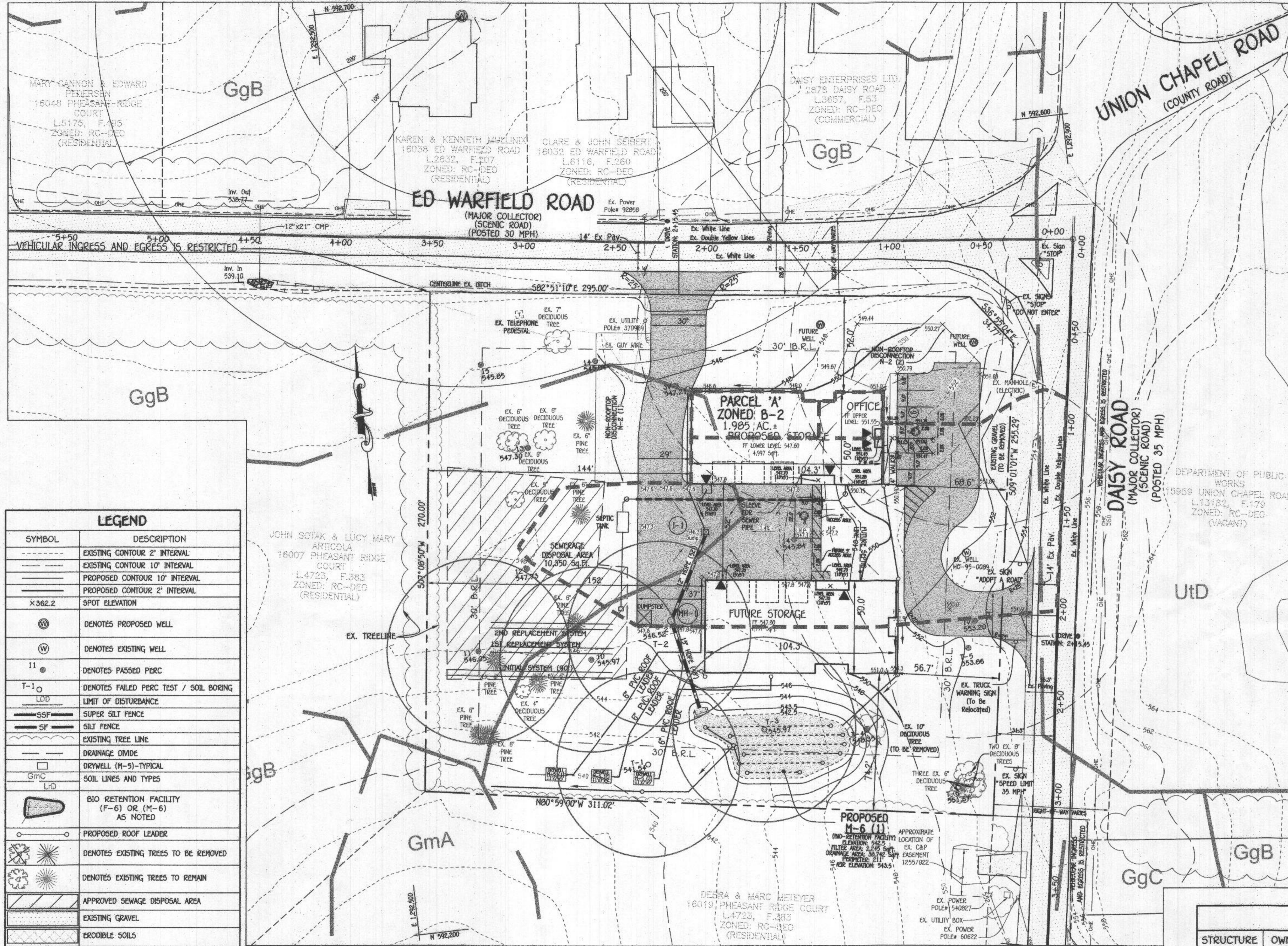
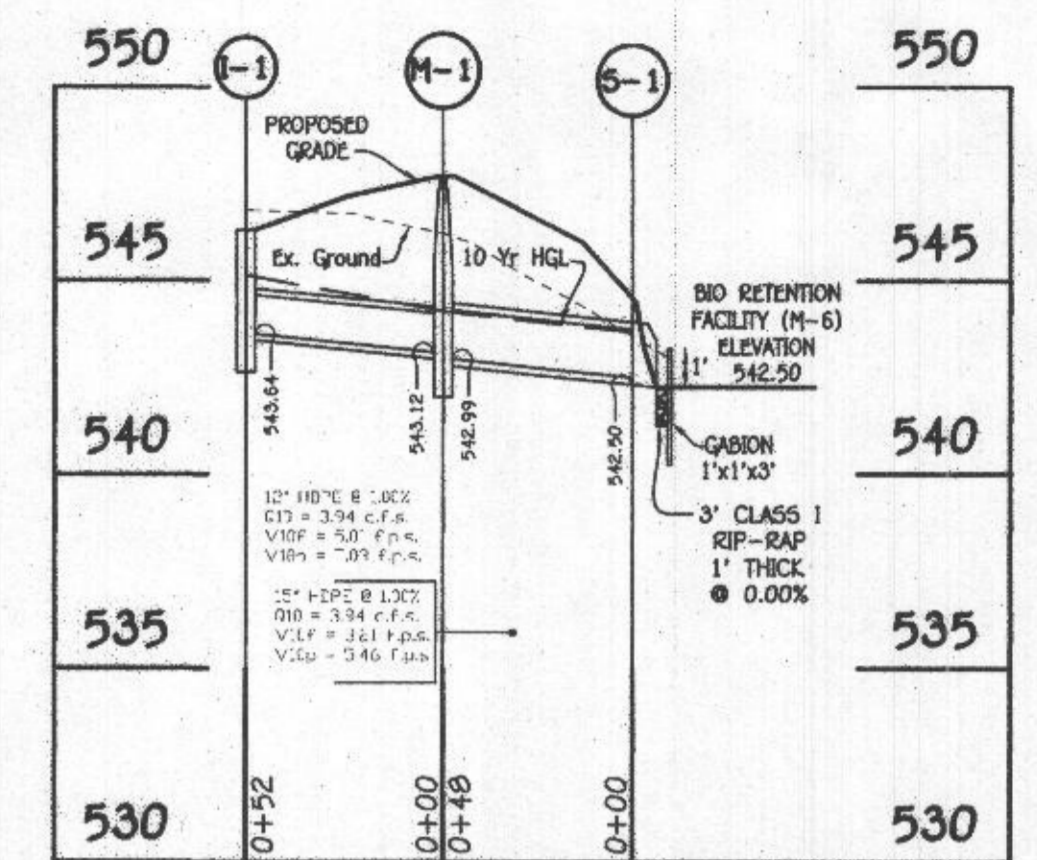


SOILS LEGEND			
SOIL	NAME	CLASS	KW
GgA	Glenn loam, 0 to 3 percent slopes	B	0.37
GgB	Glenn loam, 3 to 6 percent slopes	B	0.37
GmA	Glennville silt loam, 0 to 3 percent slopes	C	0.48



LEGEND	
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
x362.2	SPOT ELEVATION
⊙	DENOTES PROPOSED WELL
⊙	DENOTES EXISTING WELL
11	DENOTES PASSED PERC
T-1	DENOTES FAILED PERC TEST / SOIL BORING
LD	LIMIT OF DISTURBANCE
SSF	SUPER SILT FENCE
SF	SILT FENCE
---	EXISTING TREE LINE
---	DRAINAGE DIVIDE
GMC	DRYWELL (M-5)-TYPICAL
---	SOIL LINES AND TYPES
⬇	BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
---	PROPOSED ROOF LEADER
⊗	DENOTES EXISTING TREES TO BE REMOVED
⊗	DENOTES EXISTING TREES TO REMAIN
---	APPROVED SEWAGE DISPOSAL AREA
---	EXISTING GRAVEL
---	ERODIBLE SOILS
▼	INGRESS ENTRANCE
▼	EGRESS EXIT
---	DENOTES EXISTING FOREST TO BE REMOVED



PROFILE STORMDRAIN
SCALE HORZ. 1" = 50'
VERT. 1" = 5'

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT.
[Signature]
COUNTY HEALTH OFFICER
11/30/2020
DATE

PIPE SCHEDULE		
SIZE	CLASS	LENGTH
12"	HDPE	52'
15"	HDPE	48'

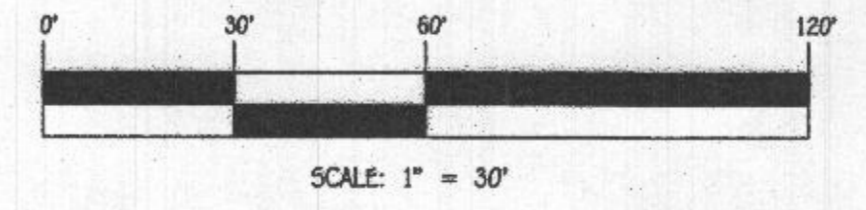
DRAINAGE AREA DATA				
DRAINAGE AREA	STRUCTURE NO.	AREA (AC.)	'C'	% IMP.
A	I-1	0.67	0.61	57

STRUCTURE SCHEDULE							
STRUCTURE NO.	OWNERSHIP AND MAINTENANCE	TOP ELEVATION	INV IN	INV OUT	COORDINATES	TYPE	REMARKS
I-1	PRIVATE	546.30	----	543.64 12"	N 592398.50 E 1292680.71	YARD INLET	D-4.14
M-1	PRIVATE	547.70	543.12 (I-1) 12"	542.99 15"	N 592353.01 E 1292656.45	4' DIA. MANHOLE	G-5.12
S-1	PRIVATE	544.50	542.50 (M-1) 15"	----	N 592310.54 E 1292665.48	15" END SECTION	D-5.51

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE FLOOR - 10232 BALTIMORE NATIONAL FREE
ELICOTT CITY, MARYLAND 21042
(410) 461-2895



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.
[Signature]
FRANK MANALANSAN II
5/21/20
DATE



OWNER
DAISY CROSSROADS LLC
16135 ED WARFIELD ROAD
WOODBINE, MD 21797-7811

DEVELOPER
RYAN MCWHORTER
6891 REDBERRY ROAD
CLARKSVILLE, MD 21029
(410)-984-5913

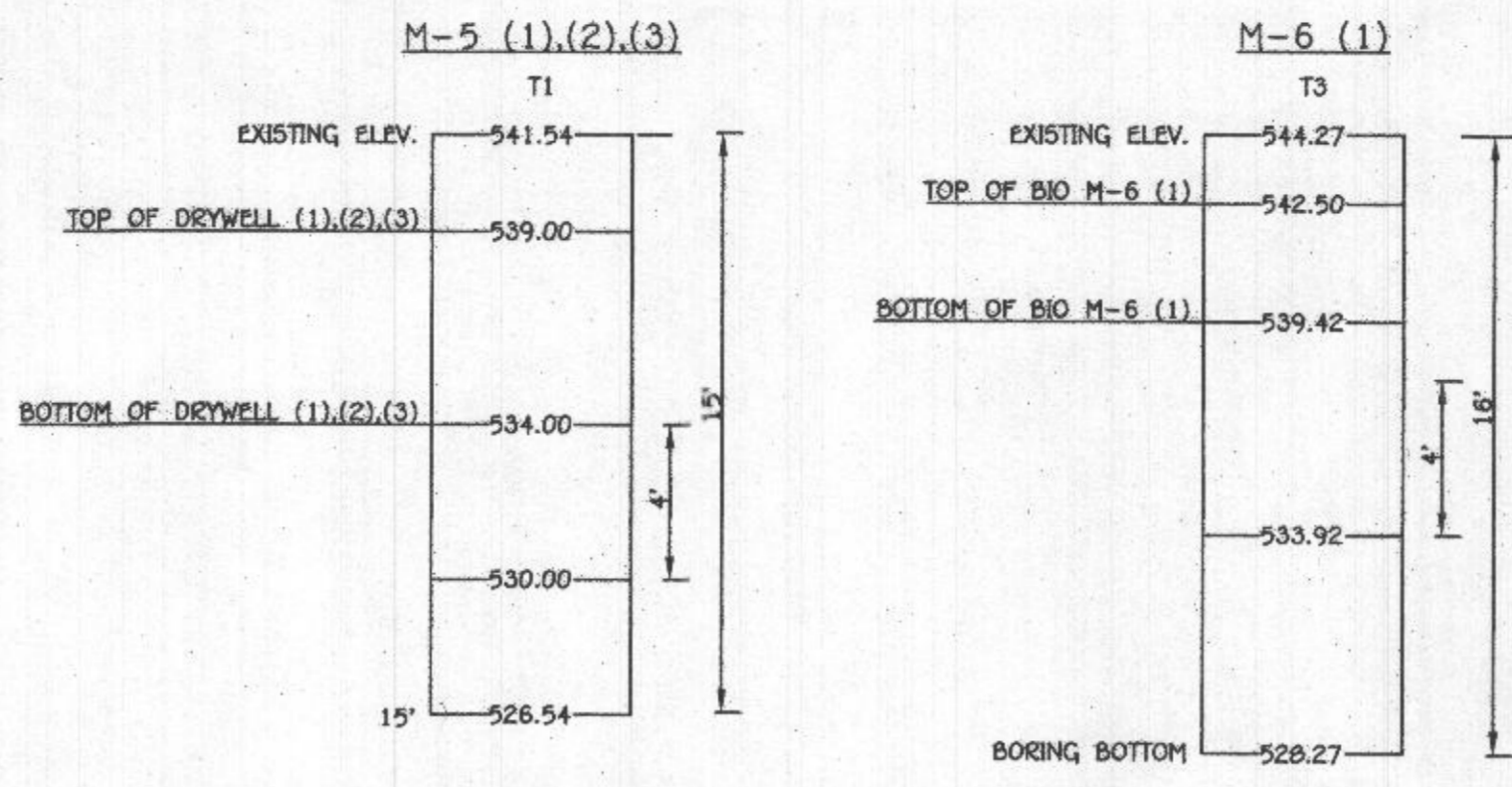
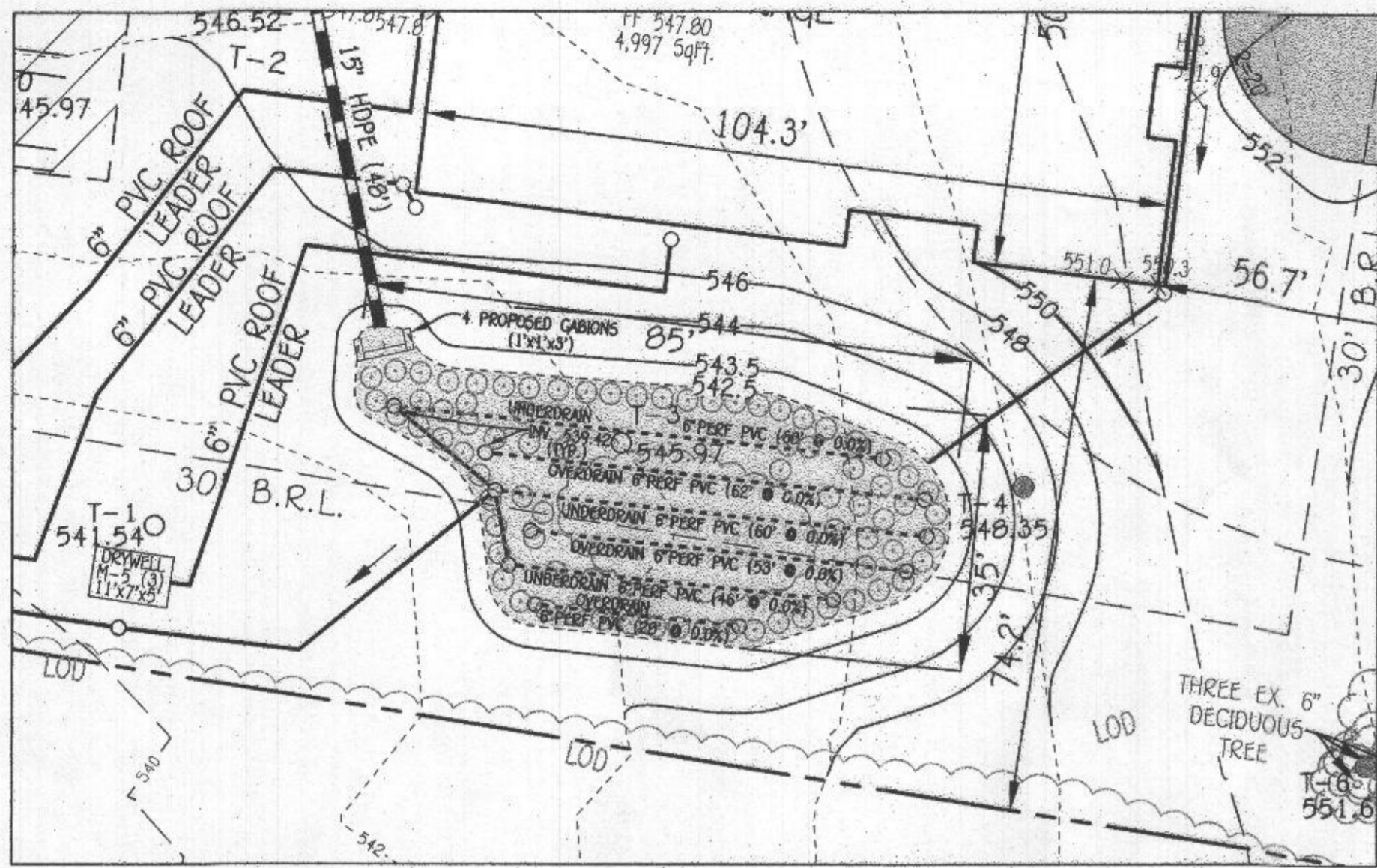
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development
[Signature]
Chief, Development Engineering Division
[Signature]
Director - Department of Planning and Zoning
[Signature]
Date: 9/29/20
Date: 11-30-20
Date: 11-30-20

PROJECT: MCWHORTER PROPERTY
PHASE: N/A
PARCEL NO.: 334

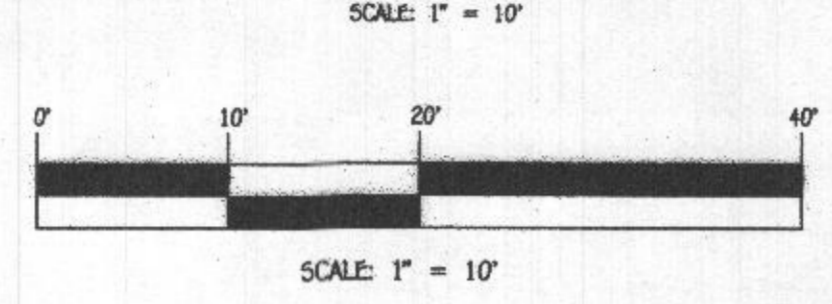
PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
9800-9802	23	B-2	13	4	24027604002

PREVIOUS HOWARD COUNTY FILES:
ECP-19-082, F-90-56

STORMDRAIN DRAINAGE AREA MAP
MCWHORTER PROPERTY
WARFIELD'S GRANT SECTION 1, AREA 1
PARCEL 'A'
16031 ED WARFIELD ROAD
TAX MAP NO.: 13 GRID NO.: 23 PARCEL NO.: 334
ZONED B-2
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: APRIL, 2020
SHEET 5 OF 13
SDP-20-012



STORMWATER MANAGEMENT BORING LOGS

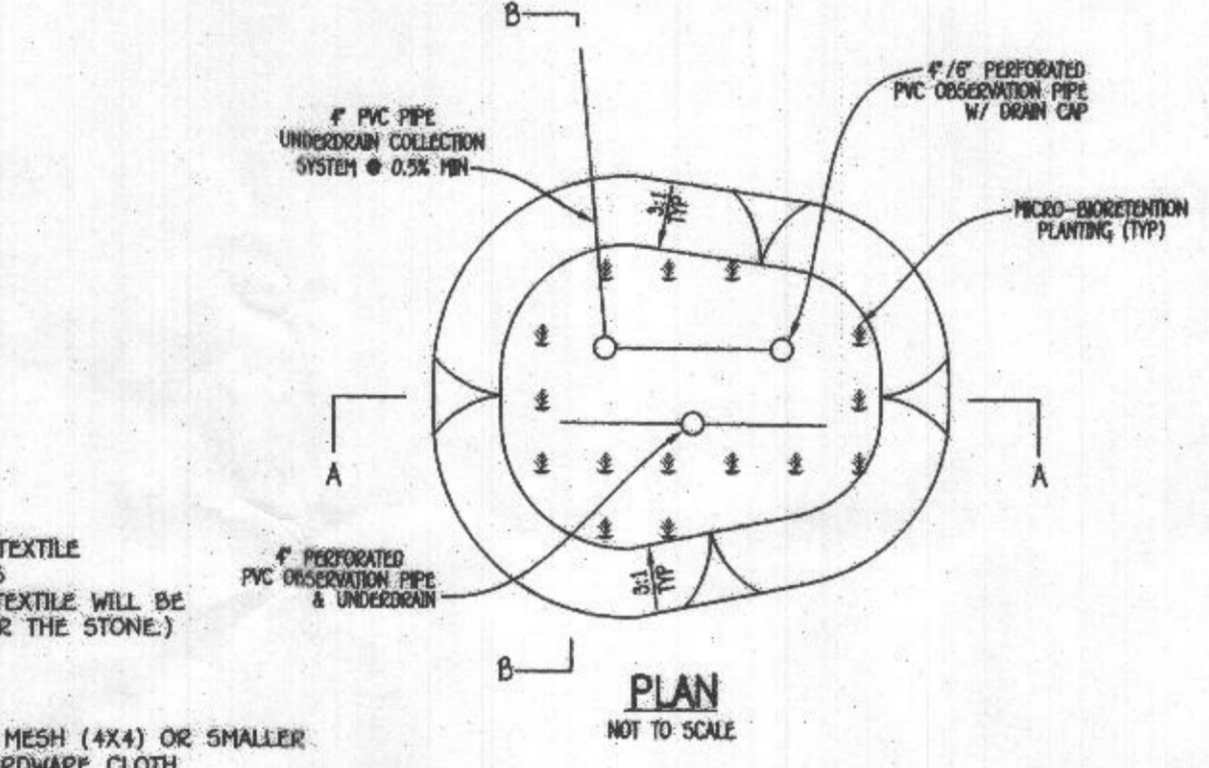
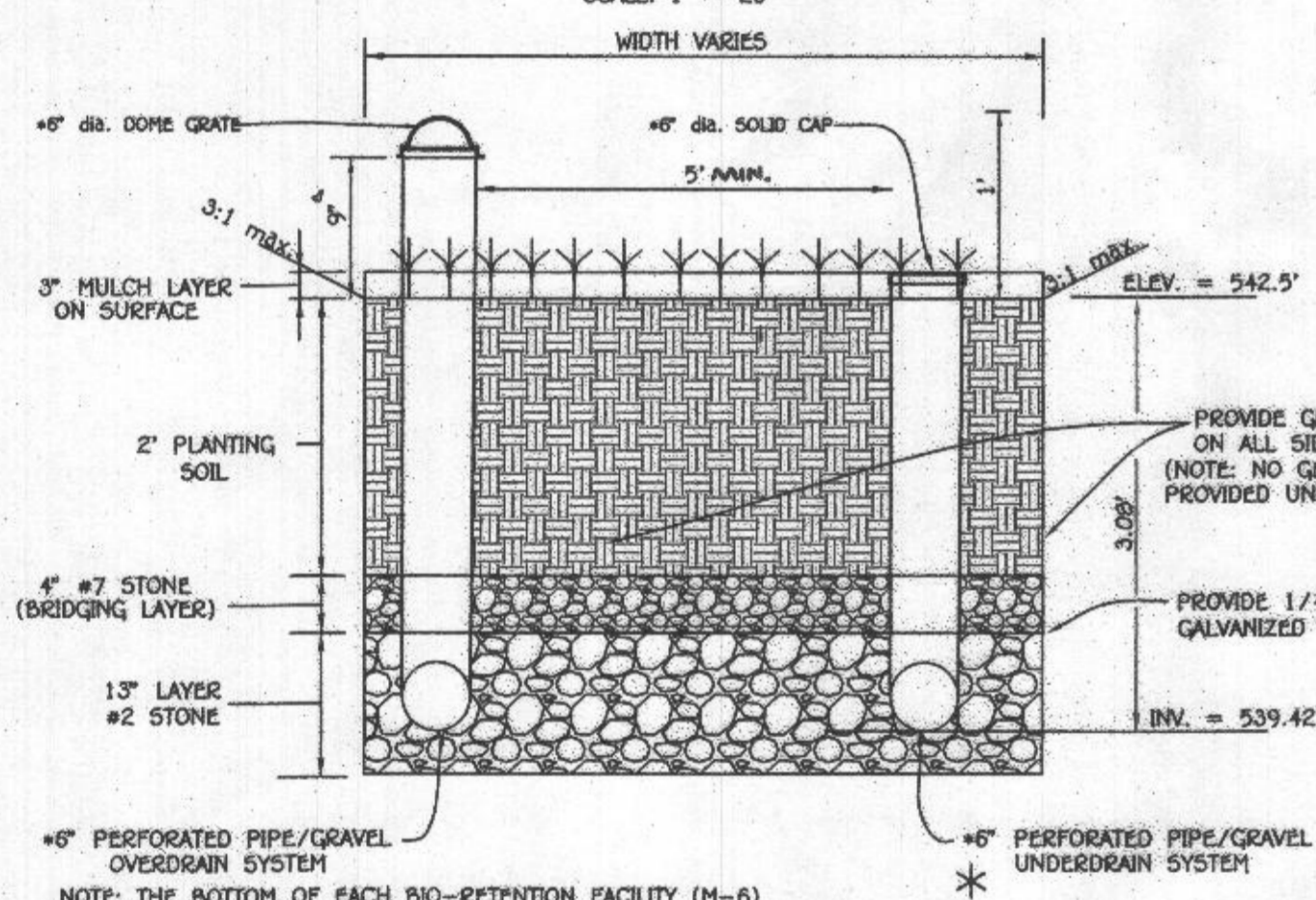
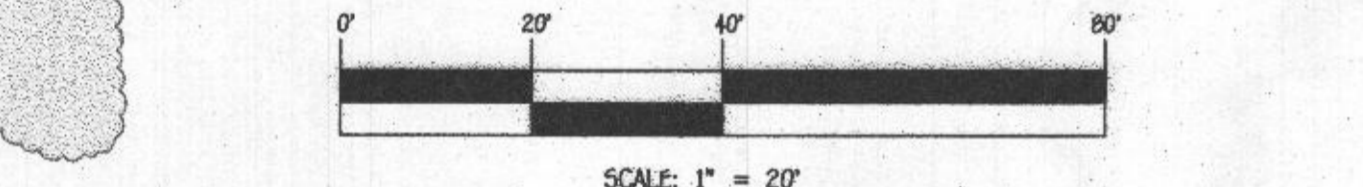


- SHRUBS**
 ANY OF THE SHRUBS LISTED MAY BE USED:
 BAYBERRY, SPICEBUSH, SPOKESHOD, WINTERBERRY, INKBERY, WITCH HAZEL, BUTTONBRUSH BUCKEYE, BOTTLEBRUSH BUCKEYE.

PLANT MATERIAL - BIO-RETENTION F-6 (12)

QUANTITY	NAME	MAXIMUM SPACING (FT.)
187 (561 sq.ft.)	GRASSES	36" o.c.
80	SHRUBS	36"-40" o.c.

- GRASS**
 ANY OF THE GRASS LISTED MAY BE USED:
 OVERSEED GRASS, HEAVY METAL SWITCHGRASS.



TYPICAL SECTION - BIO-RETENTION FACILITY (F-6)
 NO SCALE

OPERATION & MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

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

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED, DISCONNECTION OF NON-ROOFTOP (N-2)

- MAINTENANCE OF AREAS RECEIVING DISCONNECTION RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

Table B.4. Materials Specifications for Micro-Bioretenion, Rain Gardens & Landscape Infiltration

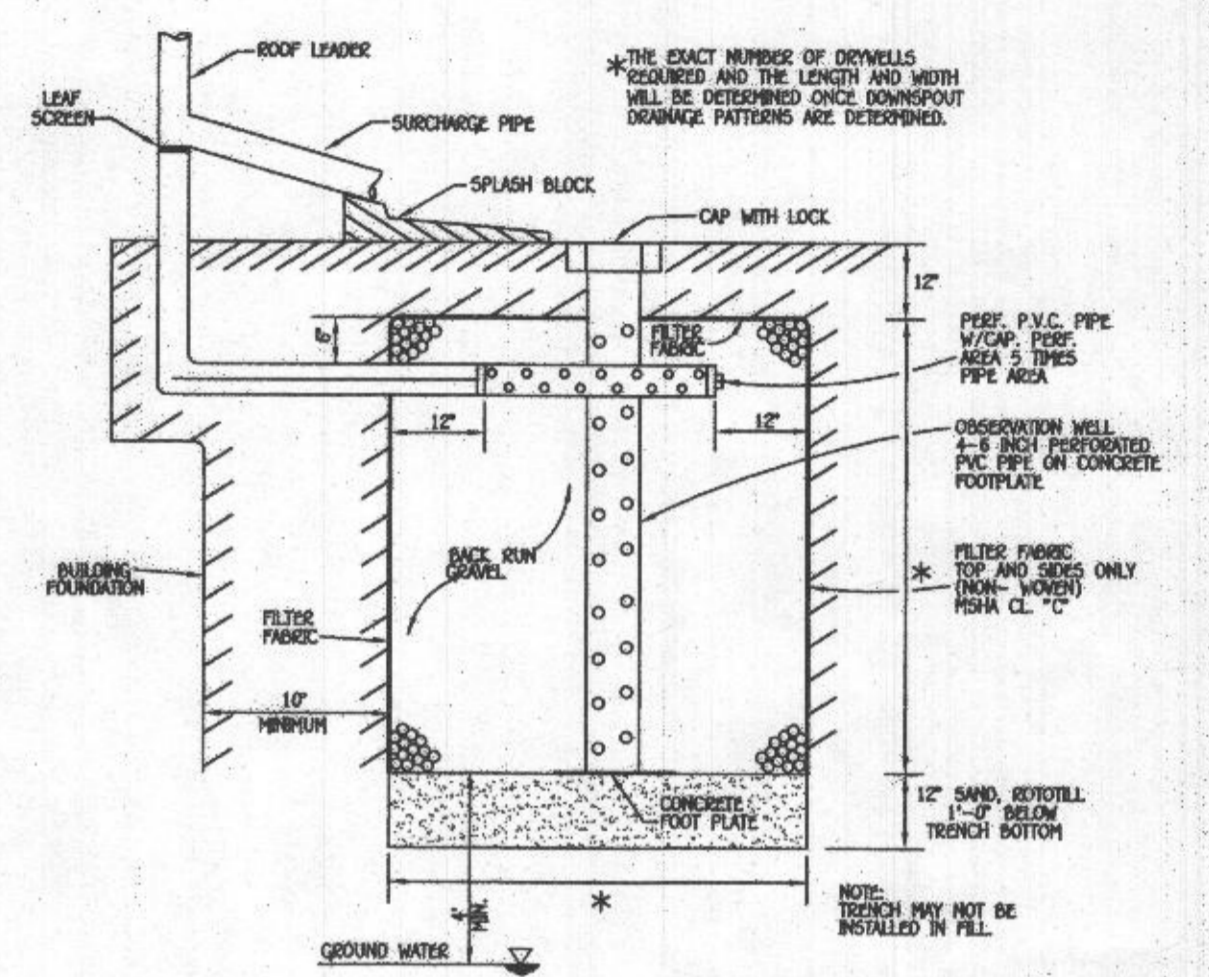
Material	Specification	Size	Notes
Planting soil (2' to 4' deep)	see Appendix A Table A-4 loamy sand 60-85% compost 35-40% or sandy loam 30% coarse sand 30% compost 10%	n/a	plantings are site-specific USDA soil types loamy sand or sandy loam; clay content <5%
Organic Content	min. 10% by dry weight (ASTM D 2974)		
Mulch	shredded hardwood		aged 6 months, minimum
Pea gravel diaphragm	pea gravel: ASTM-D-440	No. 8 or No. 9 (1/8" to 3/8")	
Curbside drain	ornamental stone: vitreous cobble	stone: 2" to 5"	
Geotextile		n/a	PE Type 1 nonwoven
Gravel (underdrains and infiltration basins)	ASTM D-43	No. 57 or No. 40 Aggregate (3/8" to 3/4")	
Underdrain piping	F 756, Type PS 28 or ASTM D-278	4" to 6" rigid schedule 40 PVC or 50K35	slotted or perforated pipe: 3/8" perf. @ 6" on center, 4 holes per row, minimum of 3" of gravel over pipes; not necessary underdrain pipes. Perforated pipe shall be wrapped with 1/4 inch galvanized hardware cloth
Poured in place concrete (if required)	MSHA, Min. No. 3; f = 3500 psi (25 MPa); normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved spec or local standards requires design drawings sealed and approved by a professional structural engineer located in the State of Maryland - design to include meeting ACI Code 308.2R, vertical loading (H-10 or H-20); allowable horizontal loading (based on soil pressure); and analysis of potential cracking
Sand	ASTM-D-8-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Geyserite (ASTM D #10) are not acceptable. No calcium carbonate or dolomite sand substitutions are acceptable. No "rock dust" can be used for sand.

FUTURE 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.

FUTURE DRY WELL CHART

DRYWELL No.	AREA OF ROOF PER DRYWELL	VOLUME REQUIRED	VOLUME PROVIDED	L	W	D
1	1000 SQ.FT.	143 CU.FT.	154 CU.FT.	11'	7'	5'
2	1000 SQ.FT.	143 CU.FT.	154 CU.FT.	11'	7'	5'
3	1000 SQ.FT.	143 CU.FT.	154 CU.FT.	11'	7'	5'



DRY WELL DETAIL (M-5)
 NOT TO SCALE
 FUTURE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS



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.

OWNER: DABY CROSSROADS LLC, 16135 ED WARFIELD ROAD, WOODBINE, MD 21797-7811
 DEVELOPER: RYAN MCWHORTER, 6801 REDBERRY ROAD, CLARKSVILLE, MD 21029, (410)-984-5813

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development: *[Signature]* Date: 9-29-20
 Chief, Development Engineering Division: *[Signature]* Date: 11-30-20
 Director - Department of Planning and Zoning: *[Signature]* Date: 11-30-20

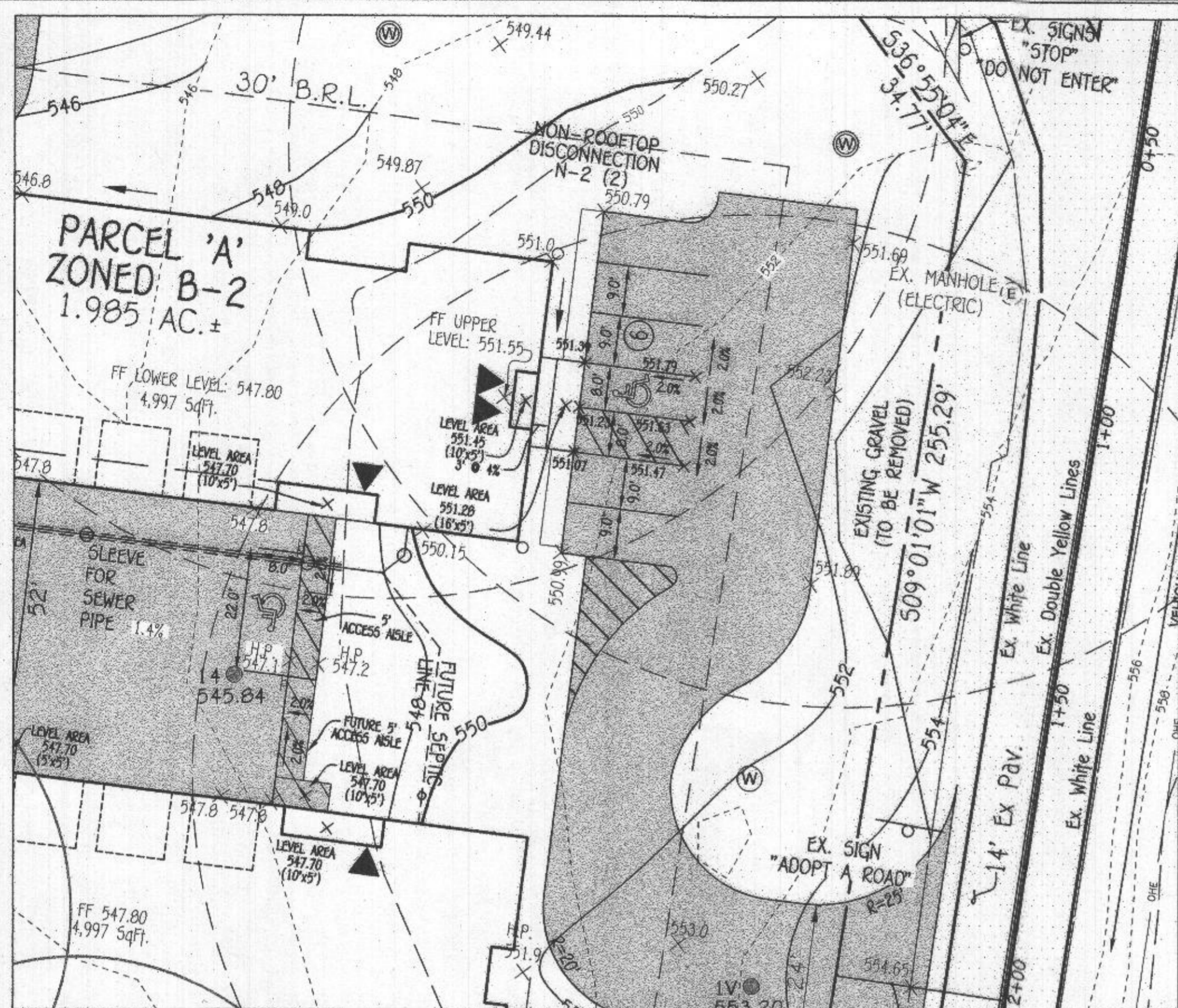
PROJECT	PHASE	PARCEL NO.
MCWHORTER PROPERTY	N/A	334

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
9800-9802	23	B-2	13	4	24027604002

PREVIOUS HOWARD COUNTY FILES: ECP-19-082, F-90-56

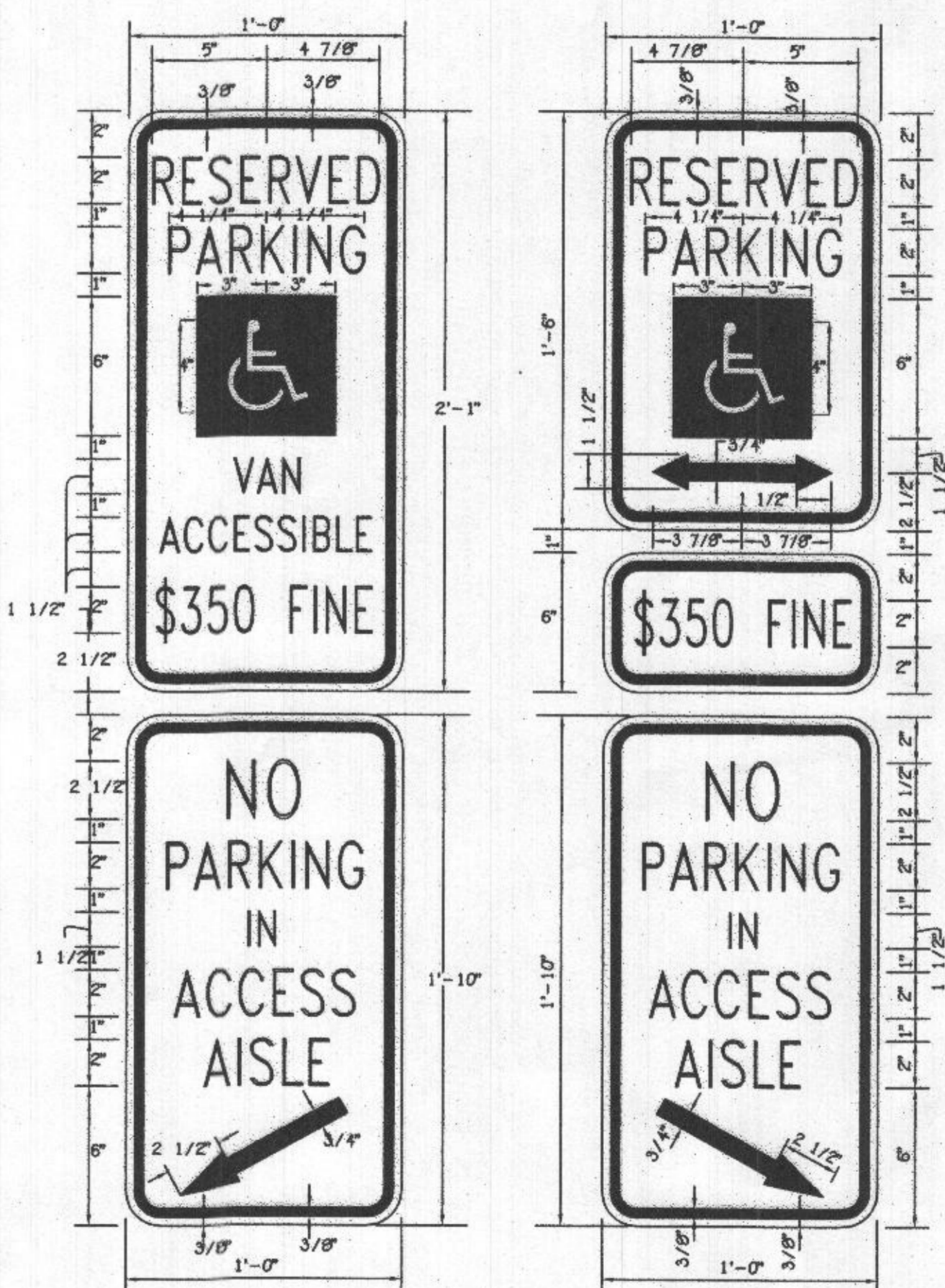
SWM NOTES, DETAILS & BORING LOGS

MCWHORTER PROPERTY
 WARFIELD'S GRANT SECTION 1, AREA 1
 PARCEL 'A'
 16031 ED WARFIELD ROAD
 TAX MAP NO.: 13 GRID NO.: 23 PARCEL NO.: 334
 ZONED B-2
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: APRIL, 2020
 SHEET 6 OF 13



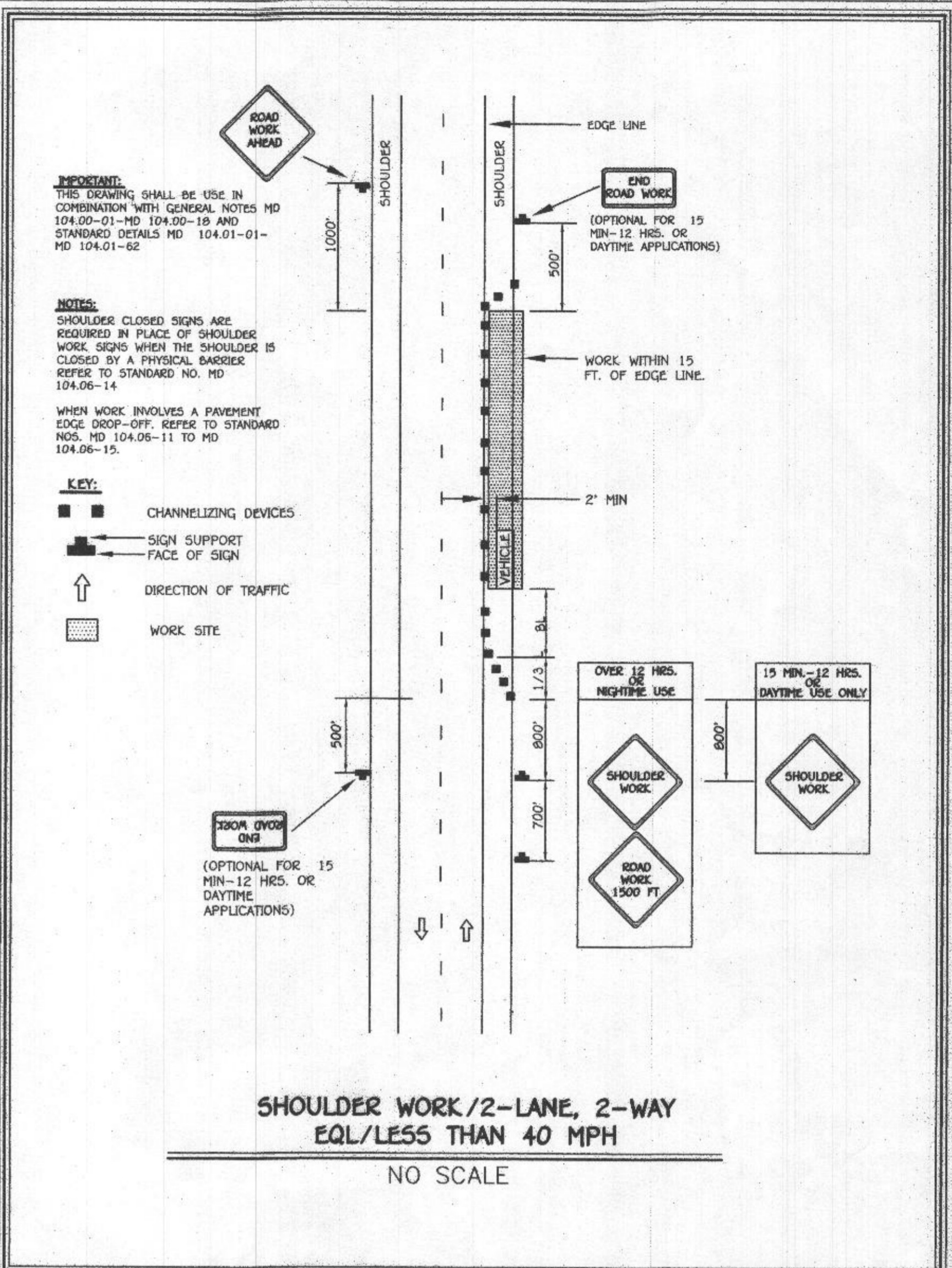
HANDICAP PARKING DETAIL
SCALE: 1" = 20'

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)						
		3 TO <5			5 TO <7			
P-1	PARKING BAYS: RESIDENTIAL AND NON-RESIDENTIAL PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY	PAVEMENT MATERIAL (INCHES)		MIN. SUPERPAVE ASPHALT MIX WITH GAB	MIN. SUPERPAVE ASPHALT MIX WITH CONSTANT GAB			
		SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM PG 64-225, LEVEL 1 (ESAL)		1.5	1.5	1.5	1.5	1.5
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 9.5 MM PG 64-225, LEVEL 1 (ESAL)		NA	NA	NA	NA	NA
		SUPERPAVE ASPHALT MIX BASE 19.0 MM PG 64-225, LEVEL 1 (ESAL)		2.0	2.0	2.0	3.5	3.0
		GRADED AGGREGATE BASE (GAB)		8.5	7.0	5.0	4.0	

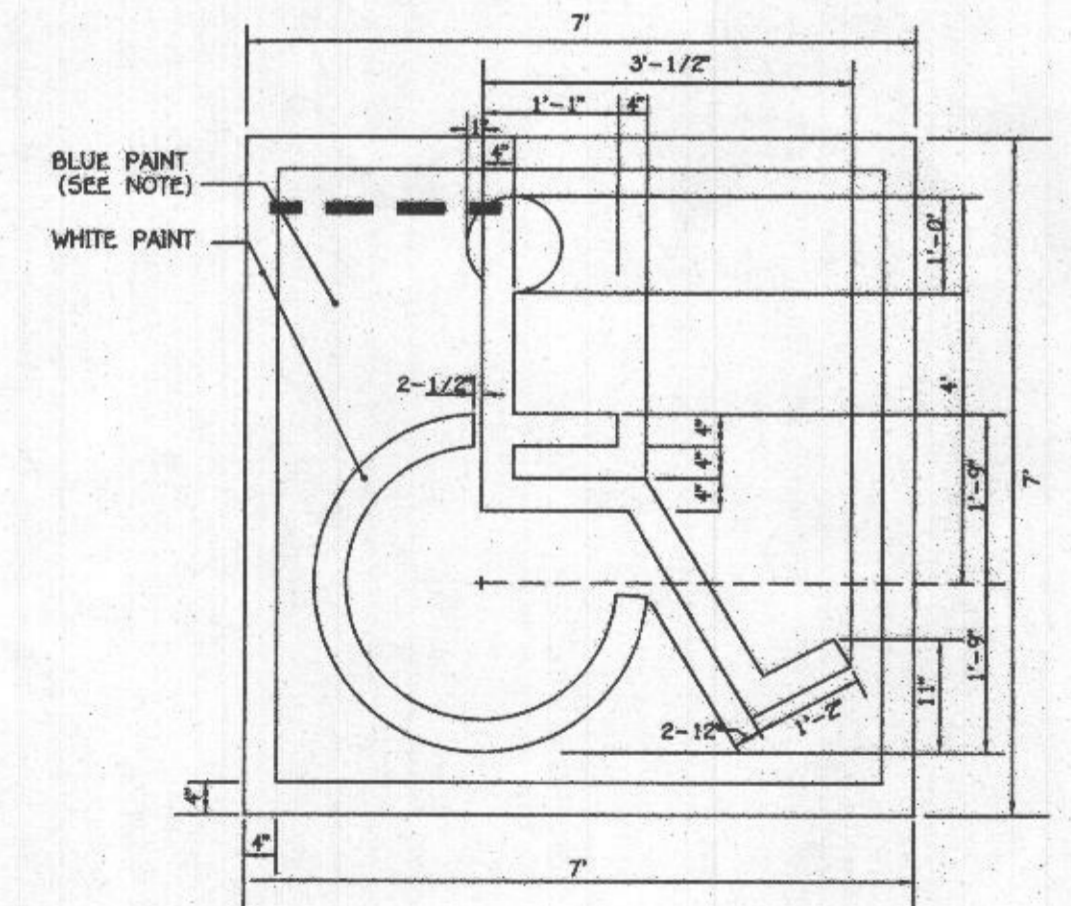


- GENERAL NOTES:**
- SIGNS SHALL MEET DESIGN STANDARDS OF THE FEDERAL HIGHWAY ADMINISTRATION AND CONFORM TO THE STATE OF MARYLAND STANDARD HIGHWAY SIGN BOOKLET DETAIL R7-8.
 - ONE SIGN IS REQUIRED PER SPACE PLACED AS SHOWN ON SITE IMPROVEMENT PLAN.
 - SIGNS SHALL BE POLE MOUNTED WITH HOT DIPPED GALVANIZED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

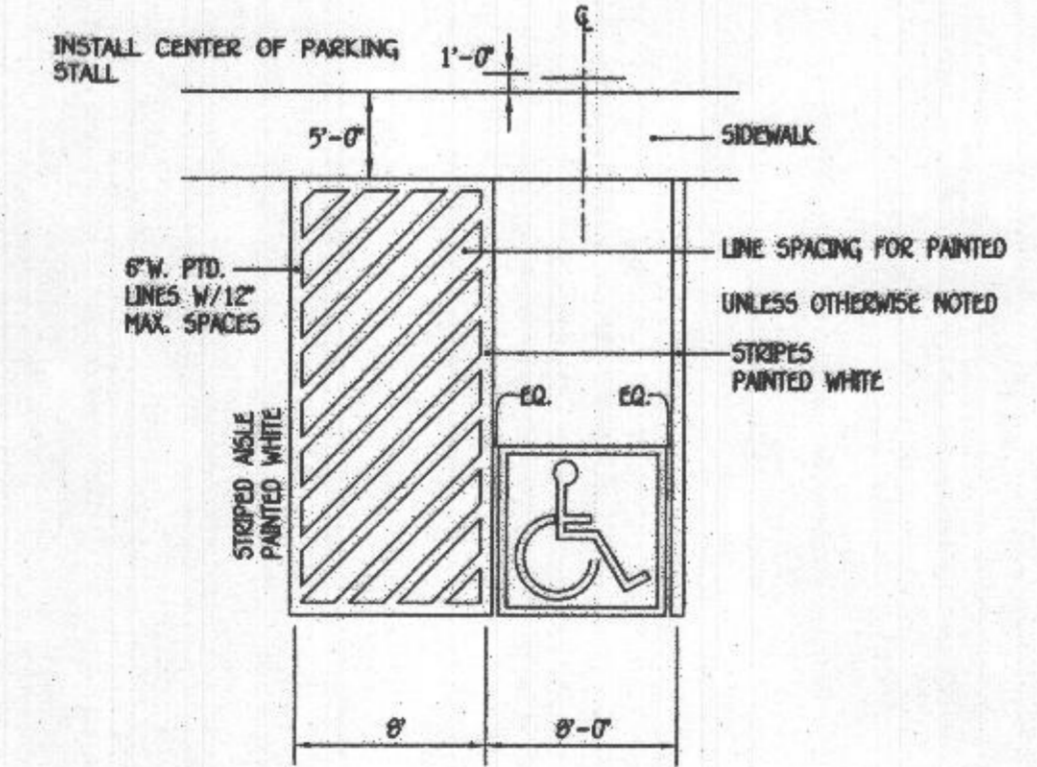
HANDICAP PARKING SIGN DETAIL
NOT TO SCALE



**SHOULDER WORK /2-LANE, 2-WAY
EQL/LESS THAN 40 MPH**
NO SCALE



HANDICAP SPACE STENCIL LAYOUT
SCALE: 1" = 20'

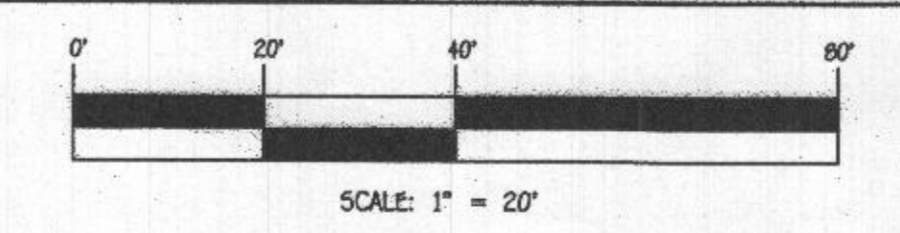


ACCESSIBLE SPACE LAYOUT
SCALE: 1" = 20'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALDWIN NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 481-2295



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. 21478, EXPIRATION DATE: 7/14/21.
Frank H. Hanawan II
DATE: 5/21/20



OWNER
DANSY CROSSROADS LLC
18135 ED WARFIELD ROAD
WOODGLEN, MD 21797-7811

DEVELOPER
RYAN MCWHORTER
8991 REDBERRY ROAD
CLARESVILLE, MD 21029
(410)-984-5613

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development: *[Signature]* Date: 4/29/20

Chief, Development Engineering Division: *[Signature]* Date: 11-30-20

Director - Department of Planning and Zoning

PROJECT	PHASE	PARCEL NO.
MCWHORTER PROPERTY	N/A	334

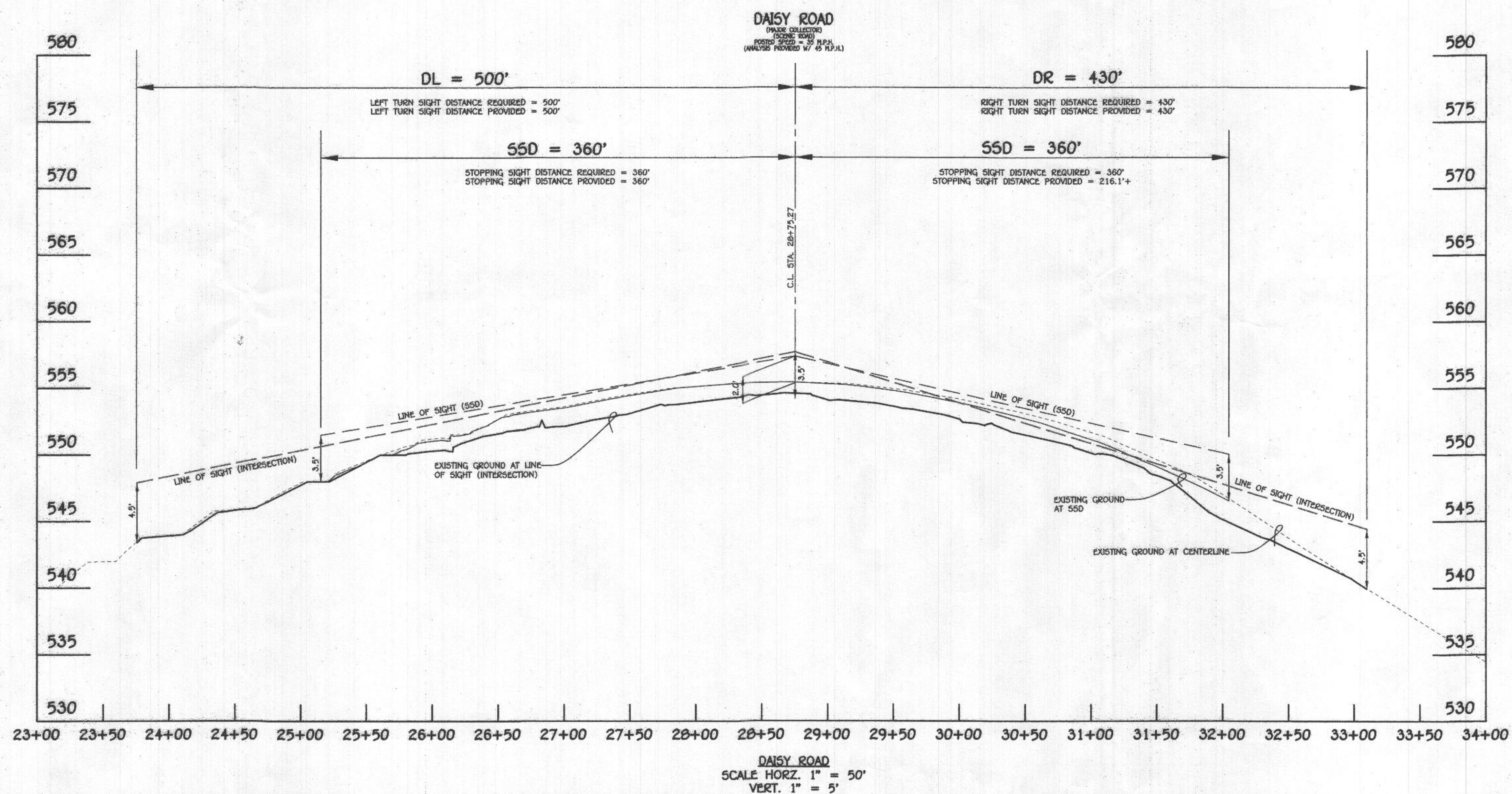
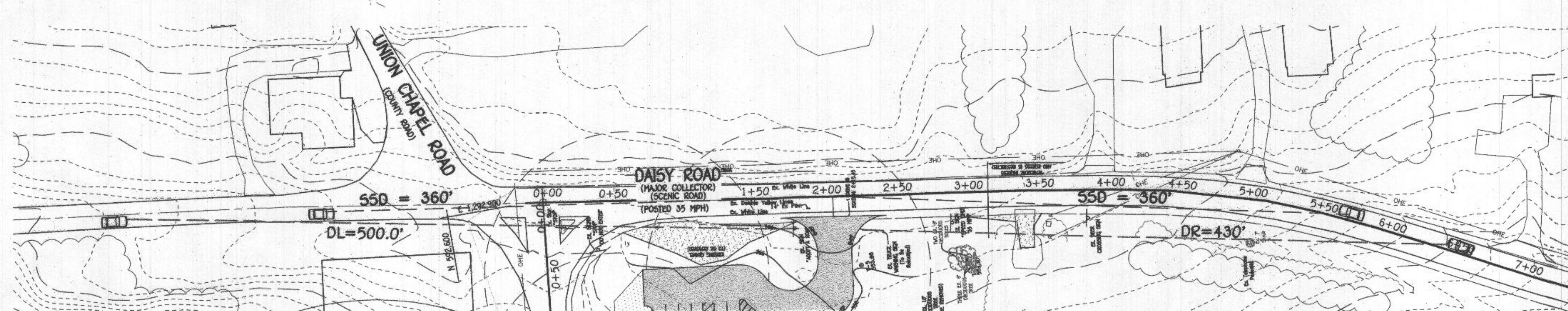
PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
9800-9802	23	B-2	13	4	24027604002

PREVIOUS HOWARD COUNTY FILES:
ECP-19-062, F-90-56

ROAD AND HANDICAP NOTES & DETAILS

MCWHORTER PROPERTY
WARFIELD'S GRANT SECTION 1, AREA 1
PARCEL 'A'
16031 ED WARFIELD ROAD
TAX MAP NO.: 13 GRID NO.: 23 PARCEL NO.: 334
ZONED B-2
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: APRIL, 2020
SHEET 7 OF 13

SDP-20-012



DAISY ROAD
SCALE HORZ. 1" = 50'
VERT. 1" = 5'

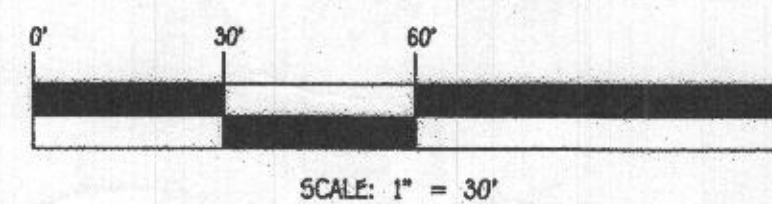
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SERVICE OFFICE, P.O. BOX 10272 BALTIMORE, MARYLAND 21286
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2895



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 Mansorian II
FRANK MANSORIAN II
DATE: 5/2/20



OWNER

DAISY CROSSROADS LLC
15105 ED WARFIELD ROAD
WOODBINE, MD 21797-7811

DEVELOPER

RYAN MCWHORTER
6851 REDBERRY ROAD
CLARKSVILLE, MD 21029
(410)-984-5813

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development
Date: 11/23/20

Chief, Development Engineering Division
Date: 11-3-20

Director, Department of Planning and Zoning

PROJECT	PHASE	PARCEL NO.
MCWHORTER PROPERTY	N/A	334
PLAT	BLOCK NO.	ZONE
9800-9802	23	B-2
TAX/ZONE	ELEC. DIST.	CENSUS TR.
13	4	24027604002
PREVIOUS HOWARD COUNTY FILES: ECP-19-062, F-90-56		

SITE DISTANCE ANALYSIS

MCWHORTER PROPERTY
WARFIELD'S GRANT SECTION 1, AREA 1
PARCEL 'A'
16031 ED WARFIELD ROAD

TAX MAP NO.: 13 GRID NO.: 23 PARCEL NO.: 334
ZONED B-2

FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: APRIL, 2020
SHEET 8 OF 13

SDP-20-012