GENERAL NOTES-

- I. Construction shall be performed in accordance with latest editions of the following, including all addenda, supplements or updates:
- a. Design Manual Volume One Roads and Storm Drains, 1994 edition, of the Carroll County Department of Public Works. b. Design Guide for Flexible Pavement, 2004, of the Carroll County Department of Public Works.
- c. Book of Standards, Highway and Incidental Structures of the Maryland Department of Transportation, State Highway Administration.
 d. Standard Specifications for Construction and Materials, 2008 edition, of the Maryland Department of Transportation, State Highway
- e. Maryland Manual on Uniform Traffic Control Devices (MdMUTCD) 2009 Edition of the Maryland Department of Transportation, State Highway

 Administration.
- f. Maryland Standards and Specifications for Soil Erosion and Sediment Control, 1994 edition, published jointly by Water Resources Administration, Soil Conservation Service and State Soil Conservation Committee.
- All of the above noted publications are included by reference as part of these construction plans.
- 2. The Contractor shall notify the Carroll County Department of Public Works, Construction Inspection Division (410-386-2157) a minimum of three (3) working days before beginning work.
- 3. Contractor shall furnish, place and maintain traffic control measures as shown in these plans and as specified in the MdMUTCD. Contractor shall immediately remove and replace devices which are damaged, do not function properly, or are determined by Construction Inspector to be unsuitable for their purpose. Traffic control devices may be removed only upon approval of Construction Inspector.
- 4. Locations of existing utilities are shown only as notification to Contractor of the presence of underground utilities. Carroll County and the design engineer do not warrant or guarantee correctness or completeness of information shown. Contractor is responsible for contacting Miss Utility at I-800-257-7777 for verifying existence and location of all utilities prior to beginning work. Any damage to existing utilities due to Contractor's operation shall be repaired immediately at Contractor's expense.
- 5. Developer is responsible in all regards for relocation of any existing utilities.
- 6. In case of discrepancy between scaled and figured dimensions, figured dimensions shall govern.
- 7. If for any reason proposed facilities cannot be constructed in accordance with approved plans, Contractor must immediately inform Construction Inspector or Construction Inspection Division (410-386-2157) and shall not begin or continue work on those items. If the Department of Public Works determines plan revisions are necessary, no work shall be performed on the item(s) in question until revised plans issued by the design engineer are approved and issued for construction by the Bureau of Development Review.
- 8. Failure to mention specifically the provision of any item(s), or performance of any work or procedure which would normally be required to complete the project, shall not relieve the Contractor of his responsibility to provide such item(s) or to perform such work or procedure.
- 9. Construct earth fills for roads, embankments, and structures in accordance with Section 204 EMBANKMENT AND SUBGRADE of the MD SHA Standard Specifications for Construction and Materials. Compact the material that is 1 foot below the top of subgrade to at least 92.0% of maximum dry density using AASHTO T-180 method. Compaction of top one foot of fill shall not be less than 97.0% of maximum dry density using the same method.
- IO. Developer is responsible for providing soil, base aggregate and hot mix asphalt compaction testing. A certified technician must be onsite at all times during fill operations. Compaction tests must be certified by a Professional Engineer registered in the State of Maryland. Copies of soil compaction test results must be provided to, and approved by, the Construction Inspection Division prior to placement of curbs and/or base aggregate. Copies of base aggregate compaction test results must be provided to, and approved by, the Construction Inspection Division prior to placement of base hot mix asphalt.
- I I. Inlet grates in sumps shall be constructed level at elevation given in structure schedule. Inlets on grade shall be adjusted so that slope of grate matches finished flow line of curb. Top elevation shall apply to centerline of grate at flow line of curb. Cross slope of the grate shall match the road cross slope.
- I 2. Pipe elevations shown on storm drain profiles are invert elevations unless otherwise noted.
- 13. Where ditch or waterway stabilization matting of any type is specified, installation shall be in accordance with manufacturer's recommendations.

 Matting shall be placed on bottom and side slopes to provide either 1.0' stabilized depth, unless otherwise indicated on plans.
- 14. All existing paving disturbed by utility cuts shall be replaced in accordance with Carroll County Standard Plate 47, Option 1 or Option 3 in the Design Manual, Volume 1 or as noted in the Utility Permit.
- I5. Once begun, road construction shall be continued until full depth of aggregate base and paving as shown on the typical section are placed, including the finished surface course. Aggregate base course and hot mix asphalt base course shall not remain uncovered for more than five working days.
- I G. Off-site borrow material to be imported for embankment construction and support of pavement is to meet the minimum subgrade soil specifications in Table 3 of the Design Guide for Flexible Pavements. CBR testing of off-site borrow material shall be completed and the test results submitted to and approved by the Bureau of Development Review prior to delivery of the material. The paving design sections shown on the approved plans shall be reviewed and evaluated using the CBR testing results of the borrow material. Any changes to the pavement design sections based on the CBR test results shall be incorporated through the red-line revision process.
- 17. The design Equivalent Single Axle Loads (ESAL) and the design CBR value shall be noted on the construction plans.
- 18. Permanent signage and striping shall be furnished and installed by the Carroll County Bureau of Roads Operations. Contractor shall notify the Bureau of Roads Operations at 410-386-6717 a minimum of three (3) weeks prior to starting work and then again 48 hours prior to completion of work.
- 19. Construction vehicles, contractor or private, or construction materials or equipment shall not be parked, placed, or stored within any public right-of-way.

SOIL CLASSIFICATION PROPERTY LINE STREAM SEPTIC / STREAM BUFFER CLEAN OUT SWM DRYWELL FAILED PERC TEST PASSED PERC TEST PASSED PERC TEST CLEAN CLEAN CONSTRUCTION EASEMENT STONE CONSTRUCTION EASEMENT DESCRIPTION OF TREATMENT TONE EXISTING WELL PROPOSED WELL A SEPTIC / STREAM BUFFER STONE CONSTRUCTION EASEMENT STONE CONSTRUCTION EASEMENT

BENCH MARKS

BENCHMARK #1: CARROLL COUNTY SURVEY CONTROL "FRYMAN"

NORTH = 681,008.195

EAST = 1,320,593.460

ELEVATION = 877.33

DESCRIPTION = CONCRETE MONUMENT SET FLUSH WITH THE GROUND, ON THE SOUTH SIDE OF HOOK ROAD, BEING 1.10 MILES FROM INTERSECTION OF MARYLAND ROUTE 97 & HOOK ROAD.

BENCHMARK #2: CARROLL COUNTY SURVEY CONTROL "FRYMAN AZI"

NORTH = 680,866.275 EAST = 1,321,730.908

ELEVATION = 787.385

DESCRIPTION = REBAR AND CAP SET FLUSH WITH THE GROUND, ON THE SOUTH SIDE OF ARNOLD ROAD, BEING 0.10 MILES FROM INTERSECTION OF HOOK ROAD AND ARNOLD ROAD.

CONCEPT PLANS FOR

THE SANCTUARY

7TH ELECTION DIST. CARROLL CO., MD.

OWNER

KENNELL INC. C/O WALTER KENNELL 6200 CANDLE COURT SYKESVILLE, MD 21784 PHONE # 443-827-3307

ENGINEER'S/SURVEYOR'S DESIGN CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN DESIGNED ACCORDING TO CHAPTER 151 OF THE CODE OF PUBLIC LOCAL LAWS AND ORDINANCES OF CARROLL COUNTY AND I HEREBY CERTIFY THAT THESE DOCUMENTS WERE

PREPARED OR APPROVED BY ME, AND I AM A DULY LICENSED PROFESSIONAL ENGINEER/SURVEYOR UNDER THE LAWS

DEVELOPER'S/LANDOWNER'S CERTIFICATION

1/WE HEREBY CERTIFY THAT ALL PROPOSED WORK SHOWN ON THESE CONSTRUCTION DRAWING(S) WILL B

TITLE XV. CHAPTER 151 OF THE CODE OF PUBLIC LOCAL LAWS AND ORDINANCES OF CARROLL COUNTY,

CONDUCTED IN STRICT ACCORDANCE WITH THESE PLANS. I/WE ALSO UNDERSTAND THAT IT IS MY/OUR RESPONSIBILI'

(30) DAYS OF COMPLETION OF WORK ON THE STORMWATER MANAGEMENT FACILITY/FACILITIES. I/WE ALSO CERTIFY THAT THIS/THESE STORMWATER MANAGEMENT FACILITY/FACILITIES WILL BE INSPECTED DURING CONSTRUCTION BY A

TO HAVE THE CONSTRUCTION SUPERVISED AND CERTIFIED, INCLUDING THE SUBMITTAL OF "AS-BUILT" PLANS CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER OR PROFESSIONAL LAND SURVEYOR, AS APPROPRIATE, WITHIN THIRTY

REGISTERED PROFESSIONAL ENGINEER OR PROFESSIONAL LAND SURVEYOR, AS APPROPRIATE, IN ACCORDANCE WITH

ENGINEER'S/SURVEYOR'S "AS-BUILT" CERTIFICATION

I/WE HEREBY CERTIFY THAT THE FACILITY/FACILITIES SHOWN ON THIS/THESE PLAN(S) WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS, I ALSO CERTIFY THAT THIS/THESE

FACILITIES WERE INSPECTED IN ACCORDANCE WITH TITLE XV, CHAPTER 151 OF THE CODE OF PUBLIC LOCAL LAWS AND ORDINANCES OF CARROLL COUNTY AND LIFERBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED

BY ME, AND I AM A DULY LICENSED PROFESSIONAL ENGINEER OR PROFESSIONAL LAND SURVEYOR, AS APPROPRIATE,

EXP. <u>08-03-2025</u>

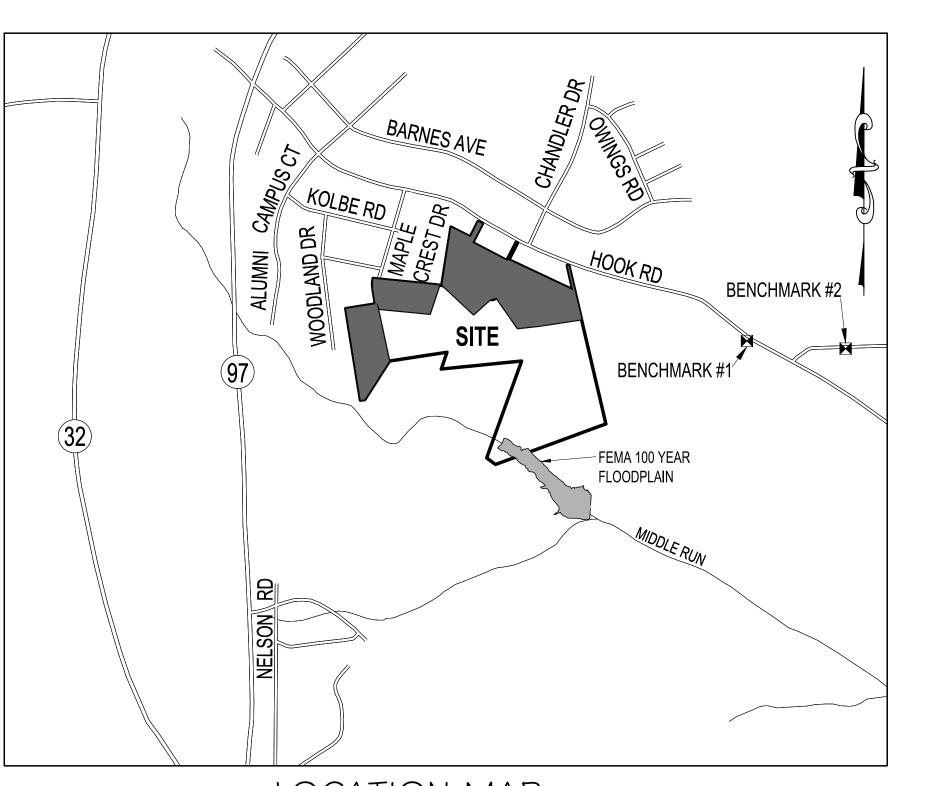
OF THE STATE OF MARYLAND.

LICENSE NO.__

DEVELOPER

KENNELL INC. C/O WALTER KENNELL 6200 CANDLE COURT SYKESVILLE, MD 21784 PHONE # 443-827-3307

TRIP GENERATION	
PROPOSED SINGLE FAMILY RESIDENCES	ΙC
AVG. DAILY TRIPS PER RESIDENCE	ΙC
AM PEAK HOUR TRIPS	9
PM PEAK HOUR TRIPS	12
TOTAL AVG DAILY TRIPS	100



LOCATION MAP

SCALE: | "= | 000'

-INDEX OF SHEETS-

SHEET 1: TITLE SHEET

SHEET 2: CONCEPT PLAN

SHEET 3: CONCEPT PLAN & PROFILE - SANCTUARY COURT

SHEET 4: CONCEPT STORM WATER MANAGEMENT PLAN

SHEET 5: CONCEPT STORM WATER MANAGEMENT DETAILS

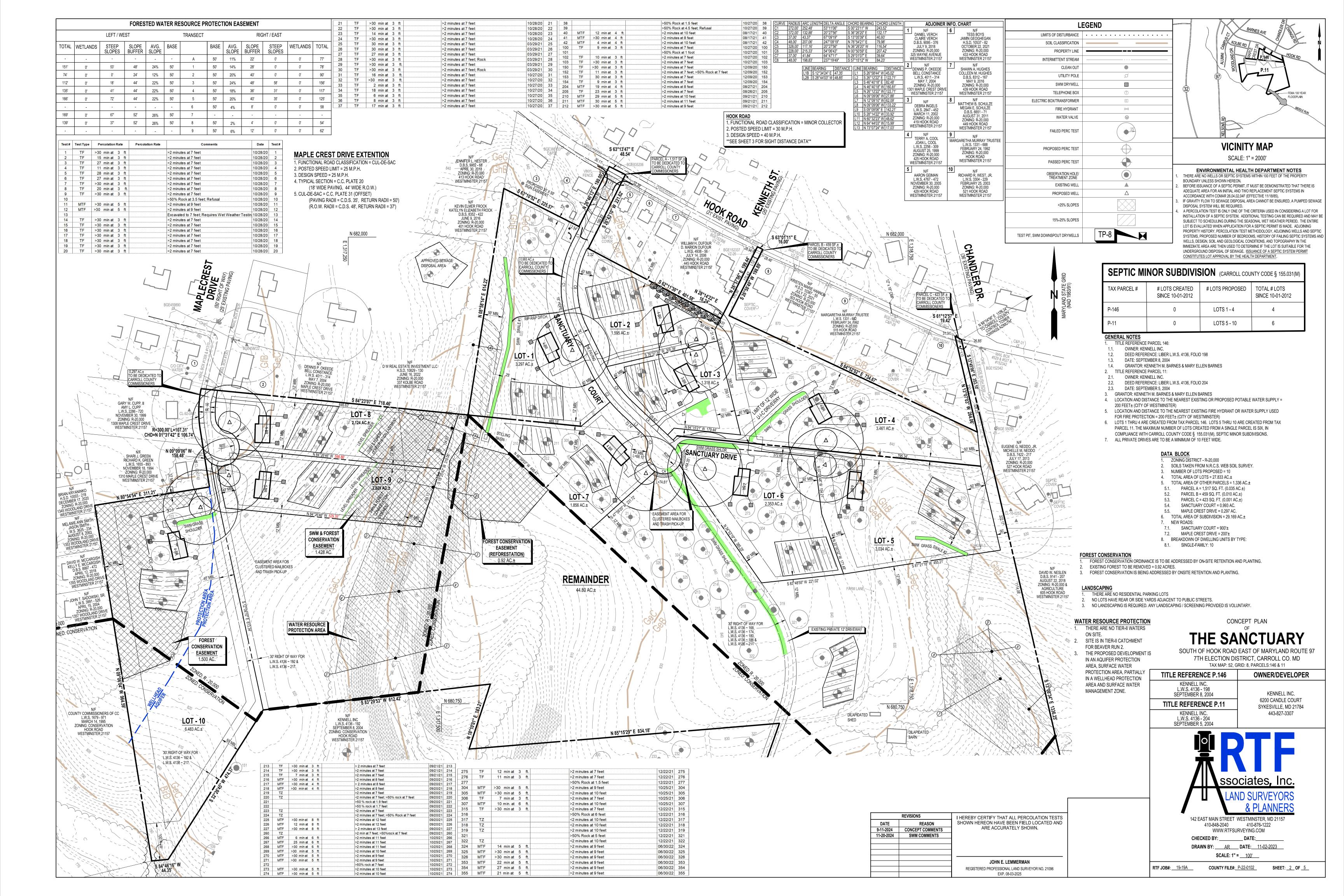
REVISIONS				
DATE	REASON			
9-11-2024	CONCEPT PLAN REVIEW COMMENTS			
11-20-2024	SWM COMMENTS			

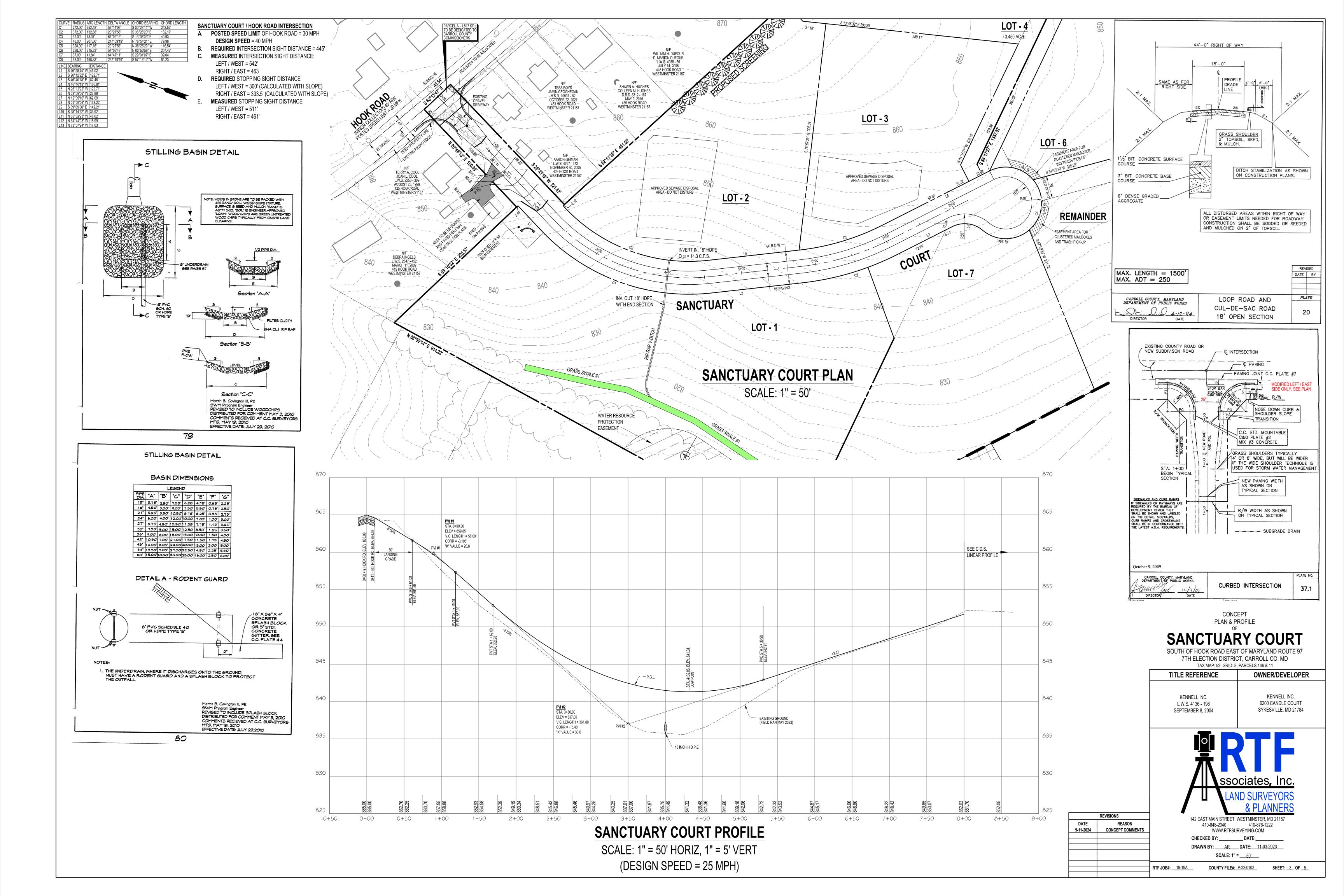


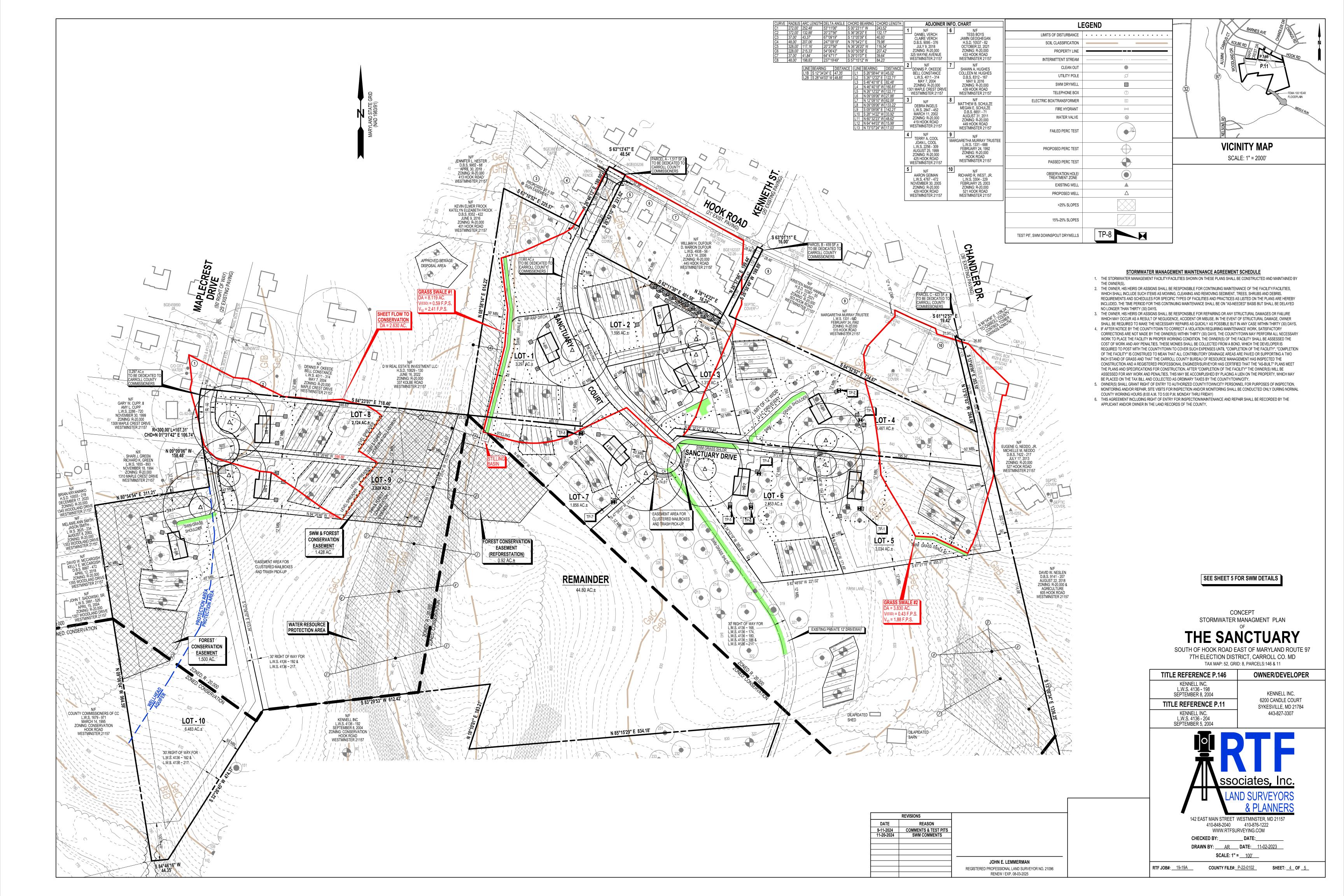
SANCTUARY COVER SHEET

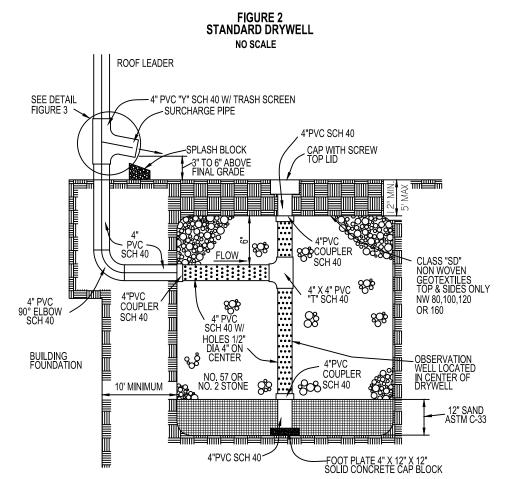
DATE: 11-22-23 CO. FILE#: P-22-010

CO. FILE#: P-22-0102 SHEET: 1 OF 5









 MINIMUM SETBACKS: 100 FT. FROM WELLS 25 FT. FROM SEPTIC AREAS 10 FT. FROM BUILDINGS

- 2. FROM THE DOWNSPOUT TO THE DRYWELL THE DRAIN PIPE MUST BE AT LEAST 6" BELOW GRADE. 3. THE LOCATIONS AND SIZE OF ALL DRYWELLS MUST BE SHOWN ON THE GRADING PLOT PLAN. 4. THESE GEOTEXTILES ARE AVAILABLE IN FINKSBURG @ ES&G DISTRIBUTORS 2601 EMORY RD. BLDG.8. 866-744-5001, ANY
- 5. ALL ROOF LEADERS MUST BE CONNECTED TO THE DRYWELLS

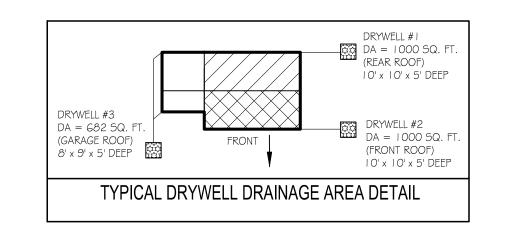
EQUIVALENT GEOTEXTILE IS ACCEPTABLE.

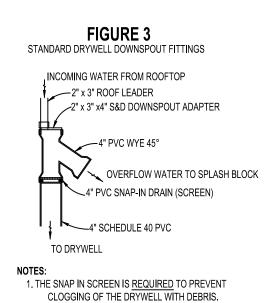
	INS	SPECTION CHAR	T FOR DRY WELI	. INSTALLATION	(M-5)	
STAGE	INSPECTOR APPROVAL		INSPECTOR'S APPROVAL	S DRY WELL #2	INSPECTOR APPROVAL	
	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE
1. INDIVIDUAL HOUSE HAS BEEN CONSTRUCTED AND FINAL GRADING IS COMPLETE., EXCAVATE TO REQUIRED SIZE & LOCATION						
2. PLACEMENT OF SAND & INSTALL GEOTEXTILE FABRIC ON SIDES						
3. INSTALL FOOT PLATE, 4" PVC AND WASHED NO. 2 STONE						
4. WRAP TOP OF STONE WITH GEOTEXTILE FABRIC & BACKFILL						
5. INSTALL & CONNECT DOWNSPOUTS TO FACILITY WITH SCREEN FITTINGS AND SPLASH BLOCKS AT OVER FLOWS.						

CONTACT THE CERTIFYING PROFESSIONAL ENGINEER/PROFESSIONAL LAND SURVEYOR (JOHN E. LEMMERMAN, RTF ASSOCIATES, INC. 410-848-2040) A MINIMUM OF 24 HOURS PRIOR EXCAVATION OF DRYWELLS TO INSPECT EXCAVATION SIZE AND LOCATION. HAVE ALL MATERIALS ON SITE.

STORMWATER MANAGEMENT SEQUENCE OF CONSTRUCTION - DOWNSPOUT DRYWELLS CONTACT THE CERTIFYING PROFESSIONAL ENGINEER/PROFESSIONAL LAND SURVEYOR (JOHN E. LEMMERMAN, RTF ASSOCIATES, INC. 410-848-2040) A MINIMUM OF 24 HOURS PRIOR EXCAVATION OF DRYWELLS TO INSPECT EXCAVATION SIZE AND LOCATION. HAVE ALL MATERIALS ON SITE.

- 2. ONCE INDIVIDUAL HOUSE IS FINAL GRADED, EXCAVATE DRYWELL TO REQUIRED SIZE AND LOCATION, ONCE SIZE AND LOCATION IS VERIFIED BY CERTIFYING PROFESSIONAL, INSTALL FOOTPLATE, GEOTEXTILE FABRIC ON TOP & SIDES ONLY, SAND AND STONE, WHILE CERTIFYING PROFESSIONAL IS ON SITE.
- 4. ONCE ALL DOWNSPOUTS ARE CONNECTED, HAVE SCREEN FITTINGS AND SPLASH BLOCKS DOWN AT ALL OVERFLOWS, CONTACT CERTIFYING PROFESSIONAL FOR FINAL INSPECTION.
- 5. SUBMIT AS-BUILT CERTIFICATION FOR BOND RELEASE.





2. SEE FIGURE 3a "LIST OF POTENTIAL SUPPLIERS TO

ACCOMPANY FIGURE 3 STANDARD DRYWELL DOWNSPOUT FITTINGS" FOR INFORMATION ON

SOME LOCAL RETAILERS THAT SUPPLY COMPONENTS FOR THIS SYSTEM. NOTES:
THE CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT OBTAINED THIS PART INFORMATION AFTER SENDING OUT A LETTER TO KNOWN LOCAL PLUMBING SUPPLY COMPANIES AND AFTER RECEIVING INFORMATION FROM EACH RESPECTIVE COMPANY. THE

> FIGURE 3a LIST OF POTENTIAL SUPPLIERS TO ACCOMPANY FIGURE 3

SUPPLIERS LISTED ABOVE ARE PROVIDED FOR REFERENCE PURPOSES ONLY. ANY EQUIVALENT SCHEDULE 40 PVC FITTINGS FROM

STANDARD DRYWELL DOWNSPOUT FITTINGS

2" x 3" x 4" S&D DOWNSPOUT ADAPTER BT PLUMBING SUPPLY, INC., 486 LUCABAUGH MILL RD., WESTMINSTER, MD 21157; 410-876-2118-PART NO. PSDDSA234

FERGUSON ENTERPRISES, INC., 900 WAKEFIELD VALLEY RD., NEW WINDSOR, MD 21776; 410-635-6682-PART NO. PSDAKMP

LOWES HOME IMPROVEMENT WAREHOUSE OF WESTMINSTER, 777 MARKET ST., WESTMINSTER, MD 21157; 410-857-7445- PART NO. NDS L9P04

THE PLUMBERY HOME CENTER (TWO LOCATIONS), 15 NORTH MAIN STREET, MT. AIRY, MD 21771; 301-829-1770 OR 410-751-1113; OR 418 E. BALTIMORE ST., TANEYTOWN, MD 21787; 410-751-1113- PART NO.-REQUIRES BUSHING

4" PVC WYE 45°

ANY VENDOR MAY BE USED.

BT PLUMBING SUPPLY, INC., 486 LUCABAUGH MILL RD., WESTMINSTER, MD 21157; 410-876-2118-PART NO. PY4

FERGUSON ENTERPRISES, INC., 900 WAKEFIELD VALLEY RD., NEW WINDSOR, MD 21776; 410-635-6682-PART NO. PDWVYP

LOWES HOME IMPROVEMENT WAREHOUSE OF WESTMINSTER, 777 MARKET ST., WESTMINSTER, MD 21157; 410-857-7445- PART NO. CHARLOTTE CPF600 1400

4" PVC SNAP-IN DRAIN SCREEN

BT PLUMBING SUPPLY, INC., 486 LUCABAUGH MILL RD., WESTMINSTER, MD 21157; 410-876-2118-PART NO. JSD42004

JONES-STEPHENS CORP.; WWW.PLUMBEST.COM; 800-355-6637- PART NO. D42-004

LOWES HOME IMPROVEMENT WAREHOUSE OF WESTMINSTER, 777 MARKET ST., WESTMINSTER, MD 21157; 410-857-7445- PART NO. OATEY 435693

THE PLUMBERY HOME CENTER (TWO LOCATIONS), 15 NORTH MAIN STREET, MT. AIRY, MD 21771; 301-829-1770 OR 410-751-1113; OR 418 E. BALTIMORE ST., TANEYTOWN, MD 21787; 410-751-1113- PART NO.-REQUIRES CUTTING TO FIT

	STORMWATER MAINTE DRYWE MODIFIED TO CORRESPOND TO	ELL
W-2	MONTHLY INSP	ECTION
Inspection Item	Inspection Requirements	Remedial Action
Vegetative Cover and Erosion	Check overflow area for channelizing and bare spots.	Re-seed or re-plant in accordance with approved landscaping plans. Re-grade if concentrated flow is causing rills or gullying over the facility.
	SEASONAL INSPECTION AND AI	FTER A MAJOR STORM
Inspection Item	Inspection Requirements	Remedial Action
Leaves and Debris	Check that gutters, downspouts and screens are clear of leaves and debris.	Clean out gutters, downspouts and screens and dispose of leaves and debris in an acceptable manner.
Inflow and Overflow	Check for misalignments, broken pipes, and blockages. Inlet pipe and surcharge overflow "Y or T" must be in good condition.	Repair any broken or faulty piping. Clear out any blockages.
Dewatering	Check observation wells for water level. Water stored in stone must dewater within 48 hours of rainfall. Noticeable odors or the presence of algae or stained water are indicators of anaerobic conditions and inadequate dewatering of the facility.	Excavate, remove, clean, and replace stone and sand in accordance with approved plans.
	ANNUAL INSPE	CTION
Inspection Item	Inspection Requirements	Remedial Action
Maintenance Access	Check for accessibility to facility.	Prevent excessive vegetative growth, erosion, and obstructions on access way.
Overall Function	Check that flow conveyance is operating as	Renair to good condition according to specifications or

the approved plans.

STORMWATER MAINTENANCE SCHEDULE SHEET FLOW TO CONSERVATION AREA

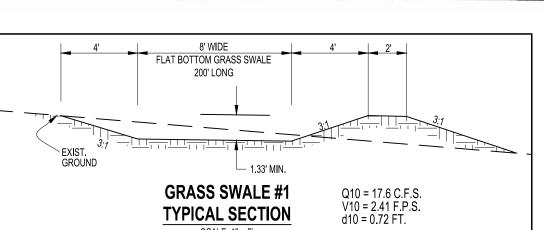
MONTHLY INSPECTION				
Inspection Item	Inspection Requirements	Remedial Action		
Level Spreader (if present)	Check for dislocated stone.	Replace stone.		
Edge of Conservation Area	Check for channelization and bare spots and/or accumulated sediments	Regrade, re-seed and remove sediments as necessary		
SE	ASONAL INSPECTION AND A	AFTER A MAJOR STORM		
Inspection Item	Inspection Requirements	Remedial Action		
Inflow	Ensure sheet flow from pavement to conservation area.	Remove and properly dispose of debris, trash, vegetation, accumulated sediments, and regrade and re-seed as necessary to ensure sheet flow into conservation area.		
Treatment	Ensure sheet flow through dense vegetation in Conservation area.	Limit mowing to twice annually. Regrade and reseed to eliminate channels and rills, then revegetate.		
ANNUAL INSPECTION				
Inspection Item	Inspection Requirements	Remedial Action		
Overall Function of Conservation	Check that the "sheet flow to conservation area" is operating as designed.	Repair to good condition according to specifications on the approved plans.		

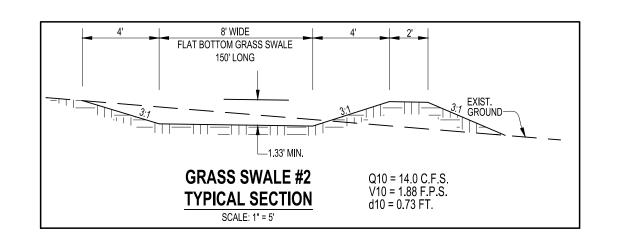
MODIFIED TO CORRESPOND TO CARROLL COUNTY DETAILS

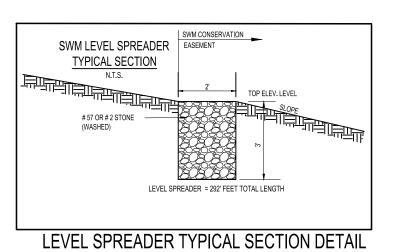
<i>3</i> 11
edial Action
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ER A MAJOR STORM
edial Action
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mowing to twice annually. Regrade and reto eliminate channels and rills, then revegetate.
ON
edial Action
ir to good condition according to specifications e approved plans.

STORMWATER MAINTENANCE SCHEDULE

	MONTHLY INSPI	ECTION
Inspection Item	Inspection Requirements	Remedial Action
Debris and Trash	Check for trash and debris in channel including inlets, outlets, and area around facility.	Remove all trash and debris and dispose in an acceptable manner. Unclog all openings.
Grass Cover	Grass in swale must be maintained at a height of 4 to 6 inches. Check for channelizing and bare spots.	Mow side slopes when grass exceeds 12 inches in height. Mow channel at least bi-annually. Remove grass clippings. Re-plant with topsoil, seed, and matting.
	SEASONAL INSPECTION AND AF	
Inspection Item	Inspection Requirements	Remedial Action
Sediment Accumulation	Check for accumulated sediment and clogged openings.	When sediment accumulates to 2 inches in depth, remove sediment. Remove sediment from any clogged openings. Dispose of all sediment in an acceptable location.
Erosion	Check inflow, channel, outfall, and side slopes for evidence of erosion, rills, gullies, and runoff channelization.	Re-plant with topsoil, seed, and matting. Re-grade if concentrated runoff to the facility is causing rills or gullying. Grade, vegetate, and/or armor to provide stable conveyance in accordance with approved plans.
	ANNUAL INSPE	CTION
Inspection Item	Inspection Requirements	Remedial Action
Maintenance Access	Check for accessibility to facility.	Prevent excessive vegetative growth, erosion, and obstructions on access way.
Overall Function of Facility	Check that flow conveyance is operating as designed	Repair to good condition according to specifications on the approved plans.







INSPECTION CHART FOR LEVEL SPREADER INSTALLATION

SCALE: 1" = 50'

STAGE	INSPECTOR' APPROVAL	
	INITIALS	DATE
1. VERIFY DRAINAGE AREA TO LEVEL SPREADER IS STABILIZED WITH A VEGETATION OR A 2" STAND OF GRASS		
2. EXCAVATE LEVEL SPREADER TO THE REQUIRED SIZE/LOCATION		
3. INSTALL STONE		
4. REMOVE/STABILIZE EXCESS MATERIAL		
5. SUBMIT SWM AS-BUILT CERTIFICATION FOR BOND RELEASE		

CONTACT THE CERTIFYING PROFESSIONAL ENGINEER/PROFESSIONAL LAND SURVEYOR (JOHN E. LEMMERMAN, RTF ASSOCIATES, INC. 410-848-2040) A MINIMUM OF 24 HOURS PRIOR EXCAVATION OF DRYWELLS TO INSPECT EXCAVATION SIZE AND LOCATION. HAVE ALL MATERIALS ON SITE.

STORMWATER MANAGEMENT SEQUENCE OF CONSTRUCTION -LEVEL SPREADER CONTACT THE CERTIFYING PROFESSIONAL ENGINEER/PROFESSIONAL LAND SURVEYOR (JOHN E. LEMMERMAN, RTF ASSOCIATES, INC. 410-848-2040) A MINIMUM OF 24 HOURS PRIOR EXCAVATION OF DRYWELLS TO INSPECT EXCAVATION SIZE AND LOCATION. HAVE ALL MATERIALS ON SITE. 2. ONCE DRAINAGE AREA TO LEVEL SPREADER IS STABILIZED WITH VEGETATION OR IF PREVIOOUSLY DISTURBED, A 2" STAND OF GRASS, EXCAVATE LEVEL SPREADER TO THE REQUIRED SIZE AND LOCATION. 3. ONCE SIZE AND LOCATION IS VERIFIED BY CERTIFYING PROFESSIONAL, INSTALL STONE WHILE CERTIFYING PROFESSIONAL IS ON SITE. 4. ONCE ALL EXCESS MATERIAL IS REMOVED OR STABILIZED, CONTACT CERTIFYING PROFESSIONAL FOR FINAL

STORMWATER MAINTENANCE SCHEDULE

NON-ROOFTOP DISCONNECTION

5. SUBMIT AS-BUILT CERTIFICATION FOR BOND RELEASE.

"WIDE SHOULDER TECHNIQUE"

MODIFIED TO CORRESPOND TO CARROLL COUNTY DETAILS

MONTHLY INSPEC	TION	
Inspection Requirements	Remedial Action	
Check for vegetation over 4" height. Check disconnection area for channelizing and bare spots.	Mow grass/remove trees and shrubs. Re-grade if concentrated flow is causing rills or gullying on surface. Re-seed as necessary.	
SEASONAL INSPECTION AND AFTE	CR A MAJOR STORM	
Inspection Item Inspection Requirements Remedial Action		
Ensure sheet flow from pavement to grass shoulder disconnection area.	Remove debris, vegetation, regrade and re-seed as necessary to ensure sheet flow from pavement.	
Check for soft areas and/or soil saturated to the surface,	Check slotted pipe, rodent guards and eliminate blockages. If necessary, excavate, remove and replace stone and slotted pipe.	
ANNUAL INSPECTION	ON	
Inspection Requirements	Remedial Action	
Check that grass disconnection is operating as designed.	Repair to good condition according to specifications on the approved plans.	
	Check for vegetation over 4" height. Check disconnection area for channelizing and bare spots. SEASONAL INSPECTION AND AFTE Inspection Requirements Ensure sheet flow from pavement to grass shoulder disconnection area. Check for soft areas and/or soil saturated to the surface, ANNUAL INSPECTION Inspection Requirements Check that grass disconnection is operating as	

GRASS SWALE #1			GRASS SWALE #2		
INSPECTION CHART FOR GRASS SWALE (N	1-8)		INSPECTION CHART FOR GRASS SWALE (I	M-8)	
INSTALLATION	INSPECTOR'S	APPROVAL	INSTALLATION	INSPECTOR'S	APPROVAL
STAGE	INITIALS	DATE	STAGE	INITIALS	DATE
1. GRASS CHANNEL STAKED OUT PER PLAN LINE AND GRADE			1. GRASS CHANNEL STAKED OUT PER PLAN LINE AND GRADE		
2. SWALE BOTTOM, SIDES EXCAVATED TO SUBGRADE			2. SWALE BOTTOM, SIDES EXCAVATED TO SUBGRADE		
3. PLACEMENT OF 3" TOPSOIL, SEED & MULCH OR STABILIZATION MATTING IN GRASS SWALE.			3. PLACEMENT OF 3" TOPSOIL, SEED & MULCH OR STABILIZATION MATTING IN GRASS SWALE.		
4. ALL VEGETATED DISTURBED AREAS ARE STABILIZED WITH A 2" STAND OF GRASS.			4. ALL VEGETATED DISTURBED AREAS ARE STABILIZED WITH A 2" STAND OF GRASS.		
5. SIGNED AND CERTIFIED AS-BUILT SUBMITTED TO THE CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT			5. SIGNED AND CERTIFIED AS-BUILT SUBMITTED TO THE CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT		

(M-8) GRASS SWALE - STORMWATER MANAGEMENT SEQUENCE OF CONSTRUCTION

CONTACT THE CERTIFYING PROFESSIONAL ENGINEER/PROFESSIONAL LAND SURVEYOR (JOHN E. LEMMERMAN, RTF ASSOCIATES, INC. 410-848-2040)

JOHN E. LEMMERMAN

REGISTERED PROFESSIONAL LAND SURVEYOR NO. 21096

RENEW / EXP. 08-03-2025

A MINIMUM OF 24 HOURS PRIOR EXCAVATION OF GRASS SWALE TO INSPECT EXCAVATION SIZE AND LOCATION. EXCAVATE THE SWALE AND DIVERSION BERM TO APPROVED PLAN SUBGRADE. PLACE 3" TOPSOIL ON SWALE BOTTOM AND SIDE SLOPES AND STABILIZE WITH PERMANENT GRASS SEED AND MULCH.

REVISIONS

9-11-2024

REASON CONCEPT COMMENTS

SWM COMMENTS

ONCE THE ENTIRE DRAINAGE AREA TO THE GRASS CHANNEL IS STABILIZED WITH PAVEMENT OR 2" STAND OF GRASS, SUBMIT AN AS-BUILT CERTIFICATION TO THE CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT FOR BOND RELEASE.

CONCEPT PLAN

TITLE REFERENCE P.146

VICINITY MAP

SCALE: 1" = 2000'

SOUTH OF HOOK ROAD EAST OF MARYLAND ROUTE 97 7TH ELECTION DISTRICT, CARROLL CO. MD TAX MAP: 52, GRID: 8, PARCELS:146 & 11

OWNER/DEVELOPER

SHEET: <u>5</u> **OF** <u>5</u>

KENNELL INC. L.W.S. 4136 - 198 SEPTEMBER 8, 2004 TITLE REFERENCE P.11 KENNELL INC. L.W.S. 4136 - 204 SEPTEMBER 5, 2004	KENNELL INC. 6200 CANDLE COURT SYKESVILLE, MD 21784 443-827-3307
	ciates, Inc.
142 EAST MAIN STREET 9 410-848-2040	ND SURVEYORS & PLANNERS WESTMINSTER, MD 21157 410-876-1222 RVEYING.COM
CHECKED BY:	<u> </u>
DRAWN BY: <u>AR</u>	DATE: 11-02-2023

SCALE: 1" = 100'

COUNTY FILE#: P-22-0102

RTF JOB#: 19-19A