

STANDARD SEDIMENT CONTROL NOTES

- . A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
- 2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most recent 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- . Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes steeper than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol 1, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- 5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec.51), sod (Sec. 54), temporary seeding (Sec. 50), and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of arasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- . Site Analysis: Total Area of Site __Acres Area Disturbed Area to be roofed or paved _Acres Area to be vegetatively stabilized _Acres ____Cu.Yds. Total Cut __Cu.Yds. Total Fill Cut&Fill to be balanced on site Offsite waste/borrow area location:
- 3. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- 10.0n 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 with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- 1. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be re-disturbed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Apply 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq.ft.)

Seeding: For the periods March 1—April 30, and August 15—October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sq.ft.). For the period May 1-August 14, seed with 3 lbs/acre of weeping lovegrass (.07 lbs/1000 sq.ft.). For the period November 16-February 28, protect site by applying 2 tons/acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq.ft.) of unrotted weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slope 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

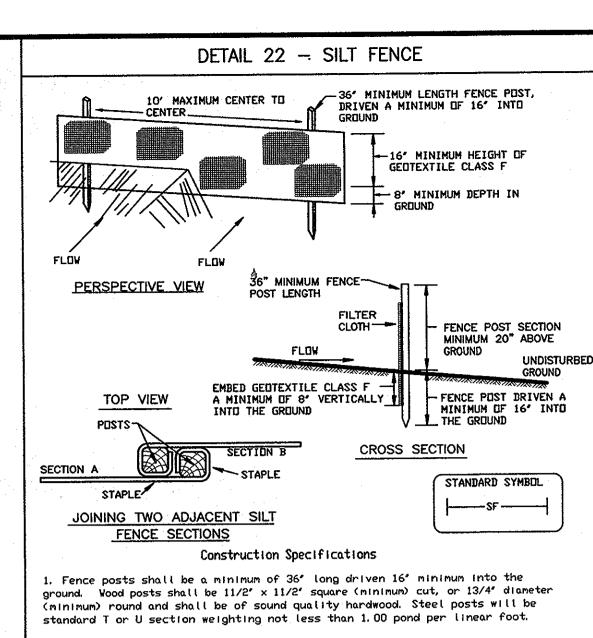
Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

- 1. Preferred Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq.ft.) and 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq.ft.) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs/acre 30-0-0 ureaform fertilizer (9 2.lbs/1000 sa.ft.)
- Acceptable Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq.ft.) and 1000 lbs/acre 10-10-10 fertilizer (23 lbs/1000 sq.ft.) before seeding. Harrow or disk into upper three inches of soil.

reseedings. Seeding: For the periods March 1—April 30, and August 1—October 15, seed with 60 lbs/acre (1.4 lbs/1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1-July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs/acre (.05 lbs/1000 sq.ft.) of weeping lovegrass. During the period of October 16-February 28, protect site by: Option 1- Two tones per acre of well anchored straw mulch and seed as soon as possible in the spring. Option 2- Use sod. Option 3- Seed with 60 lbs/acre Kentucky 30 Tall Fescue and mulch with 2 tons/acre well anchored straw.

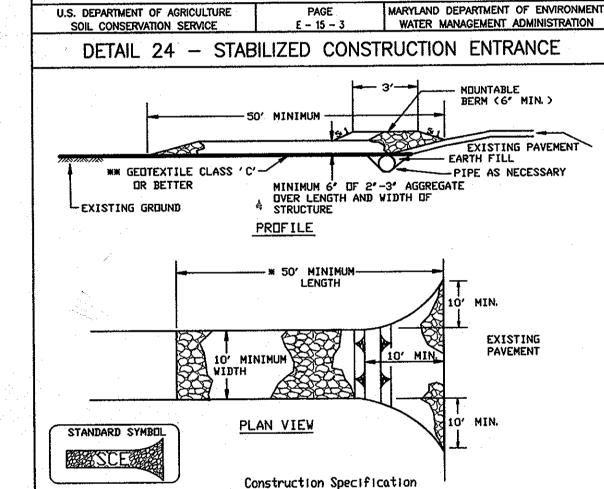
Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slope 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

Maintenance: Inspect all seeding areas and make repairs, replacements and reseedings.



- 2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class Fi
 - Test: MSMT 509 50 lbs/in (min.) Test: MSMT 509 20 lbs/in (min.) Tensile Modulus 0.3 gal ft2/ minute (max.) Testi MSMT 322 Test: MSMT 322 Filtering Efficiency
- 3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- 4. Silt Fence shall be inspected after each rainfall event and maintained when

bulges occur or when sediment accumulation reached 50% of the fabric height.



- . Length minimum of 50' (*30' for single residence lot).
- ? Width 18' minimum, should be flared at the existing road to provide a turning
- 3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family

4. 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

5. 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 5:1 slopes and a minimum of 6' of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey 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.

6. 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.

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION SOIL CONSERVATION SERVICE

SILT FENCE

Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length unlimited 1,000 feet
Flatter than 50:1	unlimited	
50:1 to 10:1	125 feet	
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3 1 to 2 1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE WATER MANAGEMENT ADMINISTRATION

STANDARD DRY WELL SCHEMATIC

12" SAND FILTER LAYER ASTM C33 CLEAN, FINE WASHEO AGGREGATE SAND. ROTOTILL 1' BELOW TRENCH BOTTOM

NOTES

1. MANUFACTURED SAND IS NOT ACCEPTABLE IN DRYWELLS.

2. ALL PIPES SHOULD BE SCH 40 PVC 4" MIN X 1/2" STEEL FOOT -10' FROM BUILDING FOUNDATION PLATE - 100' FROM SEPTIC FIELD - 100' FROM WELL LOCATION AND SHOULD BE LOCATED TO MINIMIZE ANY BASEMENT SEAPAGE.

SEAPAGE.

1. MINIMUM NUMBER OF PERFORATIONS SHALL BE 5 TIMES PIPE AREA.

5. TRENCH MAY NOT BE INSTALLED IN FILL.

Howard County, Maryland

Department of Public Works

Per Sysom

30' EXISTING PRIVATE R.O.W.

307.17

TYPICAL DOWNSPOUT

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

L. 282, F. 404

L. 2599, F. 427

10' UTILITY EASEMENT

PLAT No. 10923 L. 2979, F. 278

306.60

/ CLEANOUT. SEE DETAILS THIS SHEE

PLAN VIEW

SEE PLAN FOR ALL DIMENSIONS

--- PVC WYE TO SPLASH BLOCK

LAYOUT OPTION 1

308.50

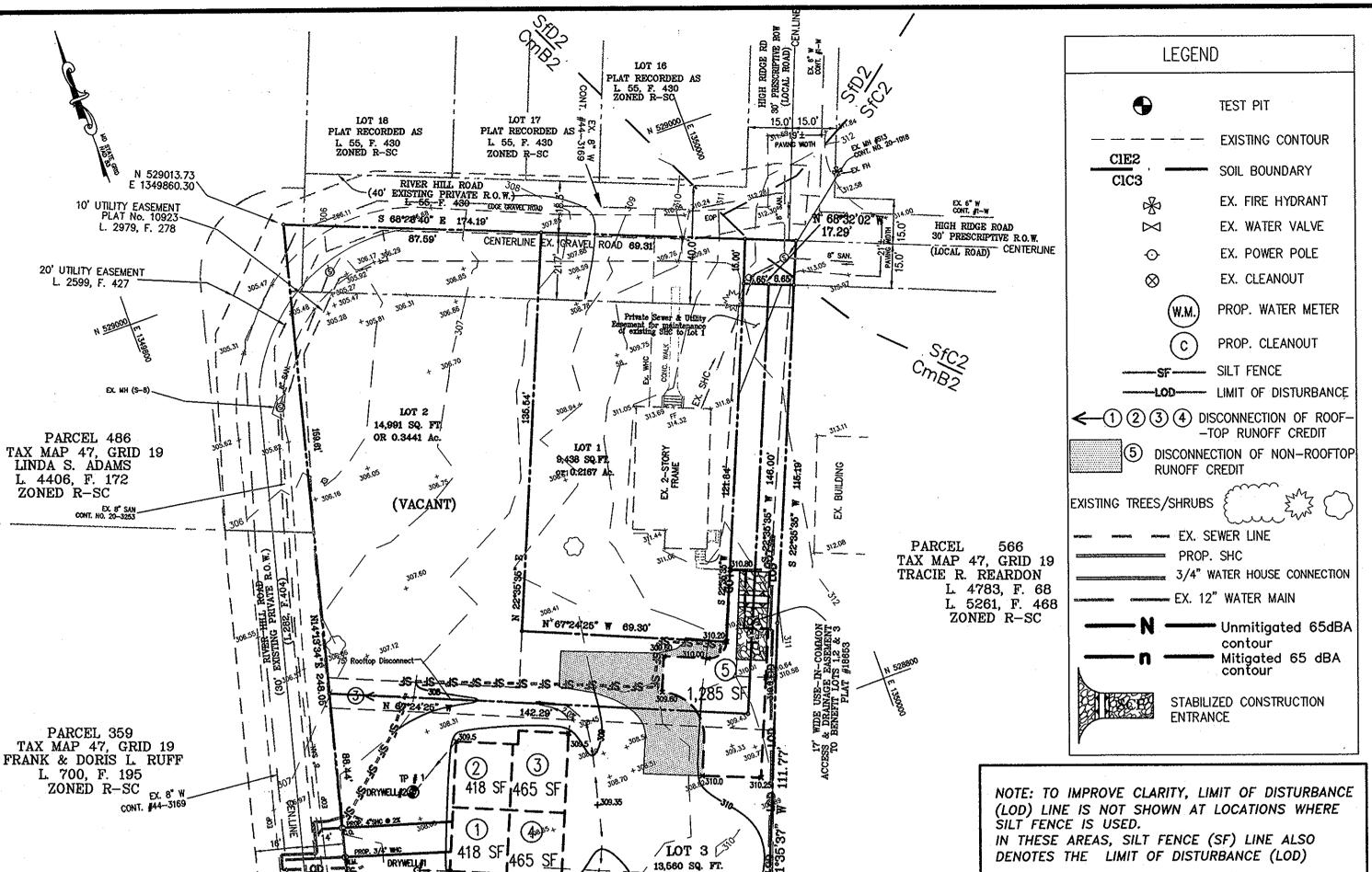
— TYPICAL DOWNSPOU

Roof Drain

Drywell

Private

20' UTILITY EASEMENT



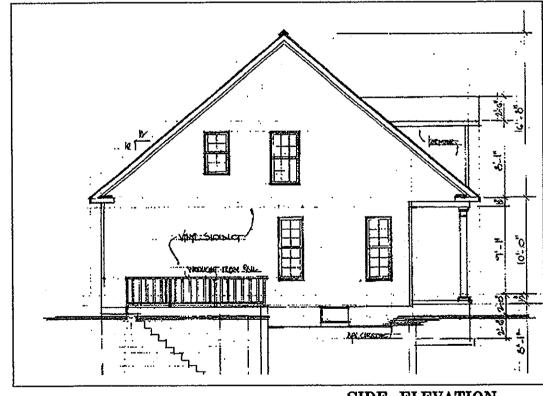
OR 0.3113 Ac.

TOTAL DRAINAGE AREA 0.9 AC. TAX MAP 50, GRID 1 TOTAL IMPERVIOUS AREA 0.08 AC. ROBERT LEE BOLTON SWM & SEDIMENT & EROSION CONTROL PLAN L. 1271, F. 186 TOTAL IMPERVIOUS AREA DISCONNECTED 0.08 AC. ZONED R-SC SCALE 1"=30' USING SWM CREDITS DRYWELL INVERT ELEVATION TABLE O AC. TOTAL REMAINING IMPERVIOUS AREA DRYWELL # INVERT OF DIST. PIPE INVERT OF DIST. TOP ELEVATION TO BE TREATED PIPE @ DRYWELL 308.50 306.38 307.17

LAYOUT OPTION 2

observation well / Cleanout o self flush with proposeo existing grade

D - 9.01



SIDE ELEVATION SCALE 1"=10'

CONTRACTOR SHALL INSTALL AND/OR RESET

Moderately Eroded

SEDIMENT CONTROL INSPECTOR.

SOIL SYMBOL SOIL TYPE

HO.CO. SOIL MAP NO. 33

ADDITIONAL LENGTH OF SILT IF REQUIRED BY THE

SOIL ANALYSIS

Chillum Silt Loam, 1-5% slopes,

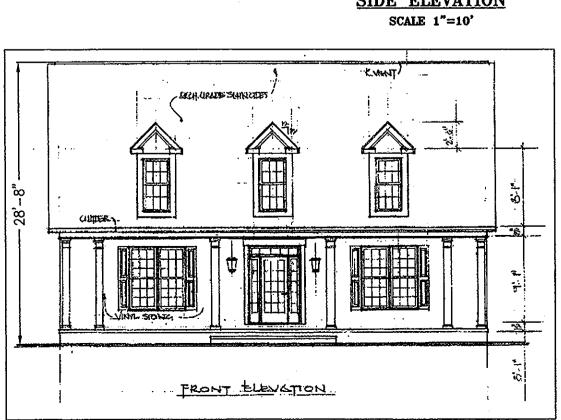
Sassafras gravelly sandy loam,

5-10% slopes, Moderately Eroded

Sassafras gravelly sandy loam,

10-15% slopes, Moderately Eroded

CLASSIFICATION



FRONT ELEVATION SCALE 1"=10'

MINIMUM SIZING CRITERIA	VOLUME REQUIREMENT	NOTES
WATER QUALITY VOLUME (WQv)	0.01 AC.FT.	Credits provided by Non-rooftop, rooftop disconnect and Dry wells
RECHARGE VOLUME (Rev)	0.003 AC.FT.	Provided by SWM credits (Non-rooftop, rooftop disconnect and Dry wells)
CHANNEL PROTECTION VOLUME (Cpv)	_	Not Required
OVERBANK FLOOD PROTECTION (Qp)	-	Not Required
EXTREME FLOOD VOLUME (Qf)		Not Required

SEQUENCE OF CONSTRUCTION

- . Obtain a Grading Permit.
- 2. Install sediment controls as shown on plan in accordance with
- 3. Perform necessary grading. As site is brought to grade, install utilities and commence house construction. All downspouts, swales, ditches, and other concentrated flow areas shall receive erosion control mattina.
- Begin driveway construction and install landscaping.
- 5. Stabilize the site with topsoil and seeding as per notes on this
- 6. After the site is permanently stabilized and permission is granted from the Howard County Sediment Control Inspector, remove sediment controls and stabilize any remaining disturbed areas.

ENGINEER'S CERTIFICATE certify that this plan for erosion and sediment control represents a

9/17/07

practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Drunks Signature of Engineer

DHARAM V. KATHURIA

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.

9-17-07 Nathaniel J NATHANIEL J. HEATH

Print name of Developer

Reviewed for HOWARD SCD and meets Technical Requirements.

9.24.07

DEPARTMENT OF PLANNING AND ZONING

102307

FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

Professional Certification hereby certify that these documents were prepared of am a duly licensed

OWNER/DEVELOPER

NATHANIEL J. HEATH &

DUSTIN R. HEATH

16111-A LAUREL RIDGE DR.

LAUREL, MD 20707

approved by me, and that professional engineer under the laws of the State of Maryland, License No. 8818 Expiration Date: 10/17/08

SINGLE FAMILY DETACHED DWELLING ZONED R-SC PARCEL 565 GRID 19 L. 10489 F. 096 6TH ELECTION DISTRICT TAX MAP 47 HOWARD COUNTY, MARYLAND FINAL PLAN APPROVED DATE 12/27/02 PREVIOUS FILE # F-02-036, WP-02-121 PLAT #18653

HEATH RESIDENCE

BLAIR SUBDIVISION LOT 3

STORMWATER MANAGEMENT, SEDIMENT & EROSION CONTROL PLAN.

ELEVATIONS, NOTES & DETAILS

SCALE: AS SHOWN DATE: 09/19/07 JOB NO.: SHEET: 2 OF 2



KCE ENGINEERING, INC

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SDP-07-114