

33\dwg\04023-3001Sdp Lot 2.dwg, 11/14/2007 12:00:1

20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION DEFINITION

Using vegetation as cover for barren soil to protect it from forces that cause erosion. PURPOSE

Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

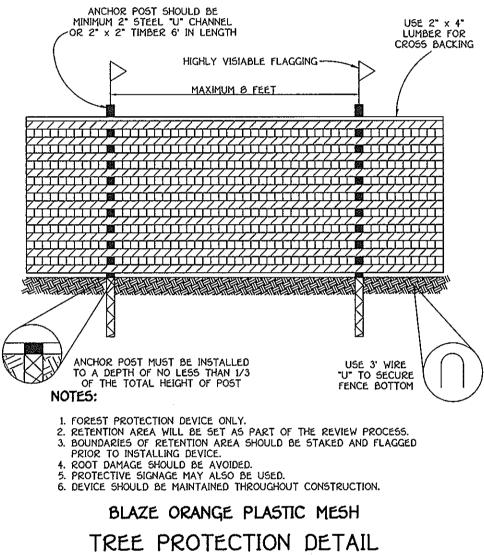
CONDITIONS WHERE PRACTICE APPLIES This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration Oup to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary Soil Stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc. EFFECTS ON WATER QUALITY AND QUANTITY

- Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants ill also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seedbed preparation, seeding, mukhing and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters. SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS
- A. Site Preparation Install erosion and sediment control structures (either temporary of permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
- ii. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding. iii. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres. Soil Amendments (Fertilizer and Lime Specifications)
- Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering urposes may also be used for chemical analyses.
- ii. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according o the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee of the producer.
- iii. Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a *100 mesh sieve and 98-100% will pass through a *20 mesh sieve. Incorporate lime and fertilizer into the top 3-5° of soil by disking or other suitable means.
- Seedbed Preparation i. Temporary Seeding a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of by the second s suitable agricultural or construction equipment, such as disc harrows or chisel plaws or rippers mounted on construction equipment. After the soil is loosened it should not b rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3:D should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
- b. Apply fertilizer and lime as prescribed on the plans. c. In corporate time and fertilizer into the top 3-5° of soil by disking or other suitable means. ii. Permanent Seeding Minimum soil conditions required for permanent vegetative establishment: 1. Soil pH shall be between 6.0 and 7.0.
 - Soluble saits shall be less than 500 parts per million (opm). The soil shall contain less than 40% clay, but enough fine grained material ()30% silt plus clay) to provide the capacity to hold a
 - moderate amount of moisture. An exception is if lovegrass o serecia lespedezas is to be planted, then a sardy soil (<30% sil
 - plus clay) would be acceptable. Soil shall contain 1.5% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration. If these conditions cannot be met by soils on site, adding topsoil is required
 - in accordance with Section 21 Standard and Specification for Topsoil. Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoi to the surface area and to create horizontal erosion check slots to prevent topsoil from
 - Apply soil amendments as per soil test or as included on the plans. Mix soil amendments into the top 3-5° of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seedbed preparation loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-3° of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.
- D. Seed Specifications i. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job. Note: Seed tags shall be made available to the inspector to verify type and rate of seed used. i. Inoculant - The inoculant for treating legume seed in the seed mixtures shall be a pure culture of introgen fixing bacteria prepared specifically for the species. Inoculants shall not be used later that
- the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75-60° F. can weaken bacteria and make the inoculant less effective. Methods of Seeding i. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a cultipacker seeder.
- If fertilizer is being applied at the time of seeding, the application rates amounts will not
- it tertilizer is being applied at the time of seeding, the applied in tales amounts will no exceed the following: nitrogen; maximum of 100 lbs, per acre total of soluble nitrogen; P205 (phosphorous); 200 lbs/ac; K20 (potassium); 200 lbs/ac. 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. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and
- i. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
 a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact.
 b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
- iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil Cultipaction seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
- Much Specifications (In order of preference) i. Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonable bright in color, and shall not be musty, moldy, caked decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
- Wood Cellulose Fiber Mukh (WCFM)

 WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
- WCFM shall be dred green or contain a green dre in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread sturry. WCFM, including dre, shall contain no germination or growth inhibiting factors. WCFM materials shall be manufactured and processed in such a manner that the
- wood cellulose fiber mulch will remain in uniform suspension in water under acitatic and will blend with seed, fertilizer and other additives to form a homogeneous surry The much material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed
- in contact with the soil without inhibiting the growth of the grass seedings. WCFM material shall contain no elements or compounds at concentration levels that will be phytol-toxic.
- Will be phytoi-toxic. f. WCFM must conform to the following physical requirements: fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90% minimum. Note: Only sterile straw mulch should be used in areas where one species of grass is desired.

- G. Mulching Seeded Areas Mulch shall be applied to all seeded areas immediately after seeding. i. If grading is completed outside of the seeding season, mulch along shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications
 - ii. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1° and 2°. Much applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a much anchoring tool is
- to be used, the rate should be increased to 2.5 tons/acre.
 iii. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs of wood cellulose fiber per 100 gallons of water.
- Becuring Straw Mulch Mulch Anchoring: Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:
- preference, aepending upon size of area and erosion hazard:
 A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should be used on the contour if possible.
 Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- of water. iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and crest of banks. The remainder of area should be appear uniform after binder application. Symphetic binders such as Acrylic DLR (Agro-Tack), DCA-70 Petroset, Terra Tax ii, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to archor mulch.
- Lightweight plastic netting may be stapled over the mulch according to manufacturer's recomendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.
- I. Incremental Stabilization Cut Slopes All cuts slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15'.
- ii. Construction sequence (Refer to Figure 3 below): Excavate and stabilize all temporary swales, side ditches, or berms that will be used to conver runoff from the excavation. Perform Phase 1 excavation, dress, and stabilize.
- Perform Phase 2 excavation, dress and stabilize. Overseed Phase 1 areas a
- necessary. Perform final phase excavation, dress and stabilize. Overseed previously seeded
- Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions int he operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization. J. Incremental Stabilization of Embankments - Fill Slopes
- Embankments shall be constructed in lifts as prescribed on the plans.
- ii. Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches
 iii. Stopes shall be stabilized immediately when the vertical height of the multiple lifts reaches
 iii. At the end of each day, temporary berms and pipe slope drains should be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-prosive manner to a sediment transing during.
- a sediment trapping device. Construction seduence: Refer to Figure 4 (below).

iv. Construction sequence: Refer to Figure 4 (below).
a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct slope silt fence on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.
b. Place Phase 1 embankment, dress and stabilize.
c. Place Phase 2 embankment, dress and stabilize.
d. Place final phase embankment, dress and stabilize.
d. Place final phase embankment, dress and stabilize.
Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of and placement of topsoil (if required) grading and permanent seed and mulch. any interruptions in the operation or completing the operation of topsoil (if required) grading and permanent seed and mulch. the operation out of the seeding season will necessitate the application of temporary stabilization.



NOT TO SCALE

SCHEDULE A - PE							
PERIMETER	CATEGORY PROPERTY/ROADWAY	LANDSCAPE TYPE	LINEAR FOOT OF ROADWAY FRONT/PERIM				
P-1	ADJACENT TO PERIMETER PROPERTY	A	618.09 LF				
P-2	ADJACENT TO PERIMETER PROPERTY	A	21.66 LF				
P-3	ADJACENT TO PERIMETER PROPERTY	A	510.36 LF				
P-4	ADJACENT TO ROADWAY	N/A	43.86 LF				

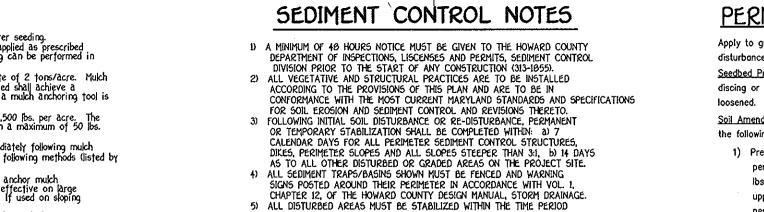
BUILDER/DEVELOPER'S/CERTIFICATE

I/WE CERTIFY THAT THE REQUIRED LANDSCAPING WILL BE DONE ACCORDING TO THIS PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF NOTICE ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMILIED TO THE DEPARTMENT OF PLANNING AND ZONING

- Formey 11-26-0

* NOTE 1: CREDIT TAKEN FOR EXISTING TREES ALONG P-1. * NOTE 2: PERIMETER LANDSCAPE P-3 OBLIGATION RELOCATED TO PROVIDE 6 SHADE TREES TO BUFFER PROPOSED HOUSE ON LOT 2 FROM LOT 1. COYNE PROPERTY AND LOT 106, ROCKBURN TOWNSHIP AND TO PROVIDE 6 SHADE TREES ALONG PERIMETER LANDSCAPE P-1 TO BUFFER PROPOSED HOUSE ON LOT 2 FROM EXISTING HOUSE ON AQDJOINING TAX MAP 37 PARCEL 297.

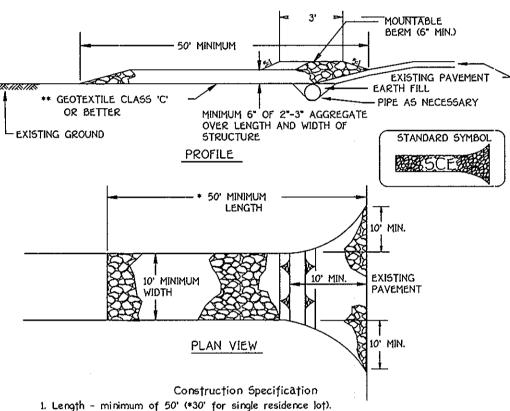
FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2855				OF MANDA	ENGINEER'S CERTIFICATE "I certify that this plan for erosion and sediment control represents a practical and workabe 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." Signature of Engineer EARL D. COLLINS Date Date "I'Ve certify that all development and construction will be done according to this plan, for sediment and erosion control and that any responsible personnel involved in 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." If 26-07
·	NO.	REVISION	DATE	6	Signature of Developer STEPHEN FORNEY Date



- SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDE 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 CAI NLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
-) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE O BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.



- SAME DAY OF DISTURBANCE. 9) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR 10) 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 WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL Y THE INSPECTION AGENCY IS MADE.
- 11) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGHTS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY WHICHEVER IS SHORTER



- 2. Width 10' minimum, should be flared at the existing road to provide a turning radius. ric (filter cloth) shall be placed over the existing ground price to placing stone. **The plan approval authority may not require single family residences to use aeotextile.
- 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 entrance. 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. 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 NOT TO SCALE

IMETER LANDSCAPE EDGE NUMBER OF PLANTS REQUIRED EXISTING VEGETATION TO BE PLANTED YES 237.00 L 618.09 / 60 = 10.30 = 10 6 237 / 60 = 3.95 = 4N/A N/A 0 YES 191.00 L 518.36 / 60 = 8.64 = 9 6 191 / 60 = 3.18 =

GENERAL NOTE:

N/A

LOT I CONTAINS AN EXISTING HOUSE AND IS EXEMPT FROM LANDSCAPING. LANDSCAPING FOR LOT 2 SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL AND AS SHOWN ON THIS PLAN FILED WITH HOWARD. COUNTY. SURETY AMOUNT OF \$3600.00 (12 SHADE TREES . \$300/EA) SHALL BE PROVIDED WITH THE GRADING PERMIT.

N/A

N/A

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, discing or other acceptable means before seeding, if not previously

- Soil Amendments : In lieu of soil test recommendations, use one of the following schedules 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs.
- per 1000 sa.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 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 (9 lbs. per 1000 sq.ft.). 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs per 1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding : For the period March 1 thru April 30 and from August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs. per 1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq.ft.) of weeping lovegross. During the period October 16 thru February 28, protect site by one of the following

1) 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring. 2) Use sod.

3) Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw. Mulching : Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000

sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 goi, per acre (5 gol, per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

Maintenance : Inspect all seeded areas and make needed repairs. replacements and reseedings.

short—term vegetative cover is needed. Seedbed 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 (14 lbs. per 1000 sg.ft.). Seeding : For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of annual rye (3.2 lbs. per 1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 1000 sq.ft.). For the period November 16 thru February 28, protect site by applying 2 tons per 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. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring too or 218 gal. per acre (5 gol. per 1000 sq.ft.) of emulsified asphalt on flot areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal.

per 1000 sq.ft.) for anchoring. Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL

EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEQUENC

- 1. OBTAIN GRADING PERMIT 2. INSTALL SEDIMENT AND ER
- 3. CLEAR AND GRUB TO LIMI
- 4. INSTALL TEMPORARY SEE 5. CONSTRUCT BUILDINGS
- 6. FINE GRADE SITE AND INS
- 7. REMOVE SEDIMENT CONTRO AND PERMISSION IS GRAN
- 36" MINIMUM LENGTH FENCE POST. 10' MAXIMUM CENTER TO DRIVEN A MINIMUM OF 16" INTO - CENTER GROUND NOTE: - 16" MINIMUM HEIGHT O GEOTEXTILE CLASS 1 8" MINIMUM DEPTH IN GROUND FLOW FLOV PERSPECTIVE VIEW POST LENGTH FENCE POST SECTION FILTER MINIMUM 20" ABOVE GROUND FLO FLOW TATIATIATIATIATIATIATI UNDISTURBED GROUND TINTIN TINTIN TO EMBED GEOTEXTILE CLASS F TOP VIEW - FENCE POST DRIVEN A A MINIMUM OF & VERTICALLY INTO THE GROUND MINIMUM OF 16" INTO POSTS -THE GROUND CROSS SECTION SECTION B 1. F SECTION A STAR STANDARD SYMBOL STAPLE 2. 0 ______SF _____ JOINING TWO ADJACENT SILT FENCE SECTIONS 3. F Construction Specifications 4. F 1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be 6. standard T or U section weighting not less than 1.00 pond per linear foot. 2. Geotextile shall be fastened securely to each fence post with wire ties 7. or staples at top and mid-section and shall meet the following requirements for Geotextile Class F: Tensile Strength 50 lbs/in (min.) Test: MSMT 509 Tensile Modulus 20 lbs/in (min) Test: MSMT 509 0.3 gal ft / minute (max.)² Test: MSMT 322 Flow Rate Filtering Efficiency 75% (min.) Test: MSMT 322 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. Silt Fence Design Criteria (Maximum (Maximum Silt Fence Length Slope Steepness Slope Length Flatter than 50:1 unlimited unlimited 1.000 fee 50:1 to 10:1 125 feet 750 fee 100 feet 10:1 to 5:1 60 feet 500 feet 5:1 to 3:1 40 feet 250 feet 3:1 to 2:1 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 SILT FENCE NOT TO SCALE PROFESSIONAL CERTIFICATE 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. 9753. EXPIRATION DATE 2/28/08. Confallal 11.20.07 EARL D. COLLINS PPROVED: HOW Lad 1.5.D. Natural Resources Conservation Service approved for soil erosion and sediment control by HEWARD BOIL CONSERVITION DISTRICT.

OJECT OYNE PROPER

LAT

D04

19577

WATER CODE

OWNER/BUILDER/DEVELOPER STEPHEN FORNEY

12/19/07

3360 BRANTLY COURT GLENWOOD, MARYLAND 21738

410-730-3940

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a

I CONTROL for rate and methods not covered. where	e noted on plans.	continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except
CE OF CONSTRUCTION IT 7 DAYS fertil EROSION CONTROL DEVICES AS SHOWN ON PLAN 7 DAYS Weed LIMITS OF DISTURBANCE 4 DAYS the c EEDING 2 DAYS All au	ting mix shall be as follo ; yard of planting mix. lizer per cubic yard of p l Control: Incorporate a chemical used to assure reas within contract lim	aintained in planting beds 2 percent slope). Was: Deciduous Plants - Two parts topsoil, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per Evergreen Plants - two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen (acidic) slanting mix. Topsoil shall conform to the Landscape Guidelines. I pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check its adaptability to the specific ground cover to be treated. Its disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded. decape use only. see other plan sheets for more information on grading, sediment control, layout, etc.
FINCE POST SPACING SMALL NOT EXCEED 10 CONTRET TO CENTER GROUND URFACE FLOW UNITED OR ALLYNNE FLOW DUFFACE CROUNDURE CROUNDURE FLOW DUFFACE CROUNDURE FLOW DU	ARD SYMBOL - SSF sification s. e ties. aps are not spaced apped hen "bulges" s or hts for 	FORM OF TREE 2 PIECES OF REINFORCED RUBBER HOSE
		LANDSCAPING PLANT LIST QTY. KEY NAME SIZE 12 ACER SACCHARUM 'GREEN MOUNTAIN'SUGAR MAPLE 22*-3" CALIPER FULL CROWN B/B
WARD COUNTY DEPARTMENT OF PLANNING AND ZONING	18	SEDIMENT/EROSION CONTROL NOTES & DETAILS AND LANDSCAPE NOTES & DETAILS
Identify /2.21 nent/Engineering Division Date Autment of Parking and Zoning Date SECTION LOT RTY N/A	A B NO.	SINGLE FAMILY DETACHED COYNE PROPERTY LOT 2 ZONED R-20 PLAT NO. 19577 TAX MAP NO.: 37 GRID NO.: 3 PARCEL NO.: 34
3 R-20 37 1 60 SEWER CODE 2721500	011.01	IST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: 1" = 30' DATE: JUNE, 2007 SHEET 2 OF 2

SDP 08-002

Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein. All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shape shown on the plant list and the American Association of Nurservmen (AAN) Standards. Plant material shall be healthy, vigorous, free from defects, decay, disfiguring roots, sun scald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable, disfigurements. Plant material that is weak or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be freshly dug; no healed-in plants from cold storage will be accepted. Unless otherwise specified, all general conditions, planting operations, details and planting specification shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Areas", Chereinafter "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architect, latest edition, including all agenda.

Contractor shall be required to quarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.

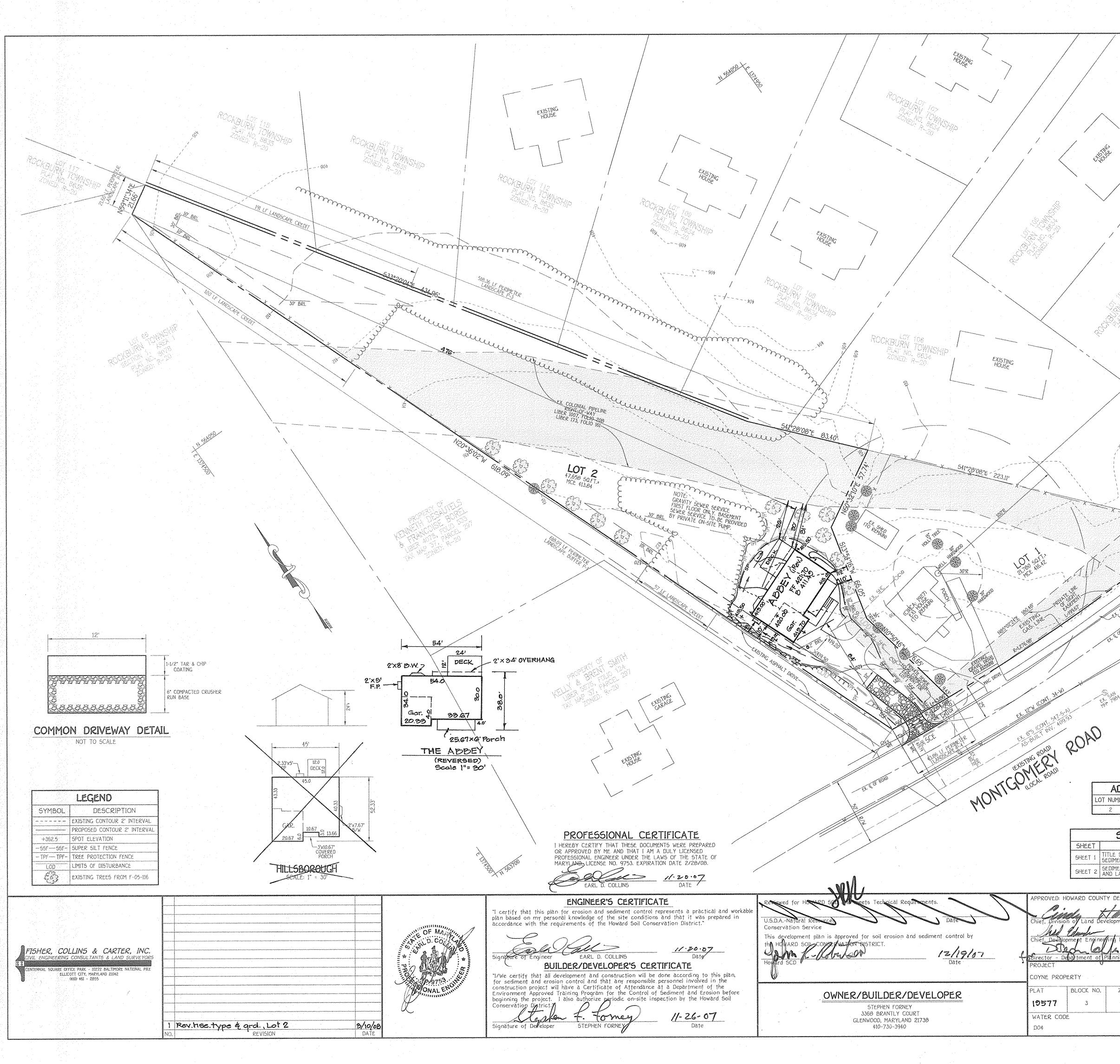
Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 40 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.

Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety fence at the drip line. Contractor id responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing

season of completion of site construction. Bid shall be base on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications

Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plan take precedence All shrubs shall be planted in continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except where noted on plans.



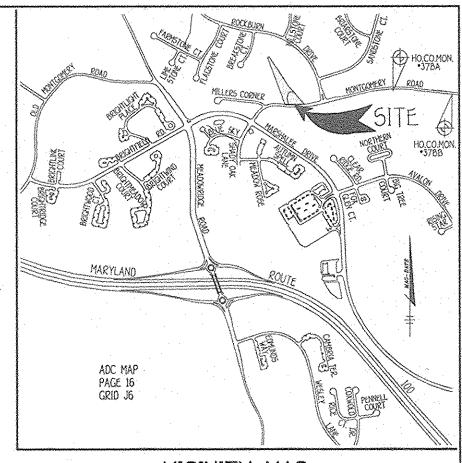


BENCH MARKS T.P. 378A ELEV. 394.019 N. 563,785.618 E. 1.376.343.172

CHOLES

LOC. NEAR THE INTERSECTION OF ROCKBURN DR. & MONTGOMERY RD. T.P. 3788 ELEV. 373.093

N. 563,663.412 E. 1,378040.471 LOC. NEAR THE INTERSECTION OF ROCKBURN WOODS WAY & MONTGOMERY RD.



VICINITY MAP SCALE : 1" = 1200'

GENERAL NOTES

- 1. SUBJECT PROPERTY ZONED R-20 PER 7/28/06 COMPREHENSIVE ZONING PLAN. 2. TOTAL AREA OF SITE: 1.094 AC. OR 47,658 SQUARE FEET. 3. COORDINATES BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY
- GEODETIC CONTROL STATION NO'S. 37BA AND NO. 37BB.
- 5TA. 37BA N563785.618 E1376343.172 ELEV. 394.019 STA. 3788 N563663.412 E1378040.471 ELEV. 373.093
- 4. THIS PLAN IS BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT NOVEMBER, 2004, BY FISHER, COLLINS & CARTER, INC.
- 5. TOTAL NUMBER OF LOTS SUBMITTED: 1 SFD 6. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE CONSTRUCTION INSPECTION
- DIVISION AT 410-313-1880 24 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION. 7. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING & CONSTRUCTION INSPECTION DIVISION AT LEAST. FIVE (5) WORKING DAYS PRIOR TO START OF WORK
- 8. WETLANDS DELINEATED BY ECO-SCIENCE PROFESSIONALS, JANUARY 6, 2005. NO NON-TIDAL WETLANDS EXIST WITHIN PLAN SUBMISSION LIMITS.
- 9. NO 100 YEAR FLOODPLAIN EXISTS ON THIS PROPERTY. 10. PREVIOUS DEPARTMENT OF PLANNING AND ZONING FILE NUMBERS FOR THIS PROPERTY ARE F-05-116, WATER CONTRACT NO. 34-W & SEWER CONTRACT
- NO. 547-5-A. 11. NO CEMETERIES EXIST ON THIS SITE BASED ON A SIGHT VISIT AND BASED ON AN EXAMINATION OF THE HOWARD COUNTY INVENTORY MAP.
- 12. FOREST CONSERVATION FOR THIS SITE WAS ADDRESSED WITH THE CORRESPONDING FINAL (F-05-116).
- 13. IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME I, SECTION 5.1.2.B.2 AND THE SUPPLEMENTAL PLAN ON FILE WITH THIS SUDIVISION, THIS PROJECT IS EXEMPT FROM PROVIDING STORMWATER MANAGEMENT. AS THE TOTAL AREA OF DISTURBANCE IS LESS THAN 5,000 SQUARE FEET.
- 14. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING OF 12 SHADE TREES IN THE
- AMOUNT OF \$3,600.00 IS PART OF THE BUILDERS GRADING PERMIT APPLICATION FOR LOT 2. 15. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY
- PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS: A) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE);
- B) SURFACE SIX (6") INCES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING. (1-1/2" MINIMUM):
- C) GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM 45-FOOT TURNING RADIUS; D) STRUCTURES - (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING
- 25 GROSS TONS (H25-LOADING); E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD
- WITH NO MORE THAN I FOOT DEPTH OVER DRIVEWAY SURFACE: F) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- 16. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- 17. THIS PLAN IS FOR HOUSE SITING AND GRADING ONLY.
- 10. THE CONTRACTOR WILL CHECK THE SEWER HOUSE CONNECTION ELEVATION
- AT THE PROPERTY LINE PRIOR TO THE START OF CONSTRUCTION. 19. FOR DRIVEWAY ENTRANCE DETAIL, REFER TO HOWARD COUNTY CODE MANUAL VOLUME IV DETAIL R.6.05.
- 20. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE. THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACK, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE
- THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK. 21. ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTINGS UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.

SITE ANALYSIS DATA CHART

D. PRESENT ZONING DESIGNATION: R-20

SEWER CONT. NO. 547-S-A

A. TOTAL PROJECT AREA: 1.094 ACRES OR 47,658 SQUARE FEET.

B. AREA OF SUBMISSION: 1.094 ACRES OR 47,658 SQUARE FEET. C. LIMITS OF DISTURBANCE: 0.114 ACRES or 4,950 SQUARE FEET.

E. PROPOSED USE FOR SITE OR STRUCTURE: RESIDENTIAL/SFD

F. DPZ FILE REFERENCES: F-05-116, WATER CONT. NO. 34-W,

50P 08.002

ADDRESS CHART OT NUMBER STREET ADDRESS 5835 MONTGOMERY ROAD

SHEET INDEX DESCRIPTION ITLE SHEET, SIDE DEVELOPMENT. EDIMENT/EROSION CONTROL PLAN SHEET 2 SEDIMENT/EROSION CONTROL NOTES & DETAILS AND LANDSCAPE NOTES & DETAILS

1						
COUNTY DEPARTMENT OF PLANNING AND ZONING			TITLE SHEET, SITE DEVELOPMENT, SEDIMENT/EROSION CONTROL PLAN			
6L	ing Division	nen an		12.21.7 Date 11308 Date	SINGLE FAMILY DETACHED COYNE PROPERTY	
Ū			TION /A	LOT NO. 2	LOT 2	
NO.	ZONE R-20	TAX/ZONE 37 SEWER CODE	ELEC. D	IST. CENSUS TR. 6011.01	ZONED R-20 PLAT NO. 19577 TAX MAP NO.: 37 GRID NO.: 3 PARCEL NO.: 34 IST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: 1" = 30' DATE: JUNE, 2007	• .
		2721500			SHEET 1 OF 2	