

LEGEND

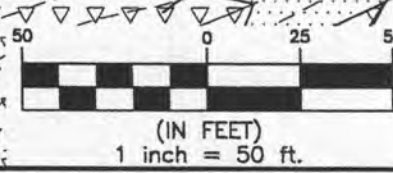
	PROPERTY BOUNDARY
	GIS CONTOUR LINES
	SOIL DELINEATION
	EXISTING BUILDINGS
	EXISTING TREELINE
	STREAM
	SEWAGE DISPOSAL AREA
	EXISTING SLOPES >25%
	EXISTING SLOPES 15-24.9%
	PERC TEST - PASS
	PERC TEST - FAIL
	EXISTING FOREST CONSERVATION EASEMENT
	EXISTING 100-YEAR FLOODPLAIN EASEMENT

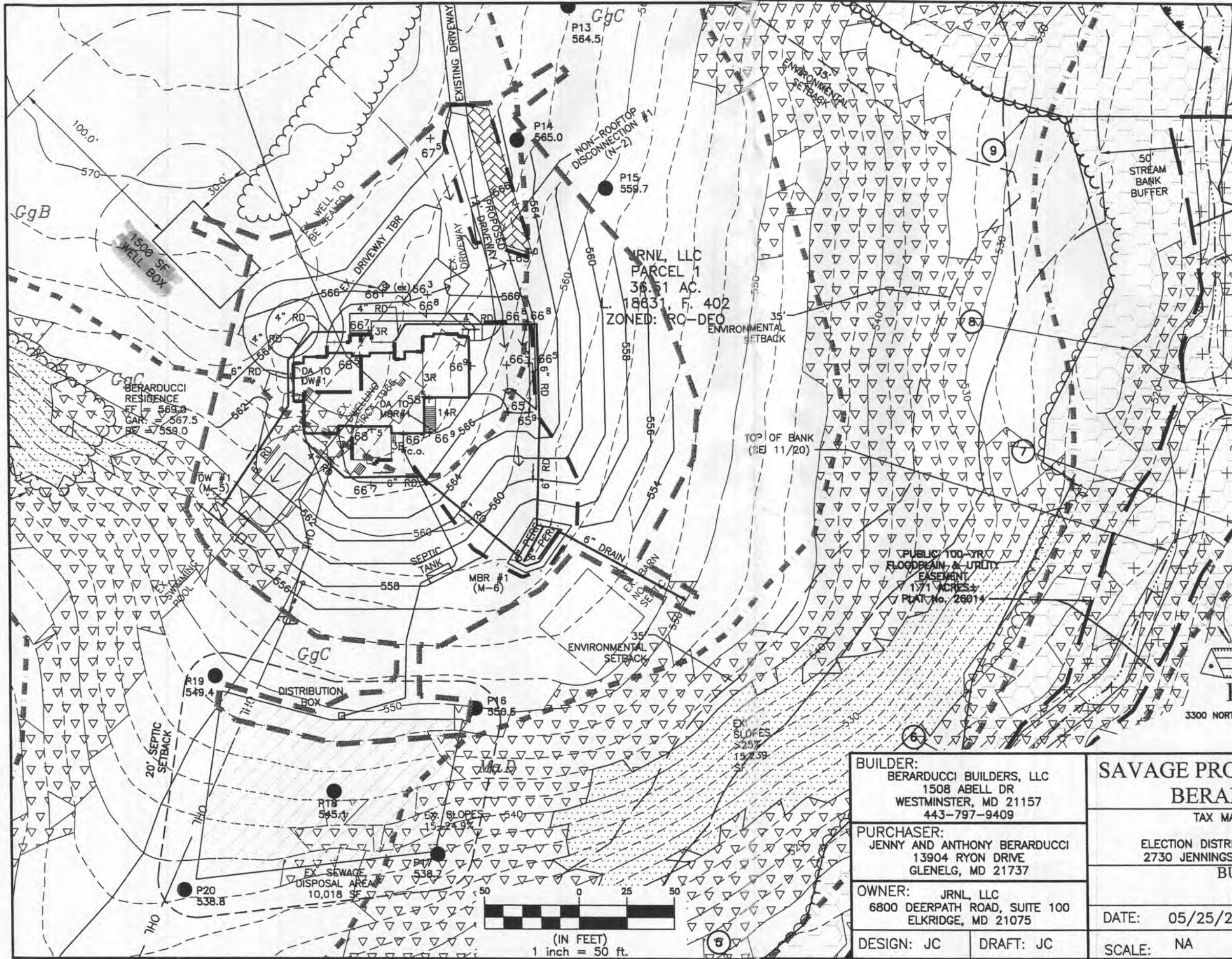


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 45577, Expiration Date: 06/08/2024.

BENCHMARK
 ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
 3300 NORTH RIDGE ROAD ▲ SUITE 140 ▲ ELLICOTT CITY, MARYLAND 21043
 (P) 410-485-6105 (F) 410-485-6644
 WWW.BEI-CIVILENGINEERING.COM

BUILDER: BERARDUCCI BUILDERS, LLC 1508 ABELL DR WESTMINSTER, MD 21157 443-797-9409	SAVAGE PROPERTY, PLAT Nos. 26014-17 BERARDUCCI RESIDENCE	
PURCHASER: JENNY AND ANTHONY BERARDUCCI 13904 RYON DRIVE GLENELG, MD 21737	TAX MAP: 13 GRID: 21 PARCEL: 109 ZONED: RC-DEO ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND 2730 JENNINGS CHAPEL ROAD, WOODBINE, MD 21797	
OWNER: JRNL, LLC 6800 DEERPATH ROAD, SUITE 100 ELKRIDGE, MD 21075	BUILDING PERMIT PLAN SITE PLAN	
DESIGN: JC	DRAFT: JC	DATE: 05/25/2022
SCALE: NA	BEI PROJECT NO. 3110	
		SHEET 3 OF 4





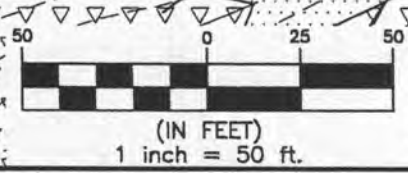
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DESIGN: JC	DRAFT: JC	DATE: 05/25/2022	BEI PROJECT NO. 3110
SCALE: NA		SHEET 3 OF 4	



PROJECT: **Savage Property, Parcel A** DATE: 04/28/22
Facility Summary

Pe: 1.00 inches

BIORETENTION FACILITIES (M-6 AND F-6)													
Facility	Drainage Area	Impervious	I (%)	Rv	ESDv Req'd (cf)	Req'd Poned Storage (75%)	Poned Volume Provided (cf)	Req'd Stone Storage (cf)	Stone Storage Provided (cf)	Total ESDv	Pe Prov.	Rev (cf)	Notes
MBR-1 (M-6)	10,624	4,550	43%	0.44	386	289	390.65	96	107	628	1.63	106.9	
TOTALS		4,550			386		391		107	628		107	

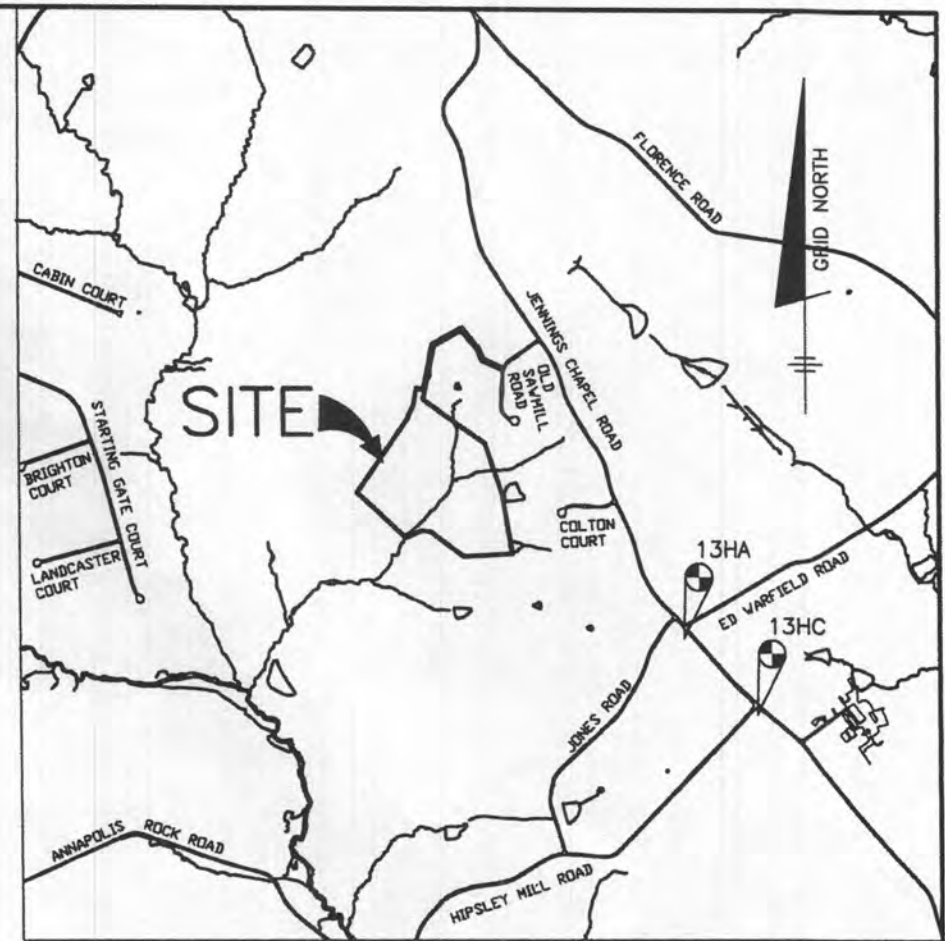
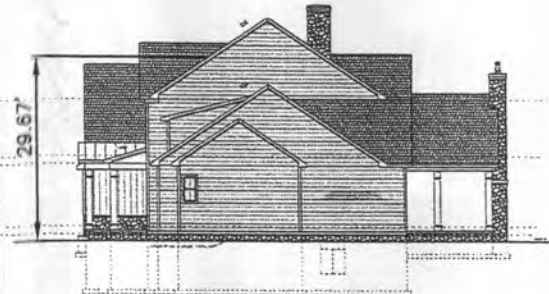
DRY WELL FACILITY (M-5)										
Facility	Impervious Area (SF)	Drainage Area (SF)	Volumetric Runoff	ESDv Required (CF)	Length (ft)	Width (ft)	Depth (ft)	Volume CF	Rev Provided (CF)	Full ESDv Provided?
DW-1 (M-5)	820	820	0.95	64.92	7.00	7.00	5.00	98	98.0	yes
Totals	820							98.0	98.0	

Non-Rooftop Disconnection (N-2)											
Facility	Impervious Area (SF)	Drainage Area (SF)	Volumetric Runoff	ESDv Required (CF)	Contrib. Per. Length (ft)	Contrib. Imp. Length (ft)	Disconnection Length (ft)	Ratio	Pe Treated (inches)	Volume Provided (CF)	
NR-1 (N-2)	905	2113	0.44	76.68	5	12	12	1	1	76.68	
Totals	905									77	

The total ESDv provided by this design is: 802 CF Required: 773 CF
 The total Rev provided by this design is: 282 CF Required: 201 CF
 *The ESDv summary table portrays storage in excess of that required for Environmental Site Design requirements.

SWM PRACTICES CHART			
ADDRESS	DRY WELL (M-5) QUANTITY	MICRO-BIORETENTION (M-6) QUANTITY	DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2) QUANTITY
2730 JENNINGS CHAPEL ROAD WOODBINE, MD 21797	1	1	1

ELEVATIONS ARE PROVIDED FOR BUILDING HEIGHT ONLY, AND ARE FROM THE ARCHITECTURAL PLANS BY:
 SCALE 3/16" = 1'-0"
 DATE: 4/22/22
 SHEET NO.: 1
GBL CUSTOM HOME DESIGN INC.
 PO BOX 237 FRANKSBURG, MD 21048
 PHONE 410-833-8320



VICINITY MAP ADC MAP: 4811, GRID D4

SCALE: 1"=2000'

BENCHMARK

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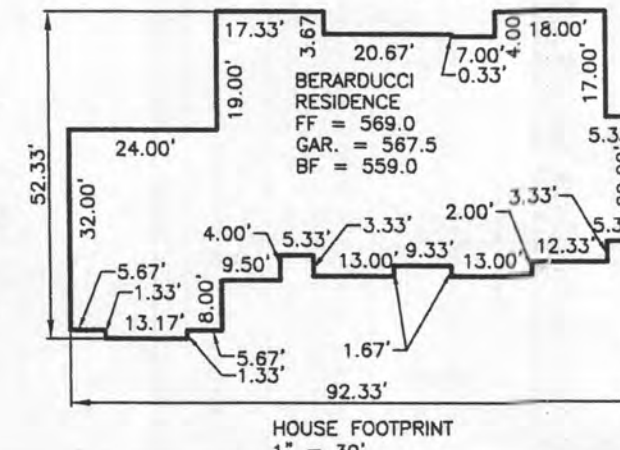


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 45577, Expiration Date: 06/08/2022.

SHEET	TITLE
1	COVER SHEET
2	OVERALL LOCATION PLAN
3	SITE PLAN
4	STORMWATER MANAGEMENT NOTES AND DETAILS

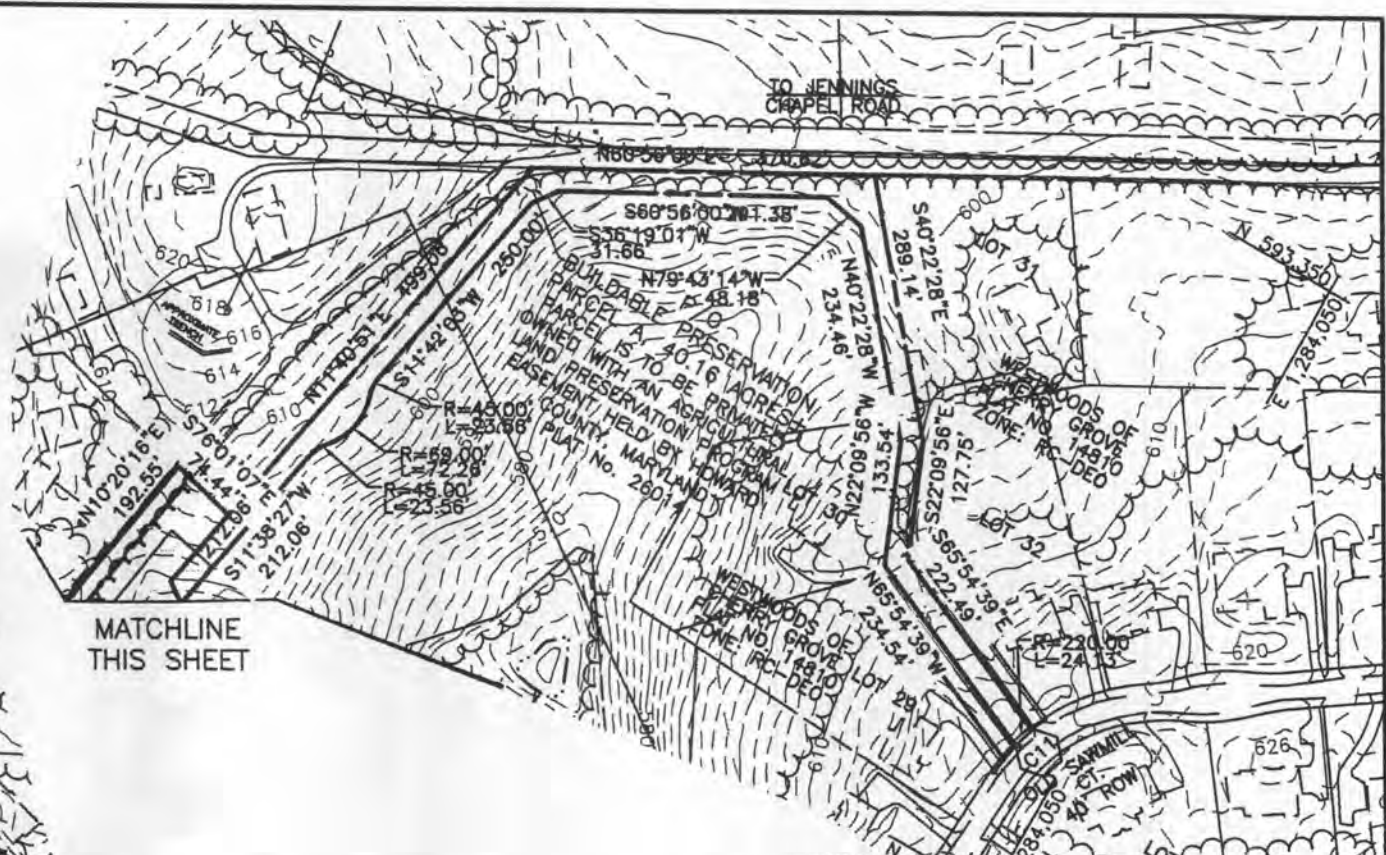
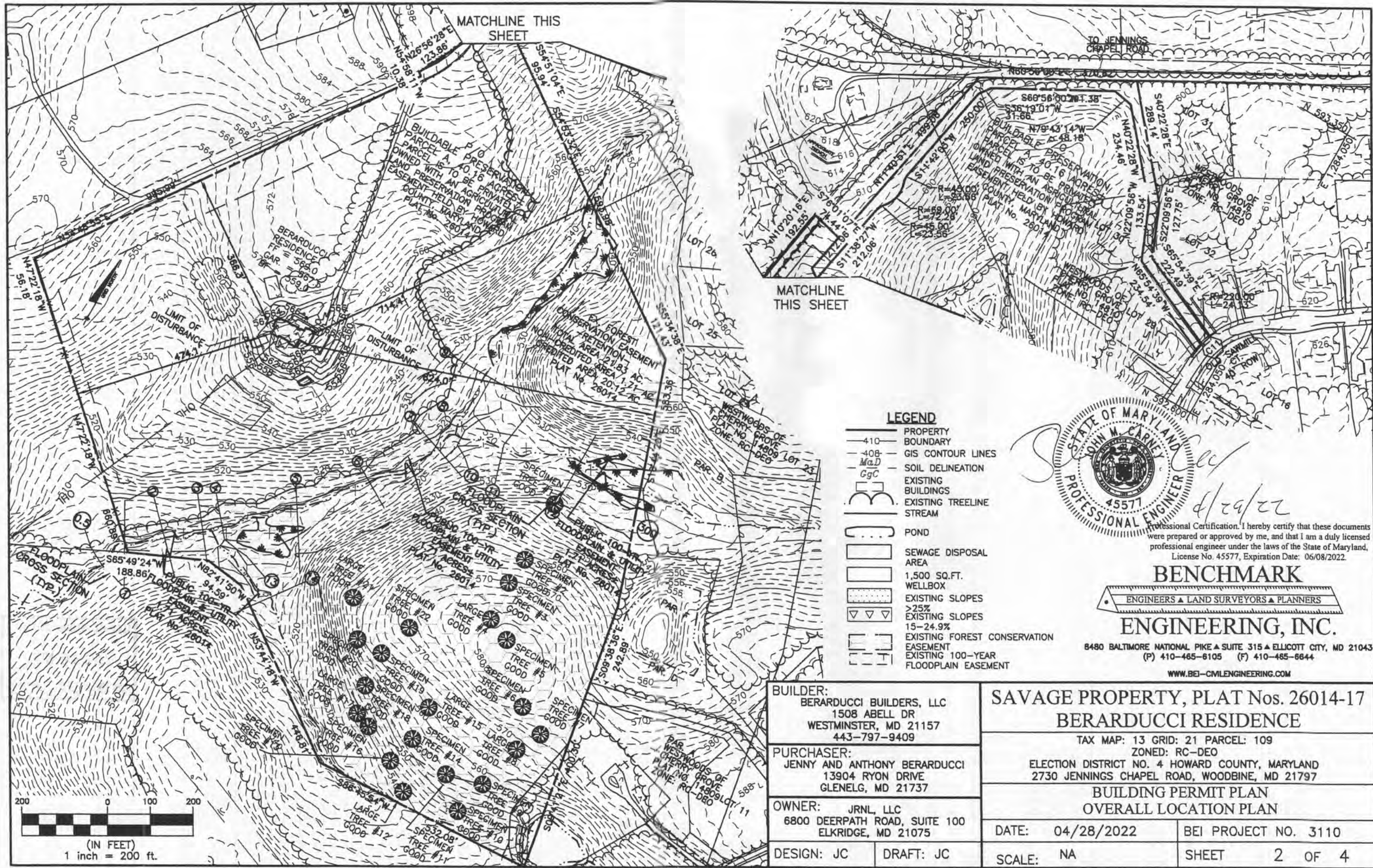
GENERAL NOTES

- THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS AREA SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE DISPOSAL AREA. RECORDATION OF A MODIFIED SEWERAGE AREA PLAT SHALL NOT BE REQUIRED.
- TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS AND WAS FIELD VERIFIED BY BENCHMARK ENGINEERING, INC. ON AUGUST, 2019.
- TO THE BEST OF OUR KNOWLEDGE, ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELL AND/OR SEPTIC HAVE BEEN SHOWN.
- THERE ARE 25% OR GREATER SLOPES, 100-YR FLOODPLAIN, WETLANDS, WETLAND BUFFERS AND STREAM BUFFERS ON THIS PARCEL. THERE ARE ALSO SPECIMEN TREES ON THIS PARCEL.
- THERE IS AN EXISTING WELL, EXISTING HOUSE, AND EXISTING SEPTIC SYSTEM ON THIS PARCEL. THE HOUSE IS TO BE REMOVED. THE WELL WILL BE UTILIZED FOR THE PROPOSED HOUSE. THE EXISTING SEPTIC WAS NOT LOCATED DURING EARLIER EXPLORATION. THE EXISTING SEWAGE DISPOSAL SYSTEM MUST BE PROPERLY ABANDONED PER THE HEALTH DEPARTMENT REGULATIONS WITH NOTIFICATION SENT TO HEALTH DEPARTMENT AT THE TIME OF ABANDONMENT.



BUILDER: BERARDUCCI BUILDERS, LLC 1508 ABELL DR WESTMINSTER, MD 21157 443-797-9409
PURCHASER: JENNY AND ANTHONY BERARDUCCI 13904 RYON DRIVE GLENELG, MD 21737
OWNER: JRNL, LLC 6800 DEERPATH ROAD, SUITE 100 ELKRIDGE, MD 21075
DESIGN: JC DRAFT: JC

SAVAGE PROPERTY, PLAT Nos. 26014-17	
BERARDUCCI RESIDENCE	
TAX MAP: 13 GRID: 21 PARCEL: 109 ZONED: RC-DEO ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND 2730 JENNINGS CHAPEL ROAD, WOODBINE, MD 21797	
BUILDING PERMIT PLAN	
COVER SHEET	
DATE: 04/28/2022	BEI PROJECT NO. 3110
SCALE: NA	SHEET 1 OF 4



LEGEND

- 410— PROPERTY BOUNDARY
- 408— GIS CONTOUR LINES
- MaD SOIL DELINEATION
- GgC EXISTING BUILDINGS
- EXISTING TREELINE
- STREAM
- POND
- SEWAGE DISPOSAL AREA
- 1,500 SQ.FT. WELLBOX
- EXISTING SLOPES >25%
- EXISTING SLOPES 15-24.9%
- EXISTING FOREST CONSERVATION
- EASEMENT
- EXISTING 100-YEAR FLOODPLAIN EASEMENT



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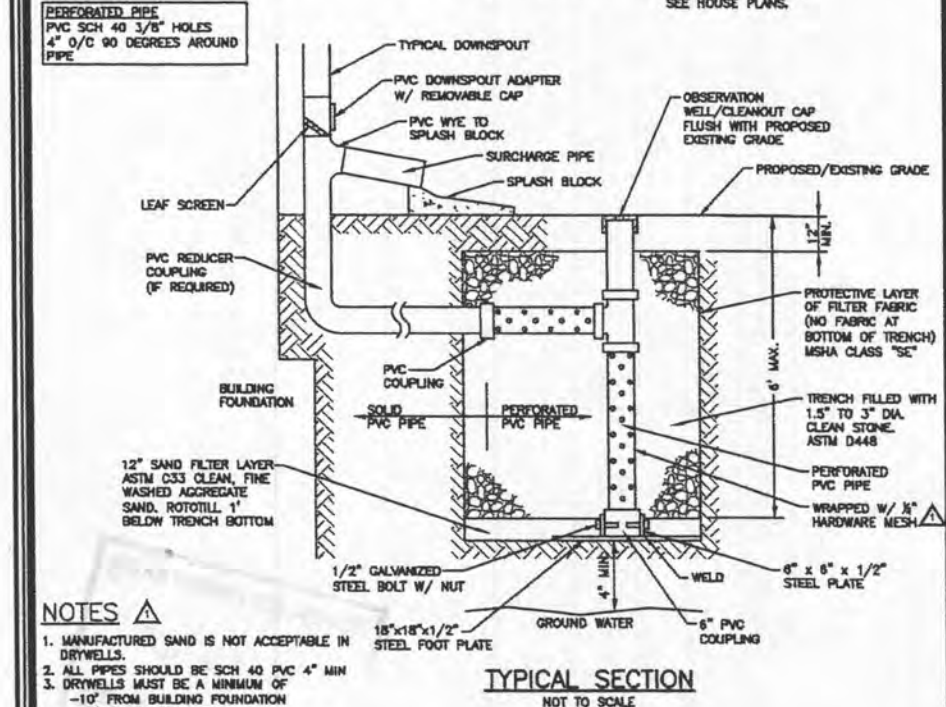
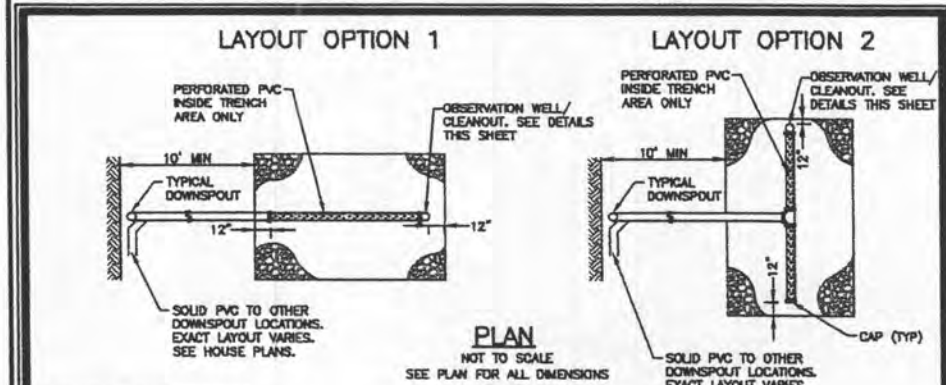
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PURCHASER: JENNY AND ANTHONY BERARDUCCI 13904 RYON DRIVE GLENELG, MD 21737		TAX MAP: 13 GRID: 21 PARCEL: 109 ZONED: RC-DEO ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND 2730 JENNINGS CHAPEL ROAD, WOODBINE, MD 21797	
OWNER: JRNL, LLC 6800 DEERPATH ROAD, SUITE 100 ELKRIDGE, MD 21075		BUILDING PERMIT PLAN OVERALL LOCATION PLAN	
DESIGN: JC	DRAFT: JC	DATE: 04/28/2022	BEI PROJECT NO. 3110
SCALE: NA		SHEET 2 OF 4	

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

- The monitoring wells and structures shall be inspected on a quarterly basis and after every large storm event.
- Water levels and sediment build up in the monitoring wells shall be recorded over a period of several days to insure trench drainage.
- A log book shall be maintained to determine the rate at which the facility drains
- When the facility becomes clogged so that it does not drain down within the 72 hour time period, corrective action shall be taken.
- The maintenance log book shall be available to Howard County for inspection to insure compliance with operation and maintenance criteria.
- Once the performance characteristics of the infiltration facility have been verified, the monitoring schedule can be reduced to an annual basis unless the performance data indicates that a more frequent schedule is required.



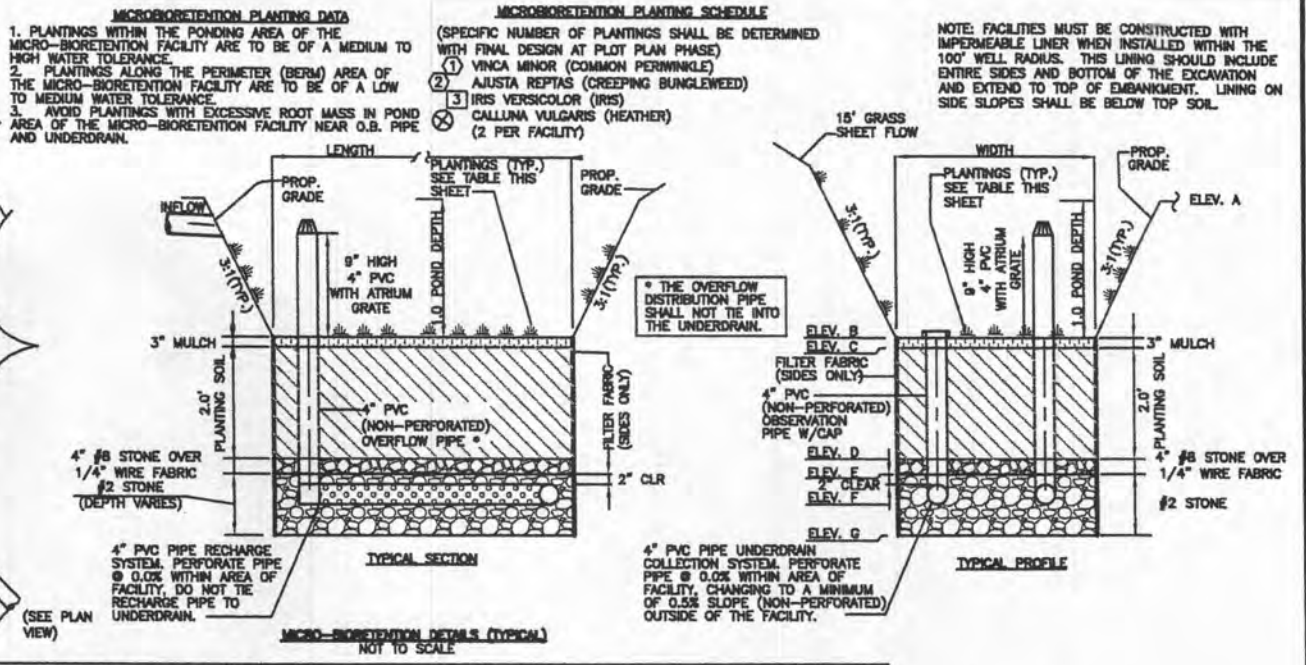
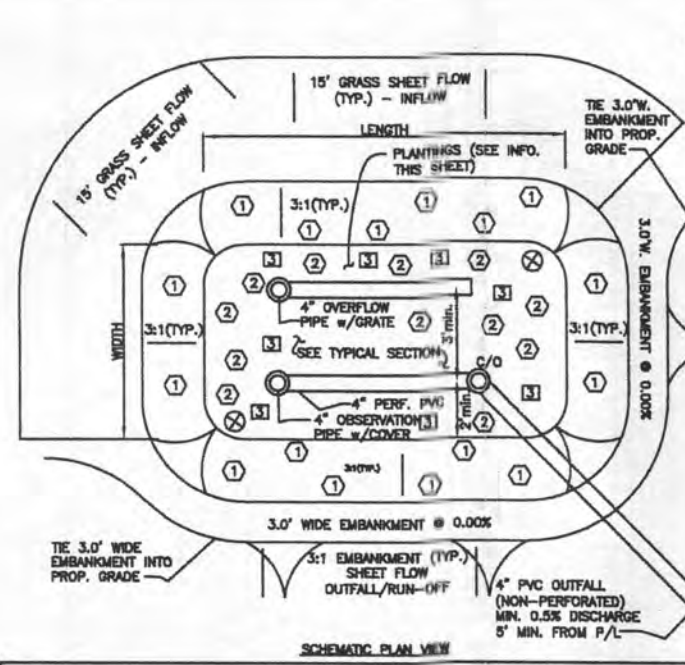
- NOTES**
- MANUFACTURED SAND IS NOT ACCEPTABLE IN DRYWELLS.
 - ALL PIPES SHOULD BE SCH 40 PVC 4" MIN
 - DRYWELLS MUST BE A MINIMUM OF
-10' FROM BUILDING FOUNDATION
-30' FROM SEPTIC FIELD
-100' FROM WELL LOCATION
AND SHOULD BE LOCATED TO MINIMIZE ANY BASEMENT SEEPAGE.
 - TRENCH MAY NOT BE INSTALLED IN FILL.

Howard County, Maryland
Department of Public Works

ROOF DRAIN DRYWELL
Private

Detail
D-9.01

5/20/2017
5/11/2021



BIORETENTION FACILITIES

FACILITY	ELEVATIONS (SEE TYPICAL BIORETENTION DETAIL)								FILTER			PLANTINGS			LINER REQ'D
	A	B	C	D	E	F	G	H	LENGTH (ft)	WIDTH (ft)	AREA (sf)	1	2	3	
MBR-1	556.00	555.00	554.83	552.83	552.50	551.83	550.83	550.00	24.0	11.1	267	26	22	12	NO

Drywell Designation	Length (ft)	Width (ft)	Depth (ft)	Grade	Top of Stone	Bottom of Stone
DW-1	7.00	7.00	5.00	556.0	554.0	549.0

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

- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.
- THE OWNER SHALL PERFORM A PLANT 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.

BIO-RETENTION DIMENSION LEGEND

FACILITY	NAME
A	TOP OF EMBANKMENT
B	TOP OF MULCH
C	TOP OF SOIL
D	TOP OF STONE FILTER
E	TOP OF STONE STORAGE
F	UNDERDRAIN INVERT
G	BOTTOM OF STONE
H	OUTFALL ELEVATION

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF ROOFTOP RUNOFF (N-1), DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

- 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 FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

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OWNER: JRNL, LLC 6800 DEERPATH ROAD, SUITE 100 ELKRIDGE, MD 21075	BUILDING PERMIT PLAN STORMWATER NOTES AND DETAILS
DESIGN: JC	DATE: 04/28/2022
DRAFT: JC	BEI PROJECT NO. 3110
SCALE: NA	SHEET 4 OF 4



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WWW.BEI-CMLENGINEERING.COM

B22002958

PROJECT:	Savage Property, Parcel A	DATE: 04/28/22
	Facility Summary	

Pe: 1.00 inches

BIORETENTION FACILITIES (M-6 AND F-6)													
Facility	Drainage Area	Impervious	I (%)	Rv	ESDv Req'd (cf)	Req'd Poned Storage (75%)	Poned Volume Provided (cf)	Req'd Stone Storage (cf)	Stone Storage Provided (cf)	Total ESDv	Pe Prov.	Rev (cf)	Notes
MBR-1 (M-6)	10,624	4,550	43%	0.44	386	289	390.65	96	107	628	1.63	106.9	
TOTALS		4,550			386		391		107	628		107	

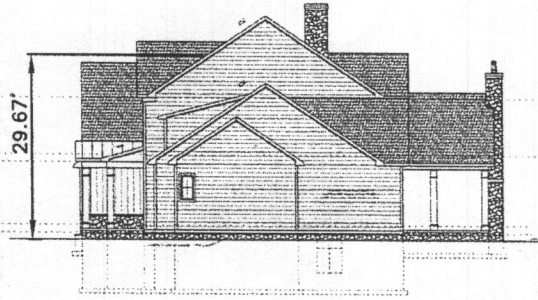
DRY WELL FACILITY (M-5)										
Facility	Impervious Area (SF)	Drainage Area (SF)	Volumetric Runoff	ESDv Required (CF)	Length (ft)	Width (ft)	Depth (ft)	Volume CF	Rev Provided (CF)	Full ESDv Provided?
DW-1 (M-5)	820	820	0.95	64.92	7.00	7.00	5.00	98	98.0	yes
Totals	820							98.0	98.0	

Non-Rooftop Disconnection (N-2)										
Facility	Impervious Area (SF)	Drainage Area (SF)	Volumetric Runoff	ESDv Required (CF)	Contrib. Per. Length (ft)	Contrib. Imp. Length (ft)	Disconnection Length (ft)	Ratio	Pe Treated (inches)	Volume Provided (CF)
NR-1 (N-2)	905	2113	0.44	76.68	5	12	12	1	1	76.68
Totals	905									77

The total ESDv provided by this design is: 802 CF Required: 773 CF
 The total Rev provided by this design is: 282 CF Required: 201 CF
 *The ESDv summary table portrays storage in excess of that required for Environmental Site Design requirements.

SWM PRACTICES CHART			
ADDRESS	DRY WELL (M-5) QUANTITY	MICRO-BIORETENTION (M-6) QUANTITY	DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2) QUANTITY
2730 JENNINGS CHAPEL ROAD WOODBINE, MD 21797	1	1	1

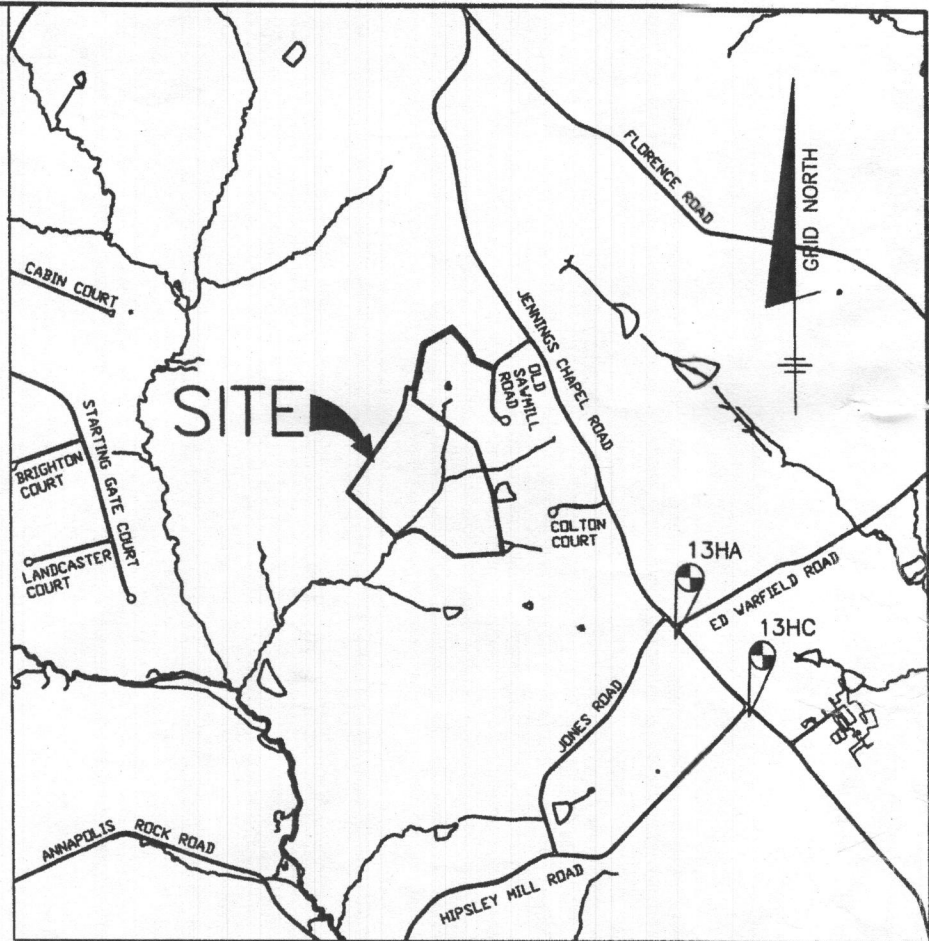
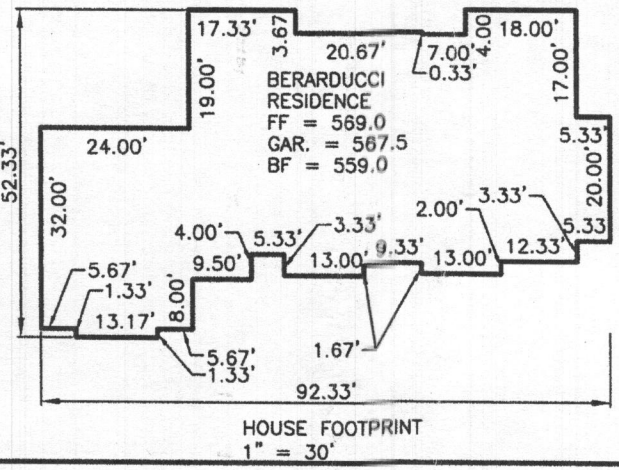
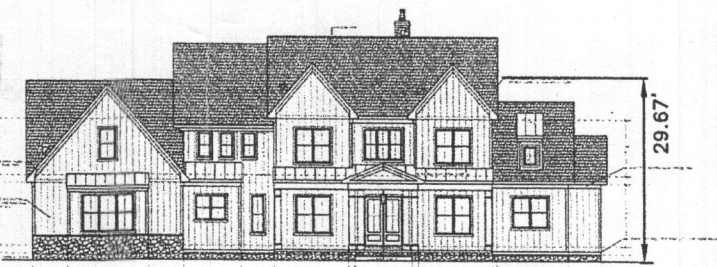
ELEVATIONS ARE PROVIDED FOR BUILDING HEIGHT ONLY, AND ARE FROM THE ARCHITECTURAL PLANS BY:
 SCALE: 3/16" = 1'-0"
 DATE: 4/20/22
 SHEET NO.:
GBL CUSTOM HOME DESIGN INC.
 PO BOX 237 FINESBURG, MD 21048
 PHONE 410-833-8320
 REFER TO THE ARCHITECTURAL PLANS FOR BUILDING INFORMATION



SHEET	TITLE
1	COVER SHEET
2	OVERALL LOCATION PLAN
3	SITE PLAN
4	STORMWATER MANAGEMENT NOTES AND DETAILS

GENERAL NOTES

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- THERE ARE 25% OR GREATER SLOPES, 100-YR FLOODPLAIN, WETLANDS, WETLAND BUFFERS AND STREAM BUFFERS ON THIS PARCEL. THERE ARE ALSO SPECIMEN TREES ON THIS PARCEL.
- THERE IS AN EXISTING WELL, EXISTING HOUSE, AND EXISTING SEPTIC SYSTEM ON THIS PARCEL. THE HOUSE IS TO BE REMOVED. THE WELL (TAG HO-20-0191) WILL BE UTILIZED FOR THE PROPOSED HOUSE. THE EXISTING SEPTIC WAS NOT LOCATED DURING EARLIER EXPLORATION. THE EXISTING SEWAGE DISPOSAL SYSTEM MUST BE PROPERLY ABANDONED PER THE HEALTH DEPARTMENT REGULATIONS WITH NOTIFICATION SENT TO HEALTH DEPARTMENT AT THE TIME OF ABANDONMENT. THERE IS A NON-POTABLE WELL WITH NO TAG.



VICINITY MAP ADC MAP: 4811, GRID D4

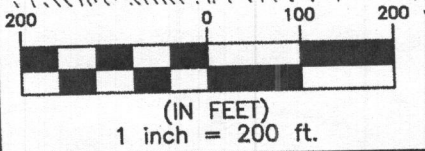
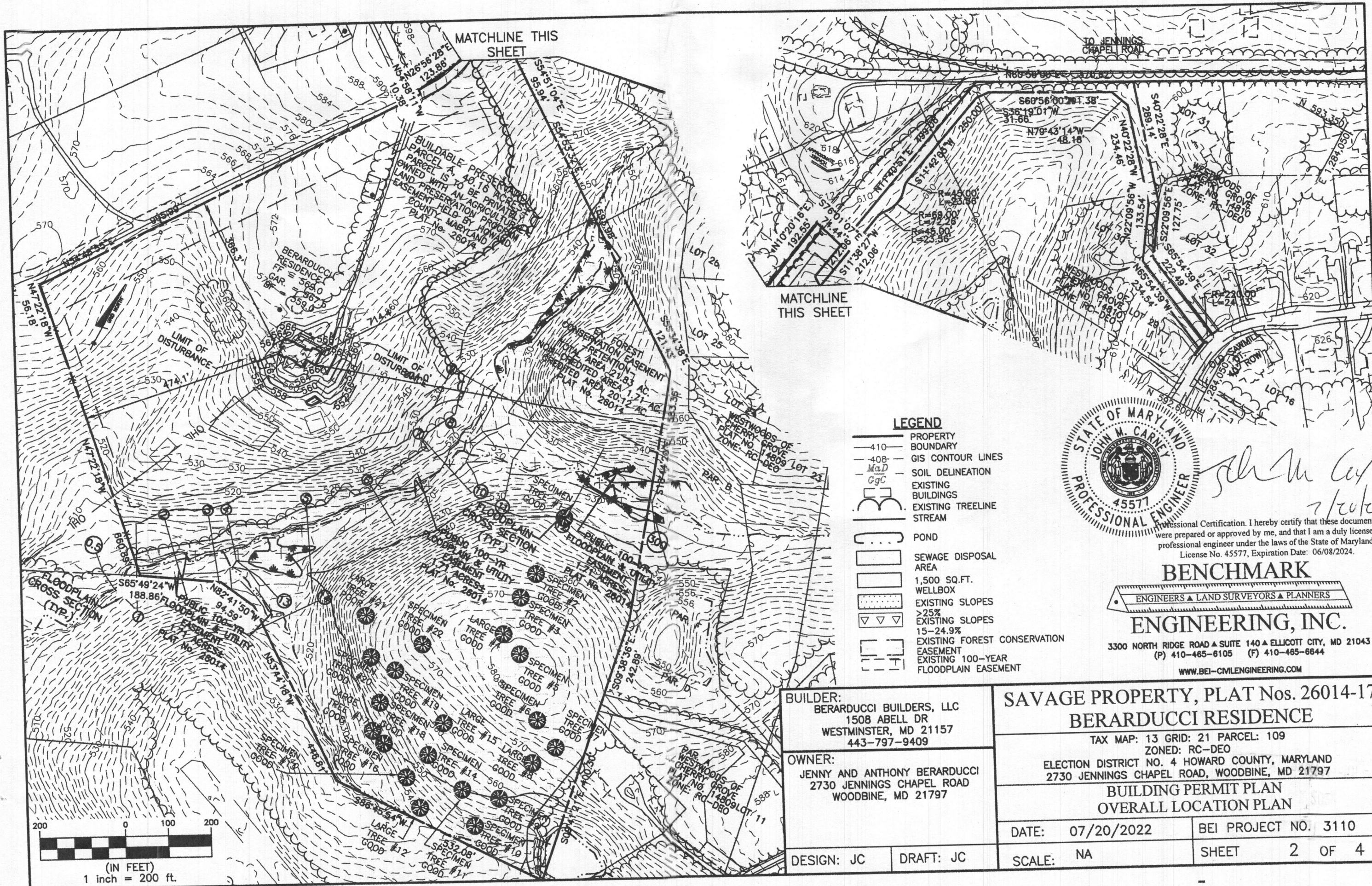
SCALE: 1"=2000'
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John M. Carney 7/20/22
 Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 45577, Expiration Date: 06/08/2024.

BUILDER: BERARDUCCI BUILDERS, LLC 1508 ABELL DR WESTMINSTER, MD 21157 443-797-9409	SAVAGE PROPERTY, PLAT Nos. 26014-17 BERARDUCCI RESIDENCE
OWNER: JENNY AND ANTHONY BERARDUCCI 2730 JENNINGS CHAPEL ROAD WOODBINE, MD 21797	TAX MAP: 13 GRID: 21 PARCEL: 109 ZONED: RC-DEO ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND 2730 JENNINGS CHAPEL ROAD, WOODBINE, MD 21797
DESIGN: JC	BUILDING PERMIT PLAN COVER SHEET
DRAFT: JC	DATE: 07/20/2022
SCALE: NA	BEI PROJECT NO. 3110
	SHEET 1 OF 4



LEGEND

- PROPERTY BOUNDARY
- GIS CONTOUR LINES
- SOIL DELINEATION
- EXISTING BUILDINGS
- EXISTING TREELINE
- STREAM
- POND
- SEWAGE DISPOSAL AREA
- 1,500 SQ.FT. WELLBOX
- EXISTING SLOPES >25%
- EXISTING SLOPES 15-24.9%
- EXISTING FOREST CONSERVATION EASEMENT
- EXISTING 100-YEAR FLOODPLAIN EASEMENT



John M. Carney
7/20/22

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BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS

ENGINEERING, INC.

3300 NORTH RIDGE ROAD ▲ SUITE 140 ▲ ELLICOTT CITY, MD 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BEI-CMLENGINEERING.COM

BUILDER:
BERARDUCCI BUILDERS, LLC
1508 ABELL DR
WESTMINSTER, MD 21157
443-797-9409

OWNER:
JENNY AND ANTHONY BERARDUCCI
2730 JENNINGS CHAPEL ROAD
WOODBINE, MD 21797

SAVAGE PROPERTY, PLAT Nos. 26014-17
BERARDUCCI RESIDENCE

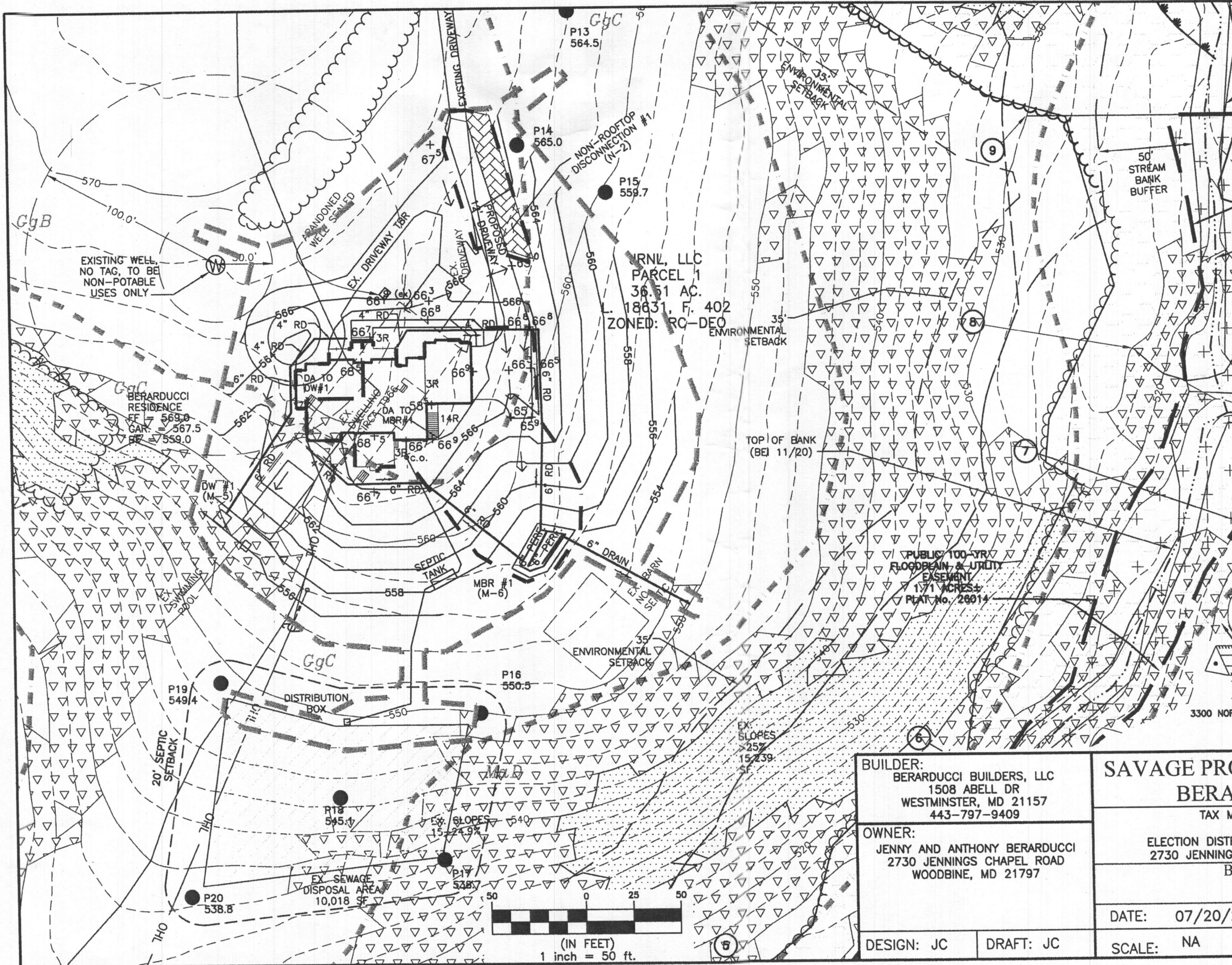
TAX MAP: 13 GRID: 21 PARCEL: 109
ZONED: RC-DEO
ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND
2730 JENNINGS CHAPEL ROAD, WOODBINE, MD 21797

BUILDING PERMIT PLAN
OVERALL LOCATION PLAN

DATE: 07/20/2022 BEI PROJECT NO. 3110

SCALE: NA SHEET 2 OF 4

DESIGN: JC DRAFT: JC



LEGEND

	PROPERTY BOUNDARY
	GIS CONTOUR LINES
	SOIL DELINEATION
	EXISTING BUILDINGS
	EXISTING TREELINE
	STREAM
	SEWAGE DISPOSAL AREA
	EXISTING SLOPES >25%
	EXISTING SLOPES 15-24.9%
	PERC TEST - PASS
	PERC TEST - FAIL
	EXISTING FOREST CONSERVATION EASEMENT
	EXISTING 100-YEAR FLOODPLAIN EASEMENT



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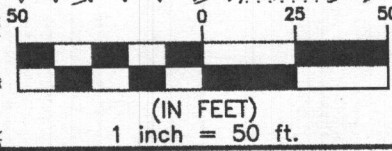
DESIGN: JC DRAFT: JC

SAVAGE PROPERTY, PLAT Nos. 26014-17
BERARDUCCI RESIDENCE

TAX MAP: 13 GRID: 21 PARCEL: 109
 ZONED: RC-DEO
 ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND
 2730 JENNINGS CHAPEL ROAD, WOODBINE, MD 21797

BUILDING PERMIT PLAN
SITE PLAN

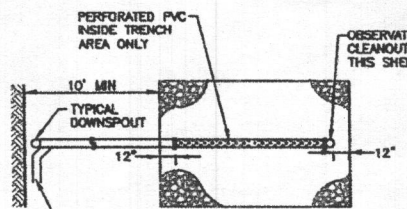
DATE: 07/20/2022	BEI PROJECT NO. 3110
SCALE: NA	SHEET 3 OF 4



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

1. The monitoring wells and structures shall be inspected on a quarterly basis and after every large storm event.
2. Water levels and sediment build up in the monitoring wells shall be recorded over a period of several days to insure trench drainage.
3. A log book shall be maintained to determine the rate at which the facility drains
4. When the facility becomes clogged so that it does not drain down within the 72 hour time period, corrective action shall be taken.
5. The maintenance log book shall be available to Howard County for inspection to insure compliance with operation and maintenance criteria.
6. 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.

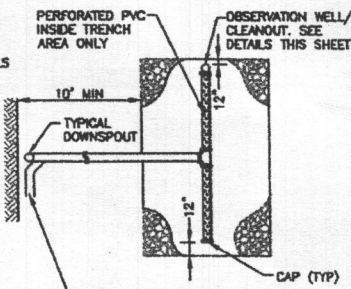
LAYOUT OPTION 1



PLAN

NOT TO SCALE
SEE PLAN FOR ALL DIMENSIONS

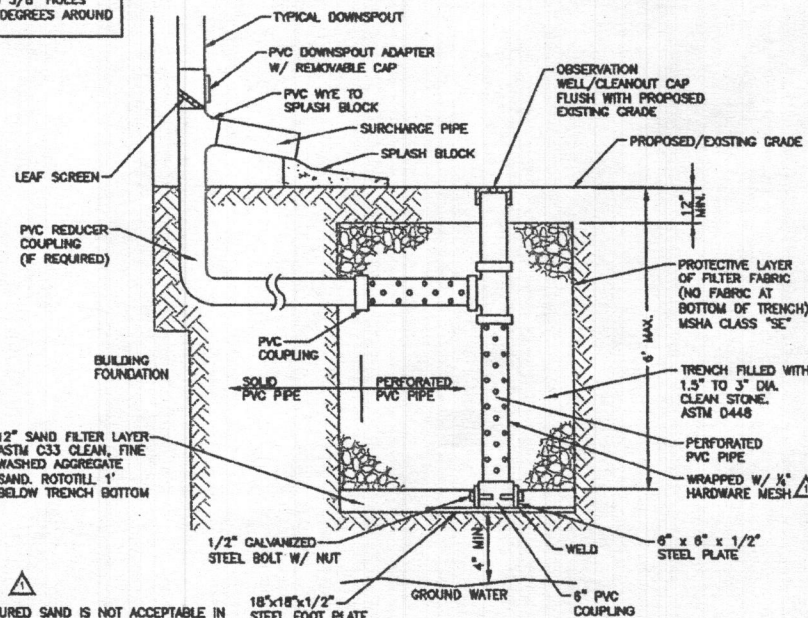
LAYOUT OPTION 2



PLAN

NOT TO SCALE
SEE PLAN FOR ALL DIMENSIONS

PERFORATED PIPE
PVC SCH 40 3/8" HOLES
4" O/C 90 DEGREES AROUND
PIPE



TYPICAL SECTION

NOT TO SCALE

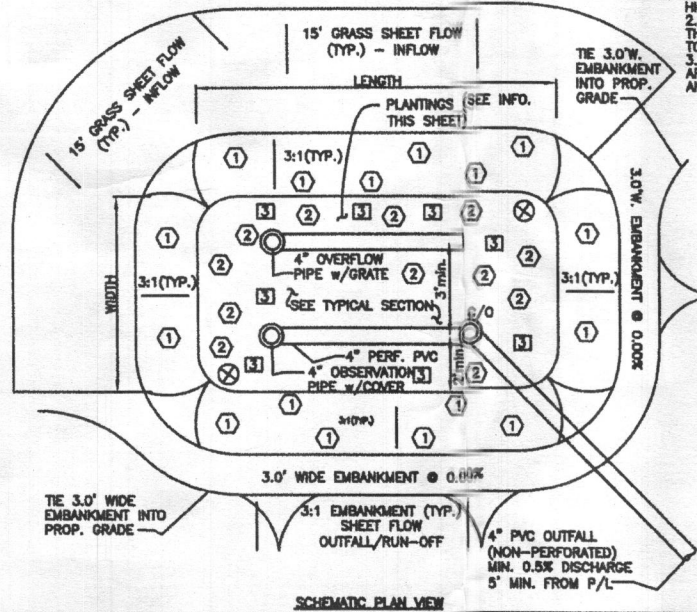
NOTES

1. MANUFACTURED SAND IS NOT ACCEPTABLE IN DRYWELLS.
2. ALL PIPES SHOULD BE SCH 40 PVC 4" MIN
3. DRYWELLS MUST BE A MINIMUM OF
-10' FROM BUILDING FOUNDATION
-30' FROM SEPTIC FIELD
-100' FROM WELL LOCATION
AND SHOULD BE LOCATED TO MINIMIZE ANY BASEMENT SEEPAGE.
4. TRENCH MAY NOT BE INSTALLED IN FILL.

Howard County, Maryland
Department of Public Works
Approved: *P. Smith*
Chief, Bureau of Engineering

ROOF DRAIN DRYWELL
Private

Detail
D-9.01



SCHEMATIC PLAN VIEW

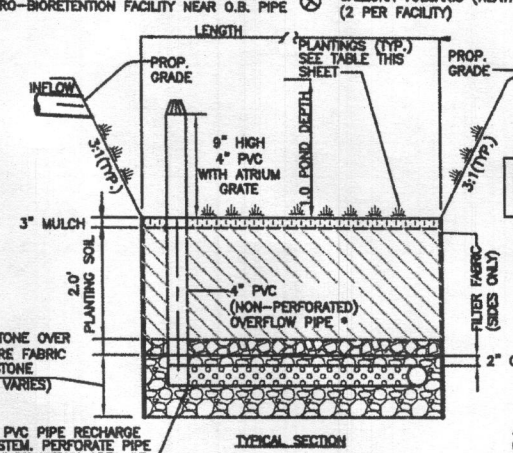
MICROBIORETENTION PLANTING DATA

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

MICROBIORETENTION PLANTING SCHEDULE

- (SPECIFIC NUMBER OF PLANTINGS SHALL BE DETERMINED WITH FINAL DESIGN AT PLOT PLAN PHASE)
- 1 VINCA MINOR (COMMON PERIWINKLE)
 - 2 AJUSTA REPTAS (CREEPING BUNGLEWEED)
 - 3 IRIS VERSICOLOR (IRIS)
 - 4 CALLUNA VULGARIS (HEATHER) (2 PER FACILITY)

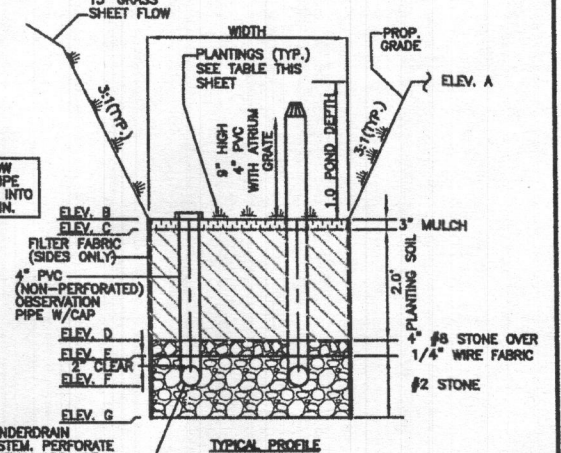
NOTE: FACILITIES MUST BE CONSTRUCTED WITH IMPERMEABLE LINER WHEN INSTALLED WITHIN THE 100' WELL RADIUS. THIS LINER SHOULD INCLUDE ENTIRE SIDES AND BOTTOM OF THE EXCAVATION AND EXTEND TO TOP OF EMBANKMENT. LINING ON SIDE SLOPES SHALL BE BELOW TOP SOIL.



TYPICAL SECTION

MICRO-BIORETENTION DETAILS (TYPICAL)

NOT TO SCALE



TYPICAL PROFILE

FACILITY	ELEVATIONS (SEE TYPICAL BIORETENTION DETAIL)								FILTER			PLANTINGS			LINER REQ'D
	A	B	C	D	E	F	G	H	LENGTH (ft)	WIDTH (ft)	AREA (sf)	1	2	3	
MBR-1	556.00	555.00	554.83	552.83	552.50	551.83	550.83	550.00	24.0	11.1	267	26	22	12	NO

Drywell Designation	Length (ft)	Width (ft)	Depth (ft)	Grade	Top of Stone	Bottom of Stone
DW-1	7.00	7.00	5.00	556.0	554.0	549.0

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

1. 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.
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.
3. 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.
4. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

BIO-RETENTION DIMENSION LEGEND

FACILITY	NAME
A	TOP OF EMBANKMENT
B	TOP OF MULCH
C	TOP OF SOIL
D	TOP OF STONE FILTER
E	TOP OF STONE STORAGE
F	UNDERDRAIN INVERT
G	BOTTOM OF STONE
H	OUTFALL ELEVATION

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF ROOFTOP RUNOFF (N-1), DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

1. 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 FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.



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BUILDER: BERARDUCCI BUILDERS, LLC 1508 ABELL DR WESTMINSTER, MD 21157 443-797-9409	PURCHASER: JENNY AND ANTHONY BERARDUCCI 13904 RYON DRIVE GLENELG, MD 21737	OWNER: JRNL, LLC 6800 DEERPATH ROAD, SUITE 100 ELKRIDGE, MD 21075
DESIGN: JC	DRAFT: JC	

SAVAGE PROPERTY, PLAT Nos. 26014-17	
BERARDUCCI RESIDENCE	
TAX MAP: 13 GRID: 21 PARCEL: 109 ZONED: RC-DEO ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND 2730 JENNINGS CHAPEL ROAD, WOODBINE, MD 21797	
BUILDING PERMIT PLAN STORMWATER NOTES AND DETAILS	
DATE: 04/28/2022	BEI PROJECT NO. 3110
SCALE: NA	SHEET 4 OF 4