Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

G14000305

Date Received: 10/7/19

Permit No.: B19003392

Building Address: 12244 Pleasant Springs Ct.	Property Owner's Name: MB Highland Reserve
City: Fulton State: MD Zip Code: 20759	Address: 1686 E. Gude Drive
Suite/Apt. #: SDP/WP/BA #:	City: Rockville State: MD Zip Code: 20850
Census Tract: Subdivision: Highland Reserve aka Regan Property	Phone: 301-762-9511 ext 318 Fax:
Section: Area: Lot: 21	Email: MQuint410@yahoo.com
Tax Map: 34 Parcel: 200 Grid: 24	**Applicant's Name & Mailing Address, (If other than stated herein)**
Zoning: RR-DEO Map Coordinates: Lot Size: 1.034 acres	Applicant's Name: Vicky Meyer
	Address: 1602 Pinnacle RD.
	City: Towson State: MD Zip Code: 21286
	Phone: 443-250-3690 Fax:
	Email: MD BIDG PerMits @ comcast.Net
Existing Use: Vacant	Contractor Company: MB Highland Reserve LLC
Proposed Use: Single Family Dwelling	Contact Person: Marc Quint
Estimated Construction Cost: $ 500,000	Address: 1686 E. Gude Drive
Description of Work: FOXRIDGE- C Elevation - w/ Deluxe Rear Extension Alt. Family entrance w/ Powder Room-page 3B;Finished Basement; Areway 10R; 6BR; 4FB; 1HB; fireplace 3 CAR GARAGE	City: Rockville State: MD Zip Code: 20850
Seeking Silver Level Certification of the NGBS-3rd party verification by Pando Alliance	License No. : 7316
	Phone: 301-762-9511 ext. 318 Fax:
	Email: MQuint@mitchellbest.com
Occupant or Tenant:	Engineer/Architect Company:
Was tenant space previously occupied? ☐Yes ☐No	Responsible Design Prof.:
Contact Name:	Address:
Address:	City: State: Zip Code:
City: State: Zip Code:	Phone: Fax:
Phone: Fax:	Email:
Email:	

Commercial Building Characteristics	Residential Building Characteristics		
Height: 3889 3648	☒ SF Dwelling ☐ SF Townhouse		
No. of stories: 1652 1652		Depth	Width
Gross area, sq. ft./floor: 2773 2773	1st floor:	66'	78'
	2nd floor:	57'	40'
Area of construction (sq. ft.):	Basement:	66'	78'
GSF 8314	☒ Finished Basement		
Use group: OSF 8073	☐ Unfinished Basement		
	☐ Crawl Space		
Construction type:	☐ Slab on Grade		
☐ Reinforced Concrete	No. of Bedrooms: 6		
☐ Structural Steel	*Multi-family Dwelling*		
☐ Masonry	No. of efficiency units:		
☐ Wood Frame	No. of 1 BR units:		
☐ State Certified Modular	No. of 2 BR units:		
	No. of 3 BR units:		
	Other Structure:		
	Dimensions:		
➢ **Roadside Tree Project Permit**	Footings:		
☐Yes ☒No	Roof:		
Roadside Tree Project Permit #	☐ State Certified Modular		
	☐ Manufactured Home		

Utilities	
Water Supply	
☐ Public	
☒ Private	
Sewage Disposal	
☐ Public	
☒ Private	
Electric: ☒ Yes ☐ No	
Gas: ☒ Yes ☐ No	
Heating System	
☐ Electric ☐ Oil	
☐ Natural Gas ☒ Propane Gas	
☐ Other:	
Sprinkler System:	
☒ Yes ☐ No	
Grading Permit Number:	G14000305
Building Shell Permit Number:	

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Applicant's Signature Vicky Meyer — *Print Name* Vicky Meyer

Email Address MdBldgPermits@Comcast.Net — *Date* 10/7/2019

Title/Company Agent - MD BIDG PerMits

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
PLEASE WRITE NEATLY & LEGIBLY

-FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL
State Highways		
Building Officials		
PSZA (Zoning)		
PSZA (Engineering)		
Health	11-15-19	D Barnard

Is Sediment Control approval required for issuance? ☒Yes ☐ No
☐ CONTINGENCY CONSTRUCTION START

DPZ SETBACK INFORMATION
Front:
Rear:
Side:
Side St.:
All minimum setbacks met? ☐ Yes ☐No
Is Entrance Permit Required? ☐ Yes ☐No
Historic District? ☐ Yes ☐No
Lot Coverage for New Town Zone:
SDP/Red-line approval date:

Filing Fee	$ 150
Permit Fee	$
Tech Fee	$
Excise Tax	$
PSFS	$
Guaranty Fund	$
Add'l per Fee	$
Total Fees	$
Sub- Total Paid	$
Balance Due	$
Check	# 4057

Distribution of Copies: White: Building Officials Green: PSZA,Zoning Yellow: PSZA,Engineering Pink: Health Gold: SHA

T:\Operations\Updated Forms\Building applmp 8.2012.docx

2018 Code plans Comp

B4003392

I. General Requirements

A. The term "work" as used in these notes shall include all provisions as drawn or specified in these documents as well as all other provisions specifically included by the Owner in the form of drawings, specifications, and written instructions and approved by the Architect.

B. Contractor shall visit the site to verify all plan and existing dimensions and conditions and shall notify the Architect in writing, of any discrepancies before proceeding with the work or shall be responsible for same.

C. Contractor shall be familiar with provisions of all applicable codes and shall insure compliance of work to those codes.

D. These documents do not include the necessary components for construction safety. Safety, care of adjacent properties during construction, compliance with state and federal regulations specified in the Owner/Contractor contract is, and shall be, the Contractor's responsibility.

E. Contractor shall supervise and direct the work and shall be solely responsible for all construction means, methods, techniques, and safety procedures and for coordinating all portions of the work.

F. If in the event of conflict between local, state, and national codes, the more stringent shall govern.

G. AIA General Conditions of the Contract for Construction are a part of this project.

H. All construction is to be in compliance with the following code:
International Residential Code For One & Two Family Dwellings, 2015 Edition (As Amended By Montgomery County, MD)

I. This project is an Owner/Builder project wherein the Owner is performing as the Contractor. The Owner is responsible for all construction means and methods as well as all compliance with building codes and other applicable laws, ordinances and regulations. The Architect is available to the Owner, however, all questions regarding this project must be directed to the Owner. The Architect assumes no responsibility for the means and methods of construction of the project, inasmuch as the Owner/Builder has full control and has assumed full responsibility.

J. Use of these documents without written permission of the Architect is forbidden.
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K. Any and all drawings and specifications for sitework, plumbing supply or waste, electrical circuiting, and heating, ventilation, and air conditioning systems not contained in the "list of drawings" listed on this page are not a part of the professional services provided to the Owner by the Architect under their Agreement. Any discrepancies with these documents by any of the above listed services shown in documents by others should be indicated in writing to Architect immediately.

L. Contractor shall be responsible for all noise attenuation requirements.

II. Structural Specifications

A. General Requirements

1. The conditions and assumptions stated in these specifications shall be verified by the Contractor for conformance to local codes and conditions. In the event of a discrepancy between these specifications and local codes or conditions, the Contractor shall notify the Architect in writing of the discrepancy and special engineering requirements shall be applied to insure the building's structural integrity.

2. These requirements may be superceded by more stringent information contained within the drawings. The more stringent shall be followed.

3. Soil conditions shall conform to the following conditions:
   Bearing capacity: Min. 2000 psf, field verify, under all footings and slab.

   Water Table: Min. 2'-0" below bottom of all concrete slabs and footings. Footings, foundations, walls and slabs shall not be placed on or in Marine Clay, Peat and other organic materials.

4. Bottom of all footings shall extend to below frost line of the locality or to a minimum of 2'-6" below grade.

5. Free draining granular backfill shall be used against foundation walls. Equivalent fluid pressure of backfill not to exceed 30 pcf. If backfill pressures exceed 30 pcf then foundation walls must be designed for actual equivalent fluid pressure.

6. All backfill under slabs and footings shall be clean, porous soil compacted in 8" layers to 95% density. Where distance from edge of foundation wall exceeds 16", but is less than 4'-0", provide backfill as described above or reinforce with #4 rebar @ 2'-0" o.c., 1'-0" beyond edge of undisturbed soil and 1'-0" into foundation wall.

B. Concrete

1. All concrete shall attain the following 28 day compressive strengths:

   -Foundation Walls, Footings, Piers and Interior Slabs . . . 3000 psi

   -All other slabs on grade (including garage slabs) . . . . 3500 psi.

2. Reinforcing steel shall conform to ASTM A-615, new billet, grade 60.

3. Welded wire mesh shall conform to ASTM A-185, with minimum laps of 8".

4. Maximum slump 5".

5. All exposed exterior concrete shall be 6+/-1% air entrained or shall conform to ASTM C260.

6. Walls with lateral earth pressures shall be shored or floor/roof construction shall be in place prior to backfilling.

7. All concrete work shall be in accordance with ACI 318.

C. Steel

1. All structural steel specified in these documents shall conform to ASTM A-36.

2. Steel pipe shall conform to ASTM A-53.

3. All welds shall comply with AWS standards.

4. All bolts in bolted steel connections shall conform to ASTM A-325.

5. All required steel anchor bolts, anchors straps, nails, caps, joist hangers shall be constructed of code approved galvanized or stainless steel. All metal nails, hangers, straps & bolts that are in direct contact with pressure treated lumber shall be fabricated from stainless steel or other non-corrosive metal approved by the Building Official.

6. All connections shall conform to AISC standards.

7. Flitch Beams: Unless noted otherwise, all steel flitch beams shall be assembled with 2 rows of 1/2" bolts @ 12" o.c. top and bottom, stagger rows 6". There shall be a bolt top and bottom 8" from each end.

II. STRUCTURAL SPECIFICATIONS (continued)

D. Wood

1. All structural wood joists and headers shall be stressed graded #2 Hem Fir 19% M.C. in accordance with NDS by NFaPA, unless noted. All wood shall comply to the following minimum specifications:

#2 Hem Fir, 19% M.C.

F_b min: 980 psi repetitive use
850 psi single member use

E min: 1,300,000 psi

F_v min: 75 psi

F_c min: 1,250 psi

$F_{c\perp}$ min: 405 psi

#2 Spruce Pine Fir 19% M.C. (#2 S.P.F.)

F_b min: 1,005 psi repetitive use
875 psi single member use

E min: 1,400,000 psi

F_v min: 70 psi

F_c min: 1,100 psi

$F_{c\perp}$ min: 425 psi

#2 Southern Pine, 19% M.C. (#2 S.Y.P.)

F_b min: 1,120 psi repetitive use
975 psi single use

To: Howard County Health Dept.
Re: 12244 Pleasant Springs Ct.
Highland Reserve - Lot 21 (Regan Property)

6 SEPTIC BEDROOMS
(1 Basement; 1 Main Level Master; 4 Upstairs)

Show 1BR

F_c min: 2,310 psi

$F_{c\perp}$ min: 730 psi

All Studs in bearing walls shall conform to the following minimum specifications:

Stud Grade Spruce Pine Fir 19% M.C.

F_b min: 775 psi repetitive use
675 psi single use

E min: 1,200,000 psi

F_v min: 70 psi

F_c min: 675 psi

$F_{c\perp}$ min: 425 psi

2. All manufactured wood trusses and truss headers shall be designed by manufacturer according to Truss Plate Institute (TPI) and other requirements specified by local building authority. Manufacturer shall submit to Architect, shop drawings and calculations sealed by a Professional Engineer registered in the governing jurisdiction. Erection shall be in accordance with TPI "Building Component Safety Information (BCSI) Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses." Roof trusses and all bridging and/or lateral bracing required for structural integrity of roof truss system is to be designed by Manufacturer's drawings.

3. All structural wood exposed to outside unprotected or bearing directly on concrete shall be pressure treated with approved materials to resist decay and infestation by termites and moisture.

4. All wall sill plates shall be min. 2x4 and shall be anchored into foundation walls with 1/2" diameter anchor bolts min. 7" into poured in place concrete and 15" into grouted cmu. Minimum 2 anchors per section of plate and anchors shall be placed 12" from end of each plate. Maximum spacing of anchors 6'-0" on center for one and two story buildings and 4'-0" on center for buildings more than two stories in height or as required per local code. Anchor straps may be used as a substitute and shall be installed per manufacturers' specifications

5. All exterior wood framework supported on approved foundation walls shall be minimum 8" above finish grade.

6. All wood framed exterior corners shall be laterally braced 4'-0" each direction from the corner with 1/2" exterior plywood or other code approved structural method.

7. Provide continuous double top plate at all bearing stud walls.

8. Provide blocking between all joists, 2 x 12 or greater, at intervals not to exceed 8'-0".

9. All structural wood posts under beams and headers over 4'-0" span shall be min. 2-2x4 unless noted otherwise.

10. All bearing partitions shall be 2x4 studs at 16" o.c. or as noted.

11. Provide solid blocking at 4'-0" o.c. between rim joist and first interior parallel joist.

12. All framing shall be detailed and installed in accordance with AF&PA Details for Conventional Wood Frame Construction

13. All ceramic tile shall be installed per Tile Council of North America as specified in the Handbook for Ceramic Tile Installation. Contractor is responsible for providing sufficient movement joints, as per Tile Council of North America specifications, for all floor tile. Movement joint locations and details are not a part of these documents.

14. Plywood subfloors shall be glued and nailed to Floor Joists with APA approved elastomeric structural adhesive and 8d common nails spaced at 6" o.c. at panel edges and 12" o.c. at intermediate supports.

15. All wood posts labeled continuous (cont.) shall be continuous from under side of beam to concrete or steel bearing.

II. STRUCTURAL SPECIFICATIONS (continued)

16. Manufactured Floor Trusses: Unless otherwise noted manufactured floor trusses shall be installed in accordance with manufacturers specifications and details.

17. All plywood roof, floor and wall sheathing shall be APA approved.

E. Masonry

1. Materials
   Mortar: Type "S" ASTM C270
   Hollow CMU: ASTM C-90
   Face Brick: ASTM C-216
   Grout Aggregated: ASTM C-404

2. All masonry shall be protected from freezing for not less than 48 hours after installation and shall not be constructed below 40 degrees F without precautions necessary to prevent freezing. No anti-freeze admixtures shall be added to the mortar.

3. Brick veneer shall be attached to wood frame with minimum #22 galvanized sheet gage corrosion-resistive corrugated metal ties min. 7/8" wide at vertical intervals max. 16" and horizontal intervals max 16". Provide weep holes at 2'-0" o.c. @ first course above grade and first course above steel lintels.

4. Provide horizontal joint reinforcement (Durawall) in all masonry walls @ 8" o.c. unless otherwise specified.

5. The top course of all masonry bearing walls shall be constructed of solid masonry units or grout filled hollow units or otherwise designed to insure adequate distribution of load.

6. All masonry work shall conform to the applicable requirements of BIA and NCMA.

III. Doors and Windows

1. Unless otherwise noted, window sizes define intended aesthetic size and type by indicating sash opening in feet and inches (i.e., 2856 DH denotes a 2'-8" wide by 5' 6" tall sash opening double hung window). Contractor shall verify that doors) to be installed comply with local code
   ion, wind/impact loads.
   ons, as defined by local code, shall be
   h a visible manufacturer's label, designating
   lies.

sture Protection

below grade enclosing habitable spaces as
wall.

enclosing basements and crawl spaces with
xterior face of wall.

istive flashing shall be provided at all
nner as to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. Similar flashings shall be installed at the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings; under and at the ends of masonry wood or metal copings and sills; continuously above all projecting wood trim at wall and roof intersections; under built-in gutters; at junctions of chimneys and roofs; and in all roof valleys and around all roof openings. All windows and doors shall be flashed in accordance with the manufacturers written instructions.

2. Building Paper: When veneer of brick, clay tile, concrete, or natural or artificial stone are used, 15 pound felt or paper shall be attached to the sheathing with flashing whenever necessary to prevent moisture penetration behind the veneer. Approved water resistant sheathing may be substituted for building paper.

V. Other

1. In locations required by local code, window opening limiting devices are to be installed by window manufacturer in compliance with code section R312.2.2.

2. Residential Energy Efficiency compliance is per the Total UA Alternative Method per the 2015 International Energy Conservation Code for climate zone 4A. Refer to REScheck Compliance Certificate and to "N" sheets (Energy Plans) for additional information.

3. NOTE: Structural Design is for Gravity Loads ONLY. Structural Engineering for Lateral Load Design requirements specified per Building Code is NOT included in these documents and shall be provided by others.

List of Drawings

1	General Notes & Specifications	5	Opt. Bonus Room & Back Stair Floor Plans with Elevation C	15	Partial Opt. Bonus Room, Opt. Bath #4 & Alt. Upper Floor Framing Plans	E4	Partial Opt. Bonus Room, Library w/ Opt. Built-Ins @ Sides, Opt. Back Stair and Alt. Kitchen Electrical Plans
RC	REScheck Compliance Certificate	5A	Intentionally Removed from Set	15A	Intentionally Removed from Set	E5	Intentionally Removed from Set
D1	Foundation/Framing Details	5B	Intentionally Removed from Set	15B	Partial Upper Floor Framing Plan W/Opt. Loft	E6	Intentionally Removed from Set
D2	Foundation/Framing Details	6	Building Section "A"	16	Roof Framing Plan w/Elevation C	N1	Energy Plans
AW	Areaway Details	6A	Part'l Building Sections F & G w/ Opt. Deluxe Rear Extension & w/ Opt. Family Loft	16A	Partial Roof Framing Plan w/ Opt. Deluxe Rear Extension w/ Elev. C	N2	Energy Plans
DK1	Deck Details	6B	Intentionally Removed from Set	17	Partial Opt. Bonus Room and Opt. Back Stair Roof Framing Plans	N3	Energy Plans
DK2	Deck Details	7	Building Section "B"	18	Partial Opt. Bonus Room w/ Opt. Bath #4 & Alt. Upper Flr Roof Framing Plans	N4	Energy Section "A"
DK3	Deck Details	8	Part'l Building Sections C, D & E	19	Partial Roof Framing Plans w/ Opt. Deluxe Rear Ext. & Opt. Morning Room Ext. w/ Elev. C		
SP1	Optional Stoop Partial Fndn Plans	8A	Intentionally Removed from Set	20	Intentionally Removed from Set		
SP2	Optional Stoop Partial Fndn Plans	8B	Intentionally Removed from Set	21	Intentionally Removed from Set		
SP3	Optional Stoop Partial Lower Fl Plans	9	Front Elevation w/ Elevation C	22	Intentionally Removed from Set		
SD	Structural Slab Details	9A	Intentionally Removed from Set	23	Roof Framing Plans w/Opt Loft		
TR	Exterior Trim Details	10	Rear Elevation w/ Elevation C	TJ	Truss Joist Details		
TR1A	Fireplace Trim Details	10A	Partial Rear Elevations w/ Alt. Upper Floor Master Suite & w/Opt. Family Loft	E1	Std. Bsmt Electrical Plan		
TR2	Fireplace Trim Details	10B	Intentionally Removed from Set	E2	Std. Lower Floor Electrical Plan		
TR3	Interior Trim Details	11	Left Side Elevation w/ Elev. C & Partial Left Side Elevation w/ Opt. Loft	E2A	Partial Lower Floor Electrical Plan w/ Opt. Deluxe Rear Extension		
TR4	Intentionally Removed from Set	11A	Partial Left Side Elevation w/ Opt. Deluxe Rear Extension w/ Elev C & W/Opt. Loft	E2B	Partial Lower Floor Electrical Plan w/ Opt. Morning Room Extension & Deluxe Rear Extension & Opt. Loft		
2	Std Fndn/Bsmt Plans	11B	Intentionally Removed from Set	E3	Std. Upper Floor Electrical Plan		
2A	Partial Fndn/Bsmt Plans w/ Opt. Rear Ext. & Opt. Morning Room Ext.	12	Right Side Elevation & Partial Right Side Elevation w/ Opt. Deluxe Rear Extension w/ Elev C	E3A	Partial Alt. Upper Floor Electrical Plan & Partial Upper Flr Electrical Plan W/Opt. Loft		
2B	Intentionally Removed from Set	12A	Intentionally Removed from Set				
3	Std Lower Floor Plans w/ Elev C	13	Lower Floor Framing Plan w/ Elev C				
3A	Partial Lower Floor Plans w/ Elev C w/ Alt. Kitchen, Library Built-ins And Opt. Loft	13A	Partial Lower Flr Framing Plan w/ Opt. Deluxe Rear Ext. & Opt. Morning Rm Ext.				
3B	Partial Lower Floor Plans w/ Opt. Deluxe Rear Ext.	13B	Intentionally Removed from Set				
3C	Partial Lower Floor Plans & Upper Floor Plans w/ Opt. Deluxe Rear Ext. & Opt. Morning Room Ext.	14	Upper Floor Framing Plan w/ Elev C				
3D	Intentionally Removed from Set						
4	Std Upper Floor Plans w/ Elev C						
4A	Alt. Upper Floor Plans W/Upper Floor Master Suite & Opt. Family Loft						

Symbols

	Duplex Outlet		One Way Switch
WP	Duplex Outlet, Weather Proof on GFI circuit	3	Three Way Switch
	Duplex Outlet, Floor Mounted	4	Four Way Switch
SW	Duplex Outlet, Switch Operated	RH	Switch w/ Rheostat
RANGE	Range Outlet	SD	Smoke Detector
	Gas Outlet	CH	Chime
	Ceiling Mounted Incandescent	F	Bathroom Exhaust Fan
J	Junction Box	TV	Television Outlet
	Eyeball Light	T	Telephone Outlet
	Wall Washer Light (Recessed)	M	Medicine Cabinet
R	Recessed Light	FPB	Frost Proof Hose Bib
	2Ω Fluorescent Light	R WP	Recessed Waterproof Light
	4Ω Fluorescent Light		Dedicated Circuit Outlet
	Exterior Flood Lights		Steel Angle (Lintel)
	Wall Mounted Incandescent		Structural Post
	Pull Switch Light	SD	Smoke/Carbon Monoxide Detector
		F	Cont. Running Mech Fan

List of Abbreviations

ADJ.	Adjustable	MC	Medicine Cabinet
A.S.F.	Above Subfloor	MFG.	Manufacturing
BF	Bifold	O.A.	Overall
BM	Beam	O.C.	On Center
B.O.J.	Bottom of Joist	OPT.	Optional
CLG	Ceiling	PART.	Partial
CMU	Concrete Masonry Unit	PLYWD	Plywood
C.O.	Cased Opening	P.T.	Pressure Treated
COL.	Column	R/A	Return Air
CONC.	Concrete	R.C.	Rough Cut
CONT.	Continuous	REF	Refrigerator
CS	Casement	R/O	Range Oven
CVAC	Central Vacuum	SF	Square Feet
DBL.	Double	SHWR	Shower
DES.	Design	SIM.	Similar
DH	Double Hung	S.L.	Sliding Door/Window
DTL.	Detail	STD.	Standard
DW	Dishwasher	STL.	Steel
FD	Floor Drain/French Door	S&P	Shelf & Pole
F.P.	Fireplace	S.V.B.	Solid Valley Blocking
FTG.	Footing	T&G	Tongue & Groove
GFI	Ground Fault Circuit Interupter	T.O.S.	Top of Slab
GPDW	Gypsum Drywall	T.O.W.	Top of Wall
HD.HGHT	Window Head Height	TR	Trim
HDR	Header	TYP.	Typical
HFL	Heat/Fan/Light	WD	Wood
HWH	Hot Water Heater	W/O	Wall Oven
INSUL.	Insulation	W.W.M.	Welded Wire Mesh
L.T.	Loundry Tub	B.W.L.	Braced Wall Line

Area Calculations

Area Calculations include gross floor area to exterior face of wall for all conditioned spaces and exclude upper levels of multi-story spaces.

LOWER FLOOR :	2580 SF
UPPER FLOOR :	1217 SF
TOTAL :	3797 SF
OPT. BACK STAIR:	60 SF
OPT. BONUS ROOM W/ BACK STAIR	334 SF
OPT. BONUS ROOM W/ BACK STAIR AND BATH #4:	380 SF
FIN. BSMT :	2603 SF
LOWER FLOOR W/ OPT. CLOSET EXTENSION:	2613 SF
OPT. DELUXE REAR EXT.	279 SF
OPT. MORNING ROOM EXT.	58 SF
OPT. FAMILY LOFT	436 SF

Date	
A.C. 09/07/03 GTO	REV. 11/22/05 TH
C.O. 10/16/03 GTO	REV. 01/03/07 BKB
REV. 06/15/04 VA	REV. 06/15/07 BKB
REV. 09/24/04 EH	REV. 01/09/08 BKB
REV. 12/30/04 BB	REV. 04/01/09 DG
REV. 03/14/05 DG	REV. 09/03/09 TH
REV. 09/07/05 TH	REV. 10/05/12 JG
REV. 01/03/07 BKB	REV. 10/10/12 JG
REV. 06/15/07 BKB	REV. 01/26/16 JR
REV. 01/09/08 JT	
REV. 04/01/09 JT	
REV. 04/07/09 DG	
REV. 09/03/09 DG	

Professional Certification. I, Martin G. Mitchell, hereby certify that these documents were prepared or approved by me and that I am a duly licensed architect under the laws of the State of Maryland. License number: 10796. Expiration Date: December 24, 2016.

Project Number: 00006-01

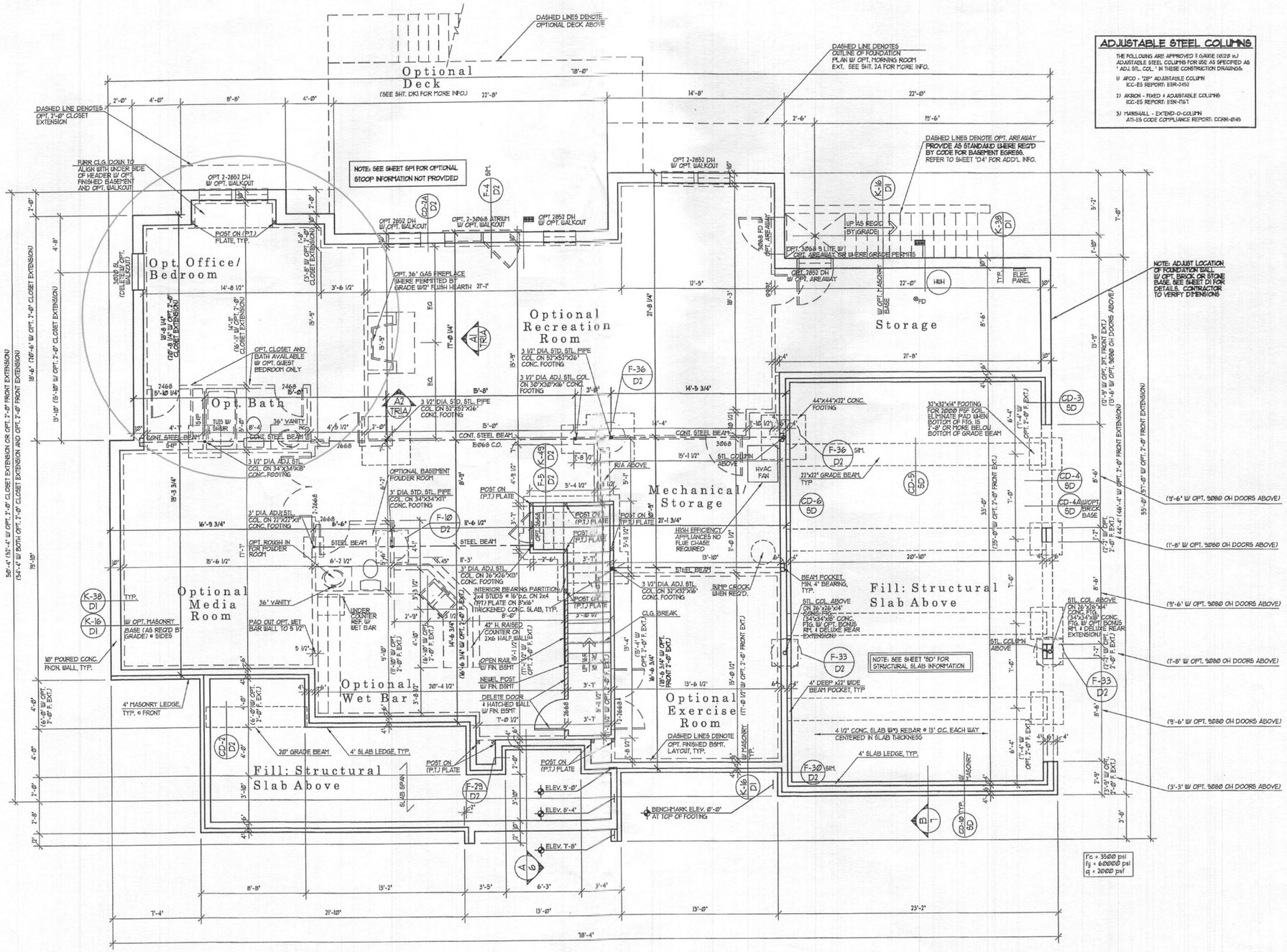
FOXRIDGE
MITCHELL BEST HOMES

Architect

BOARD OF ARCHITECTS
LICENSED
MARTIN G. MITCHELL
STATE OF MARYLAND
JAN 29 2016

SUTTON YANTIS ASSOCIATES ARCHITECTS
8300 Boone Blvd. Tel 703.734.0733
Vienna, VA 22182 Fax 703.847.0171
www.sysa.com

Sheet Number 1



BASEMENT / FOUNDATION PLAN

STANDARD- SHOWN W/ ELEVATION "C"

UNLESS OTHERWISE NOTED ALL INTERIOR PARTITIONS TO BE 3 1/2"
UNLESS OTHERWISE NOTED WINDOW HEAD HEIGHT TO BE 6'-8" ASF.

1/4" = 1'-0"

ADJUSTABLE STEEL COLUMNS

THE FOLLOWING ARE APPROVED II GAUGE (0.120 in.) ADJUSTABLE STEEL COLUMNS FOR USE AS SPECIFIED AS ' ADJ. STL. COL. ' IN THESE CONSTRUCTION DRAWINGS:

1) APCO - "ZIP" ADJUSTABLE COLUMN
ICC-ES REPORT: ESR-2452

2) AKRON - FIXED & ADJUSTABLE COLUMNS
ICC-ES REPORT: ESR-1767

3) MARSHALL - EXTEND-O-COLUMN
ATI-ES CODE COMPLIANCE REPORT: CCRR-0145

Date	
A.C. 09/07/03 GTO	REV. 07/16/07 SGB
C.B. 10/16/03 GTO	REV. 04/09/09 JT
C.B. 06/15/04 VA	REV. 04/07/09 GT
REV. 09/24/04 EH	REV. 09/15/15 JG
REV. 11/30/04 SO	REV. 10/10/12 JG
REV. 09/07/05 TM	REV. 01/16/16 JR
REV. 06/15/07 SGB	

Project Number: 00063-02

FOXRIDGE
MITCHELL BEST HOMES

Professional Certification. I, Martin G. Yantis, certify that these documents were prepared or supervised by me and that I am a duly licensed architect under the laws of the State of Maryland. license number: 19199. Expiration Date: December 24, 2016.

Architect

JAN 9 9 2016

SUTTON YANTIS ASSOCIATES ARCHITECTS
8300 Boone Blvd. Vienna, VA 22182
Tel 703.734.9733
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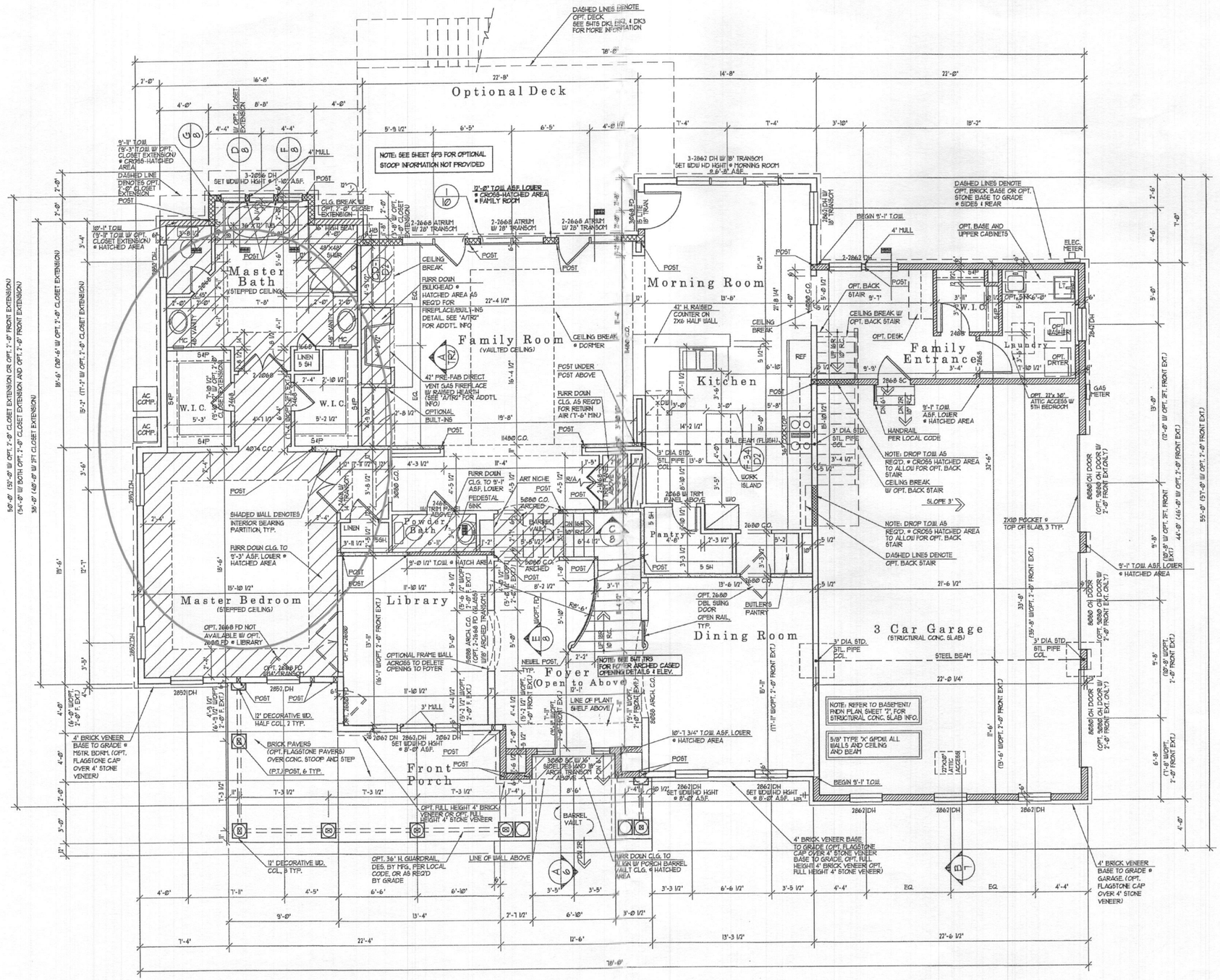
Sheet Number 2



LOWER FLOOR PLAN

STANDARD- SHOWN W/ ELEVATION "C"

UNLESS OTHERWISE NOTED ALL INTERIOR PARTITIONS TO BE 3 1/2"
UNLESS OTHERWISE NOTED WINDOW HEAD HEIGHT TO BE 7'-4" A.S.F.

1/4" = 1'-0"

Date	
A.C. 09/09/03 GTO	REV. 07/16/07 SKB
C.B. 10/08/03 GTO	REV. 04/08/09 JT
REV. 09/24/04 EH	REV. 04/15/09 JT
REV. 12/30/04 ED	REV. 04/27/09 GT
REV. 07/07/05 TH	REV. 05/08/09 DG
REV. 01/21/09 TH	REV. 10/05/12 JG
REV. 06/15/07 SKB	REV. 07/10/13 JG
	REV. 01/16/16 JR

Project Number: 0006/9-03

FOXRIDGE
MITCHELL BEST HOMES

Professional Certification. I, Martin G. Yantis, certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number, 10199. Expiration Date: December 24, 2016.

Architect

SUTTON YANTIS ASSOCIATES ARCHITECTS
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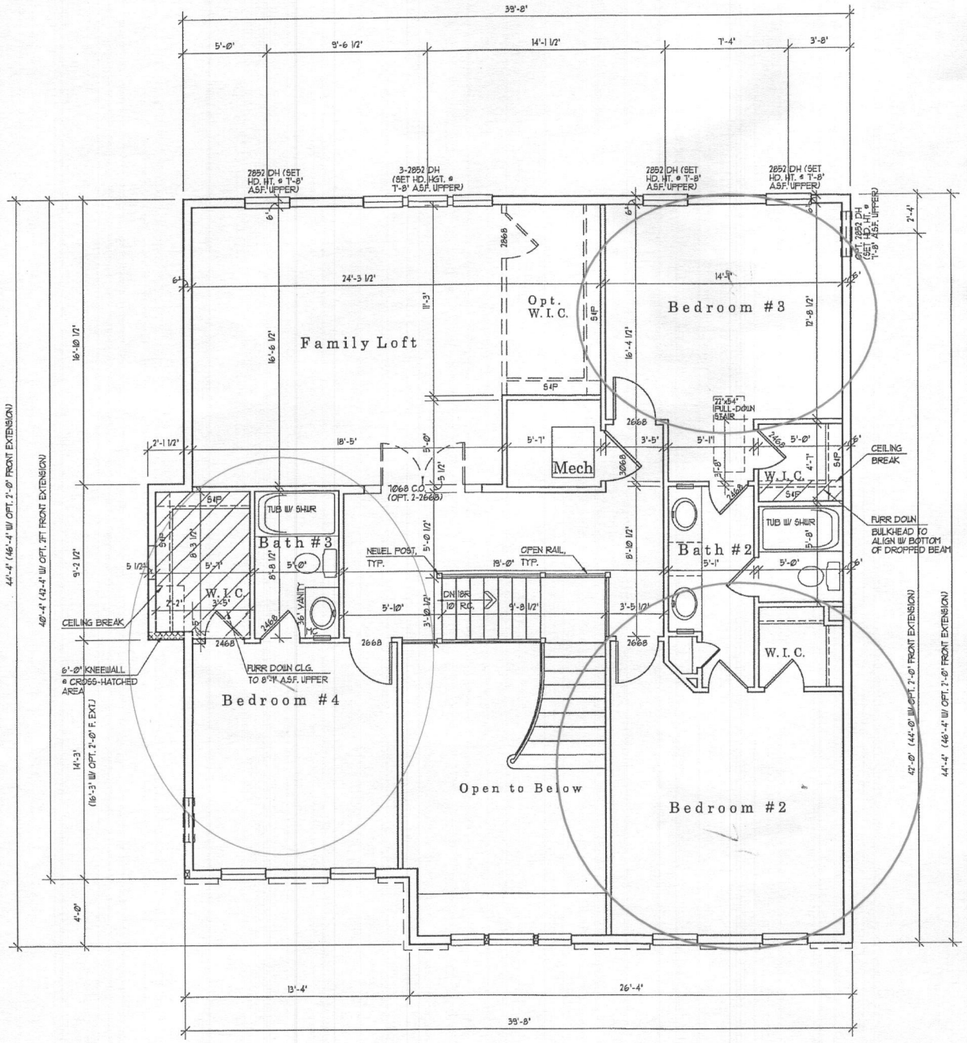
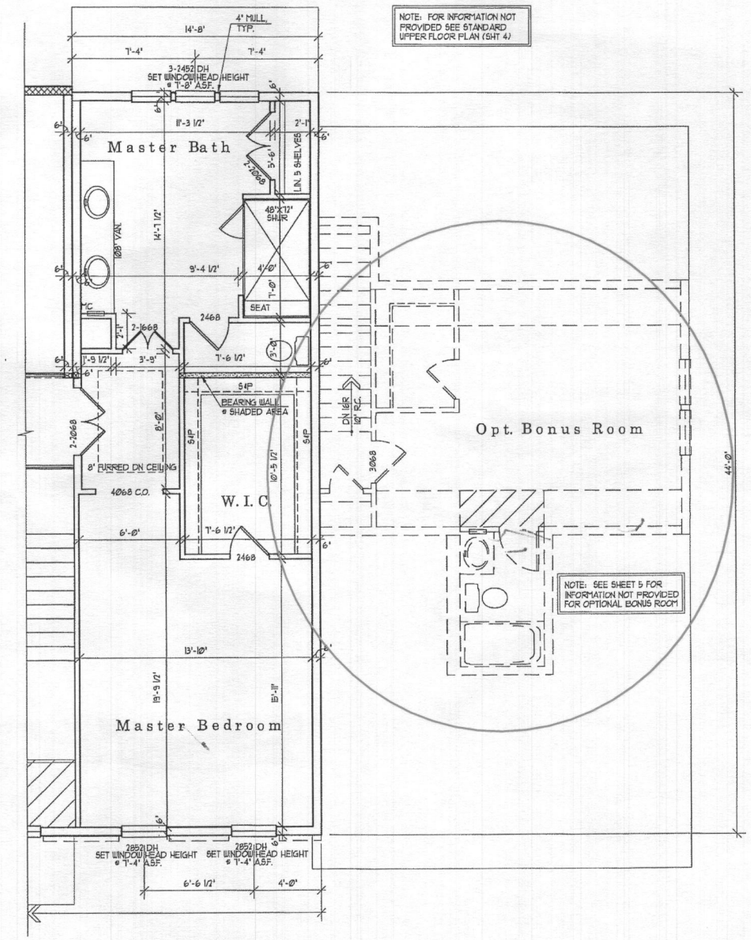
Sheet Number 3



UPPER FLOOR PLAN

W/ LOFT

1/4" = 1'-0"



PARTIAL UPPER FLOOR PLAN

W/ UPPER FLOOR MASTER BEDROOM
SHOWN W/ ELEVATION C

1/4" = 1'-0"

Date	
REV. 03/07/05 HJ	
REV. 06/15/07 BGB	
REV. 07/16/07 BGB	
REV. 10/09/12 JG	
REV. 10/16/07 JG	
REV. 01/06/16 JR	

Professional Certification I, Martin G. Yantis, certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number, 10193. Expiration Date: December 24, 2016.

Project Number: 00009-04A

FOXRIDGE
MITCHELL BEST HOMES

Architect

JAN 29 2016

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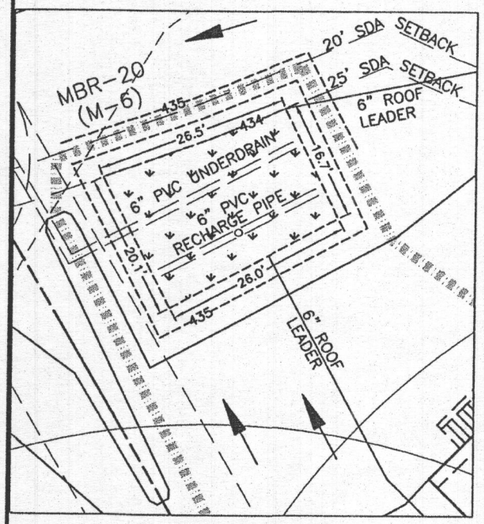
Sheet Number
4A

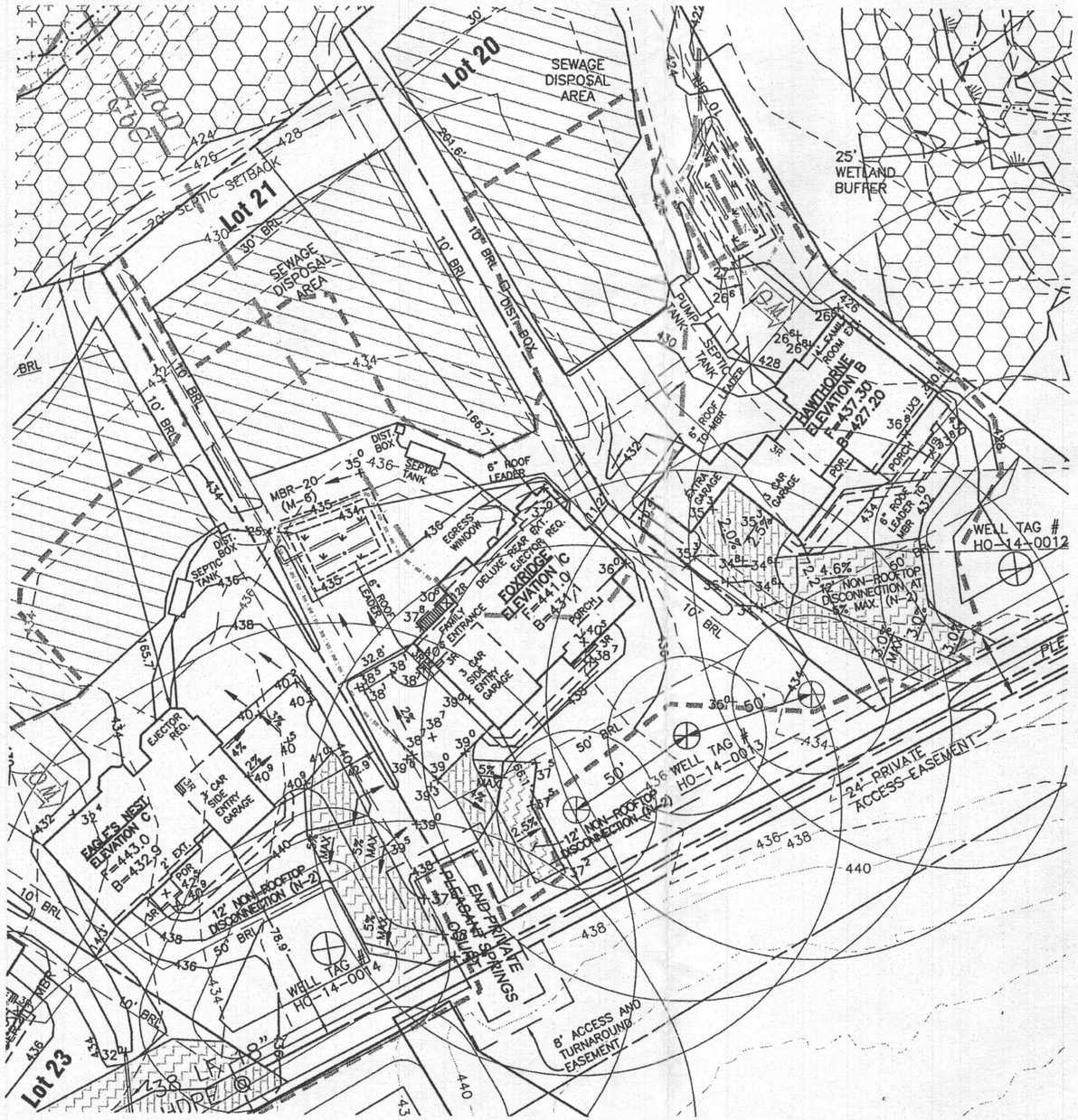
B19003392

LEGEND

SOILS CLASSIFICATION	GbC
SOILS DELINEATION	
EXISTING CONTOURS	480 / 478
PROPOSED CONTOURS	999
LIMIT OF WETLANDS	
25' WETLANDS BUFFER	
CENTERLINE OF STREAM	
STREAM BUFFER	
PROPOSED STRUCTURE	
SEPTIC RESERVE AREA	
SWM DRAINAGE DIVIDE	
LOD/EFFECTIVE AREA	



MBR-20 DETAIL
1" = 20'



PLAN VIEW
1" = 50'

GRID NORTH

Approved Septic System Plan
Howard County Health Department
Signature
Date 11-15-19
B19003392

BUILDING PERMIT PLAN NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR REGAN PROPERTY, PLAT Nos. 23063–23074. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JANUARY, 2012.
4. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS EXCEPT AS WAIVED.
6. THE EXISTING WELL SHOWN ON THIS PLAN, HO–14–0013, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
8. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
9. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED AND PROVIDED BY ONE MICRO–BIORETENTION FACILITY (MDE M–6) AND ONE NON–ROOFTOP DISCONNECTION (MDE N–2).
10. MICRO–BIORETENTION SHALL HAVE 6" ROOF LEADERS.

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. 45577, Expiration Date: 06-08-2020.

STATE OF MARYLAND
JOHN M. CARNEY
No. 45577
PROFESSIONAL ENGINEER

9/20/19

ESD STORMWATER MANAGEMENT SUMMARY TABLE

Pe= 1.60 inches Qe= 0.43 inches ESDv= 872 cf Rv= 0.27

Practice	#	DA to practice	Imp Area to practice	Af (s.f.) Required	Af (s.f.) Provided	2% DA?	ESDv Required	ESDv Provided	ESDv Pe Provided	REv Required	REv Provided	Ownership
(M-6) MicroBioretenion	MBR-20	7,830	4,954	157	478	PASS	728	870	1.6		207	Private
(N-2) Disc. of Non-Rooftop Runoff	NDC-1	1,357	680					51	1.0		51	Private
Total Treated →		9,187	5,634	157	478		872	921	1.8	137	258	
Site Total →		23,712	5,902									

OWNER/BUILDER: MB HIGHLAND RESERVE, LLC 1686 EAST GUDE DRIVE ROCKVILLE, MD 20850 301–762–9511	BENCHMARK ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS ENGINEERING, INC. 8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315 ELLICOTT CITY, MARYLAND 21043 (P) 410–465–6105 ▲ (F) 410–465–6644 WWW.BEI–CIVILENGINEERING.COM
PROJECT:	REGAN PROPERTY LOT 21
LOCATION:	12244 PLEASANT SPRINGS COURT HIGHLAND, MD 20777 TAX MAP No. 34 – BLOCK No. 24 – PARCEL No. 200 5TH ELECTION DISTRICT, TAX ID NUMBER: 05–597454
TITLE:	BUILDING PERMIT PLAN
HOUSE TYPE:	FOXRIDGE - ELEVATION C
DATE: SEPTEMBER, 2019	PROJECT NO. 2171
SCALE: AS SHOWN	DRAWING 1 OF 2

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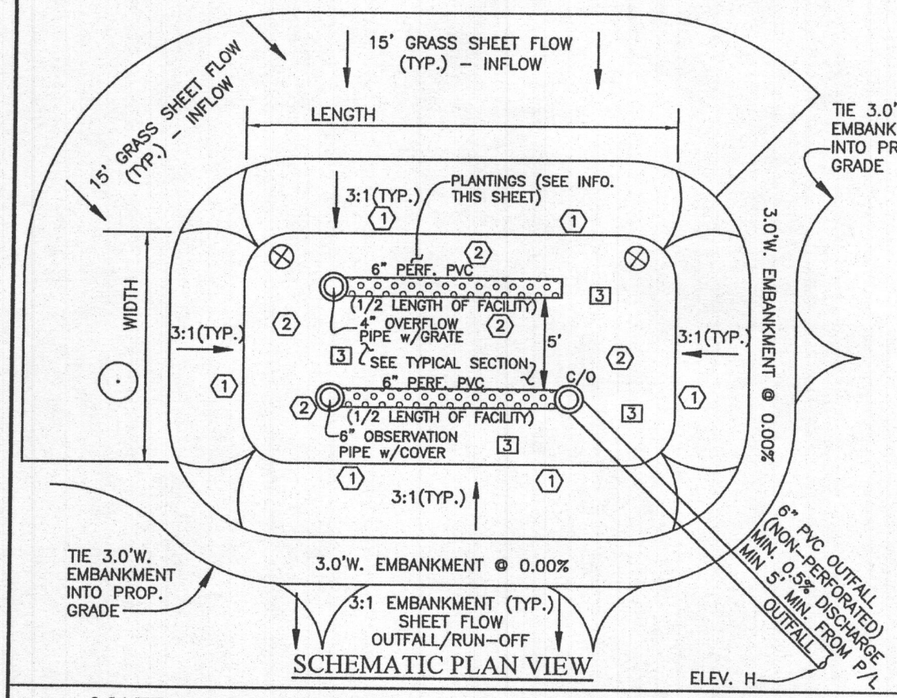
ON-LOT BIORETENTION DIMENSIONS

FACILITY	A	B	C	D	E	F	G	H	LENGTH	WIDTH	FILTER (Af)	PLANTINGS 1	PLANTINGS 2	PLANTINGS 3	LINER
MBR-20	435.00	434.00	433.75	431.75	431.42	430.92	430.09	428.00	26	20	474	105	105	53	NO

+ 1 TREE
+ 1 SHRUB

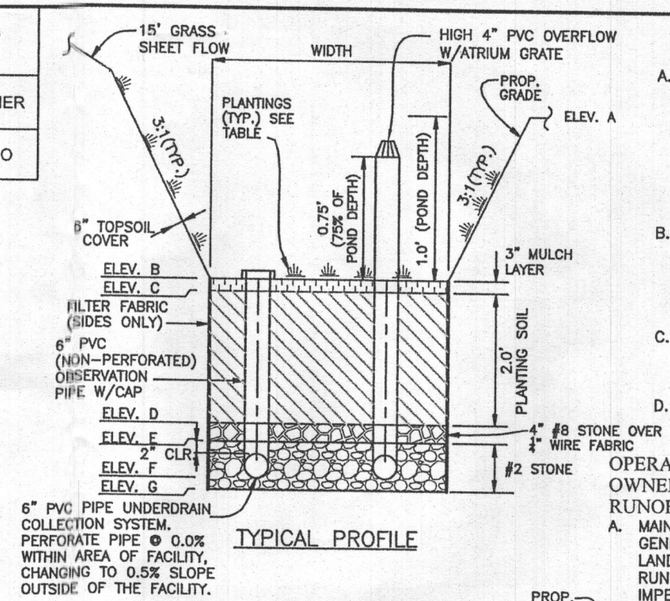


SCHEMATIC PLAN VIEW

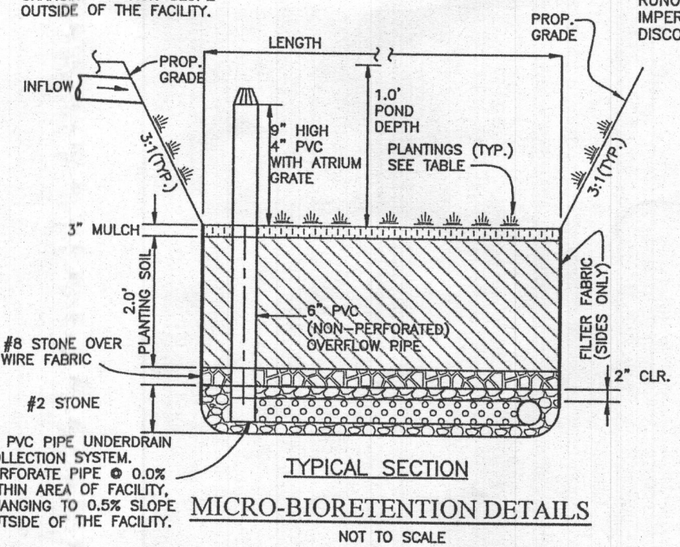
NOTE: IMPERMEABLE LINER REQUIRED WHEN FACILITY IS INSTALLED IN THE 100' WELL RADIUS. THIS LINING SHOULD INCLUDE ENTIRE SIDES AND BOTTOM OF THE EXCAVATION AND EXTEND TO TOP OF EMBANKMENT. LINING ON SIDE SLOPES SHALL BE BELOW A MINIMUM OF 6" OF TOP SOIL. LINING TO BE CLAY OR 30 MIL POND LINER

MATERIALS & SPECIFICATIONS FOR MICRO-BIORETENTION

MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS	SEE APPENDIX A; TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2.0' TO 4.0' DEEP)	LOAMY SAND 60–65% COMPOST 35–40% OR SANDY LOAM 30% COARSE SAND 30% & COMPOST 40%	N/A	USDA SOIL TYPES: LOAMY SAND OR SANDY LOAM; CLAY CONTENT <5%
ORGANIC CONTENT	MIN 10% BY DRY WEIGHT ASTM D 2974		
MULCH	SHREDDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM, NO PINE OR WOOD CHIPS
GEOTEXTILE (CLASS "C")		N/A	PE TYPE 1 NONWOVEN
GEOTEXTILE (1/4" WIRE MESH)		1/4" WIRE MESH	1/4" WIRE MESH
UNDERDRAIN GRAVEL	AASHTO M–43	NO. 57 OR NO. 6 0.375" TO 0.750"	
UNDERDRAIN PIPING	F758, TYPE PS28 OR AASHTO M–278	4" TO 6" RIGID SCH.40 PVC, SDR35 OR HDPE	3/8" PERF. @ 6" O/C, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES, NOT NECESSARY UNDERNEATH PIPES. PIPE SHALL BE WRAPPED WITH 1/4–INCH GALVANIZED HARDWARE CLOTH
IMPERVIOUS LINER	ASTM–D–4833 (THICKNESS) ASTM–D–412 (TENSILE STRENGTH 1,100 LB., ELONGATION 200%) ASTM–D–624 (TEAR RESISTANCE – 150 LB./IN) ASTM–D–471 (WATER ADSORPTION: +8 TO –2% MASS)	30 MIL. THICK	LINER TO BE ULTRAVIOLET RESISTANT. A GEOTEXTILE FABRIC SHOULD BE USED TO PROTECT THE LINER FROM PUNCTURE.
GEOTEXTILE (BELOW IMPERV. LINER)	ASTM–D–4833 (PUNCTURE STRENGTH 125LB) ASTM–D–4632 (TENSILE STRENGTH 300 LB.)		



TYPICAL PROFILE



TYPICAL SECTION

MICRO-BIORETENTION DETAILS

NOT TO SCALE

MICROBIORETENTION PLANTING SCHEDULE

(PLANTING SPECIES AND DENSITY CAN BE CHANGED OR SUBSTITUTED BY A LANDSCAPE ARCHITECT OR QUALIFIED DESIGNER)

1. IRIS FULVA (COPPER IRIS) (1 PER SY)
2. LOBELIA CARDINALIS (CARDINAL FLOWER) (1 PER SY)
3. RUDBECKIA SUBTOMENTOSA (SWEET CONEFLOWER) (1 PER 2 SY)
- CALLUNA VULGARIS (HEATHER) (1 PER FACILITY)
- ACER GINNALA (ARMUR MAPLE) (1 PER FACILITY)

MICROBIORETENTION PLANTING DATA

1. PLANTINGS WITHIN THE PONDING AREA OF THE FACILITY ARE TO BE OF A MEDIUM TO HIGH WATER TOLERANCE
2. PLANTINGS ALONG THE PERIMETER (BERM) AREA OF THE FACILITY ARE TO BE OF A LOW TO MEDIUM WATER TOLERANCE
3. AVOID PLANTINGS WITH EXCESSIVE ROOT MASS IN POND AREA OF THE RAIN GARDEN NEAR O.B. PIPE AND UNDERDRAIN.

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

A. 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.

B. 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.

C. 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.

D. 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 ROOFTOP RUNOFF (N-1), DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

A. MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE OWNER SHALL ENSURE THE AREAS RECEIVING RUNOFF ARE PROTECTED FROM COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

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. 45577, Expiration Date: 06-08-2020.

STATE OF MARYLAND JOHN M. CARNEY No. 45577 PROFESSIONAL ENGINEER

9/20/19

OWNER/BUILDER:
MB HIGHLAND RESERVE, LLC
1686 EAST GUDE DRIVE
ROCKVILLE, MD 20850
301–762–9511

BENCHMARK
ENGINEERS LAND SURVEYORS PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315
ELLICOTT CITY, MARYLAND 21043
(P) 410–465–6105 ▲ (F) 410–465–6644
WWW.BEI–CIVILENGINEERING.COM

PROJECT:	REGAN PROPERTY LOT 21
LOCATION:	12244 PLEASANT SPRINGS COURT HIGHLAND, MD 20777 TAX MAP No. 34 – BLOCK No. 24 – PARCEL No. 200 5TH ELECTION DISTRICT, TAX ID NUMBER: 05–597454
TITLE:	BUILDING PERMIT & STORMWATER MANAGEMENT NOTES & DETAILS
HOUSE TYPE:	FOXRIDGE - ELEVATION C
DATE: SEPTEMBER, 2019	PROJECT NO. 2171
SCALE: NOT TO SCALE	DRAWING 2 OF 2

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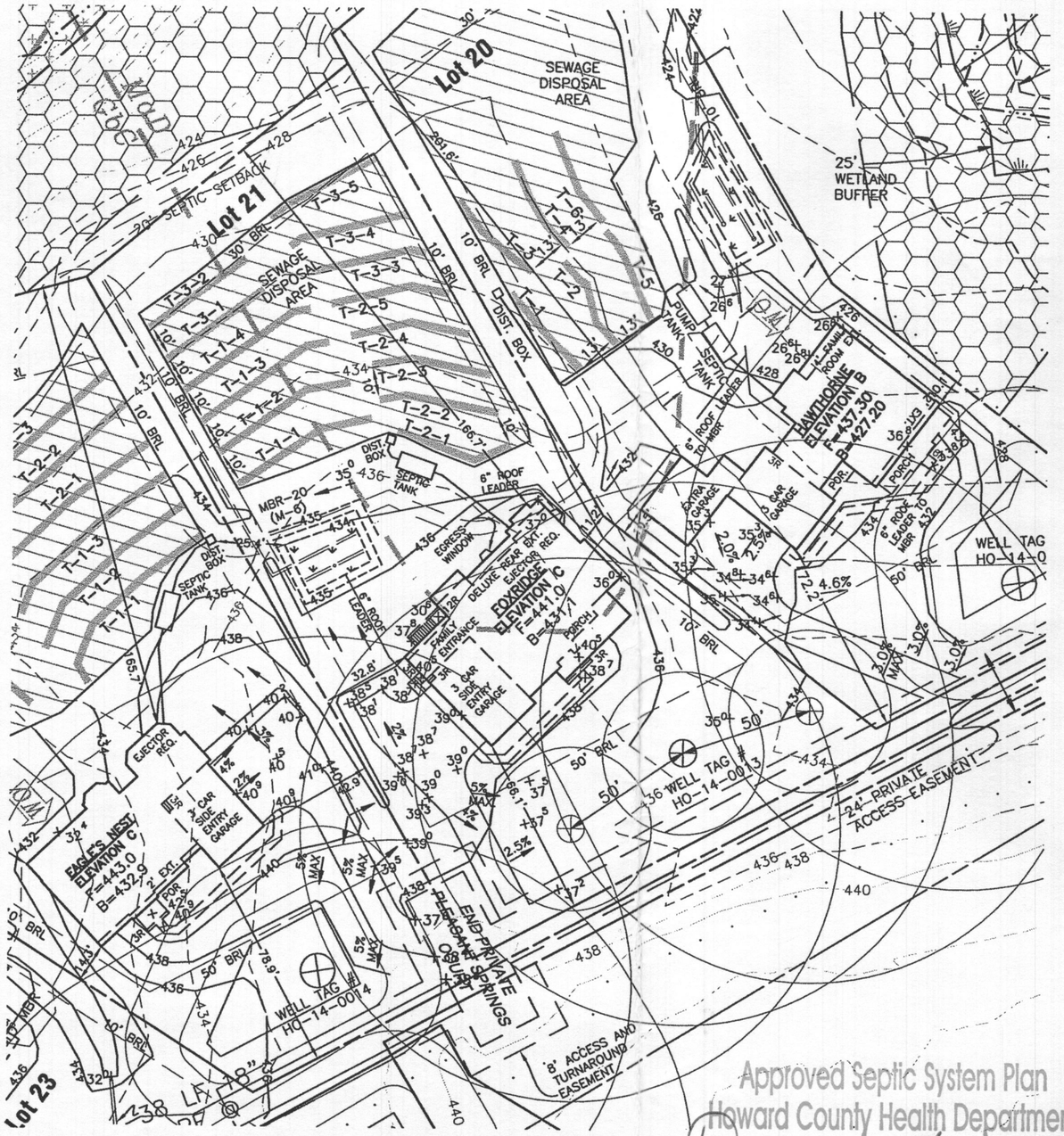
LEGEND

SOILS CLASSIFICATION	GbC
SOILS DELINEATION	
EXISTING CONTOURS	480 478
PROPOSED CONTOURS	999
LIMIT OF WETLANDS	
25' WETLANDS BUFFER	
CENTERLINE OF STREAM	
STREAM BUFFER	
PROPOSED STRUCTURE	
SEPTIC RESERVE AREA	



PLAN VIEW

1" = 50'

GENERAL NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR REGAN PROPERTY, PLAT Nos. 23063–23074. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
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7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
8. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
9. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED AND PROVIDED BY ONE MICRO–BIORETENTION FACILITY (MDE M–6) AND ONE NON–ROOFTOP DISCONNECTION (MDE N–2).
10. MICRO–BIORETENTION SHALL HAVE 6" ROOF LEADERS.

THIS PLAN IS FOR SEPTIC DESIGN ONLY

SEE MANUFACTURES SPECIFICATIONS FOR DETAILS. WWW.MAYERPRECAST.COM EQUIVALENT FROM OTHER MANUFACTURERS CAN BE SUBSTITUTED.

SIGNATURE AND SEAL ARE FOR SEPTIC PROFILE AND CALCULATIONS ONLY, TANK AND DETAILS WERE NOT DESIGNED OR REVIEWED BY THE ENGINEER:

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. 45577, Expiration Date: 06-08-2020.

STATE OF MARYLAND — JOHN M. CARNEY — No. 45577 — PROFESSIONAL ENGINEER

9/20/19

Approved Septic System Plan
Howard County Health Department
Dane Bernard 11-15-19
Signature Date
B19003392

OWNER/BUILDER: MB HIGHLAND RESERVE, LLC, 1686 EAST GUDE DRIVE, ROCKVILLE, MD 20850, 301–762–9511	BENCHMARK ENGINEERS LAND SURVEYORS PLANNERS — ENGINEERING, INC. 8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315, ELLICOTT CITY, MARYLAND 21043, (P) 410–465–6105 ▲ (F) 410–465–6644, WWW.BEI–CIVILENGINEERING.COM
PROJECT:	REGAN PROPERTY, LOT 21
LOCATION:	12244 PLEASANT SPRINGS COURT, FULTON ~~HIGHLAND~~, MD ~~20777~~ 20759; TAX MAP No. 34 – BLOCK No. 24 – PARCEL No. 200; 5TH ELECTION DISTRICT, TAX ID NUMBER: 05–597454
TITLE:	ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
HOUSE TYPE:	FOXRIDGE - ELEVATION C
DATE: SEPTEMBER, 2019	PROJECT NO. 2171
SCALE: AS SHOWN	DRAWING 1 OF 2

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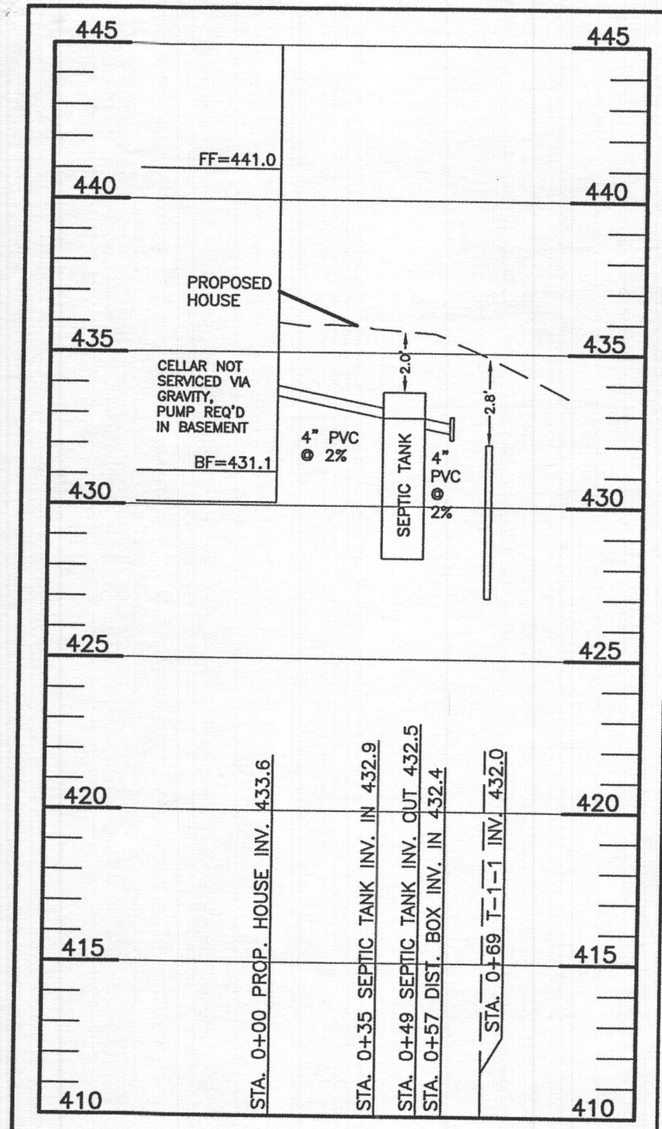
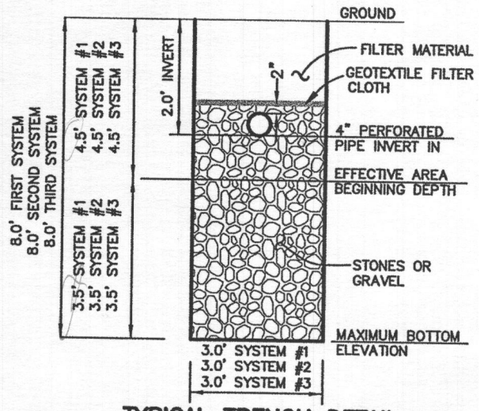


LOT 21 OSDS PROFILE

SCALE: 1"=50' HORIZ., 1"=5' VERT.

OSDS INVERT CHART - LOT 21	
INV @ HOUSE	433.6
GROUND @ HOUSE	437.0
INV IN SEPTIC TANK	432.9
INV OUT SEPTIC TANK	432.5
TOP OF SEPTIC TANK	433.7
GROUND OVER SEPTIC TANK	435.7
INV IN DIST BOX	432.4
INV OUT DIST BOX	432.3
GROUND AT DIST BOX	435.4

LOT 21



TYPICAL TRENCH DETAIL

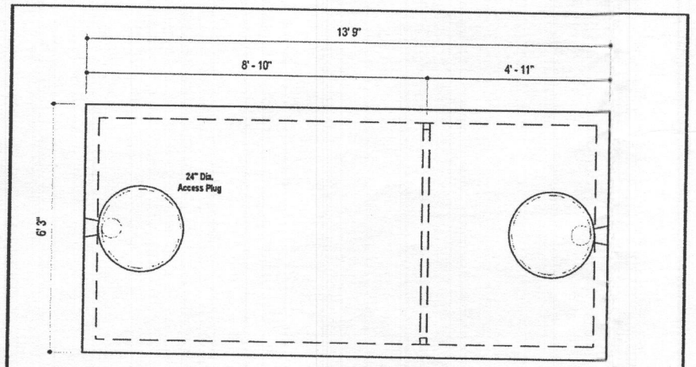
NOT TO SCALE

TRENCH DATA - LOT 21					
INITIAL SYSTEM		FIRST REPLACEMENT		SECOND REPLACEMENT	
TRENCH 1-1		TRENCH 2-1		TRENCH 3-1	
LENGTH	57 ft	LENGTH	45 ft	LENGTH	45 ft
GROUND ELEVATION	435.0	GROUND ELEVATION	435.2	GROUND ELEVATION	432.0
INVERT ELEVATION	432.0	INVERT ELEVATION	432.1	INVERT ELEVATION	430.0
MAX BOTTOM ELEVATION	427.0	MAX BOTTOM ELEVATION	427.2	MAX BOTTOM ELEVATION	424.0
TRENCH 1-2		TRENCH 2-2		TRENCH 3-2	
LENGTH	57 ft	LENGTH	45 ft	LENGTH	45 ft
GROUND ELEVATION	434.2	GROUND ELEVATION	434.6	GROUND ELEVATION	431.0
INVERT ELEVATION	431.9	INVERT ELEVATION	431.9	INVERT ELEVATION	429.0
MAX BOTTOM ELEVATION	426.2	MAX BOTTOM ELEVATION	426.6	MAX BOTTOM ELEVATION	423.0
TRENCH 1-3		TRENCH 2-3		TRENCH 3-3	
LENGTH	57 ft	LENGTH	45 ft	LENGTH	45 ft
GROUND ELEVATION	433.4	GROUND ELEVATION	433.9	GROUND ELEVATION	431.9
INVERT ELEVATION	431.4	INVERT ELEVATION	431.8	INVERT ELEVATION	429.9
MAX BOTTOM ELEVATION	425.4	MAX BOTTOM ELEVATION	425.9	MAX BOTTOM ELEVATION	423.9
TRENCH 1-4		TRENCH 2-4		TRENCH 3-4	
LENGTH	57 ft	LENGTH	45 ft	LENGTH	45 ft
GROUND ELEVATION	432.3	GROUND ELEVATION	433.3	GROUND ELEVATION	430.9
INVERT ELEVATION	430.3	INVERT ELEVATION	431.3	INVERT ELEVATION	428.9
MAX BOTTOM ELEVATION	424.3	MAX BOTTOM ELEVATION	425.3	MAX BOTTOM ELEVATION	422.9
		TRENCH 2-5		TRENCH 3-5	
		LENGTH	45 ft	LENGTH	45 ft
		GROUND ELEVATION	432.6	GROUND ELEVATION	429.9
		INVERT ELEVATION	430.6	INVERT ELEVATION	427.9
		MAX BOTTOM ELEVATION	424.6	MAX BOTTOM ELEVATION	421.9

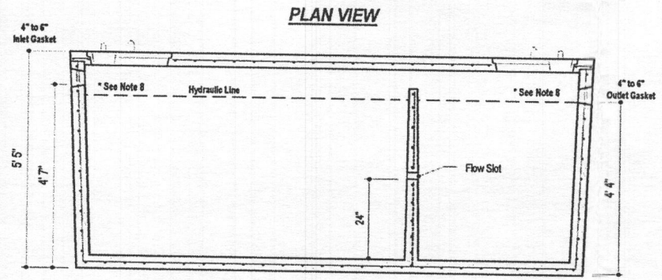
INITIAL SYSTEM		
Number of Bedrooms	6	
Application Rate	0.6	gpd/sf
Effective Area Beginning Depth	4.5	ft
Bottom Max Depth	8.0	ft
Design Flow	900	gpd
Drainage Field square footage	1500	sf
Sidewall reduction credit	0.45	
Trench width	3	
Effective Area Depth	3.5	
Linear Length of trench Required	**227**	**lf**

1st REPLACEMENT SYSTEM		
Number of Bedrooms	6	
Application Rate	0.6	gpd/sf
Effective Area Beginning Depth	4.5	ft
Bottom Max Depth	8.0	ft
Design Flow	900	gpd
Drainage Field square footage	1500	sf
Sidewall reduction credit	0.45	
Trench width	3	
Effective Area Depth	3.5	
Linear Length of trench Required	**227**	**lf**

2nd REPLACEMENT SYSTEM		
Number of Bedrooms	6	
Application Rate	0.6	gpd/sf
Effective Area Beginning Depth	4.5	ft
Bottom Max Depth	8.0	ft
Design Flow	900	gpd
Drainage Field square footage	1500	sf
Sidewall reduction credit	0.45	
Trench width	3	
Effective Area Depth	3.5	
Linear Length of trench Required	**227**	**lf**



PLAN VIEW



SECTION A-A

DESIGN DATA & GENERAL NOTES

[1] Concrete strength f'c=4,000 p.s.i. @ 28 days. Density = 150 pcf.
[2] Cement - Portland Type I/II per ASTM C 150-92.
[3] Admixtures & plasticizers per ASTM C 260-86 & C 494-92.
[4] Reinforcing per ASTM A185. Min. 1-1/2" cover.
[5] Top slab sealed with butyl rope mastic.
[6] 4" wall, 4" base, & 6" top thickness.
[7] Max 3" of cover
[8] Depending on use of tank, Inlet & Outlet baffle may be required by code.

Mayer Bros., Inc.
6264 Race Road
Elkridge, Maryland 21075
Tel. 410.796.1434
Fax. 410.796.1438
www.mayerbrosprecast.com

2,000 GALLON SEPTIC TANK
2-Compartment
Stock Item [Approx. 19,900 lbs]

Dwg. No. 2000-2C	No Scale	Aug 11, 2008

HEALTH DEPARTMENT SPEC SHEET INFORMATION LOT 21			
System	Application Rate	Effective Depth	Bottom Depth
Initial	0.6	4.5	8.0
1st Replacement	0.6	4.5	8.0
2nd Replacement	0.6	4.5	8.0

SEE MANUFACTURES SPECIFICATIONS FOR DETAILS. EQUIVALENT FROM OTHER MANUFACTURERS CAN BE SUBSTITUTED.

THIS PLAN IS FOR SEPTIC DESIGN ONLY

SIGNATURE AND SEAL ARE FOR SEPTIC PROFILE AND CALCULATIONS ONLY, TANK, PUMP, AND DETAILS WERE NOT DESIGNED OR REVIEWED BY THE ENGINEER:

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. 45577, Expiration Date: 06-08-2020.

STATE OF MARYLAND JOHN M. CARNEY No. 45577 PROFESSIONAL ENGINEER

9/20/19

OWNER/BUILDER:
MB HIGHLAND RESERVE, LLC
1686 EAST GUDE DRIVE
ROCKVILLE, MD 20850
301-762-9511

BENCHMARK
ENGINEERS LAND SURVEYORS PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315
ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 ▲ (F) 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

PROJECT: REGAN PROPERTY
LOT 21

LOCATION: 12244 PLEASANT SPRINGS COURT
FULTON ~~HIGHLAND~~, MD ~~20777~~ 20759
TAX MAP No. 34 – BLOCK No. 24 – PARCEL No. 200
5TH ELECTION DISTRICT, TAX ID NUMBER: 05-597454

TITLE: ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

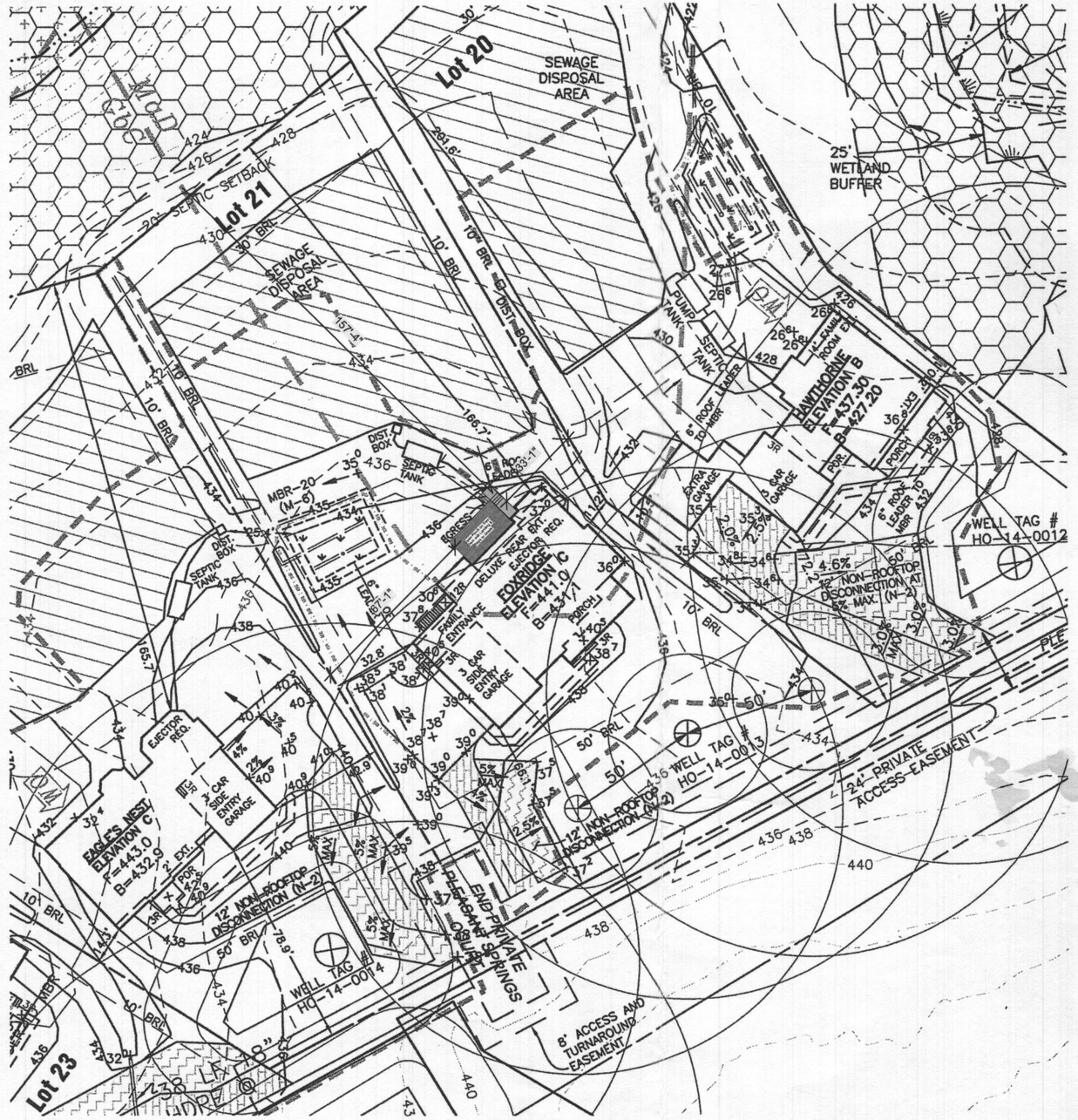
HOUSE TYPE: FOXRIDGE - ELEVATION C

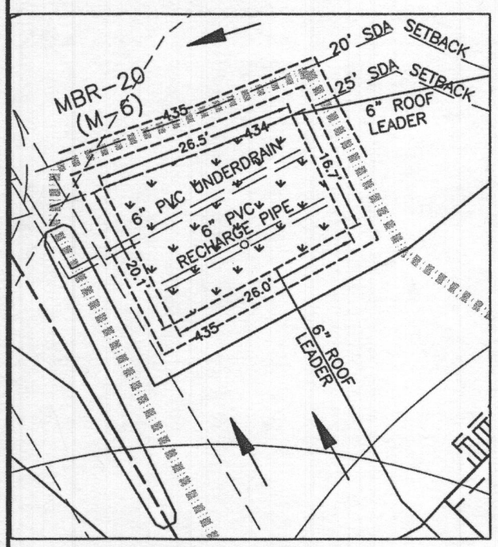
DATE:	SEPTEMBER, 2019	PROJECT NO.	2171
SCALE:	AS SHOWN	DRAWING 2 OF 2	

J:\2171 Regan Property\dwg\8072v2.dwg, 9/20/2019 3:29:08 PM, \\bei-central\Kyocera C3 3031ci KX

LEGEND

SOILS CLASSIFICATION — GbC
SOILS DELINEATION
EXISTING CONTOURS — 480, 478
PROPOSED CONTOURS — 999
LIMIT OF WETLANDS
25' WETLANDS BUFFER
CENTERLINE OF STREAM
STREAM BUFFER
PROPOSED STRUCTURE
SEPTIC RESERVE AREA
SWM DRAINAGE DIVIDE
LOD/EFFECTIVE AREA





MBR-20 DETAIL
1" = 20'

BUILDING PERMIT PLAN NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR REGAN PROPERTY, PLAT Nos. 23063–23074. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JANUARY, 2012.
4. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS EXCEPT AS WAIVED.
6. THE EXISTING WELL SHOWN ON THIS PLAN, HO–14–0013, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
8. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
9. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED AND PROVIDED BY ONE MICRO–BIORETENTION FACILITY (MDE M–6) AND ONE NON–ROOFTOP DISCONNECTION (MDE N–2).
10. MICRO–BIORETENTION SHALL HAVE 6" ROOF LEADERS.

On-Line
Approved Septic System Plan
Howard County Health Department
Kana Bernad 12-3-19
Signature Date

Building Permit
B 19004099

PLAN VIEW
1" = 50'

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. 45577, Expiration Date: 06-08-2020.

STATE OF MARYLAND — JOHN M. CARNEY — No. 45577 — PROFESSIONAL ENGINEER
9/20/19

ESD STORMWATER MANAGEMENT SUMMARY TABLE

Pe= 1.60 inches Qe= 0.43 inches ESDv= 872 cf Rv= 0.27

Practice	#	DA to practice	Imp Area to practice	Af (s.f.) Required	Af (s.f.) Provided	2% DA?	ESDv Required	ESDv Provided	ESDv Pe Provided	REv Required	REv Provided	Ownership
(M-6) MicroBioretenion	MBR-20	7,830	4,954	157	478	PASS	728	870	1.6		207	Private
(N-2) Disc. of Non-Rooftop Runoff	NDC-1	1,357	680					51	1.0		51	Private
Total Treated →		9,187	5,634	157	478		872	921	1.8	137	258	
Site Total →		23,712	5,902									

OWNER/BUILDER:
MB HIGHLAND RESERVE, LLC
1686 EAST GUDE DRIVE
ROCKVILLE, MD 20850
301–762–9511

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WWW.BEI–CIVILENGINEERING.COM

PROJECT: REGAN PROPERTY
LOT 21

LOCATION: 12244 PLEASANT SPRINGS COURT
HIGHLAND, MD 20777
TAX MAP No. 34 – BLOCK No. 24 – PARCEL No. 200
5TH ELECTION DISTRICT, TAX ID NUMBER: 05–597454

TITLE: BUILDING PERMIT PLAN

HOUSE TYPE: FOXRIDGE - ELEVATION C

DATE: SEPTEMBER, 2019 | PROJECT NO. 2171

SCALE: AS SHOWN | DRAWING 1 OF 2

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