

SHEET INDEX

NO	TITLE
1	COVER SHEET
2	SITE DEVELOPMENT AND LANDSCAPE PLAN
3	STORMWATER MANAGEMENT PLAN
4	SEDIMENT CONTROL NOTES AND DETAILS
5 & 6	HOUSE MODELS

PERMIT INFORMATION BLOCK					
SUBDIVISION NAME: KERGER WOODS, LOTS 1-5		SECTION/AREA: N/A	PARCEL: 327		
PLAT NO. 25270-71	BLOCK(S) 15	ZONING R-20	TAX MAP NO. 31	ELECTION DISTRICT FIRST	CENSUS TRACT 601103

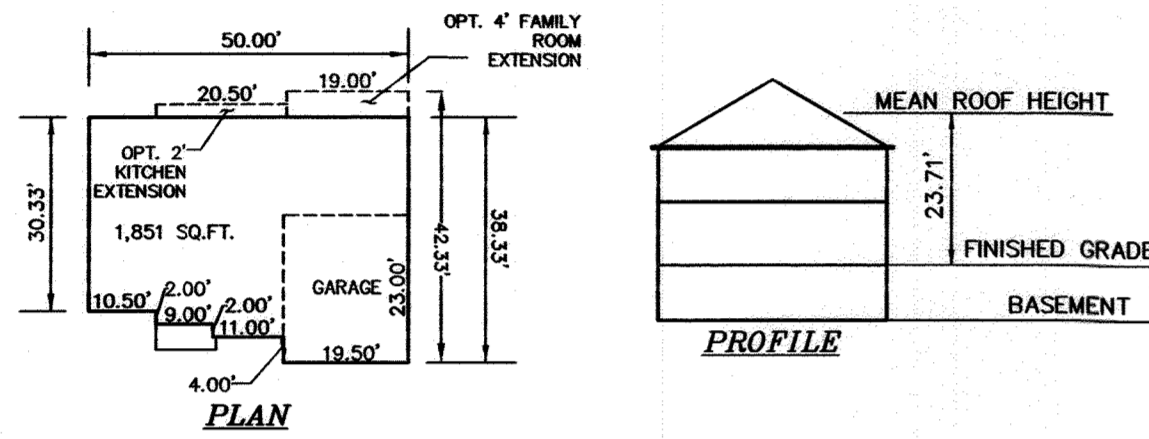
ADDRESS CHART

LOT #	ADDRESS
1	5301 THOMAS WYATT WAY
2	5305 THOMAS WYATT WAY
3	5309 THOMAS WYATT WAY
4	5304 THOMAS WYATT WAY

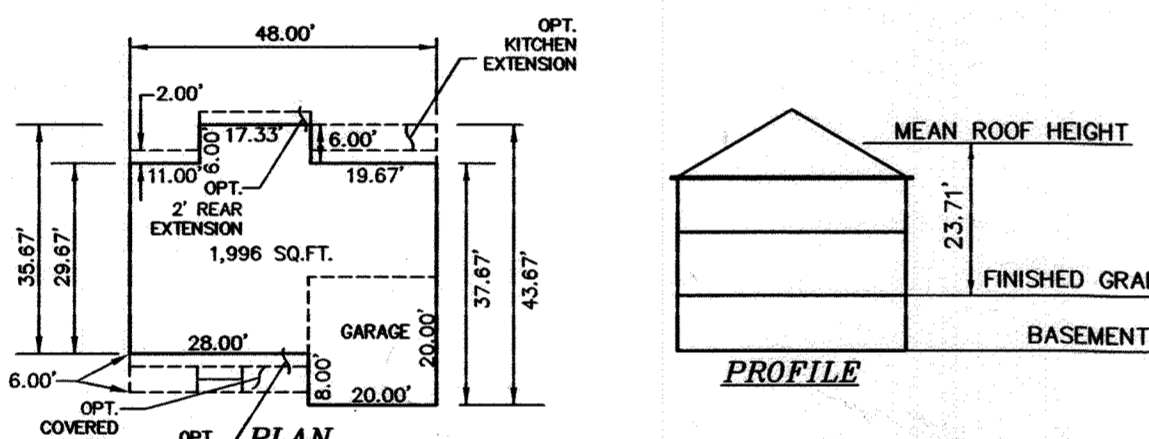
STORMWATER MANAGEMENT PRACTICES CHART

LOT NO.	DRY WELLS M-5 (NUMBER)	MICRO-BIORETENTION M-6 (NUMBER)	GRASS SWALE M-8 (Y/N)
1	4	-	N
2	4	-	N
3	4	1	N
4	4	-	N

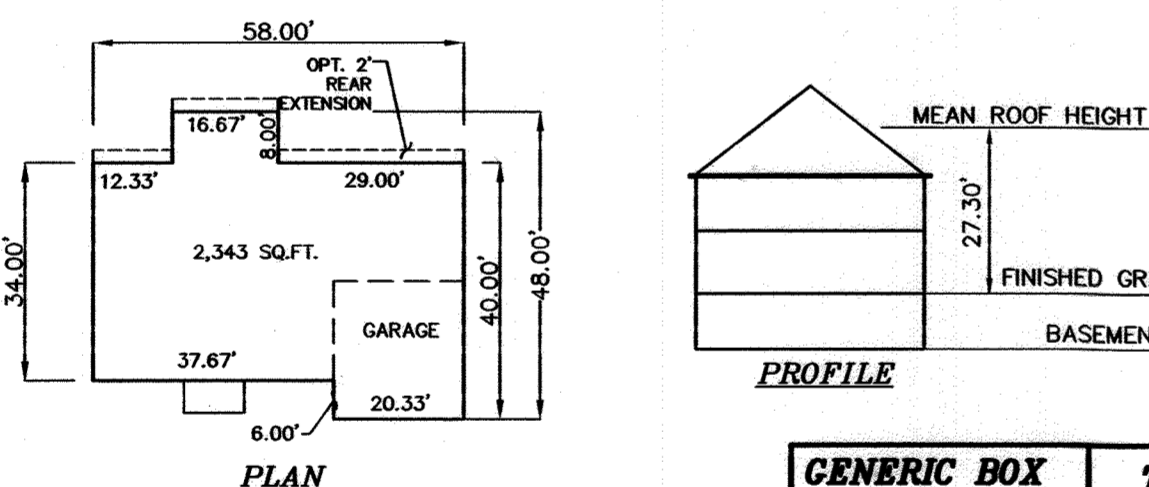
UIC DRIVEWAY - 3 Y



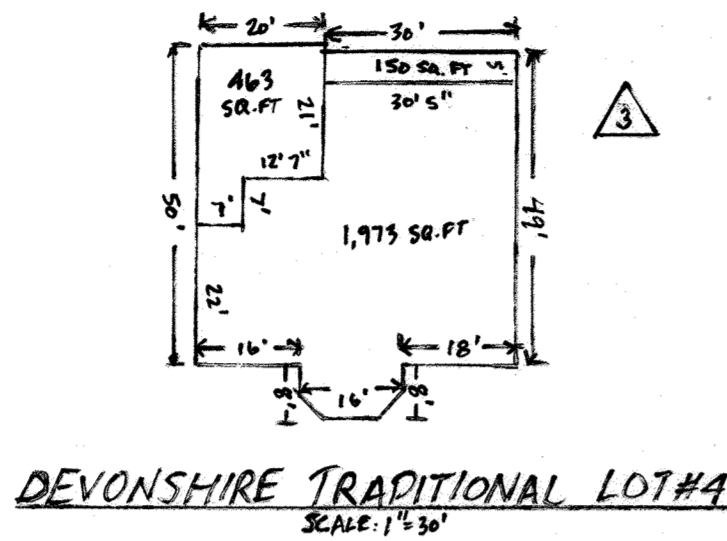
THE THOMAS  
SCALE: 1"=30'



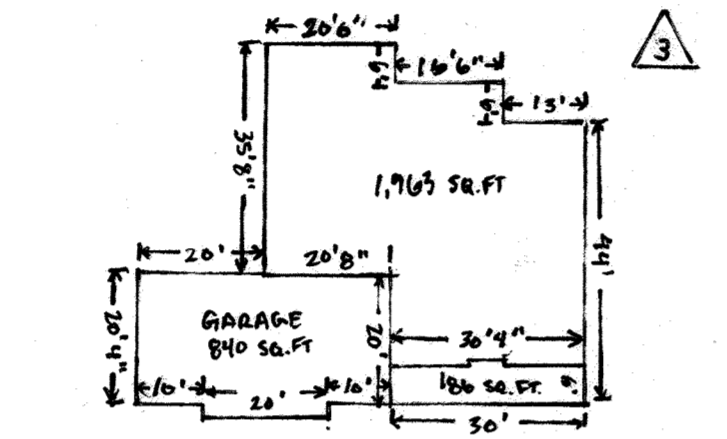
THE GERALD  
SCALE: 1"=30'



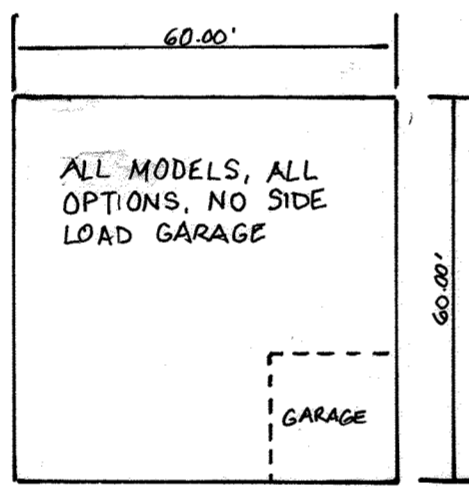
THE WYATT  
SCALE: 1"=30'



DEVONSHIRE TRADITIONAL LOT #4  
SCALE: 1"=30'



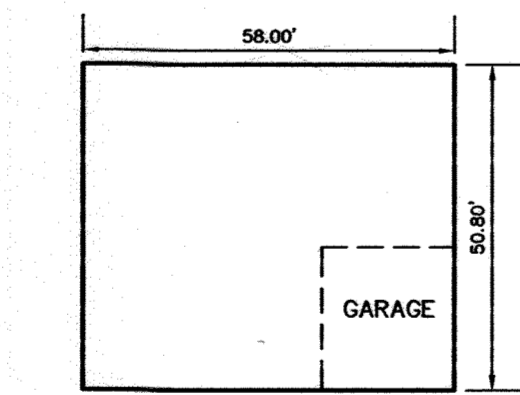
HANTHORN HERITAGE LOT #3  
SCALE: 1"=30'



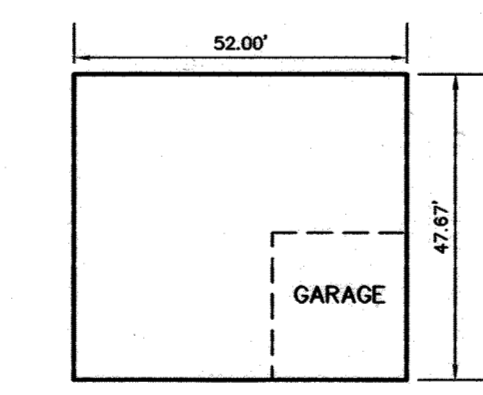
GENERIC BOX 'C'

HOUSE TYPE SELECTION CHART

GENERIC BOX	THE THOMAS	THE GERALD	THE WYATT
A	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS
B	ALL OPTIONS	ALL OPTIONS	DOES NOT FIT



GENERIC BOX 'A'  
SCALE: 1"=30'



GENERIC BOX 'B'  
SCALE: 1"=30'

NOTES:

- HOUSE AREA SHOWN INCLUDES ALL OPTIONS.
- IF THE FOOTPRINT AREA OF ANY OF THE SELECTED HOUSE MODELS WITH THEIR CHOSEN OPTIONS EXCEED 2,200 SQUARE FEET, THE STORMWATER MANAGEMENT FOR THAT PARTICULAR LOT WILL BE REDESIGNED.

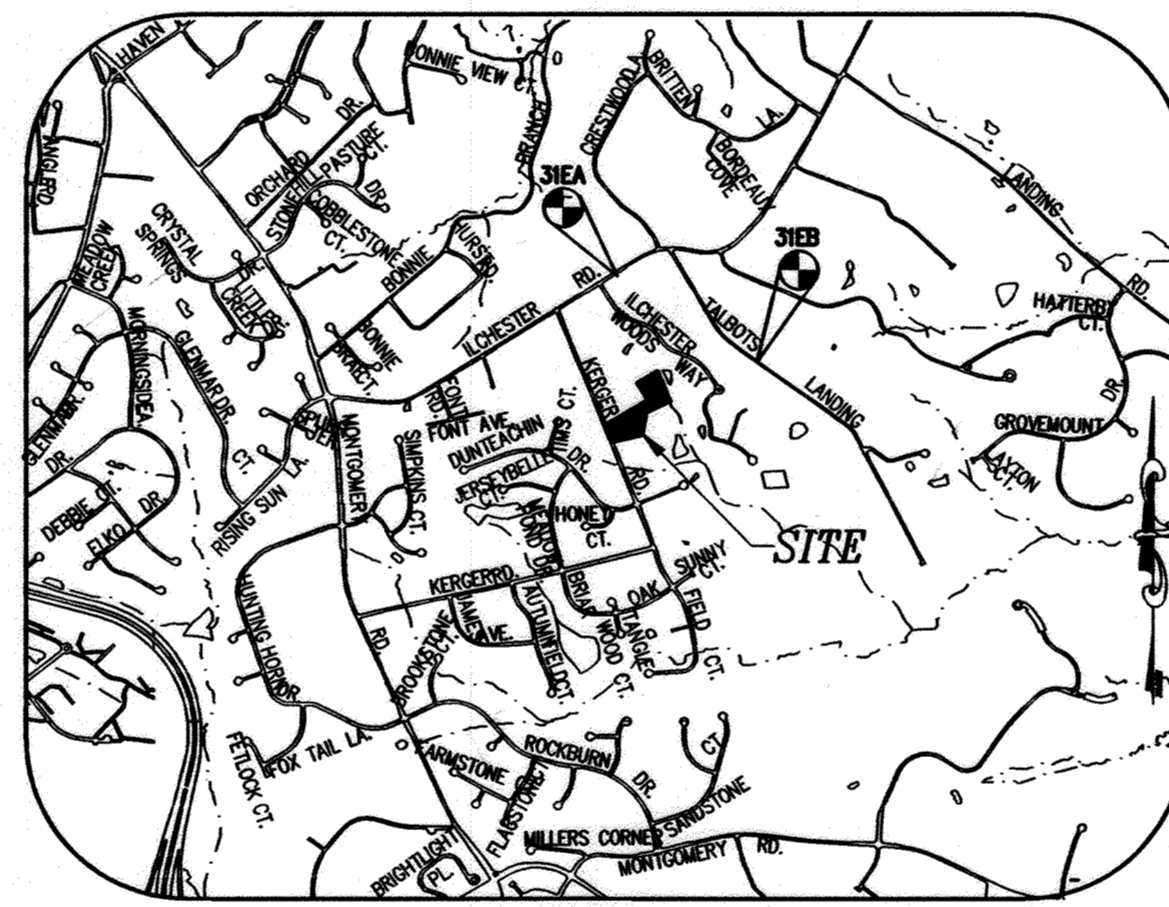
# SITE DEVELOPMENT PLAN

## KERGER WOODS

### LOTS 1 THRU 4

### FIRST ELECTION DISTRICT

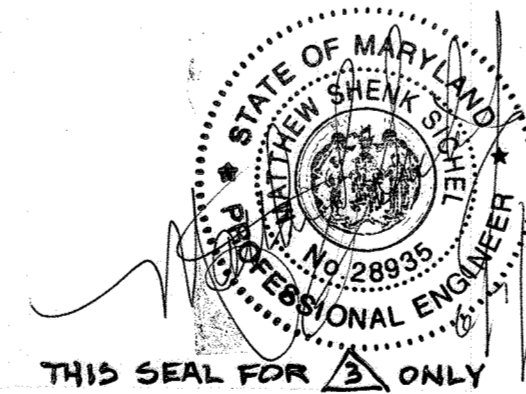
### HOWARD COUNTY, MARYLAND



VICINITY MAP  
SCALE: 1"=2000'

GENERAL NOTES:

- SUBJECT PROPERTY ZONED "R-20" PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS.
- SITE ANALYSIS DATA:  
LOCATION: TAX MAP: 31 PARCEL: 327 GRID: 15  
ELECTION DISTRICT: FIRST  
ZONING: R-20  
TOTAL TRACT AREA: 3.60 AC±  
AREA OF PLAN SUBMISSION (LOTS 1-4): 3.60 AC±  
LIMIT OF DISTURBANCE: 1.47 AC±  
PROPOSED USE FOR SITE: RESIDENTIAL  
TOTAL NUMBER OF UNITS: 4  
TYPE OF PROPOSED UNITS: SFD  
NUMBER OF REQUIRED PARKING SPACES: 4 UNITS x 2.5 SPACES = 10 SPACES  
NUMBER OF PARKING SPACES PROVIDED: 4 SPACES PER UNIT; 4x4 = 16 SPACES  
DPZ FILE NUMBERS: F-19-053, ECP-19-001, WP-19-028
- PROJECT BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT MAY 2018 BY MILDENBERG, BOENDER & ASSOC., INC.
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 31EA & 31EB  
STA. NO. 31EA EL. 468.877 N 569,641.138 E 1,374,816.086  
STA. NO. 31EB EL. 452.657 N 568,730.995 E 1,376,273.635
- EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY, WITH MAXIMUM TWO FOOT CONTOUR INTERVALS, PERFORMED ON OR ABOUT MAY, 2018 BY MILDENBERG, BOENDER & ASSOC., INC.
- NO CEMETERIES EXIST ON SITE.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- STEEP SLOPES GREATER THAN 25% AND OVER 20,000 SQ. FT. IN AREA DO NOT EXIST ON SITE.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:  
A) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE).  
B) SURFACE - 8 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2").  
C) GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. OF 45 FOOT TURNING RADIUS.  
D) STRUCTURES (CULVERT/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (M25 LOADING).  
E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD PLAIN WITH NO MORE THAN 1 FOOT OF DEPTH OVER DRIVEWAY SURFACE.  
F) STRUCTURE CLEARANCES - MINIMUM 12 FEET  
G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- FOREST CONSERVATION OBLIGATION REQUIREMENTS FOR THIS PROJECT HAVE BEEN PROVIDED VIA PAYMENT OF FEE-IN-LIEU IN THE AMOUNT OF \$19,602 FOR THE REQUIRED 0.6 ACRES (26,136 SQ. FT.) OF AFFORESTATION UNDER F-19-053.
- LANDSCAPING FOR LOTS 1 THRU 4 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. SURETY IN THE AMOUNT OF \$17,850 (34 SHADE TREES, 51 EVERGREENS) FOR THE REQUIRED LANDSCAPING WILL BE PROVIDED WITH THE GRADING PERMIT APPLICATION.
- THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPE MATERIALS AND BERMS, FENCES, AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWIT LISTED AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTION OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM LOT AND ROAD RIGHT-OF-WAY LINE AND NOT TO THE PIPESTEM LOT DRIVEWAY.
- STORMWATER MANAGEMENT REQUIREMENTS WILL BE SATISFIED VIA MICRO-BIORETENTION FACILITIES AND DRY WELLS AND BE PRIVATELY OWNED AND MAINTAINED, AS APPROVED UNDER F-19-053.
- THE OPEN SPACE REQUIREMENT FOR THIS PROJECT WAS MET BY A PAYMENT OF FEE-IN-LIEU IN THE AMOUNT OF \$6,000.00 UNDER F-19-053.
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED UNDER CONTRACT # 266W (WATER) AND # 10-1215-D (SEWER).
- THIS DEVELOPMENT IS DESIGNED TO BE IN ACCORDANCE WITH SECTION 16.127 RESIDENTIAL INFILL DEVELOPMENT OF SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE DEVELOPER OF THIS PROJECT SHALL CREATE COMPATILITY WITH THE EXISTING NEIGHBORHOOD THROUGH THE USE OF ENHANCED PERIMETER LANDSCAPING, BERMS, FENCES, SIMILAR HOUSE TYPES AND THE DIRECTIONAL ORIENTATION OF THE PROPOSED HOUSES.
- NO WETLANDS AND ITS BUFFER EXIST ON SITE AS CERTIFIED IN THE WETLAND AND FSD LETTER PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. IN JUNE 2018 UNDER F-19-053.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (CONV. BILL 45-2003). DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION OR BUILDING/GRADING PERMIT.
- LOTS 1-4 IN THIS PROJECT ARE SUBJECT TO THE MIHU FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MARYLAND STATE HIGHWAY ADMINISTRATION STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410)313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- IN ACCORDANCE WITH SECTION 128.0 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACK, PORCHES OR DECKS, OPEN OR ENCLOSED, MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- EXISTING UTILITIES ARE BASED ON AS-BUILT PLANS FOR WATER AND SEWER CONTRACTS AND ARE VERIFIED BY FIELD RUN SURVEY CONDUCTED BY MILDENBERG, BOENDER & ASSOC., INC.
- NO 100 YEAR FLOODPLAIN EXISTS ON THIS SITE.
- THIS PLAN IS SUBJECT TO WP-19-028, SEEKING AN ALTERNATIVE COMPLIANCE TO SECTIONS 16.1205(a)(7) WHICH STATES THAT STATE CHAMPION TREES, TREES 75% OF THE DIAMETER OF STATE CHAMPION TREES AND TREES 30" IN DIAMETER OR LARGER SHALL BE LEFT IN AN UNDISTURBED CONDITION DURING CONSTRUCTION. THIS ALTERNATIVE COMPLIANCE WAS APPROVED ON OCTOBER 25, 2018, SUBJECT TO THE FOLLOWING CONDITIONS:  
1. ADD THE ALTERNATIVE COMPLIANCE PETITION WP-19-028, ON ALL PROPOSED PLANS AS A GENERAL NOTE STATING THE REQUEST, THE APPROVAL DATE AND CONDITIONS.  
2. SHOW THE 2 SPECIMEN TREES BEING REMOVED AND LABELED PER WP-19-028 ON ALL PLANS. THE SPECIMEN TREE REMOVAL WILL BE MITIGATED BY THE PLANTING OF 4 PERIMETER LANDSCAPE TREES OF 2.5" TO 3" CALIBER.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 48 HOURS PRIOR TO EXCAVATION WORK BEING DONE:  
MISS UTILITY 800-257-7777  
VERIZON TELEPHONE COMPANY (410) 725-9976  
HOWARD COUNTY BUREAU OF UTILITIES (410) 313-6900  
AT&T CABLE LOCATION DIVISION (410) 393-3533  
BALTIMORE GAS AND ELECTRIC (410) 685-0123  
STATE HIGHWAY ADMINISTRATION (410) 531-5533
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR REQUIRED BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
- SHC ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.
- FOR DRIVEWAY ENTRANCE DETAIL, REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6-6.
- A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-2430 FOR DETAILS AND COST ESTIMATES.



"PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28935, EXPIRATION DATE: 1/16/23"

MIHU ALLOCATION EXEMPTION TRACKING

TOTAL NUMBER OF LOTS/UNITS	4
NUMBER OF MIHU REQUIRED	0
NUMBER OF MIHU PROVIDED ONSITE (EXEMPT FROM AFPO ALLOCATIONS)	0
NUMBER OF AFPO ALLOCATION REQUIRED (REMAINING LOTS/UNITS)	0
MIHU FEE-IN-LIEU (INDICATED LOT/UNIT NUMBERS)	1-4

DEVELOPERS CERTIFICATE  
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
Signature of Developer: Thomas James O'Neill, Jr.  
Date: 5-27-21

ENGINEER'S 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 of Engineer: Samer A. Alomer, P.E.  
Date: 08/30/2020

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Chief, Development Engineering Division: [Signature]  
Date: 6-14-21  
Chief, Division of Land Development: [Signature]  
Date: 6-23-21  
Director: [Signature]  
Date: 6-23-21

STATE OF MARYLAND PROFESSIONAL ENGINEER  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28859, EXP. DATE 08/08/21.  
Signature: Samer A. Alomer, P.E.  
Date: 08/30/2020

OWNER/DEVELOPER  
THOMAS O'NEILL  
GERARD O'NEILL  
5239 KERGER ROAD  
ELLCOTT CITY, MD 21043  
410-292-4831

LOTS 1-4 IN THIS PROJECT ARE SUBJECT TO THE MODERATE INCOME HOUSING UNIT (MIHU) FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.

project	date	description	scale	date
18-011	AUG.2020	engineering	MM/M/AMT	MM/
		illustration	MM/AMT	MM/
			MM/AMT	MM/
			MM/AMT	MM/

ADD LOT 3 AND 4 HOUSE LAYOUT	date
ADD GENERAL BOX 'C'	NOV.2021
	NOV.2021

KERGER WOODS  
LOTS 1 THRU 4  
TAX MAP 31 GRID 15 PARCEL 327  
HOWARD COUNTY, MARYLAND  
FIRST ELECTION DISTRICT  
COVER SHEET

MILDENBERG, BOENDER & ASSOC., INC.  
Engineers, Planners, Surveyors  
7350-B Grace Drive, Columbia, Maryland 21044  
(410) 997-0296 Fax  
(410) 997-0298 Tel.

**SOILS TABLE**

SYMBOL	RATING	NAME	K FACTOR	MAP NO.	COMMENTS
ChB	(B)	CHILLUM-RUSSETT LOAMS, 2-5% SLOPES	.37	19	
ChC	(B)	CHILLUM-RUSSETT LOAMS, 5-10% SLOPES	.37	19	HIGHLY ERODIBLE
Fa	(D)	FALLSINGTON SANDY LOAM, 0-2% SLOPES	.20	19	

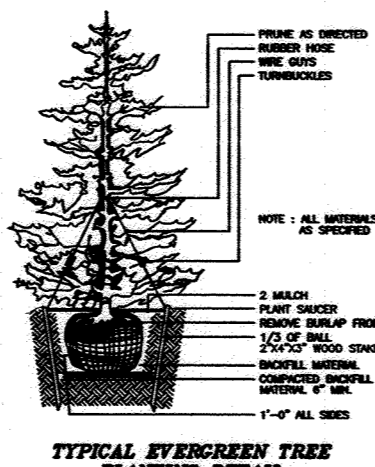
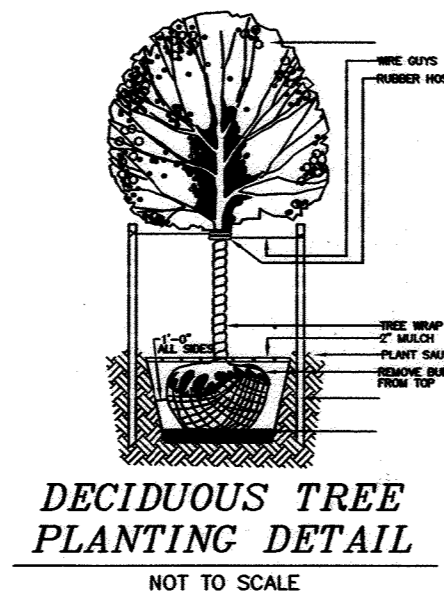
**SCHEDULE A : PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO PERIMETER PROPERTIES								TOTAL
	B (PERIMETER 1)	B (PERIMETER 2)	B (PERIMETER 3)*	B (PERIMETER 4)**	B (PERIMETER 5)***	B (PERIMETER 6)	B (PERIMETER 7)****	N/A (PERIMETER 8)	
LANDSCAPE TYPE	486.01 LF	212.78 LF	244.60 LF	341.99 LF	283.02 LF	237.75 LF	123.81 LF	85.75 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO	YES	YES	YES	NO	YES	N/A	
NUMBER OF PLANTS REQUIRED									
SHADE TREES	10	4	5	7	6	5	2	0	39
EVERGREEN TREES	15	5	6	9	7	6	3	0	51
SHRUBS	0	0	0	0	0	0	0	0	0
NUMBER OF PLANTS PROVIDED									
SHADE TREES	10	4	9	1	5	5	0	0	34
EVERGREEN TREES	15	5	9	9	7	6	3	0	51
OTHER TREES (2:1 SUBSTITUTION)	0	0	0	0	0	0	0	0	0
SHRUBS (10:1 SUBSTITUTION)	0	0	0	0	0	0	0	0	0

(PERIMETER 3)\*--CREDIT TAKEN FOR 3 EXISTING TREES, 4 ADDITIONAL SHADE TREES HAVE BEEN PROVIDED AS PER CONDITION OF WP-19-028 APPROVAL.  
 (PERIMETER 4)\*\*--CREDIT TAKEN FOR 6 EXISTING TREES.  
 (PERIMETER 5)\*\*\*--CREDIT TAKEN FOR 1 EXISTING TREES.  
 (PERIMETER 7)\*\*\*\*--CREDIT TAKEN FOR 2 EXISTING TREES.  
 --NOTE-- SEE GENERAL NOTE 12 REGARDING THE REQUIRED LANDSCAPING SURETY.

**PERIMETER LANDSCAPE REQUIREMENT PLANTING SCHEDULE**

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
18	(Symbol)	PRUNUS SARGENTII OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	SARGENT CHERRY	2.5"-3" CAL.
16	(Symbol)	ACER RUBRUM (R) OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	RED MAPLE	2.5"-3" CAL.
51	(Symbol)	OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	ELEGANTISSIMA ARBORVITAE	2.5"-3" CAL.
TOTAL		34 SHADE TREES, 51 EVERGREENS		



**OWNER/DEVELOPER**

THOMAS O'NEILL  
 GERARD O'NEILL  
 5239 KERGER ROAD  
 ELLICOTT CITY, MD 21043  
 410-292-4831

**DEVELOPERS CERTIFICATE**

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

Signature of Developer: *Thomas James O'Neill Jr.*  
 DATE: 5-27-21

**ENGINEER'S 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.

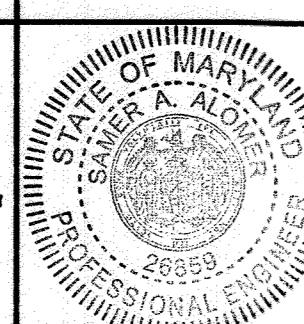
Signature of Engineer: *Samer A. Alomer P.E.*  
 DATE: 08/30/2020

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

Signature of District Director: *Alexander Britcher*  
 DATE: 06/03/21

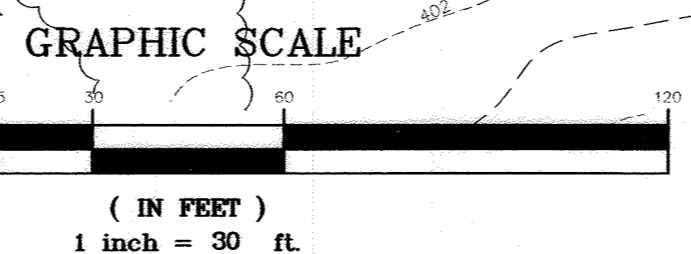
APPROVED DEPARTMENT OF PLANNING AND ZONING  
 Signature: *[Signature]*  
 DATE: 6/14/21  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Signature: *[Signature]*  
 DATE: 6/24/21  
 CHIEF, DIVISION OF LAND DEVELOPMENT



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26859, EXP. DATE 08/08/21.

Signature: *Samer A. Alomer P.E.*  
 DATE: 08/30/2020



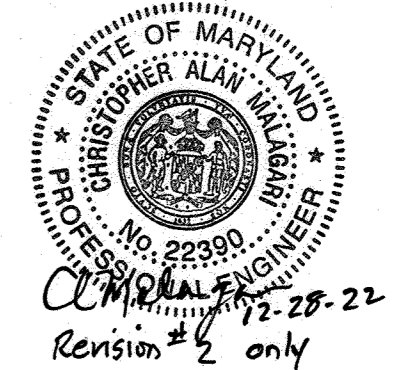
**DEVELOPER'S/OWNER'S CERTIFICATE**

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO A PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE, AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Signature: *[Signature]*  
 DATE: 5-27-21

**LEGEND**

- EXIST. TREE LINE
- PROP. TREE LINE
- EXIST. SPECIMEN TREE
- EXIST. POWER POLE
- OVERHEAD ELEC.
- MINOR CONTOUR
- MAJOR CONTOUR
- PROPOSED SILT FENCE
- PROPOSED SUPER SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- LIMITS OF DISTURBANCE
- PROPOSED DRIVEWAY
- EX. PRIVATE USE-IN-COMMON ACCESS, STORMWATER MANAGEMENT AND UTILITY EASEMENT, PLAT# 25270-71



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 22390, Expiration Date: 6-20-23

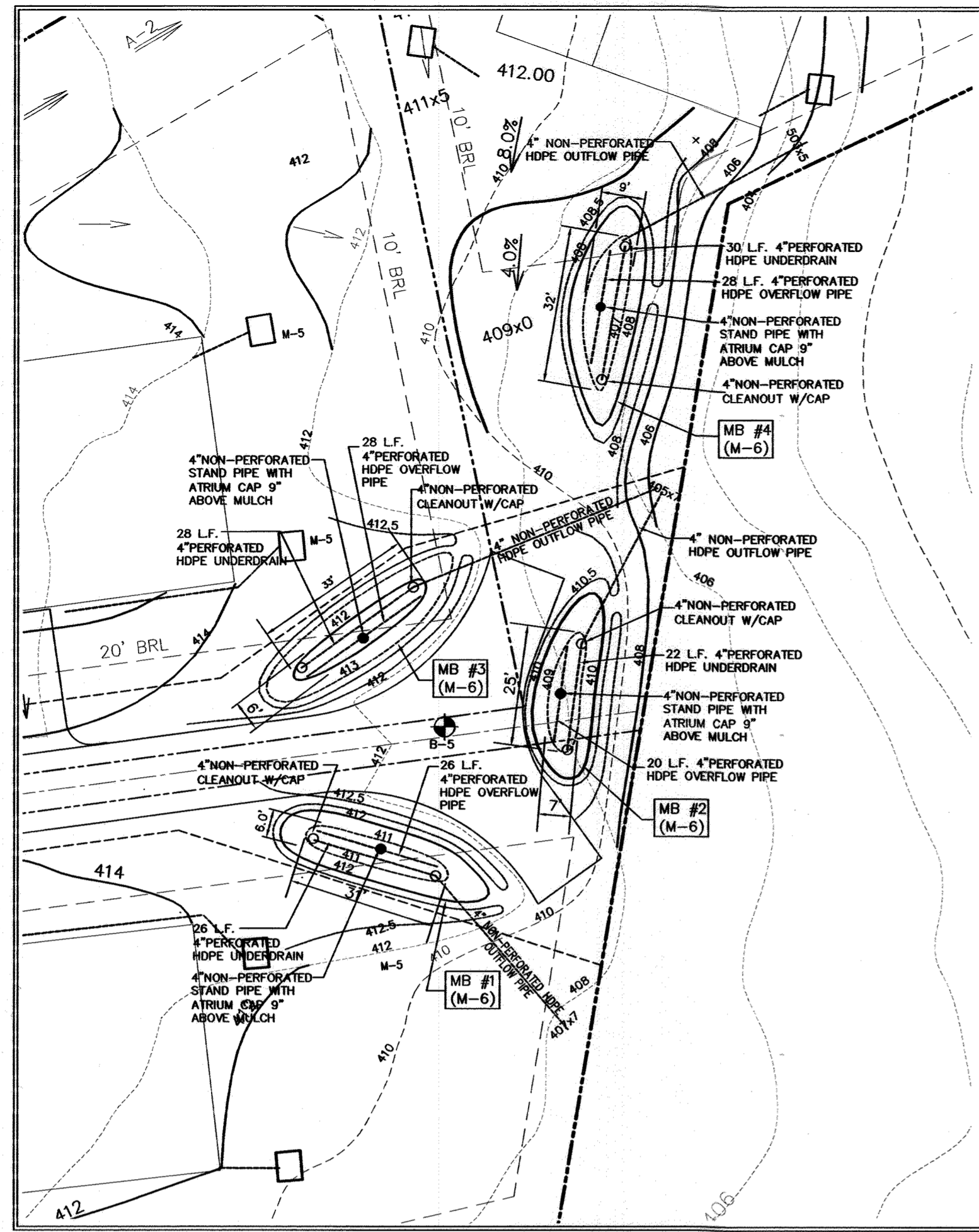
P: 2004/18-011/DWG/KERGER WOODS

project	18-011	date	AUG. 2020
illustration	MM/AMT	engineering	MM
scale	1"=30'	approval	MM
description			
revisions			

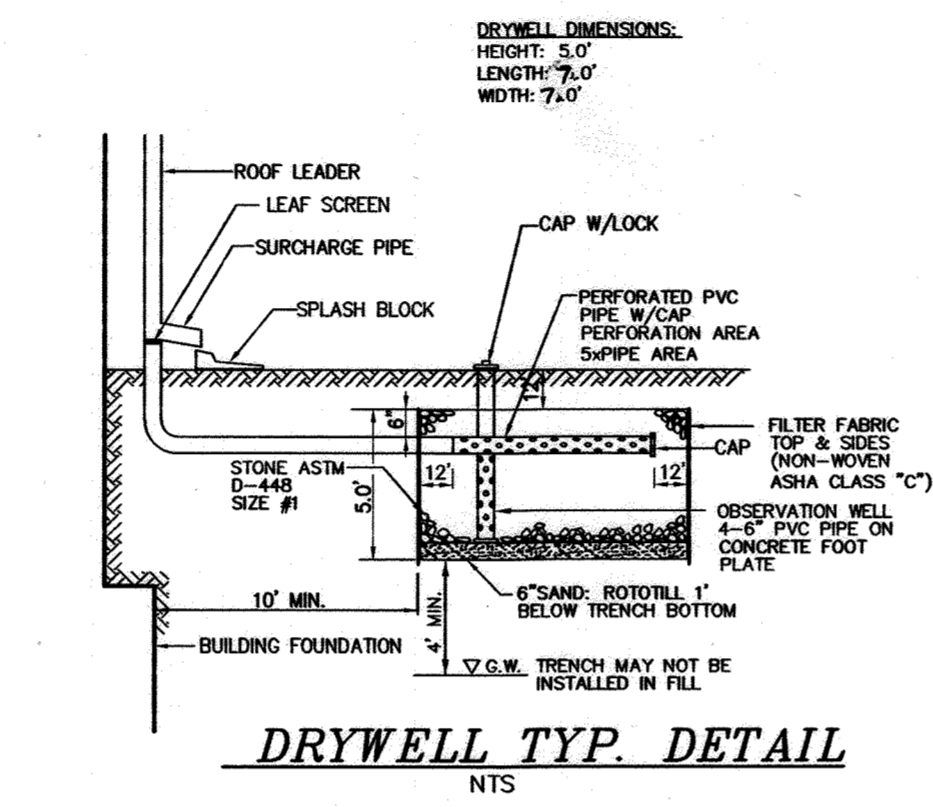
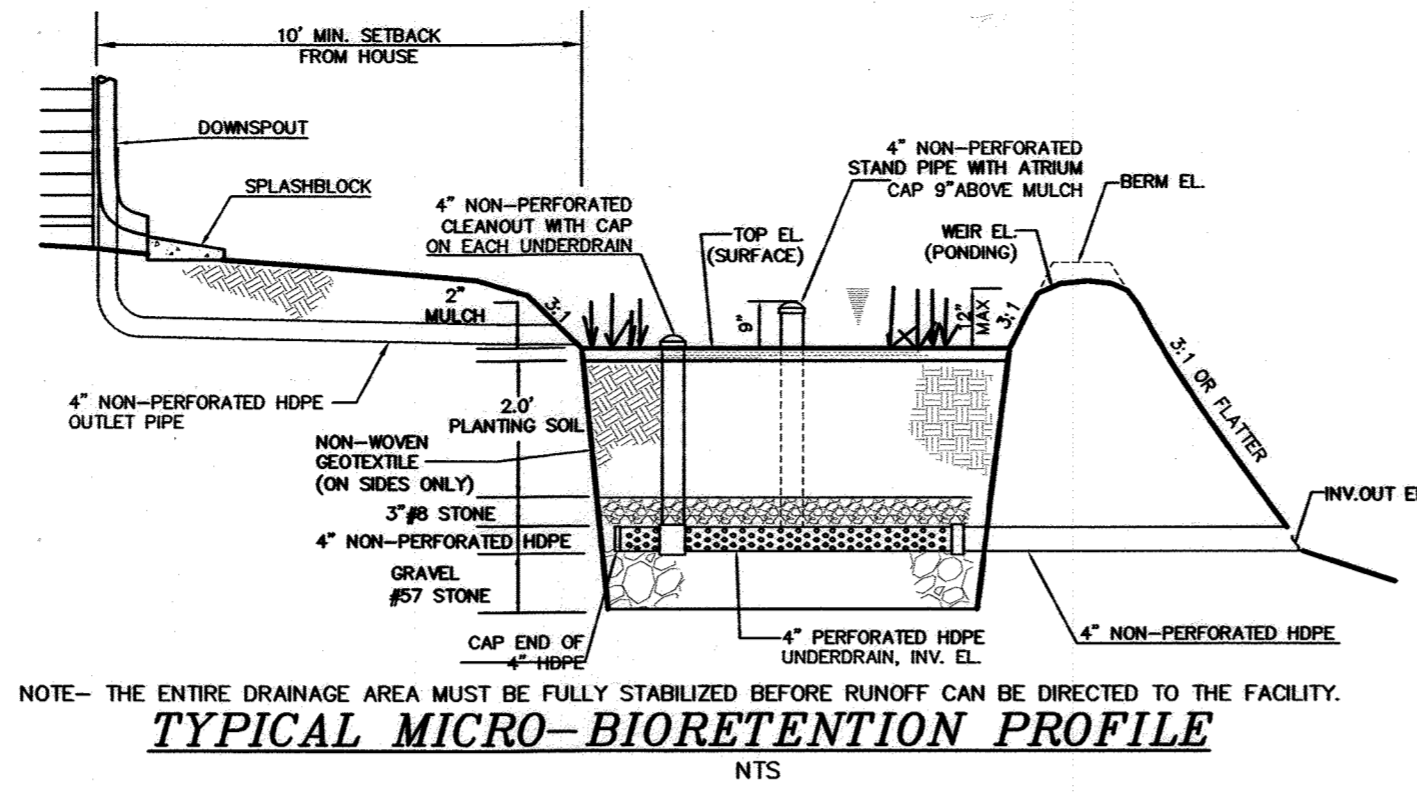
2	Revised to Remove Existing Driveway on Lot 1	12/24/22	date
	ADD GARAGE, 30' x 40', ALL LOTS, REMOVE GRASS		

**KERGER WOODS**  
 LOTS 1 THRU 4  
 TAX MAP 31 GRID 15 PARCEL 327  
 HOWARD COUNTY, MARYLAND  
 1ST ELECTION DISTRICT  
**SITE DEVELOPMENT AND LANDSCAPE PLAN**

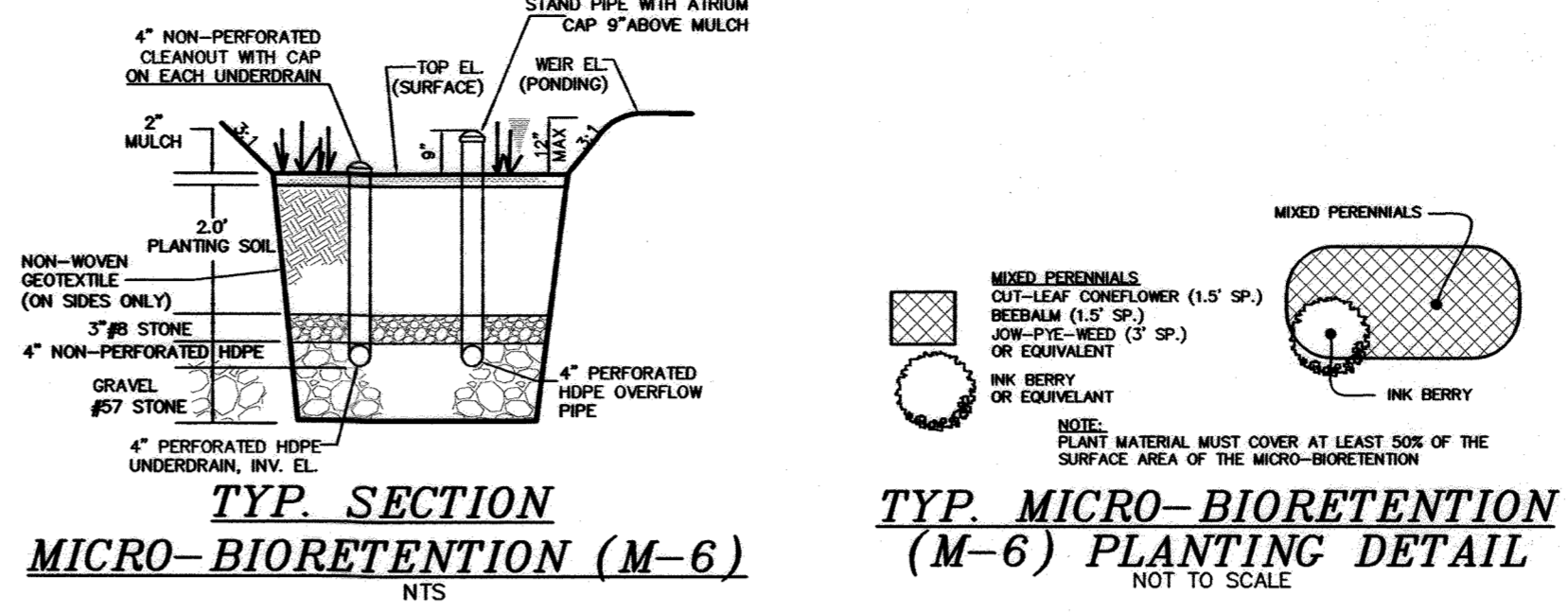
**MILDENBERG, BOENDER & ASSOC., INC.**  
 Engineers Planners Surveyors  
 7350-B Grace Drive, Columbia, Maryland, 21044  
 (410) 997-0296 Tel. (410) 997-0298 Fax



**MICRO BIO-RETENTIONS PLAN**  
SCALE: 1"=20'



SEE SHEET 7 FOR REVISED SWM DRYWELL LOCATIONS



**MICRO-BIORETENTION SCHEDULE**

FACILITY	TOP EL. (SURFACE)	WEIR EL. (PONING)	BERM EL.	INV. IN	INV. OUT	SURFACE AREA	PONDING AREA	PONDING DEPTH	GRAVEL DEPTH BELOW UNDERDRAIN	SITE SLOPE
MB-1	411.00	412.00	412.50	408.08	407.70	150 SF	420 SF	12"	12"	3:1
MB-2	409.00	410.00	410.50	406.08	405.70	110 SF	380 SF	12"	12"	3:1
MB-3	412.00	413.00	413.50	409.08	405.70	175 SF	470 SF	12"	9"	3:1
MB-4	407.00	408.00	408.50	404.08	403.50	200 SF	480 SF	12"	9"	3:1

**SWM PRACTICES SCHEDULE**

AREA	PROPOSED PRACTICES	REQUIRED ESDv	PROVIDED ESDv
LOT 1	M-5, DRYWELLS (4 EACH), (7'x7') EACH M-8, GRASS SWALE M-6, MICRO-BIORETENTION (MB #3)	342 C.F. 299 C.F. 206 C.F.	392 C.F. 299 C.F. 376 C.F.
LOT 2	M-5, DRYWELLS (4 EACH), (7'x7') EACH M-6, MICRO-BIORETENTION (MB #4)	344 C.F. 281 C.F. 268 C.F. 234 C.F.	394 C.F. 400 C.F.
LOT 3	M-5, DRYWELLS (4 EACH), (7'x7') EACH M-6, MICRO-BIORETENTION (MB #1)	344 C.F. 246 C.F. 241 C.F. 211 C.F.	394 C.F. 345 C.F.
P/O UIC	M-6, MICRO-BIORETENTION (MB #2)	165 C.F.	289 C.F.
TOTAL		1,416 C.F. 3,322 C.F.	3,271 C.F.

**OPERATION AND MAINTENANCE SCHEDULE FOR MICRO BIO-RETENTION (M-6), GRASS SWALE (M-8)**

- 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 INSPECTION 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 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 WITHIN A 72-HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- 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.

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

Signature: *Thomas James O'Neill, Jr.* DATE: 5-27-21  
 Signature: *Samer A. Alomer, P.E.* DATE: 08/30/2020

**ENGINEER'S 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.

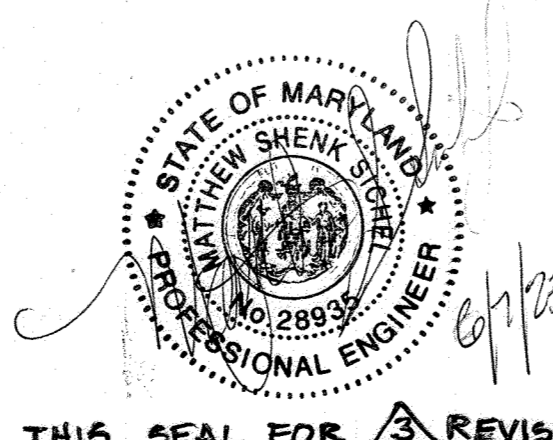
Signature: *Alexander Brattini* DATE: 06/03/21  
 Signature: *Samer A. Alomer, P.E.* DATE: 08/30/2020

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Signature: *[Signature]* DATE: 6/16/21  
 Signature: *[Signature]* DATE: 6/23/21

**OWNER/DEVELOPER**  
THOMAS O'NEILL  
GERARD O'NEILL  
5239 KERGER ROAD  
ELLICOTT CITY, MD 21043  
410-292-4831

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26859, EXP. DATE 08/08/21.

Signature: *Samer A. Alomer, P.E.* DATE: 08/30/2020



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28933, EXPIRATION DATE: 1/15/23.

THIS SEAL FOR REVISION ONLY

project	18-011	date	AUG. 2020
illustration	MM/AMT	engineering	MM
scale	1"=50'	approval	MM

REVISED SWM CALCULATIONS	MM/2021	date	
2021/05 SWM PRACTICES SCHEDULE		description	
revisions			

**KERGER WOODS**  
LOTS 1 THRU 4  
TAX MAP 31 GRID 15 PARCEL 327  
HOWARD COUNTY, MARYLAND

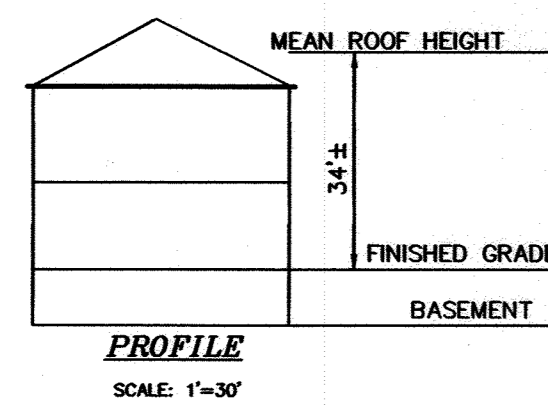
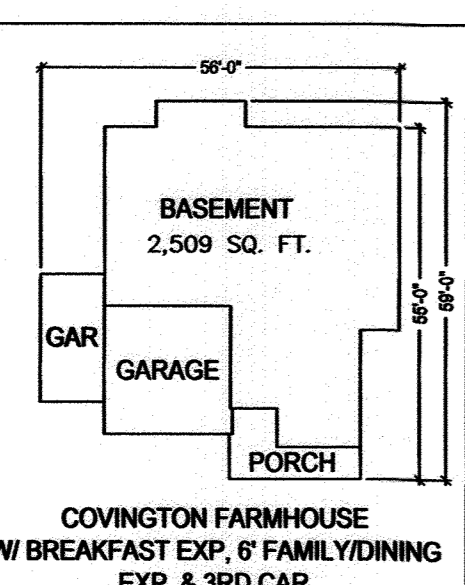
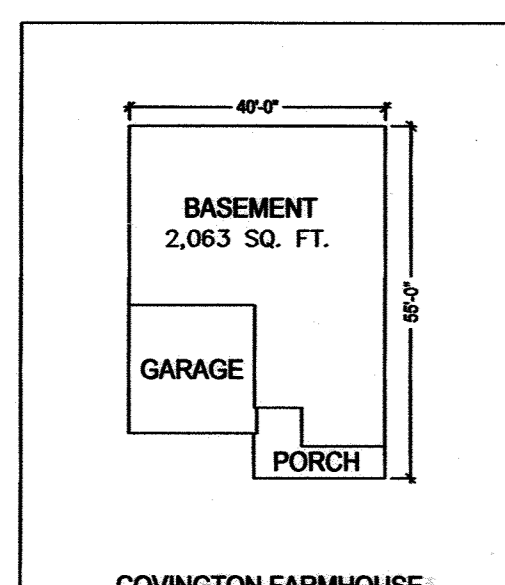
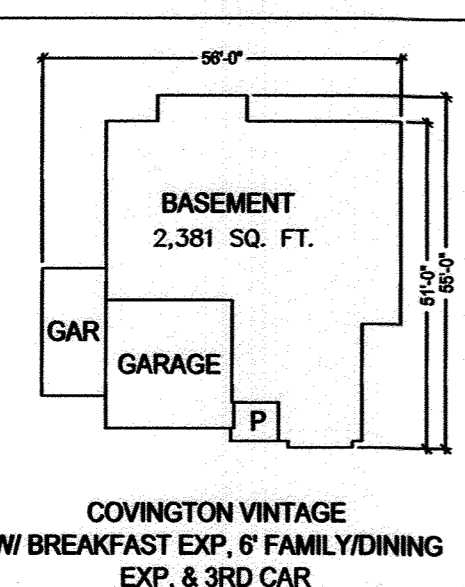
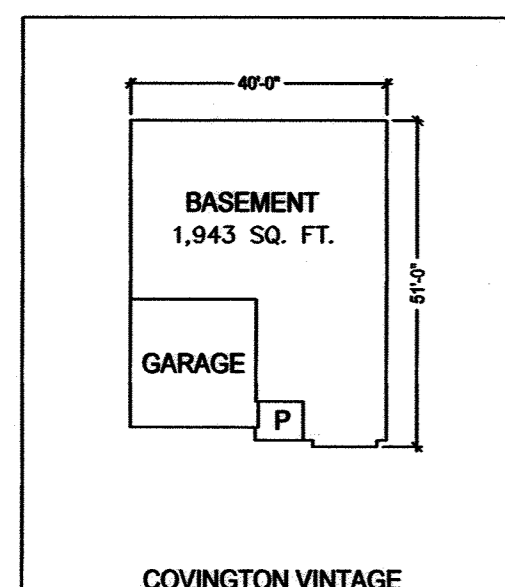
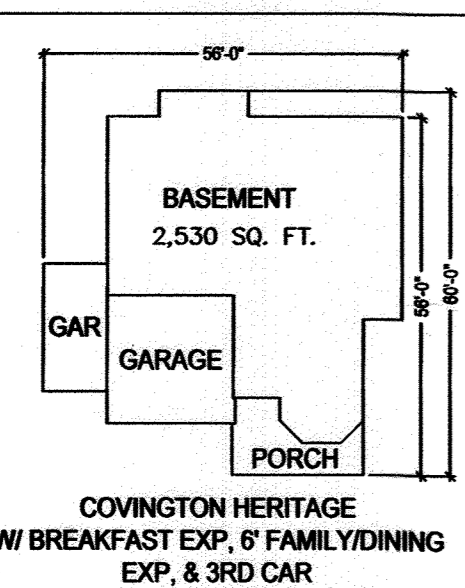
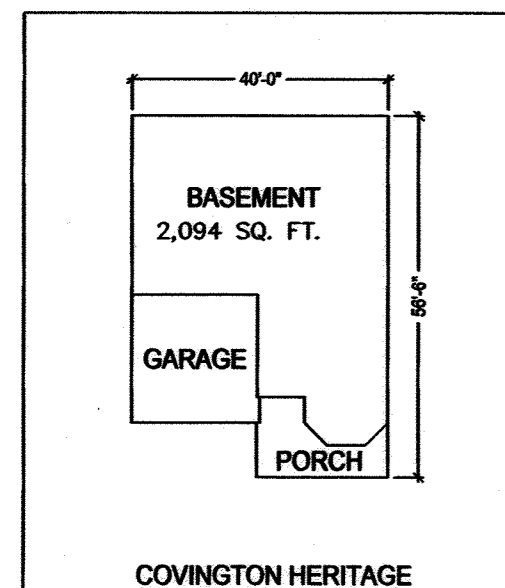
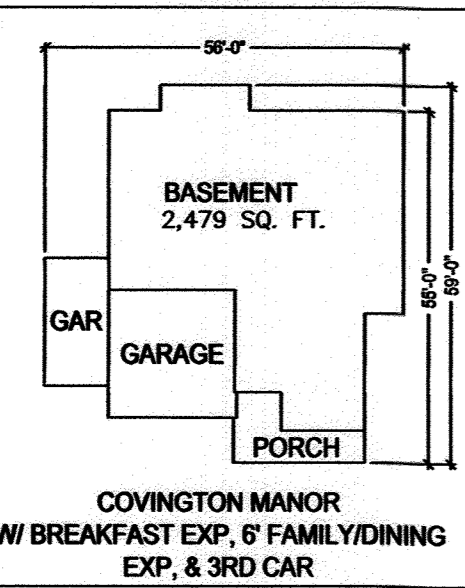
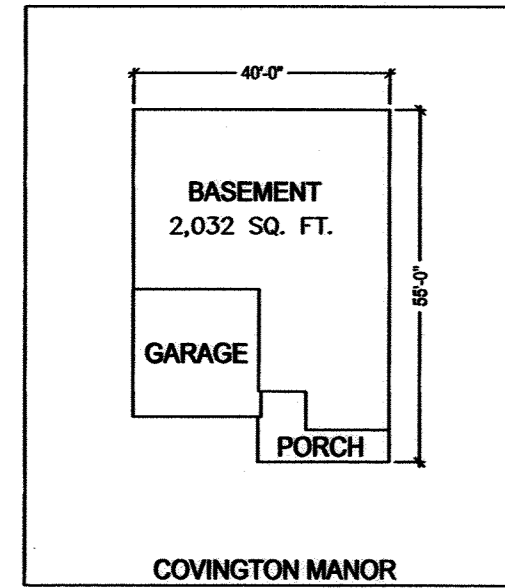
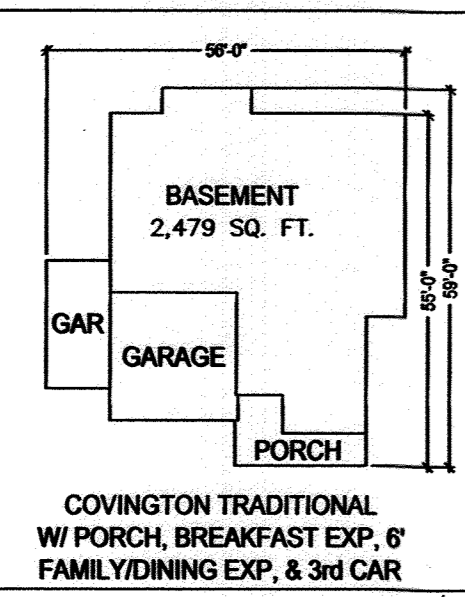
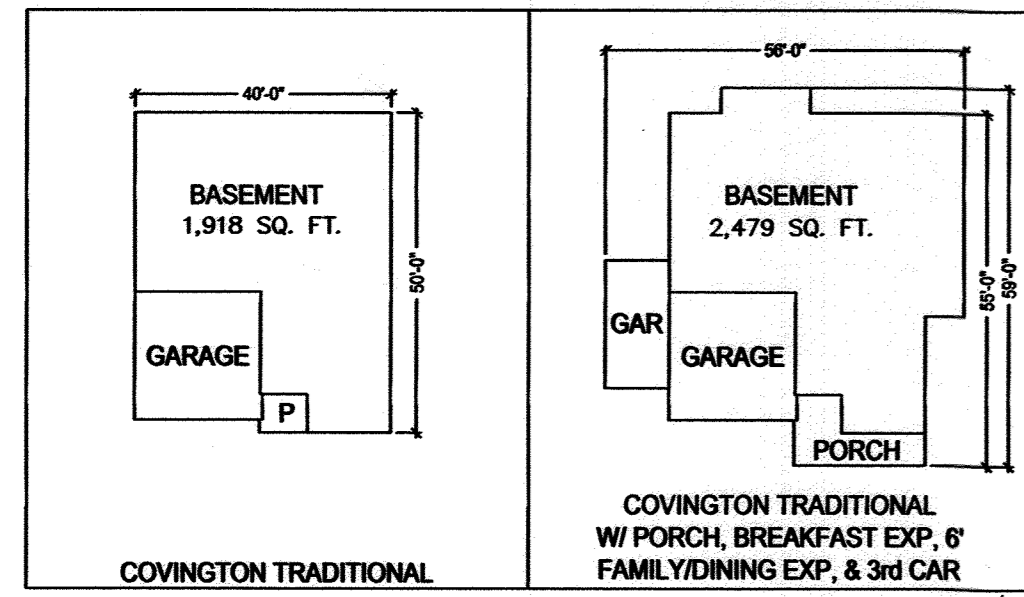
1ST ELECTION DISTRICT

**STORMWATER MANAGEMENT PLAN**

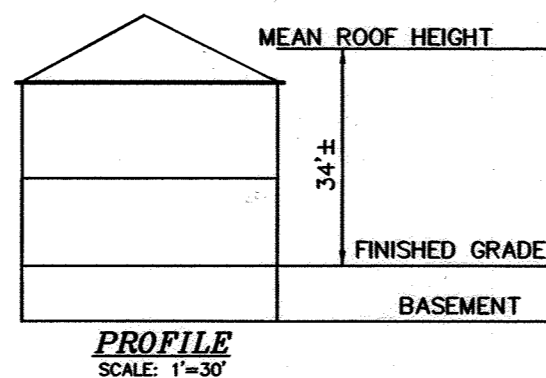
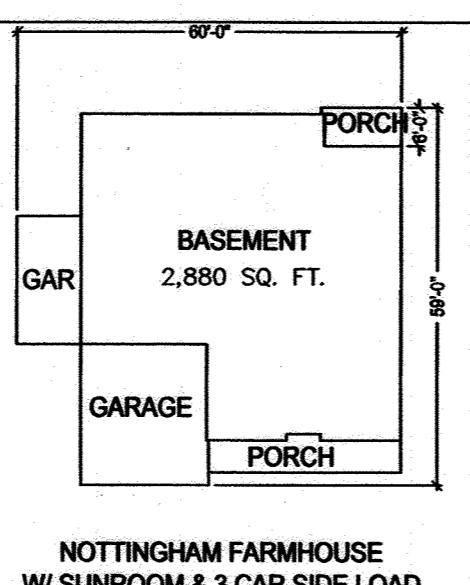
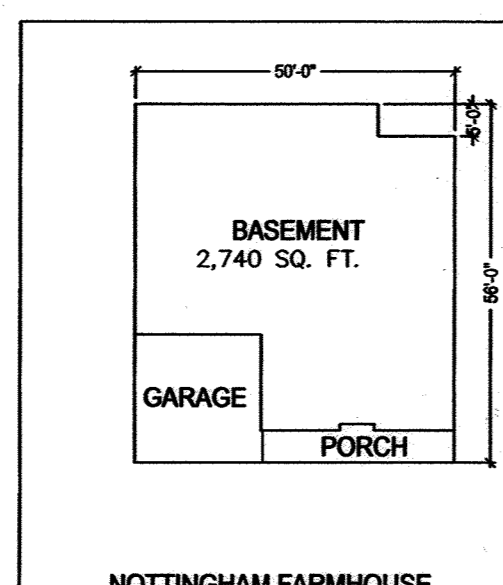
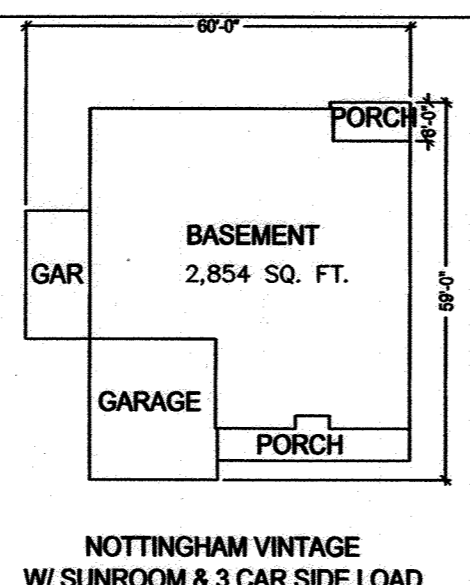
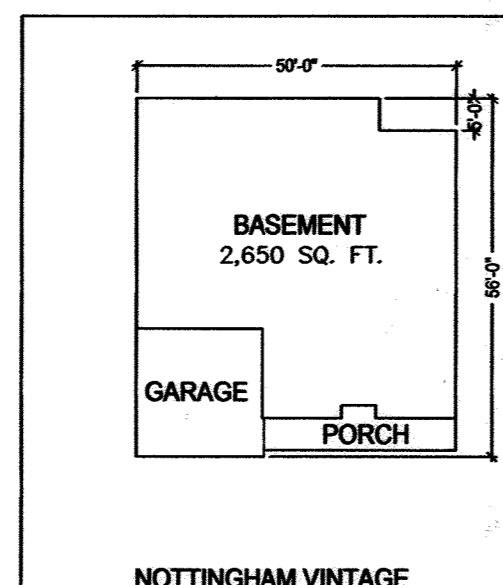
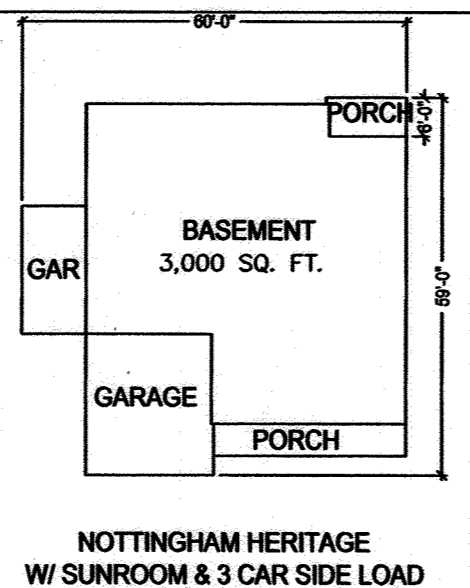
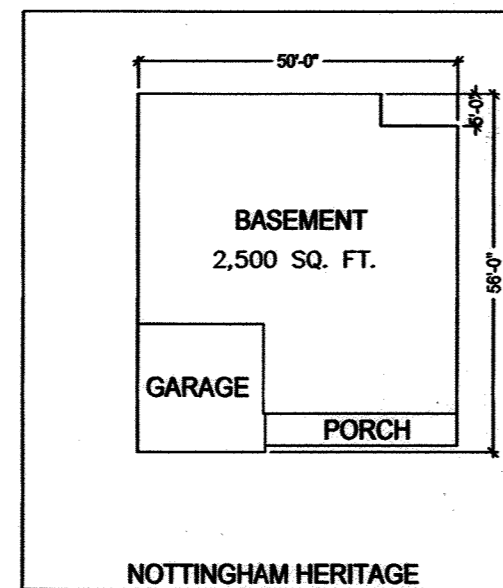
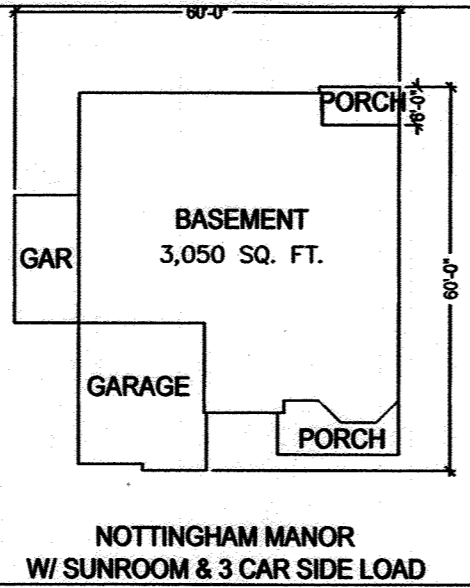
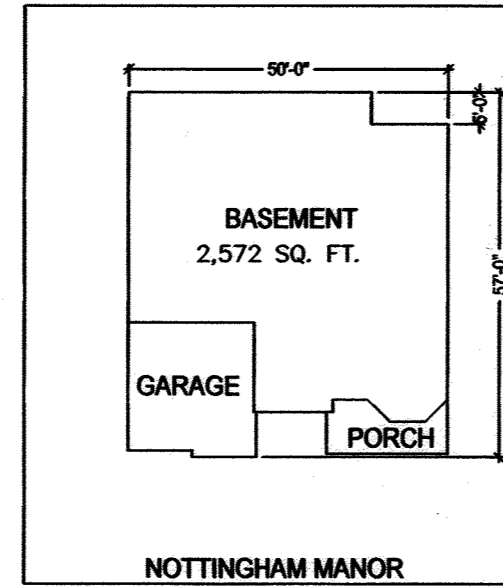
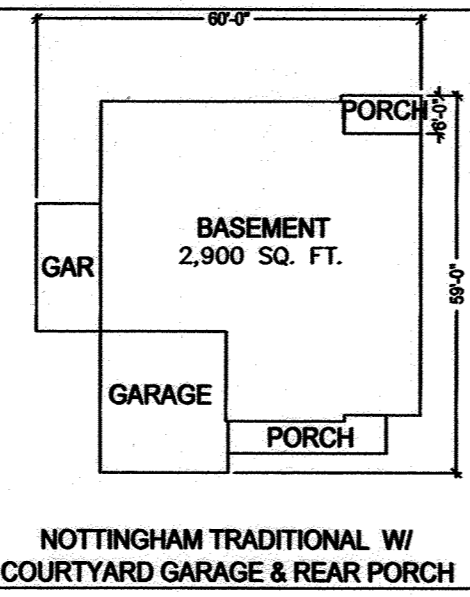
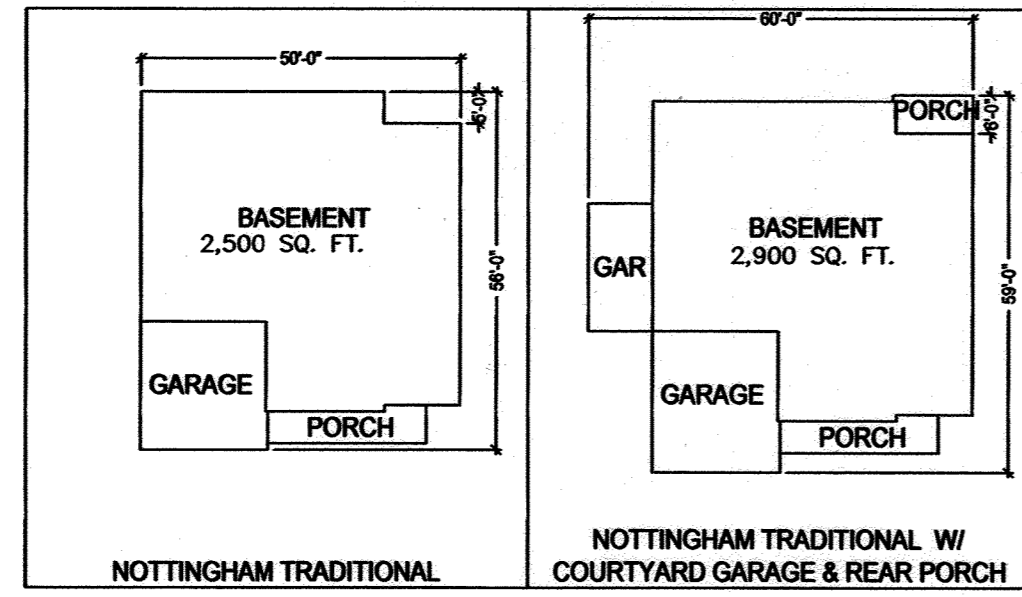
**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
7350-B Grace Drive, Columbia, Maryland, 21044  
(410) 997-0286 Tel. (410) 997-0288 Fax.



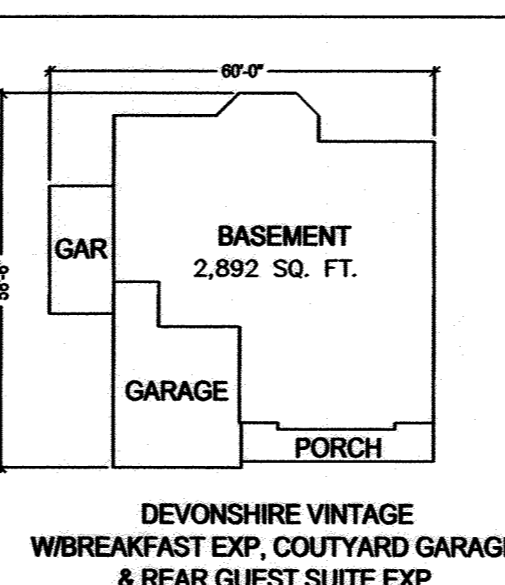
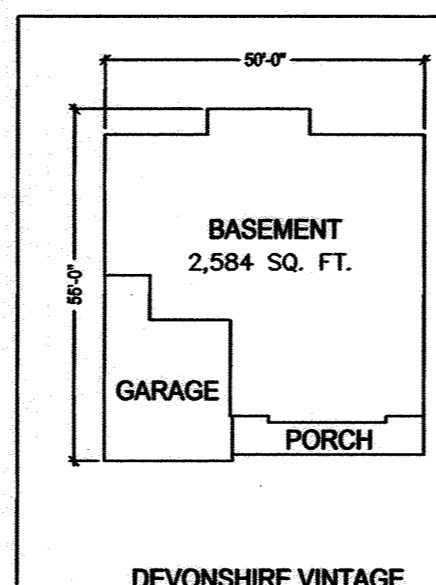
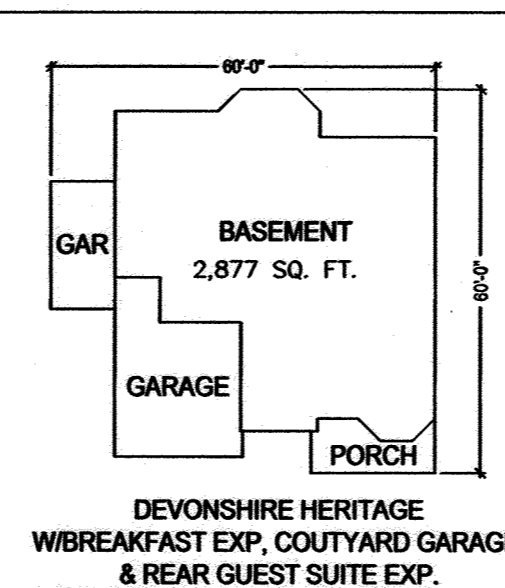
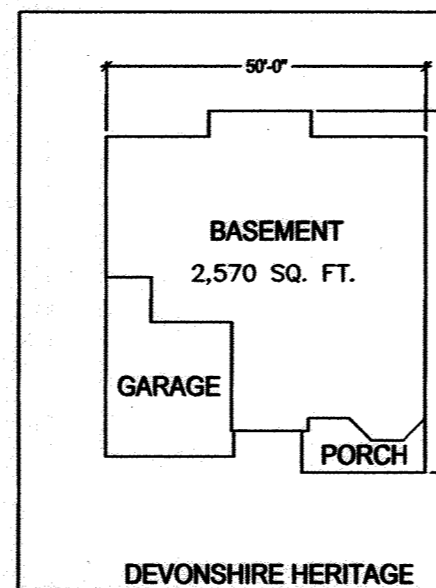
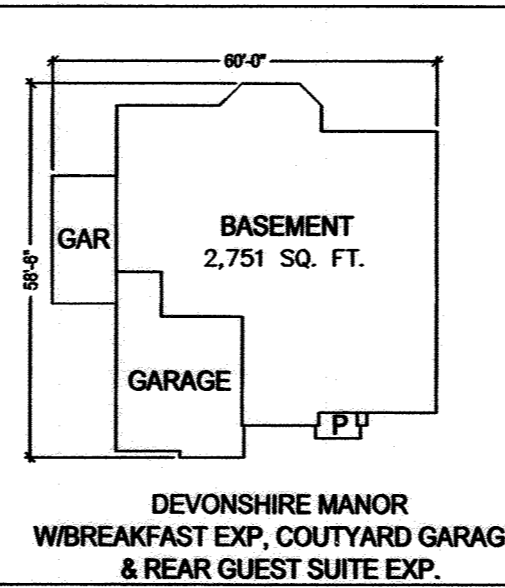
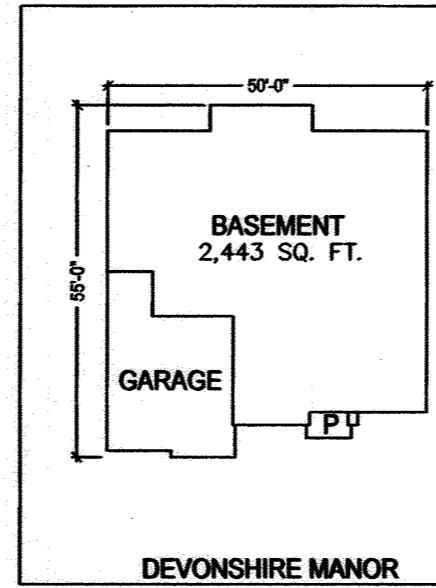
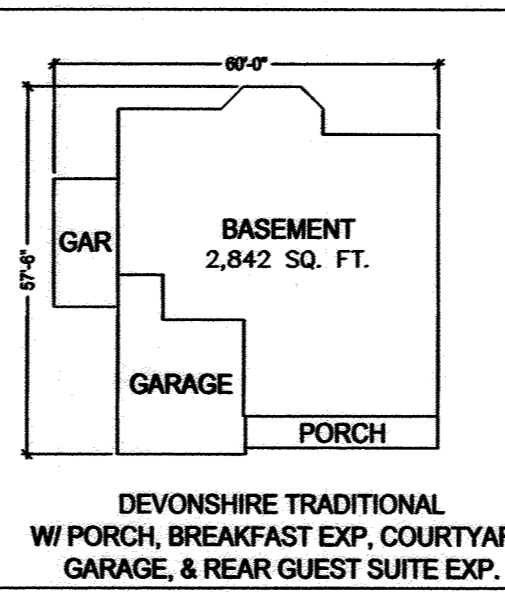
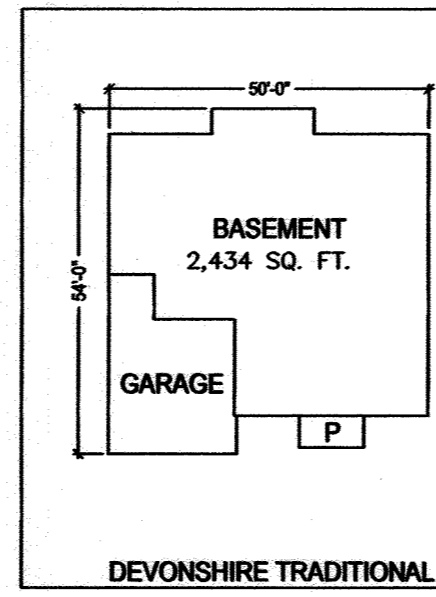
**COVINGTON PLAN**



**NOTTINGHAM PLAN**

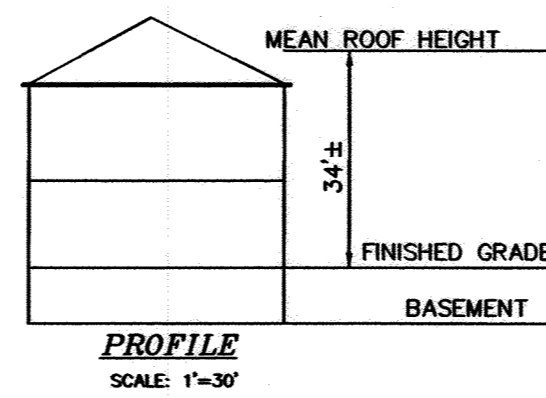


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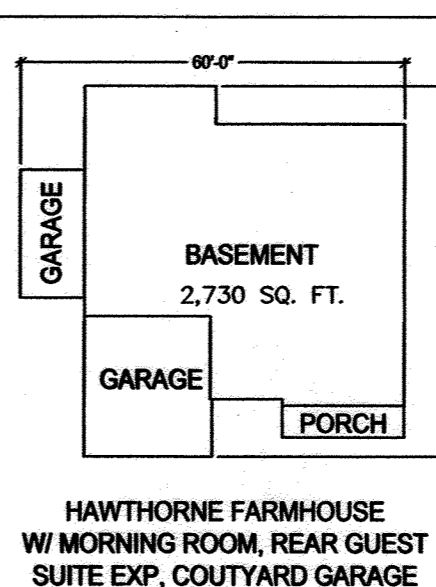
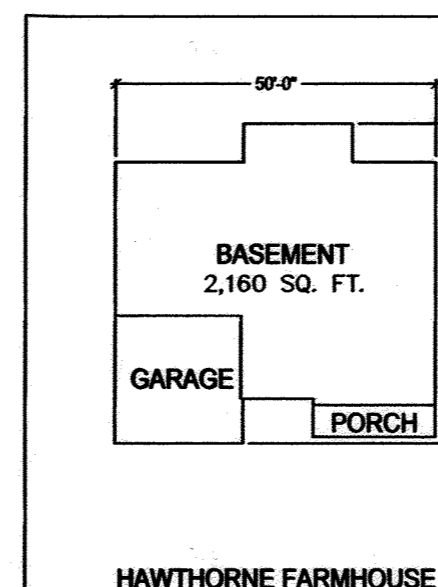
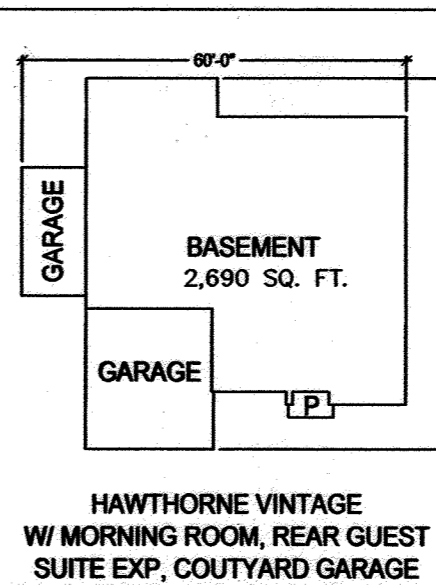
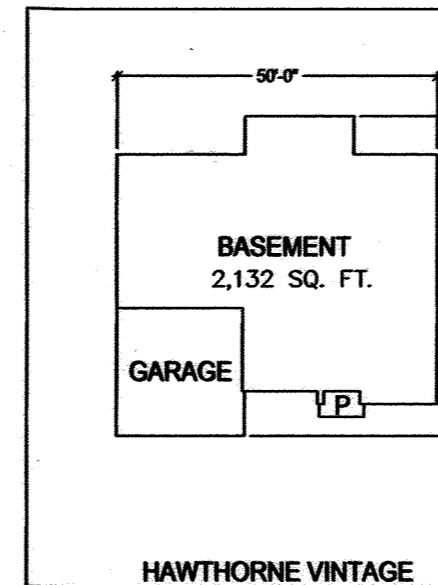
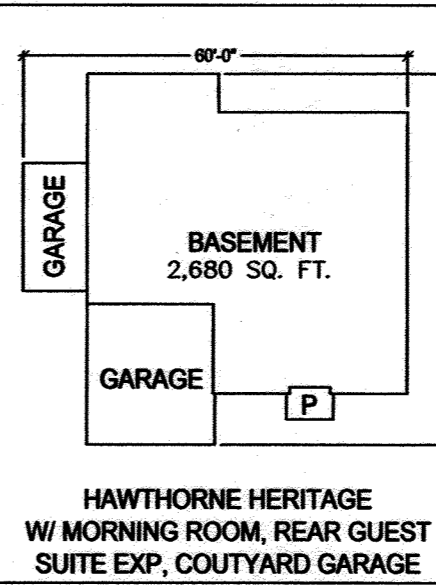
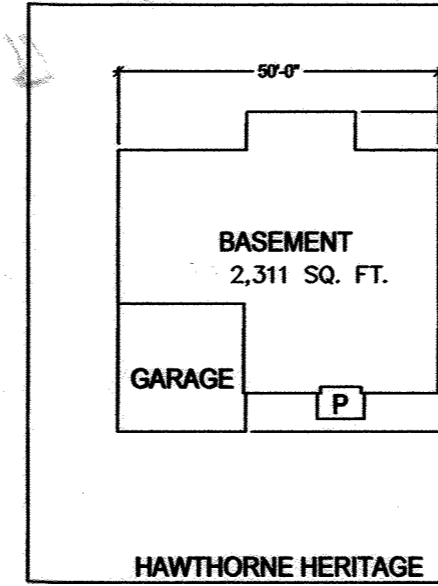
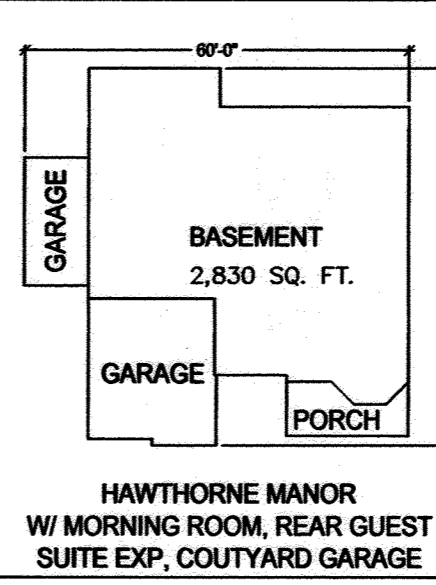
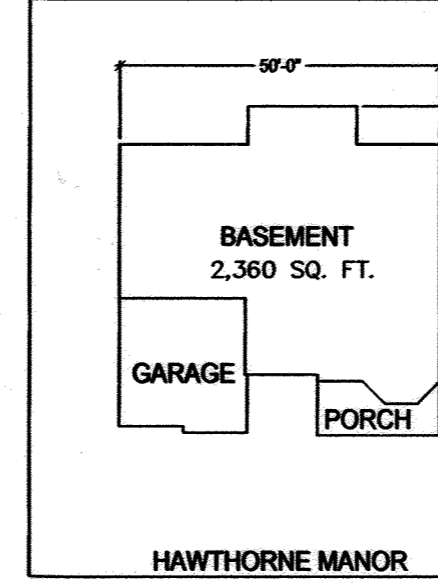
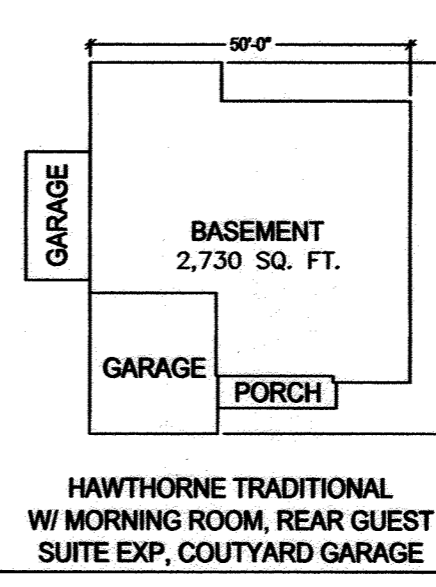
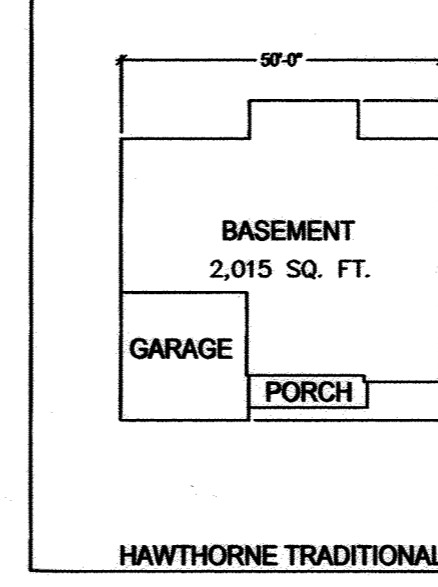


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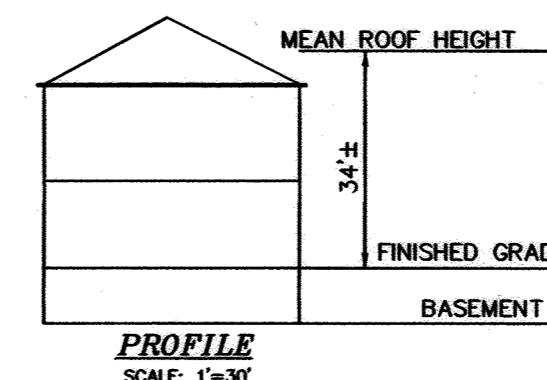


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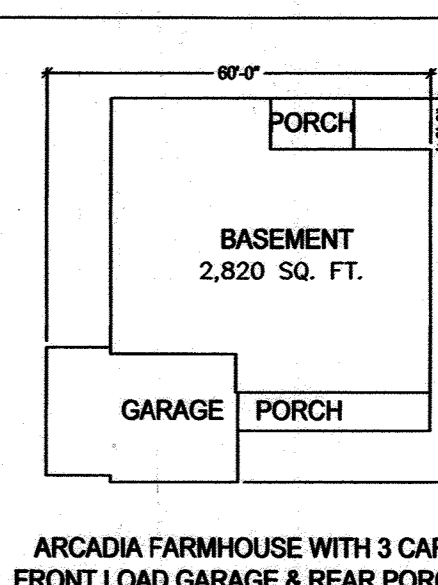
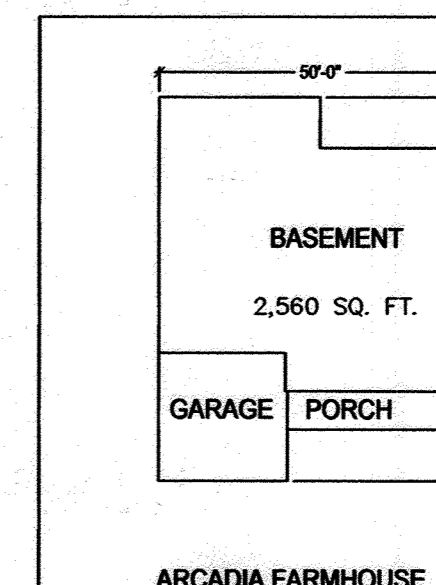
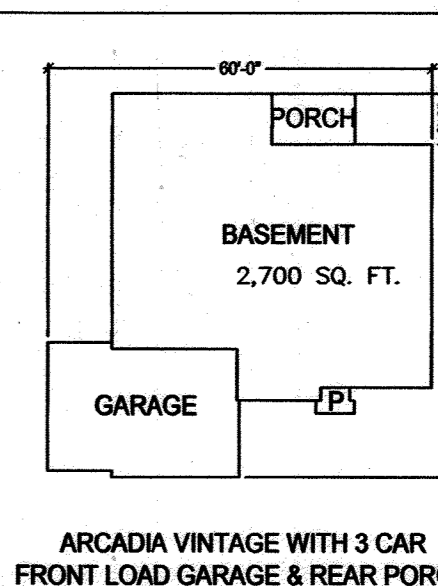
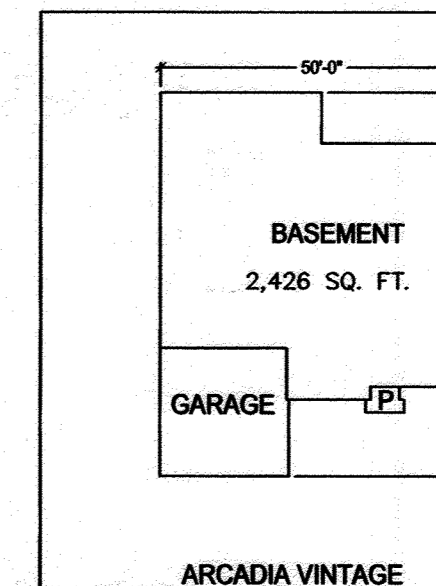
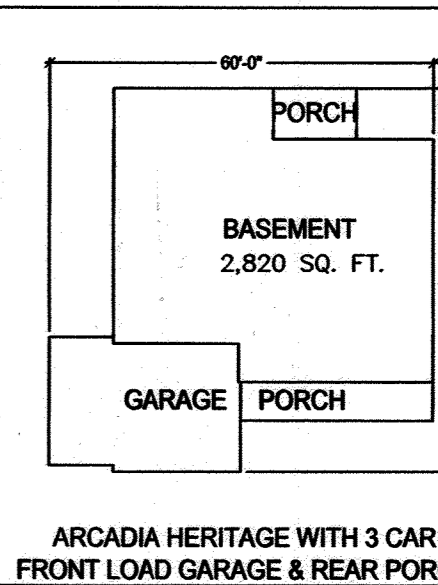
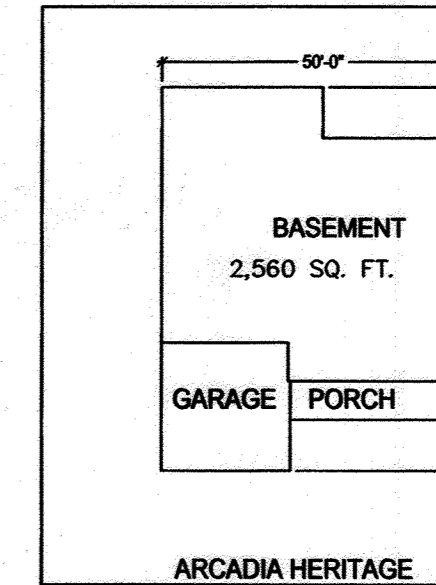
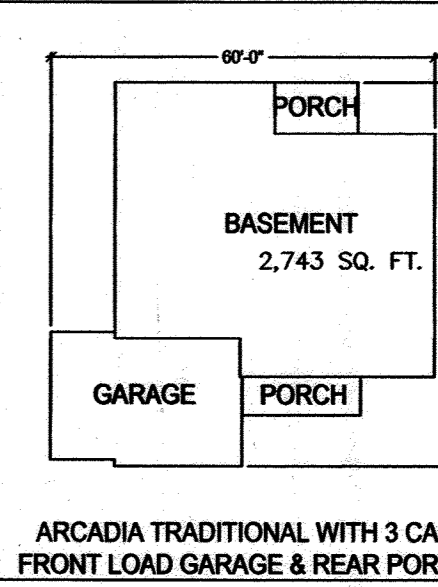
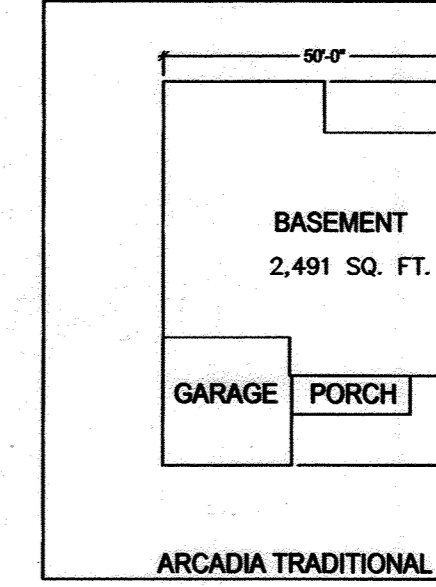


SCALE: 1"=30'

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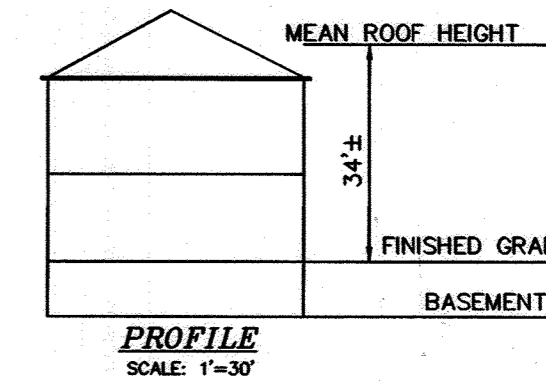


**ARCADIA PLAN**



SCALE: 1"=30'

SCALE: 1"=30'



no.	description	date

**KERGER WOODS**  
LOTS 1 THRU 4  
TAX MAP 31 GRID 15 PARCEL 327  
HOWARD COUNTY, MARYLAND  
1ST ELECTION DISTRICT  
HOUSE MODELS

**MILDENBERG & ASSOC., INC.**  
Engineers Planners Surveyors  
7850-B Grace Drive, Columbia, Maryland 21044  
(410) 987-0286 Tel. (410) 987-0288 Fax.

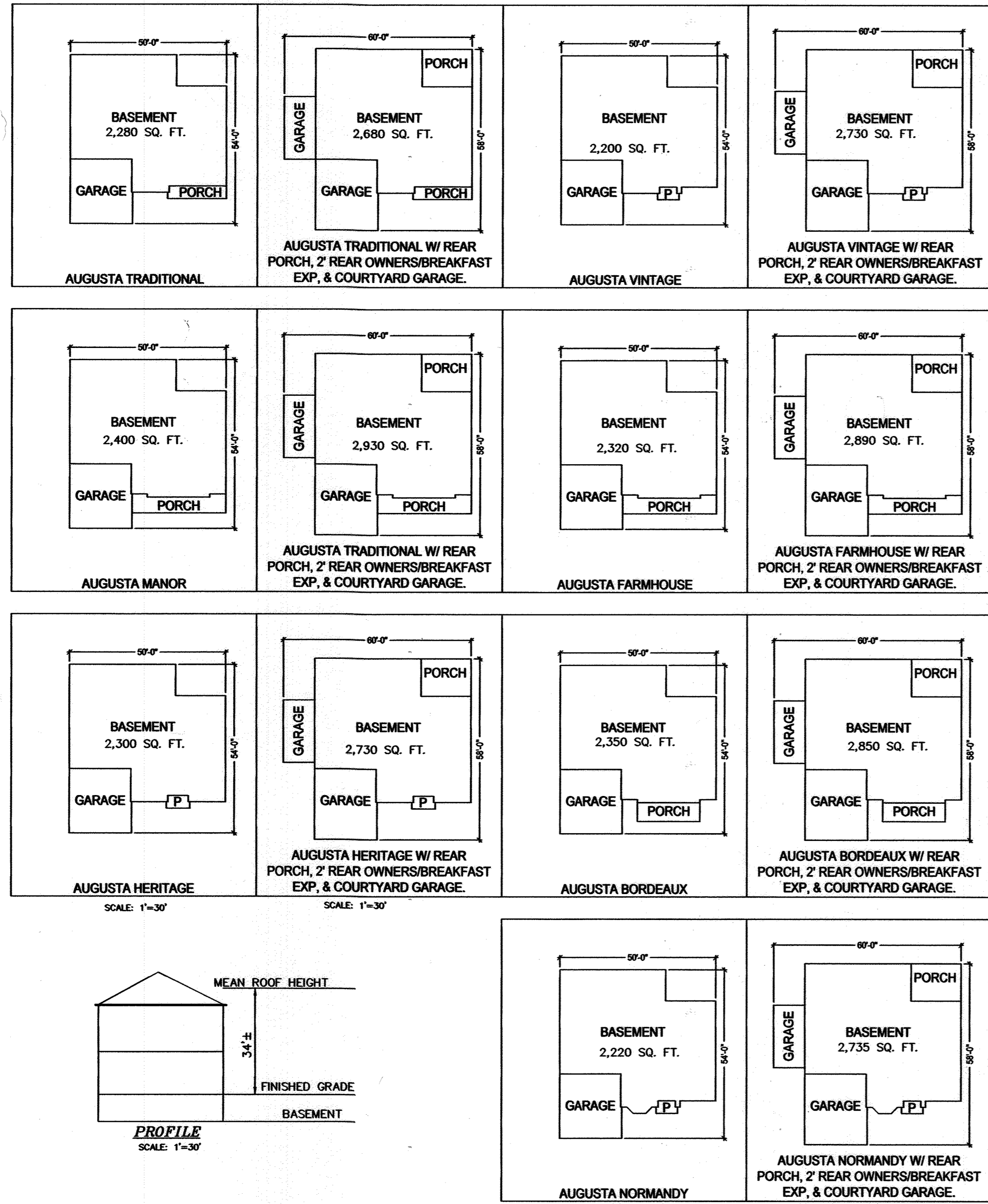
P.2004/18-011/DWG/KERGER WOODS

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

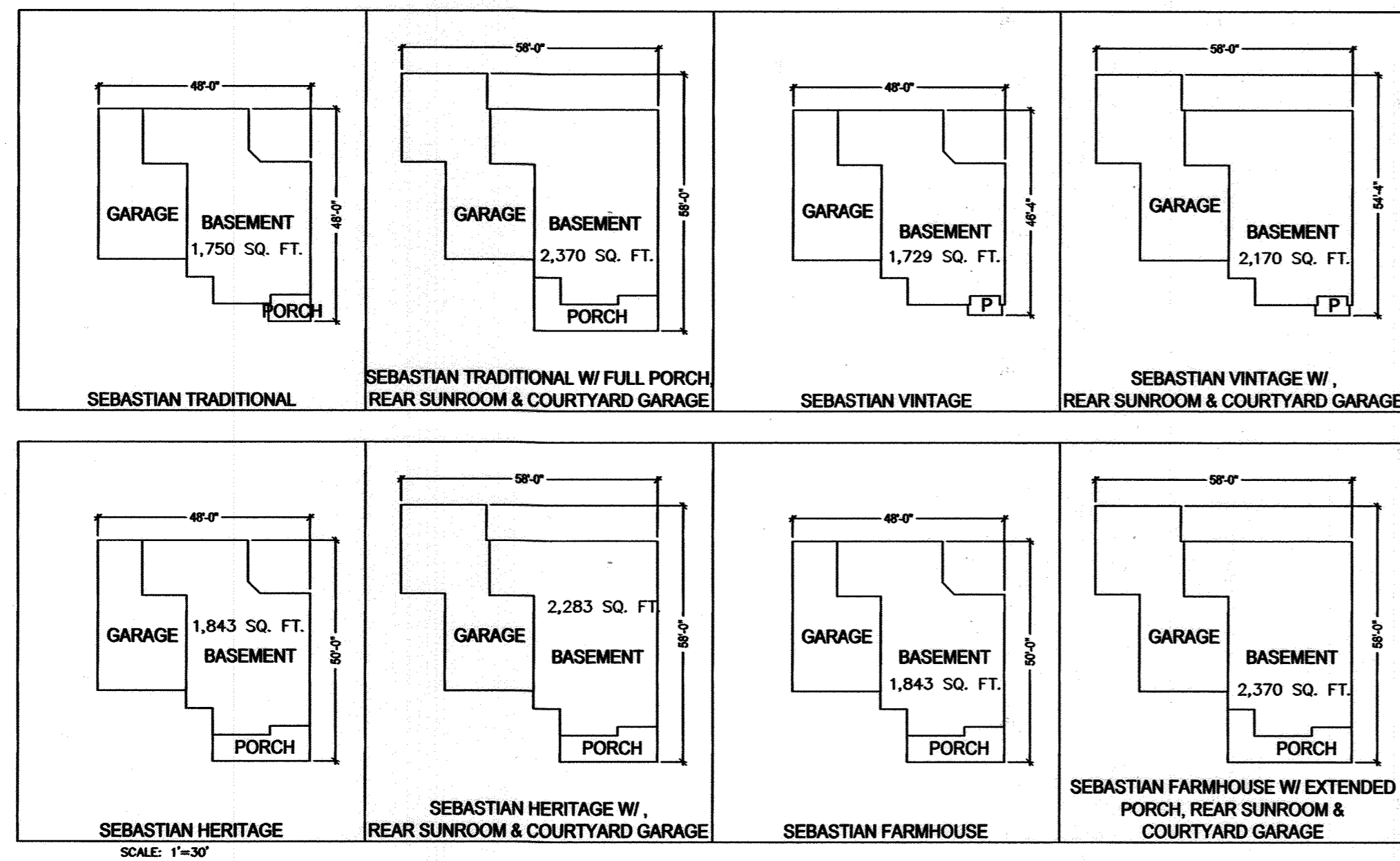
1/27/22  
DATE  
1/31/22  
DATE  
1/31/22  
DATE

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26859, EXP. DATE 08/08/23  
SAMER A. ALOMER, P.E. DATE

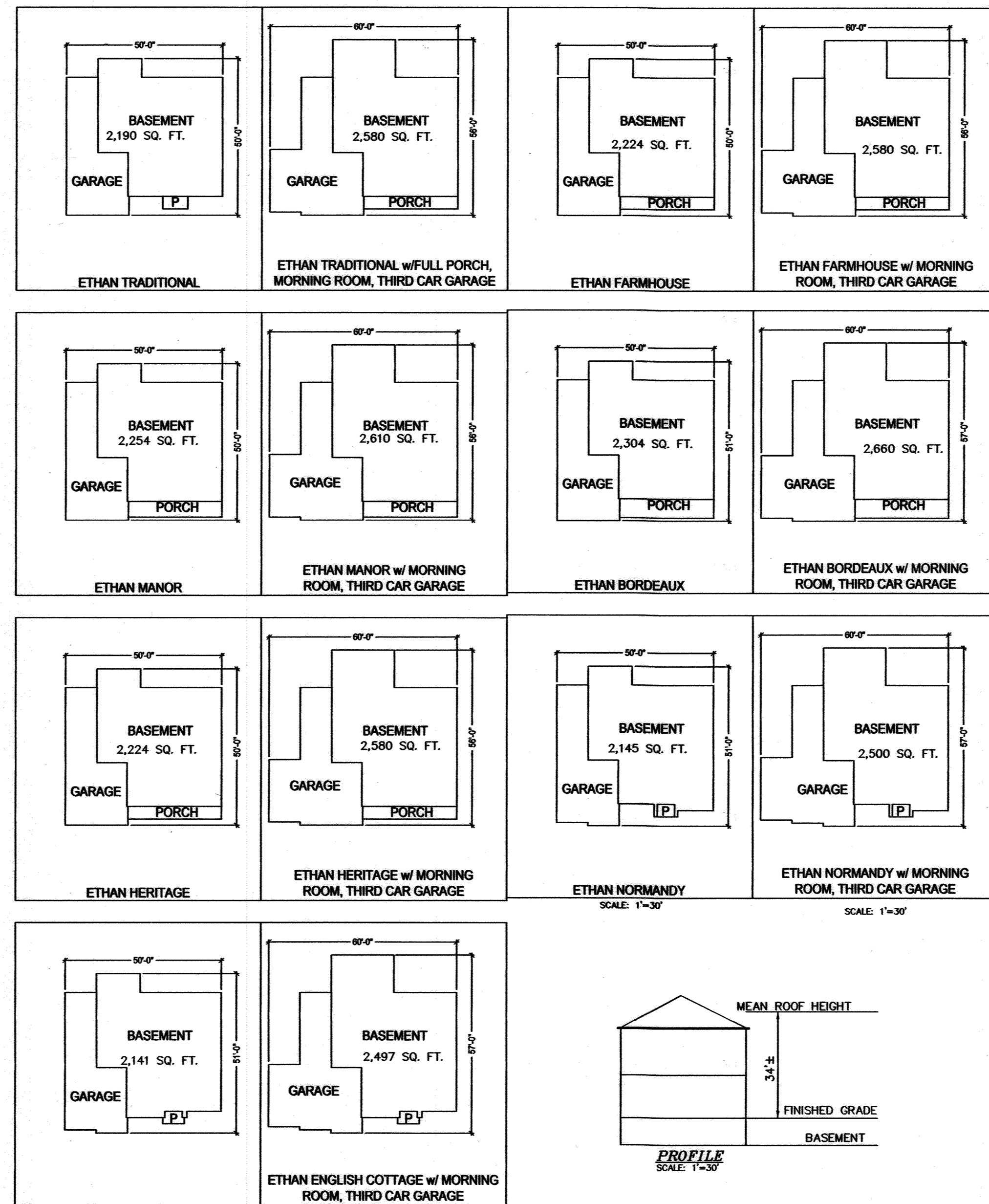
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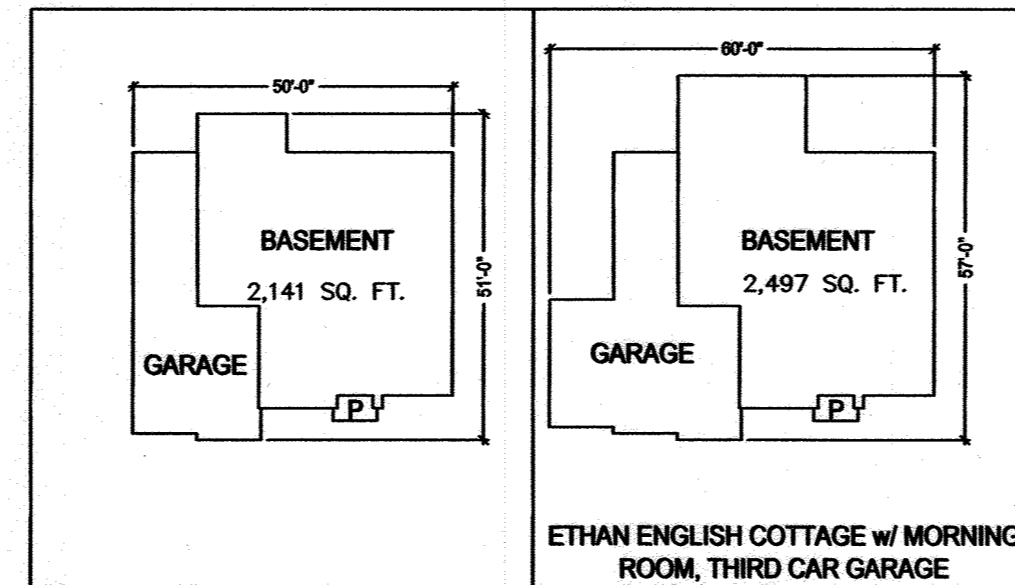
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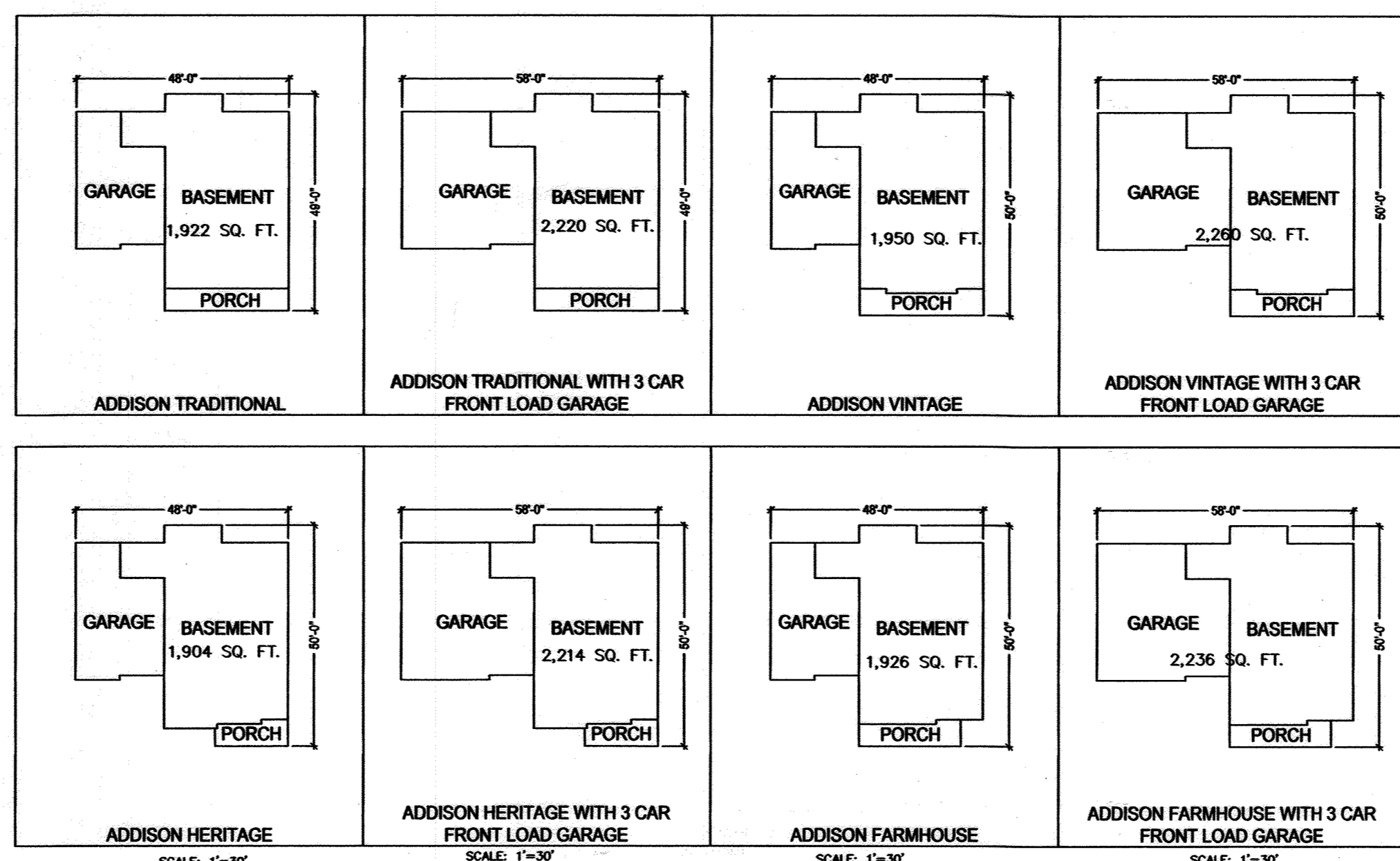
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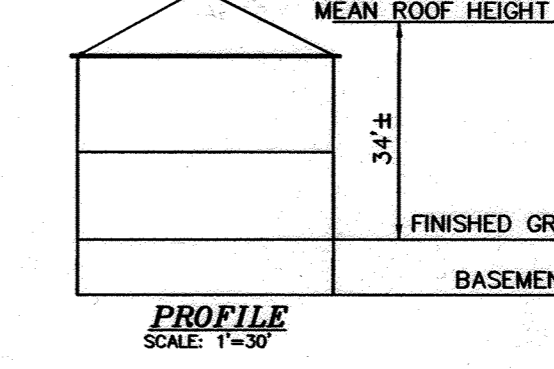
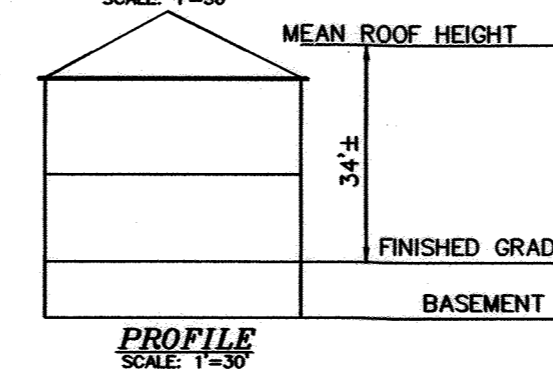
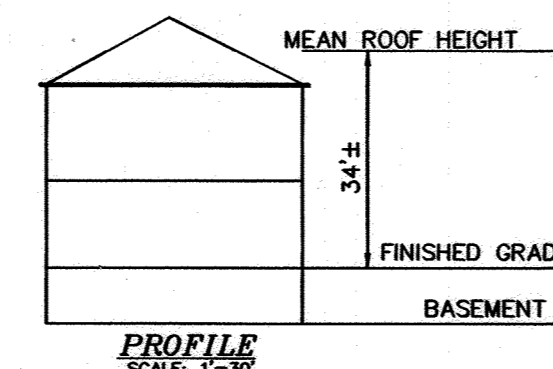
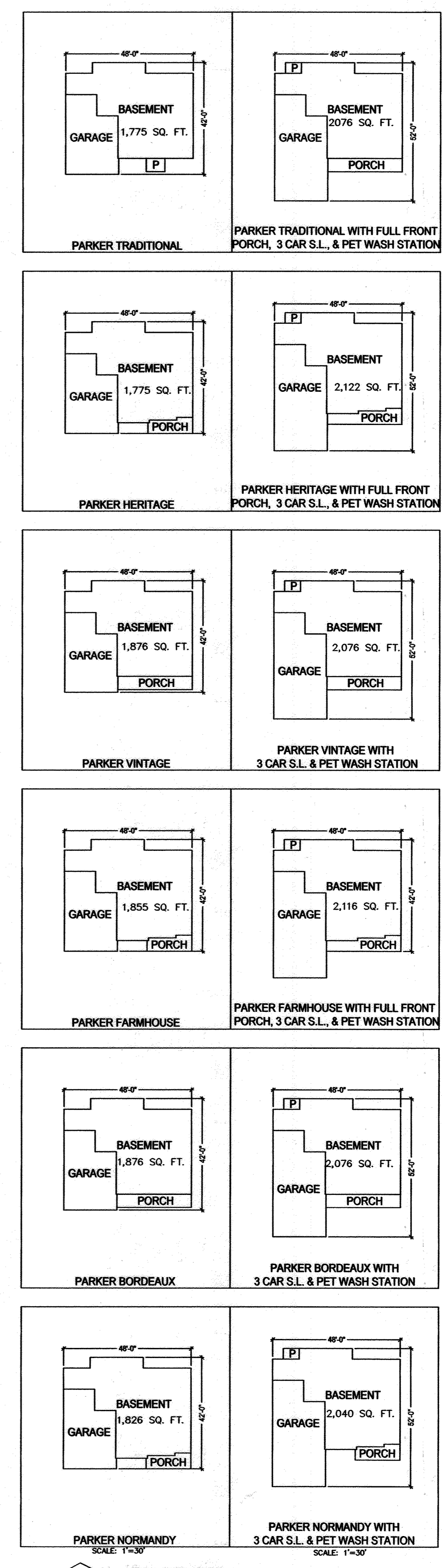
**ETHAN ENGLISH COTTAGE**



**ADDISON PLAN**

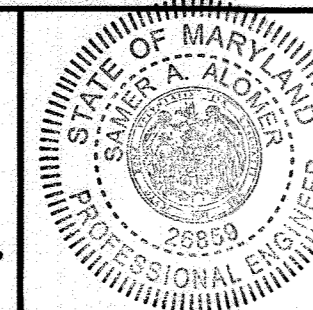


**PARKER PLAN**



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

1/19/22  
DATE  
1/15/22  
DATE  
1/31/22  
DATE



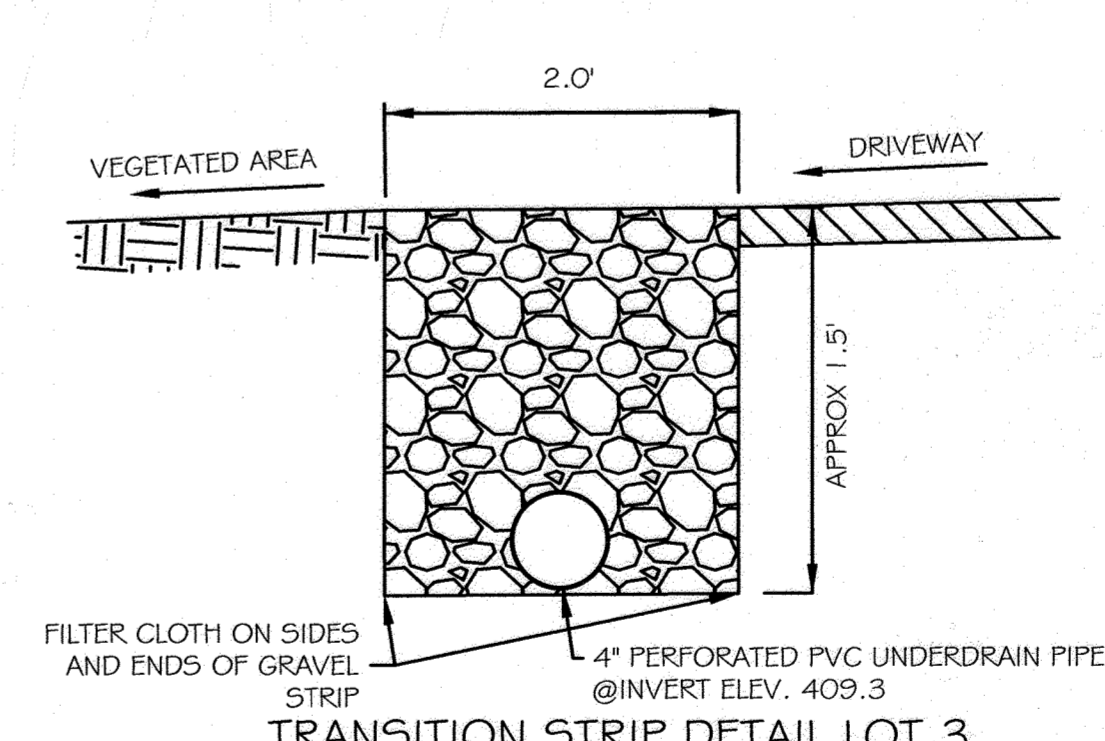
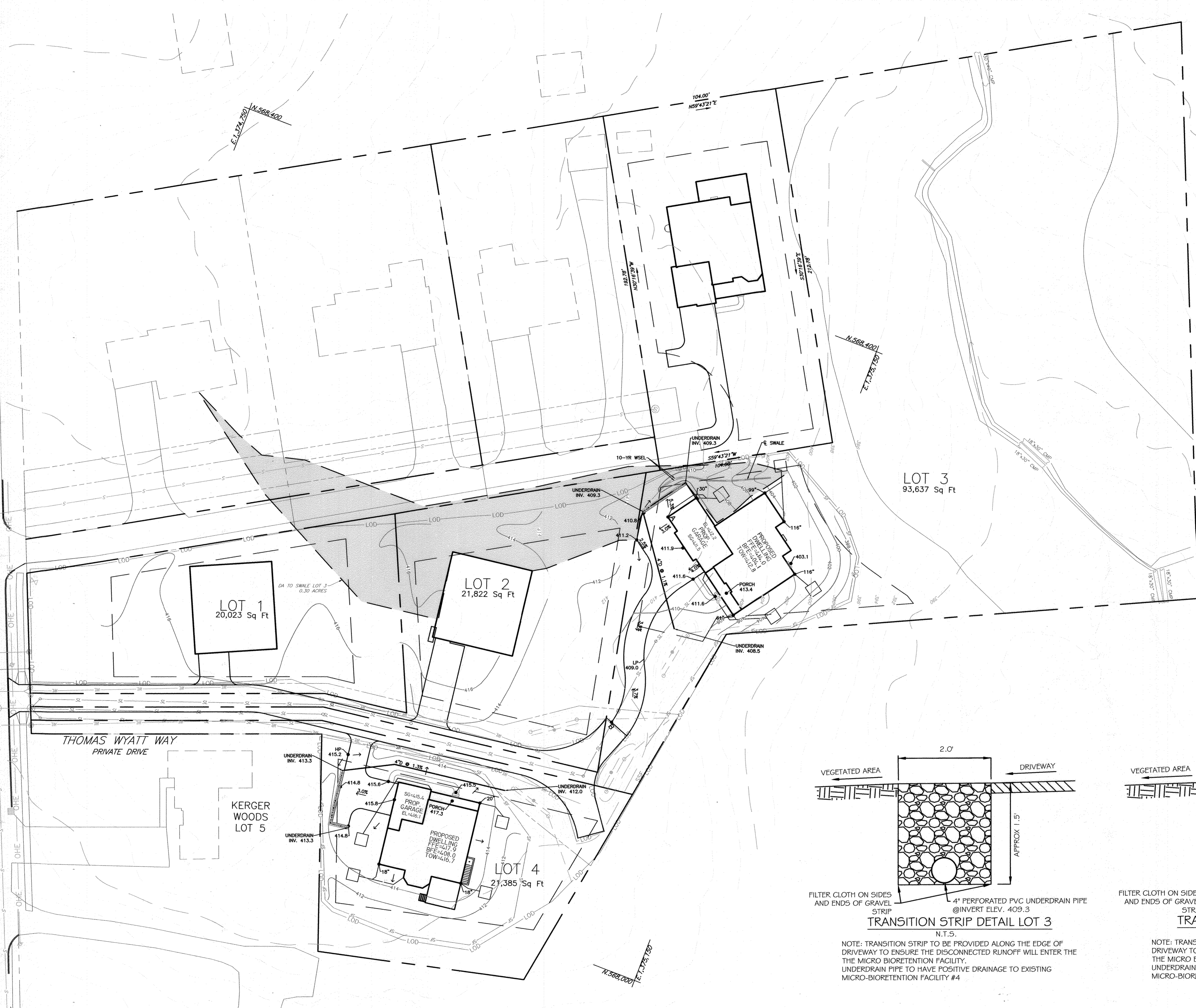
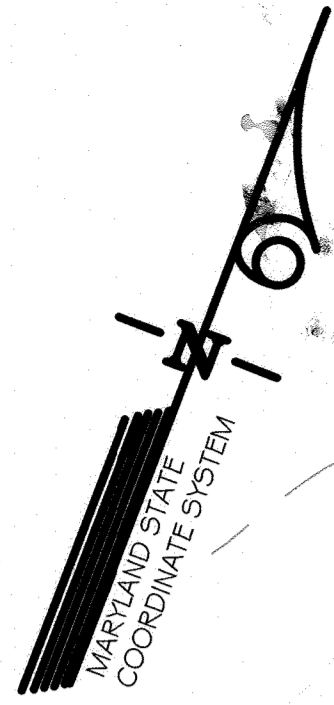
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26859, EXP. DATE 08/08/23.  
SAMER A. ALOMER, P.E. DATE

date	JAN 2022
project	18-011
illustration	MM/MNT
scale	1"=30'
approval	SAA

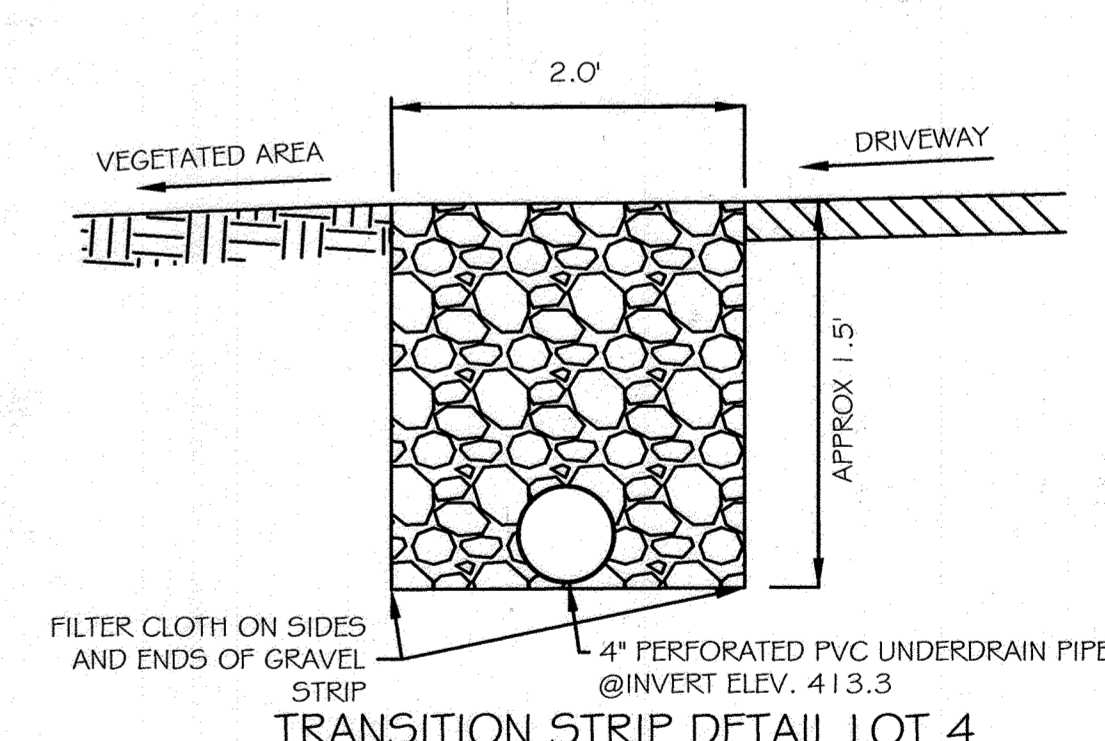
no.	description	revisions

**KERGER WOODS**  
LOTS 1 THRU 4  
TAX MAP 31 GRID 15 PARCEL 327  
HOWARD COUNTY, MARYLAND  
1ST ELECTION DISTRICT  
HOUSE MODELS

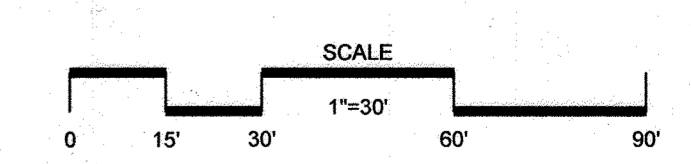
**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers, Planners & Surveyors  
7850-B Grace Drive, Columbia, Maryland 21044  
(410) 997-0296 Tel. (410) 997-0298 Fax.



**TRANSITION STRIP DETAIL LOT 3**  
 N.T.S.  
 NOTE: TRANSITION STRIP TO BE PROVIDED ALONG THE EDGE OF DRIVEWAY TO ENSURE THE DISCONNECTED RUNOFF WILL ENTER THE MICRO BIORETENTION FACILITY. UNDERDRAIN PIPE TO HAVE POSITIVE DRAINAGE TO EXISTING MICRO-BIORETENTION FACILITY #4



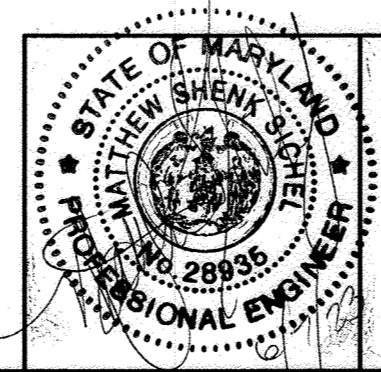
**TRANSITION STRIP DETAIL LOT 4**  
 N.T.S.  
 NOTE: TRANSITION STRIP TO BE PROVIDED ALONG THE EDGE OF DRIVEWAY TO ENSURE THE DISCONNECTED RUNOFF WILL ENTER THE MICRO BIORETENTION FACILITY. UNDERDRAIN PIPE TO HAVE POSITIVE DRAINAGE TO EXISTING MICRO-BIORETENTION FACILITY #1



APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature]  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 6/21/23

[Signature]  
 DIRECTOR  
 DATE: 6/27/23

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28935 EXPIRATION DATE: 01/15/2025



**KCI TECHNOLOGIES**  
 ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGE  
 936 RIDGEBROOK ROAD  
 SPARKS, MARYLAND 21152  
 TELEPHONE: (410) 316-7800  
 FAX: (410) 316-7818

REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
3	6/7/2023	REVISED LOT 3 & 4 HOUSE LAYOUTS	KCI	5/4/2023

**KERGER WOODS SUBDIVISION  
 SITE DEVELOPMENT PLAN  
 LOTS 3 AND 4  
 HOWARD COUNTY, MD**

DESIGNED BY: FFW  
 DRAWN BY: JDL

ZONING: R-20 TAX MAP: 31 GRD: 15 PARCEL: 327 ELECTION DIST: 1

DRAWING NO. **ZhoWB1**  
 SHEET 7 OF 7  
 KCI JOB NUMBER 272103754.CAL