

# CARUSO HOMES, INC.

2120 BALDWIN AVE, STE 200  
CROFTON, MARYLAND 21114

TEL (301) 261-0277  
FAX (301) 261-6588

"KINGSPORT"

SINGLE FAMILY

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REVISED : 09-06-19

ALL WORK SHALL COMPLY WITH 2018 INTERNATIONAL RESIDENTIAL CODE W/ AMENDMENTS  
FLOOR FRAMING TO BE 11-7/8" FLOOR SYSTEM  
7-3/4" RISE-10" TREAD STAIR

\*\* THE LOCAL JURISDICTION SHALL FILL IN THIS TABLE WITH LOCAL CLIMATIC AND GEOGRAPHIC CRITERIA \*\*

2018 CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA:				HOWARD COUNTY MARYLAND							
GROUND SNOW LOAD	WIND SPEED (mph)		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP.	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP.
	Speed (mph)	Topographic Effects		Weathering	Frost Line Depth	Termites					
40 PSF	15		B	SEVERE	30"	MODERATE TO HEAVY					

Health

**Professional Certification**

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional Architect under the laws of the State of Maryland.

license number 5621  
expiration date 04-03-2020

4375 OLD DOXBURY  
Brookville, MD 20833

2 story  
Finished Basement  
3 Bath room  
1/2 Bathroom  
4 Bedroom

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3516

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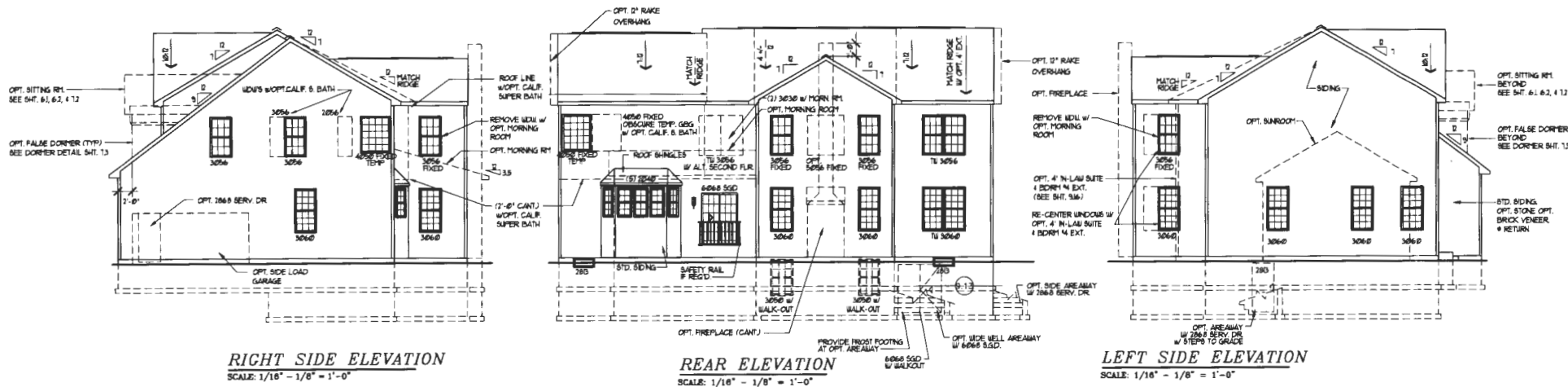
## REVISIONS

DATE	COMMENT
03-16-09	FINAL REVISIONS
06-12-04	MISC. STRUCTURAL REVISIONS - JM
8-6-04	REDLINE REVISIONS - KMG
9-16-04	MISC. REDLINE REVISIONS - KMG
03-28-05	ADD PG CITY DETAILS - JL
4-8-05	ADD OPT. 3-CAR SIDE LOAD GARAGE DETAILS w/ OPT. SITTING ROOM
08-28-05	ADDITIONAL REVISIONS - KAH
05-05-06	ADDED OPT. 3-CAR FRONT LOAD GARAGE - KAH
10-30-06	REDLINE REVISIONS - RZS
01-07-07	SHEETS PG 4, PG 5, 4 PG 6 & 6 ADDED TO SET - RZS
01-26-07	GENERAL REDLINE REVISIONS - UPS
04-04-07	GENERAL REDLINE REVISIONS - UPS
06-06-07	REVISED MORNING ROOM - RZS
10-05-07	AR 9 - CGG
11-08-07	REV. GARAGE DOOR LOCATION - CGG
12-10-07	GENERAL UPDATES - KAH
11-30-08	ADD OPT. DELUXE FAMILY RM WINDOW PACKAGE
12-07-08	UPDATE PG 1 DETAILS
05-11-11	RE-INDEX DRAWINGS
12-05-11	ADDED OPT. MOTOR COURT GARAGE - RC
02-15-13	IRC 2012 CODE UPDATE - cad
02-20-14	REVISED 2-STORY CONSERVATORY PER CLIENT COMMENTS - cad
03-09-14	REVISED 2-STORY CONSERVATORY - LOCATION TO MATCH SUNRM
07-16-14	BRICK WINDOW HEADS TO RECEIVE KEYS / REFRIGERATOR RECESS ADDED
05-24-14	REVISIONS AND UPDATES PER MARK-UPS -
11-10-14	ADD P.P. FOR ELEV. 91 4 REV. P.P. FOR 22 4 23.
03-10-15	"LEAN" PLAN REVIEW REVISIONS
04-09-15	REVISE KITCHEN LAYOUT, ADD DESK NEXT TO REF.
07-21-15	REVISE PORCH SIZES WITH MISC. REVISIONS FROM 5-21-15 REDLINES
12-08-15	ADDED 4 REVISED NEW ARTS 4 CRAIL ELEVATIONS AND PARTIAL PLANS
03-16-16	2016 REVIEW AND UPDATE
03-25-16	ADDED SIDE CONSERVATORY PLANS TO THE SET.
03-29-16	CHANGE TUB IN THE CARIBBEAN BATH TO "I"
05-16-16	FEED REVISION COMMENTS - RC
06-05-16	ADDED "ALT." ELEVATION AT OPT. OWNER'S SUITE EXTENSION - RC
10-21-16	ADDED OPT. ATTIC LOFT - RC
11-21-16	ADDED ALT. SECOND FLOOR ELEVATIONS - RC
12-07-16	REVISE WINDOW AT OPT. WALK-OUT - RC
02-11-17	ADDED ECC COMPLIANCE NOTES FOR BALTIMORE COUNTY - RC
02-12-17	ADDED OPT. SIDE IN-LAW SUITE AND OPT. EXTENDED KITCHEN - RC
03-13-18	ADDED ELEVATION 94 - RC
06-13-18	CRAFTSMAN ELEVATIONS 4 OPTIONS COORDINATION
07-04-18	ADDED OPT. DELUXE KITCHEN DETAILS, ADDED OPT. CARIBBEAN BATH AND OPT. CALIFORNIA BATH DETAILS w/ ALT. SECOND FLOOR
03-04-19	LIEN REVIEW 4 MISC. CLIENT COMMENTS
07-16-19	LIEN REVIEW 4 MISC. CLIENT COMMENTS
09-06-19	2018 CODE UPDATE

**Architecture Collaborative, Inc.**  
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"KINGSPORT"

CA033260

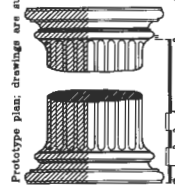


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ELEVATION #1  
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CARUSO HOMES  
KINGSPORT  
title

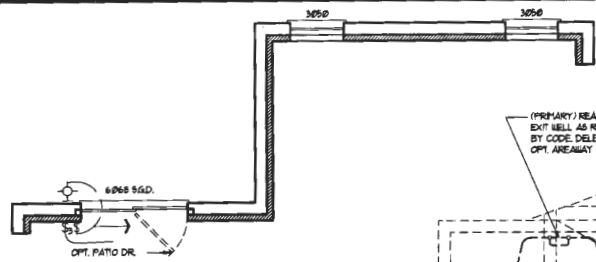
REVISIONS	GENERAL REDLINE REVISIONS - AP
03-14-14	GENERAL REDLINE REVISIONS - AP
03-18-15	LEAN PLAN REVIEW COMMENTS
03-03-16	ADD GRILL SPACE
3-01-16	REV. WINDOWS AT OPT. WALK-OUT - RC

SHEET #  
**3.1**

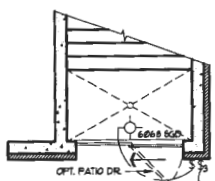


**Professional Certification**  
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional architect under the laws of the State of Maryland.  
license number: 5821  
expiration date: 04-03-2020

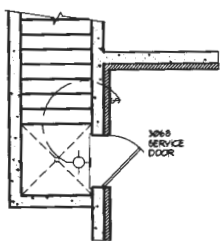




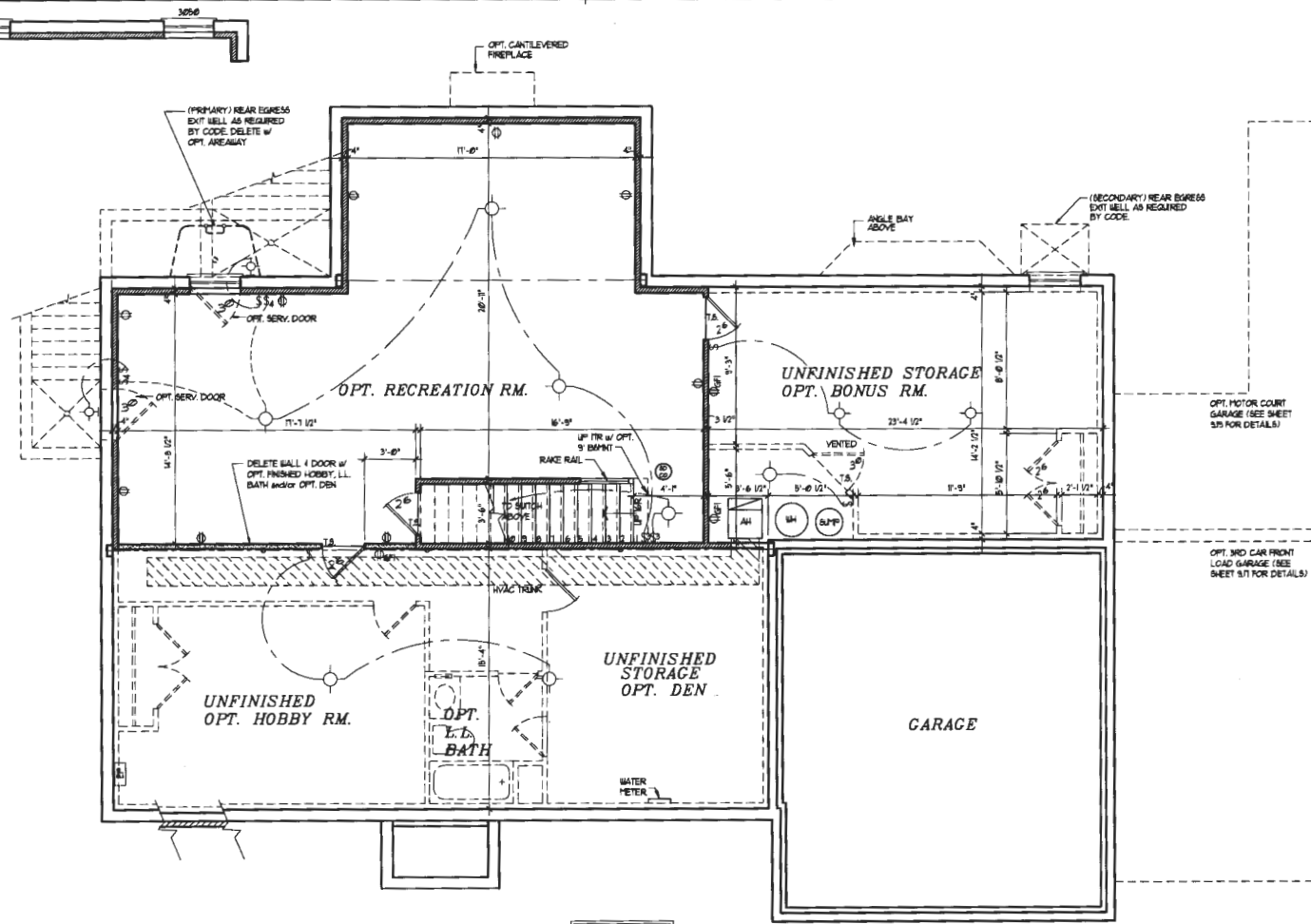
**PARTIAL PLAN**  
OPT. WALKOUT



**OPT. 7' WIDE AREAWAY**  
PARTIAL PLAN

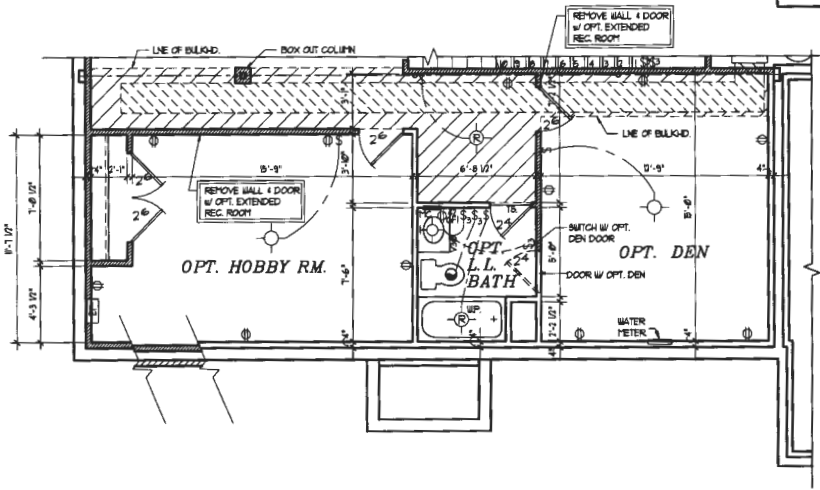


**OPT. SIDE AREAWAY**  
PARTIAL PLAN



**GENERAL NOTES:**

- FLOOR ASSEMBLIES LOCATED DIRECTLY OVER A SPACE THAT IS NOT PROTECTED BY AN AUTOMATIC FIRE SPRINKLER SYSTEM SHALL BE:
  - CONSTRUCTED OF NOMINAL 2x10" OR GREATER DIMENSIONAL LUMBER
  - PROVIDED WITH 1/2" GYPSUM WALLBOARD MEMBRANE 5/8" WOOD STRUCTURAL PANEL MEMBRANE OR EQUIVALENT ON THE UNDERSIDE OF THE FLOOR BEARING MEMBERS (AS AN ALTERNATIVE, JOIST MAY BE PROTECTED WITH AN APPROVED FIRE-PROTECTIVE COATING).
- SLEEPING ROOMS IN BASEMENTS THAT ARE NOT PROTECTED BY AN AUTOMATIC FIRE SPRINKLER SYSTEM SHALL ALSO HAVE AN EMERGENCY ESCAPE AND RESCUE OPENING THAT LEADS TO A PUBLIC WAY.
- SLEEPING ROOMS IN BASEMENTS THAT ARE NOT PROTECTED BY FIRE SPRINKLER SYSTEM ARE NOT REQUIRED TO HAVE EMERGENCY ESCAPE AND RESCUE OPENING. THE ESCAPE WINDOW AND WELL MAY BE OFFERED AS "OPTIONAL".



**OPT. FINISHED LOWER LEVEL PLAN**  
SCALE: 1/4" = 1'-0"

**PARTIAL PLAN w/ OPT. HOBBY, L.L. BATH & DEN**  
SCALE (17x11): 1/8" = 1'-0"  
SCALE (8 1/2x11): 1/4" = 1'-0"

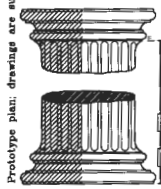
**Professional Certification**  
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License number: 8822  
expiration date: 04-03-2020

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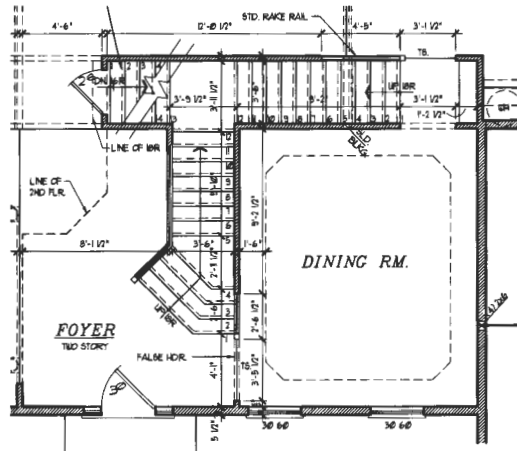
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Title: CARUSO HOMES KINCSPORT

revisions	REVISE PORCH SIZE
07-22-15	ADD WINDOWS AT WALK-OUT - RC
12-01-16	

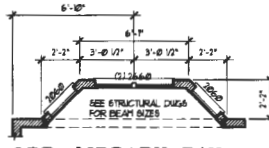
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**4.2**



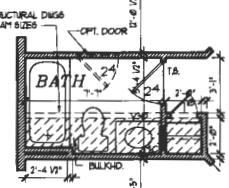
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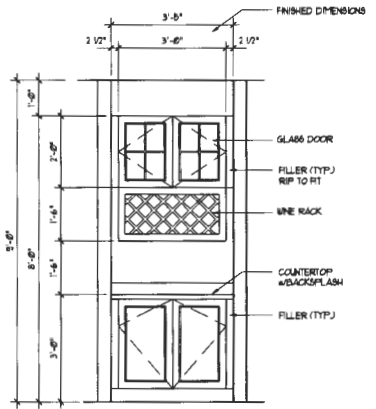
STAIR W/ OPT. 10' CL'G.  
SCALE: 1/4" = 1'-0"



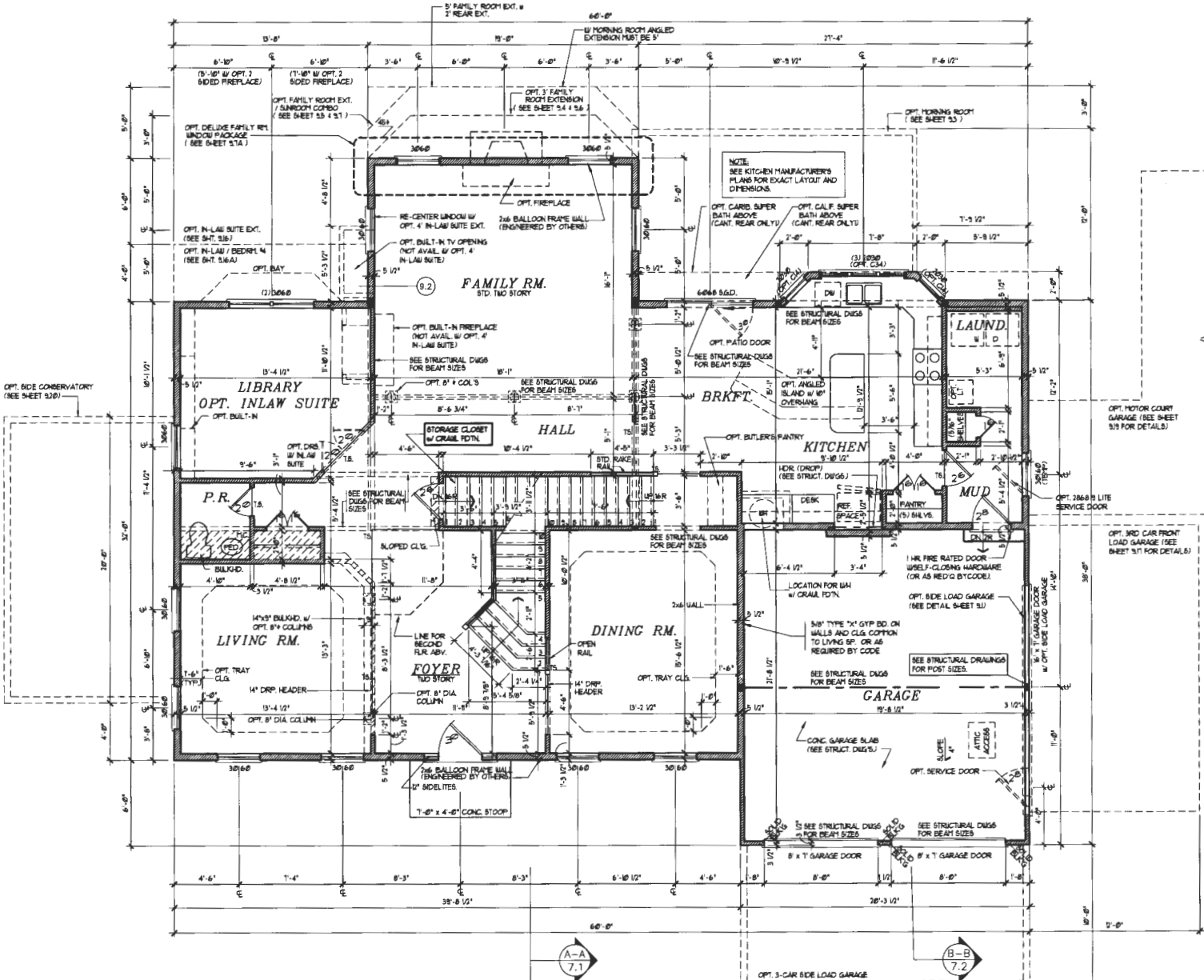
OPT. LIBRARY BAY



PARTIAL PLAN  
OPT. FULL BATH



ELEVATION  
OPT. BUTLER'S PANTRY  
SCALE: 1/2" = 1'-0"



FIRST FLOOR PLAN  
SCALE: 1/8" - 1/4" = 1'-0"

Professional Certification  
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional architect, under the laws of the State of Maryland.  
Name: [Redacted]  
Expiration Date: 04-03-2020

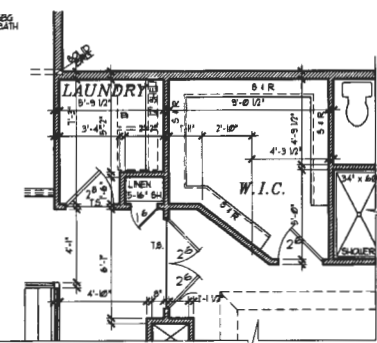
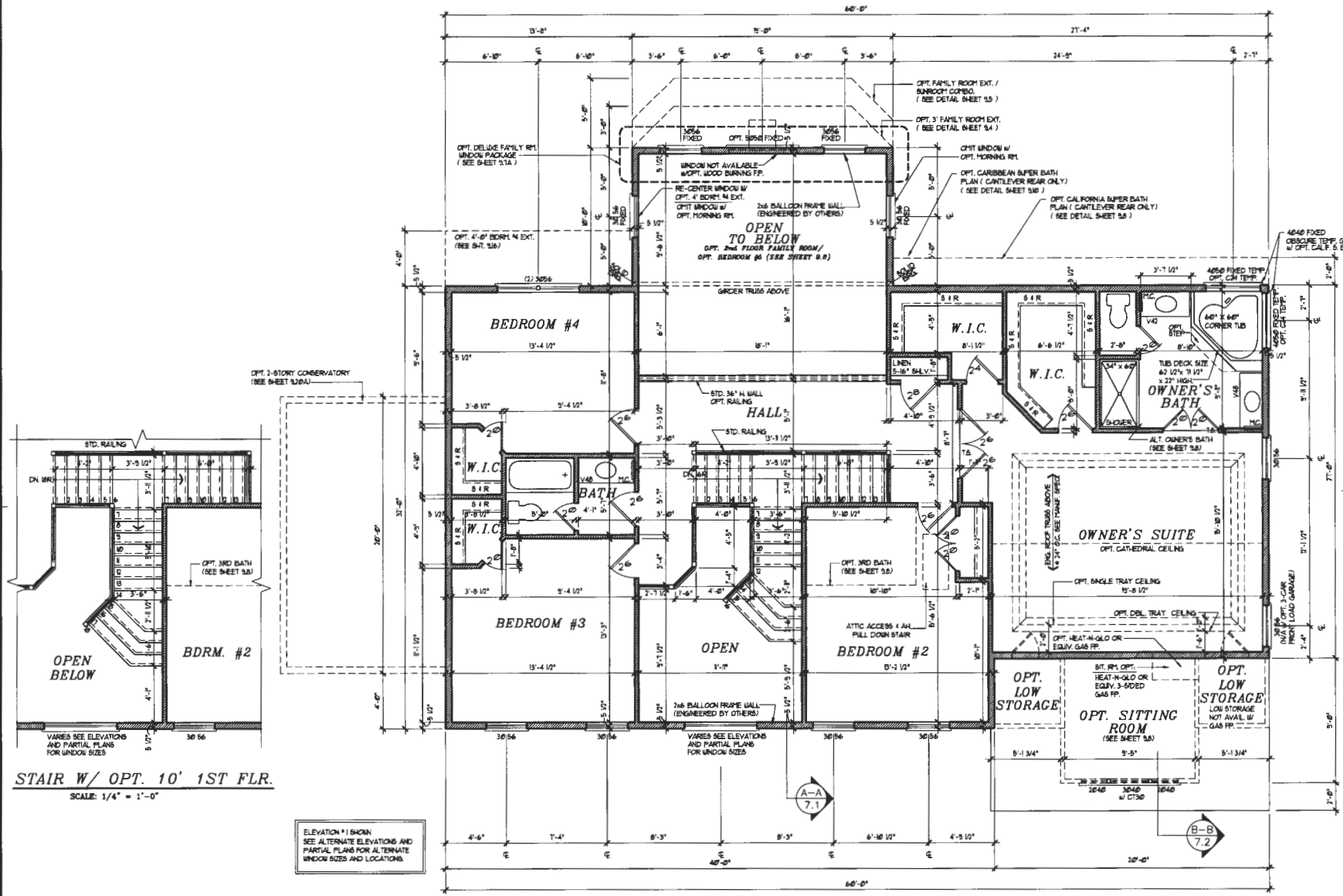
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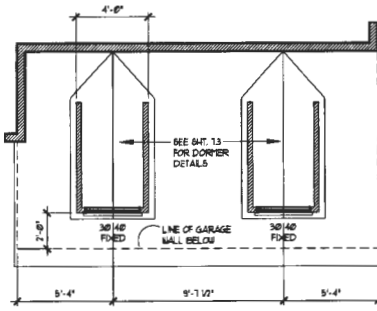
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DATE 06-16-19  
FILE# CARP100 (Rev.)  
scale 1/8" - 1/4"  
CARUSO HOMES  
KINGSPOINT  
Title

Revisions	GENERAL REDLINE REVISIONS - AP
09-24-14	GENERAL REVIEW COMMENTS
03-18-15	TRADE REVIEW COMMENTS
07-22-15	REVISE PORCH SIZE, 246 # DINING

SHEET #  
5.1

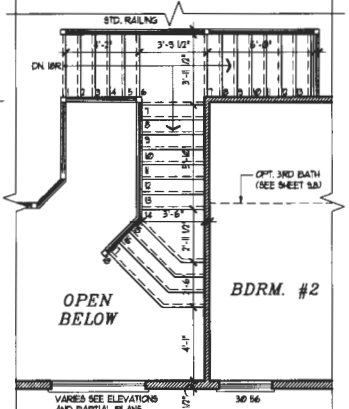


**OPT. LAUNDRY ROOM**  
SCALE: 1/4" = 1'-0"



**OPT. DORMER LOCATION PLAN**  
SCALE: 1/4" = 1'-0"

**SECOND FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**STAIR W/ OPT. 10' 1ST FLR.**  
SCALE: 1/4" = 1'-0"

ELEVATION #1 SHOWN  
SEE ALTERNATE ELEVATIONS AND  
PARTIAL PLANS FOR ALTERNATE  
WINDOW SIZES AND LOCATIONS.

**Professional Certification**  
I hereby certify that these documents  
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that I am a duly licensed  
professional architect under the laws  
of the State of Maryland.  
license number: **ME2**  
expiration date: **04-03-2020**

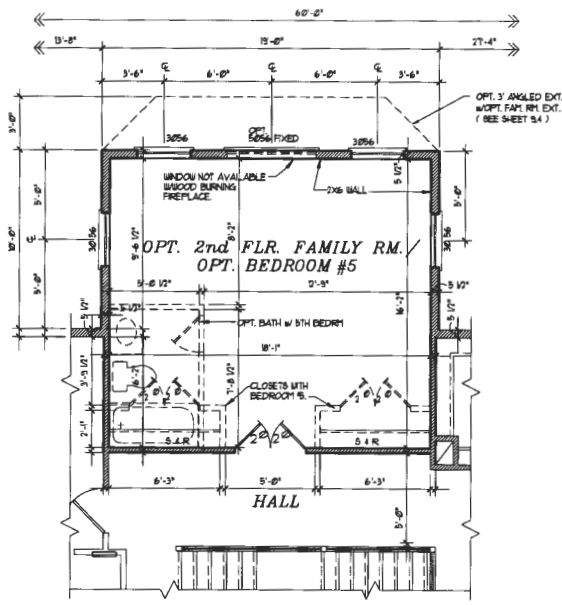
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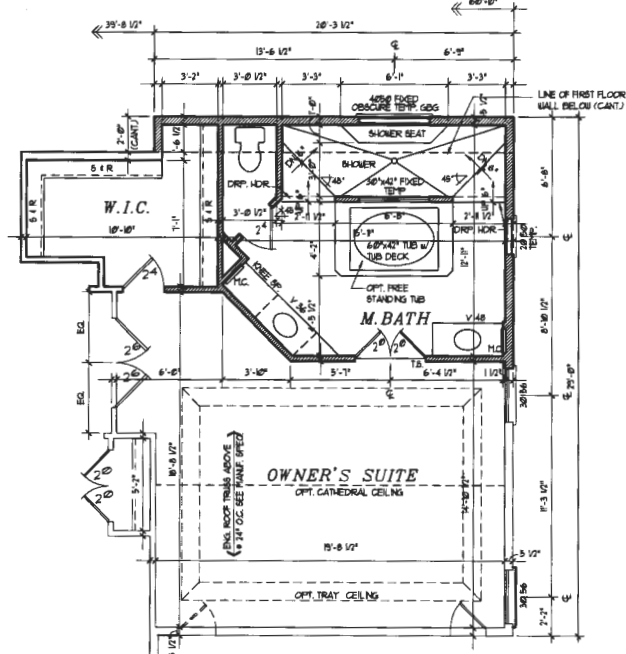
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**CARUSO HOMES**  
 KINGSPOINT  
 LULU

Revisions  
 09-24-14 GENERAL RECLINE REV/SIONG - AP

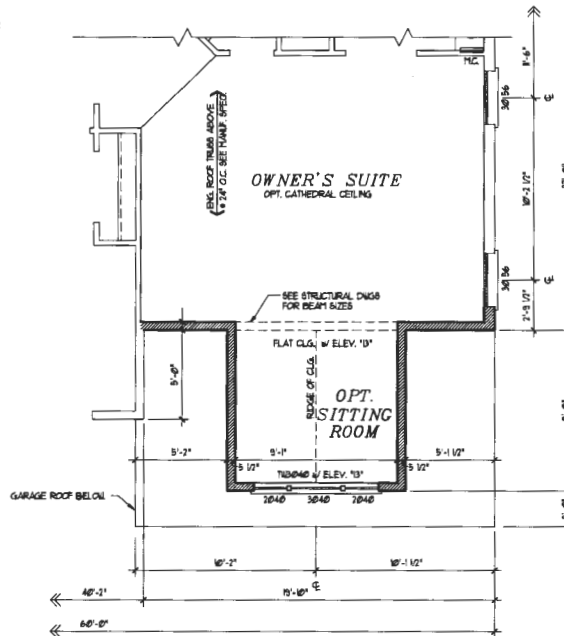
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**6.1**



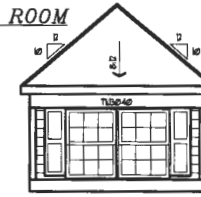
**OPT. BEDROOM #5**  
PARTIAL PLAN



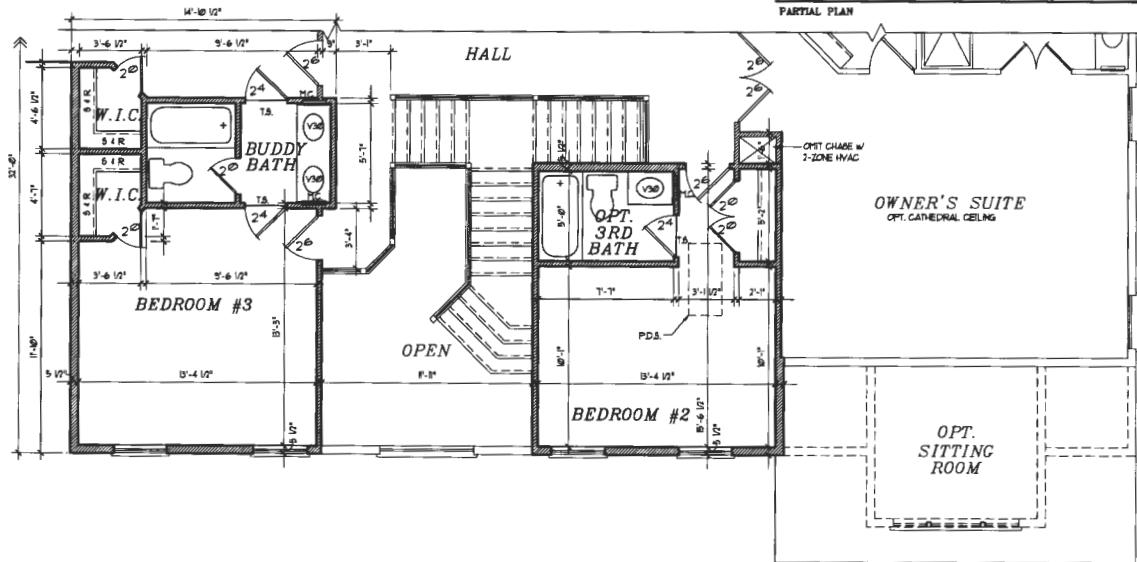
**OPT. CALIFORNIA SUPER BATH**  
PARTIAL PLAN



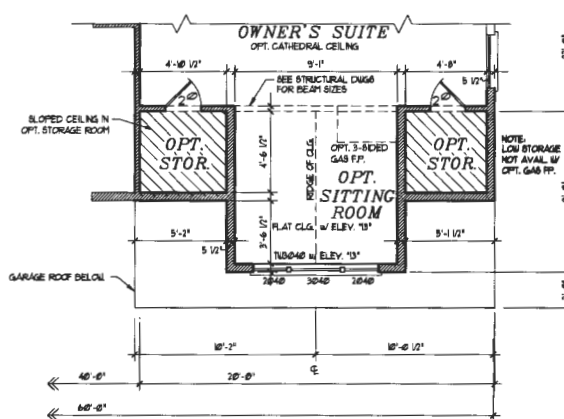
**OPT. SITTING ROOM**  
PARTIAL PLAN



**OPT. SITTING ROOM w/ ELEV. (13)**



**OPT. 3rd BATH PLAN W/BUDDY BATH**  
PARTIAL PLAN  
(SHOWN W/ OPT. STAIR W/ 10' CL.C. @ 1ST FLR.)



**OPT. SITTING ROOM W/STORAGE**  
PARTIAL PLAN

**STANDARD SECOND FLOOR PLAN OPTIONS**

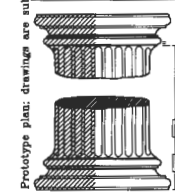
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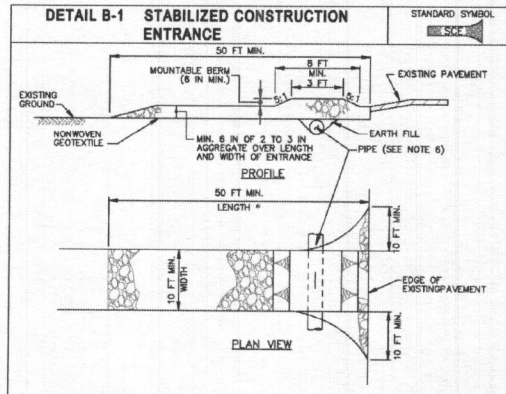
**Professional Certification**  
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License number: 5421  
expiration date: 04-02-2023

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content	STANDARD SECOND FLOOR PLAN OPTIONS
revision	09-24-14 GENERAL REDLINE REVISION - AP
scale	1/8" = 1/4" = 1'-0" TITLE CADPP210 (drawn: date)
title	CARUSO HOMES KINGSPORT

SHEET #	9.8
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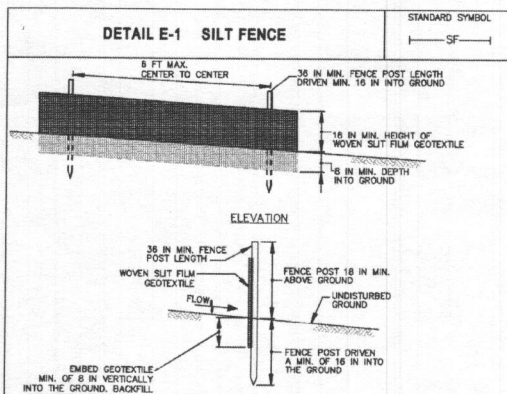




**CONSTRUCTION SPECIFICATIONS**

- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (40 FEET FOR SINGLE RESIDENCE LOTS). USE MINIMUM WIDTH OF 10 FEET. FLARE SIDE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SIDE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SIDE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
- PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPOURED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

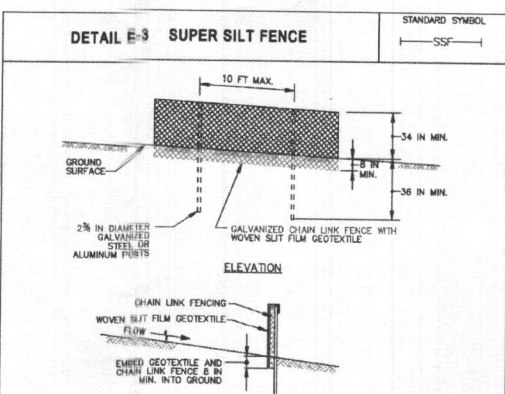
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL  
U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011  
MARYLAND DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION



**CONSTRUCTION SPECIFICATIONS**

- INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.065 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
- FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUD RINGS.
- FASTEN WOVEN SILT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
- WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
- EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE 1/4 INCH FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
- PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BLADES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL  
U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011  
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MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL  
U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011  
MARYLAND DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION

**I. BIORETENTION AREA SOIL SPECIFICATION**

A. PLANTING SOIL:  
THE BIORETENTION AREA SHALL CONSIST OF A PLANTING SOIL HAVING A HOMOGENEOUS MIX OF 50% CONSTRUCTION SAND, 20-30% TOPSOIL WITH AN ALLOWABLE 5% MAXIMUM CLAY CONTENT, AND 20-30% ORGANIC COMPOST OR MULCH TO PROVIDE A SOIL MEDIUM WITH HIGH HYDROLOGIC CAPACITY.  
THE PLANTING SOIL SHALL BE FREE OF PLANTS OR PLANT PARTS OF BERMUDA GRASS, QUAKE GRASS, JOHNSON GRASS, MUGWORT, NUTSEDGE, POISON IVY, CANDIAN THISTLE OR OTHER AS SPECIFIED.  
IT SHALL NOT CONTAIN TOXIC SUBSTANCES HARMFUL TO PLANT GROWTH.  
THE PLANTING SOIL SHALL BE TESTED AND MEET THE FOLLOWING CRITERIA:  
PH RANGE: 5.5 - 6.5  
ORGANIC MATTER: 15 - 30%  
THE FOLLOWING TESTING FREQUENCIES SHALL APPLY TO THE ABOVE SOILS:  
PH ORGANIC MATTER: 1 TEST PER 90 CUBIC YARDS, BUT NOT MORE THAN 1 TEST PER BIORETENTION AREA.  
ONE GRAIN SIZE ANALYSIS SHALL BE PERFORMED PER 90 CUBIC YARDS OF PLANTING SOIL, BUT NO LESS THAN 1 TEST PER BIORETENTION AREA.

B. MULCH LAYER SPECIFICATION:  
A MULCH LAYER SHALL BE PROVIDED ON TOP OF PLANTING SOIL. AN ACCEPTABLE MULCH LAYER SHALL INCLUDE SHREDDED HARDWOOD OR SHREDDED WOOD CHIPS OR OTHER SIMILAR PRODUCTS APPROVED BY THE HOWARD COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES.  
OF THE APPROVED MULCH PRODUCTS, ALL MUST BE WELL AGED, UNIFORM IN COLOR, AND FREE OF FOREIGN MATERIALS, INCLUDING PLANT MATERIAL. WELL AGED MULCH IS DEFINED AS MULCH THAT HAS BEEN STOCK PILED OR STORED FOR AT LEAST TWELVE (12) MONTHS.

C. SAND SPECIFICATION:  
THE SAND SHALL BE FREE OF DELETERIOUS MATERIAL AND ROCKS GREATER THAN ONE INCH IN DIAMETER.

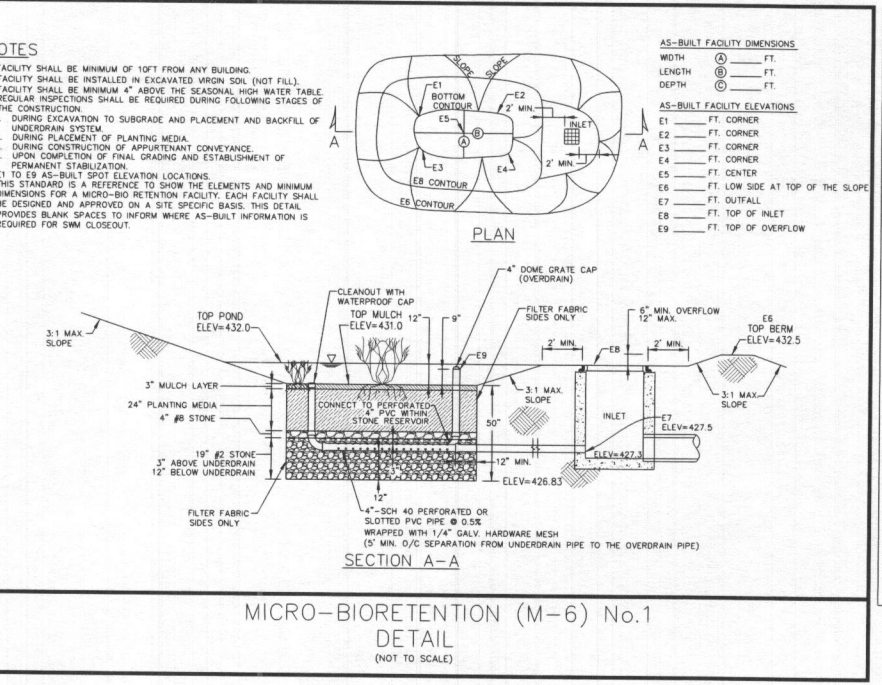
D. COMPACTION:  
SOIL SHALL BE PLACED IN LIFTS LESS THAN 18 INCHES AND LIGHTLY COMPACTED.

**II. BIORETENTION AREA PLANT SPECIFICATION**

GENERAL PLANTING:  
ROOT STOCK OF PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT FROM SOURCE TO THE JOB SITE AND UNTIL PLANTED.  
WALLS OF PLANTING PIT SHALL BE DUG SO THAT THEY ARE VERTICAL.  
THE DIAMETER OF PLANTING PIT MUST BE A MINIMUM OF SIX INCHES LARGER THAN THE DIAMETER OF THE ROOT BALL.  
THE PLANTING PIT SHALL BE DEEP ENOUGH TO ALLOW 1/4 OF THE BALL TO BE ABOVE THE EXISTING GRADE. LOOSE SOIL AT THE BOTTOM OF THE PIT SHALL BE TAMPED BY HAND.  
THE APPROPRIATE AMOUNT OF FERTILIZER IS TO BE PLACED AT THE BOTTOM OF THE PIT.  
THE PLANT SHALL BE REMOVED FROM THE CONTAINER AND PLACED AT THE BOTTOM OF THE PLANTING PIT BY LIFTING AND CARRYING THE PLANT BY ITS BALL. NEVER LIFT THE PLANT BY THE BRANCHES OR TRUNK.  
SET THE PLANT STRAIGHT AND IN THE CENTER OF THE PIT SO THE CENTER OF THE BALL IS APPROXIMATELY 1/4 ABOVE THE EXISTING GRADE.  
BACKFILL PLANTING PIT WITH EXISTING SOIL.  
MAKE SURE PLANT REMAINS STRAIGHT DURING BACKFILLING.

PROCEDURE:  
NEVER COVER THE TOP OF THE BALL WITH SOIL MOUND SOIL AROUND THE EXPOSED SIDE OF THE BALL.  
MAKE SURE MULCH DOES NOT CONTACT TREE'S TRUNK.  
TREE SHALL BE BRACED USING 2" X 2" WHITE OAK STAKES.  
STAKES SHALL BE PLACED PARALLEL TO WALKWAYS AND BUILDINGS. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE.  
BALL THE TREE IS BRACED TO THE STAKES UTILIZING HOSE AND WIRES. FERTILIZER.  
TREE AND SHRUB FERTILIZER SHALL BE A 21 gm. TIGHTLY COMPRESSED, LONG LASTING, SLOW RELEASE (2-YEAR) FERTILIZER TABLET WITH MINIMUM GUARANTEED ANALYSIS OF 20-10-5:  
TOTAL NITROGEN (N) - 20%  
WATER SOLUBLE ORGANIC NITROGEN - 7%  
WATER IN SOLUBLE ORGANIC NITROGEN - 13%  
AVAILABLE PHOSPHORIC ACID (P2 O5) - 10%  
SOLUBLE POTASH (K2O) - 5%  
FOR CONTAINERIZED TREES AND SHRUBS, PLACE THE SPECIFIED FERTILIZER TABLET(S) IN THE BOTTOM OF THE PLANTING PIT ACCORDING TO THE FOLLOWING RATES:  
1 GAL. CONTAINER 1 ea. 21 gm. TABLETS.  
3 GAL. CONTAINER 2 ea. 21 gm. TABLETS.  
5 GAL. CONTAINER 3 ea. 21 gm. TABLETS.  
7 GAL. CONTAINER 5 ea. 21 gm. TABLETS.

PLANTING NON-GRASS GROUND COVER:  
THE GROUND COVER PLANTING HOLES SHALL BE DUG THROUGH THE MULCH WITH ONE OF THE FOLLOWINGS: HAND TRUCK SHOVEL, BULB PLANTER, OR HOE (THIS DOES NOT APPLY TO GRASS OR LEGUMES).  
BEFORE PLANTING BIODEGRADABLE POTS, THEY SHALL BE SPLIT, AND NON BIODEGRADABLE POTS SHALL BE REMOVED. ROOT SYSTEMS OF THE POTTED PLANTS SHALL BE SPLIT OR CRUMBLED.  
THE GROUND COVER SHALL BE PLANTED SO THAT ROOTS ARE SURROUNDED BY THE SOIL BELOW THE MULCH. POTTED PLANTS SHALL BE SET SO THAT THE TOP OF THE POT IS EVEN WITH THE EXISTING GRADE. THE ROOTS OF BARE-ROOT PLANTS SHALL BE COVERED TO THE CROWN.  
THE MULCH AND PLANTED GROUND COVER BED SHOULD BE COVERED WITH A PRE-EMERGENT HERBICIDE.  
THE ENTIRE GROUND COVER BED SHALL BE THOROUGHLY WATERED.



**Table B.4.1 Materials Specifications for Micro-Bioretenion, Rain Gardens & Landscape Infiltration-**

Material	Specification	Size	Notes
Plantings	see Appendix A, Table A.4	n/a	plantings are site-specific
Planting soil (2' to 4' 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		aged 6 months, minimum: no pine or wood chips
Pea gravel diaphragm	pea gravel; ASTM-D-448	NO. 8 OR NO. 9 (1 1/8" TO 3/8")	
Curtain drain	ornamental stone; washed cobbles	stone: 2" to 5"	
Gravel (underdrains and infiltration berms)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" to 3/4")	
Underdrain piping	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/2-inch galvanized hardware cloth
Poured in place concrete (if required)	MSHA Mix No. 3; f <sub>c</sub> = 3500 psi @ 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required; 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved State or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 350 R.89; vertical loading [H-10 or H-20]; allowable horizontal loading (based on soil pressures); and analysis of potential cracking.
Sand	AASHTO M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Gneiss (AASHTO) #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.

**NOTES**

- FACILITY SHALL BE MINIMUM 10 FT FROM ANY BUILDING.
- FACILITY SHALL BE MINIMUM 4" ABOVE THE SEASONAL HIGH WATER TABLE.
- REGULAR INSPECTIONS SHALL BE REQUIRED DURING FOLLOWING STAGES OF THE CONSTRUCTION:
  - DURING EXCAVATION TO SUBGRADE AND PLACEMENT AND BACKFILL OF UNDERDRAIN SYSTEM.
  - DURING PLACEMENT OF PLANTING MEDIA.
  - DURING CONSTRUCTION OF APPURTENANT CONVEYANCE.
  - UPON COMPLETION OF FINAL GRADING AND ESTABLISHMENT OF PERMANENT STABILIZATION.
- E1 TO E9 REFERENCE TO SPOT ELEVATION LOCATIONS.
- THIS STANDARD IS A REFERENCE TO SHOW THE ELEMENTS AND MINIMUM DIMENSIONS FOR A MICRO-BIO RETENTION FACILITY. EACH FACILITY SHALL BE DESIGNED AND APPROVED ON A SITE SPECIFIC BASIS. THIS DETAIL PROVIDES BLANK SPACES TO INFORM WHERE AS-BUILT INFORMATION IS REQUIRED FOR SHM CLOSOUT.

**AS-BUILT FACILITY DIMENSIONS**  
WIDTH @ FT.  
LENGTH @ FT.  
DEPTH @ FT.

**AS-BUILT FACILITY ELEVATIONS**  
E1 - FT. CORNER  
E2 - FT. CORNER  
E3 - FT. CORNER  
E4 - FT. CORNER  
E5 - FT. CENTER  
E6 - FT. LOW SIDE AT TOP OF THE SLOPE  
E7 - FT. OUTFALL  
E8 - FT. TOP OF INLET  
E9 - FT. TOP OF OVERFLOW

**STORMWATER MANAGEMENT PRACTICES**

LOT No.	ADDRESS	GREEN ROOF (Y/N)	PERMEABLE PAVEMENT (Y/N)	REINFORCED TURF (Y/N)	DISCONNECTION OF ROOFTOP RUNOFF (NUMBER)	DISCONNECTION OF ROOFTOP RUNOFF (Y/N)	SHEETFLOW TO CONSERVATION AREA (NUMBER)	RAINWATER HARVESTING (NUMBER)	SUBMERGE GRAVEL WETLAND (NUMBER)	LANDSCAPE INFILTRATION (NUMBER)	INFILTRATION BERMS (NUMBER)	DRY WELLS (NUMBER)	MICRO-BIORETENTION (NUMBER)	RAIN GARDENS (NUMBER)	SWALES (NUMBER)	ENHANCED FILTER (NUMBER)
2	4375 OLD ROXBURY RD.	N	N	N	N	N	N	0	0	0	0	0	1	0	0	0

**PLANTING SCHEDULE - MICRO-BIORETENTION & RAINGARDEN**

SHRUB	BOTANICAL NAME	COMMON NAME	CONDITION	SIZE	REMARKS
SHRUB	ILEX GABRA	INKBERRY	CONTAINER	12"	PLANT 3' APART
SHRUB	HAMAMELIS VIRGINIANA	WITCH HAZEL	CONTAINER	12"-24"	PLANT 3' APART
PERENNIAL	IRIS VERSICOLOR	BLUE FLAG	SEEDLINGS		PLANT 15" APART, TRIANGULAR GRID
PERENNIAL	GERANIUM MACULATUM	CRANESBILL	SEEDLINGS		PLANT 15" APART, TRIANGULAR GRID
PERENNIAL	SOLIDAGO SPHACELATA	GOLDEN FLEECE	SEEDLINGS		PLANT 15" APART, TRIANGULAR GRID

**PLANTING NOTES**

- PLANT A MIX OF SHRUBS AND PERENNIALS.
- REFERENCE STANDARDS. COMPLY WITH THOSE LISTED BELOW.
  - NOMENCLATURE FOR PLANT MATERIALS SHALL BE IN ACCORDANCE WITH HORTUS III, BY THE STAFF OF L.H. BAILEY HORTICULTURE.
  - AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1, LATEST EDITION, AMERICAN NURSERY & LANDSCAPE ASSOCIATION (ANLA).
  - LANDSCAPE SPECIFICATION GUIDELINES, LATEST EDITION, LANDSCAPE CONTRACTORS ASSOCIATION.
- PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECAST WEATHER CONDITIONS ARE SUITABLE FOR WORK. PERFORM ACTUAL PLANTING WHEN GROUND IS WORKABLE, I.E., MOIST, NOT WET OR FROZEN.

**PLAN PREPARED BY:**  
NJR & ASSOCIATES  
Land Surveying and Planning  
2770 STATE ROUTE 32  
WEST FRIENDSHIP, MD 21794  
TEL (240) 508-3200

**PROFESSIONAL CERTIFICATION:**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE # 11049, EXPIRATION DATE: 2/10/2021.  
August 26, 2019  
DATE

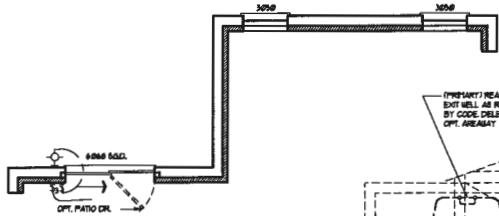
**DEVELOPER:**  
CARLOS HOMES  
2120 BALDWIN AVENUE, Ste 200  
CROFTON, MD 21114  
(301) 261-0277

**OWNER:**  
SD PROPERTIES, LLC  
12235 HEATCUFF CORT  
ELICOTT CITY, MD 21042  
(301) 261-0277

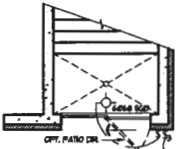
**SIMPLIFIED ENVIRONMENTAL CONCEPT PLAN**

**SITE DETAILS AND NOTES**  
ELEANOR HELEN JOHNSON PROPERTY  
LOT 2  
PLAT NUMBER 20858  
TAX MAP 21, GRID 19, PARCEL 82  
4375 OLD ROXBURY ROAD, BROOKVILLE, MD 20729  
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

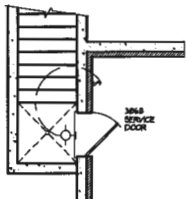
SCALE: 1" = 20'  
JOB NO.: 3551  
DATE: AUG. 15, 2019  
SHEET: 2 OF 2



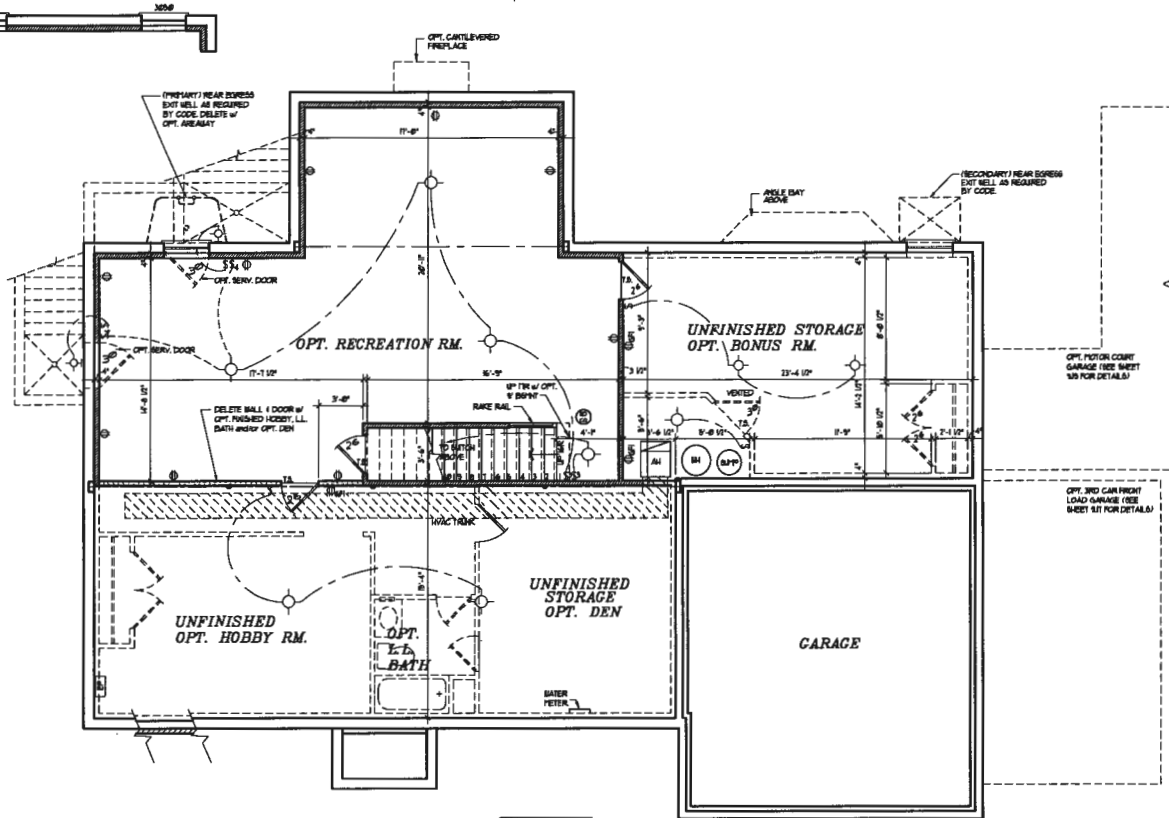
**PARTIAL PLAN**  
OPT. WALKOUT



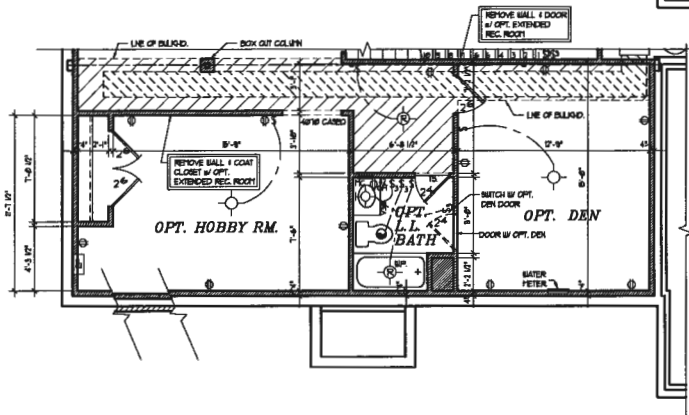
**OPT. 7' WIDE AREAWAY**  
PARTIAL PLAN



**OPT. SIDE AREAWAY**  
PARTIAL PLAN



**OPT. FINISHED LOWER LEVEL PLAN**  
SCALE: 1/4" = 1'-0"



**PARTIAL PLAN w/  
OPT. HOBBY, L.L. BATH & DEN**  
SCALE (19X11) 1/8" = 1'-0"  
SCALE (36X24) 1/4" = 1'-0"

- GENERAL NOTES:**
- FLOOR ASSEMBLIES LOCATED DIRECTLY OVER A SPACE THAT IS NOT PROTECTED BY AN AUTOMATIC FIRE SPRINKLER SYSTEM SHALL BE:
    - CONSTRUCTED OF NOTIONAL 1 1/2" W/ OR GREATER DIMENSIONAL LAYER
    - PROTECTED WITH 1/2" GYPSUM HALLOWED REFRIGERATE, 1/2" SOCC STRUCTURAL PANEL REFRIGERATE OR EQUIVALENT ON THE UNDERSIDE OF THE FLOOR FINISH FIBERGLASS FAB AN ALTERNATIVE JOIST MAY BE PROTECTED WITH AN APPROVED FIRE-PROTECTIVE COATING.
  - BASEMENTS SHALL HAVE NOT LESS THAN ONE EMERGENCY ESCAPE AND RESCUE OPENING THAT SHALL OPEN DIRECTLY INTO A PUBLIC WAY OR YARD THAT LEADS TO A PUBLIC WAY.
  - SLEEPING ROOMS IN BASEMENTS THAT ARE NOT PROTECTED BY AN AUTOMATIC FIRE SPRINKLER SYSTEM SHALL ALSO HAVE AN EMERGENCY ESCAPE AND RESCUE OPENING THAT LEADS TO A PUBLIC WAY.
  - SLEEPING ROOMS IN BASEMENTS THAT ARE PROTECTED WITH FIRE SPRINKLER SYSTEMS ARE NOT REQUIRED TO HAVE EMERGENCY ESCAPE AND RESCUE OPENING. A FIRE EXITS WINDOW AND HALL SHALL BE OPENED AS OPTIONAL.

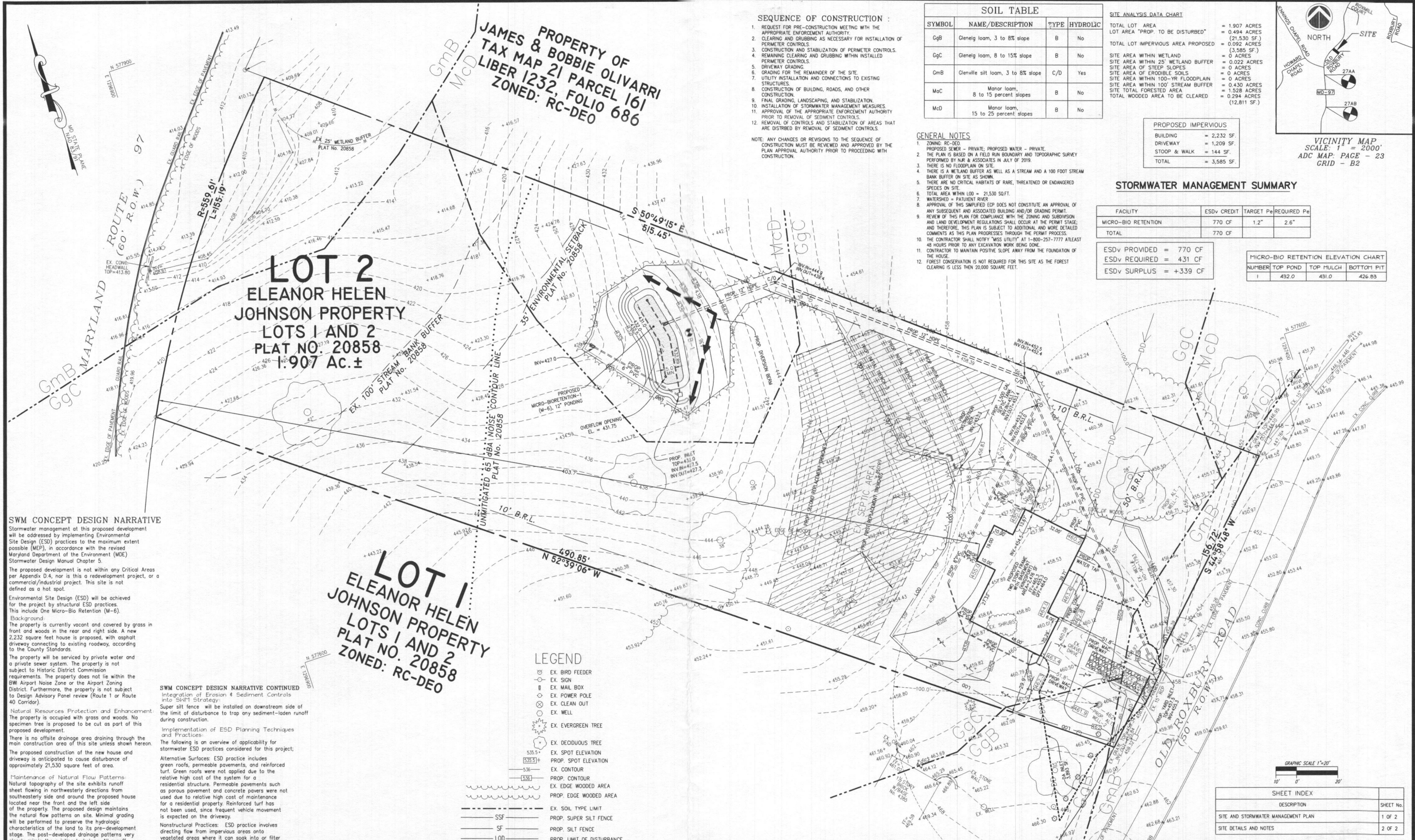
Architecture Collaborative, Inc.  
8320 Main Street, Suite 2, Ellicott City, MD 21043  
www.archcol.com  
Tel: (410) 465-7500 Fax: (410) 465-0903

PROJECT: OPT. FINISHED LOWER LEVEL PLAN  
DATE: 05-15-07  
SCALE: 1/8" = 1'-0" FILE# 20060400 Rev. 01  
CLIENT: CARUSO HOMES  
TITLE: KINGSFORD

REVISION	DATE	BY	DESCRIPTION
07-27-05			REMOVE PORCH SIZE
07-06-05			ADD WINDOWS AT WALK-OUT - REC
02-08-05			ELIMINATE DOOR TO OPT. HOBBY RM.

SHEET #  
**4.2**

Professional Certification  
I hereby certify that these documents were prepared or supervised by me, and that I am a duly Licensed Professional Architect under the laws of the State of Maryland.  
License number: 682  
expiration date: 04-02-2009



**SWM CONCEPT DESIGN NARRATIVE**  
 Stormwater management at this proposed development will be addressed by implementing Environmental Site Design (ESD) practices to the maximum extent possible (MEP), in accordance with the revised Maryland Department of the Environment (MDE) Stormwater Design Manual Chapter 5.

The proposed development is not within any Critical Areas per Appendix D.4, nor is this a redevelopment project, or a commercial/industrial project. This site is not defined as a hot spot.

Environmental Site Design (ESD) will be achieved for the project by structural ESD practices. This includes One Micro-Bio Retention (M-6).

**Background:**  
 The property is currently vacant and covered by grass in front and woods in the rear and right side. A new 2,232 square foot house is proposed, with asphalt driveway connecting to existing roadway, according to the County Standards.

The property will be serviced by private water and a private sewer system. The property is not subject to Historic District Commission requirements. The property does not lie within the BW Airport Noise Zone or the Airport Zoning District. Furthermore, the property is not subject to Design Advisory Panel review (Route 1 or Route 40 Corridor).

**Natural Resources Protection and Enhancement:**  
 The property is occupied with grass and woods. No specimen tree is proposed to be cut as part of this proposed development.

There is no offsite drainage area draining through the main construction area of this site unless shown hereon.

The proposed construction of the new house and driveway is anticipated to cause disturbance of approximately 21,530 square feet of area.

**Maintenance of Natural Flow Patterns:**  
 Natural topography of the site exhibits runoff sheet flowing in westerly directions from southeasterly side and around the proposed house located near the front and the left side of the property. The proposed design maintains the natural flow patterns on site. Minimal grading will be performed to preserve the hydrologic characteristics of the land to its pre-development stage. The post-developed drainage patterns very closely mimic the existing hydrology. All runoff from proposed impervious areas and from treatment facilities flow directly onto grassed areas, before being conveyed to the ultimate discharge points.

**Reduction of Impervious Areas:**  
 The house footprint has been minimized by proposing a 2-story house with basement rather than a rancher-style design. The proposed driveway width will be kept to the 12' and an access to the garage will be at the end of the driveway. The limit of disturbance is kept to a minimum possible for this site.

**SWM CONCEPT DESIGN NARRATIVE CONTINUED**  
 Integration of Erosion & Sediment Controls into SWMT Strategy:  
 Super silt fence will be installed on downstream side of the limit of disturbance to trap any sediment-laden runoff during construction.

Implementation of ESD Planning Techniques and Practices:  
 The following is an overview of applicability for stormwater ESD practices considered for this project:

Alternative Surfaces: ESD practice includes green roofs, permeable pavements, and reinforced turf. Green roofs were not applied due to the relative high cost of the system for a residential structure. Permeable pavements such as porous pavement and concrete pavers were not used due to relative high cost of maintenance for a residential property. Reinforced turf has not been used, since frequent vehicle movement is expected on the driveway.

Nonstructural Practices: ESD practice involves directing flow from impervious areas onto vegetated areas where it can soak into or filter over ground instead of being connected to storm drain system. These measure are not being proposed due to the steep slopes on this site.

Structural Micro-Scale Practices: One Micro-Bio Retention (M-6) will be used to treat runoff from the roof and paved surfaces along with some green area. These items were unable to be disconnected for sufficient length to be eligible as N-1 practices.

Waiver to Environmental Regulations:  
 No Alternative Compliance will be required for construction of a single family on this property.

- LEGEND**
- EX. BIRD FEEDER
  - EX. SIGN
  - EX. MAIL BOX
  - ⊕ EX. POWER POLE
  - ⊖ EX. CLEAN OUT
  - ⊗ EX. WELL
  - ⊙ EX. EVERGREEN TREE
  - ⊕ EX. DECIDUOUS TREE
  - EX. SPOT ELEVATION
  - EX. SPOT ELEVATION
  - EX. CONTOUR
  - PROP. CONTOUR
  - EX. EDGE WOODED AREA
  - PROP. EDGE WOODED AREA
  - EX. SOIL TYPE LIMIT
  - PROP. SUPER SILT FENCE
  - PROP. SILT FENCE
  - PROP. LIMIT OF DISTURBANCE
  - PROP. DRAINAGE DIVIDE
  - PROP. DRAINAGE DIVERSION BERM
  - SOIL BORING
  - PROP. WELL
  - EX. PRIVATE SEPTIC RESERVE AREA

- SEQUENCE OF CONSTRUCTION :**
1. REQUEST FOR PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE ENFORCEMENT AUTHORITY.
  2. CLEARING AND GRUBBING AS NECESSARY FOR INSTALLATION OF PERIMETER CONTROLS.
  3. CONSTRUCTION AND STABILIZATION OF PERIMETER CONTROLS.
  4. REMAINING CLEARING AND GRUBBING WITHIN INSTALLED PERIMETER CONTROLS.
  5. DRIVEWAY GRADING.
  6. GRADING FOR THE REMAINDER OF THE SITE.
  7. UTILITY INSTALLATION AND CONNECTIONS TO EXISTING STRUCTURES.
  8. CONSTRUCTION OF BUILDING, ROADS, AND OTHER CONSTRUCTION.
  9. FINAL GRADING, LANDSCAPING, AND STABILIZATION.
  10. INSTALLATION OF STORMWATER MANAGEMENT MEASURES.
  11. APPROVAL OF THE APPROPRIATE ENFORCEMENT AUTHORITY PRIOR TO REMOVAL OF SEDIMENT CONTROLS.
  12. REMOVAL OF CONTROLS AND STABILIZATION OF AREAS THAT ARE DISTURBED BY REMOVAL OF SEDIMENT CONTROLS.
- NOTE: ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.

**SOIL TABLE**

SYMBOL	NAME/DESCRIPTION	TYPE	HYDROLIC
GgB	Geneve loam, 3 to 8% slope	B	No
GgC	Geneve loam, 8 to 15% slope	B	No
GmB	Glenville silt loam, 3 to 8% slope	C/D	Yes
MaC	Manor loam, 8 to 15 percent slopes	B	No
McD	Manor loam, 15 to 25 percent slopes	B	No

**SITE ANALYSIS DATA CHART**

TOTAL LOT AREA	= 1.907 ACRES
LOT AREA "PROP. TO BE DISTURBED"	= 0.494 ACRES (21,530 SF)
TOTAL LOT IMPERVIOUS AREA PROPOSED	= 0.092 ACRES (3,985 SF)
SITE AREA WITHIN WETLAND	= 0 ACRES
SITE AREA WITHIN 25' WETLAND BUFFER	= 0.022 ACRES
SITE AREA OF STEEP SLOPES	= 0 ACRES
SITE AREA OF ERODIBLE SOILS	= 0 ACRES
SITE AREA WITHIN 100-YR FLOODPLAIN	= 0.430 ACRES
SITE AREA WITHIN 100' STREAM BUFFER	= 1.528 ACRES
TOTAL FORESTED AREA	= 0.294 ACRES (12,811 SF)

**PROPOSED IMPERVIOUS**

BUILDING	= 2,232 SF
DRIVEWAY	= 1,209 SF
STOOP & WALK	= 144 SF
TOTAL	= 3,585 SF

- GENERAL NOTES**
1. ZONING: RC-DEO
  2. PROPOSED SEWER - PRIVATE, PROPOSED WATER - PRIVATE.
  3. THE PLAN IS BASED ON A FIELD RUN BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY NJR & ASSOCIATES IN JULY OF 2019.
  4. THERE IS NO FLOODPLAIN ON SITE.
  5. THERE IS A WETLAND BUFFER AS WELL AS A STREAM AND A 100 FOOT STREAM BANK BUFFER ON SITE AS SHOWN.
  6. THERE ARE NO CRITICAL HABITATS OF RARE, THREATENED OR ENDANGERED SPECIES ON SITE.
  7. TOTAL AREA WITHIN LOD = 21,530 SQ.FT.
  8. WATERSHED = PATUXENT RIVER
  9. APPROVAL OF THIS SIMPLIFIED ESD DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED BUILDING AND/OR GRADING PERMIT. REVIEW OF THIS PLAN FOR COMPLIANCE WITH THE ZONING AND SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE PERMIT STAGE, AND THEREFORE, THIS PLAN IS SUBJECT TO ADDITIONAL AND MORE DETAILED COMMENTS AS THIS PLAN PROGRESSES THROUGH THE PERMIT PROCESS.
  10. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
  11. CONTRACTOR TO MAINTAIN POSITIVE SLOPE AWAY FROM THE FOUNDATION OF THE HOUSE.
  12. FOREST CONSERVATION IS NOT REQUIRED FOR THIS SITE AS THE FOREST CLEARING IS LESS THAN 20,000 SQUARE FEET.

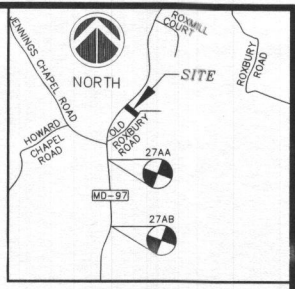
**STORMWATER MANAGEMENT SUMMARY**

FACILITY	ESDV CREDIT	TARGET Pe	REQUIRED Pe
MICRO-BIO RETENTION	770 CF	1.2"	2.6"
TOTAL	770 CF		

ESDV PROVIDED = 770 CF  
 ESDV REQUIRED = 431 CF  
 ESDV SURPLUS = +339 CF

**MICRO-BIO RETENTION ELEVATION CHART**

NUMBER	TOP POND	TOP MULCH	BOTTOM PIT
1	432.0	431.0	426.83



**PLAN PREPARED BY:** NJR & ASSOCIATES  
 Land Surveying and Planning  
 2770 STATE ROUTE 32  
 WEST FRIENDSHIP, MD 21794  
 TEL: (240) 508-3200

**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 11049, EXPIRATION DATE: 2/10/2021.  
 August 26, 2019  
 DATE

**DEVELOPER:** CARUSO HOMES  
 2120 BALDWIN AVENUE, Ste 200  
 CROFTON, MD 21144  
 (301) 261-0277

**OWNER:** SD PROPERTIES, LLC  
 12235 HEATCLIFF CORT  
 ELLICOTT CITY, MD 21042  
 (301) 261-0277

**SIMPLIFIED ENVIRONMENTAL CONCEPT PLAN**  
 SITE AND STORMWATER MANAGEMENT PLAN  
 ELEANOR HELEN JOHNSON PROPERTY  
 LOT 2  
 PLAT NUMBER 20858  
 TAX MAP 21, GRID 19, PARCEL 82  
 4375 OLD ROXBURY ROAD, BROOKVILLE, MD 20729  
 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SCALE: 1" = 20'  
 JOB NO.: 3551  
 DATE: AUG. 15, 2019  
 SHEET: 1 OF 2