

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	EXISTING CONDITIONS AND SOILS
3	ENVIRONMENTAL CONCEPT PLAN
4	PRELIMINARY EROSION/SEDIMENT CONTROL PLAN AND STORMWATER MANAGEMENT NOTES AND DETAILS

SOILS LEGEND			
SOIL	NAME	CLASS	K VALUE
Srt	Sassafras and Croom soils, 15 to 25 percent slopes	B	.32
Ucb	Urban land-Chillum-Beltville complex, 0 to 5 percent slopes	C	.43

HOWARD COUNTY WEBSOILS SURVEY 09/15/20

# ENVIRONMENTAL CONCEPT PLAN

## MEHTA PROPERTY

### R-A-15 ZONING DISTRICT

### TAX MAP No. 38 GRID No. 02 PARCEL NO. 700

### 1ST ELECTION DISTRICT

### ELKRIDGE, MARYLAND

#### GENERAL NOTES

- THE SUBJECT PROPERTY IS ZONED R-A-15 (PER 10/06/13 COMPREHENSIVE ZONING PLAN).
- BOUNDARY IS BASED ON A FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS & CARTER ON OR ABOUT OCTOBER, 2020.
- CONTOURS ARE BASED ON A TOPOGRAPHIC FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS & CARTER, ON OR ABOUT OCTOBER, 2020.
- COORDINATES BASED ON NAD83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 34FE AND NO. 34FB:  
 HOWARD COUNTY MONUMENT NO. 38A4 N 562,977.624 E 1,386,280.139 ELEV. 223.379'  
 HOWARD COUNTY MONUMENT NO. 0021 N 562,745.797 E 1,386,542.119 ELEV. 226.200'
- STORM WATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009.
- THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED FOR THIS PROJECT.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
- THERE ARE NO WETLANDS, STREAMS OR THEIR BUFFERS LOCATED WITHIN THE BOUNDARY OF THIS SITE.
- LANDSCAPING WILL BE PROVIDED AT THE FINAL PLAN STAGE OF THIS PROJECT.
- THIS PROPOSED LOT IS LESS THAN 40,000 SQ.FT. (36,590 SQ.FT.), AND IS THEREFORE EXEMPT FROM FOREST CONSERVATION REQUIREMENTS.
- SOIL BORING INFORMATION WILL BE PROVIDED AT THE NEXT PLAN STAGE OF THIS PROJECT.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE APPROVAL OF SUBSEQUENT OR ASSOCIATED SUBDIVISION OR SITE DEVELOPMENT PLANS OR RED-LINE REVISIONS. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN, SITE DEVELOPMENT PLAN, OR RED-LINE REVISION PROCESSES. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THE PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- AN ALTERNATIVE COMPLIANCE WILL BE REQUIRED FOR THIS PROJECT FOR DISTURBANCE OF STEEP SLOPES.
- FOREST CONSERVATION PLAN IS NOT REQUIRED FOR THIS PROJECT SINCE THE LOD IS UNDER 40,000 SQ. FT. ALTERNATIVE COMPLIANCE FOR SPECIMEN TREE REMOVAL IS ALSO NOT REQUIRED.
- A 10' SETBACK IS ADDED FROM THE GRAVE SITES ON ADJOINING PROPERTY USING GROUND PENETRATING RADAR TO VERIFY THE GRAVE LOCATIONS.
- FRONTAGE IMPROVEMENTS WILL BE SHOWN AT THE SDP SUBMISSION. STORMWATER MANAGEMENT FOR SAID IMPROVEMENTS WILL CONSIST OF MICRO-BIORETENTION.

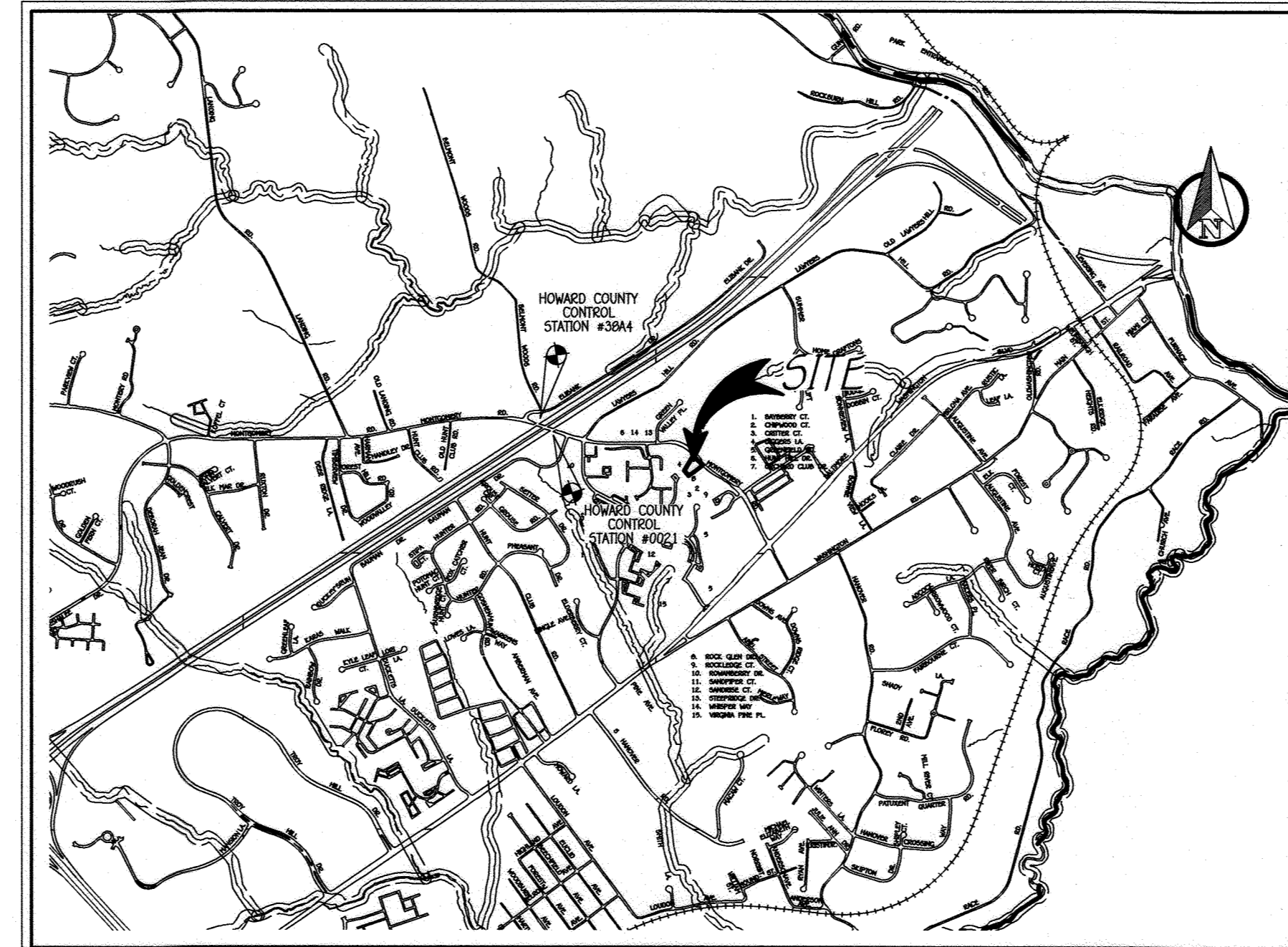
#### STORMWATER MANAGEMENT DESIGN NARRATIVE

**INTRODUCTION:**  
 THIS REPORT WILL DEMONSTRATE HOW THE CRITERIA SET FORTH IN THE MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II (EFFECTIVE OCTOBER 2000, REVISED MAY 2009) WILL BE SATISFIED FOR THIS PROJECT. THE GOAL OF CREATING HYDROLOGY SIMILAR TO THAT OF "WOODS IN GOOD CONDITION" WILL BE ACCOMPLISHED THROUGH THE USE OF DRY WELLS, PERMEABLE PAVEMENT, AND MICRO BIO-RETENTION FACILITIES AS SUGGESTED WITHIN CHAPTER 5 OF PREVIOUSLY MENTIONED MANUAL. THE ACHIEVEMENT OF THIS GOAL WILL REMOVE THE REQUIREMENT OF PROVIDING CHANNEL PROTECTION VOLUME.

**GENERAL SITE CONDITIONS:**  
 THE SUBJECT PROPERTY IS ZONED R-A-15 AND LOCATED ON TAX MAP 38, PARCEL NO. 700 OF THE HOWARD COUNTY, MARYLAND TAX MAP DATABASE SYSTEM. THE PROPERTY CONSISTING OF 0.84 ACRES, IS ROUGHLY RECTANGULAR IN SHAPE AND IS IMPROVED WITH A ROW OF 7 TOWN HOMES. THE PROPERTY IS BORDERED BY RESIDENTIAL LOTS AND HAS ROAD FRONTAGE ON MONTGOMERY ROAD. CURRENTLY ACCESS TO THE PROPERTY IS FROM AN EXISTING PARKING LOT. THIS PROJECT PROPOSES A SEVEN UNIT BLOCK OF TOWN HOMES, A RETAINING WALL AND A TWENTY TWO SPACE PARKING LOT WITH A DUMPSTER PAD. THE PROPERTY IS PARTIALLY WOODED AND HAS STEEP SLOPES GREATER THAN 25% RUNNING FROM THE FRONT WESTERLY CORNER OF THE PROPERTY TO THE REAR EASTLY CORNER OF THE PROPERTY WHICH CREATES A DRAINAGE VALLEY WITH RUNOFF FLOWING ACROSS THE ADJACENT REAR SOUTHERN PROPERTIES. THE PROPERTY IS LOCATED WITHIN THE MIDDLE PATUXENT RIVER BASIN WATERSHED (02131106). THE RUNOFF FROM THE PROPOSED IMPROVEMENTS WILL BE TREATED BY A COMBINATION OF SWM DEVICES CONSISTING OF ONE (1) M-5 MICRO BIORETENTION FACILITY AND (1) PERMEABLE PAVING AREA TO TREAT THE USE IN COMMON DRIVEWAY, PARKING SPACES, AND TEN (10) M-5 DRYWELLS TO TREAT THE PROPOSED HOUSES. THE WEB SOIL SURVEY SHOWS SOILS ON THE SITE CONSIST OF TYPE "B" - SASSAFRAS.

- NATURAL RESOURCE PROTECTION:**  
 NO WETLANDS, STREAMS, THEIR BUFFERS, FLOODPLAIN, OR FOREST EXIST ON-SITE. NO SPECIAL PROTECTION IS REQUIRED. NO WAIVERS ARE BEING REQUESTED WITH THIS DESIGN.
- MAINTENANCE OF NATURAL FLOW PATTERNS:**  
 THE EXISTING LOT HAS A NATURAL DRAINAGE VALLEY WHICH CONVERGES THE FLOW OF THE PROPERTY GENERALLY TO THE CENTER OF THE PROPERTY AND FLOWS OFF THE SOUTH EAST PROPERTY LINE. THE PROPOSED HOMES HAVE BEEN SITED ON THE EAST SIDE OF THE PROPERTY, SUCH THAT THE PROPOSED GRADING OF THE SITE MAINTAINS THE EXISTING NATURAL PATTERN.
- REDUCTION OF IMPERVIOUS AREAS THROUGH BETTER SITE DESIGN, ALTERNATIVE SURFACES AND NONSTRUCTURAL PRACTICES:**  
 ONLY THE MINIMUM IMPERVIOUS AREAS HAVE BEEN PROPOSED TO ALLOW ADEQUATE ACCESS TO THE PROPOSED LOTS. THIS DESIGN PROVIDES 22 BAY PARKING LOT FOR ACCESS TO THE TOWN HOMES.
- INTEGRATION OF EROSION AND SEDIMENT CONTROLS INTO STORMWATER STRATEGY:**  
 THIS PROJECT UTILIZES A BIO-RETENTION FACILITY IN A LOCATION THAT COULD WORK IN CONCERT WITH SEDIMENT TRAPPING IF REQUIRED.
- IMPLEMENTATION OF ESD PLANNING TECHNIQUES AND PRACTICES TO THE MAXIMUM EXTENT PRACTICABLE (MEP):**  
 THIS SUBMISSION WILL PROPOSE SEVERAL CHAPTER 5 DEVICES TO MEET AND EXCEED ENVIRONMENTAL SITE DESIGN TO THE MAXIMUM EXTENT PRACTICABLE (ESD TO THE MEP). ALL IMPERVIOUS AREAS WILL RECEIVE FULL TREATMENT.
- REQUEST FOR DESIGN MANUAL WAIVER:**  
 ALL REQUIRED WAIVERS WILL BE SUBMITTED WITH NEXT PHASE OF PLAN

- STORMWATER MANAGEMENT NOTES**
- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH MDE STORMWATER DESIGN MANUAL, VOLUMES I AND II REVISED 2009.
  - MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE 500 SQ. FT. OR LESS.
  - FINAL GRADING SHALL BE PROVIDED WITH THE SITE DEVELOPMENT PLAN.

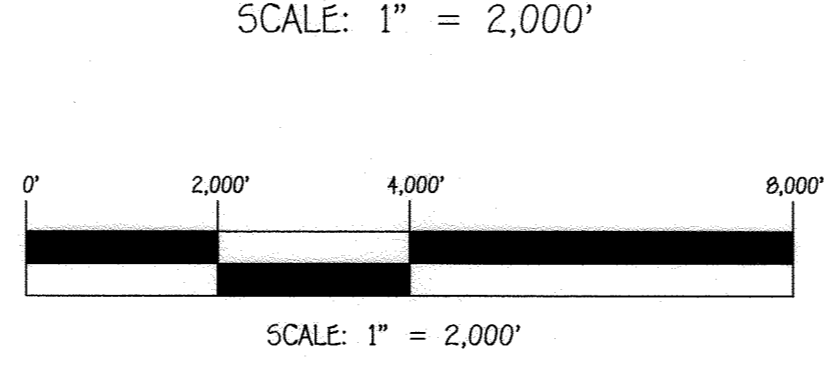


HOWARD COUNTY GEODETIC SURVEY CONTROL NO. 38A4  
 N 562,977.624 E 1,386,280.139 ELEVATION: 223.379'

HOWARD COUNTY GEODETIC SURVEY CONTROL NO. 0021  
 N 562,745.797 E 1,386,542.119 ELEVATION: 226.200'

REFER TO HOWARD CO. ADC MAP 35-01

#### VICINITY MAP



#### SITE ANALYSIS DATA CHART

A. TOTAL AREA OF THIS SUBMISSION = 0.92 AC.±
B. LIMIT OF DISTURBED AREA = 0.87 AC.±
C. PRESENT ZONING DESIGNATION = R-A-15 (PER 10/06/2013 COMPREHENSIVE ZONING PLAN)
D. PROPOSED USE: RESIDENTIAL SINGLE FAMILY ATTACHED DWELLING UNITS
E. TOTAL AREA OF FLOODPLAIN LOCATED ON-SITE = 0 AC.±
F. TOTAL AREA OF SLOPES IN EXCESS OF 25% = 0.38 AC.±
G. TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0 AC.±
H. TOTAL AREA OF STREAM (INCLUDING BUFFER) = 0 AC.±
I. TOTAL AREA OF EXISTING FOREST = 0.00 AC.±
J. TOTAL AREA OF FOREST TO BE RETAINED = 0.00 AC.±
K. TOTAL AREA OF LOTS / BUILDABLE PARCELS = 0.92 AC.±
L. TOTAL GREEN OPEN AREA (PERVIOUS) = 0.57 AC.±
M. TOTAL IMPERVIOUS AREA EXCLUDES EXISTING IMPERVIOUS = 0.35 AC.± (WITHIN LOD)
N. TOTAL AREA OF ERODIBLE SOILS = 0.38 AC.±

STORMWATER MANAGEMENT SUMMARY			
AREA ID.	ESDV REQUIRED CU.FT.	ESDV PROVIDED CU.FT.	REMARKS
SITE	2,372	2,462	DRYWELLS (M-5) & MICRO-BIORETENTION (M-6) PERMEABLE PAVEMENT (A-2)
TOTAL	2,372	2,462	

GROSS AREA = 0.92 AC. (TOTAL)  
 LOD = 0.87 ACRES  
 RCN = 63  
 TARGET Pe = 1.8"  
 Pe PROVIDED = 2.6"  
 Rv = 0.05 + (0.009) (I); I=41% = 0.42  
 S = 0.19 (39% 'B' Soils, 61% 'C' Soils)  
 Rev = (S) (Rv) (A)/12 = (0.19) (0.42) (0.35)/12 = 0.00233 ac-ft or 101 cu-ft

DRY WELL CHART							
DRYWELL NO.	AREA OF ROOF PER DOWN SPOUT	VOLUME REQUIRED	VOLUME PROVIDED	AREA OF TREATMENT	L	W	D
DW#1	300 Sq. Ft.	43 C.F.	100 C.F.	100%*	10	5	5
DW#2	300 Sq. Ft.	43 C.F.	100 C.F.	100%*	10	5	5
DW#3	300 Sq. Ft.	43 C.F.	100 C.F.	100%*	10	5	5
DW#4	300 Sq. Ft.	43 C.F.	100 C.F.	100%*	10	5	5
DW#5	300 Sq. Ft.	43 C.F.	100 C.F.	100%*	10	5	5
DW#6	300 Sq. Ft.	43 C.F.	100 C.F.	100%*	10	5	5
DW#7	300 Sq. Ft.	43 C.F.	100 C.F.	100%*	10	5	5
DW#8	600 Sq. Ft.	86 C.F.	128 C.F.	100%*	8	8	5
DW#9	600 Sq. Ft.	86 C.F.	120 C.F.	100%*	12	5	5
DW#10	900 Sq. Ft.	129 C.F.	144 C.F.	100%*	12	6	5

\* AREA OF TREATMENT EXCEEDS THAT REQUIRED.

STORMWATER MANAGEMENT PRACTICES					
LOT NO.	DISCONNECTION OF ROOFTOP RUNOFF (N-1) Y/N, NUMBER	DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2) Y/N	DRYWELLS (M-5) Y/N, NUMBER	MICRO-BIORETENTION (M-6) Y/N, NUMBER	PERMEABLE PAVEMENT (A-2) Y/N, NUMBER
Parcel 700	NO	NO	YES (10)	YES (1)	YES (1)

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461-2895

Approved: Department Of Planning And Zoning

*[Signature]* 2/17/22  
 Chief, Development Engineering Division

*[Signature]* 1/31/22  
 Chief, Division Of Land Development



**PROFESSIONAL CERTIFICATION**

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 27020, EXPIRATION DATE: 01/25/24.

*[Signature]* 1/17/2022  
 PAUL G. CAVANAUGH  
 DHE

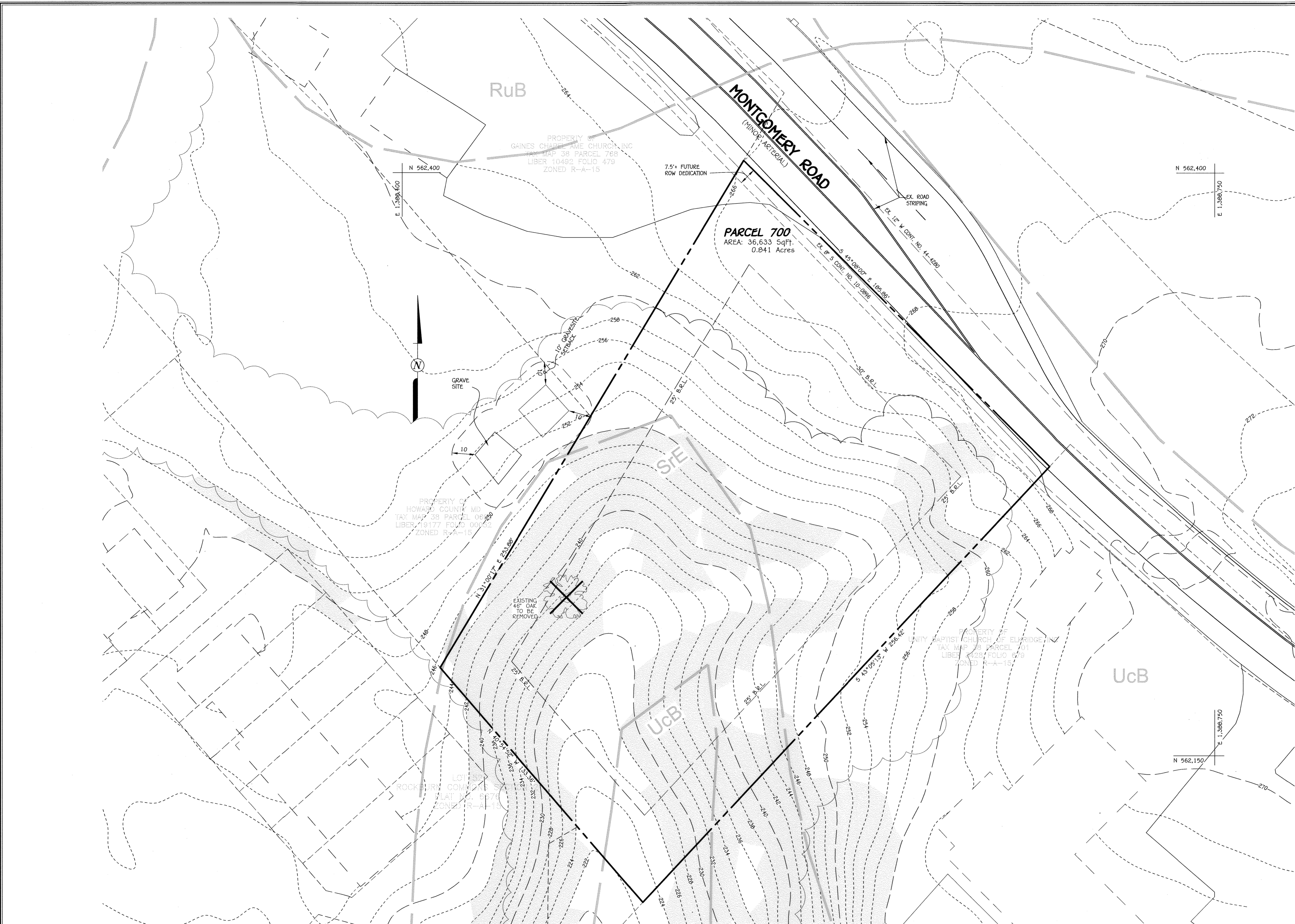
**OWNER/DEVELOPER**

CHETAN MEHTA  
 5192 TALBOTS LANDING  
 ELICOTT CITY MD 21043  
 443-285-9563

TITLE SHEET  
**MEHTA PROPERTY**  
 ZONED: R-A-15  
 FIRST ELECTION DISTRICT  
 TAX MAP: 38, GRID: 02, PARCEL: 700  
 7170 MONTGOMERY RD  
 ELKRIDGE, MARYLAND 21075  
 SCALE: AS SHOWN, DATE: JANUARY, 2022  
 SHEET 1 OF 4



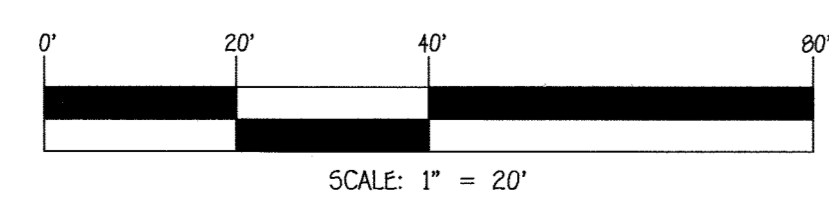
LEGEND	
SYMBOL	DESCRIPTION
---252---	EXISTING CONTOUR 2' INTERVAL
---250---	EXISTING CONTOUR 10' INTERVAL
---	BOUNDARY LINE
B.R.L.	BUILDING RESTRICTION LIMIT
12"W	EXISTING WATER LINE
8"5	EXISTING SEWER LINE
---	EXISTING TREE LINE
SrE UcB	SOIL LINES AND TYPES
---	25% OR GREATER STEEP SLOPES
✕	DENOTES EXISTING TREE TO BE REMOVED



- NOTES:
- 1) AREA OF 25% OR GREATER STEEP SLOPES = 38,960 Sq.Ft.
  - 2) NOTE THAT THERE ARE NO EXISTING STRUCTURES OR IMPERVIOUS AREAS TO BE REMOVED

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Approved: Department Of Planning And Zoning  
 Chief, Development Engineering Division  
 Date: 2.17.22  
 Chief, Division Of Land Development  
 Date: 1/21/22



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 PAUL G. CAVANAUGH  
 Date: Jan 17, 2022

**PLAN VIEW**  
 SCALE: 1" = 20'

SOILS LEGEND			
SOIL	NAME	CLASS	"K" VALUE
SrE	Sassafras and Croom soils, 15 to 25 percent slopes	B	.32
UcB	Urban land-Chillum-Beltville complex, 0 to 5 percent slopes	C	.43

HOWARD COUNTY WEBSOILS SURVEY 09/15/20

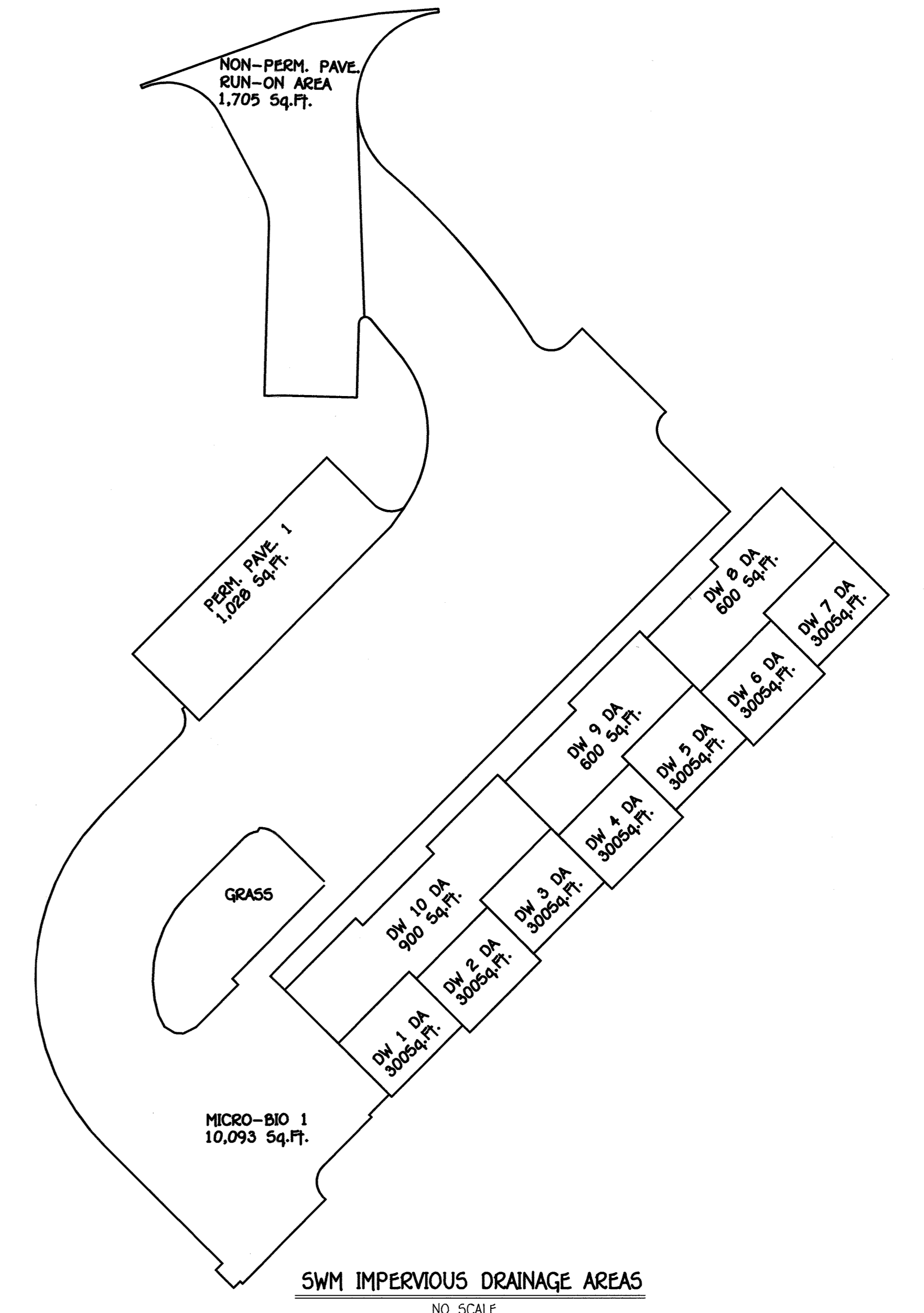
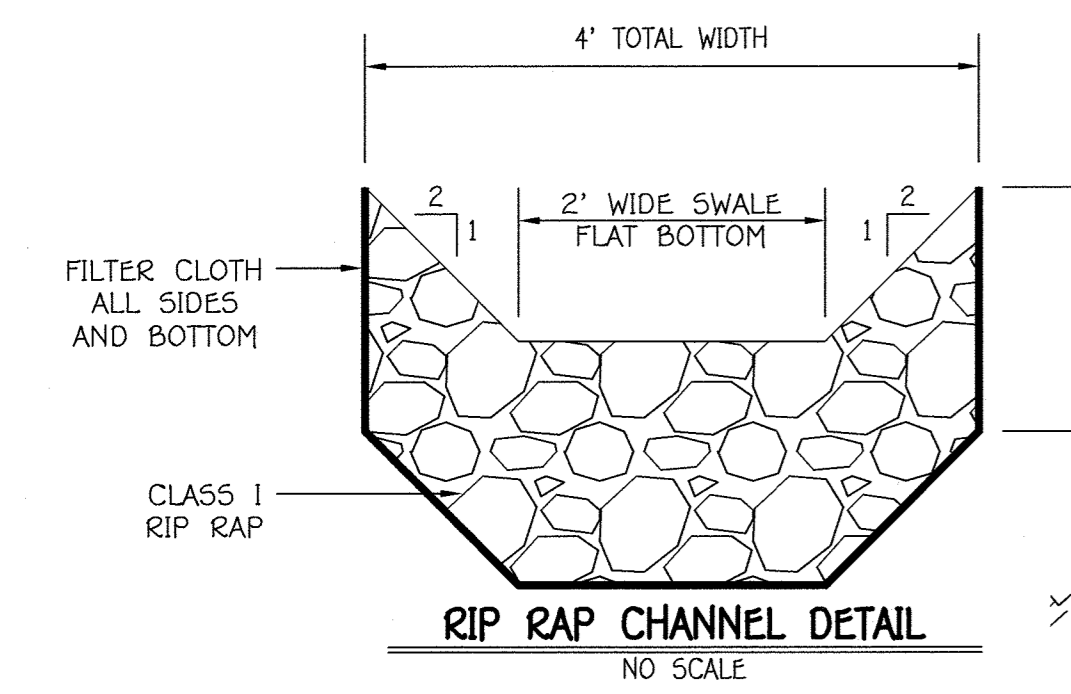
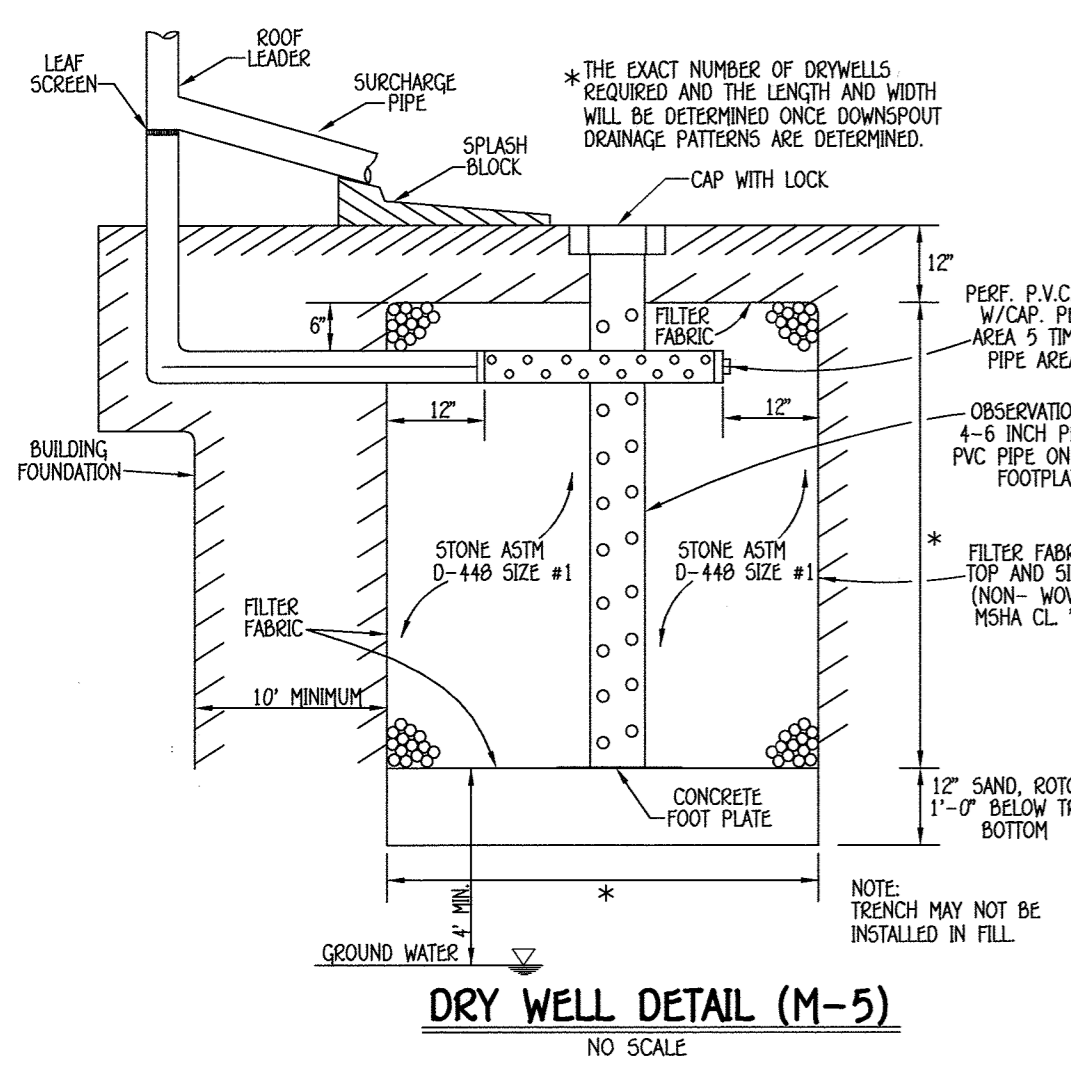
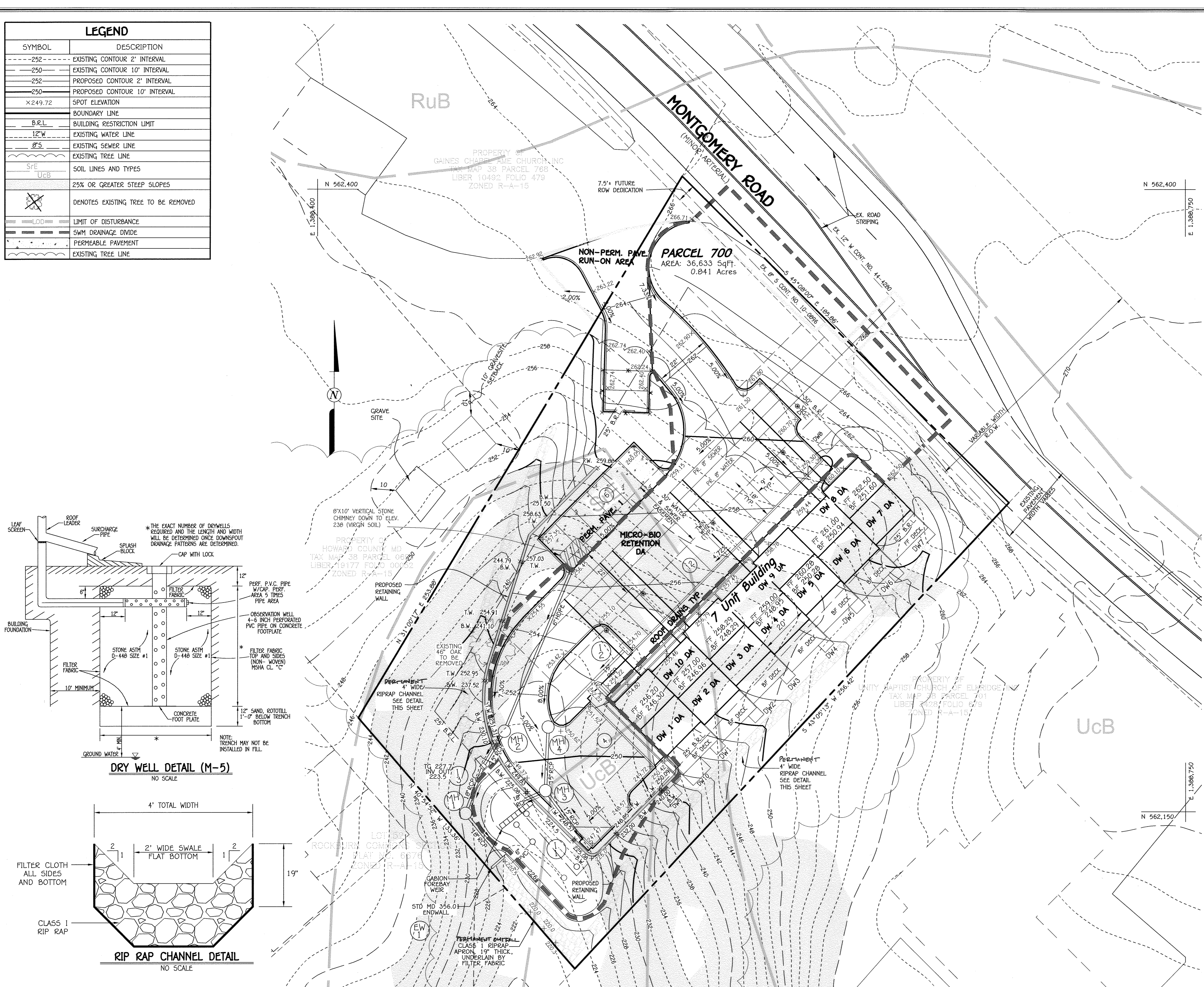
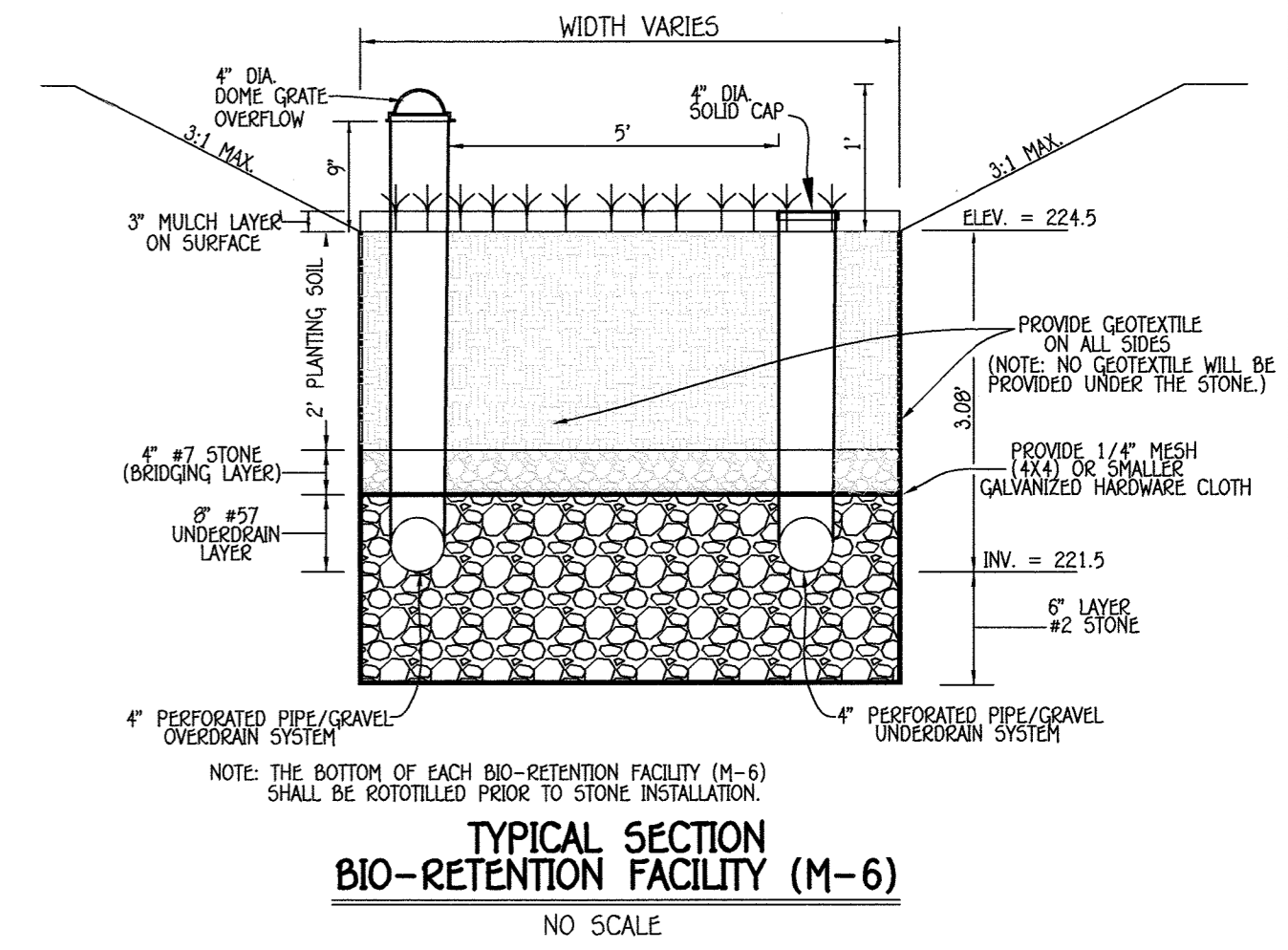
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**EXISTING CONDITIONS AND SOILS**  
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 ELKRIDGE, MARYLAND 21075  
 SCALE: AS SHOWN, DATE: JANUARY, 2022  
 SHEET 2 OF 4

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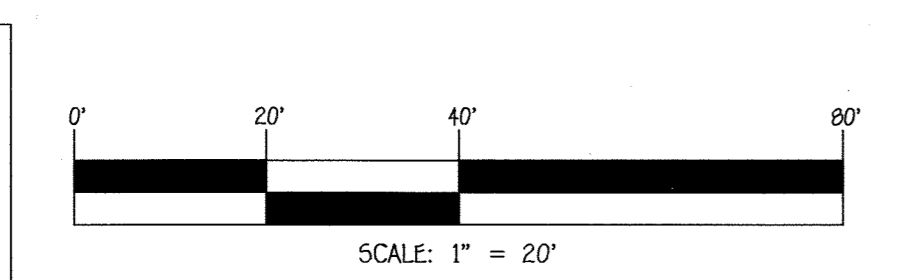


LEGEND	
SYMBOL	DESCRIPTION
- - - 252 - - -	EXISTING CONTOUR 2' INTERVAL
- - - 250 - - -	EXISTING CONTOUR 10' INTERVAL
- - - 252 - - -	PROPOSED CONTOUR 2' INTERVAL
- - - 250 - - -	PROPOSED CONTOUR 10' INTERVAL
x249.72	SPOT ELEVATION
---	BOUNDARY LINE
B.R.L.	BUILDING RESTRICTION LIMIT
12"W	EXISTING WATER LINE
8"S	EXISTING SEWER LINE
---	EXISTING TREE LINE
SrE	SOIL LINES AND TYPES
UcB	25% OR GREATER STEEP SLOPES
⊗	DENOTES EXISTING TREE TO BE REMOVED
---	LIMIT OF DISTURBANCE
---	SWM DRAINAGE DIVIDE
---	PERMEABLE PAVEMENT
---	EXISTING TREE LINE



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Approved: Department Of Planning And Zoning  
Chief, Development Engineering Division  
Chief, Division Of Land Development



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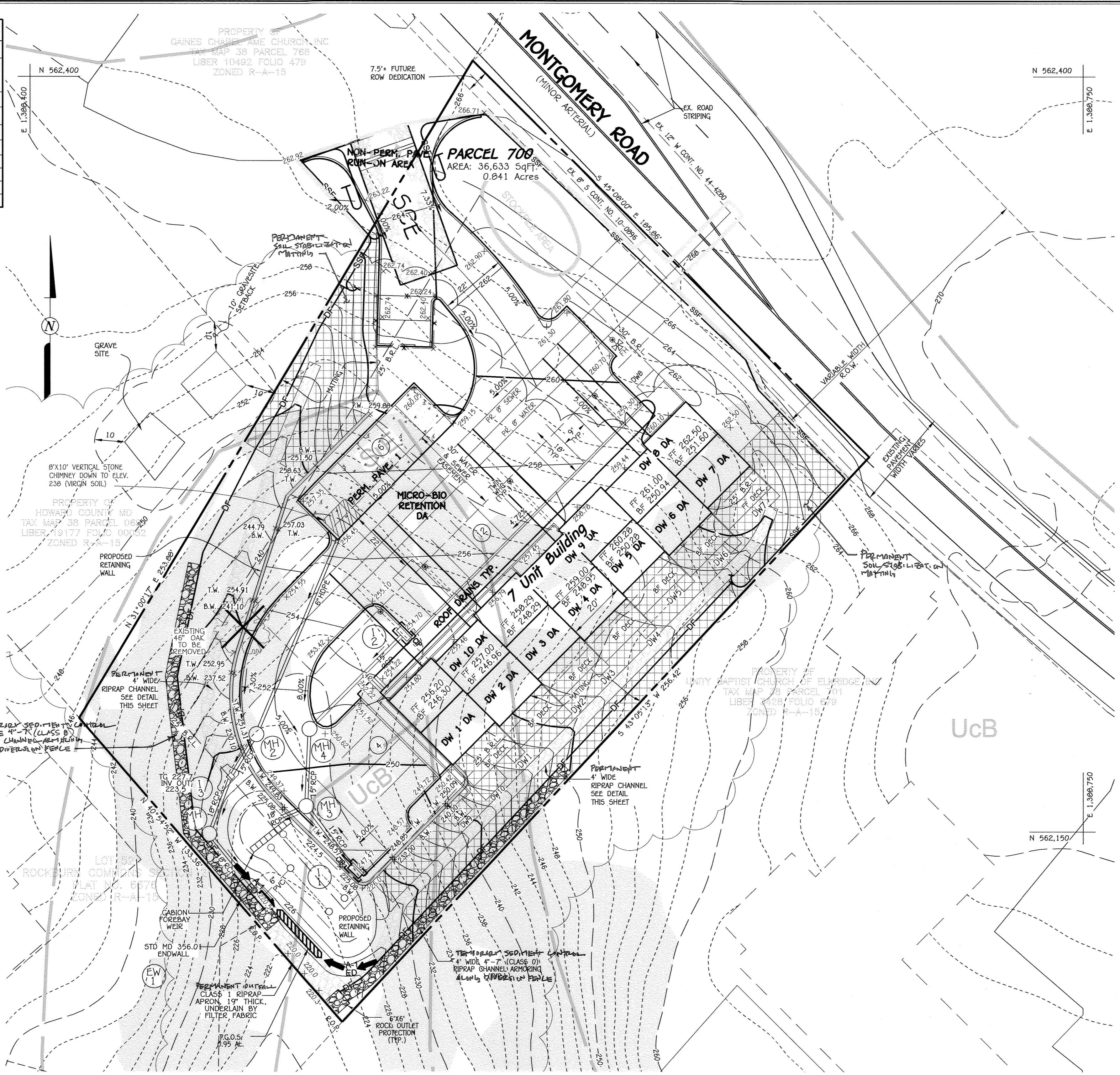
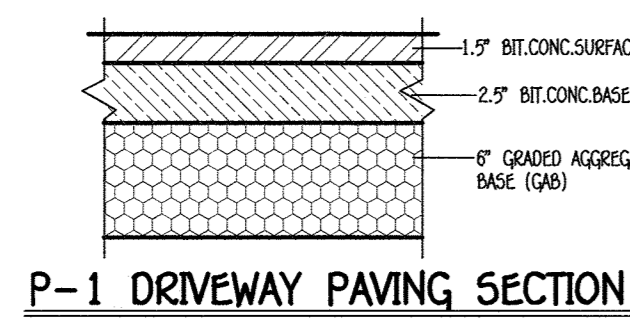
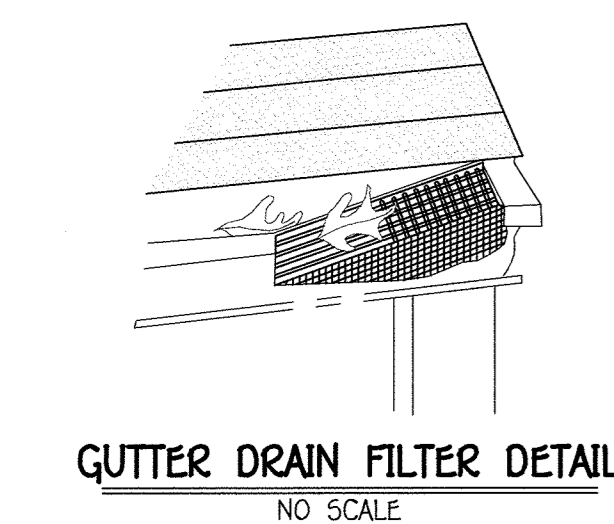
**ENVIRONMENTAL CONCEPT PLAN**  
**MEHTA PROPERTY**  
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FIRST ELECTION DISTRICT  
TAX MAP: 38, GRID: 02, PARCEL: 700  
7170 MONTGOMERY RD  
ELKRIDGE, MARYLAND 21075  
SCALE: AS SHOWN, DATE: JANUARY, 2022  
SHEET 3 OF 4



LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL		BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
---	EXISTING CONTOUR 10' INTERVAL		TEMPORARY GABION OUTFALL STRUCTURE
---	PROPOSED CONTOUR 2' INTERVAL		STABILIZED CONSTRUCTION ENTRANCE
---	PROPOSED CONTOUR 10' INTERVAL		6'x6' ROCK OUTLET PROTECTION (TYP.)
---	SPOT ELEVATION		EARTH DIKE
---	BOUNDARY LINE		PERMANENT SOIL STABILIZATION - GEOTEXTILE MATTING
B.R.L.	BUILDING RESTRICTION LIMIT		SUPER SILT FENCE
---	EXISTING WATER LINE		DIVERSION FENCE
---	EXISTING SEWER LINE		LIMIT OF DISTURBANCE
---	EXISTING TREE LINE		
SrE	SOIL LINES AND TYPES		
	UcB		
			DENOTES EXISTING TREE TO BE REMOVED
			PERMEABLE PAVEMENT
			EXISTING TREE LINE
			25% OR GREATER STEEP SLOPES

**OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS (M-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.



**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 PRETREATMENT LAYER, TRAPPING THE FINER SEDIMENTS, WHICH REMAIN SUSPENDED AFTER THE PRIMARY PRETREATMENT.

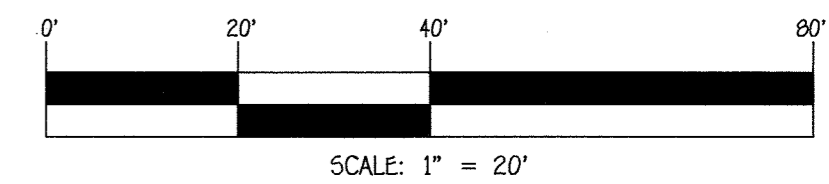
**PLANTING GUIDANCE**  
PLANT MATERIAL SELECTION SHOULD BE BASED ON THE GOAL OF SIMULATING A TERRESTRIAL FORESTED COMMUNITY OF NATIVE SPECIES. BIORETENTION SIMULATES AN UPLAND-SPECIES ECOSYSTEM. THE COMMUNITY SHOULD BE DOMINATED BY TREES, BUT HAVE A DISTINCT COMMUNITY OF UNDERSTORY TREES, SHRUBS AND 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 PRINCIPLES DESCRIBED IN TABLE A.5. THE OBJECTIVE IS TO HAVE A SYSTEM, WHICH RESEMBLES A GARDEN, AND NATURAL PLANT LAYOUT, WHILE MAINTAINING OPTIMAL CONDITIONS FOR PLANT ESTABLISHMENT AND GROWTH. FOR A MORE EXTENSIVE BIORETENTION PLAN, CONSULT ET&B, 1993 OR CLAYTOR AND SCHUELER, 1997.

SOILS LEGEND			
SOIL	NAME	CLASS	K-VALUE
SrE	Sassafras and Croom soils, 15 to 25 percent slopes	B	.32
UcB	Urban land-Chillum-Beltsville complex, 0 to 5 percent slopes	C	.43

HOWARD COUNTY WEBSOILS SURVEY 09/15/20

**DAILY STABILIZATION NOTE**  
ALL DISTURBED AREAS NOT DIRECTED TO A SEDIMENT CONTROL DEVICE SHALL BE STABILIZED AT THE END OF EACH WORKDAY. THE CONTRACTOR SHALL NOT DISTURB AN AREA GREATER THAN THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORKDAY



PRELIMINARY EROSION/SEDIMENT CONTROL PLAN AND STORMWATER MANAGEMENT NOTES AND DETAILS

**MEHTA PROPERTY**  
ZONED: R-A-15  
FIRST ELECTION DISTRICT  
TAX MAP: 3B, GRID: 02, PARCEL: 700  
1710 MONTGOMERY RD  
ELK RIDGE, MARYLAND 21075  
SCALE: AS SHOWN, DATE: JANUARY, 2022  
SHEET 4 OF 4

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLCOTT CITY, MARYLAND 21042  
(410) 461 - 2895

Approved: Department Of Planning And Zoning  
Chief, Development Engineering Division  
Date: 7-17-22  
Chief, Division Of Land Development  
Date: 7-17-22



**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 27020, EXPIRATION DATE: 01/25/24.  
Date: 7/17/22

**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.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

**OWNER/DEVELOPER**  
CHETAN MEHTA  
5192 TALBOTS LANDING  
ELLCOTT CITY MD 21043  
443-285-9563