

LAYOUT _____ INSP 4 _____
INSP 2 _____ INSP 5 _____
INSP 3 _____ INSP 6 _____

ISSUE DATE: 4/18/06

APPROVAL DATE: 7/14/06

PERMIT
INDEXED
TAX ID #05-436443

P 524415

A 513618-V

**ON-SITE SEWAGE DISPOSAL SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH**

HATFIELD'S Equipment IS PERMITTED TO INSTALL ALTER

ADDRESS: P.O. BOX 519, A.C. PHONE NUMBER: 301-854-6172

SUBDIVISION: Buckskin Ridge LOT NUMBER: 21

ADDRESS: 4277 Buckskin Wood Drive PROPERTY OWNER: Columbia Builders, Inc.

SEPTIC TANK CAPACITY (GALLONS): 1500 OUTLET BAFFLE FILTER REQUIRED

PUMP CHAMBER CAPACITY (GALLONS): n/a COMPARTMENTED TANK REQUIRED

NUMBER OF BEDROOMS: 5

SQUARE FEET PER BEDROOM: 180

LINEAR FEET OF TRENCH REQUIRED: 186 HOUSE SERVED BY PUBLIC WATER

TRENCHES:	Trench to be 3.0 feet wide. Inlet 3.5 feet below original grade. Bottom maximum depth 5.5 feet below original grade. Effective area begins at 3.5 feet below original grade. 2.0 feet of stone below distribution pipe.
LOCATION:	Place the distribution box in the highest elevation of the approved SDA.
NOTES:	<u>Basement Gravity Service not proposed</u>

PLANS APPROVED: Sara Fegel Reviewed by: KN DATE: 2/15/06

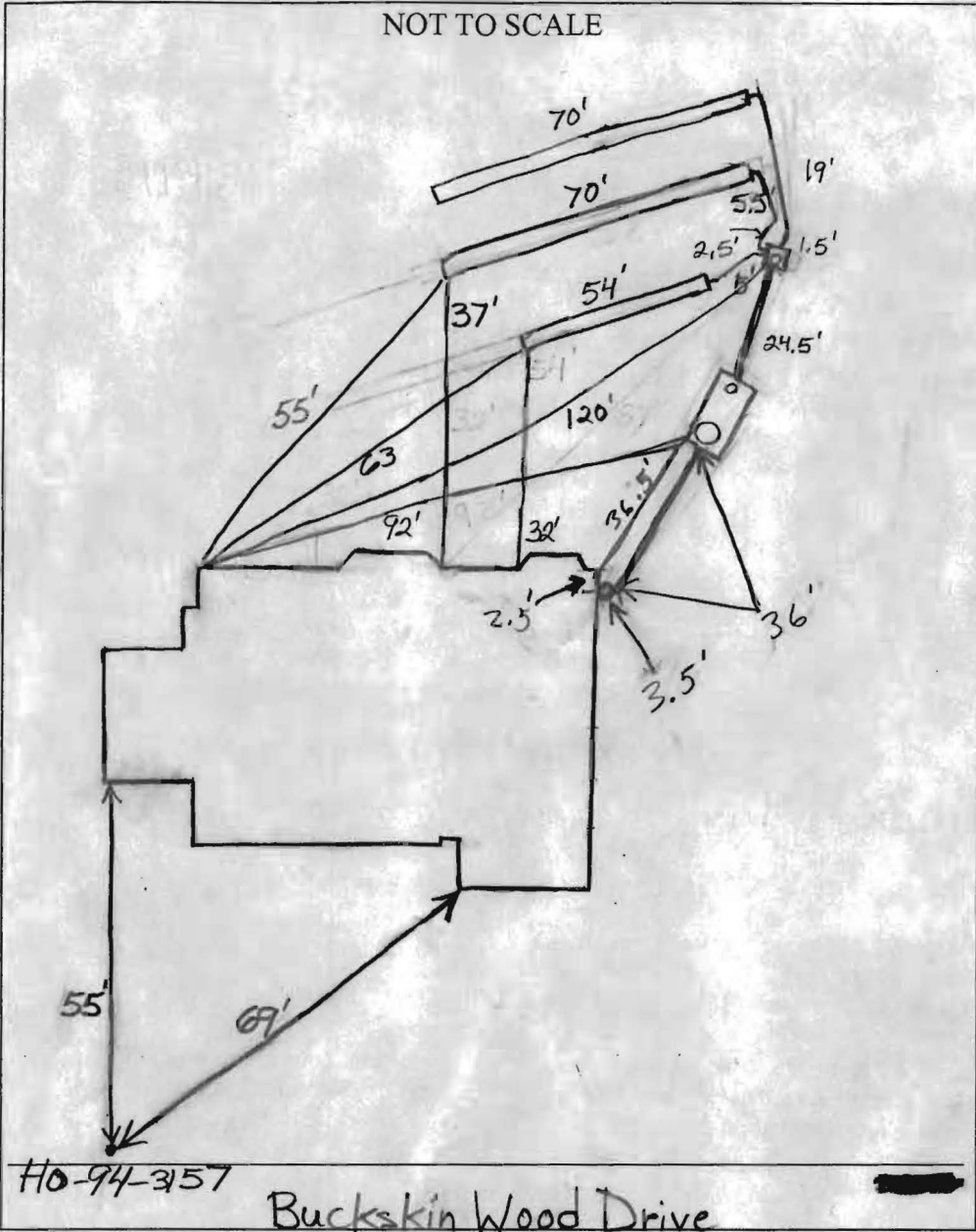
NOTES: PERMIT VOID AFTER 2 YEARS
CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
WATERTIGHT SEPTIC TANKS REQUIRED
ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL UNLESS SPECIFICALLY AUTHORIZED
MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED
CONTRACTOR RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE REGULATIONS, GUIDELINES AND THE TERMS OF THIS PERMIT

**NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS
RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM
PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT
CALL 410-313-1771 FOR INSPECTION OF SEPTIC SYSTEM**

12/26/01- B07004964

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NOT TO SCALE



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	3.5'	5.5'
NUMBER OF TRENCHES		3
TOTAL LENGTH		199'
ABSORPTION AREA		597 + Sidewall
DISTRIBUTION BOX LEVEL		Yes
DISTRIBUTION BOX BAFFLE		Yes
DISTRIBUTION BOX PORT		Yes

SEPTIC TANK DATA		
SEPTIC TANK 1 LEVEL <u>Level</u>		
<i>B. by loc</i>	CAPACITY	1500 GAL
	SEAM LOC	Top
<i>2-Comp.</i>	TANK LID DEPTH	2.5'-3'
	BAFFLES	Yes
	BAFFLE FILTER	NA
	MANHOLE LOC	Front
	6" PORT LOC	Rear
	WATERTIGHT TEST	NA
SEPTIC TANK 2 LEVEL <u>N/A</u>		
	CAPACITY	_____ GAL
	SEAM LOC	_____
	TANK LID DEPTH	_____
	BAFFLES	_____
	BAFFLE FILTER	_____
	MANHOLE LOC	_____
	6" PORT LOC	_____
	WATERTIGHT TEST	_____

HO-94-3157
Buckskin Wood Drive

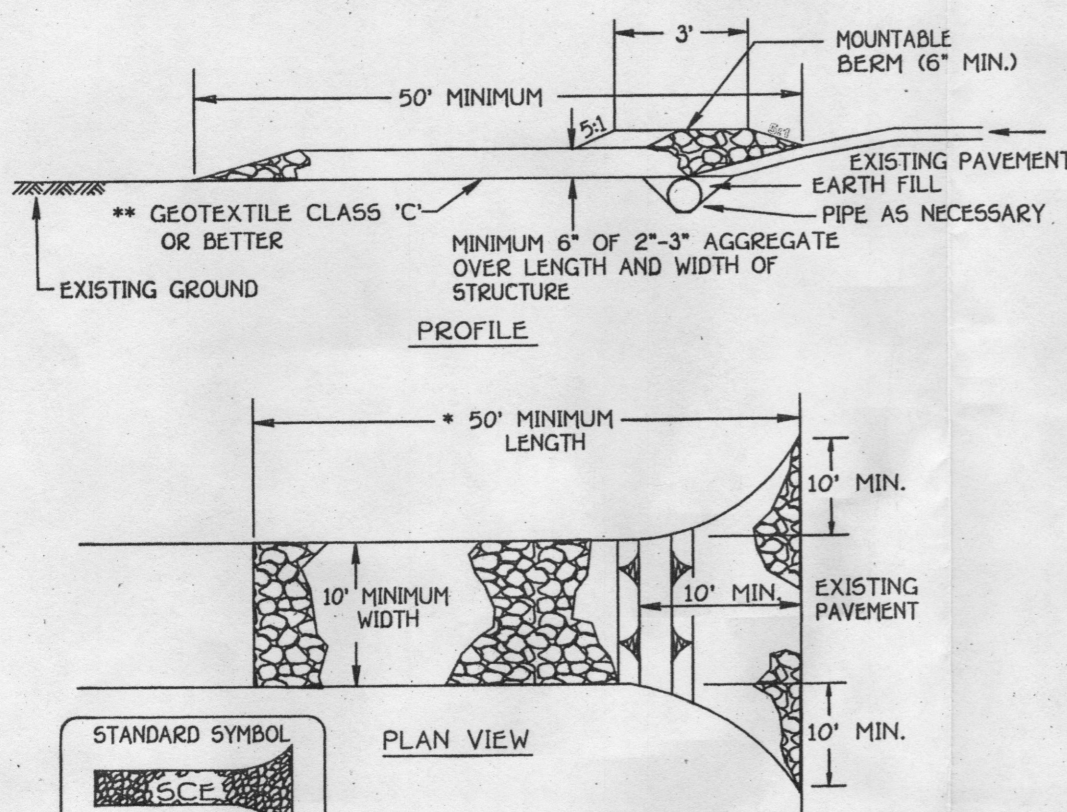
PRE-CONSTRUCTION 7/13/2006 Tank set. Contractor had to move tank closer to house because of quartzite pocket. (BB)

INSTALLATION 7/14/06 System installed. O.K. to backfill. (BB)

FINAL INSPECTOR B. Baker DATE OF APPROVAL 7/14/06

SEDIMENT CONTROL NOTES

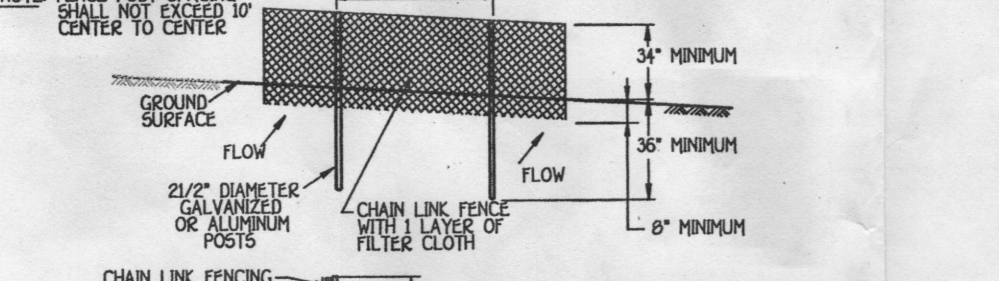
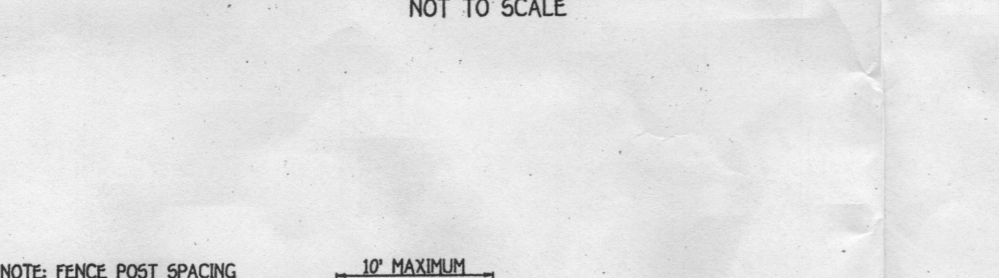
- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSING AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (33-4950).
- ALL VEGETATIVE AND STRUCTURAL PREPARATION ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND SPECIFICATIONS FOR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, Dikes, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1 BY 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS MUST BE FENCED AND MARKED WITH SIGNS POSTED AROUND THEIR PERIMETER BY ACCORDANCE WITH VOL. 1, CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE BY ACCORDANCE WITH MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (33-500 G.S.C. 54), TEMPORARY SEEDING (33-500 G.S.C. 55), TEMPORARY STABILIZATION WITH MULCH (33-500 G.S.C. 56), TEMPORARY STABILIZATION WITH MULCH (33-500 G.S.C. 57), AND TEMPORARY STABILIZATION WITH MULCH (33-500 G.S.C. 58). ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER SEEDING AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMSSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 - TOTAL AREA OF SITE: 0.928 ACRES
 - AREA TO BE GRADED OR PAVED: 0.467 ACRES
 - AREA TO BE VEGETATIVELY STABILIZED: 0.282 ACRES
 - TOTAL CUT: 480 CU.YDS.
 - TOTAL FILL: 102 CU.YDS.
 - OFFSITE WASTE/DORROW AREA LOCATION: N/A
- ANY SEDIMENT CONTROL, PRACTICES WHICH ARE DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING TO ANY OTHER GRADING, DISTURBANCE OR GRADING, OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS OBTAINED.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE FEET LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.



Construction Specification

- Length - minimum of 50' (30' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.
- Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
- Surface Water - All surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 6" slope and a minimum of 6" of stone over the pipe. Pipe shall be sized according to the drainage. When the SCE is located at a high spot and no drainage to connect to a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
- Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

STABILIZED CONSTRUCTION ENTRANCE



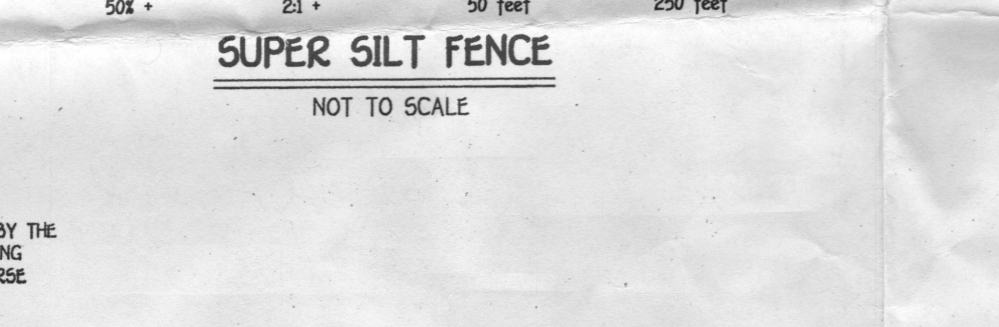
Construction Specifications

- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 6" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt buildup removed when 'bulges' develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened securely to each fence post with wire ties or stakes at top and mid section and shall meet the following requirements for Geotextile Class F:
 - Tensile Strength: 50 lb/in (min) Test: MSMT 509
 - Tensile Modulus: 20 lb/in (min) Test: MSMT 509
 - Flow Rate: 0.3 gal/(ft²·minute) (max) Test: MSMT 322
 - Filtering Efficiency: 75% (min) Test: MSMT 322

Design Criteria

Slope	Slope Steepness	Slope Length (Maximum)	Silt Fence Length (Minimum)
0 - 1%	0 - 1%	Unlimited	Unlimited
1 - 2%	1 - 2%	100 feet	100 feet
2 - 3%	2 - 3%	100 feet	100 feet
3 - 4%	3 - 4%	100 feet	100 feet
4 - 5%	4 - 5%	100 feet	100 feet
5% +	5% +	20 feet	250 feet

SILT FENCE & TREE PROTECTION



Construction Specifications

- Silt fence to be heeled into the soil.
- Wire, snow fence, etc. for tree protection only.
- Boundaries of Retention Area shall be established as part of the forest conservation plan review process.
- Boundaries of Retention Area should be staked and flagged prior to installing device.
- Avoid roof damage when placing anchor posts.
- Device should be properly maintained throughout construction.
- Protection signs are also required, see Figure C-4.
- Locate fence outside the Critical Root Zone.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT. 1 DAY
- INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN. 1 DAY
- CLEAR AND GRUB TO LIMITS OF DISTURBANCE AND MASS GRADE TO FINISH GRADE. 1 DAY
- INSTALL TEMPORARY SEEDING. 1 DAY
- CONSTRUCT BUILDINGS. 2 MONTHS
- FINISH GRADE SITE AND INSTALL PERMANENT SEEDING AND LANDSCAPE. 1 DAY
- REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERMISSION IS GRANTED BY E/S CONTROL INSPECTOR. 2 DAYS

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RESTORED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS
APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (4 LBS./1,000 SQ.FT.)

SEEDING
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH NOVEMBER 15, SEED WITH 1 BUREAU PER ANNUAL RYE (32 LBS./1,000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 15, SEED WITH 3 LBS./ACRE OF WEEPING LOVEGRASS (27 LBS./1,000 SQ.FT.) FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 29, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOIL.

MULCHING
APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS./1,000 SQ.FT.) OF UNLIMITED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1,000 SQ.FT.) OF ENHANCED ASPHALT ON FLAT ACRES OR SLOPES 6 FEET OR HIGHER. USE 340 GALLONS PER ACRE (8.5 GAL./1,000 SQ.FT.) FOR ANCHORING.

REFER TO THE 1986 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

PERMANENT SEEDING NOTES

ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:

SEEDING PREPARATION
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS
APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1,000 SQ.FT.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER (4 LBS./1,000 SQ.FT.) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (4 LBS./1,000 SQ.FT.) AND 500 LBS. PER ACRE (5 LBS./1,000 SQ.FT.) OF 10-20-20 FERTILIZER.

SEEDING
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 100 LBS. PER ACRE (2.3 LBS./1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 10 LBS./ACRE (4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE 500 LBS./1,000 SQ.FT. OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 29, PROTECT SITE BY OPTION (D) - TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR OPTION (E) - USE SOIL OPTION (E) - SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEEDED.

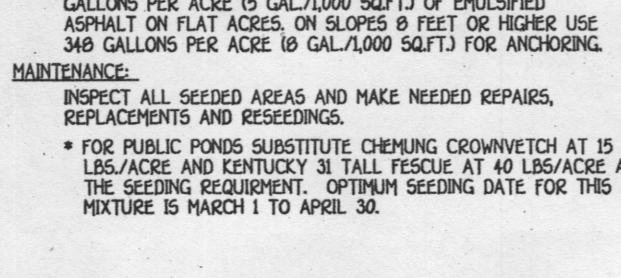
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MAINTENANCE
INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.
* FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNWEED AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS./ACRE AS THE SEEDING REQUIREMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.

GENERAL NOTES

- SUBJECT PROPERTY ZONED: RR-DEO
- TOTAL AREA OF PROPERTY: 40,402 SQ.FT.
- SEPTIC EASEMENT SUBJECT TO HOWARD COUNTY HEALTH DEPARTMENT REVIEW.
- LENGTH OF TRENCH TO BE DETERMINED AT TIME OF SEPTIC PERMIT ISSUANCE.
- CONTRACTOR/BUILDER TO VERIFY ELEVATION IN THE FIELD BEFORE BEGINNING ANY CONSTRUCTION.
- FIELD RUN TOPOGRAPHIC SURVEY DONE BY CLARK, FINEPROCK & SACKETT, INC.
- NO WETLANDS CURRENTLY EXIST ON THE PROPERTY.
- DRIVEWAY CULVERTS SHALL BE CONSTRUCTED AT SITE DEVELOPMENT PLAN STAGE IN ACCORDANCE WITH APPROVED CULVERT SIZE SHOWN ON F-01-19L.
- STORMWATER MANAGEMENT IS PROVIDED UNDER F-01-19L.

SEPTIC SYSTEM PLAN



LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
+362.5	SPOT ELEVATION
-S/TIP-S/TIP	SILT FENCE & TREE PROTECTION
-S/F	SUPER SILT FENCE
---	PROPOSED WALKOUT
---	LIMITS OF DISTURBANCE
○	EXISTING STREET TREES FROM F-01-19L

NOTES

THE EXISTING WELL SHOWN ON THIS PLAN, TAG NO. HO 94-3157 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.

DEVELOPER'S CERTIFICATE

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

Signature: *Jim Meyer* DATE: 11-27-06

ENGINEER'S CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT IS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

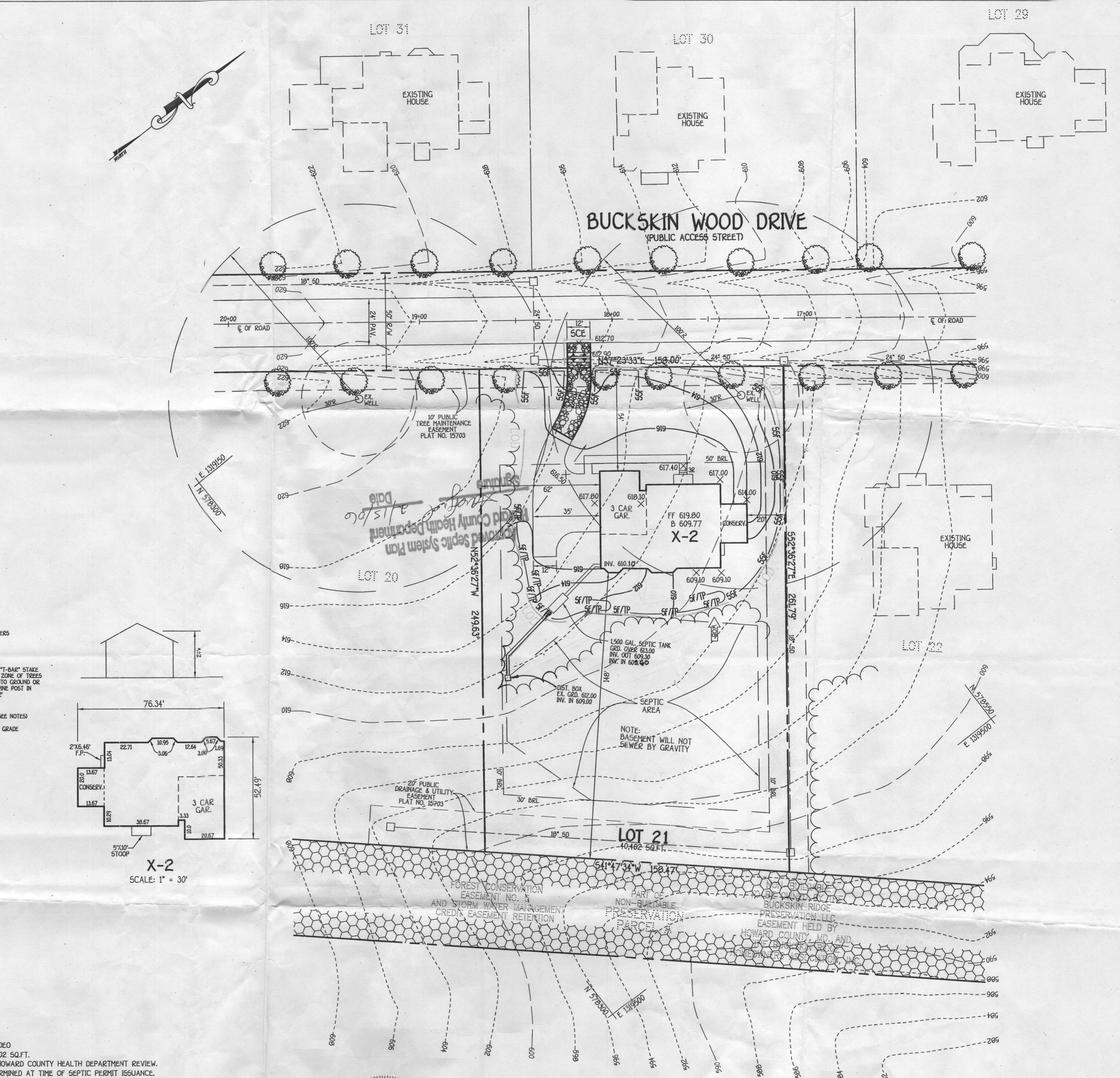
Signature: *Earl D. Collins* DATE: 11-12-06

BUILDER/DEVELOPER

COLUMBIA BUILDERS
P.O. BOX 999
COLUMBIA, MARYLAND 21044
410-730-3940

SITE DEVELOPMENT, SEDIMENT/EROSION CONTROL PLAN, NOTES & DETAILS

LOT 21
ZONED RR-DEO
5TH. ELECTION DISTRICT
SCALE: 1" = 30'



DEVELOPER'S CERTIFICATE

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

Signature: *Jim Meyer* DATE: 11-27-06

ENGINEER'S CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT IS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Signature: *Earl D. Collins* DATE: 11-12-06

BUILDER/DEVELOPER

COLUMBIA BUILDERS
P.O. BOX 999
COLUMBIA, MARYLAND 21044
410-730-3940

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