

| SHEET INDEX | |
|-------------|--|
| SHEET NO. | DESCRIPTION |
| 1 | SITE DEVELOPMENT PLAN |
| 2 | SEDIMENT & EROSION CONTROL NOTES & DETAILS |

| SPECIMEN TREE TABLE | | | | | |
|---------------------|------------------|------------|----------------|--|------------------------|
| KEY | SPECIES | SIZE (DBH) | CRZ (FT OR IN) | COMMENTS | STATUS |
| 1 | RED OAK | 48.5" | 72.75 | | TO REMAIN |
| 2 | RED OAK | 44.5" | 66.75 | POOR, HEAVILY TRIMMED, LIMB DIEBACK | REMOVED UNDER F-14-09B |
| 3 | SOUTHERN RED OAK | 42.5" | 63.75 | POOR, MAJOR TRUNK ROT | TO REMAIN |
| 4 | SOUTHERN RED OAK | 47.5" | 71.25 | GOOD | REMOVED UNDER F-14-09B |
| 5 | WHITE OAK | 30.5" | 45.75 | GOOD | TO REMAIN |
| 6 | RED MAPLE | 30" | 45 | GOOD | TO REMAIN |
| 7 | TULIP POPULAR | 32" | 48 | FAIR, SOME LIMB DIEBACK | TO REMAIN |
| 8 | LINDEN | 32" | 48 | GOOD | TO REMAIN |
| 9 | SILVER MAPLE | 37" | 55.5 | FAIR, SPLITS INTO MULTIPLE STEMS ABOVE BREAST HEIGHT, SHORT WITH LIMITED CROWN, POSSIBLY THE RESULT OF HISTORICAL TRIMMING | TO REMAIN |

| LEGEND | |
|--------|---------------------------------------|
| SYMBOL | DESCRIPTION |
| --- | EXISTING CONTOUR 2' INTERVAL |
| --- | PROPOSED CONTOUR 2' INTERVAL |
| --- | EX. SILT FENCE |
| --- | EX. SUPER SILT FENCE |
| --- | LIMIT OF DISTURBANCE |
| --- | EXISTING FENCE LINE |
| --- | EX. LIMIT OF TREES AND FOREST |
| --- | PERIMETER LANDSCAPING PER F-14-09B |
| --- | EXISTING TREES |
| --- | STABILIZED CONSTRUCTION ENTRANCE |
| --- | MODERATE STEEP SLOPES: 15%-25% |
| --- | SOIL LINES AND TYPES |
| --- | EXISTING FOREST CONSERVATION EASEMENT |
| --- | EXISTING 75' STREAM BUFFER |
| --- | PROPOSED TREE LINE |
| --- | EROSION CONTROL MATTING |

| Property Line Table | | |
|---------------------|-------------|---------|
| Line | Bearing | Length |
| PL1 | S51°50'04"W | 228.00' |
| PL2 | S37°33'52"E | 30.29' |
| PL3 | S44°10'07"W | 119.50' |
| PL4 | S51°50'04"W | 221.86' |
| PL5 | S37°33'52"E | 29.56' |
| PL6 | S44°10'07"W | 57.43' |

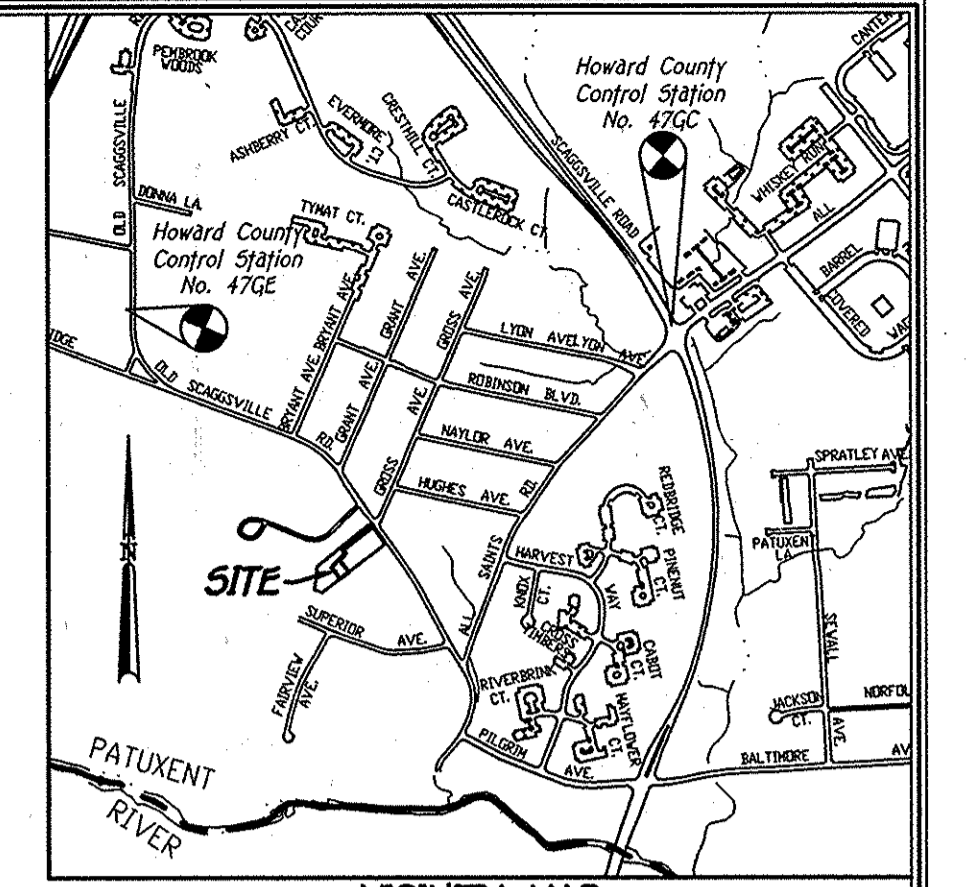
| ADDRESS CHART | |
|---------------|---------------------------|
| LOT NUMBER | STREET ADDRESS |
| 3 | 9296 OLD SCAGGSVILLE ROAD |

| SITE ANALYSIS DATA CHART | |
|--------------------------|---|
| A. | TOTAL AREA OF THIS SUBMISSION = 8,199 SQ.FT. OR 0.19 AC. |
| B. | LIMIT OF DISTURBED AREA = 6,109 SQ.FT. OR 0.14 AC. |
| C. | PRESERVE ZONING DESIGNATION = R-SC |
| D. | PROPOSED USE: RESIDENTIAL |
| E. | PREVIOUS HOWARD COUNTY FILES: ECP-14-061; WP-15-041; F-14-09B |
| F. | TOTAL AREA OF FLOODPLAIN LOCATED ON SITE = 0.00 SQ.FT. |
| G. | TOTAL AREA OF SLOPES IN EXCESS OF 10% = 0.00 SQ.FT. |
| H. | TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 SQ.FT. |
| I. | TOTAL AREA OF STREAM (INCLUDING BUFFER) = 0.00 SQ.FT. |
| J. | TOTAL AREA OF EXISTING FOREST = 0.00 SQ.FT. |
| K. | TOTAL AREA OF FOREST TO BE REMOVED = 0.00 SQ.FT. |
| L. | TOTAL GREEN OPEN AREA = 6,347 SQ.FT. OR 0.15 AC. |
| M. | TOTAL IMPERVIOUS AREA = 1,891 SQ.FT. OR 0.04 AC. |
| N. | TOTAL AREA OF ERODIBLE SOILS = 0.00 SQ.FT. |

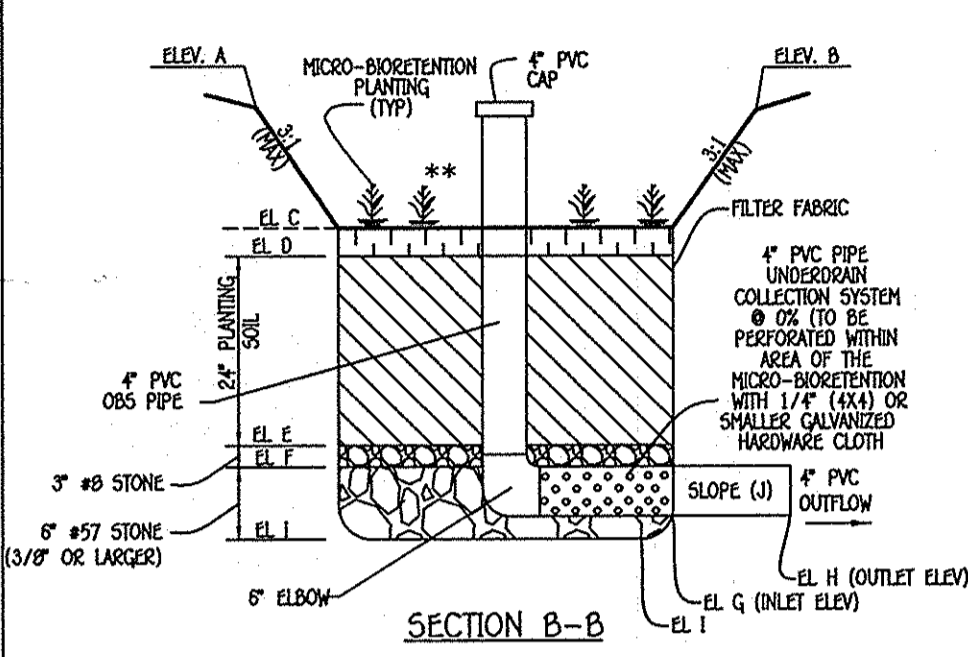
| BENCHMARK INFORMATION | |
|-----------------------|---|
| B.M.#1 | HOWARD COUNTY CONTROL STATION 47GC - HORIZONTAL - (NAD '83) E 528,939.724 N 1,354,223.558 ELEVATION = 226.306 - VERTICAL - (NAVD '83) |
| B.M.#2 | HOWARD COUNTY CONTROL STATION #47GE - HORIZONTAL - (NAD '83) E 1,350,854.964 N 1,350,854.953 ELEVATION = 335.756 - VERTICAL - (NAVD '83) |

| STORMWATER MANAGEMENT PRACTICES | | |
|---------------------------------|---------------------------|-----------------------------|
| LOT No. | ADDRESS | MICRO-BIORETENTION (NUMBER) |
| 3 | 9296 OLD SCAGGSVILLE ROAD | 1 |

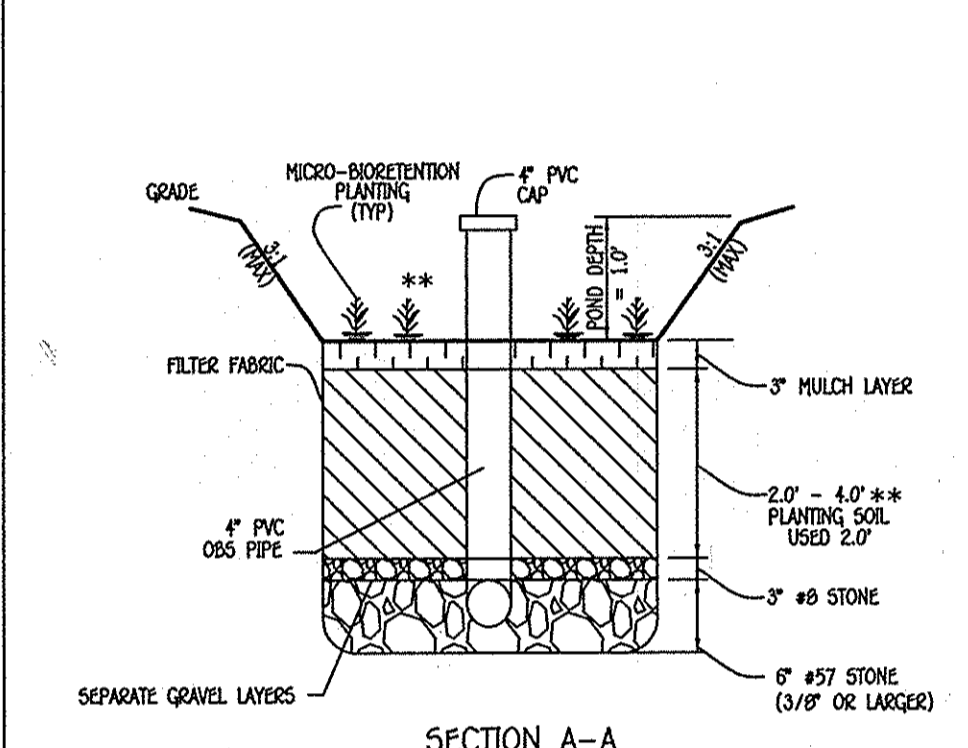
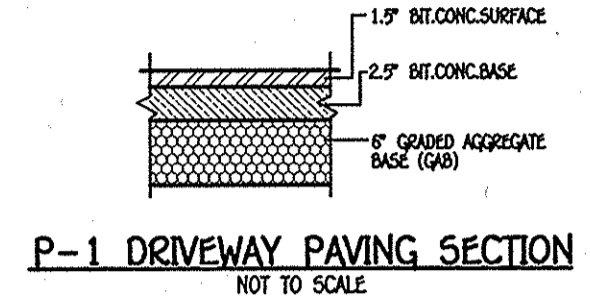
| Minimum Lot Size Chart | | | |
|------------------------|--------------|--------------|------------------|
| LOT No. | GROSS AREA | PIPESTEM AGE | MINIMUM LOT SIZE |
| 3 | 8,199 SQ.FT. | 1,859 SQ.FT. | 6,340 SQ.FT. |



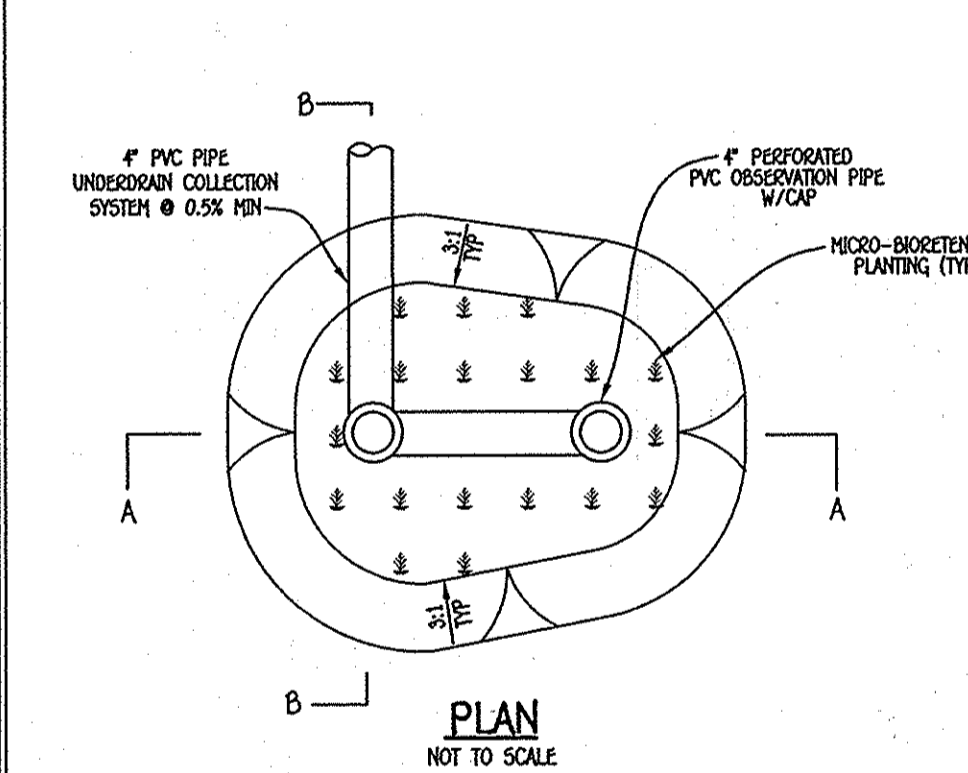
| MICRO-BIORETENTION | | | | | | | | | | |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| BIORETENTION FILTER | A | B | C | D | E | F | G | H | I | J |
| LOT 3 | 251.20 | 251.20 | 250.20 | 249.95 | 247.95 | 247.70 | 247.37 | 247.19 | 247.16 | 0.9X |



| MICRO-BIORETENTION PLANT MATERIAL | | |
|-----------------------------------|------------------|---------------------------------|
| QUANTITY | NAME | MAXIMUM SPACING (FT.) |
| 10 | MIXED PERENNIALS | 1.5 TO 3.0 FT. |
| 1 | SILY DOGWOOD | PLANT AWAY FROM INFLOW LOCATION |



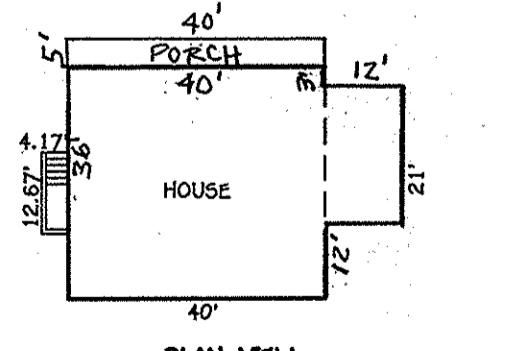
MICRO-BIORETENTION DETAIL (M-6)
NOT TO SCALE



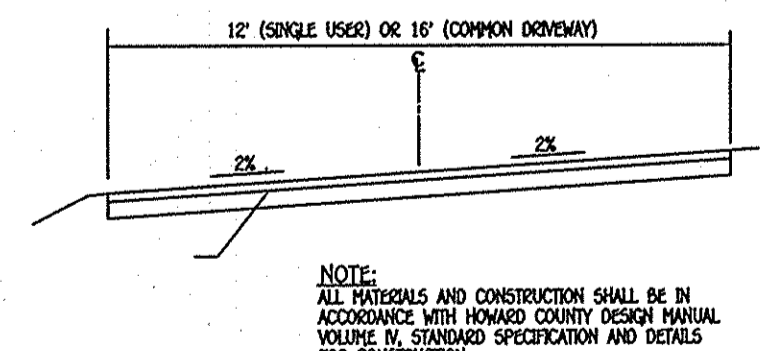
MICRO-BIORETENTION PLANTING DETAIL
NOT TO SCALE

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

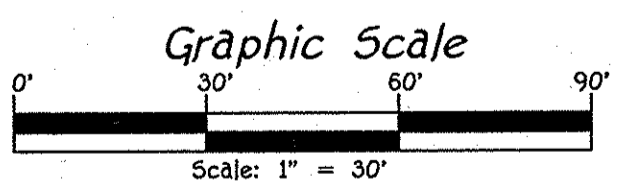
- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE ADDRESSING DEAD MATERIAL AND SOONING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.
- THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERING TIED BACK TREES AND SHRUBS AND REPLACE ALL DEFICIENT STAKES AND WIRES.
- THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE NEW MULCH IS APPLIED.
- THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.



HOUSE DETAILS
SCALE: 1"=30'



TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION
NOT TO SCALE



Please Note That Lots 2 Thru 4 In This Subdivision Are Subject To The Moderate Income Housing Unit (M.I.H.U.) Fee-In-Lieu Requirement That Is To Be Calculated And Paid To The Department Of Inspections Licenses And Permits At The Time Of Building Permit Issuance By The Permit Applicant.

DESIGN BY: FISHER, COLLINS & CARTER, INC.
DRAWN BY:
CHECKED BY:

| DATE | DESCRIPTION | REVISION BLOCK |
|----------|--|----------------|
| 11/12/15 | REVISE HOUSE ELEVATIONS PER AS-BUILT | |
| 7/20/15 | REVISE HOUSE TO 36FT PEER INSTEAD OF 21FT PEER | |

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 50806.
EXPIRATION DATE: 01/12/2016.

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

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan for sediment and erosion control and that all responsible personnel involved in the construction project will have adequate attendance at a Department of the Environment Approved Training Program to the Control of Sediment and Erosion before beginning the project. I also authorize on-site inspection by the Howard Soil Conservation District.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning

Chief, Division of Land Development

Chief, Development Engineering Division

OWNER/DEVELOPER
Richard Scott Sabatelli
9300 Old Scaggsville Road
Laurel, Maryland 20723
Ph: 301-864-1043

| PLAT NO. | BLOCK NO. | ZONE | TAX/PARCEL | ELEC. DIST. | CENSUS TR. |
|----------|-----------|------|------------|-------------|------------|
| 23327 | 2 | R-SC | 50/451 | SIXTH | 606906 |

SITE DEVELOPMENT PLAN

SABATELLI PROPERTY
LOT 3

TAX MAP No.: 50 GRID NO. 2 PARCEL No.: 451

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: 1"=30' DATE: MAY, 2015

SHEET 1 OF 2

SDP-15-037

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

A. Soil Preparation

1. Temporary Stabilization
a. Seeded preparation consists of loosening soil to a depth of 3 to 9 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or ripplers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged around but left in the roughened condition. Slopes 3:1 or flatter are to be treated with ridges running parallel to the contour of the slope.
b. Apply fertilizer and lime as prescribed on the plans.
c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
2. Permanent Stabilization
a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
 - i. Soil pH between 6.0 and 7.0.
 - ii. Soluble salts less than 500 parts per million (ppm).
 - iii. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if loesslike soil is planted, then a sandy soil (less than 30 percent silt plus clay) may be acceptable.
 - iv. Soil contains 1.5 percent minimum organic matter by weight.
 - v. Soil contains sufficient pore space to permit adequate root penetration.
- b. Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
- c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.
- d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
- e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rate taken depends on soil texture. Remove large objects like stones and boulders, and relay the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 1:1 or flatter with graded equipment leaving the soil in an irregular running parallel to the contour of the slope. Above the top 1 to 3 inches of soil loose and friable. Seeded loosening may be unnecessary on newly disturbed areas.

B. Topsoiling

1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a stable, nutrient rich growing medium. Soil of concern has low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
2. Topsoil salvaged from an existing site may be used provided it meets the standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS.
3. Topsoiling is limited to areas having 2:1 or flatter slopes where:
 - a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - c. The original soil to be vegetated contains material toxic to plant growth.
4. The soil is so acidic that treatment with limestone is not feasible.
5. Areas having slopes steeper than 2:1 require special consideration and design.
6. Topsoil Specifications: Soil to be used must follow the following criteria:
 - a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, silt, trash, or other materials larger than 1 1/2 inches in diameter.
 - b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or other noxious plants.
 - c. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
7. Topsoil Application
 - a. Erosion and sediment control practices must be maintained when applying topsoil.
 - b. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding and seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.
 - c. Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

C. Soil Amendments (Fertilizer and Lime Specifications)

1. Soil tests must be performed to determine the exact rates and application rates for both lime and fertilizer on sites having slopes of 2:1 or steeper. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Fertilizers may be substituted for fertilizers with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.
3. Lime materials must be ground limestone (hydrated or burnt lime) may be substituted except when hydroseeding. Lime containing total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #200 mesh sieve.
4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.
5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

1. Application of seed and mulch to establish vegetative cover.
 - a. Purpose: To protect disturbed soils from erosion during and at the end of construction.
 - b. Conditions Where Practice Applies: To the surface of all perimeter contours, slopes, and any erodible area not under active grading.
2. Seeding
 - a. Specifications
 - i. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B-4 regarding the quality of seed. Seed tests must be available upon request to the inspector to verify type of seed and seeding rate.
 - ii. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws.
 - iii. Incorporating the seed into the soil by hydroseeding or by a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as treated on the package. Use four times the recommended rate when hydroseeding. Note it is very important to keep inoculants as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and mottle the inoculant less effective.
 - iv. Seed or seed mix must be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.
 - b. Application
 - i. Dry Seeding: This includes use of conventional dry or broadcast spreaders.
 - ii. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries.
 - iii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with weighted roller to provide good seed to soil contact.
 - iv. Disk or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.
 - v. Cultipacker seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seeded must be firm after planting.
 - vi. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
 - vii. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
 - viii. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P₂O₅ (phosphorus), 200 pounds per acre; K₂O (potassium), 200 pounds per acre.
 - ix. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
 - x. Mix seed and fertilizer on site and seed immediately and without interruption.
 - xi. When hydroseeding do not incorporate seed into the soil.
3. Mulching (In order of preference)
 - a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dirty. Note: Use only sterile straw mulch in areas where one species of grass is desired.
 - b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into uniform fibrous physical state.

A. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

1. General Specifications
 - a. Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
 - b. Sod must be machine cut at a uniform soil thickness to 3/4 inch, plus or minus 1/8 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.
 - c. Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grip on the upper 10 percent of the section.
 - d. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
 - e. Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be stored by an agronomist or soil scientist prior to its installation.
2. Sod Installation
 - a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
 - b. Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
 - c. Wherever possible, lay sod with the long edges abutted to the contour and with staggered joints. Soil and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil surface.
 - d. Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of rolling, tamping, and irrigating for any piece of sod within eight hours.
3. Sod Maintenance
 - a. In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting.
 - b. After the first week, wet watering is required as necessary to maintain adequate moisture content.
 - c. Do not mow until the sod is firmly rooted. No more than 1/2 inch of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.

TEMPORARY SEEDING NOTES (B-4-4)

1. To stabilize disturbed soils with vegetation for up to 6 months.
 - a. Purpose: To use fast growing vegetation that provides cover on disturbed soils.
 - b. Conditions Where Practice Applies: Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.
2. Criteria
 - a. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.
 - b. For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary Seeding.
3. When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4-3.1.5 and maintain until the next seeding season.

| Hardness Zone (from Figure B.3): | lb | Fertilizer Rate (10-20-20) | Lime Rate | | | | |
|----------------------------------|---------|----------------------------|---------------|---------------|-------------------|---|----------------------------------|
| Seed Mixture (from Table B.1): | Species | Application Rate (lb/acre) | Seeding Dates | Seeding Depth | N (lb/1000 sq ft) | P ₂ O ₅ (lb/1000 sq ft) | K ₂ O (lb/1000 sq ft) |
| | BARLEY | 96 | 3/1 - 5/15 | 1" | 435 | 100 | 2 tons/acre |
| | OATS | 72 | 8/15 - 10/15 | 1" | 190 | 100 | 1000 sq ft |
| | RYE | 112 | 1" | 1" | | | |

PERMANENT SEEDING NOTES (B-4-5)

1. General Use
 - a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixtures, application rates, seeding dates, and seeding depths in the Permanent Seeding Summary. The summary is to be placed on the plan.
 - b. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 342 - Critical Area Planning.
2. Turfgrass Mixtures
 - a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
 - b. For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency. If for areas receiving low maintenance, apply use form fertilizer (45-0-0) at 3 1/2 lbs per 1,000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.
3. Turfgrass Seeding
 - a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
 - b. Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixtures, application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
 - i. Kentucky Bluegrass/Fine Fescue: Full Sun Mixture: For use in areas that receive intensive maintenance, irrigation required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1,000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
 - ii. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1,000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
 - iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium maintenance in full sun to medium shade. Recommended Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1,000 square feet. One or more cultivars may be blended.
 - iv. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf areas. Mixture includes Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 pounds per 1,000 square feet.
 - c. Notes:
 - i. Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Home #77, "Turfgrass Selection Recommendations for Maryland"
 - ii. Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.
 - iii. Ideal Times of Seeding for Turf Grass Mixture Western MD: March 15 to June 1, August 1 to October 1 (Hardness Zones: 5b, 6b) Central MD: March 1 to May 15, August 15 to October 15 (Hardness Zones: 6b) Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardness Zones: 7a, 7b)
 - d. Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1 1/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.
 - e. If soil moisture is deficient, supply new seedlings with adequate water for plant growth (1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

| Hardness Zone (from Figure B.3): | lb | Fertilizer Rate (10-20-20) | Lime Rate | | | | | |
|----------------------------------|-------------|----------------------------|---------------------------------|-----------------|--|---|----------------------------------|---------------------------------|
| Seed Mixture (from Table B.3): | No. Species | Application Rate (lb/acre) | Seeding Dates | Seeding Depth | N (lb/1000 sq ft) | P ₂ O ₅ (lb/1000 sq ft) | K ₂ O (lb/1000 sq ft) | |
| | TALL FESCUE | 100 | Mar. 1 - 15 / Aug. 15 - Oct. 15 | 1 1/4" - 1 1/2" | 45 lb. per acre (1.0 lb. per 1000 sq ft) | 90 lb/acre (2 lb./1000 sq ft) | 90 lb/acre (2 lb./1000 sq ft) | 2 tons/acre (90 lb./1000 sq ft) |

DESIGN BY:
DRAWN BY:
CHECKED BY:

FISHER, COLLINS & RIDGES, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
10000 WEST GAITHERSBURG ROAD SUITE 300
GAITHERSBURG, MARYLAND 20878
(410) 461-2999

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38386, EXPIRATION DATE: 01/18/2018.

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

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all 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/We also authorize periodic on-site inspection by the Howard Soil Conservation District.

DATE: 6/18/15
DATE: 6/23/15
DATE: 6/18/15

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

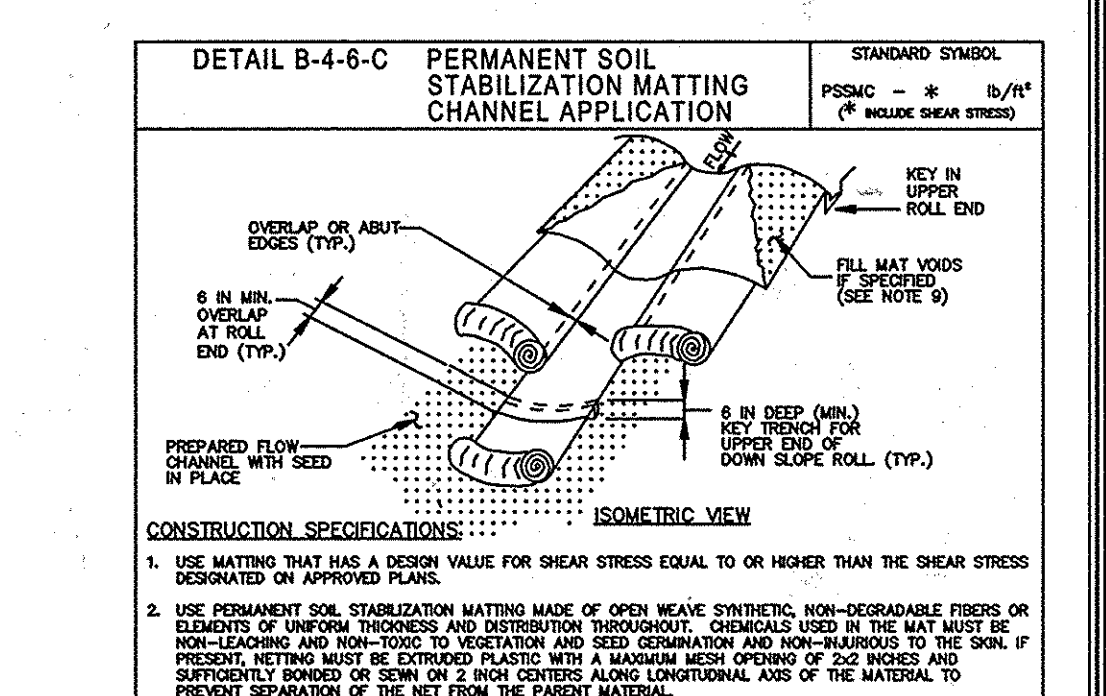
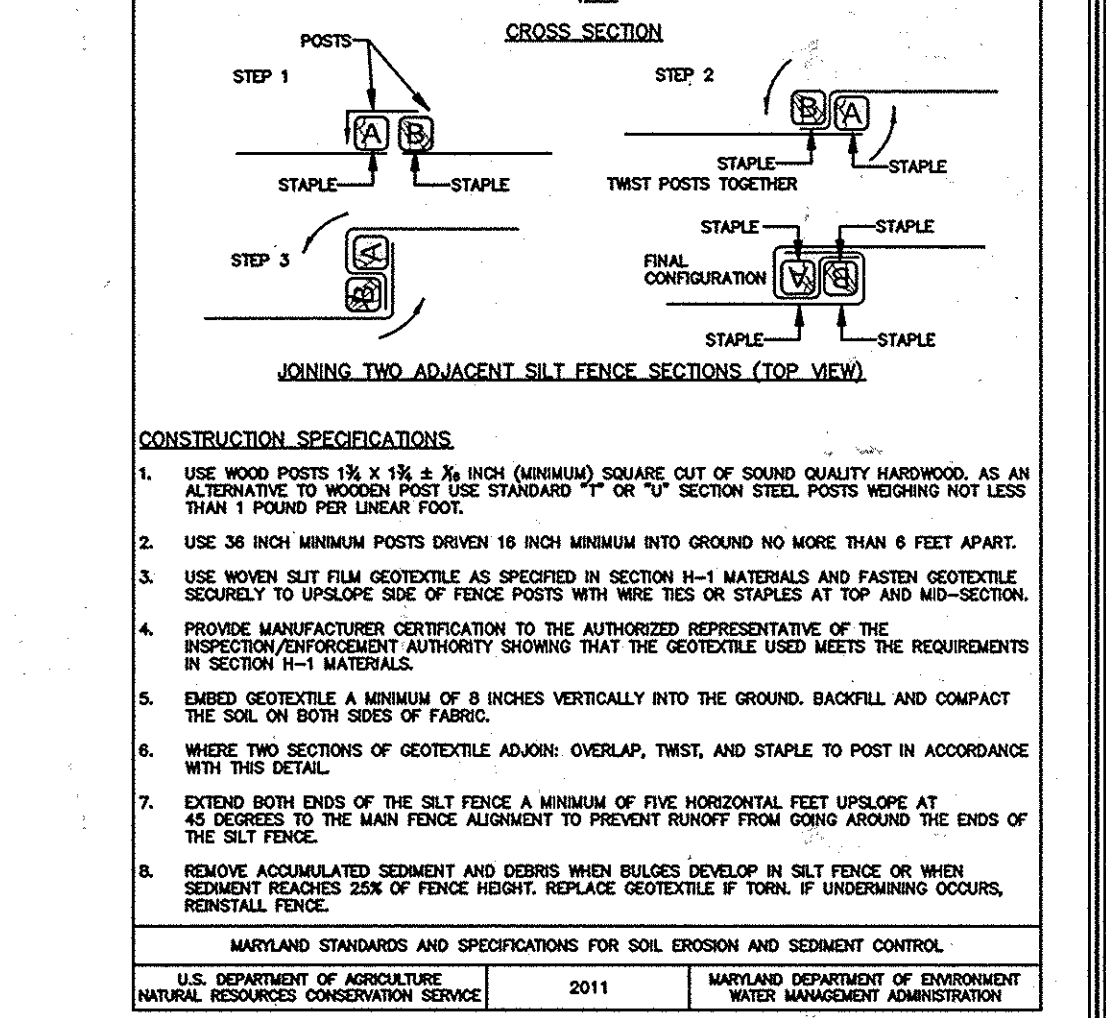
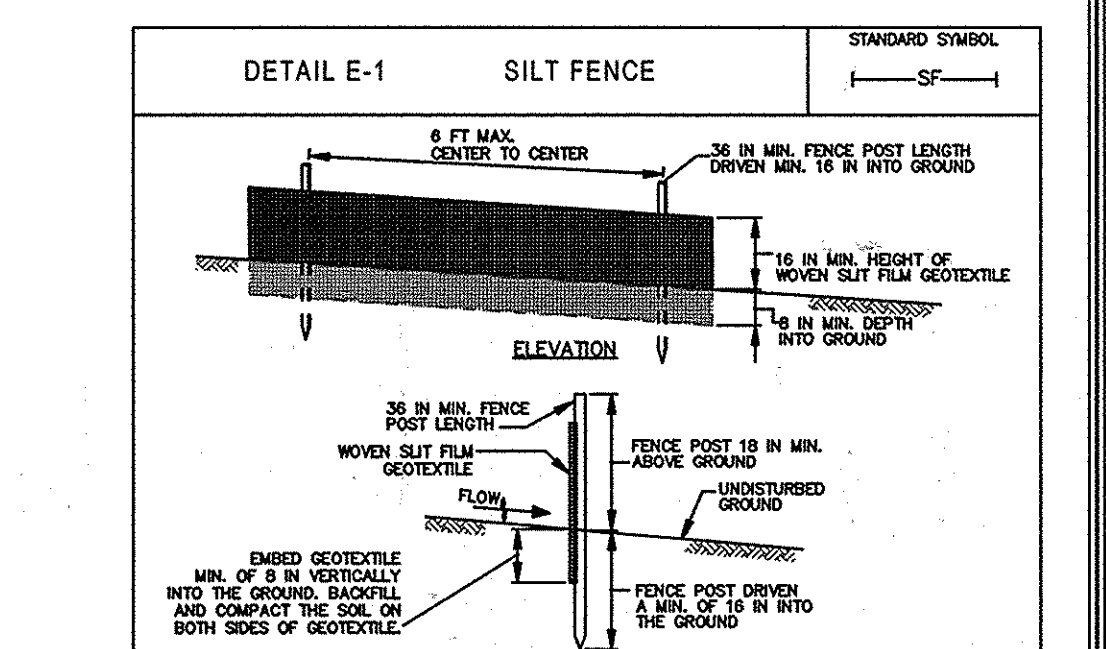
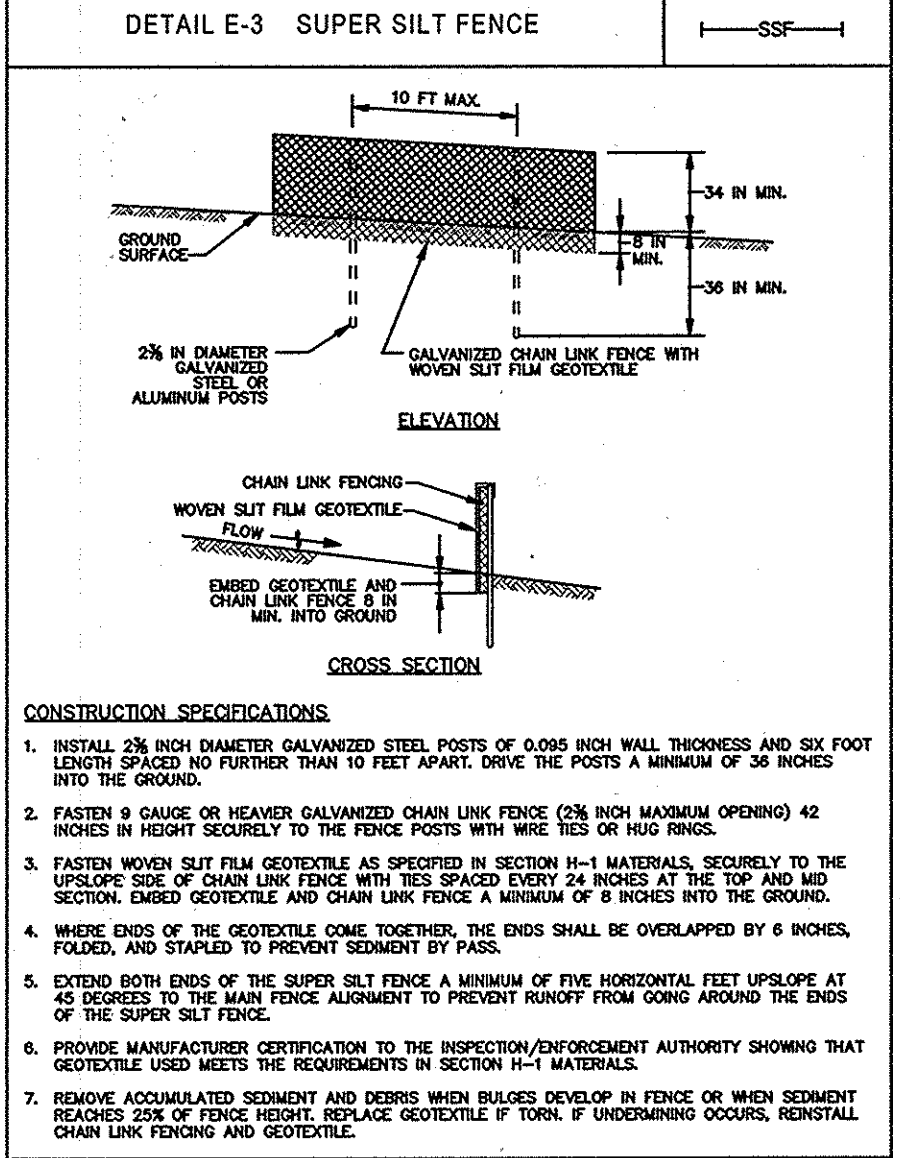
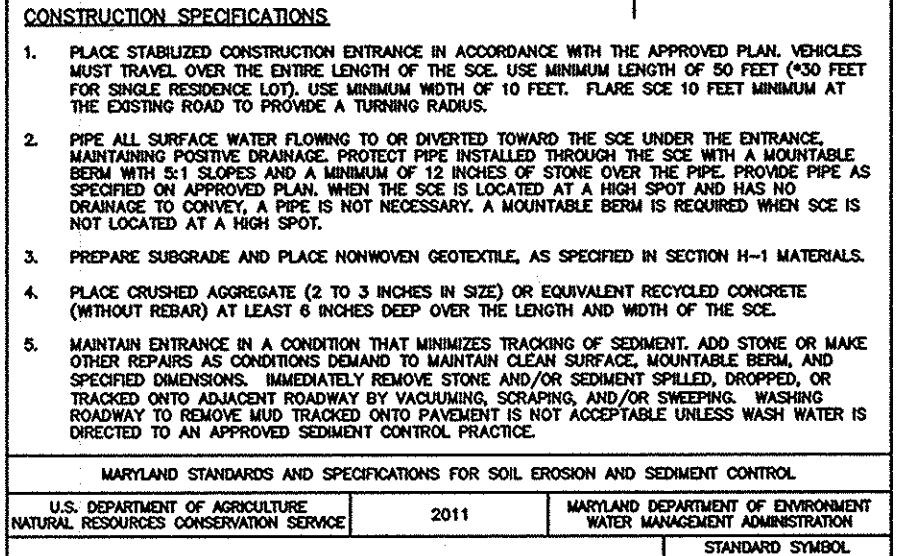
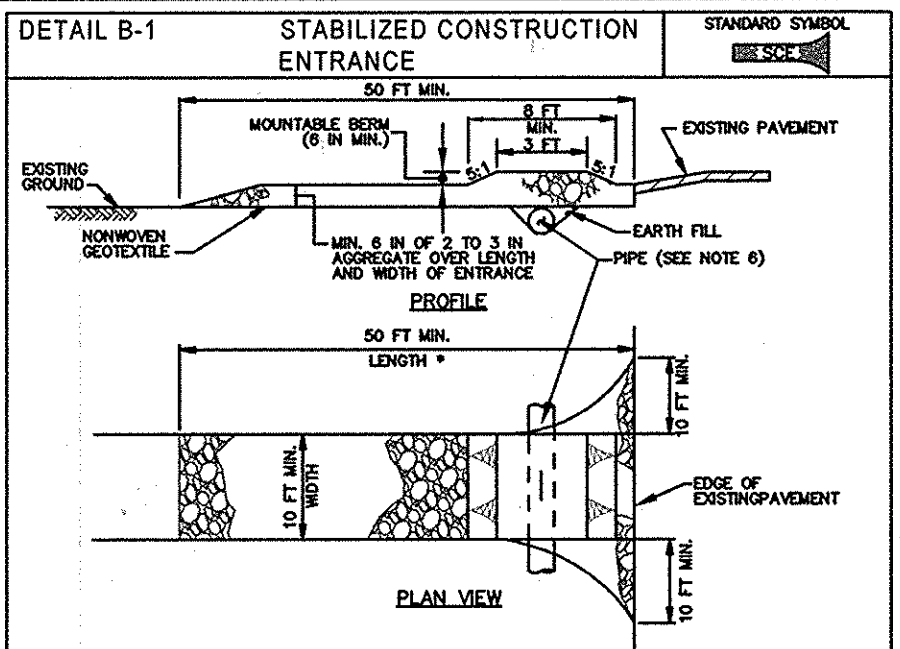
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APPROVED: DEPARTMENT OF PLANNING AND ZONING

6/23/15
6-23-15
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SEDIMENT & EROSION CONTROL NOTES & DETAILS

SABATELLI PROPERTY
LOT 3
TAX MAP No. 50 GRID NO. 2 PARCEL No. 451
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: NOT TO SCALE DATE: MAY, 2015
SHEET 2 OF 2 SDP-15-037



- SEQUENCE OF CONSTRUCTION
1. OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. (2 WEEKS)
 2. NOTIFY "MISS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/ INSPECTION AT 410-313-1329 AT LEAST 24 HOURS BEFORE STARTING WORK.
 3. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND ANY ADDITIONAL SILT FENCE OR SUPER-SILT FENCE REQUIRED BY SEDIMENT CONTROL INSPECTOR. EXISTING SEDIMENT CONTROLS AREA TO BE UTILIZED FOR HOUSE CONSTRUCTION. (1 DAY)
 4. REMOVE NECESSARY TREES AND ROUGH GRADE LOT. (2 DAYS)
 5. INSTALL TEMPORARY SEEDING. (1 DAY)
 6. CONSTRUCT BUILDING, PORCH, AND DRIVEWAY. INSTALL WATER AND SEWER HOUSE CONNECTIONS TO FINAL EROSION CONTROL MATTING. (3 MONTHS)
 7. INSTALL ROOF LEAVES, FINE GRADE SITE, AND INSTALL PERMANENT SEEDING. (3 DAYS)
 8. UPON COMPLETION OF ALL GRADING WITH DRAINAGE AREA TO MICRO-BIORETENTION AREA, CONSTRUCT MICRO-BIORETENTION FACILITY AND UNDERDRAIN. (2 DAYS)
 9. INSTALL MICRO-BIORETENTION PLANT MATERIAL AND MULCH. (1 DAY)
 10. ALL FINAL GRADES AND STABILIZATION SHOULD BE COMPLETED BEFORE ANY REMOVAL OF TEMPORARY CONSTRUCTION DEVICES TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE SEDIMENT CONTROL DEVICES MAY BE REMOVED. (3 DAYS)