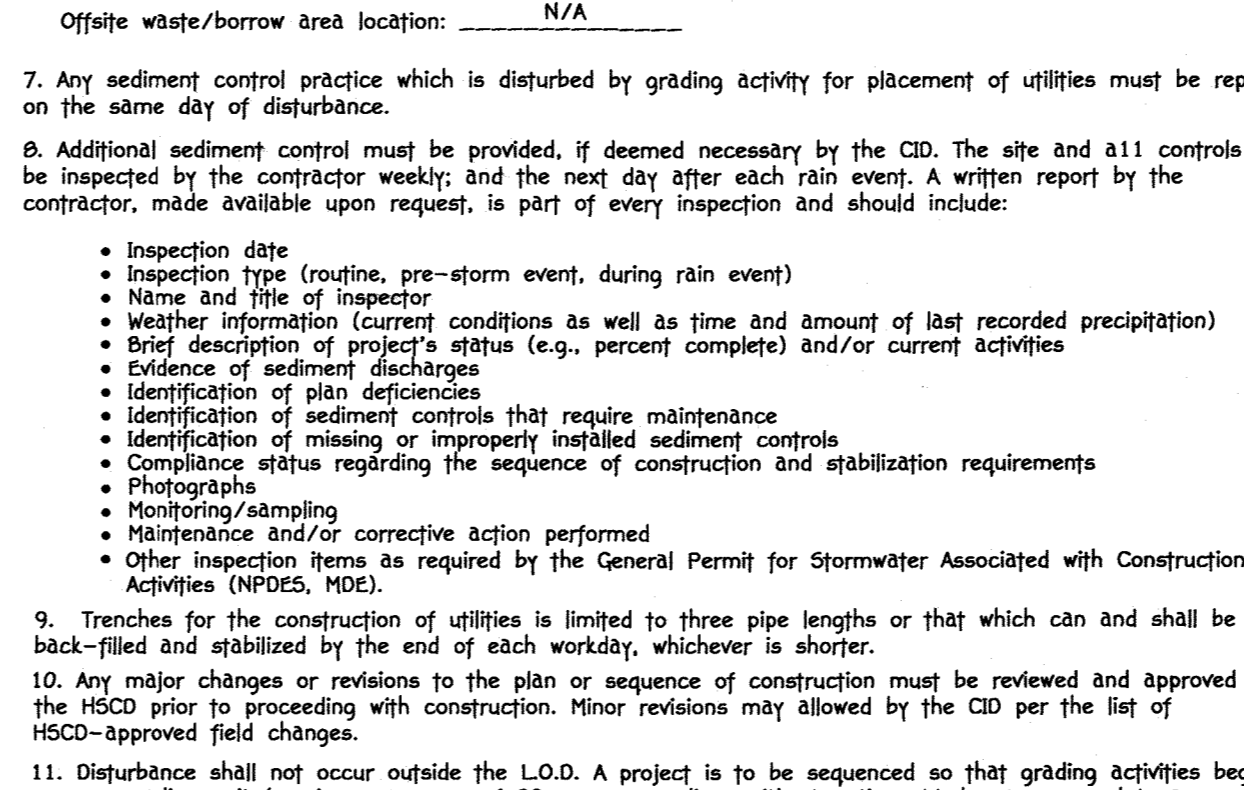
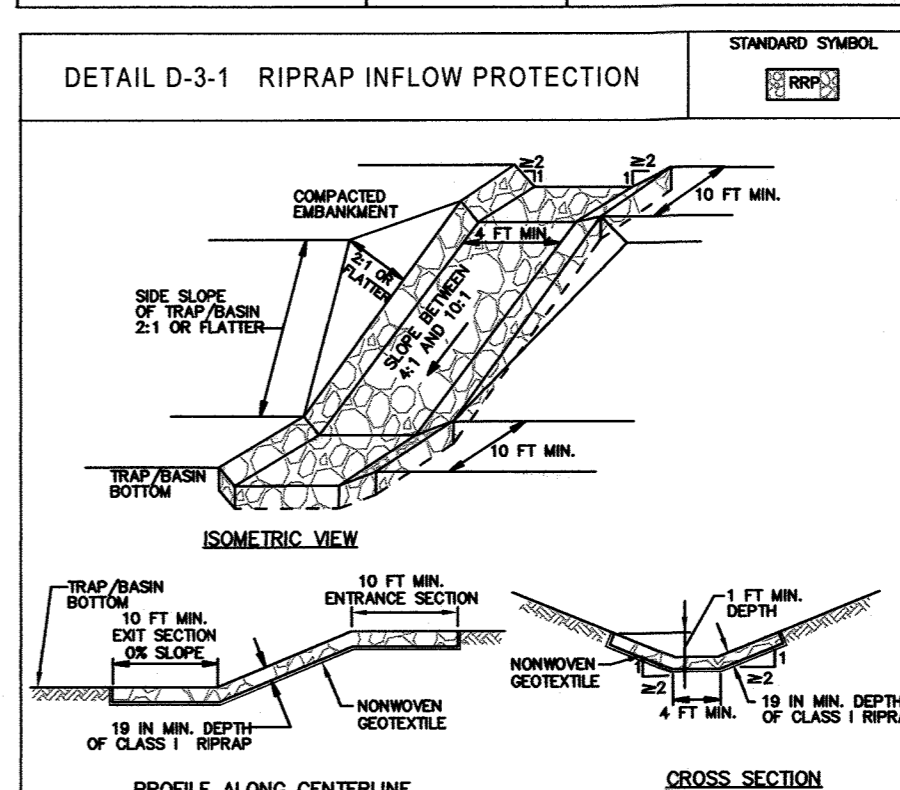
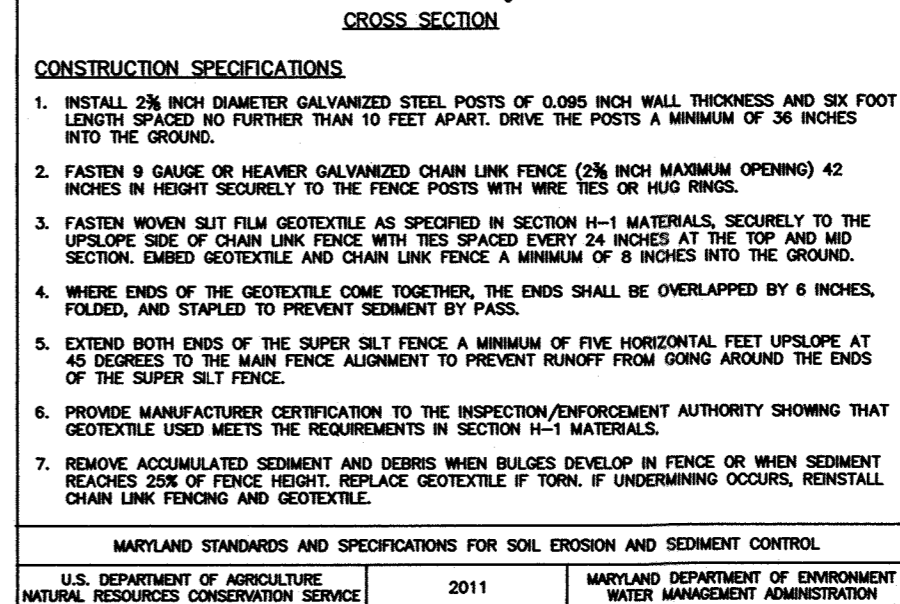
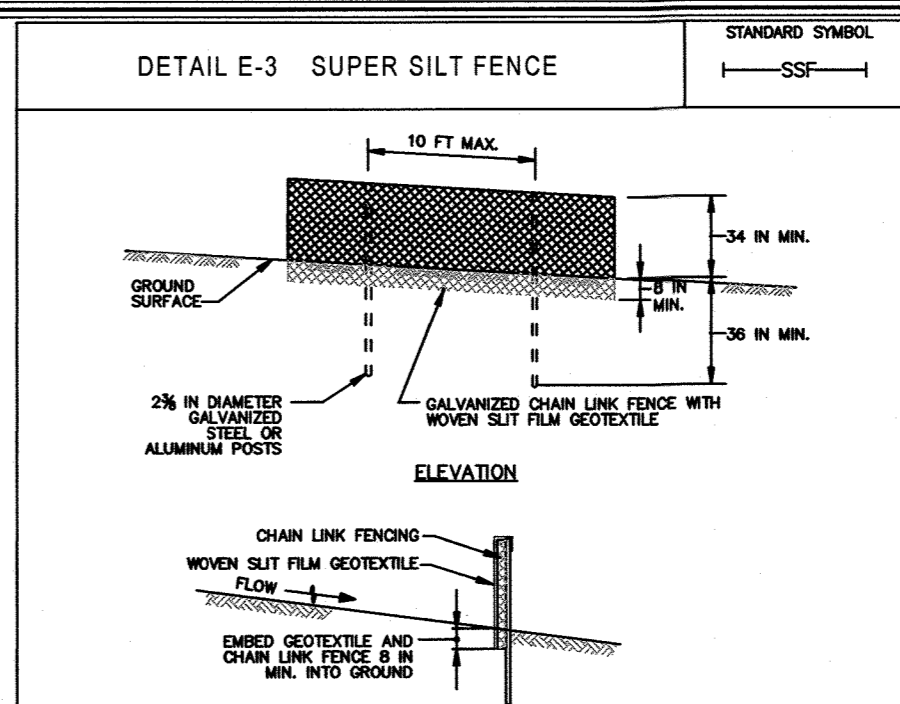
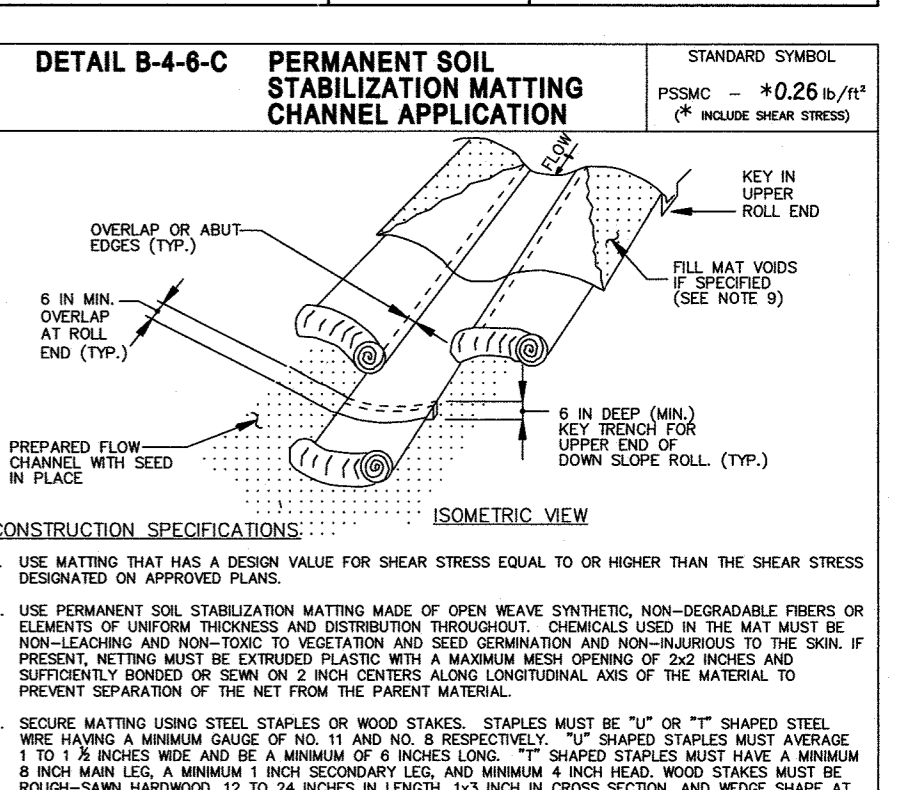
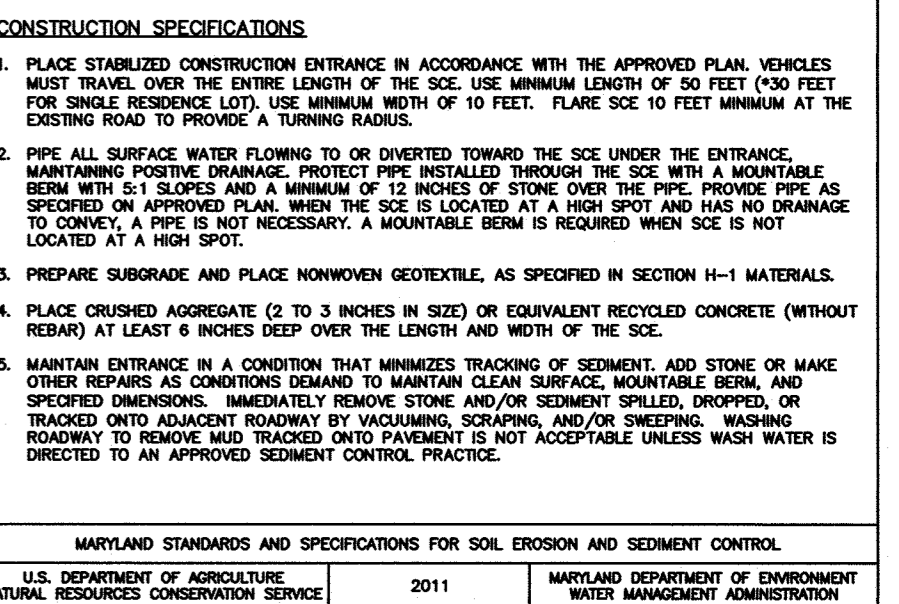
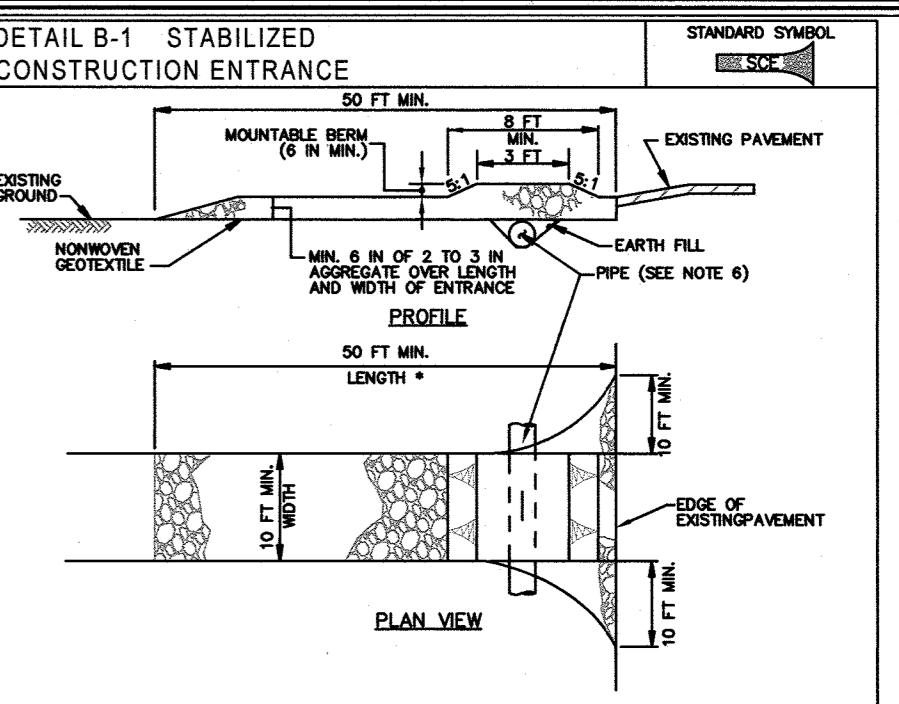


TABLE B.1 TEMPORARY SEEDING FOR SITE STABILIZATION table with columns: SEEDING RATE 1/ (LB./AC. OR 1000 FT. 2), SEEDING DEPTH 2/ (INCHES), RECOMMENDED SEEDING DATES BY PLANT HARDNESS ZONE 3/ (5b AND 6a, 6b, 7a AND 7b).



CONSTRUCTION SPECIFICATIONS table with columns: ITEM NO., DESCRIPTION, QUANTITY, UNIT, COMMENTS.

CONSTRUCTION SPECIFICATIONS table with columns: ITEM NO., DESCRIPTION, QUANTITY, UNIT, COMMENTS.



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FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS. CENTENNIAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE, ELICOTT CITY, MARYLAND 21142. (410) 461 - 2097

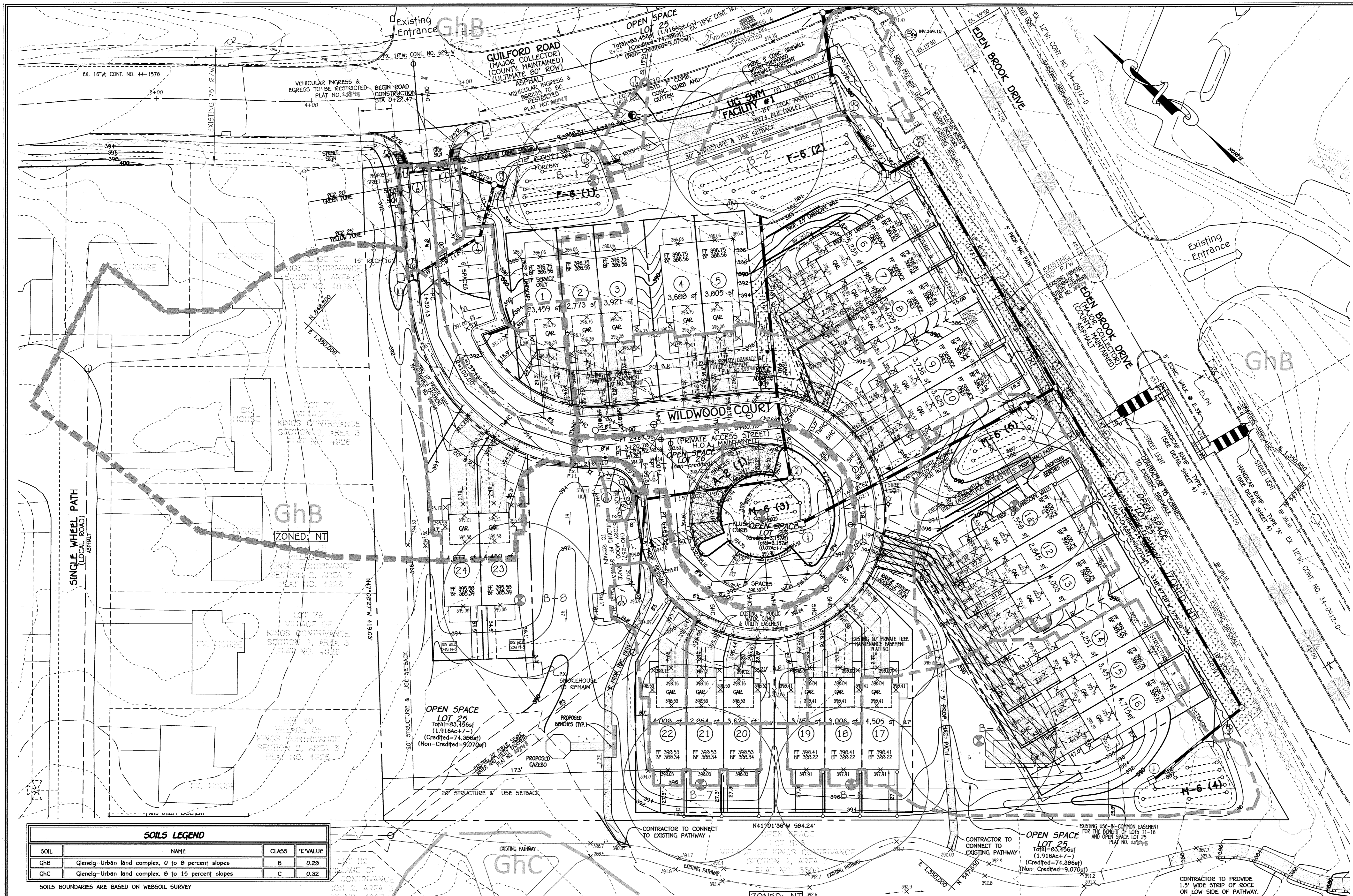
PROFESSIONAL CERTIFICATE. I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

OWNER: ENLH, LLC, 6800 DEERPATH ROAD #100, ELK RIDGE, MD 21075. DEVELOPER: ROCK REALTY LLC, C/O H&H ROCK COMPANIES, 6800 DEERPATH ROAD #100, ELK RIDGE, MD 21075.

EDEN BROOK. PROJECT: EDEN BROOK. PARCEL No.: 269. PLAT: 7. BLOCK NO.: 7. ZONE: R-12. TAX/ZONE: 42. ELEC. DIST.: 6. CENSUS TR.: 605102.

EROSION/SEDIMENT CONTROL NOTES & DETAILS. SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING. EDEN BROOK. LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27. TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269. ZONED R-12. SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND. SCALE: AS SHOWN DATE: APRIL, 2020. SHEET 7 OF 21.

EDEN BROOK. LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27. TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269. ZONED R-12. SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND. SCALE: AS SHOWN DATE: APRIL, 2020. SHEET 7 OF 21. SDP-20-009



LEGEND

SYMBOL	DESCRIPTION
- - - - -	EXISTING 2' CONTOURS
- - - - -	EXISTING 10' CONTOURS
- - - - -	PROPOSED CONTOUR
•	SPOT ELEVATION
H.P.	HIGH POINT
---	SOILS LINES AND TYPE
- - - - -	PROPOSED TREELINE
- - - - -	EXISTING TREELINE
⊗	EXISTING TREES & SHRUBS
⊗	EXISTING TREES & SHRUBS (TO BE REMOVED)
T.B.R.	TO BE REMOVED OR RELOCATED
- - - - -	EXISTING FENCE LINE
- - - - -	EXISTING PAVING
- - - - -	PROPOSED PAVING
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- - - - -	LIMITS OF DISTURBANCE
- - - - -	CREDITED OPEN SPACE
- - - - -	EXISTING USE-IN-COMMON ACCESS EASEMENT
- - - - -	SUPER SILT FENCE
⊙	PROPOSED SWM BORING LOCATION
- - - - -	EXISTING PRIVATE DRAINAGE AND UTILITY EASEMENT

DRAINAGE AREA DATA

STRUCTURE NO.	AREA	"C"	SDNO	% IMP.
I-1	1.44 AC.	.61	R-12	57%
I-2	0.60 AC.	.63	R-12	60%
I-3	0.36 AC.	.57	R-12	52%
I-4	0.31 AC.	.61	R-12	57%
I-5	0.53 AC.	.65	R-12	63%
I-6	0.25 AC.	.73	R-12	73%
I-6A	0.01 AC.	.35	R-12	25%
I-6B	0.01 AC.	.50	R-12	54%
I-7	0.02 AC.	.95	R-12	100%
I-8	0.03 AC.	.92	R-12	96%
I-9	0.20 AC.	.82	R-12	84%
I-10	0.22 AC.	.73	R-12	73%
I-11	0.84 AC.	.15	R-12	0%
I-12	1.42 AC.	.34	R-12	24%
I-13	0.01 AC.	.24	R-12	11%
I-14	0.15 AC.	.25	R-12	13%

SOILS LEGEND

SOIL	NAME	CLASS	"K" VALUE
GhB	Glenelg-Urban land complex, 0 to 8 percent slopes	B	0.28
GhC	Glenelg-Urban land complex, 8 to 15 percent slopes	C	0.32

SOILS BOUNDARIES ARE BASED ON WEBSOIL SURVEY

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SOURCE OFFICE PARK - 13272 BALTIMORE NATIONAL PLACE
 ELK RIDGE CITY, MARYLAND 21074
 (410) 861-2999

NO.	REVISION	DATE



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/21.
 Frank Mamalusan II, 9/11/20
 FRANK MAMALUSAN II, L.S.

SCALE: 1" = 30'

OWNER	DEVELOPER
ENH, LLC 6800 DEERPATH ROAD #100 ELK RIDGE, MD 21075 (410)-579-1441	ROCK REALTY, LLC C/O H&H ROCK COMPANIES 6800 DEERPATH ROAD #100 ELK RIDGE, MD 21075 (410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Howard County Department of Planning and Zoning

Chief, Division of Land Development: 11/12/20
 Chief, Development Engineering Division: 11/19/20
 Director: 11/12/20

PROJECT	PHASE	PARCEL NO.
EDEN BROOK		269

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
	7	R-12	42	6	605102

PREVIOUS HOWARD COUNTY FILES:
 BA-17-030C, ECP-18-051, WP-19-055, SP-18-003, F-20-011
 & CONTRACT NO. 24-5081-0

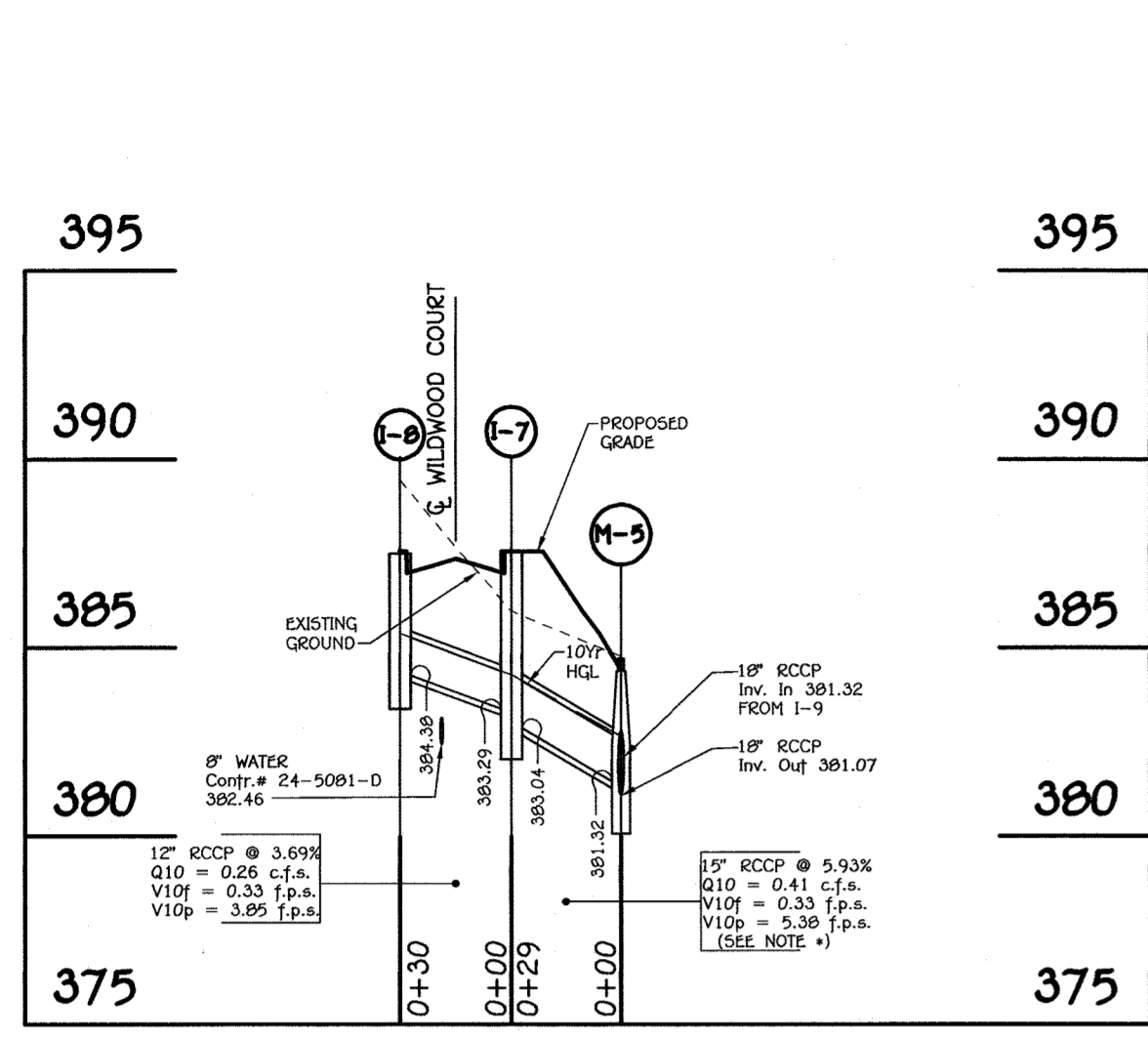
STORMDRAIN DRAINAGE AREA MAP

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

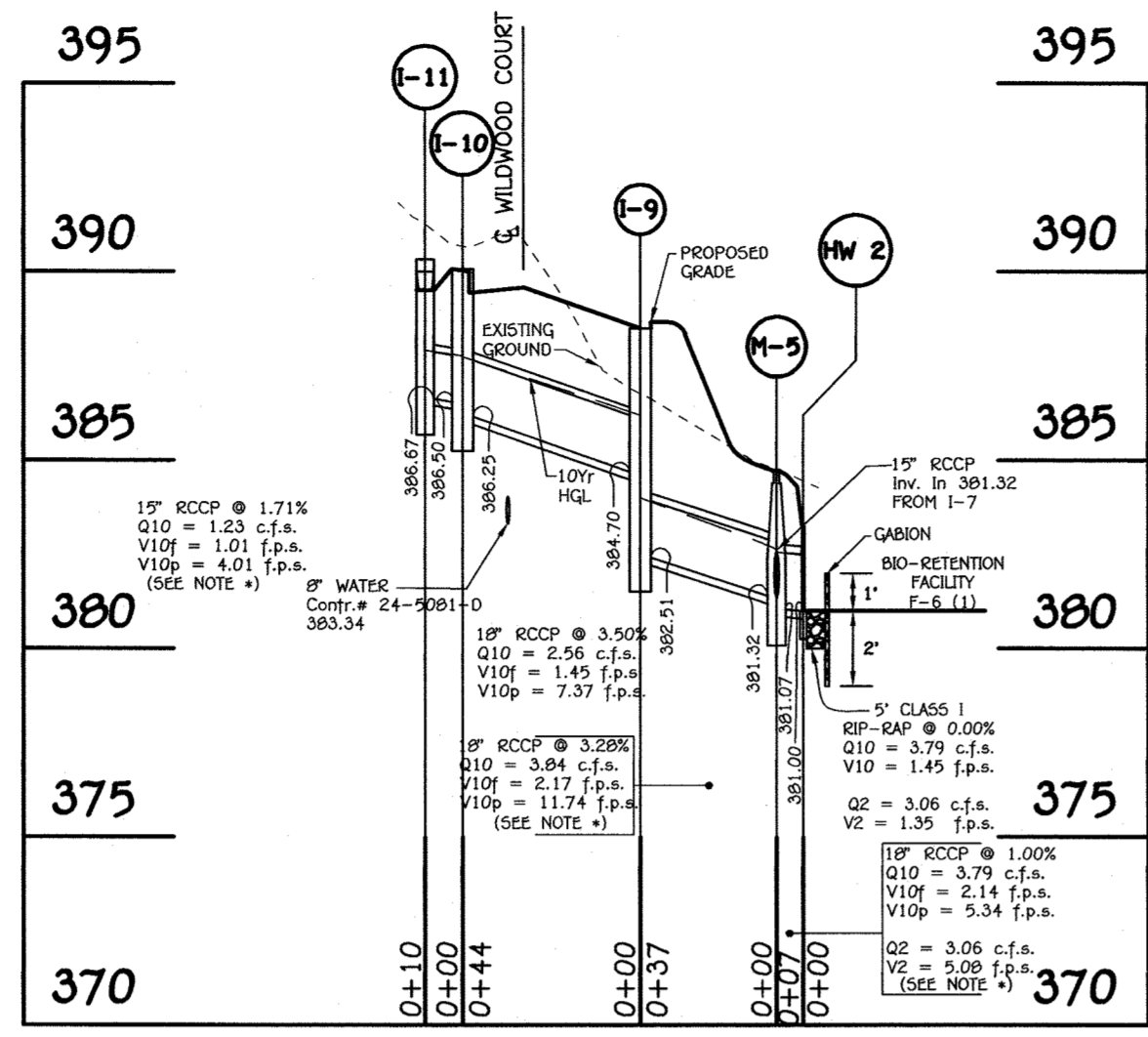
EDEN BROOK
 LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
 TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
 ZONED R-12
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: SEPTEMBER, 2020
 SHEET 8 OF 21

SDP-20-009

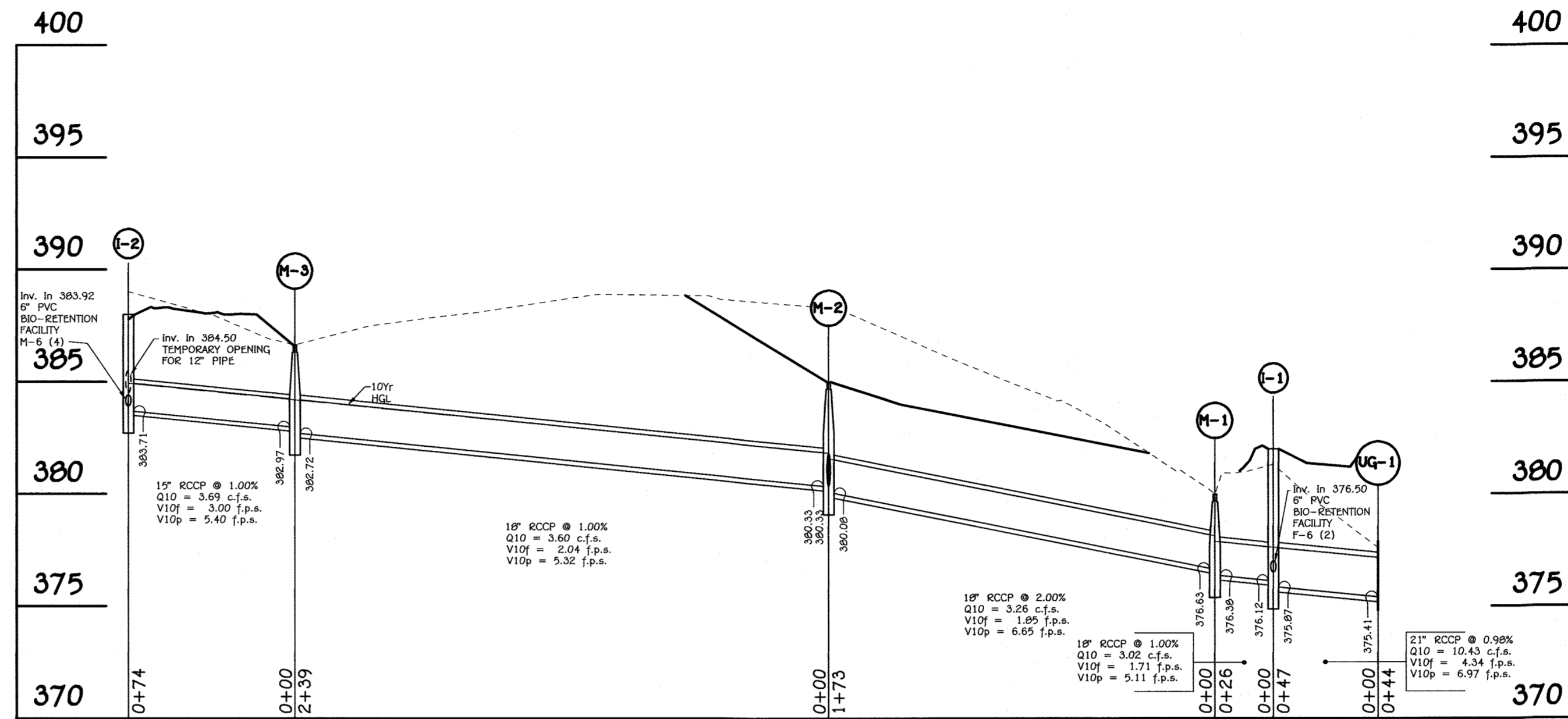
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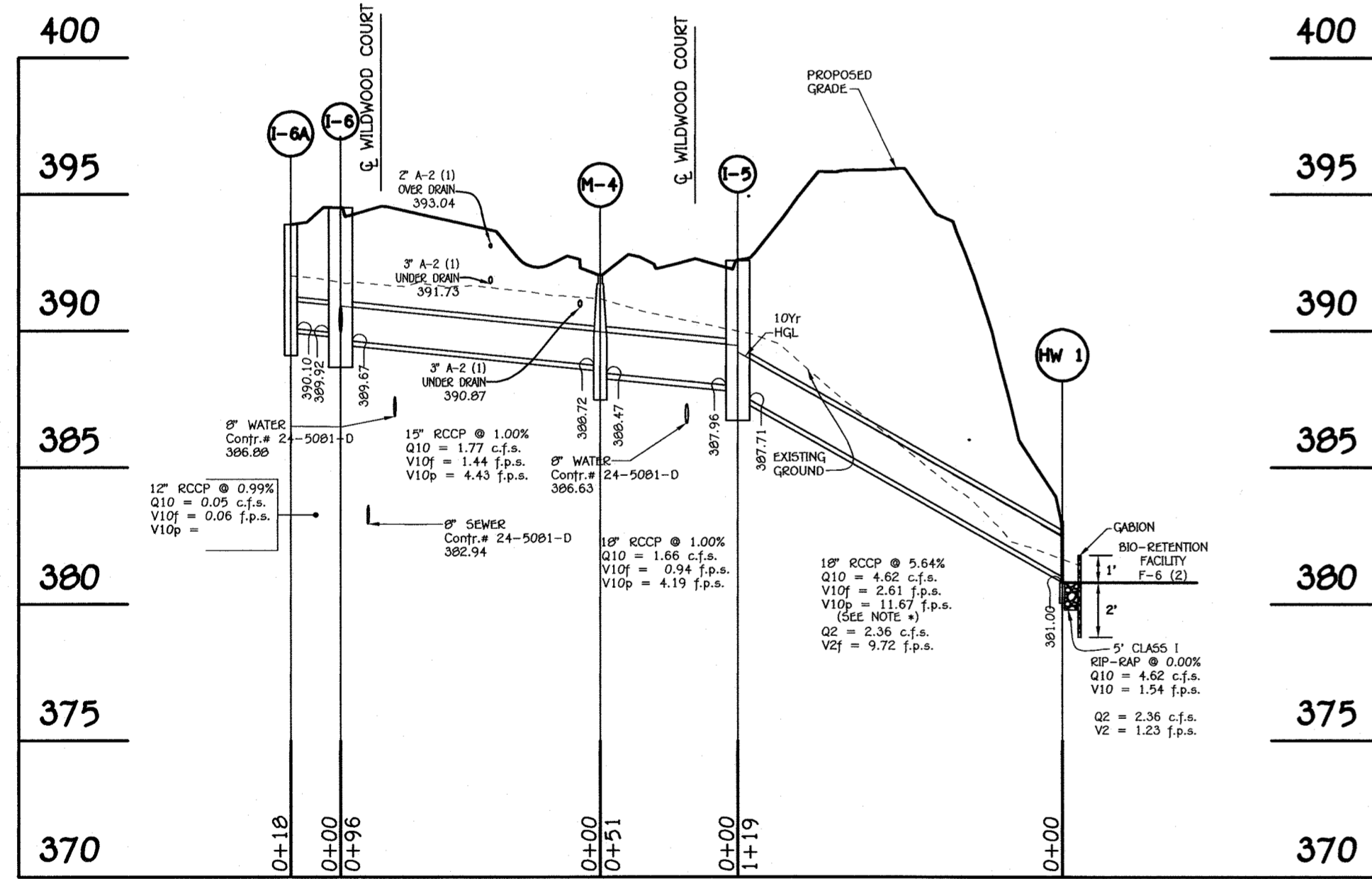
STORM DRAIN PROFILE
SCALE: HORZ. 1" = 50'
VERT. 1" = 5'



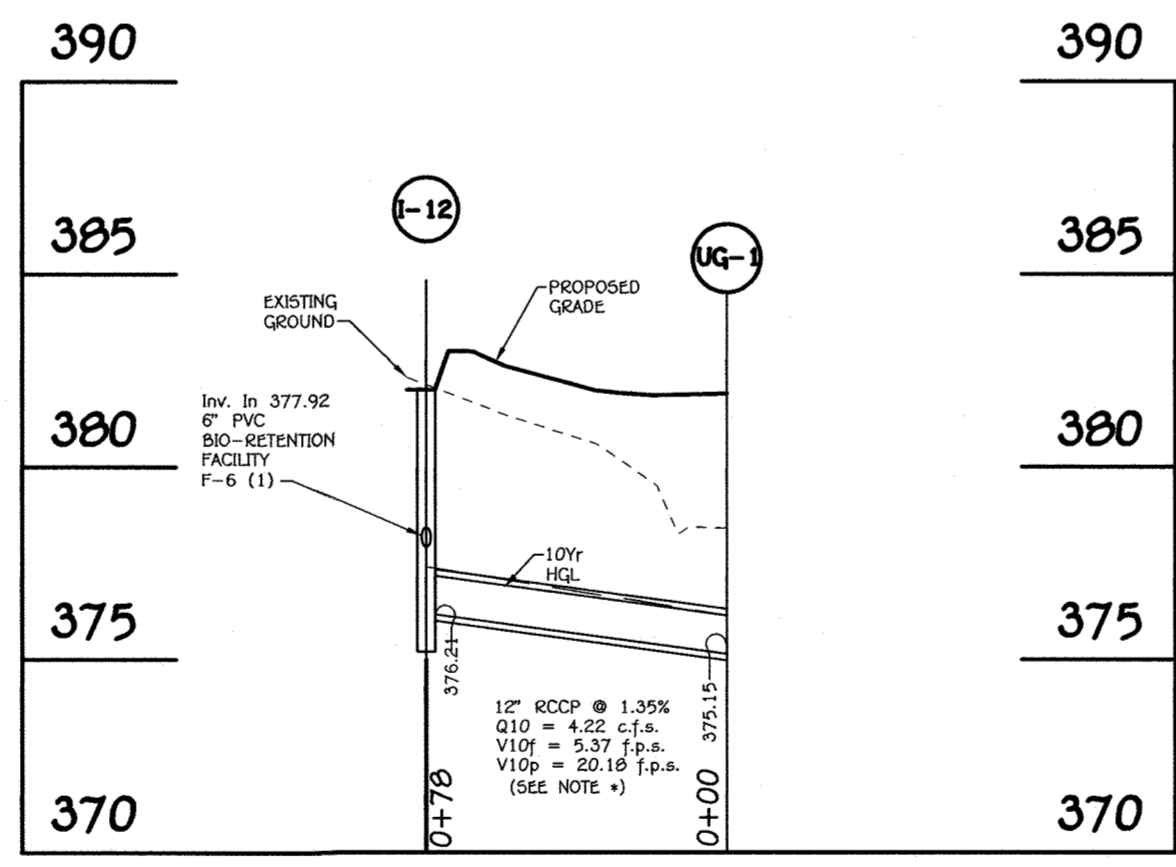
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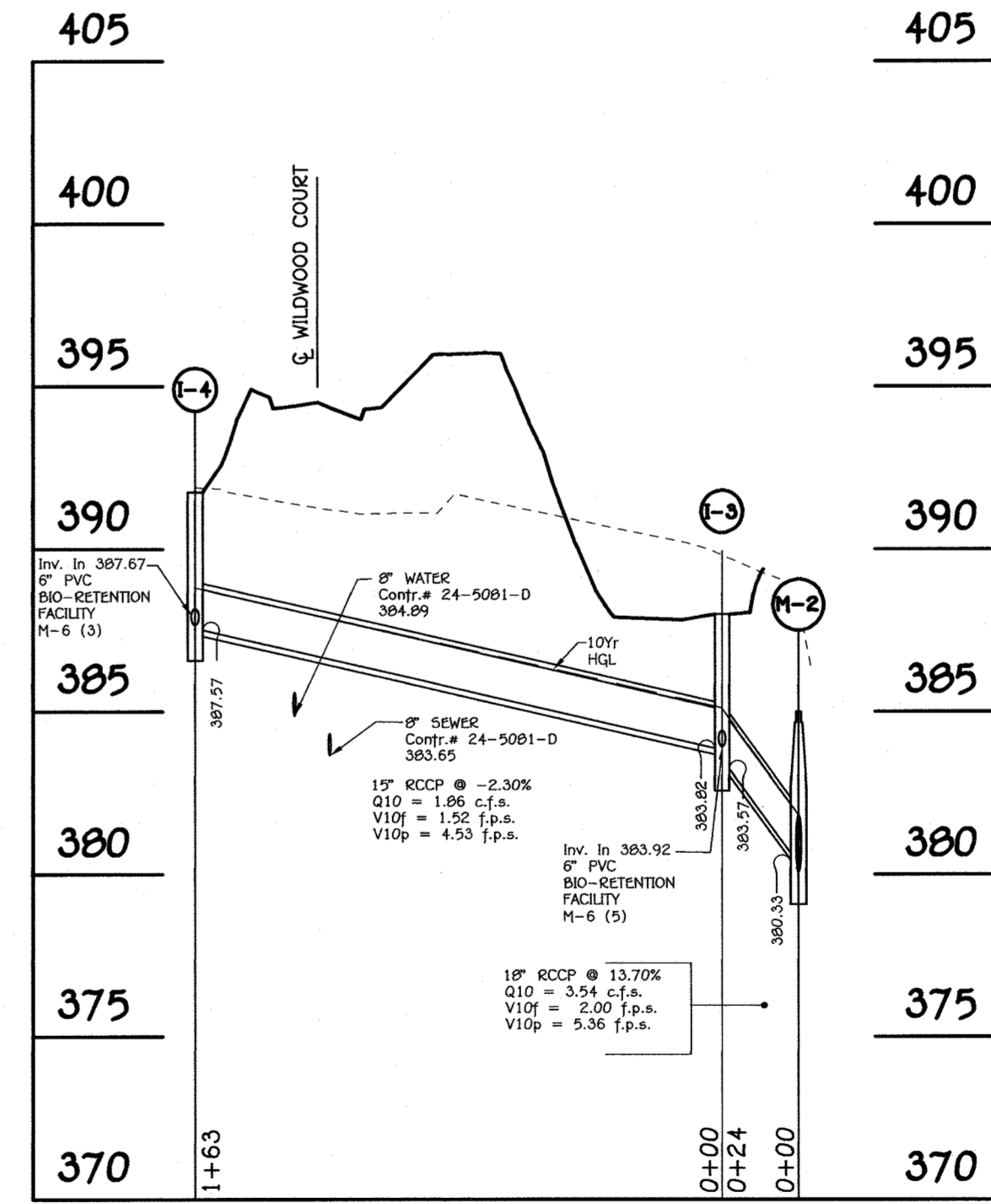
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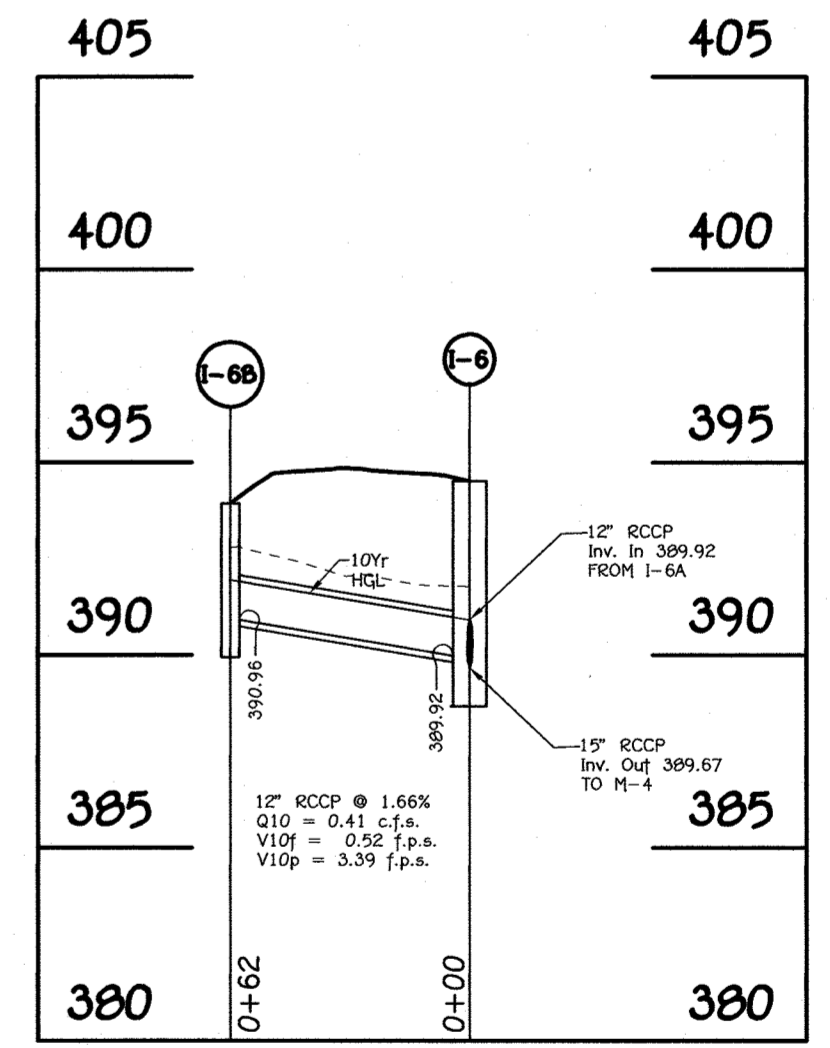
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STORM DRAIN PROFILE
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STORM DRAIN PROFILE
SCALE: HORZ. 1" = 50'
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STORM DRAIN PROFILE
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FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELKROTT CITY, MARYLAND 21042
(410) 461-1299

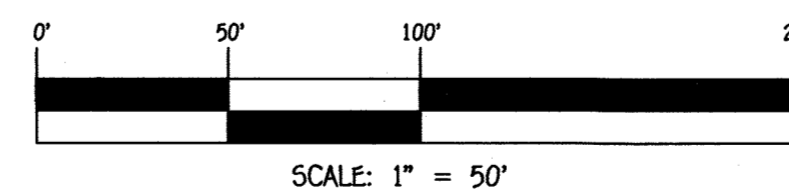


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Frank J. Panlousian II
FRANK PANLOUSIAN II, L.S.

5/26/20
DATE



OWNER

ENLN, LLC
6800 DEERPATH ROAD #100
ELK RIDGE, MD 21075
(410)-579-1441

DEVELOPER

ROCK REALTY, LLC
C/O H&H ROCK COMPANIES
6800 DEERPATH ROAD #100
ELK RIDGE, MD 21075
(410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Michael J. Ac... 11/12/20
Chief, Division of Land Development EB Date
Frank Panlousian II 11/12/20
Chief, Development Engineering Division NY Date
John... 11/12/20
Director, Department of Planning and Zoning Date

PROJECT: EDEN BROOK PHASE: PARCEL No. 269

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
	7	R-12	42	6	605102

PREVIOUS HOWARD COUNTY FILES:
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STORMDRAIN PROFILES

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

EDEN BROOK

LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27

TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269

ZONED R-12

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: APRIL, 2020

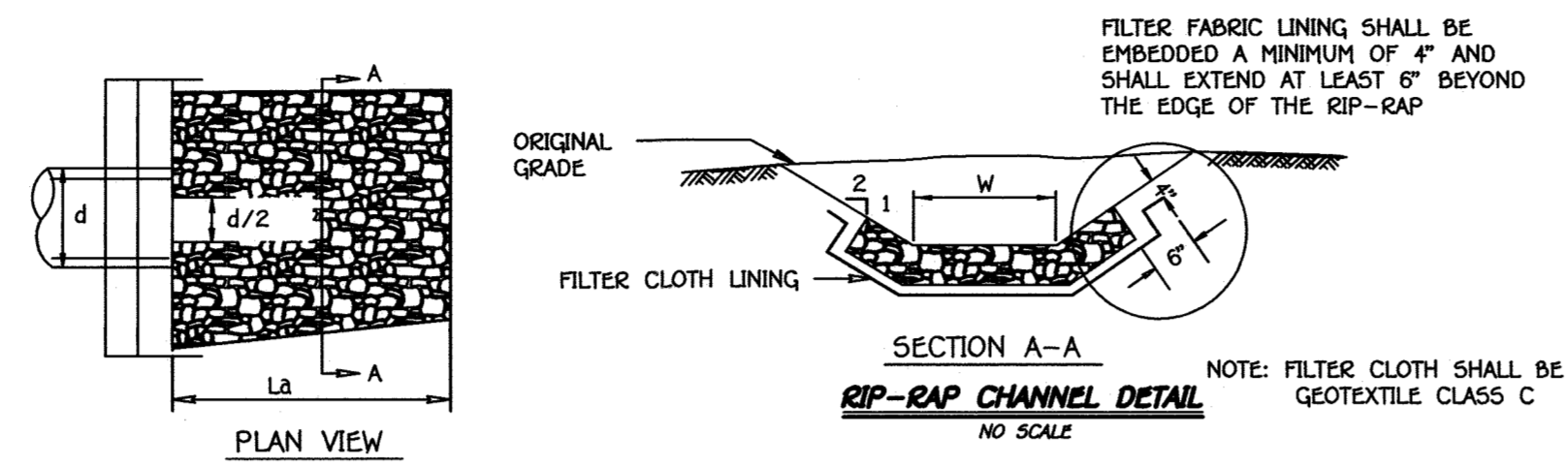
SHEET 9 OF 21

SDP-20-009

PIPE MATERIAL WHERE DEPTH OF COVER PERMITS.

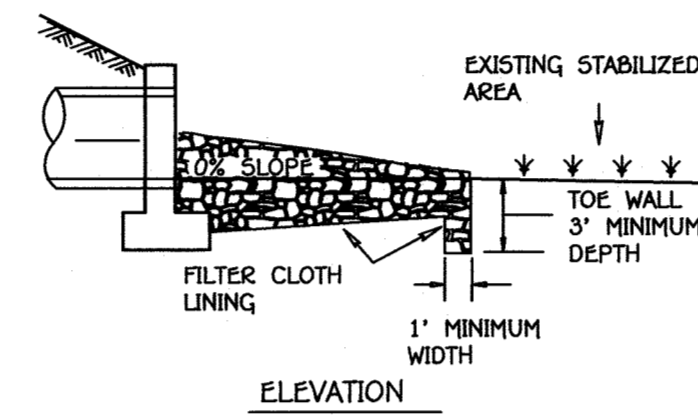
STRUCTURE SCHEDULE

STRUCTURE NO.	OWNERSHIP AND MAINTENANCE	TOP ELEVATION	INV IN	INV OUT	COORDINATES	TYPE	REMARKS
HW 1	PRIVATE	383.21	381.00 (1-5) 18"	-----	N 548025.87 E 1350244.39	TYPE 'C' ENDWALL	D. - 5.21
HW 2	PRIVATE	383.21	381.00 (M-5) 18"	-----	N 548162.67 E 1350150.27	TYPE 'C' ENDWALL	D. - 5.21
I-1	PRIVATE	382.00	376.12 (M-1) 18" 376.50 F-6 (2) 6"	375.87 21"	N 547982.96 E 1350317.83	YARD INLET	D. - 4.12
I-2	PRIVATE	388.00	383.92 M-6 (4) 6"	383.71 15"	N 547597.41 E 1350136.58	YARD INLET	D. - 4.12
I-3	PRIVATE	388.00	383.92 M-6 (5) 6" 383.82 (I-4) 15"	383.57 18"	N 547817.68 E 1350264.35	YARD INLET	D. - 4.12
I-4	PRIVATE	391.75	387.67 M-6 (3) 6"	387.57 15"	N 547876.51 E 1350112.64	YARD INLET	D. - 4.12
I-5	PRIVATE	392.57	387.96 (M-4) 18"	387.71 18"	N 547939.82 E 1350162.29	A-10 INLET	D. - 4.03
I-6	PRIVATE	394.52	389.92 (I-6A) 12"	389.67 15"	N 547963.22 E 1350057.88	A-5 INLET	D. - 4.01
I-6A	PRIVATE	393.90	-----	390.10 12"	N 547981.42 E 1350057.14	YARD INLET	D. - 4.12
I-6B	PRIVATE	393.94	-----	390.96 12"	N 547925.20 E 1350008.43	YARD INLET	D. - 4.12
I-7	PRIVATE	387.58	383.29 (I-8) 12"	383.04 15"	N 548196.30 E 1350137.19	A-5 INLET	D. - 4.01
I-8	PRIVATE	387.50	-----	384.38 12"	N 548216.79 E 1350115.74	A-5 INLET	D. - 4.01
I-9	PRIVATE	388.50	384.70 (I-10) 18"	382.51 18"	N 548153.21 E 1350114.48	A-5 INLET	D. - 4.01
I-10	PRIVATE	390.08	386.50 (I-11) 15"	386.25 18"	N 548169.18 E 1350070.31	A-5 INLET	D. - 4.01
I-11	PRIVATE	389.50	-----	386.67 15"	N 548175.46 E 1350062.58	YARD INLET	D. - 4.12
I-12	PRIVATE	382.00	377.92 F-6 (1) 6"	376.21 12"	N 548124.91 E 1350201.28	YARD INLET	D. - 4.12
I-13	PUBLIC	379.05	-----	374.31	N 548138.51 E 1350260.88	'S' INLET	D. - 4.24
I-14	PUBLIC	371.60	369.72 (M-1A) 23' x 14"	368.70 18"	N 548062.28 E 1350390.2	'S' INLET	D. - 4.24
M-1	PRIVATE	379.97	376.63 (M-2) 18"	376.38 18"	N 547973.49 E 1350342.37	4' DIA. MANHOLE	G. - 5.12
M-1A	PUBLIC	372.51	370.52 (C5-1) TWIN 10"	369.86 23' x 14"	N 548081.32 E 1350369.69	4' DIA. MANHOLE	G. - 5.12
M-2	PRIVATE	385.00	380.33 (M-3) 18" 380.33 (I-3) 18"	380.08 18"	N 547809.96 E 1350286.71	4' DIA. MANHOLE	G. - 5.12
M-3	PRIVATE	386.64	382.97 (I-2) 15"	382.72 18"	N 547583.89 E 1350209.76	4' DIA. MANHOLE	G. - 5.12
M-4	PRIVATE	392.05	388.72 (I-6) 15"	388.47 18"	N 547900.77 E 1350130.21	4' DIA. MANHOLE	G. - 5.12
M-5	PRIVATE	384.72	381.32 (I-9) 18" 381.32 (I-7) 15"	381.07 18"	N 548169.07 E 1350147.24	4' DIA. MANHOLE	G. - 5.12



CONSTRUCTION SPECIFICATIONS FOR RIP-RAP OUTFALLS

- The subgrade for the filter, riprap or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
- The rock or gravel shall conform to the specified grading limits when installed respectively to the riprap or filter.
- Filter cloth shall be protected from punching, cutting or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of cloth over the damaged part or by completely replacing the cloth. All overlaps whether for repairs or for joining two pieces of cloth shall be a minimum of one foot.
- Stone for the riprap or gabion outlets may be placed by equipment. Both shall each be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for riprap or gabion outlets shall be delivered and placed in a manner that will insure that it is reasonably homogenous with the smaller stones and spalls filling the voids between the larger stones. Riprap shall be placed in a manner to prevent damage to the filter blanket or filter cloth. Hand placement will be required to the extent necessary to prevent damage to the permanent works.



RIP-RAP CHANNEL DESIGN DATA															
STRUCTURE	AREA (S.F.)	WETTED PERIMETER	R	R 2/3	S	S 1/2	W	d	n	V (f.p.s.)	Q (c.f.s.)	RP-RAP SIZE D ₅₀	BLANKET THICKNESS D _{max}	PIPE SIZE	LA
HW 1	2.993	6.59	2.2018	1.692	0.005	0.0707	4'	0.58	0.04	1.54	4.62	9.5"	15"	18"	5'
HW 2	2.621	6.33	2.4151	1.800	0.005	0.0707	4'	0.52	0.04	1.45	3.79	9.5"	15"	18"	5'

PIPE SCHEDULE

SIZE	CLASS	LENGTH
2"	PERFORATED PVC, SCH.40	100 L.F.
3"	PERFORATED PVC, SCH.40	100 L.F.
6"	PERFORATED PVC, SCH.40	1,053 L.F.
6"	PVC, SCH.40	109 L.F.
10"	HDPE (SMOOTH INTERIOR)	82 L.F.
12"	RCCP, CL. IV	188 L.F.
15"	RCCP, CL. IV	339 L.F.
18"	RCCP, CL. IV	536 L.F.
21"	RCCP, CL. IV	47 L.F.
23" x 14"	HECP, CL. HE-111	28 L.F.
84"	12 GA. AASHO	160 L.F.

NOTE: RCCP, CL. IV MAY BE SUBSTITUTED WITH HDPE PIPE MATERIAL WHERE DEPTH OF COVER PERMITS.

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CENTENNIAL SQUARE OFFICE PARK - 10672 BALTIMORE NATIONAL PIKE
ELKTON CITY, MARYLAND 21042
(410) 461-2999

STATE OF MARYLAND
FRANK JOHN MANSMAN II, L.S.
PROFESSIONAL LAND SURVEYOR
No. 21476
EXPIRES 7/14/21

PROFESSIONAL CERTIFICATION

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Frank John Mansman II 9/11/20
FRANK MANSMAN II, L.S. DATE

SCALE: 1" = 50'

OWNER

ENL, LLC
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ELKRIDGE, MD 21075
(410)-579-1441

DEVELOPER

ROCK REALTY, LLC
C/O H&H ROCK COMPANIES
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(410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chandrajiv Singh AC 11/12/20
Chief, Division of Land Development ES Date

Kevin Panchal 11/9/20
Chief, Development Engineering Division NY Date

John Goss 11/12/20
Director - Department of Planning and Zoning Date

PROJECT: EDEN BROOK PHASE: PARCEL NOs: 269

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
	7	R-12	42	6	605102

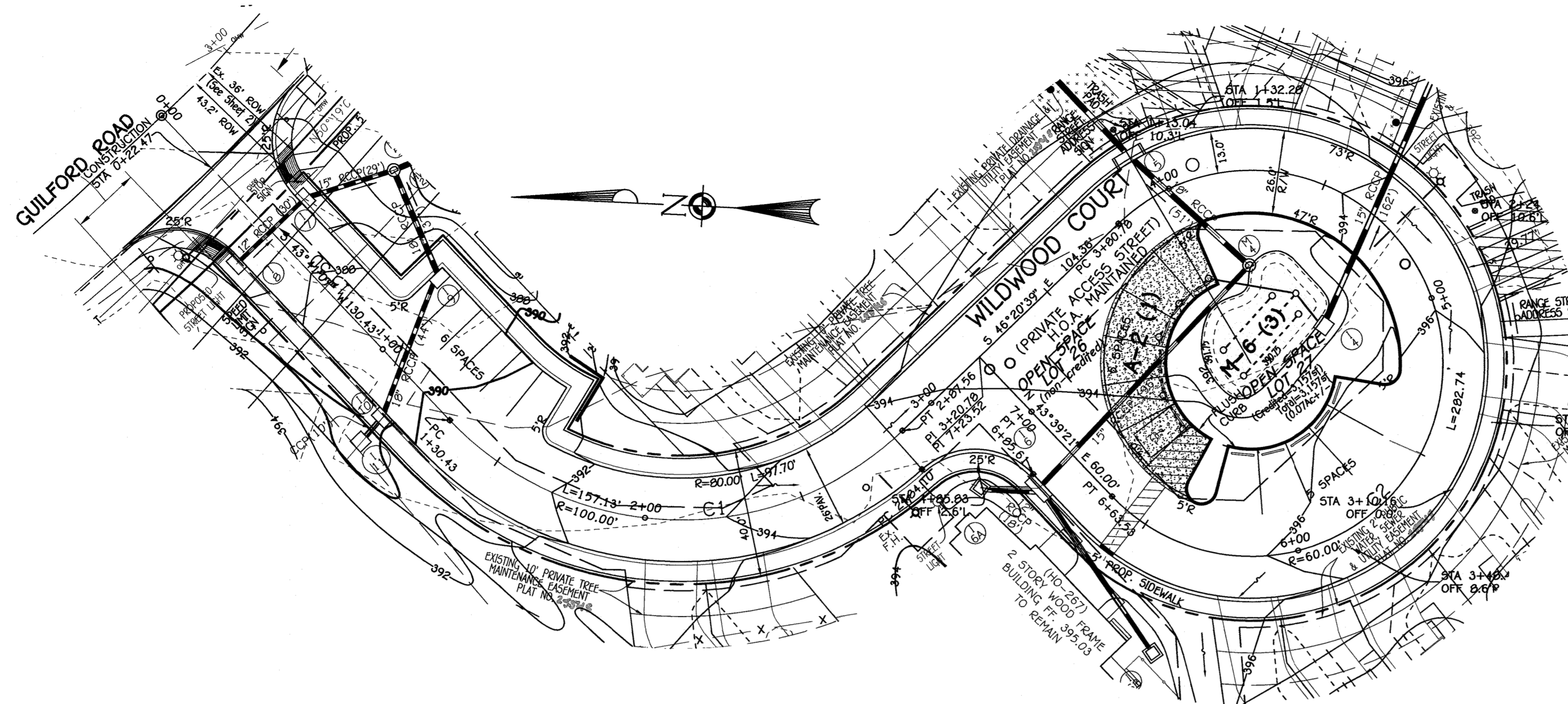
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STORMDRAIN PROFILES

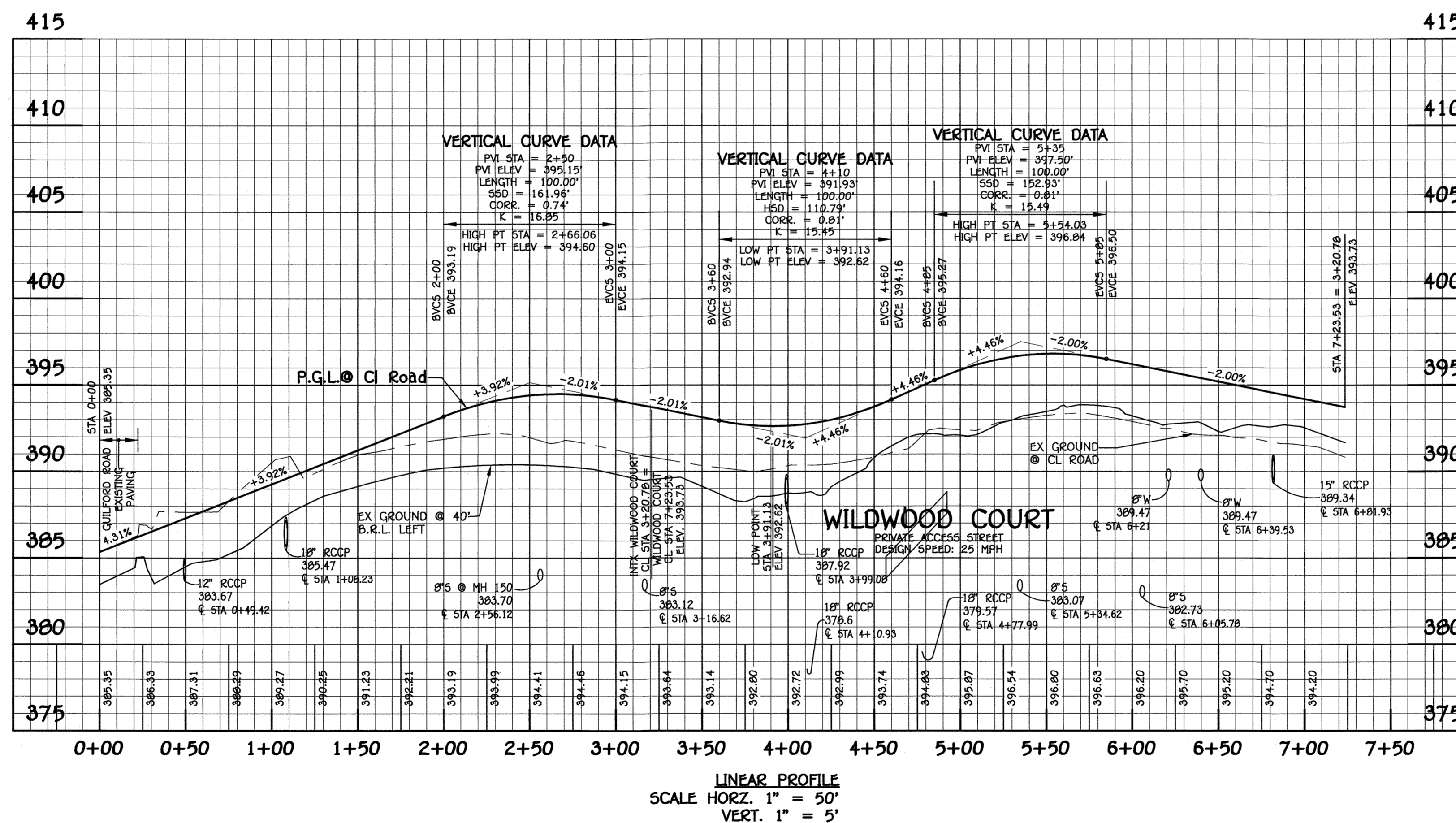
SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

EDEN BROOK

LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
ZONED R-12
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: SEPTEMBER, 2020
SHEET 10 OF 21 **SDP-20-009**



PROPOSED ALIGNMENT CURVE TABLE							
CURVE#	ROAD NAME	CL STATION	RADIUS	LENGTH	DELTA	TANGENT	CHORD
C1	WILDWOOD COURT	STA 1+30.43 TO STA 2+87.56	100.00'	157.13'	57°17'45"	141.46'	501°19'45.73"E
C2	WILDWOOD COURT	STA 3+80.78 TO STA 6+63.53	60.00'	282.74'	95°29'35"	84.85'	588°39'21.65"W

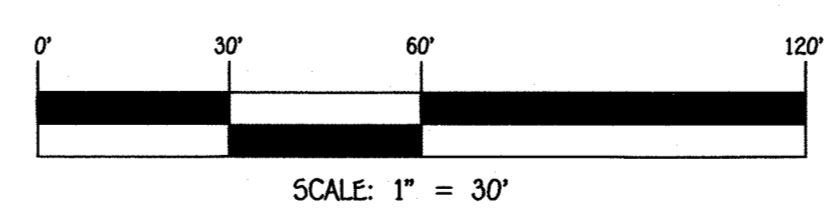


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Frank Mawlanian II, L.S. 9/11/20
 DATE



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 ELK RIDGE, MD 21075
 (410)-579-1441

DEVELOPER
 ROCK REALTY, LLC
 C/O H&H ROCK COMPANIES
 6800 DEERPATH ROAD #100
 ELK RIDGE, MD 21075
 (410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Debra Dyer 11/12/20
 Chief, Division of Land Development Date

Michael Borchert 11/12/20
 Chief, Development Engineering Division Date

Director - Department of Planning and Zoning 11/12/20 Date

PROJECT: EDEN BROOK PHASE: PARCEL No.: 269

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
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 & CONTRACT NO. 24-5081-0

ROAD PLAN AND PROFILE SHEET

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

EDEN BROOK
 LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
 TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
 ZONED R-12
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: SEPTEMBER, 2020
 SHEET 11 OF 21

SDP-20-009

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INFILTRATION AND FILTER SYSTEM CONSTRUCTION SPECIFICATIONS

INFILTRATION AND FILTER SYSTEMS EITHER TAKE ADVANTAGE OF EXISTING PERMEABLE SOILS OR CREATE A PERMEABLE MEDIUM SUCH AS SAND FOR WC, AND RE. V. IN SOME INSTANCES WHERE PERMEABILITY IS GREAT, THESE FACILITIES MAY BE USED FOR QP AS WELL. THE MOST COMMON SYSTEMS INCLUDE INFILTRATION TRENCHES, INFILTRATION BASINS, SAND FILTERS, AND ORGANIC FILTERS.

WHEN PROPERLY PLANTED, VEGETATION WILL THRIVE AND ENHANCE THE FUNCTIONING OF THESE SYSTEMS. FOR EXAMPLE, PRE-TREATMENT BUFFERS WILL TRAP SEDIMENTS THAT OFTEN ARE BOUND WITH PHOSPHORUS AND METALS. VEGETATION PLANTED IN THE FACILITY WILL AID IN NUTRIENT UPTAKE AND WATER STORAGE. ADDITIONALLY, PLANT ROOTS WILL PROVIDE ARTERIES FOR STORMWATER TO PERMEATE SOIL FOR GROUNDWATER RECHARGE. FINALLY, SUCCESSFUL PLANTINGS PROVIDE AESTHETIC VALUE AND WILDLIFE HABITAT MAKING THESE FACILITIES MORE DESIRABLE TO THE PUBLIC.

DESIGN CONSTRAINTS:

- > PLANTING BUFFER STRIPS OF AT LEAST 20 FEET WILL CAUSE SEDIMENTS TO SETTLE OUT BEFORE REACHING THE FACILITY, THEREBY REDUCING THE POSSIBILITY OF CLOGGING.
- > DETERMINE AREAS THAT WILL BE SATURATED WITH WATER AND WATER TABLE DEPTH SO THAT APPROPRIATE PLANTS MAY BE SELECTED (HYDROLOGY WILL BE SIMILAR TO BIORETENTION FACILITIES, SEE FIGURE A.5 AND TABLE A.4 FOR PLANTING MATERIAL GUIDANCE).
- > PLANTS KNOWN TO SEND DOWN DEEP TAPROOTS SHOULD BE AVOIDED IN SYSTEMS WHERE FILTER FABRIC IS USED AS PART OF FACILITY DESIGN.
- > TEST SOIL CONDITIONS TO DETERMINE IF SOIL AMENDMENTS ARE NECESSARY.
- > PLANTS SHALL BE LOCATED SO THAT ACCESS IS POSSIBLE FOR STRUCTURE MAINTENANCE.
- > STABILIZE HEAVY FLOW AREAS WITH EROSION CONTROL MATS OR SOO.
- > TEMPORARILY DIVERT FLOWS FROM SEED AREAS UNTIL VEGETATION IS ESTABLISHED.
- > SEE TABLE A.5 FOR ADDITIONAL DESIGN CONSIDERATIONS.

BIO-RETENTION

SOIL BED CHARACTERISTICS
THE CHARACTERISTICS OF THE SOIL FOR THE BIORETENTION FACILITY ARE PERHAPS AS IMPORTANT AS THE FACILITY LOCATION, SIZE, AND TREATMENT VOLUME. THE SOIL MUST BE PERMEABLE ENOUGH TO ALLOW RUNOFF TO FILTER THROUGH THE MEDIA, WHILE HAVING CHARACTERISTICS SUITABLE TO PROMOTE AND SUSTAIN A ROBUST VEGETATIVE COVER CROP. IN ADDITION, MUCH OF THE NUTRIENT POLLUTANT UPTAKE (NITROGEN AND PHOSPHORUS) IS ACCOMPLISHED THROUGH ABSORPTION AND MICROBIAL ACTIVITY WITHIN THE SOIL PROFILE. THEREFORE, SOILS MUST BALANCE THEIR CHEMICAL AND PHYSICAL PROPERTIES TO SUPPORT BIOTIC COMMUNITIES ABOVE AND BELOW GROUND.

THE PLANTING SOIL SHOULD BE A SANDY LOAM, LOAMY SAND, LOAM (USDA), OR A LOAM/SAND MIX (SHOULD CONTAIN A MINIMUM 35 TO 60% SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHOULD BE LESS THAN 25% BY VOLUME (ENVIRONMENTAL QUALITY RESOURCES (EQR), 1996; ENGINEERING TECHNOLOGY INC. AND BIOMATERIALS, INC. (ETAB), 1993). SOILS SHOULD FALL WITHIN THE SM, ML, SC CLASSIFICATIONS OR THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0.5/HR) IS REQUIRED (A CONSERVATIVE VALUE OF 0.5 FEET PER DAY IS USED FOR DESIGN). THE SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER. BRUSH OR SEEDS FROM NOXIOUS WEEDS (E.G., JOHNSON GRASS, HYGWORT, NUTSEDGE, AND CANADA THISTLE, OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05.) SHOULD NOT BE PRESENT IN THE SOILS. PLACEMENT OF THE PLANTING SOIL SHOULD BE IN 12 TO 18 LIFTS THAT ARE LOOSELY COMPACTED (TAMPED LIGHTLY WITH A BACKHOE BUCKET OR TRAVERSED BY DOZER TRACKS). THE SPECIFIC CHARACTERISTICS ARE PRESENTED IN TABLE A.3.

TABLE A.3 PLANTING SOIL CHARACTERISTICS

PARAMETER	VALUE
PH RANGE	5.2 TO 7.00
ORGANIC MATTER	1.5 TO 4.0% (BY WEIGHT)
MAGNESIUM	35 LBS. PER ACRE, MINIMUM
PHOSPHORUS (PHOSPHATE - P2O5)	75 LBS. PER ACRE, MINIMUM
POTASSIUM (POTASH - K2O)	85 LBS. PER ACRE, MINIMUM
SOLUBLE SALTS	500 PPM
CLAY	10 TO 25 %
SILT	30 TO 55 %
SAND	35 TO 60%

MULCH LAYER

THE MULCH LAYER PLAYS AN IMPORTANT ROLE IN THE PERFORMANCE OF THE BIORETENTION SYSTEM. THE MULCH LAYER HELPS MAINTAIN SOIL MOISTURE AND AVOIDS SURFACE SEALING, WHICH REDUCES PERMEABILITY. MULCH HELPS PREVENT EROSION, AND PROVIDES A MICROENVIRONMENT SUITABLE FOR SOIL BIOTA AT THE MULCH/SOIL INTERFACE. IT ALSO SERVES AS A PRE-TREATMENT LAYER, TRAPPING THE FINER SEDIMENTS, WHICH REMAIN SUSPENDED AFTER THE PRIMARY PRE-TREATMENT.

THE MULCH LAYER SHOULD BE STANDARD LANDSCAPE STYLE, SINGLE OR DOUBLE SHREDED HARDWOOD MULCH OR CHIPS. THE MULCH LAYER SHOULD BE WELL ACID (STOCKPILED OR STORED FOR AT LEAST 12 MONTHS), UNIFORM IN COLOR, AND FREE OF OTHER MATERIALS, SUCH AS WEED SEEDS, SOIL, ROOTS, ETC. THE MULCH SHOULD BE APPLIED TO A MAXIMUM DEPTH OF THREE INCHES. GRASS CLIPPINGS SHOULD NOT BE USED AS A MULCH MATERIAL.

PLANTING GUIDANCE

PLANT MATERIAL SELECTION SHOULD BE BASED ON THE GOAL OF SIMULATING A TERRESTRIAL FORESTED COMMUNITY OF NATIVE SPECIES. BIORETENTION SIMULATES AN UPLAND-SPECIES ECOSYSTEM. THE COMMUNITY SHOULD BE DOMINATED BY TREES, BUT HAVE A DISTINCT COMMUNITY OF UNDERSTORY TREES, SHRUBS AND HERBACEOUS MATERIALS. BY CREATING A DIVERSE, DENSE PLANT COVER, A BIORETENTION FACILITY WILL BE ABLE TO TREAT STORMWATER RUNOFF AND WITHSTAND URBAN STRESSES FROM INSECTS, DISEASE, DROUGHT, TEMPERATURE, WIND, AND EXPOSURE. THE PROPER SELECTION AND INSTALLATION OF PLANT MATERIALS IS KEY TO A SUCCESSFUL SYSTEM. THERE ARE ESSENTIALLY THREE ZONES WITHIN A BIORETENTION FACILITY (FIGURE A.5). THE LOWEST ELEVATION SUPPORTS PLANT SPECIES ADAPTED TO STANDING AND FLUCTUATING WATER LEVELS. THE MIDDLE ELEVATION SUPPORTS PLANTS THAT LIKE DRIER SOIL CONDITIONS, BUT CAN STILL TOLERATE OCCASIONAL INUNDATION BY WATER. THE OUTER EDGE IS THE HIGHEST ELEVATION AND GENERALLY SUPPORTS PLANTS ADAPTED TO DRIER CONDITIONS. A SAMPLE OF APPROPRIATE PLANT MATERIALS FOR BIORETENTION FACILITIES ARE INCLUDED IN TABLE A.4. THE LAYOUT OF PLANT MATERIAL SHOULD BE FLEXIBLE, BUT SHOULD FOLLOW THE GENERAL PRINCIPALS DESCRIBED IN TABLE A.5. THE OBJECTIVE IS TO HAVE A SYSTEM, WHICH RESEMBLES A RANDOM, AND NATURAL PLANT LAYOUT, WHILE MAINTAINING OPTIMAL CONDITIONS FOR PLANT ESTABLISHMENT AND GROWTH. FOR A MORE EXTENSIVE BIORETENTION PLAN, CONSULT ETAB, 1993 OR CLAYTON AND SCHUELEZ, 1997.

OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS (M-6) AND (F-6)

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. 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 AND PRUNING.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDER BEYOND TREATMENT. TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING, REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

DRAINAGE AREA F-6 (1) BIORETENTION PLANT MATERIAL

QUANTITY	NAME	MAXIMUM SPACING (FT.)
167 (502 sq.ft.)	GRASSES	1 FT.
72	SHRUBS	2 FT.

DRAINAGE AREA F-6 (2) BIORETENTION PLANT MATERIAL

QUANTITY	NAME	MAXIMUM SPACING (FT.)
297 (892 sq.ft.)	GRASSES	1 FT.
127	SHRUBS	2 FT.

DRAINAGE AREA F-6 (3) BIORETENTION PLANT MATERIAL

QUANTITY	NAME	MAXIMUM SPACING (FT.)
56 (168 sq.ft.)	GRASSES	1 FT.
24	SHRUBS	2 FT.

DRAINAGE AREA F-6 (4) BIORETENTION PLANT MATERIAL

QUANTITY	NAME	MAXIMUM SPACING (FT.)
117 (352 sq.ft.)	GRASSES	1 FT.
50	SHRUBS	2 FT.

DRAINAGE AREA F-6 (5) BIORETENTION PLANT MATERIAL

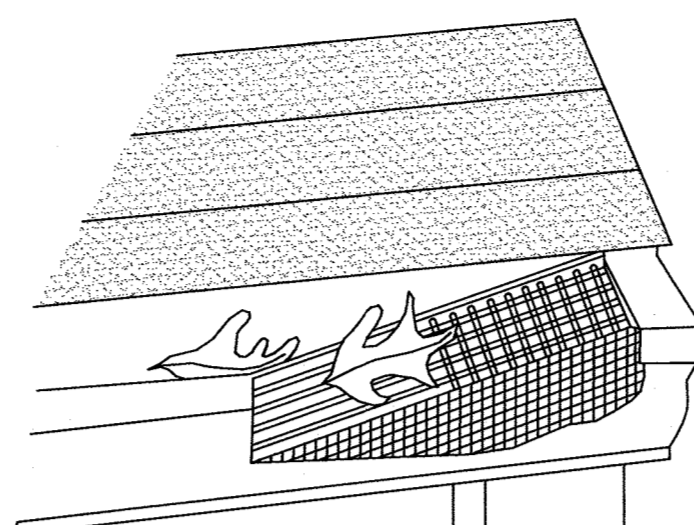
QUANTITY	NAME	MAXIMUM SPACING (FT.)
75 (225 sq.ft.)	GRASSES	1 FT.
32	SHRUBS	2 FT.

SHRUBS

RAYBERRY
SPICEBUSH
ARROWWOOD
WINTERBERRY
INLEBERRY
WITCH HAZEL
BUTTERNUT
BUCKEYE
BOTTLEBRUSH
BUCKEYE

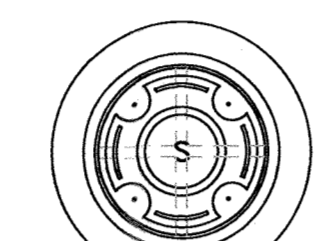
GRASS

SWITCHGRASS
HEAVY METAL
SWITCHGRASS



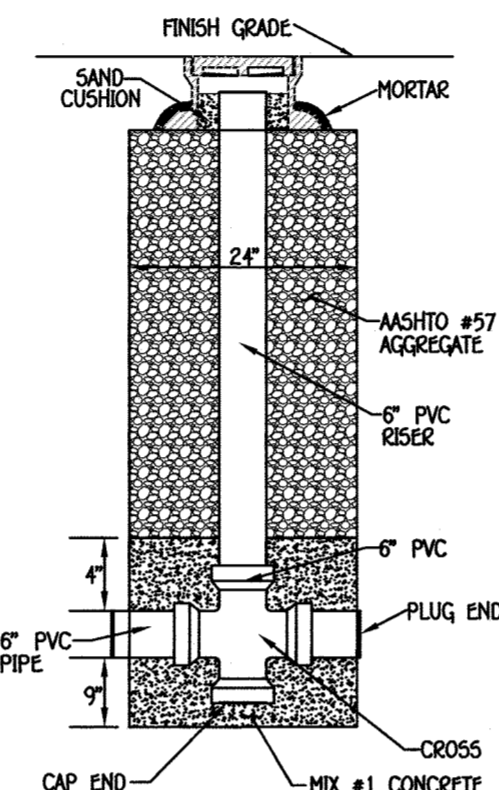
GUTTER DRAIN FILTER DETAIL

NOT TO SCALE
*A GUTTER GUARD OR A SUITABLE EQUIVALENT SHALL BE USED FOR EACH DOWNSPOUT DIRECTED TO A DRYWELL.



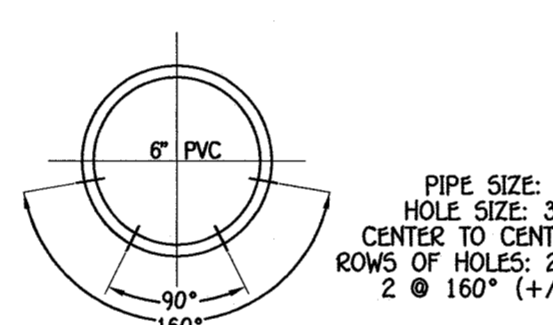
LAMP HOLE FRAME & COVER

NOTE: MATERIAL SHALL BE GRAY IRON CASTING. CASTINGS MUST BE MACHINED ON BEARING SURFACES.



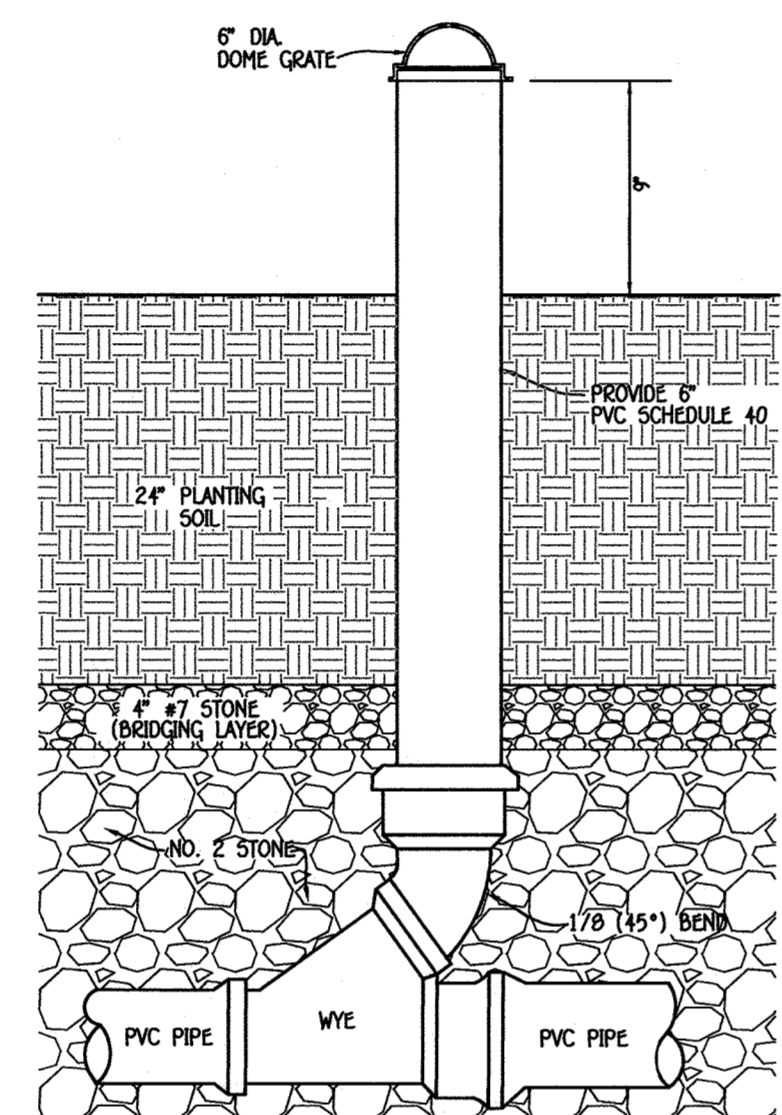
CLEANOUT/WATER QUALITY SAMPLING PORT DETAIL

NOT TO SCALE



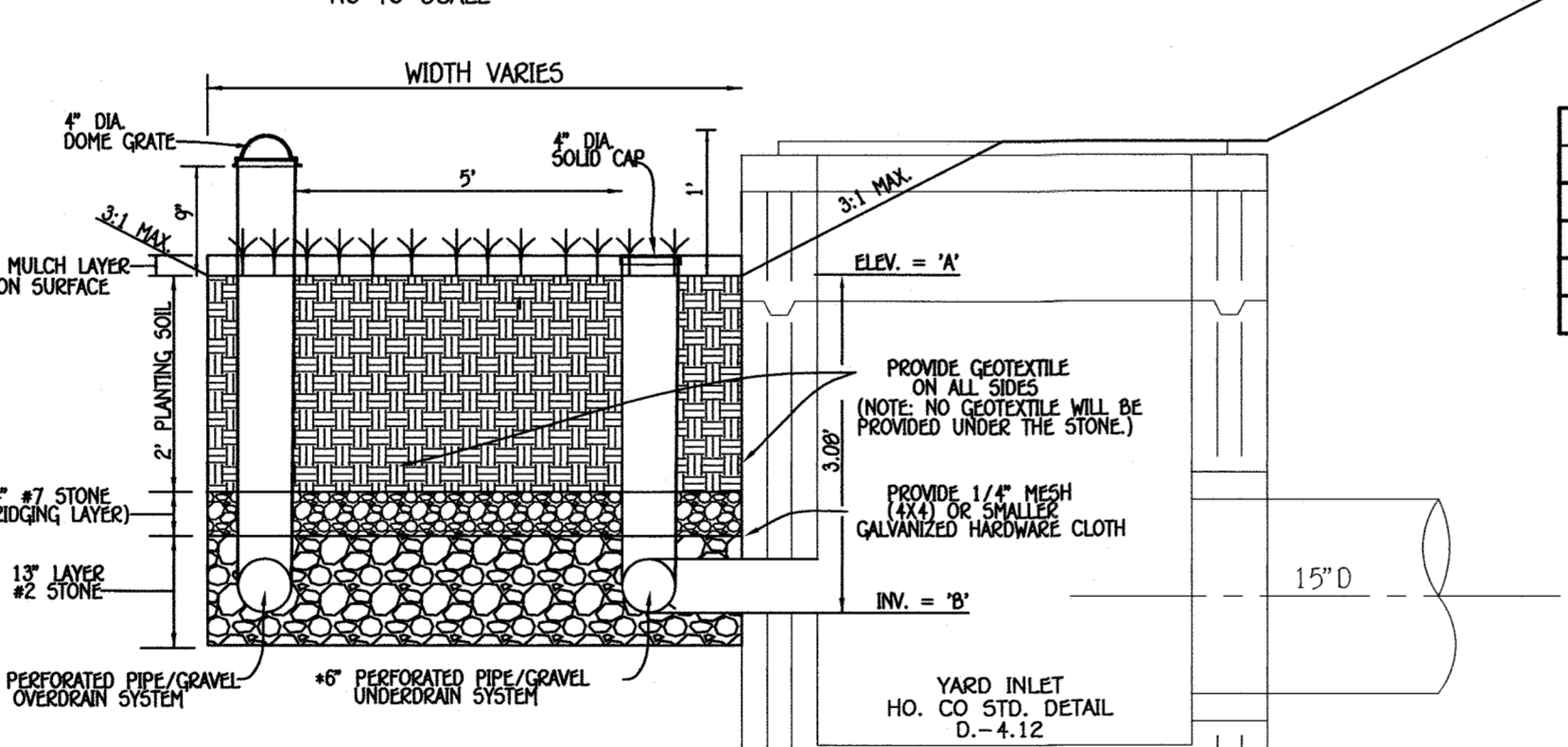
SCH40 PVC PERFORATED UNDERDRAIN PIPE DETAIL FOR HORIZONTAL DRAIN PIPE

NOT TO SCALE



TYPICAL CLEAN-OUT DETAIL

NOT TO SCALE



TYPICAL SECTION BIO-RETENTION FACILITY (F-6)

NOT TO SCALE

*CONTRACTOR MAY SUBSTITUTE 6" DIAMETER SLOTTED HDPE PIPE CLASS II PER MS100 SPECIFICATION MESH/405 N-12 5/16" PIPE OR EQUIVALENT.

NOTE: THE BOTTOM OF EACH BIO-RETENTION FACILITY (M-6) SHALL BE ROTOTILLED PRIOR TO STONE INSTALLATION.

CONSTRUCTION CRITERIA:

THE FOLLOWING ITEMS SHOULD BE ADDRESSED DURING CONSTRUCTION OF PROJECTS WITH DRY WELLS:

EROSION AND SEDIMENT CONTROL:
FINAL GRADING FOR PROPOSED DRY WELLS SHOULD NOT TAKE PLACE UNTIL THE SURROUNDING SITE IS COMPLETELY STABILIZED. IF THIS CANNOT BE ACCOMPLISHED, RUNOFF FROM DISTURBED AREAS SHALL BE DIVERTED.

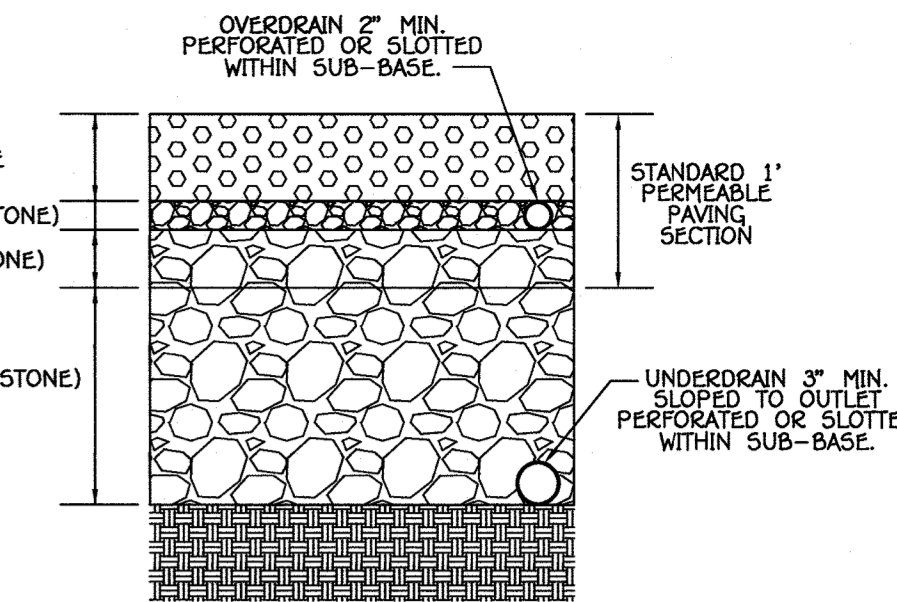
SOIL COMPACTION:
EXCAVATION SHOULD BE CONDUCTED IN DRY CONDITIONS WITH EQUIPMENT LOCATED OUTSIDE OF THE PRACTICE TO MINIMIZE BOTTOM AND SIDEWALL COMPACTION. CONSTRUCTION OF A DRY WELL SHALL BE PERFORMED WITH LIGHTWEIGHT, WIDE-TRACKED EQUIPMENT TO MINIMIZE DISTURBANCE AND COMPACTION. EXCAVATED MATERIALS SHALL BE PLACED IN A CONTAINED AREA.

UNDERGROUND CHAMBER:
A SUBSURFACE PREFABRICATED CHAMBER MAY BE USED.

DRY WELL BOTTOM:
THE BOTTOM SHALL BE AS LEVEL AS POSSIBLE TO MINIMIZE POOLED WATER IN SMALL AREAS THAT MAY REDUCE OVERALL INFILTRATION AND LONGEVITY.

FILTER CLOTH:
FILTER CLOTH SHALL NOT BE INSTALLED ON THE BOTTOM OF THE WELL. NON-WOVEN FILTER CLOTH SHOULD BE USED TO LINE THE TOP AND SIDES OF THE DRY WELL TO PREVENT THE PORE SPACE BETWEEN THE STONES FROM BEING BLOCKED BY THE SURROUNDING NATIVE MATERIAL.

GRAVEL MEDIA:
THE AGGREGATE SHALL BE COMPOSED OF AN 18 TO 48-INCH LAYER OF CLEAN WASHED, OPEN GRADED MATERIAL WITH 40% POROSITY (E.G., ASTM D448 4, 5, OR 6 STONE OR EQUAL).



TYPICAL SECTION - A-2 PERMEABLE SECTION W/ OVERDRAIN & UNDERDRAIN

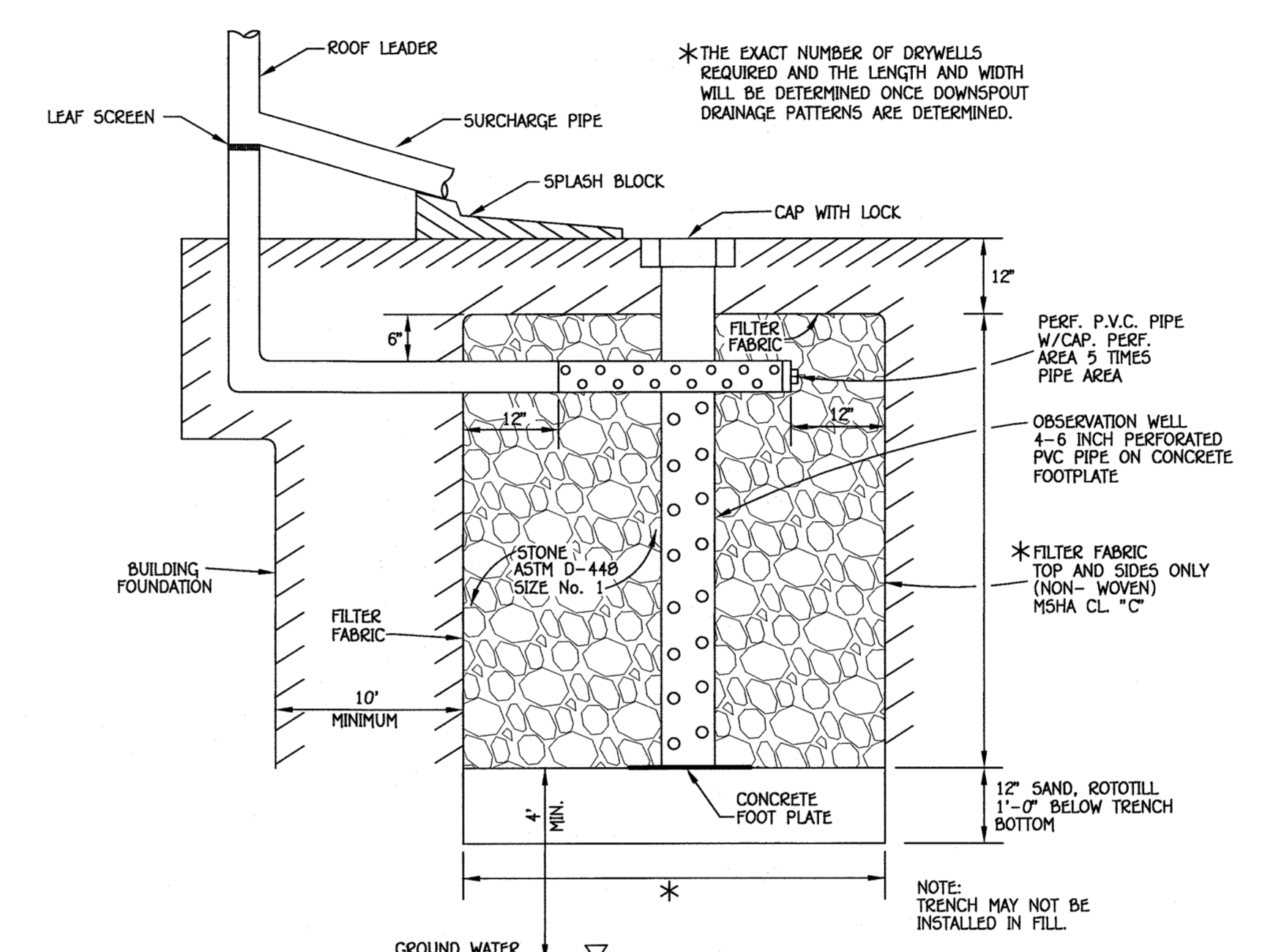
NO SCALE
(SEE CHART ABOVE FOR PAVEMENT THICKNESS)

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED PERMEABLE PAVEMENT (A-2)

- THE OWNER SHALL PERIODICALLY SWEEP (OR VACUUM POROUS CONCRETE PAVEMENT) THE PAVEMENT SURFACES TO REDUCE SEDIMENT ACCUMULATION AND INSURE CONTINUED SURFACE POROSITY. SWEEPING SHOULD BE PERFORMED AT LEAST TWICE ANNUALLY WITH A COMMERCIAL CLEANING UNIT. WASHING OR COMPRESSED AIR UNITS SHOULD NOT BE USED TO PERFORM SURFACE CLEANING.
- THE OWNER SHALL PERIODICALLY CLEAN DRAINAGE PIPES, INLETS, STONE EDGE DRAINS AND OTHER STRUCTURES WITHIN OR DRAINING TO THE SUBBASE.
- THE OWNER SHALL USE DEICERS IN MODERATION. DEICERS SHOULD BE NON-TOXIC AND BE APPLIED EITHER AS CALCIUM MAGNESIUM ACETATE OR AS PRETREATED SALT.
- THE OWNER SHALL ENSURE SNOW PLOWING IS PERFORMED CAREFULLY WITH BLADES SET ONE INCH ABOVE THE SURFACE. PLOWED SNOW PILES AND SNOWMELT SHOULD NOT BE DIRECTED TO PERMEABLE PAVEMENT.

PERMEABLE PAVING CHART

PERM. PAV. AREA NO.	DEPTH
A-2(1)	2.0'



DRY WELL DETAIL

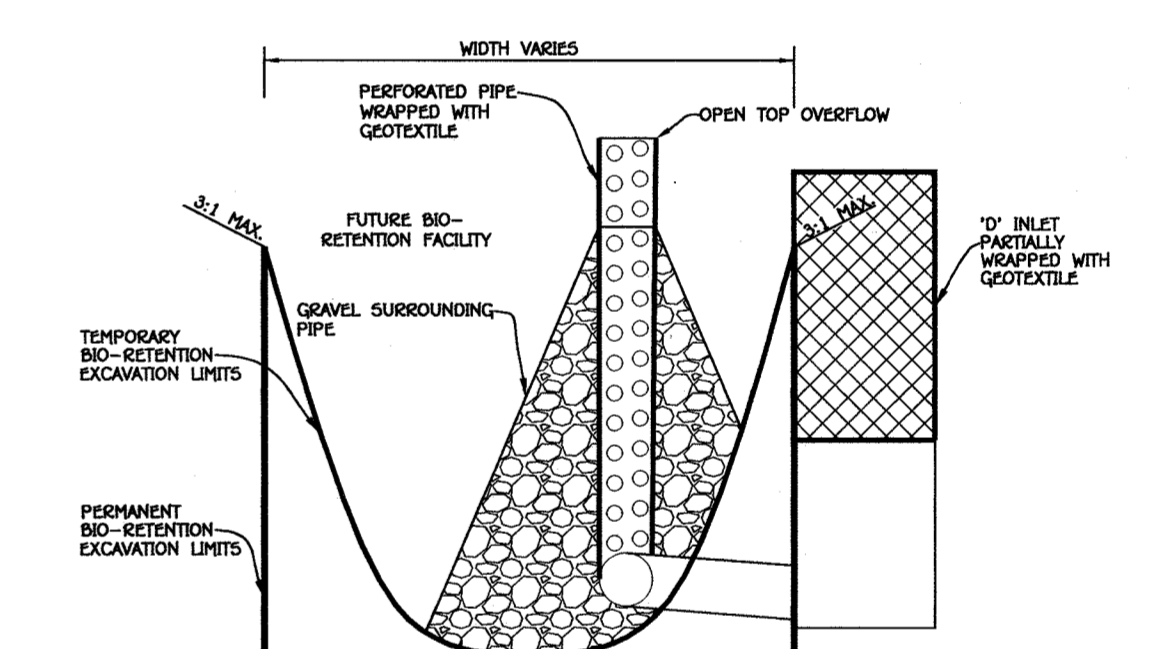
NOT TO SCALE

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRY WELLS (M-5)

- THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH DRAINAGE.
- THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.

DRY WELL CHART

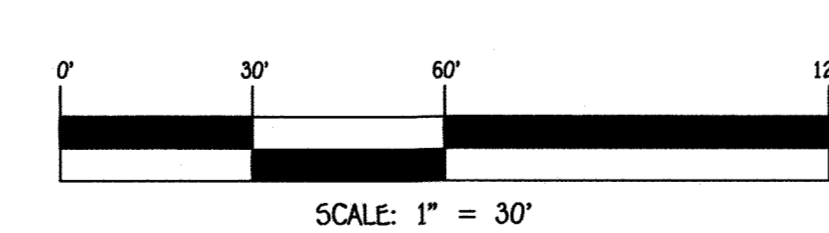
LOT NO.	DRYWELL NUMBER	NO. OF DOWNSPOUTS	AREA OF ROOF	VOLUME REQUIRED	VOLUME PROVIDED	AREA OF STORAGE	AREA OF TREATMENT	NO. OF DRYWELLS	DIMENSIONS OF DRYWELLS
23	M-5 (23A)	2	907 Sqft	130 Cuft	140 Cuft	100%	100%	1	10' X 7' X 5'
24	M-5 (24A)	2	907 Sqft	130 Cuft	140 Cuft	100%	100%	1	10' X 7' X 5'



TYPICAL SECTION - OPTIONAL INTERIM BIO-RETENTION FACILITY

(USED FOR MINOR SEDIMENT TRAPPING)

NOT TO SCALE



PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/21.

Frank Manalansan II
FRANK MANALANSAN II, L.S.
5/26/20
DATE

OWNER

ENLN, LLC
6800 DEERPATH ROAD #100
ELK RIDGE, MD 21075
(410)-579-1441

DEVELOPER

ROCK REALTY, LLC
C/O H&H ROCK COMPANIES
6800 DEERPATH ROAD #100
ELK RIDGE, MD 21075
(410)-967-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Adria Miller as AC
Chief, Division of Land Development 5/8 11/12/20
Date

Luigi Randolf as C.E.
Chief, Development Engineering Division w/y 11/9/20
Date

John Conner
Director, Department of Planning and Zoning 11/12/20
Date

PROJECT	PHASE	PARCEL No.			
EDEN BROOK		269			
PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
	7	R-12	42	6	605102

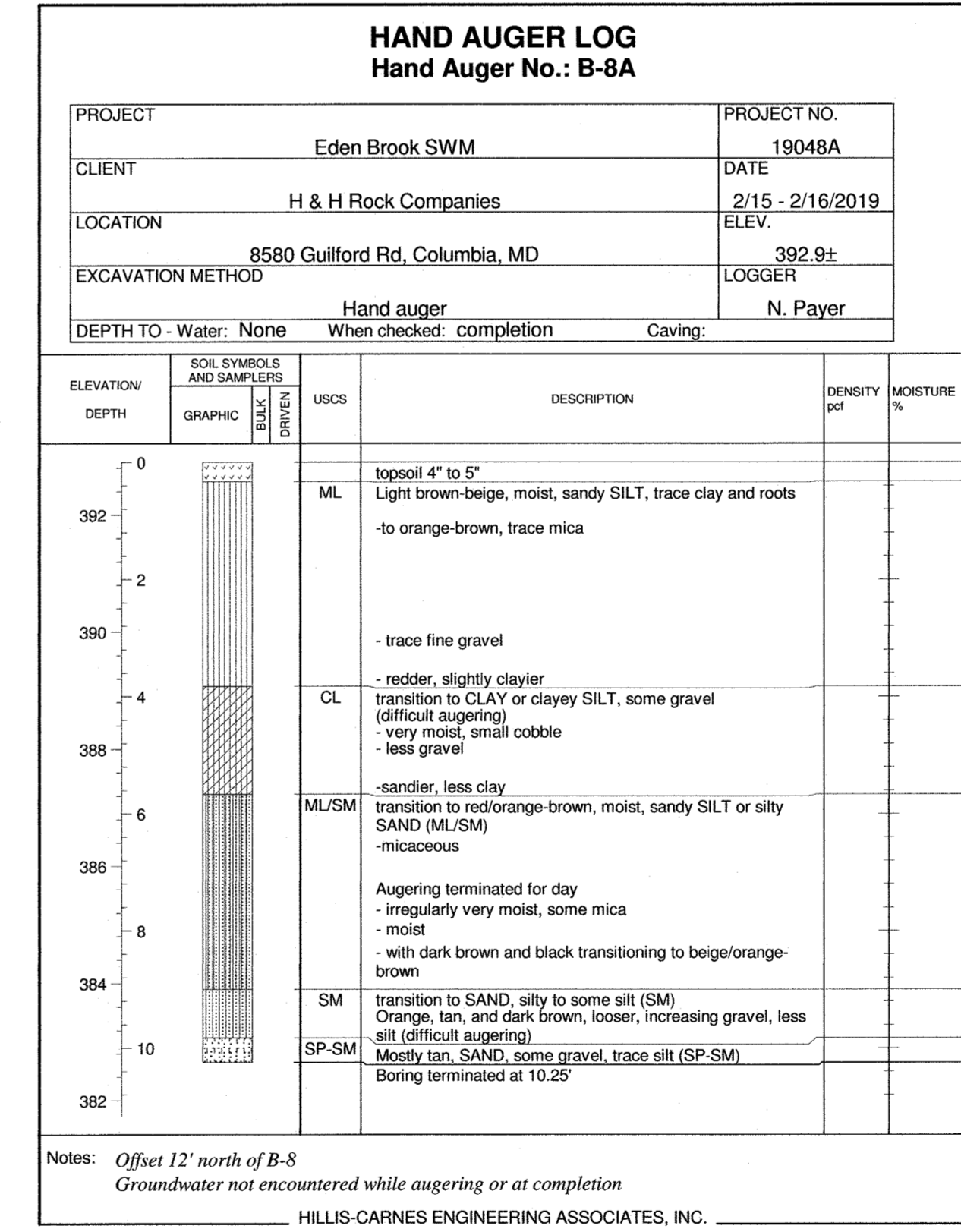
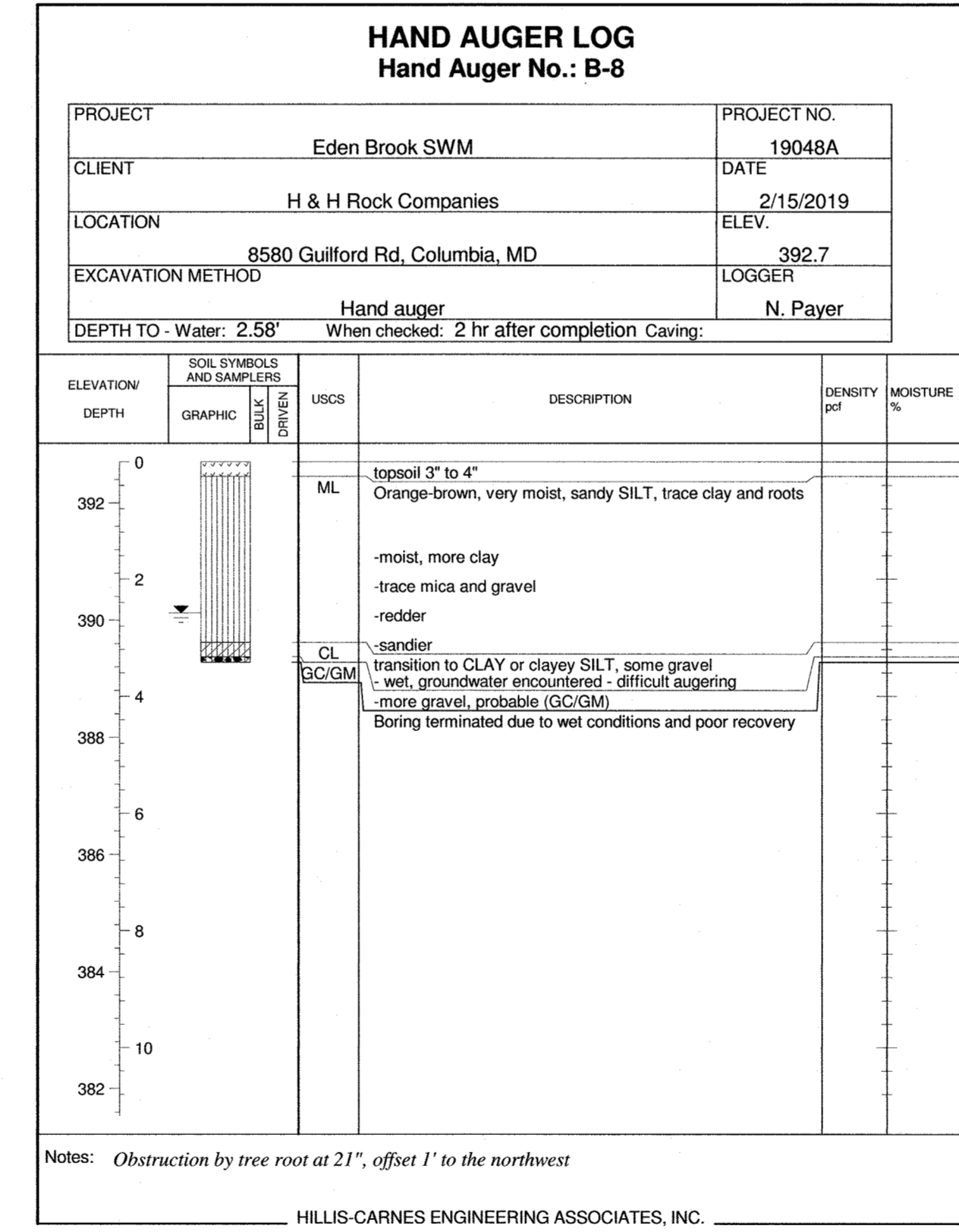
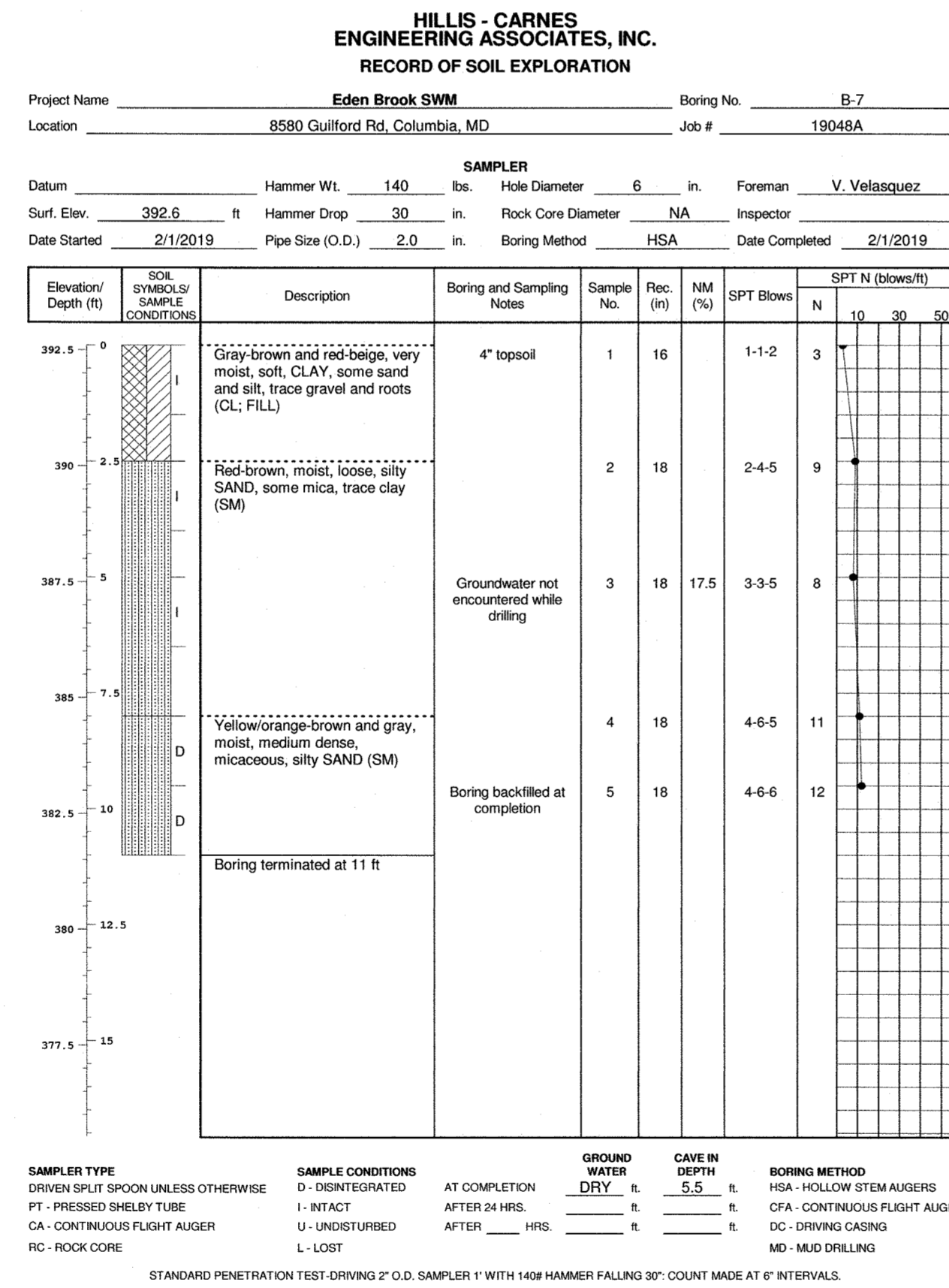
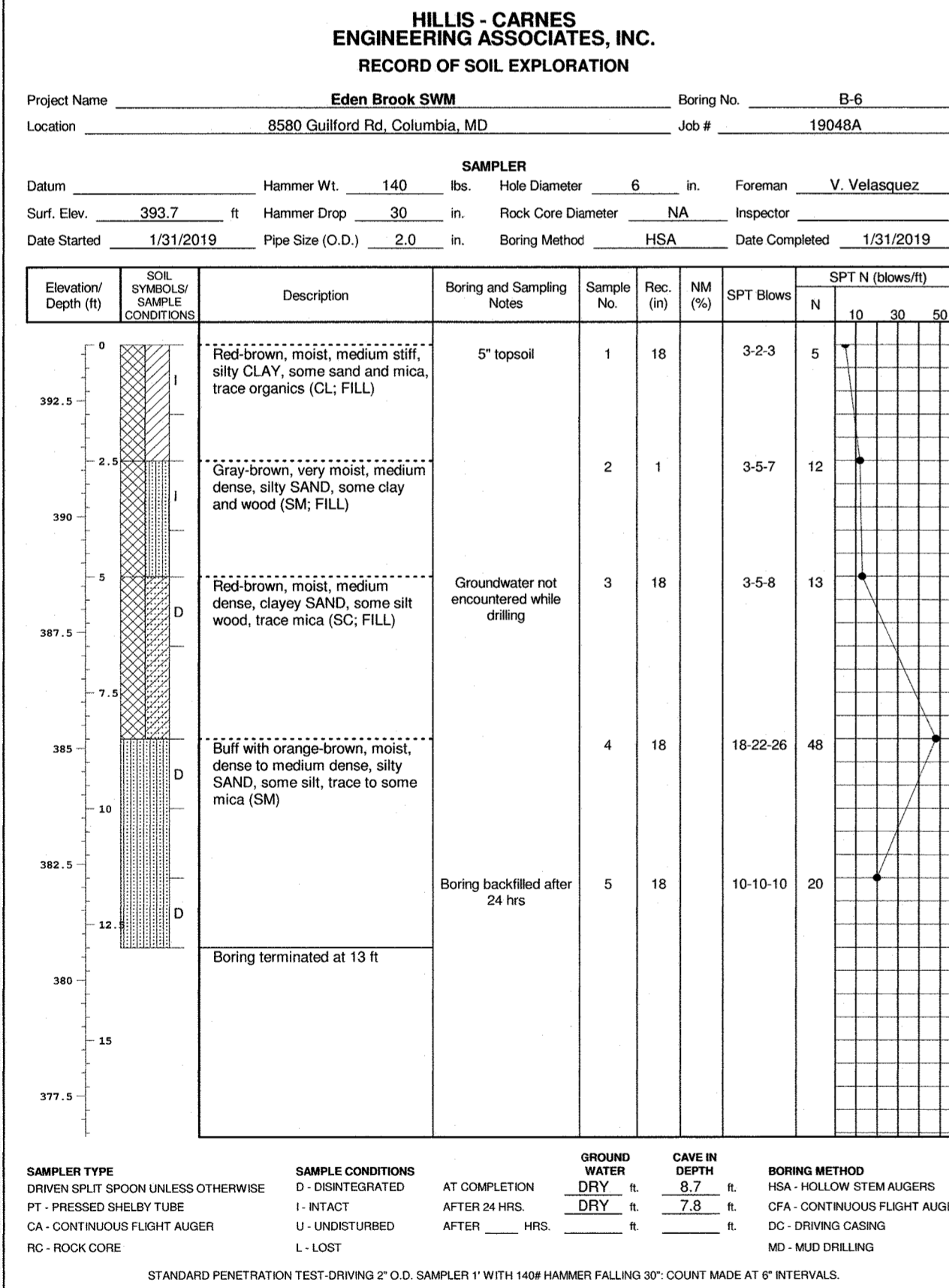
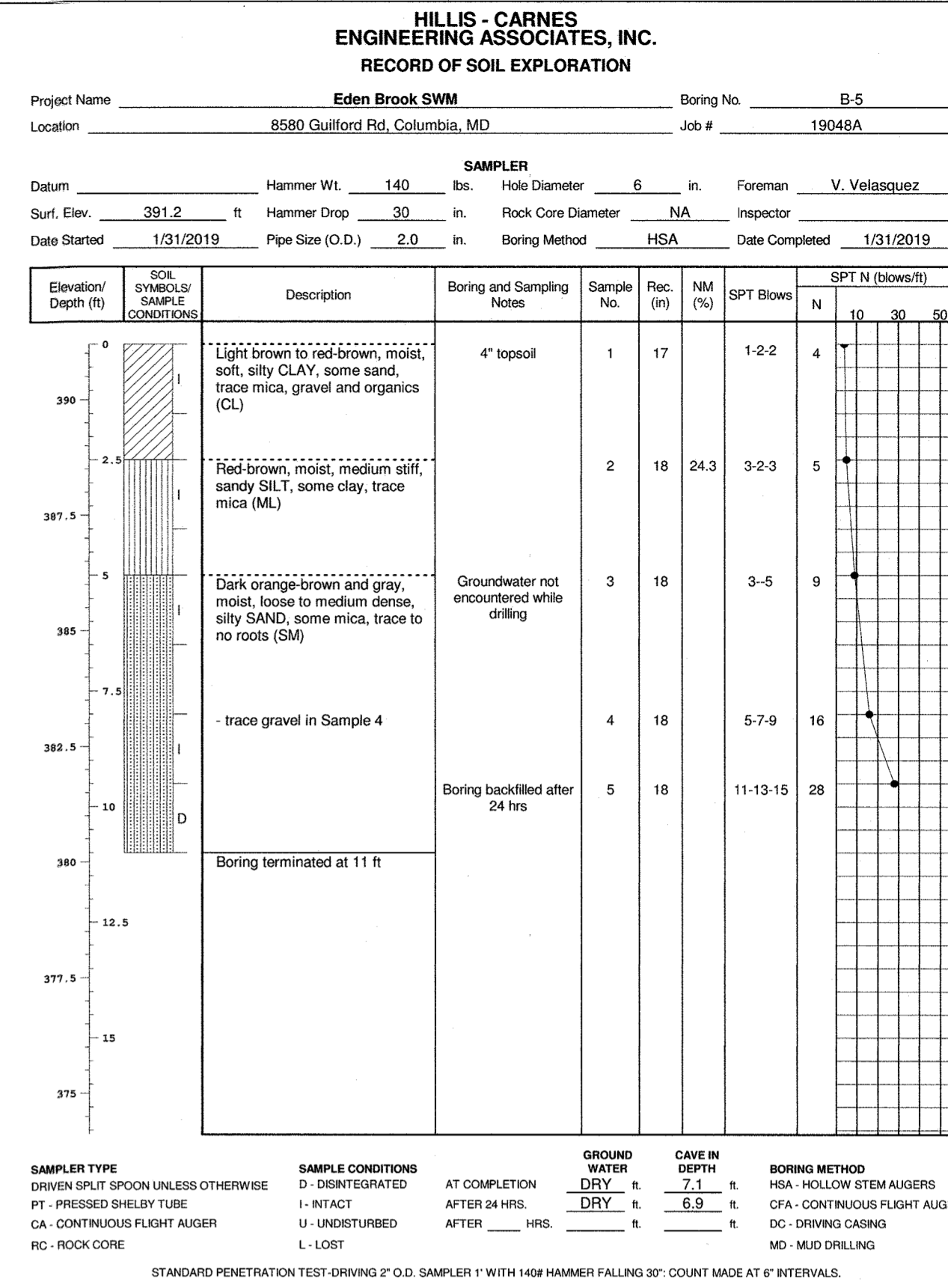
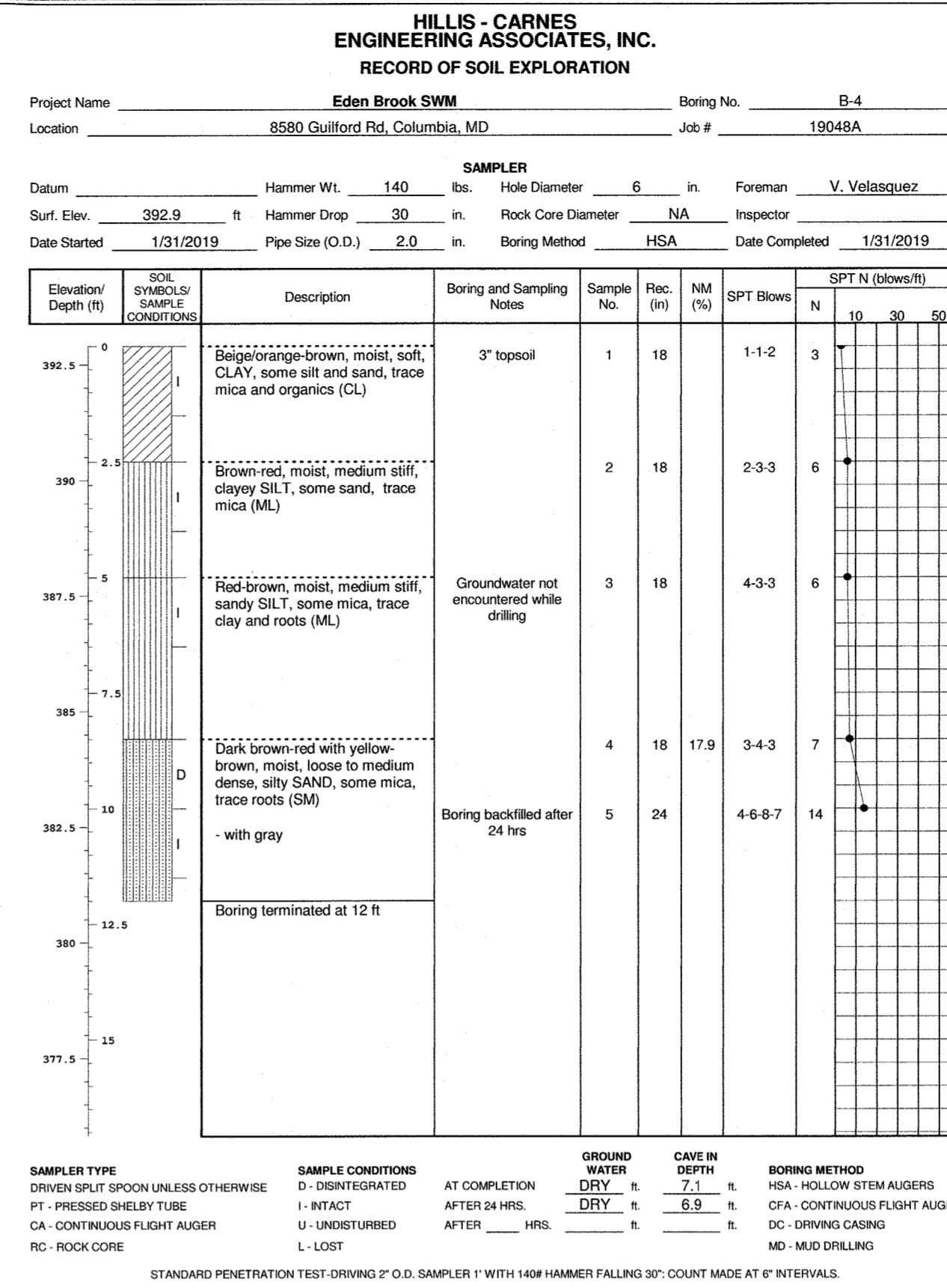
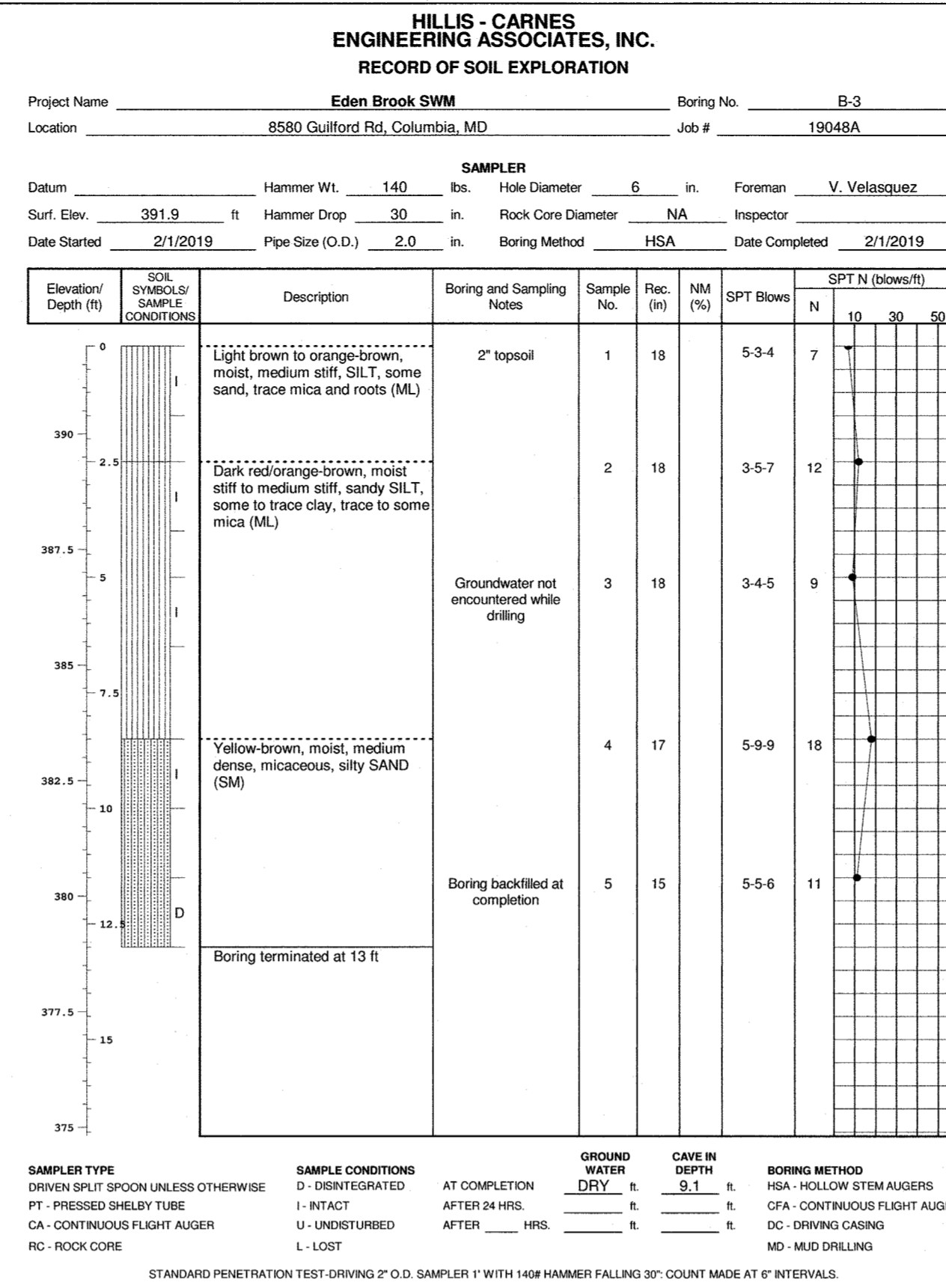
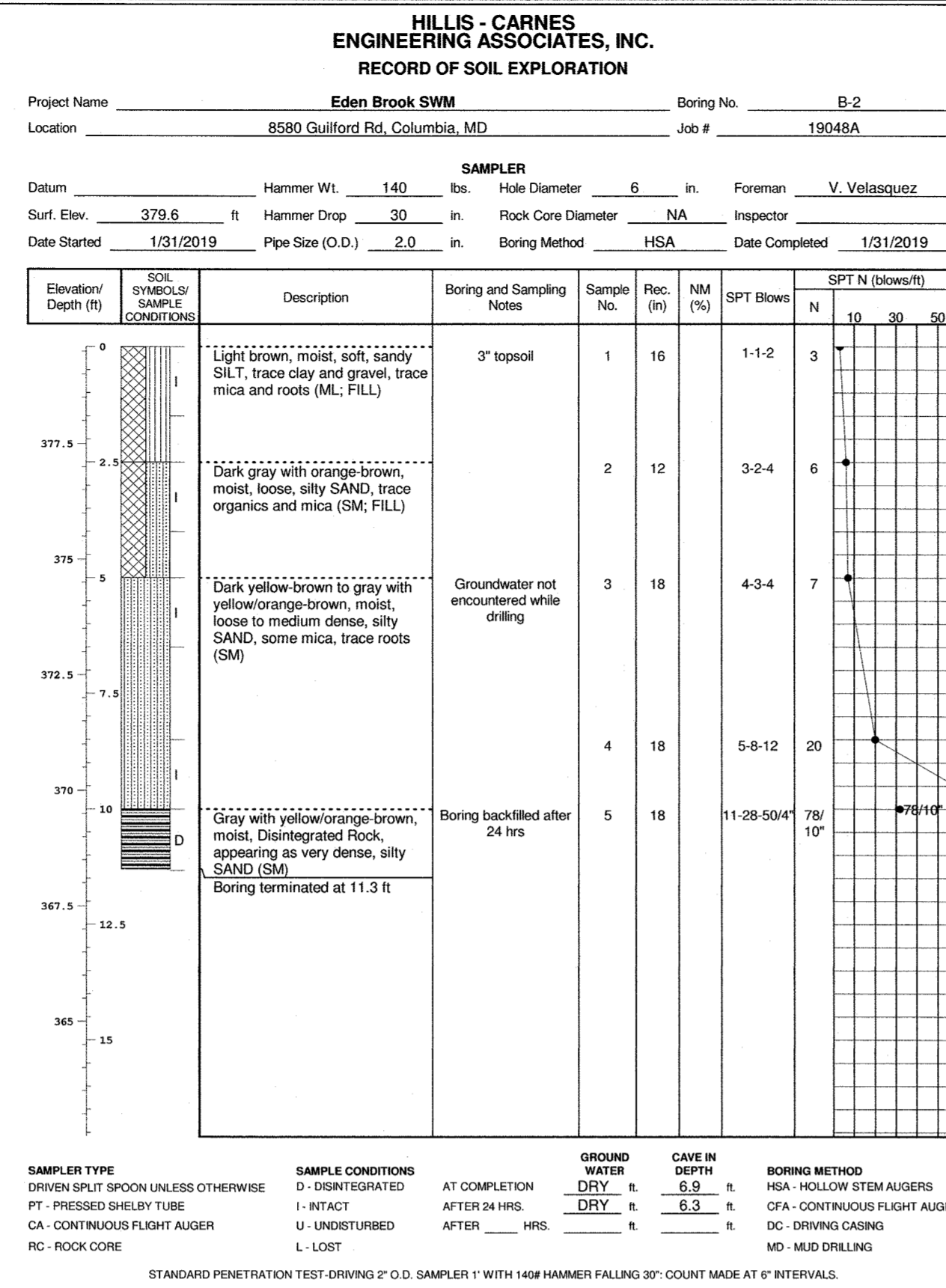
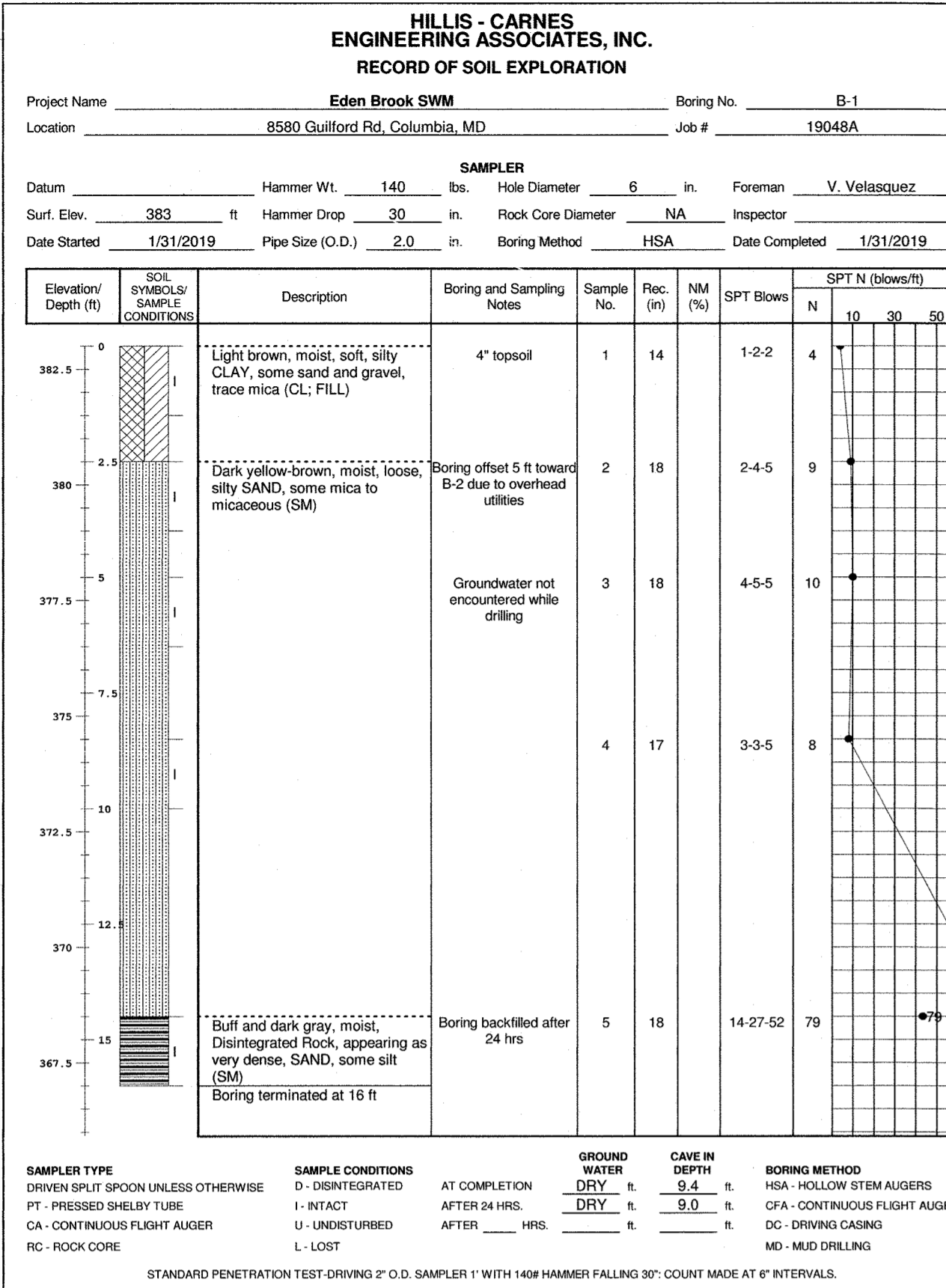
PREVIOUS HOWARD COUNTY FILES:
BA-17-030C, ECP-18-051, WP-19-055, SP-18-003, F-20-011
& CONTRACT NO.24-5081-0

STORMWATER MANAGEMENT NOTES & DETAILS

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

EDEN BROOK
LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
ZONED R-12
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: APRIL, 2020
SHEET 12 OF 21

SDP-20-009



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENAL SQUARE OFFICE PARK - 10272 BALDPOKE NATIONAL PARK
ELLSWORTH CITY, MARYLAND 21042
(410) 661-2999



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/21.
Frank M. Mansanor, Jr.
DATE: 2/11/20

OWNER: ENH, LLC
6800 DEERPATH ROAD #100
ELK RIDGE, MD 21075
(410)-579-1441

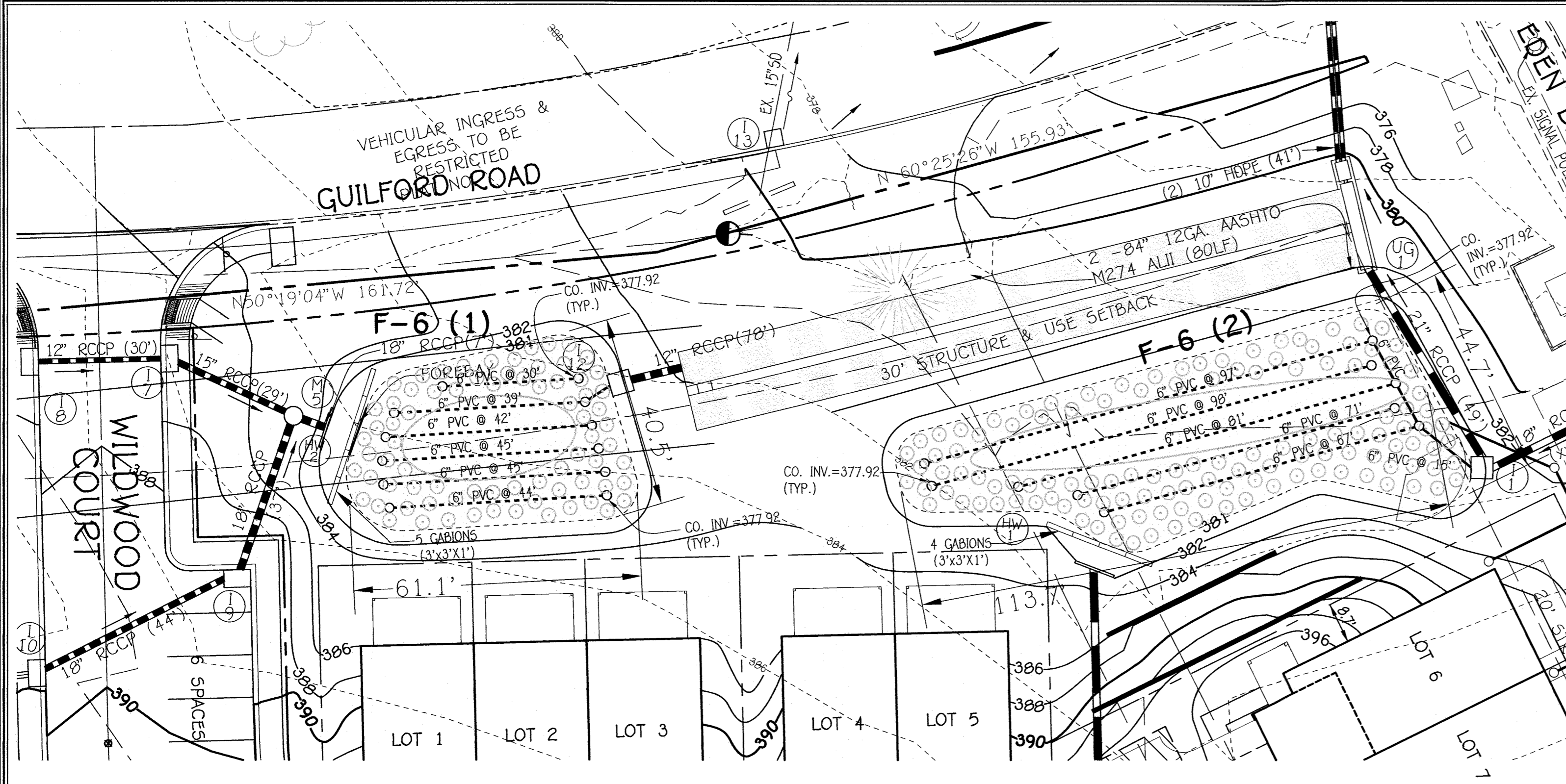
DEVELOPER: ROCK REALTY, LLC
C/O H&H ROCK COMPANIES
6800 DEERPATH ROAD #100
ELK RIDGE, MD 21075
(410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development: 1/12/20
Chief, Development Engineering Division: 1/12/20
Director, Department of Planning and Zoning: 1/12/20

PROJECT: EDEN BROOK PHASE: PARCEL NO. 269
PLAT: BLOCK NO. 7 ZONE: R-12 TAX/ZONE: 42 ELEC. DIST.: 6 CENSUS TR.: 605102

PREVIOUS HOWARD COUNTY FILES:
BA-17-030C, ECP-16-051, WP-19-055, SP-18-003, F-20-011
& CONTRACT NO.24-5001-0

BORING LOGS
SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING
EDEN BROOK
LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
ZONED R-12
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: SEPTEMBER, 2020
SHEET 13 OF 21
SDP-20-009

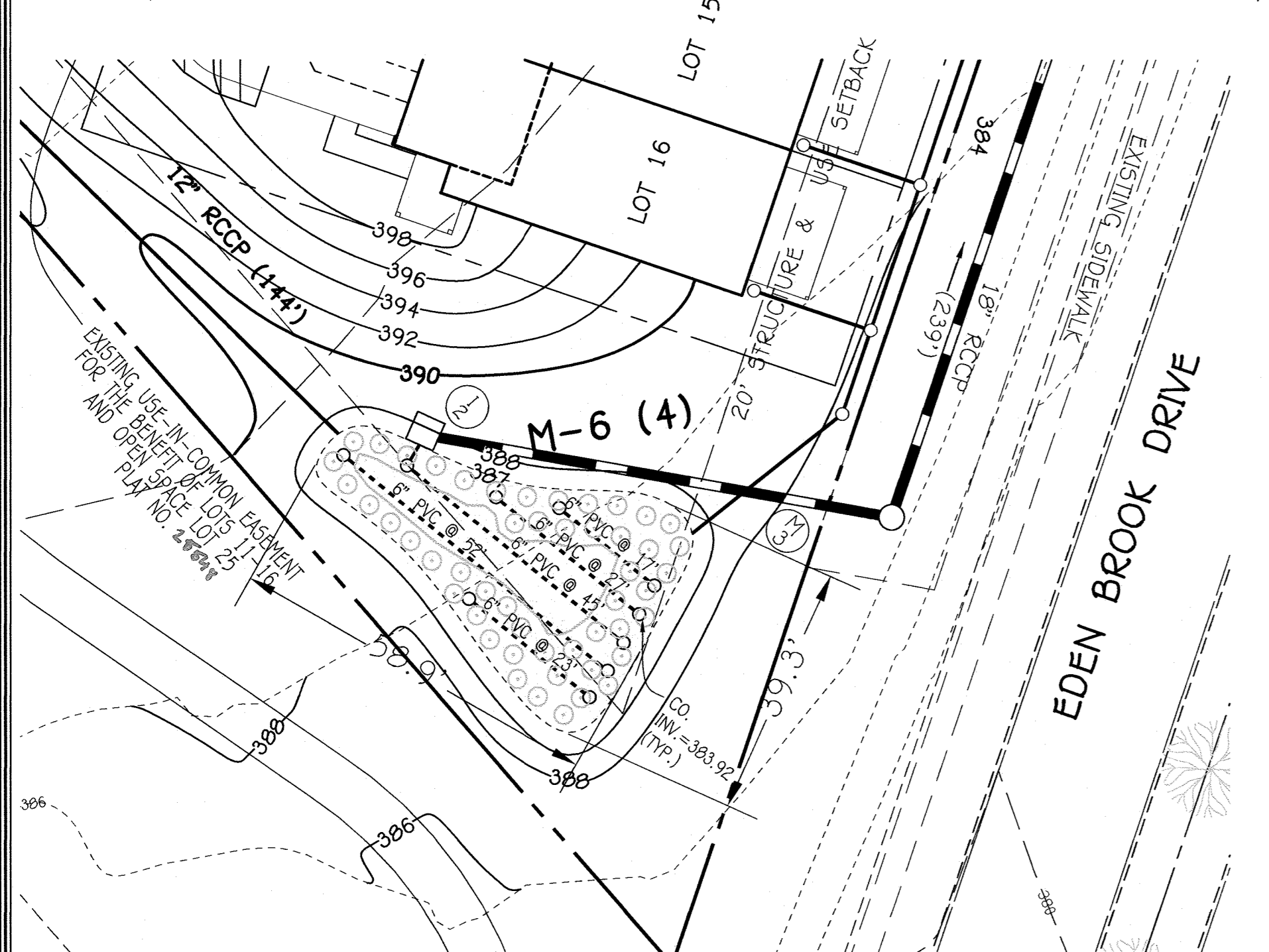


F-6 (1)
 (BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 66,699 SqFt.
 FILTER AREA: 1,966 SqFt.
 ELEVATION 381
 PERIMETER 171'
 WEIR ELEVATION 382
 PONDING DEPTH: 1'

NOTE:
 1) STORMWATER
 MANAGEMENT FACILITY
 TO BE PRIVATELY
 OWNED AND
 MAINTAINED.

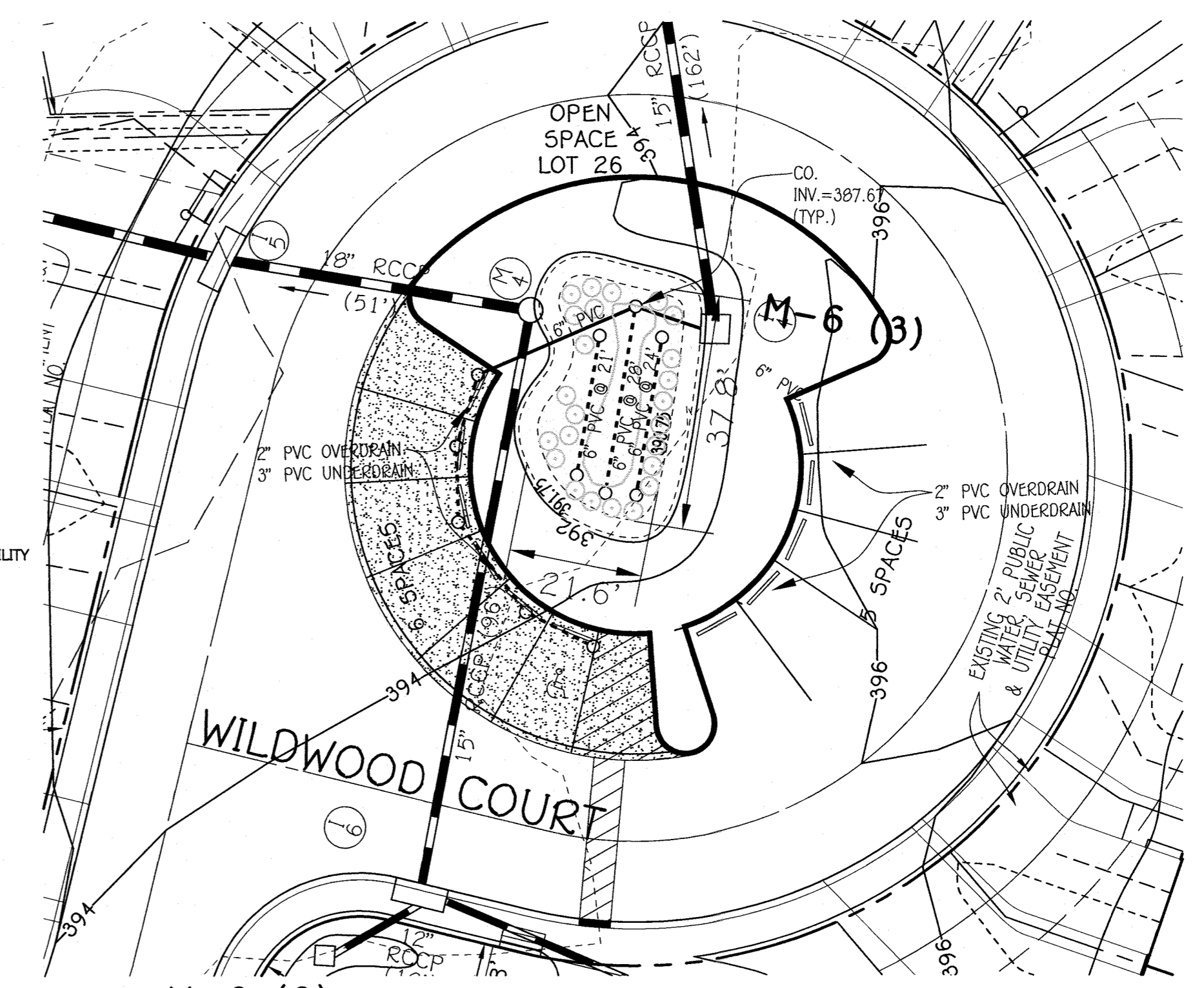
F-6 (2)
 (BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 64,792 SqFt.
 FILTER AREA: 3,569 SqFt.
 ELEVATION 381
 PERIMETER 289'
 WEIR ELEVATION 382
 PONDING DEPTH: 1'

NOTE:
 1) STORMWATER
 MANAGEMENT FACILITY
 TO BE PRIVATELY
 OWNED AND
 MAINTAINED.



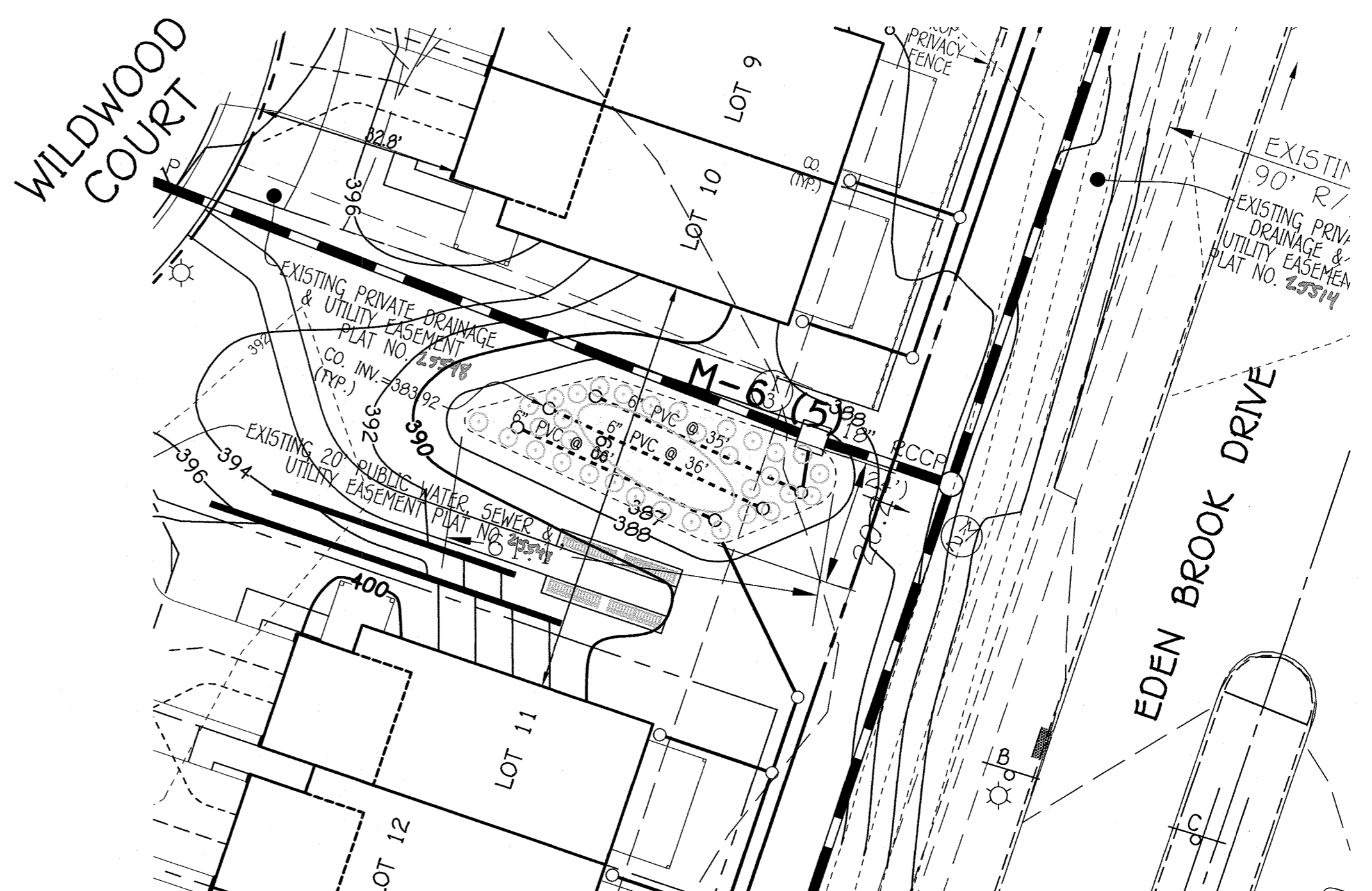
M-6 (4)
 (BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 29,891 SqFt.
 FILTER AREA: 1,546 SqFt.
 ELEVATION 387
 PERIMETER 172'
 WEIR ELEVATION 388
 PONDING DEPTH: 1'

NOTE:
 1) STORMWATER
 MANAGEMENT FACILITY
 TO BE PRIVATELY
 OWNED AND
 MAINTAINED.



M-6 (3)
 (BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 6,474 SqFt.
 FILTER AREA: 672 SqFt.
 ELEVATION 390.75
 PERIMETER 123'
 WEIR ELEVATION 391.75
 PONDING DEPTH: 1'

NOTE:
 1) STORMWATER
 MANAGEMENT FACILITY
 TO BE PRIVATELY
 OWNED AND
 MAINTAINED.



M-6 (5)
 (BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 15,754 SqFt.
 FILTER AREA: 1,546 SqFt.
 ELEVATION 387
 PERIMETER 172'
 WEIR ELEVATION 388
 PONDING DEPTH: 1'

NOTE:
 1) STORMWATER
 MANAGEMENT FACILITY
 TO BE PRIVATELY
 OWNED AND
 MAINTAINED.

A-2 (1)
 (PERMEABLE PAVING)
 DRAINAGE AREA: 5,196 SqFt.
 PERMEABLE PAVING AREA: 1,657 SqFt.
 NOTE:
 1) STORMWATER
 MANAGEMENT FACILITY
 TO BE PRIVATELY
 OWNED AND
 MAINTAINED.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALDORNE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-3995

STATE OF MARYLAND
 FRANK JOHN MANNERS, J.N.
 PROFESSIONAL LAND SURVEYOR
 No. 21476
 EXPIRES 7/14/21

NO.	REVISION	DATE

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/21.

Francis Mamalanan II
 FRANCIS MAMALANAN II, L.S.
 9/11/20
 DATE

0' 20' 40' 80'
 SCALE: 1" = 20'

OWNER
 ENL, LLC
 6800 DEERPATH ROAD #100
 ELK RIDGE, MD 21075
 (410)-579-1441

DEVELOPER
 ROCK REALTY, LLC
 C/O H&H ROCK COMPANIES
 6800 DEERPATH ROAD #100
 ELK RIDGE, MD 21075
 (410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chiaia Sanyal for AC 11/12/20
 Chief, Division of Land Development 66 Date

Joseph Bandoli for C.E. 11/19/20
 Chief, Development Engineering Division 109 Date

John G... for Director 11/12/20
 Director, Department of Planning and Zoning Date

PROJECT	PHASE	PARCEL NOS.			
EDEN BROOK		269			
PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
	7	R-12	42	6	605102

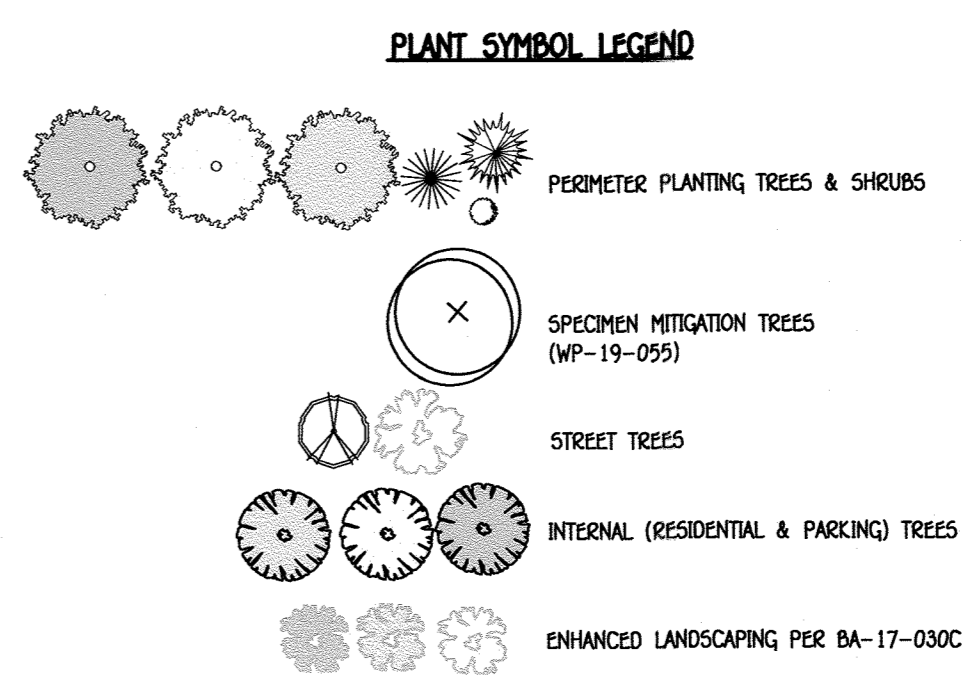
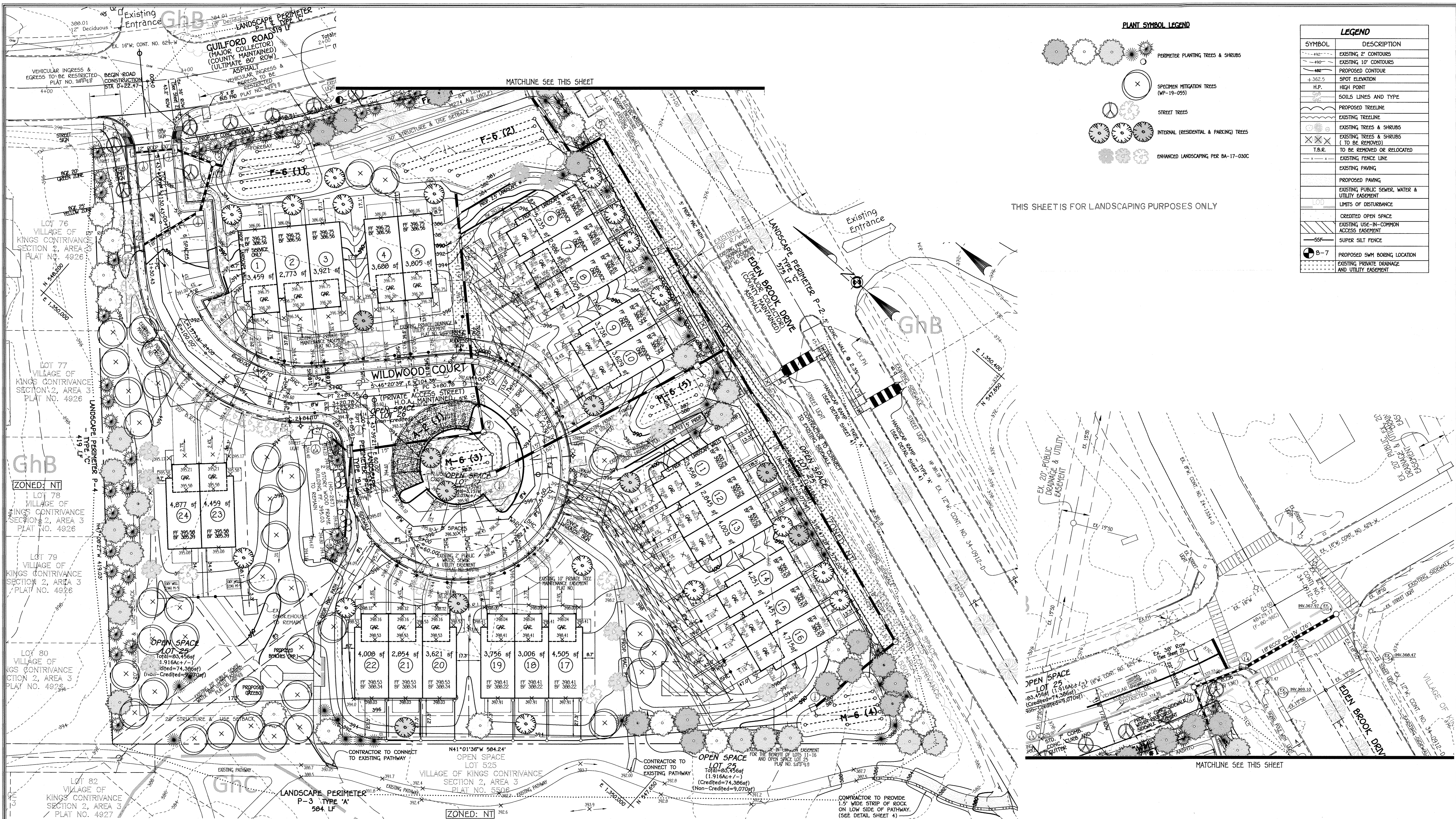
PREVIOUS HOWARD COUNTY FILES:
 BA-17-030C, ECP-18-051, WP-19-055, SP-18-003, F-20-011
 & CONTRACT NO.24-5081-0

STORMWATER MANAGEMENT NOTES AND DETAILS SHEET

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

EDEN BROOK
 LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
 TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
 ZONED R-12
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: SEPTEMBER, 2020
 SHEET 14 OF 21

SDP-20-009



LEGEND

SYMBOL	DESCRIPTION
---482---	EXISTING 2' CONTOURS
---490---	EXISTING 10' CONTOURS
---	PROPOSED CONTOUR
+362.5	SPOT ELEVATION
H.P.	HIGH POINT
---	SOILS LINES AND TYPE
---	PROPOSED TREELINE
---	EXISTING TREELINE
---	EXISTING TREES & SHRUBS
---	EXISTING TREES & SHRUBS (TO BE REMOVED)
T.B.R.	TO BE REMOVED OR RELOCATED
---	EXISTING FENCE LINE
---	EXISTING PAVING
---	PROPOSED PAVING
---	EXISTING PUBLIC SEWER, WATER & UTILITY EASEMENT
---	LIMITS OF DISTURBANCE
---	CREDITED OPEN SPACE
---	EXISTING USE-IN-COMMON ACCESS EASEMENT
---	SUPER SILT FENCE
⊙	PROPOSED SWM BORING LOCATION
---	EXISTING PRIVATE DRAINAGE AND UTILITY EASEMENT

THIS SHEET IS FOR LANDSCAPING PURPOSES ONLY

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELKDRIDGE CITY, MARYLAND 21042
 (410) 461-3099

NO.	REVISION	DATE



LANDSCAPE DEVELOPER'S CERTIFICATE
 I/we certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/we further certify that upon completion a letter of landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

Name: *Frank Manalansan* Date: *4/20/2020*
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/21.

Frank Manalansan Date: *5/26/20*
 FRANK MANALANSAN E. L.S.

0' 30' 60' 120'
 SCALE: 1" = 30'

OWNER
 ENLN, LLC
 6800 DEERPATH ROAD #100
 ELKDRIDGE, MD 21075
 (410)-579-1441

DEVELOPER
 ROCK REALTY LLC
 C/O H&H ROCK COMPANIES
 6800 DEERPATH ROAD #100
 ELKDRIDGE, MD 21075
 (410)-567-1049

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chia Chiu Date: *11/12/20*
 Chief, Division of Land Development

John Pankaj Date: *11/12/20*
 Chief, Development Engineering Division

Director, Department of Planning and Zoning

PROJECT	EDEN BROOK	PHASE	269	PARCEL NO.	269
PLAT	7	ZONE	R-12	TAX/ZONE	42
		ELEC. DIST.	6	CENSUS TR.	605102

PREVIOUS HOWARD COUNTY FILES:
 BA-17-030C, ECP-18-051, WP-19-055, SP-18-003, F-20-011
 & CONTRACT NO.24-5081-D

LANDSCAPE PLAN

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

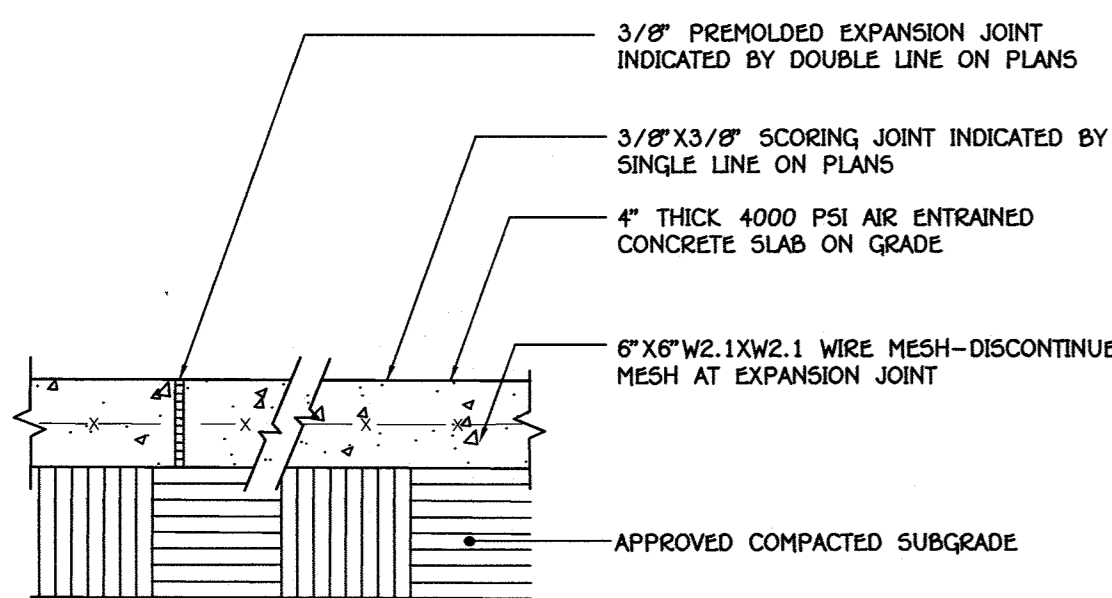
EDEN BROOK
 LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
 TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
 ZONED R-12
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: APRIL, 2020
 SHEET 15 OF 21

SDP-20-009



GAZEBO DETAIL
TYPE: CLASSIC VINYL GAZEBO
(OR APPROVED EQUAL)

NOT TO SCALE
*INSTALLED AT GRADE FOR HANDICAP ACCESSIBILITY

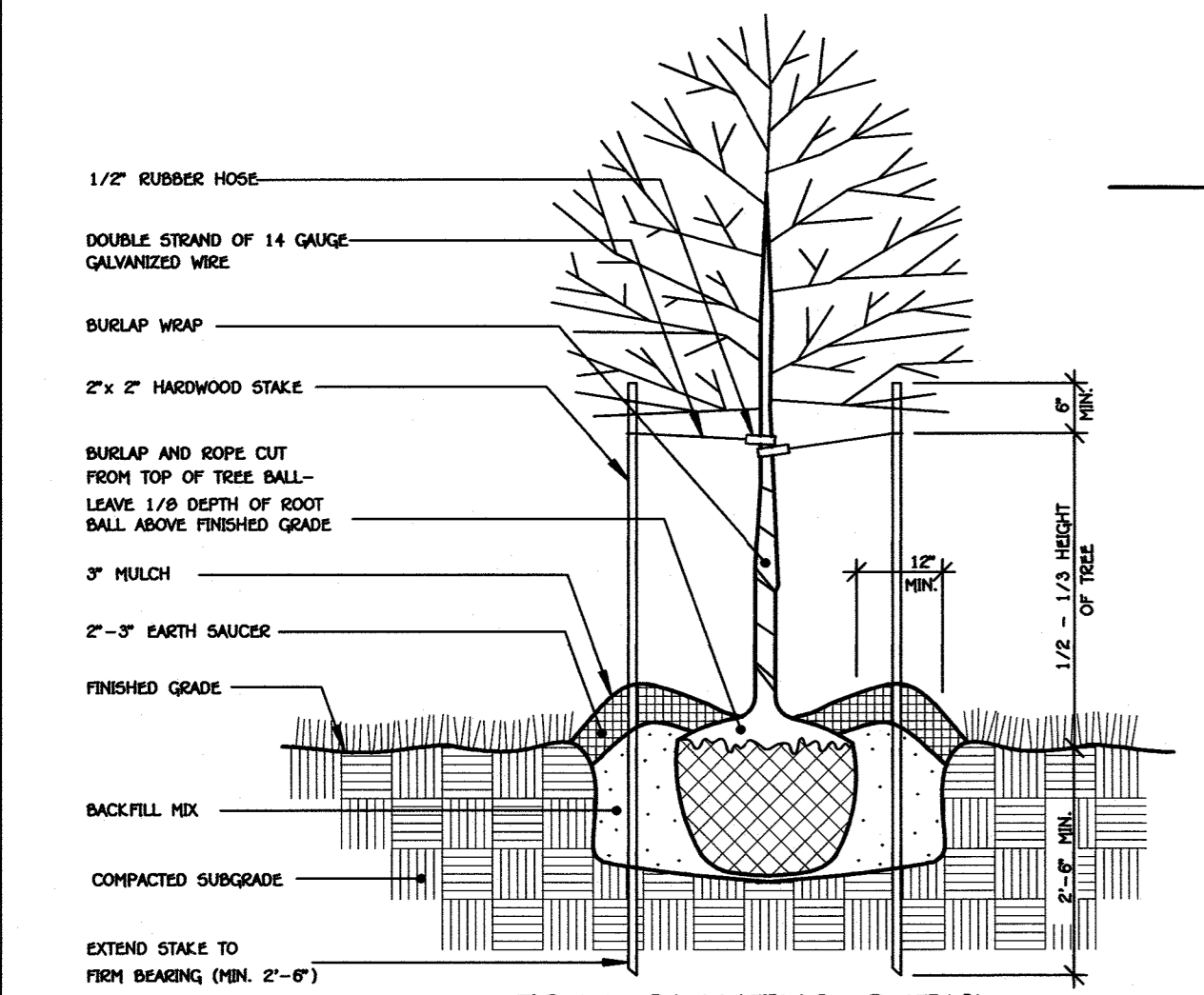


NOTE: REFER TO SITE PAVING PLAN AND FLOOR PLANS FOR LOCATIONS OF EXPANSION JOINTS AND SCORING JOINTS. WHERE NOT INDICATED, INSTALL EXPANSION JOINTS AT MAX. 15'-0" O.C. AND INSTALL SCORING JOINTS AT MAX. 5'-0" O.C.

SLOPE ACROSS SIDEWALK SHALL BE MIN. 1/8" FT.

CONCRETE WALK DETAIL

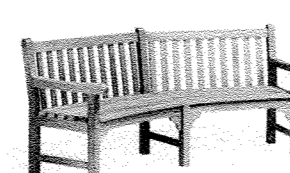
NO SCALE



TREE PLANTING DETAIL

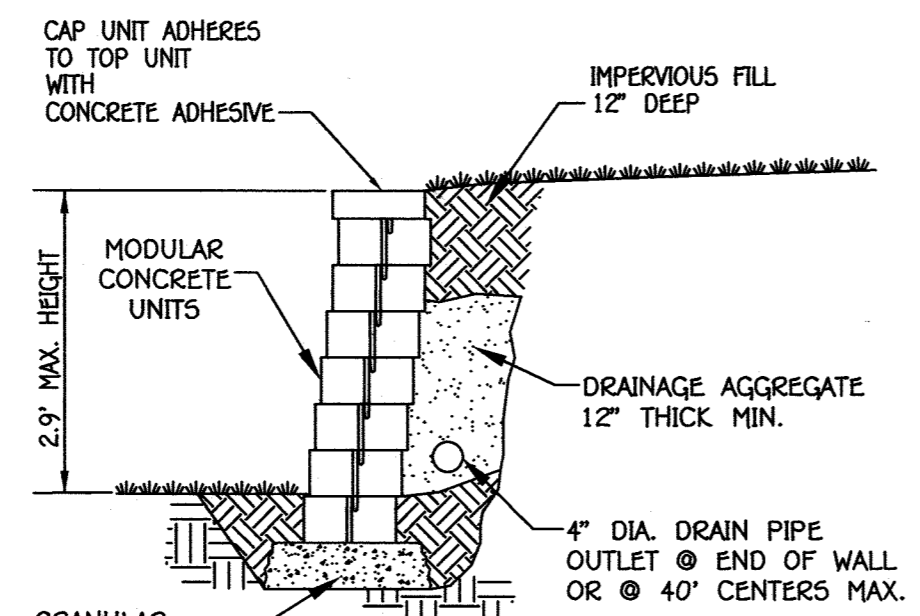


ESSEX is designed to add dimension and weight to larger landscape and commercial settings. Constructed using dimensionally larger lumber, these benches will provide a base for any outdoor project, but are especially scaled for the ground surface.



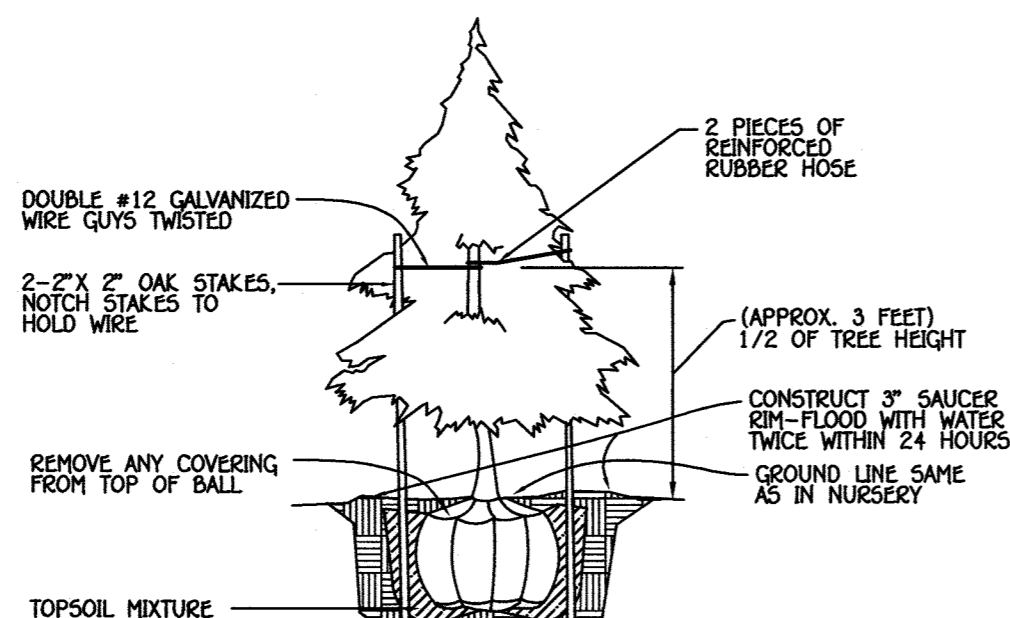
BENCH DETAIL
TYPE: ESSEX (OR APPROVED EQUAL)

NOT TO SCALE



CONCRETE BLOCK LANDSCAPE WALL DETAIL

NO SCALE



EVERGREEN TREE PLANTING DETAIL

NOTES

- 1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL...
2. AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE...
3. THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING...
4. FOR ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH CREDIT IS GIVEN, BE REMOVED OR DIE PRIOR TO RELEASE OF BONDS...
5. A MINIMUM OF 20 FT SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
6. ON THE APPROACH SIDE OF A STOP SIGN, NO STREET TREE SHALL BE PLANTED WITHIN 30 FT OF THE STOP SIGN.

LANDSCAPING PLANT LIST table with columns: SYMBOL, QTY., BOTANICAL AND COMMON NAME, SIZE, COMMENTS. Includes plants like Acer Rubrum, Zelkova serrata, and Ilex.

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING table with columns: CATEGORY, SFA REAR TO ROADWAY, SFA REAR/SIDE TO ROADWAY, etc.

SCHEDULE C RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING table with columns: NUMBER OF DWELLING UNITS, NUMBER OF TREES REQUIRED, etc.

PRIVATE REFUSE PAD LANDSCAPING table with columns: NUMBER OF TREES REQUIRED, SHADE TREES, etc.

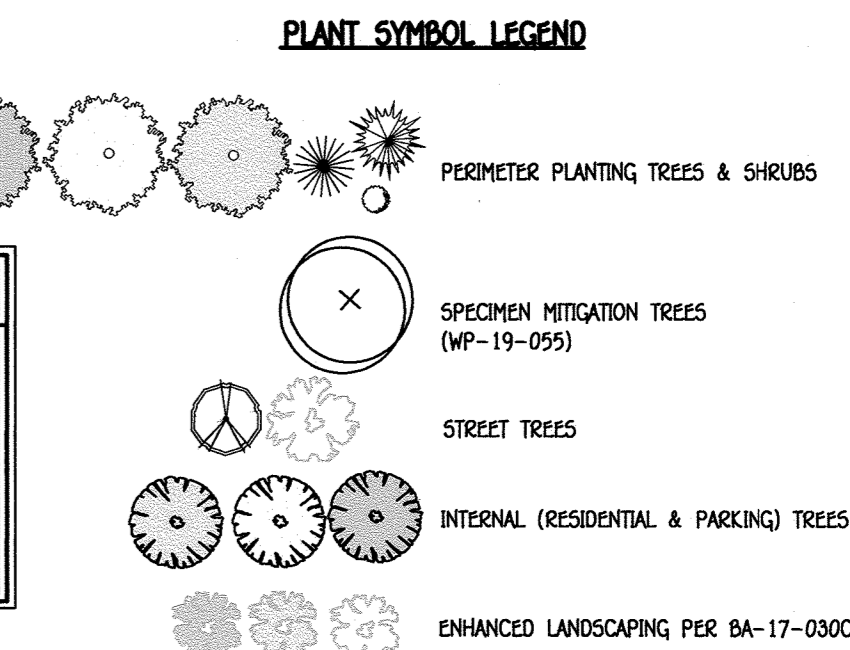
STREET TREE PLANT LIST table with columns: QTY., KEY, NAME, SIZE. Lists Prunus sargentii and Cercis canadensis.

REFUSE PAD LANDSCAPE PLANT LIST table with columns: QTY., KEY, NAME, SIZE. Lists Taxus cuspidata and Dwarf Japanese Yew.

TREE COUNT table with columns: TOTAL PERIMETER TREES PROVIDED, TOTAL INTERNAL (PARKING & RESIDENTIAL) TREES PROVIDED, etc.

STREET TREE SCHEDULE table with columns: QTY., SIZE, COMMENTS. Details row length and tree spacing.

- NOTES: 1. WHEN THE DISTANCE BETWEEN THE CURB AND THE SIDEWALK IS LESS THAN 6 FEET, AND WHERE TREES ARE PLANTED CLOSER THAN 3 FEET TO THE SIDEWALK...
2. TREES SHALL BE PLACED A MINIMUM OF 30 FEET FROM ALL SIGNS AND INTERSECTIONS...



Trex Seclusions Composite Fencing System architectural drawing showing components, installation details, and notes.

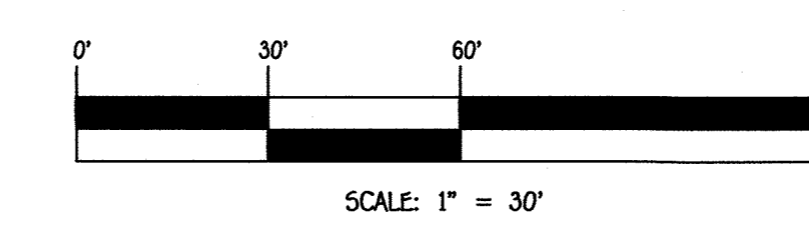
PLANTING SPECIFICATIONS

PLANTS, RELATED MATERIAL, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN. ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED, HAVE A VIGOROUS ROOT SYSTEM, AND SHALL CONFORM TO THE SPECIES, SIZE, ROOT AND SHAFT SHOW ON THE PLANT LIST...

PRIVACY FENCE DETAIL
TYPE: TREX SECLUSIONS COMPOSITE FENCING (OR APPROVED EQUAL)

LANDSCAPE DEVELOPER'S CERTIFICATE: I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual.

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND...



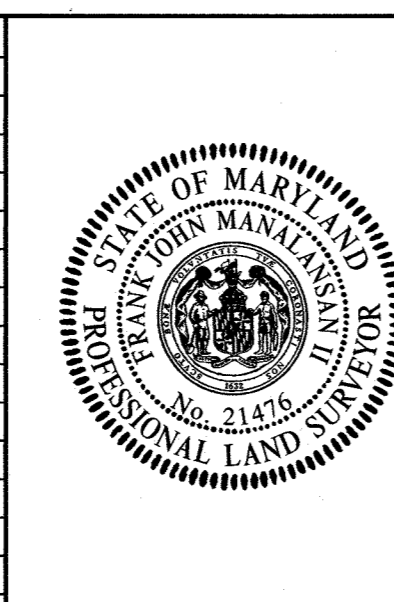
OWNER: ENLH, LLC, 6800 DEERPATH ROAD #100, ELK RIDGE, MD 21075. DEVELOPER: ROCK REALTY, LLC, C/O H&H ROCK COMPANIES, 6800 DEERPATH ROAD #100, ELK RIDGE, MD 21075.

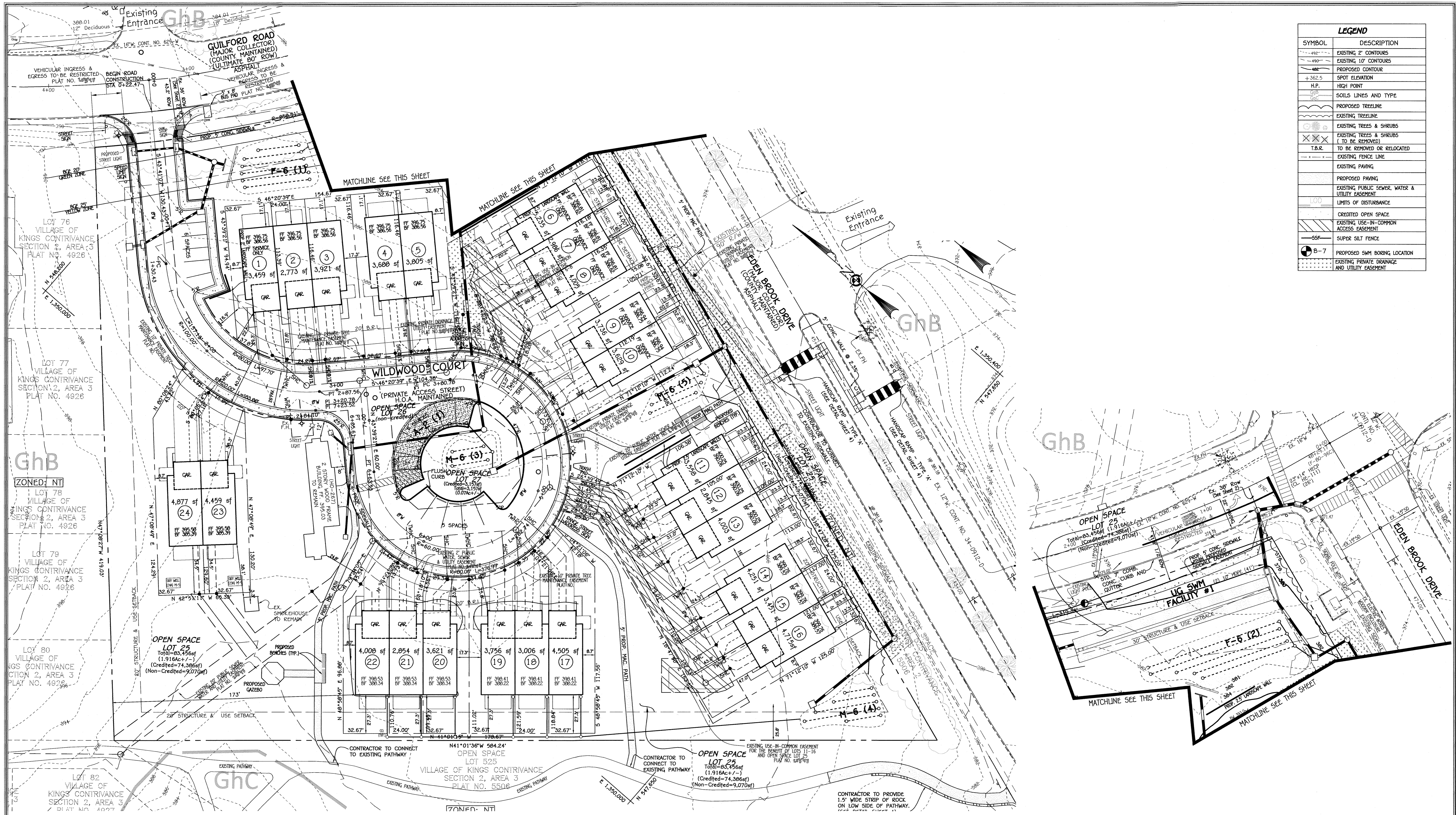
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. Includes signatures and dates for Chief, Division of Land Development and Chief, Development Engineering Division.

LANDSCAPE NOTES & DETAILS: SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING. EDEN BROOK, LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27. SCALE: AS SHOWN DATE: APRIL, 2020.

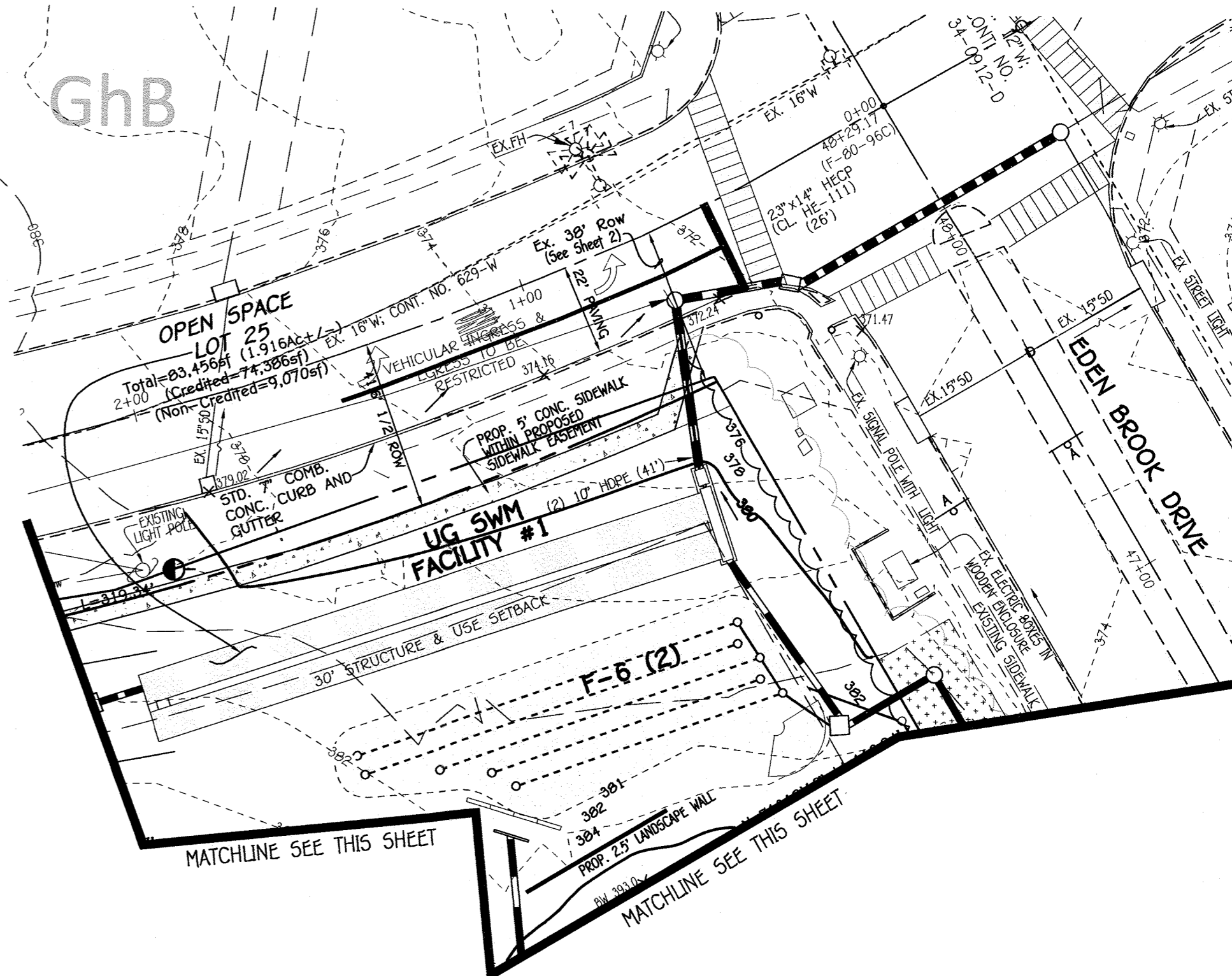
FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS. CENTENNIAL SQUARE OFFICE, PARK - 10272 BALTIMORE NATIONAL PLACE, ELLETTOWN CITY, MARYLAND 21042.

REVISION table with columns: NO., REVISION, DATE.





LEGEND	
SYMBOL	DESCRIPTION
---492---	EXISTING 2' CONTOURS
---490---	EXISTING 10' CONTOURS
---	PROPOSED CONTOUR
+362.5	SPOT ELEVATION
H.P.	HIGH POINT
---	SOILS LINES AND TYPE
---	PROPOSED TREELINE
---	EXISTING TREELINE
---	EXISTING TREES & SHRUBS (TO BE REMOVED)
---	EXISTING TREES & SHRUBS TO BE REMOVED OR RELOCATED
T.B.R.	EXISTING FENCE LINE
---	EXISTING PAVING
---	PROPOSED PAVING
---	EXISTING PUBLIC SEWER, WATER & UTILITY EASEMENT
---	LIMITS OF DISTURBANCE
---	CREDITED OPEN SPACE
---	EXISTING USE-IN-COMMON ACCESS EASEMENT
---	SUPER SILT FENCE
⊙ B-7	PROPOSED SWM BORING LOCATION
---	EXISTING PRIVATE DRAINAGE AND UTILITY EASEMENT

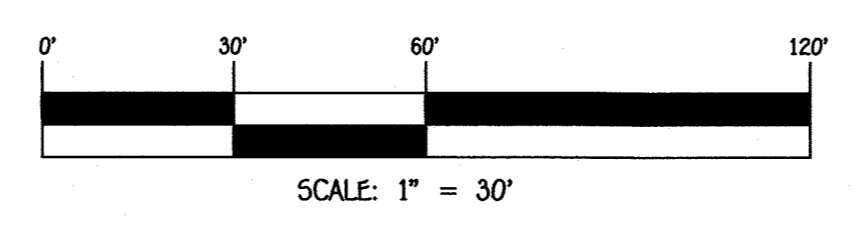


FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FILE
 ELK RIDGE CITY, MARYLAND 21042
 (410) 651-2295



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/21.

Frank Manalansan II
 FRANK MANALANSAN II, L.S. DATE: 11/12/20



OWNER
 ENL, LLC
 6800 DEERPATH ROAD #100
 ELK RIDGE, MD 21075
 (410)-579-1441

DEVELOPER
 ROCK REALTY, LLC
 C/O H&H ROCK COMPANIES
 6800 DEERPATH ROAD #100
 ELK RIDGE, MD 21075
 (410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

William Shaw AC, Chief, Division of Land Development, Date: 11/12/20
Howard Panchelli C.E., Chief, Development Engineering Division, Date: 11/12/20
John Goss, Director, Department of Planning and Zoning, Date: 11/12/20

PROJECT	EDEN BROOK	PHASE	269
PLAT	7	ZONE	R-12
TAX/ZONE	42	ELEC. DIST.	6
PARCEL No.	269	CENSUS TR.	605102

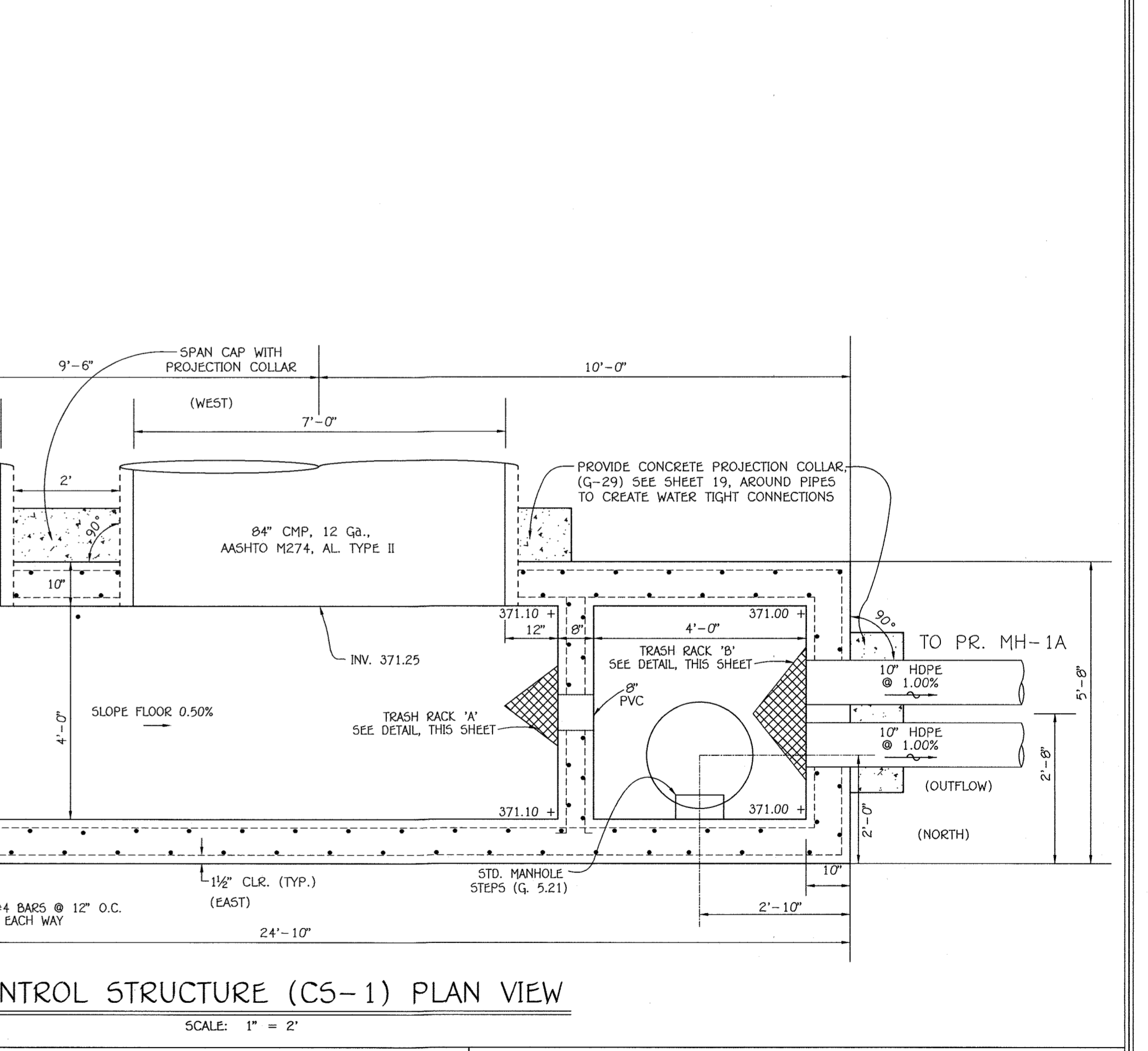
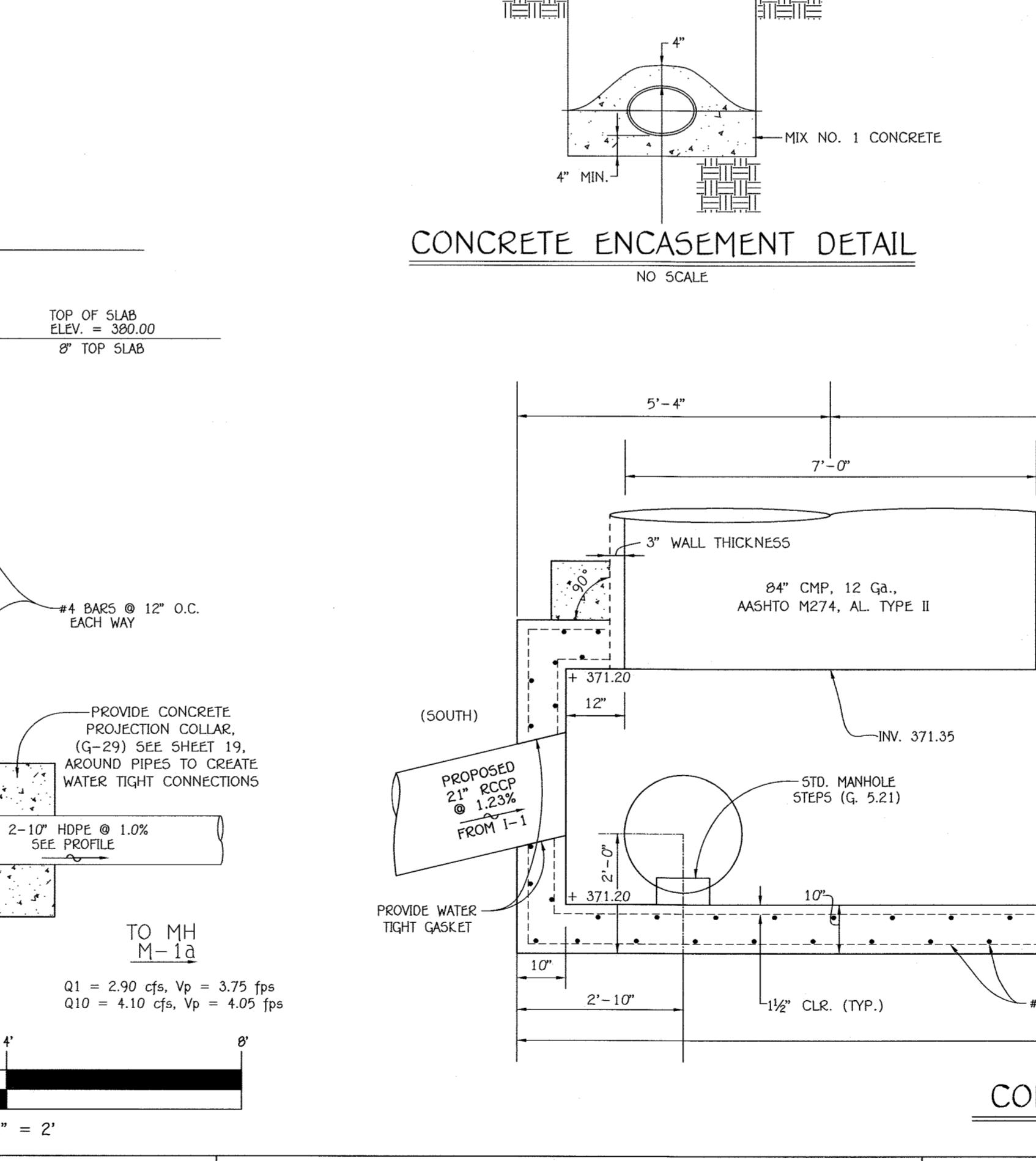
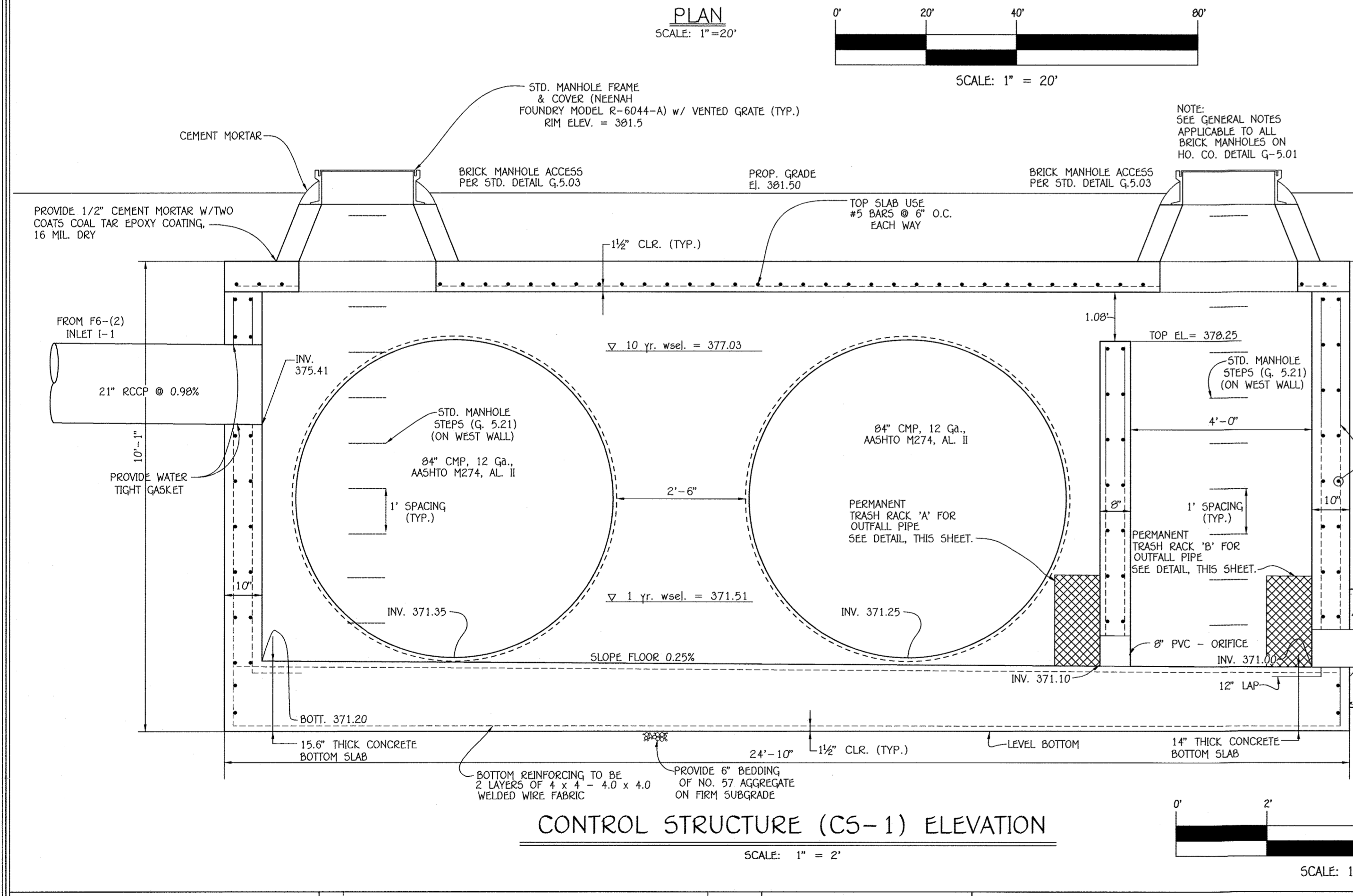
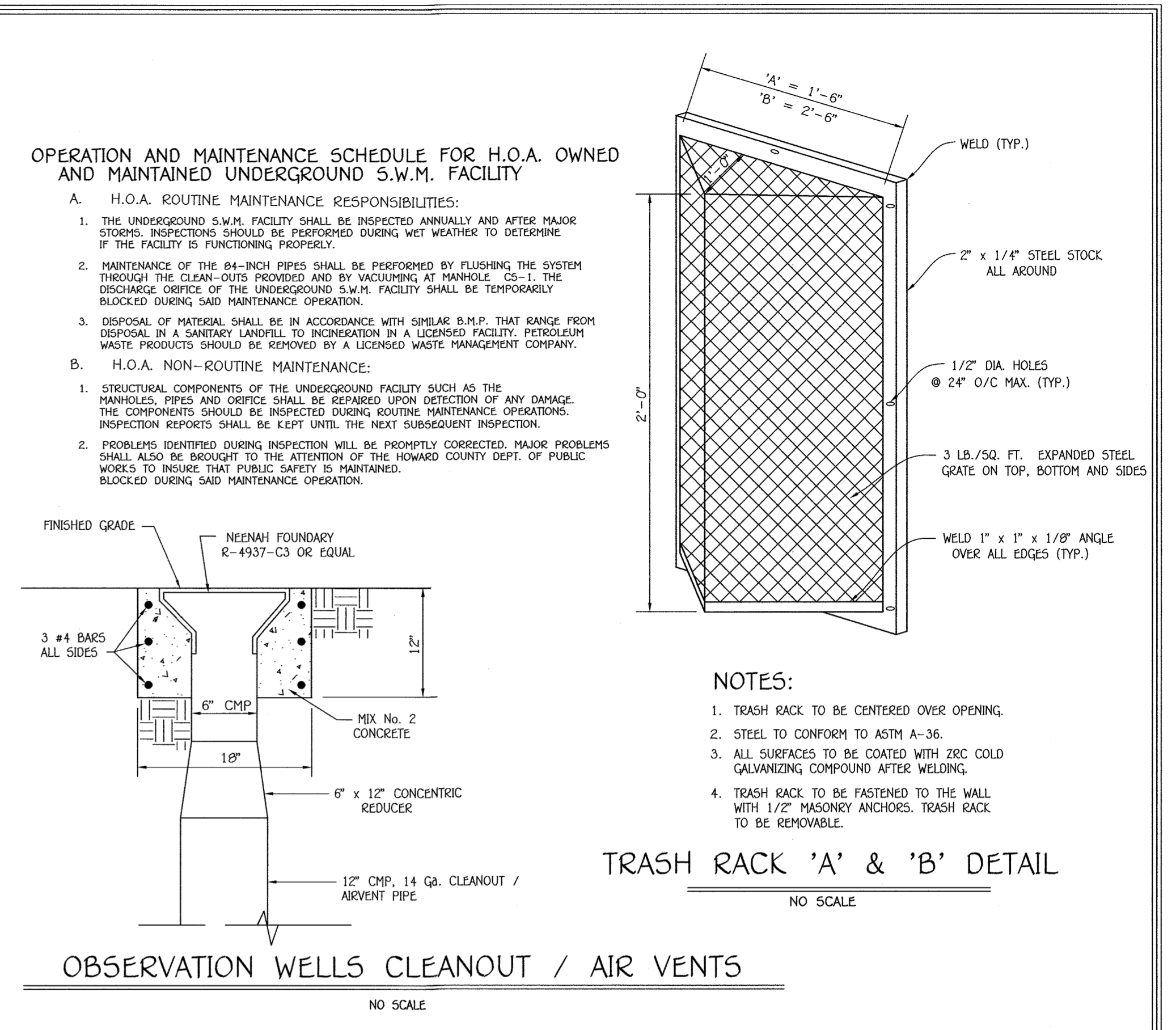
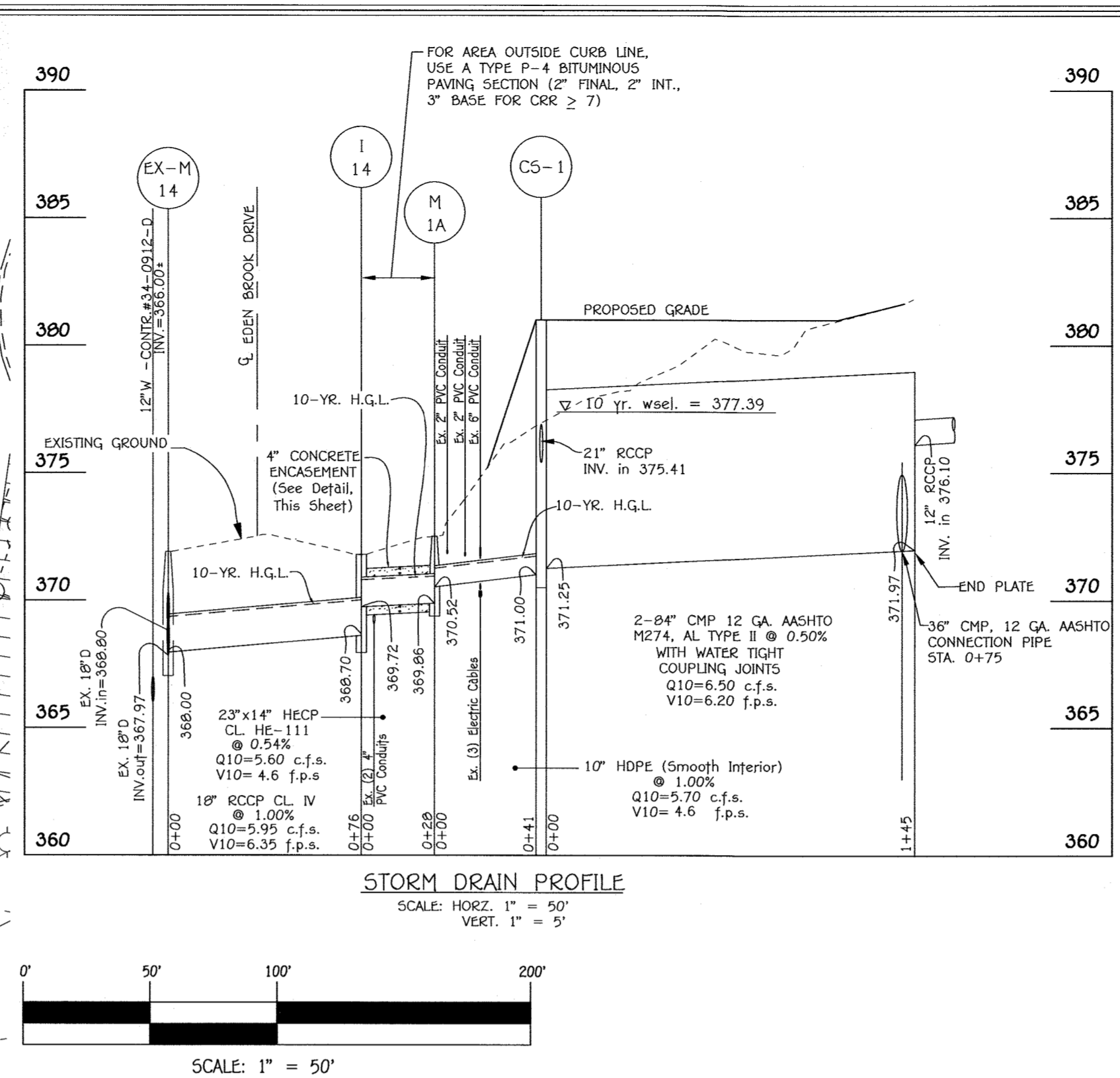
PREVIOUS HOWARD COUNTY FILES:
 BA-17-030C, ECP-18-051, WP-19-055, SP-18-003, F-20-011 & CONTRACT NO.24-5001-0

GEOMETRY PLAN

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

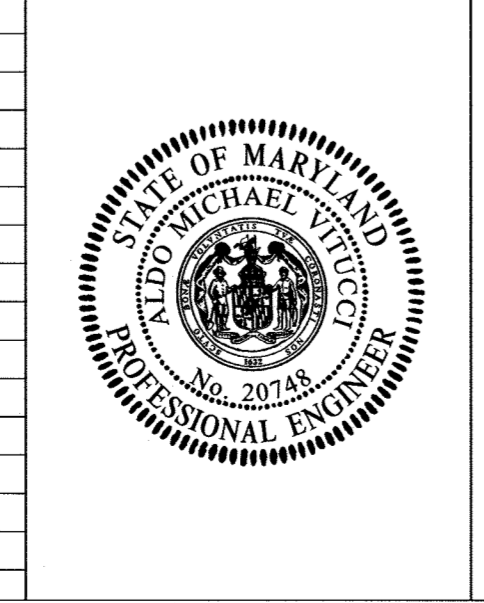
EDEN BROOK
 LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
 TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
 ZONED R-12
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: SEPTEMBER, 2020
 SHEET 17 OF 21 **SDP-20-009**

1/20/21 17007 Engineering Design/STUP Plan, Set 1/17007 Geometry Plan, C, 17 Geometry Plan, 11



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21046
 (410) 461-2895

NO.	REVISION	DATE



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20748, EXPIRATION DATE: 2/22/21.

Michael P. Vitucci
 ALDO M. VITUCCI, P.E.
 9/14/2020
 DATE

OWNER
 ENL, LLC
 6800 DEERPATH ROAD #100
 ELK RIDGE, MD 21075
 (410)-979-1441

DEVELOPER
 ROCK REALTY, LLC
 C/O H&H ROCK COMPANIES
 6800 DEERPATH ROAD #100
 ELK RIDGE, MD 21075
 (410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John J. ...
 Chief, Division of Land Development
 Date: 11/12/20

Joseph ...
 Chief, Development Engineering Division
 Date: 11/9/20

...
 Director, Department of Planning and Zoning
 Date: 11/12/20

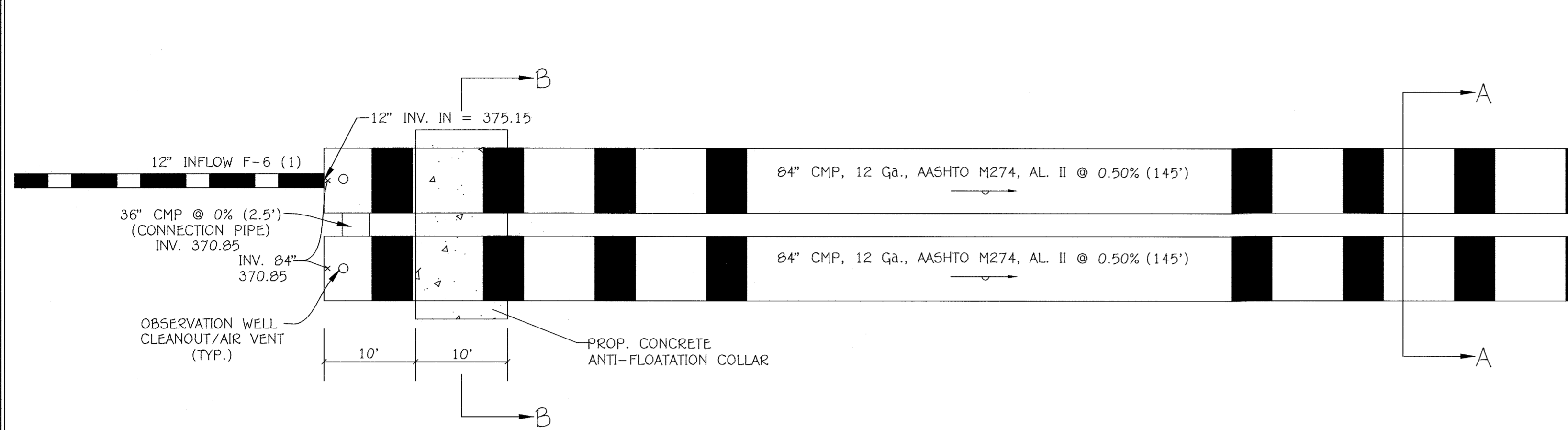
UNDERGROUND SWM PLAN, PROFILE AND DETAILS

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

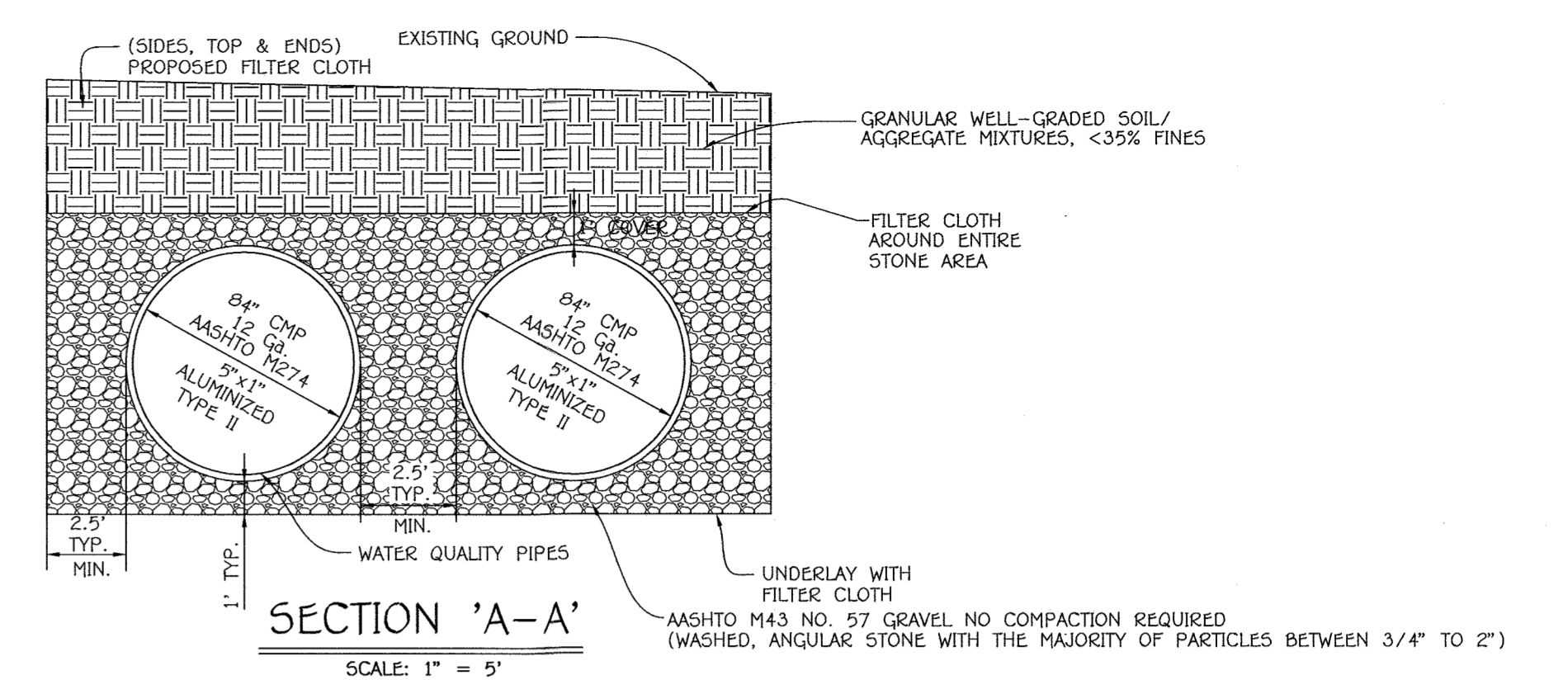
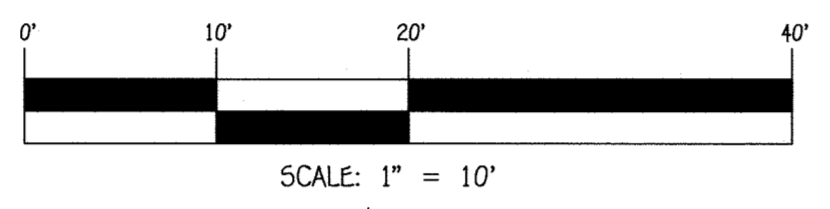
EDEN BROOK
 LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
 TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
 ZONED R-12
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: APRIL, 2020

PREVIOUS HOWARD COUNTY FILES:
 BA-17-030C, ECP-18-091, WP-19-055, SP-18-003, F-20-011
 & CONTRACT NO.24-5081-D

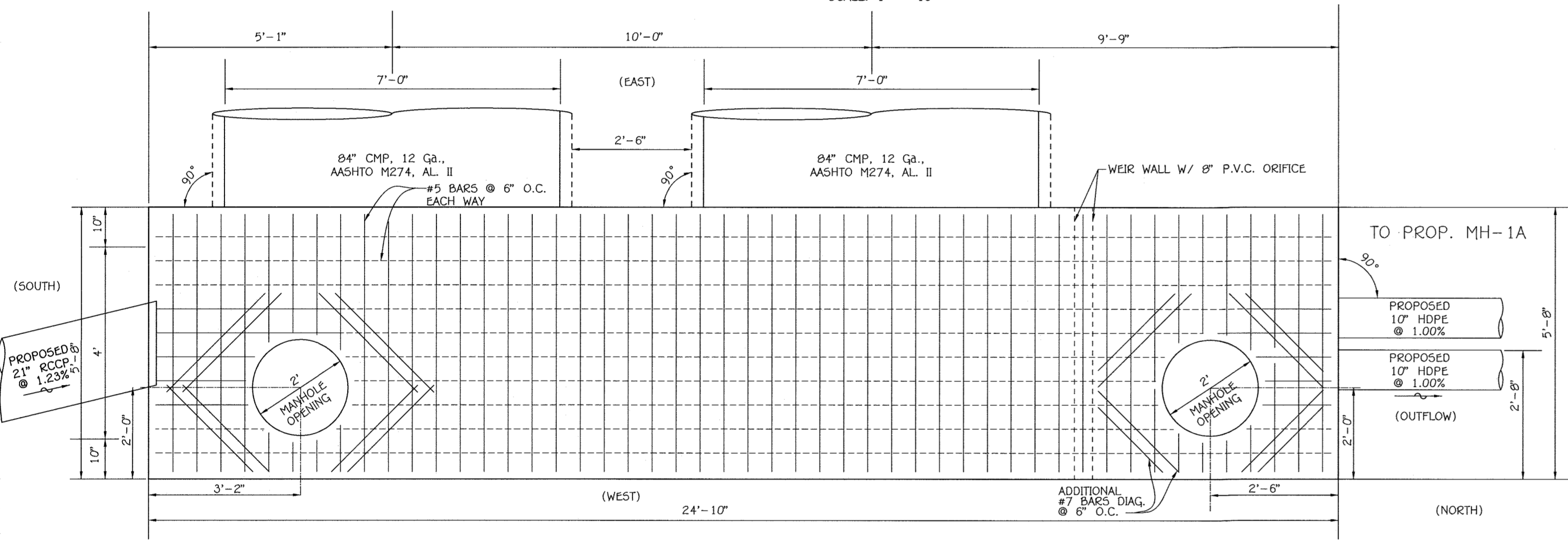
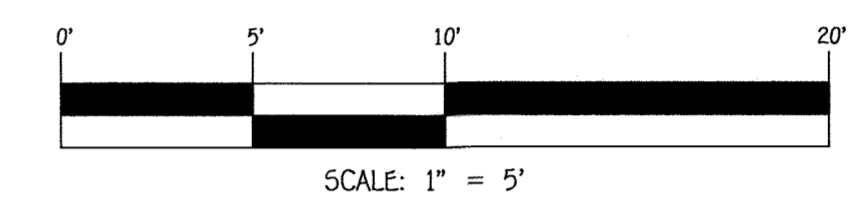
SHEET 18 OF 21 **50P-20-009**



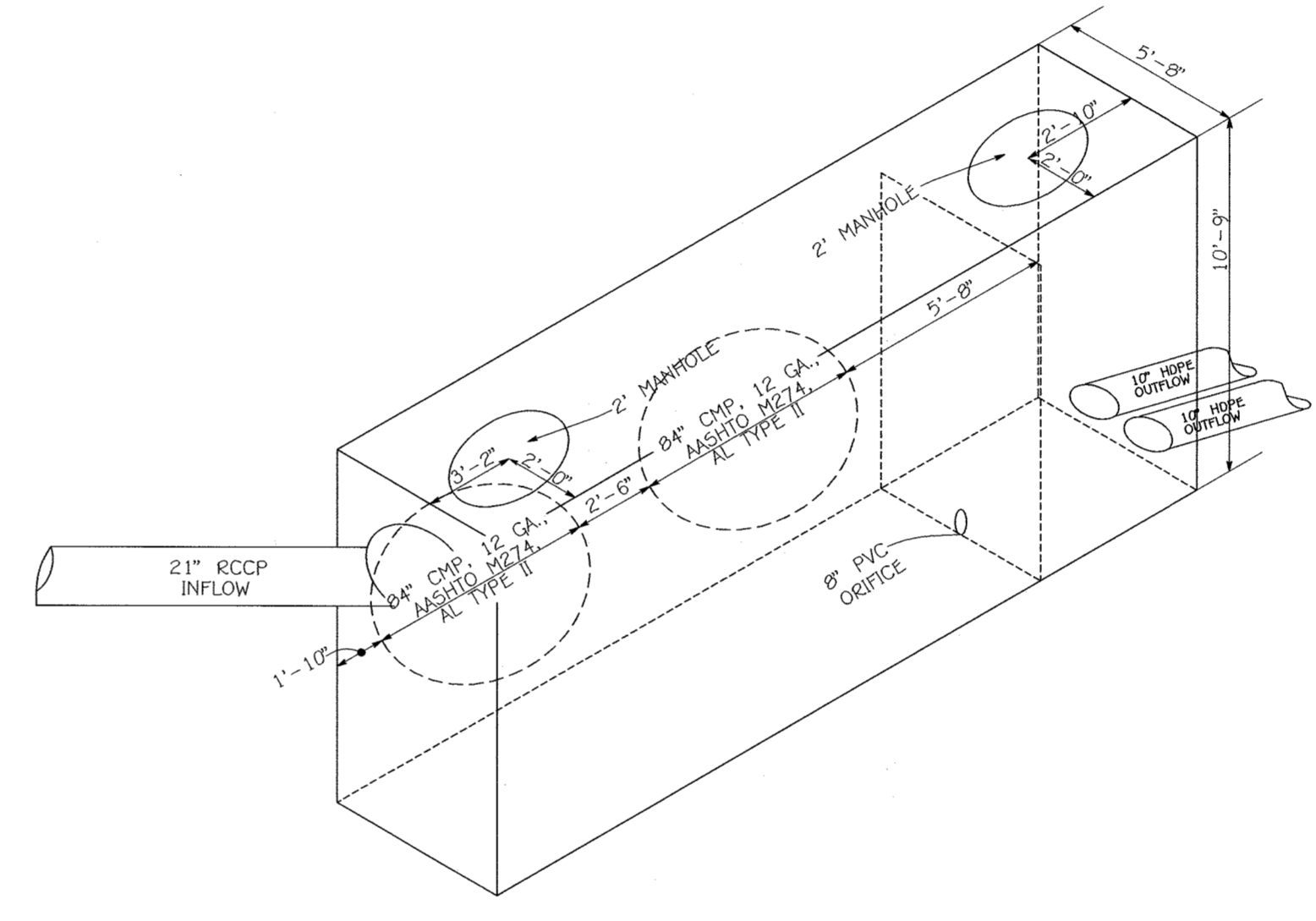
PIPE DETAIL
SCALE: 1" = 10'



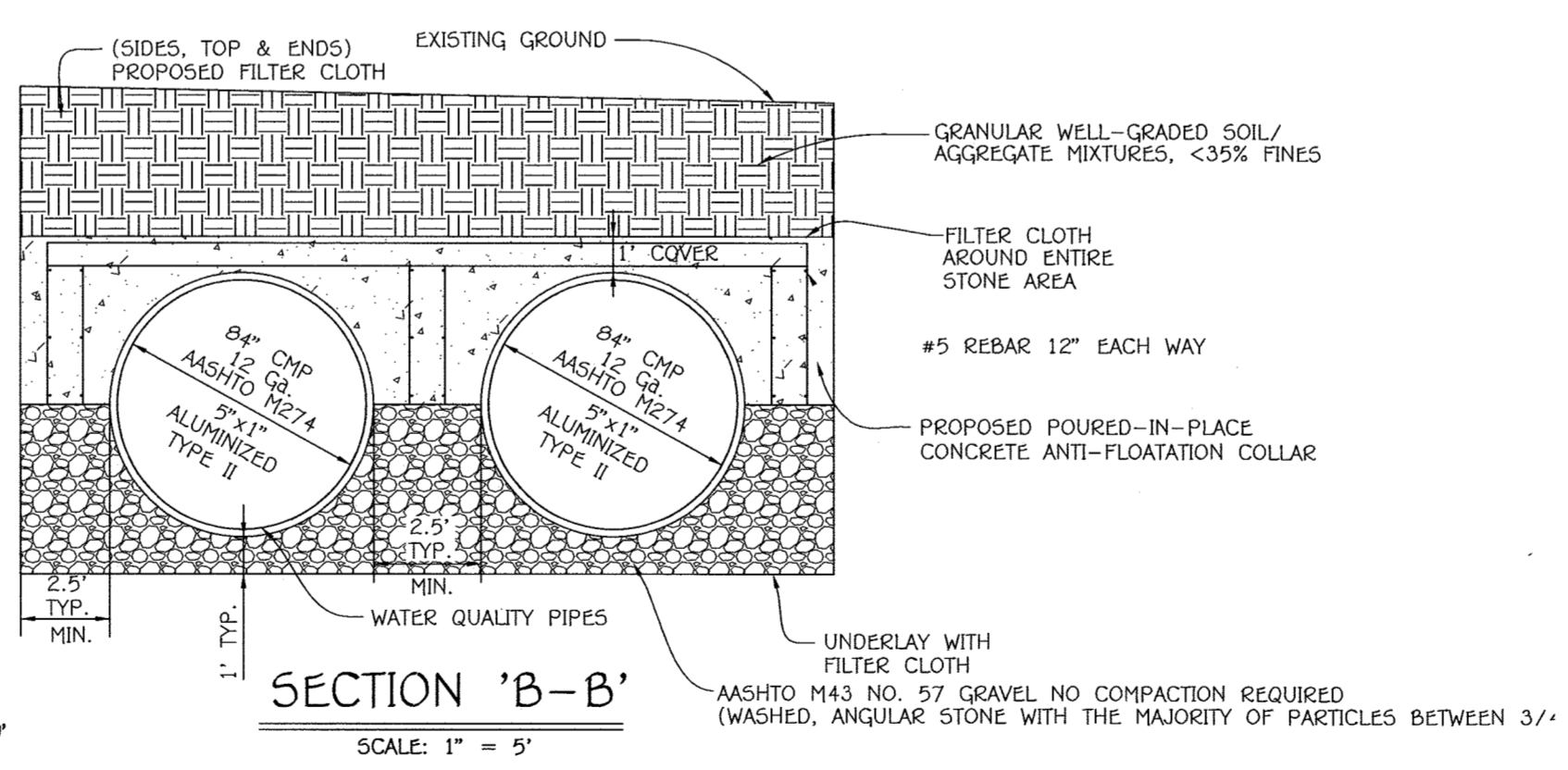
SECTION 'A-A'
SCALE: 1" = 5'



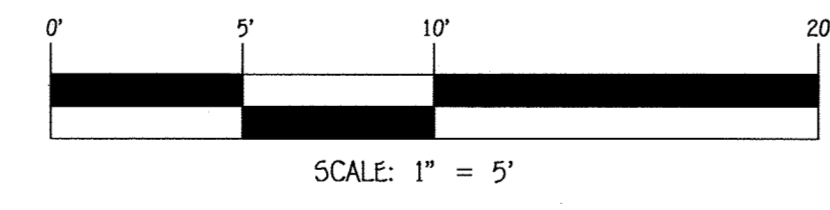
TOP SLAB DETAIL
SCALE: 1" = 2'



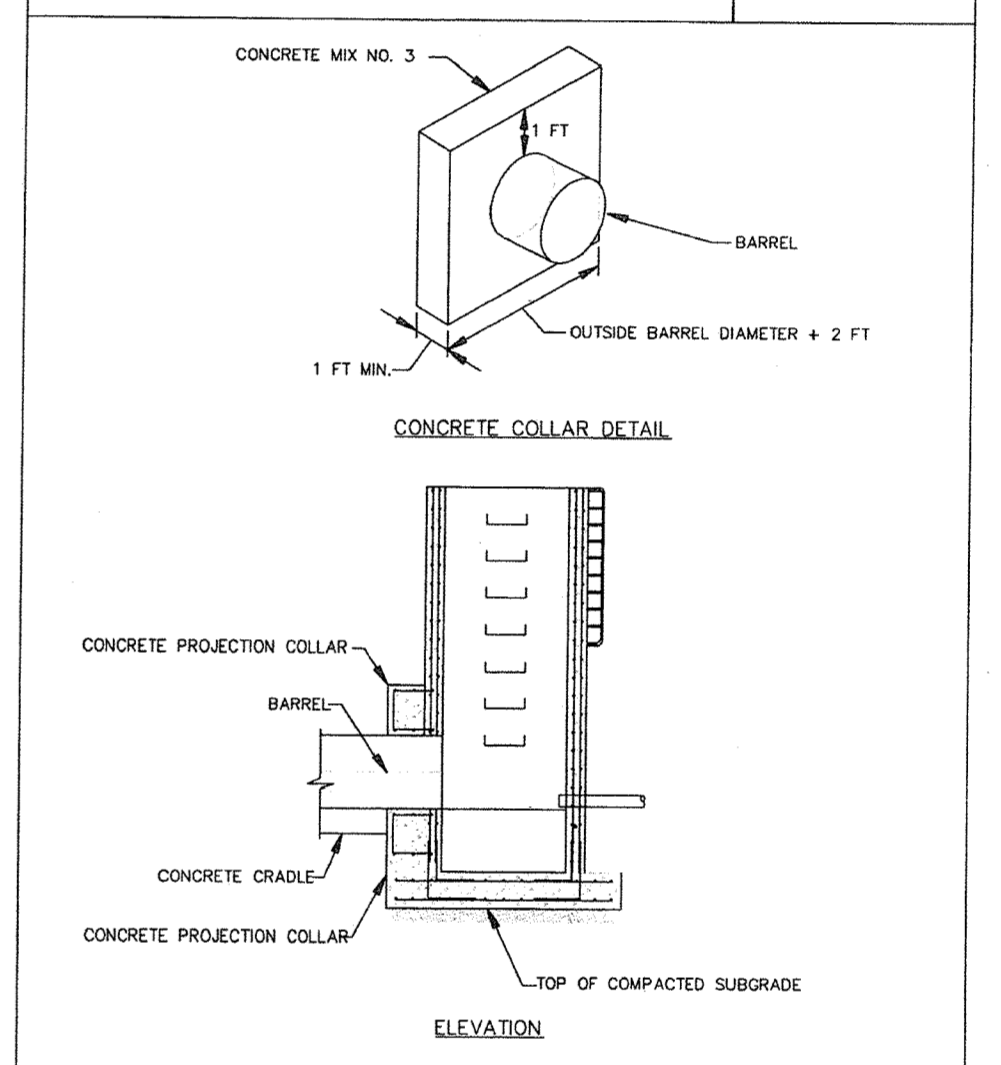
ISOMETRIC VIEW CONTROL STRUCTURE
SCALE: 1" = 5'



SECTION 'B-B'
SCALE: 1" = 5'



DETAIL G-2-9 PROJECTION COLLAR



CONSTRUCTION SPECIFICATIONS
1. CAST 1 FOOT THICK CONCRETE COLLAR TO OUTLET STRUCTURE WITH FOUR #4 U-SHAPED REBARS.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011
MARYLAND DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION, G.51

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10275 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 451-2995



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20748, EXPIRATION DATE: 2/22/21.

Alto M. Vitucci
ALDO M. VITUCCI, P.E.
DATE: 9/13/20

OWNER
ENLN, LLC
6800 DEERPATH ROAD #100
ELKRIDGE, MD 21075
(410)-579-1441

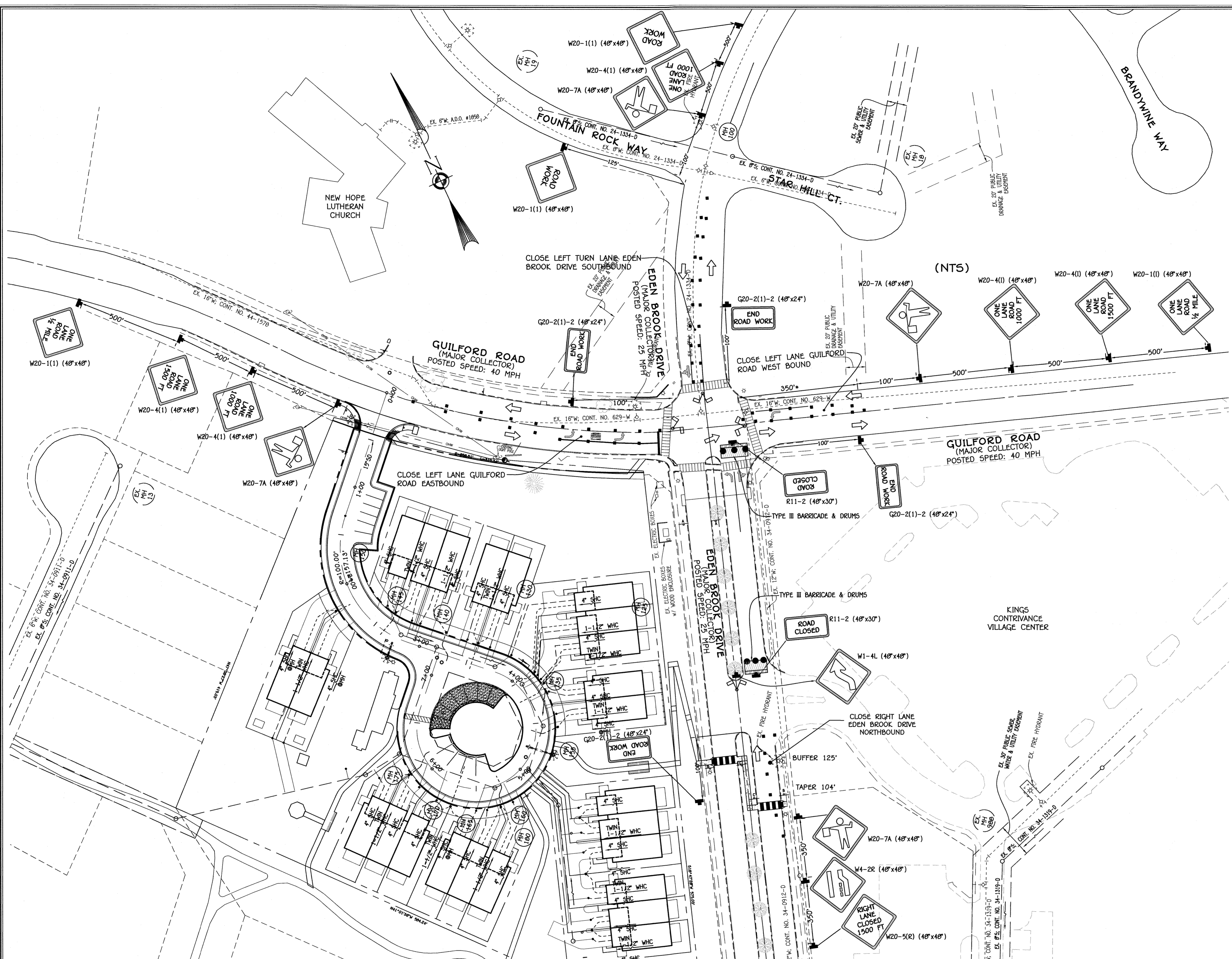
DEVELOPER
ROCK REALTY, LLC
C/O H&H ROCK COMPANIES
6800 DEERPATH ROAD #100
ELKRIDGE, MD 21075
(410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chia-Lin Chen AC, Chief, Division of Land Development, Date: 11/12/20
Joseph R. Smith C.E., Chief, Development Engineering Division, Date: 11/9/20
Walter G. ..., Director, Department of Planning and Zoning, Date: 11/12/20

PROJECT	EDEN BROOK	PHASE	PARCEL NOS.
PLAT	BLOCK NO.	ZONE	TAX/ZONE
7	R-12	42	6
PREVIOUS HOWARD COUNTY FILES:		ELEC. DIST.	CENSUS TR.
8A-17-030C, ECP-18-051, WP-19-055, SP-18-003, F-20-011 & CONTRACT NO.24-5081-D		6	605102

UNDERGROUND SWM PIPE DETAIL AND DETAILS
SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING
EDEN BROOK
LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
ZONED R-12
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: APRIL, 2020
SHEET 19 OF 21

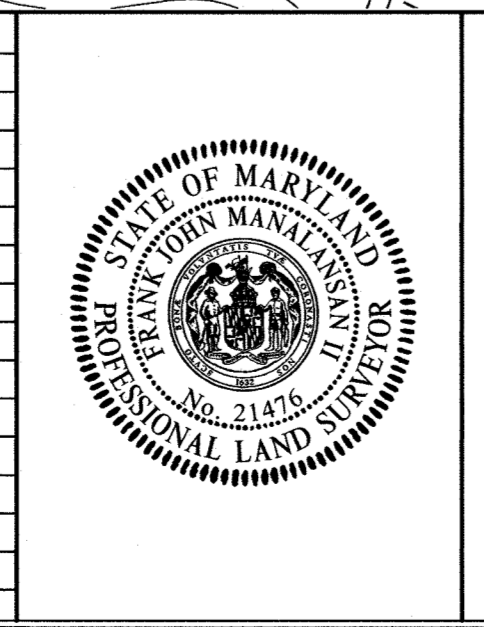


- HOWARD COUNTY - TRAFFIC CONTROL PLAN (GENERAL NOTES)**
- Howard County - Traffic Signal Maintenance Shop (Office Pager: 443.542.8210) shall be notified 2 weeks in advance to schedule a field meeting and coordinate the "flash" mode sequencing at the Guilford Road and Eden Brook Drive intersection.
 - Prior to beginning any work, Howard County - Traffic Engineering Division (Office Phone: 410.313.2430) shall be notified 48 hours in advance to schedule a field inspection of the traffic control devices.
 - During a regular work week (Monday - Friday), no work shall be permitted at the Guilford Road and Eden Brook Drive intersection between 12:01 AM to 9:30 AM and 2:00 PM to 12:00 PM. Additionally, no work will be permitted on Saturdays, Sundays, or holidays.
 - All construction and materials for the traffic control devices shall be in accordance with the standards contained in the latest edition of the State of Maryland Manual on Uniform Traffic Control Devices.
 - Travel lanes shall be a minimum of 10 feet in width. When only one lane is open, flaggers and the appropriate signing shall be provided. Guilford Road and Eden Brook Drive shall be opened to full operation at night.
 - If a drop-off measures greater than 4", a barrier or 2:1 slope of compacted "crusher run" stone gravel shall be provided.
 - Pavement disruptions of 1" or greater shall be ramped with a beveled edge of 4 horizontal to one vertical (4:1).
 - All open trenches shall be closed at the end of each day. If steel plates are to be used, appropriate signing will be required. Steel plates must be pinned and recessed in accordance with Howard County standards.
 - Contractor shall install "CAUTION STEEL PLATES AHEAD" signs in advance of steel plate bridging.
 - At the end of the workday, all temporary signs that do not apply shall be covered or removed.
 - Channeling devices and temporary striping shall be removed as soon as practical.
 - All traffic control devices shall be kept in their proper position and promptly repaired, replaced, or cleaned, as necessary, to preserve their appearance and continuity.
 - Access shall be provided to all existing driveways at all times unless covered by the approved Traffic Control Plan. Contractor shall coordinate all driveway construction with the property owner. All cones and flagmen shall be moved accordingly as construction progresses.
 - All construction signing shall be in accordance with the typical sign placement shown on these plans and shall not obstruct existing Traffic Control Devices.
 - Any changes to the Traffic Control Plan shall be submitted to Traffic Engineering for review and approval.
 - The contractor's and workers' vehicles must be parked in a manner as to not obstruct or impeded existing sight distance; traffic signage; or traffic control devices.

- TRAFFIC CHANNELIZATION BARREL/CONE SPACING:
 GUILFORD ROAD - 35'
 EDEN BROOK DRIVE - 30'
- FLAGGER
- DIRECTION OF TRAFFIC
- TAPER LENGTH = $\frac{WS^2}{60}$
 W = WIDTH OF OFFSET (FT)
 S = POSTED SPEED LIMIT (MPH)
- NTS = NOT TO SCALE
- *BARRELS (FULL LEFT LANE CLOSURE) ARE TO EXTEND 350' FROM STOP BAR

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING, CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELKRICT CITY, MARYLAND 21102
 (410) 461 - 2020

NO.	REVISION	DATE



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/21.

Frank J. Manderson II
 FRANK MANDERSON II, L.S.
 5/26/20
 DATE

0' 50' 100' 200'
 SCALE: 1" = 50'

OWNER	DEVELOPER
ENLN, LLC 6800 DEERPATH ROAD #100 ELK RIDGE, MD 21075 (410)-579-1441	ROCK REALTY, LLC C/O H&H ROCK COMPANIES 6800 DEERPATH ROAD #100 ELK RIDGE, MD 21075 (410)-567-1045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John P. ... Chief, Division of Land Development ES 11/12/20
John P. ... Chief, Development Engineering Division NY 11/12/20
John P. ... Director - Department of Planning and Zoning NY 11/12/20

PROJECT	PHASE	PARCEL No.
EDEN BROOK		269
PLAT	BLOCK NO.	ZONE
	7	R-12
TAX/ZONE	ELEC. DIST.	CENSUS TR.
42	6	605102

PREVIOUS HOWARD COUNTY FILES:
 BA-17-030C, ECP-18-051, WP-19-055, SP-18-003, F-20-011
 & CONTRACT NO. 24-5081-D

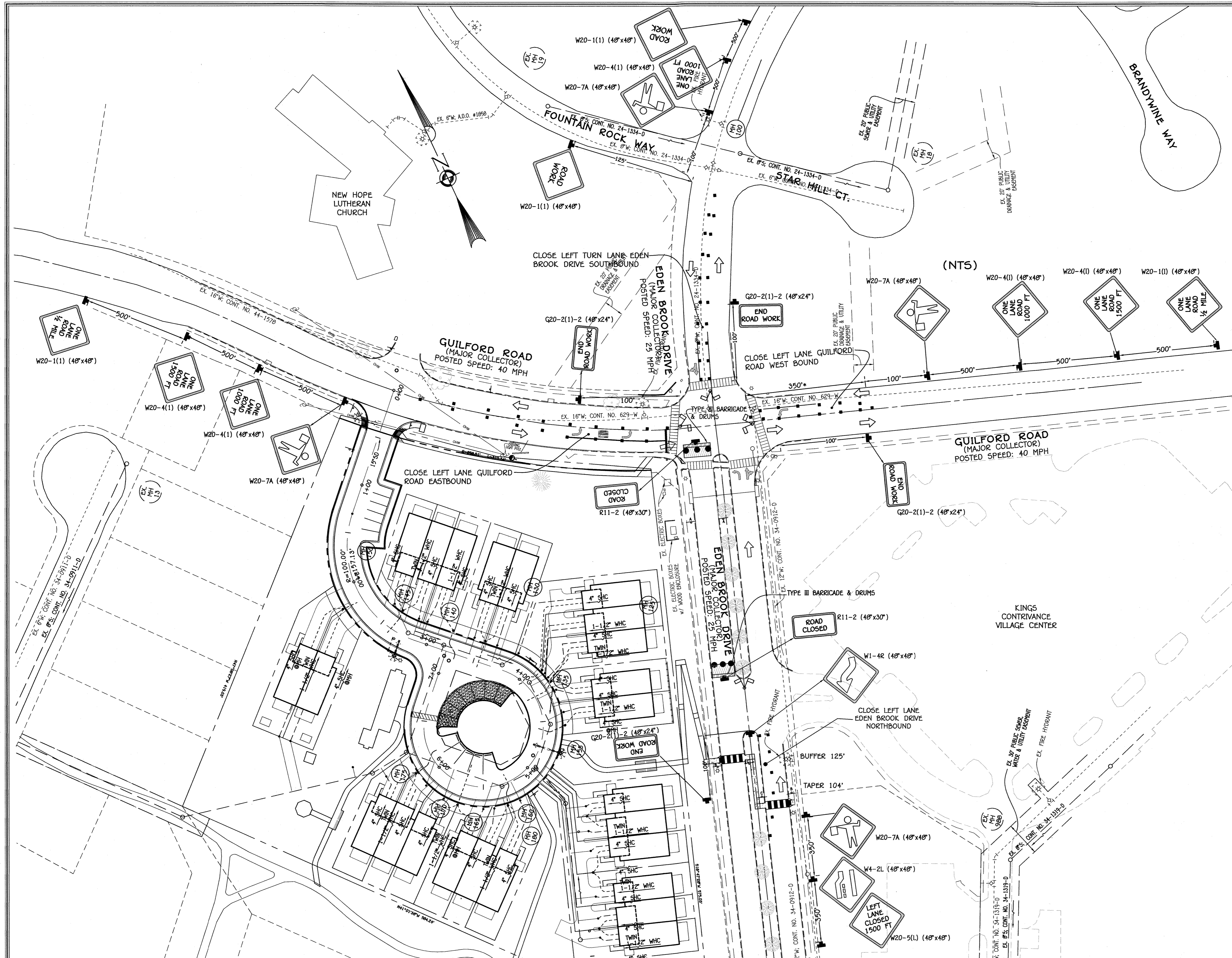
**TRAFFIC CONTROL PLAN
 PHASE 1**

SINGLE FAMILY ATTACHED - AGE-RESTRICTED ADULT HOUSING

EDEN BROOK
 LOTS 1 THRU 24, OPEN SPACE LOTS 25 THRU 27
 TAX MAP NO.: 42 GRID NO.: 7 PARCEL NO.: 269
 ZONED R-12
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: APRIL, 2020
 SHEET 20 OF 21

SDP-20-009

1:2017/1707/Engineering/Drawings/SDP/1707 TRAFFIC CONTROL PLAN.dwg, PH1, 1:1



HOWARD COUNTY - TRAFFIC CONTROL PLAN (GENERAL NOTES)

- Howard County - Traffic Signal Maintenance Shop (Office Pager: 443.542.8210) shall be notified 2 weeks in advance to schedule a field meeting and coordinate the "flash" mode sequencing at the Guilford Road and Eden Brook Drive intersection.
- Prior to beginning any work, Howard County - Traffic Engineering Division (Office Phone: 410.313.2430) shall be notified 48 hours in advance to schedule a field inspection of the traffic control devices.
- During a regular work week (Monday - Friday), no work shall be permitted at the Guilford Road and Eden Brook Drive intersection between 12:01 AM to 9:30 AM and 2:00 PM to 12:00 PM. Additionally, no work will be permitted on Saturdays, Sundays, or holidays.
- All construction and materials for the traffic control devices shall be in accordance with the standards contained in the latest edition of the State of Maryland Manual on Uniform Traffic Control Devices.
- Travel lanes shall be a minimum of 10 feet in width. When only one lane is open, flaggers and the appropriate signing shall be provided. Guilford Road and Eden Brook Drive shall be opened to full operation at night.
- If a drop-off measures greater than 4", a barrier or 2:1 slope of compacted "crusher run" stone gravel shall be provided.
- Pavement disruptions of 1" or greater shall be ramped with a beveled edge of 4 horizontal to one vertical (4:1).
- All open trenches shall be closed at the end of each day. If steel plates are to be used, appropriate signing will be required. Steel plates must be pinned and recessed in accordance with Howard County standards.
- Contractor shall install "CAUTION STEEL PLATES AHEAD" signs in advance of steel plate bridging.
- At the end of the workday, all temporary signs that do not apply shall be covered or removed.
- Channeling devices and temporary striping shall be removed as soon as practical.
- All traffic control devices shall be kept in their proper position and promptly repaired, replaced, or cleaned, as necessary, to preserve their appearance and continuity.
- Access shall be provided to all existing driveways at all times unless covered by the approved Traffic Control Plan. Contractor shall coordinate all driveway construction with the property owner. All cones and flagmen shall be moved accordingly as construction progresses.
- All construction signing shall be in accordance with the typical sign placement shown on these plans and shall not obstruct existing Traffic Control Devices.
- Any changes to the Traffic Control Plan shall be submitted to Traffic Engineering for review and approval.
- The contractor's and workers' vehicles must be parked in a manner as to not obstruct or impeded existing sight distance; traffic signage; or traffic control devices.

- BARREL/CONE SPACING:
 GUILFORD ROAD - 35'
 EDEN BROOK DRIVE - 30'
- FLAGGER
- DIRECTION OF TRAFFIC
- TAPER LENGTH = $\frac{WS^2}{60}$
 W = WIDTH OF OFFSET (FT)
 S = POSTED SPEED LIMIT (MPH)
- NTS = NOT TO SCALE
- *BARRELS (FULL LEFT LANE CLOSURE) ARE TO EXTEND 350' FROM STOP BAR

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL FILE
 ELKROTT CITY, MARYLAND 21042
 (410) 461 - 2929

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... Director Department of Planning and Zoning NY 11/12/20 Date

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 PHASE 2**

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