

STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

Using vegetation as cover for barren soil to protect it from erosion...
 Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil...
 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 provide temporary vegetative cover for short duration (up to one year), and Permanent Seeding for long term vegetative cover...
 Examples of applicable areas for Temporary Seeding are: Temporary Soil Stabilization and Areas Left Bare Between Construction Phases, earth dikes, etc. and for Permanent Seeding are: berms, dikes, cut and fill slopes and other areas at final grade, former stockpiles and staging areas, etc.

EFFECTS ON WATER QUALITY AND QUANTITY
 The water budget, especially on volumes and rates of runoff, infiltration, evaporation, 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 will also help protect groundwater supplies by assimilating these substances present within the root zone. Sediment control devices must remain in place during grading, seedbed preparation, seeding, mowing 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
 1. Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
 2. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
 3. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.

B. Soil Amendment (Site Specific)
 1. 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 purposes may also be used for chemical analysis.
 2. Fertilizer 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 to the applicable state fertilizer laws and shall have the correct name or trademark and verbiage of the producer.
 3. Lime materials shall be ground limestone (hydrated or burnt lime may be substituted which contains at least 50% total oxidized calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 90-100% will pass through a #20 mesh sieve.
 4. Incorporate lime and fertilizer into the top 3-5" of soil by discing or other suitable means.

C. Temporary Seeding
 1. Seeding preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or ripers mounted on construction equipment. After the soil is loosened it should not be used or disposed of, but left in the roughened condition. Sloped areas greater than 3:1 should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
 2. Apply fertilizer and lime as prescribed on the plans.
 3. Apply fertilizer and lime as prescribed on the plans.
 4. Permanent Seeding
 a. Minimum soil conditions required for permanent vegetative establishment:
 1. Soils shall be less than 500 parts per million (ppm).
 2. The soil shall contain less than 40% clay, but more than 10% silt and 10% sand. The soil shall be capable of holding a moderate amount of moisture. An exception to this is for soils with a high percentage of silt and clay which is to be planted, then a sandy soil (50% silt plus clay) would be acceptable.
 3. Soil must contain sufficient pore space to permit adequate root penetration.
 4. If these conditions are not met, soil amending practices are required in accordance with Section 21 Standard and Specification for Topsoil.
 b. Areas previously graded in conformance with the drainage shall be maintained in a true and even grade, then acidified 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 topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
 c. Apply soil amendments as per soil test or as included on the plans.
 d. Mix soil amendments into the top 3-5" of topsoil by discing or other suitable means. Lawn areas should be rolled to smooth the surface, remove large objects like stones and branches, and then acidified 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 topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
 e. Apply soil amendments as per soil test or as included on the plans.
 f. Mix soil amendments into the top 3-5" of topsoil by discing or other suitable means. Lawn areas should be rolled to smooth the surface, remove large objects like stones and branches, and then acidified 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 topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.

D. Seed Specifications
 1. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to retesting by a certified inspector to verify type and rate of seed used.
 2. Note: Seed shall be tested to the inspector to verify type and rate of seed used.
 3. Inoculant - The inoculant for treating legume seed in the seed mixture shall be a pure culture of the bacteria indicated on the container. Add fresh inoculant as directed on package. Use four times the amount of inoculant as directed on package. Inoculant shall be applied to a clean seed and mixed until seed temperatures below 75°F. Inoculant bacteria and make the inoculant less effective.
 E. Method of Seeding
 1. Hydroseeding - Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seed using a carrier spreader.
 a. If fertilizer is being applied at the time of seeding, the application rate amounts will not exceed the following: nitrogen maximum of 100 lb. per acre total of soluble nitrogen; P2O5 (phosphorus) maximum of 120 lb. per acre; K2O (potassium) 200 lb. per acre.
 b. Lime - use only ground agricultural limestone, up to 3 tons per acre may be applied by hydroseeder. Normally, not more than 2 inches of limestone shall be applied in any one time. Do not use burnt or hydrated lime when hydroseeding.
 c. Seed amount on site shall be done immediately and without interruption.
 2. Dry Seeding - The inclusion of conventional drop or broadcast spreaders.
 a. Seed spreader shall be inspected into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summary or Tables 205 or 206. The seed rate shall then be reduced to a specified rate to provide good seed to soil contact.
 b. Where practical, seed should be applied in two directions perpendicular to each other.
 c. Seed amount on site shall be done immediately and without interruption.
 3. Drill or Cultivator Seeding - Mechanized seeding that apply and cover seed with soil.
 a. Cultivating seeders are required to lay the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seeded must be firm after planting.
 b. Where practical, seed should be applied in two directions perpendicular to each other.
 c. Apply the seeding rate in each direction.
 F. Muck Specifications
 1. Straw shall consist of thoroughly treated wheat, rye or oat straw, reasonable bright in color, and shall not be matted, moldy, contain seeds, or excessively dirty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
 2. Wood Chippings Fiber Muck (WCFM)
 a. WCFM shall consist of specially prepared wood chippings processed into a uniform fibrous physical state.
 b. WCFM shall be dried green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniform spread muck.
 c. WCFM shall be manufactured and processed in such a manner that the muck material shall be uniform in composition and shall be free of noxious weed seeds and shall be used with seed, fertilizer and additives to form a homogeneous slurry. The muck material shall form a borier-like ground cover, on application, having moisture absorption and permeation properties and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 d. WCFM shall conform to the following physical requirements: fiber length to approximately 1/2 inch, diameter approximately 1/16 inch, pH range of 4.0 to 8.5, ash content of 10% to 15% and moisture content of 60% to 70%.
 Note: Only sterile straw muck should be used in areas where one species of grass is desired.
 G. Mulching
 1. Mulching seeders are required to lay the seed in such a fashion as to provide a uniform distribution and depth so that the soil surface is not exposed. If a muck anchoring tool is to be used, the rate shall be increased to 2.5 tons per acre.
 2. When straw muck is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Muck shall be applied to a depth of between 2" and 4". Muck shall be applied to a depth of between 2" and 4". Muck shall be applied to a depth of between 2" and 4".
 3. Wood chippings fiber muck shall be applied at a net dry weight of 1,000 lbs. per acre. The muck shall be applied to a depth of between 2" and 4". Muck shall be applied to a depth of between 2" and 4". Muck shall be applied to a depth of between 2" and 4".
 4. A muck anchoring tool shall be used to anchor the muck to the soil. This practice is most effective on large slopes and shall be used on the contour if possible.
 5. Wood chippings fiber muck shall be applied to a depth of between 2" and 4". Muck shall be applied to a depth of between 2" and 4". Muck shall be applied to a depth of between 2" and 4".
 6. Application of liquid fertilizer shall be done immediately after seeding. Synthetic fertilizers such as Acrylic Urea (Agro-22), Urea-70 Fertilizer, etc. shall be used. All other approved fertilizers may be used as recommended by the manufacturer to anchor muck.
 7. Lightweight plastic netting may be established over the muck according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' wide and 300 to 3,000 feet long.

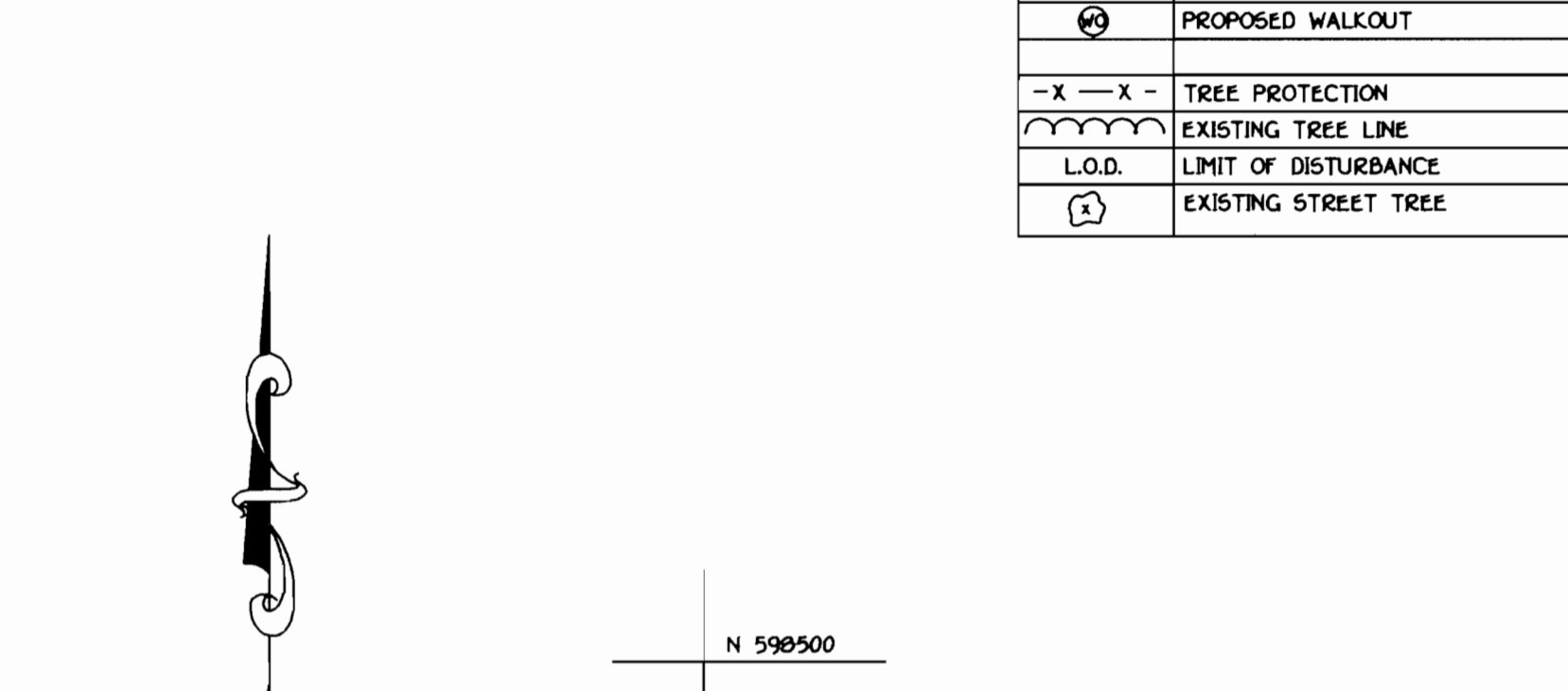
TEMPORARY SEEDING NOTES
 APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RECONSTRUCTED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.
 SEEDING PREPARATION
 LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.
 SOIL AMENDMENTS
 APPLY 500 LBS. PER ACRE 10-10-10 FERTILIZER 04 LBS./1000 SQ.FT.
 SEEDING
 FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 17 BUSHEL PER ACRE OF ANNUAL RYE (132 LBS./ACRE) OR WHEATING LONGLEAVES (107 LBS./1000 SQ.FT.) FOR THE PERIOD NOVEMBER 15 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 500.
 MULCHING
 APPLY 1 TO 2 TONS PER ACRE (20 TO 90 LBS./1000 SQ.FT.) OF UNMOTTLED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 2 1/2 GALLONS PER ACRE (5 GALLONS SQ.FT.) OF SPREADER MULCH ON FLAT AREAS ON SLOPES 6 FEET OR HIGHER, USE 3/4 GALLONS PER ACRE (5 GALLONS SQ.FT.) FOR ANCHORING.
 REFERS TO THE 1986 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEQUENCE OF CONSTRUCTION
 1. OBTAIN GRADING PERMIT.
 2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN.
 3. CLEAR AND GRUB TO LIMITS OF DISTURBANCE AND PAAS GRADE TO SUB-BASE.
 4. INSTALL TEMPORARY SEEDING.
 5. CONSTRUCT UTILITIES (M&E AND SH&I).
 6. CONSTRUCT DWELLING.
 7. FINE GRADE SITE AND INSTALL PERMANENT SEEDING. LANDSCAPE, SIDEWALKS AND DRIVEWAY.
 8. REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERMISSION IS GRANTED BY E/S CONTROL INSPECTOR.

ENGINEER'S CERTIFICATE
 I certify that this plan for sediment and erosion control represents a practical and workable plan based on the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 Signature of Engineer (print name below signature) **Earl D. Collins** Date **4.9.01**
EARL D. COLLINS
 PROFESSIONAL ENGINEER
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 also authorize persons on-site inspection by the Howard Soil Conservation District.
 Signature of Developer (print name below signature) **Steve Forney** Date **4.9.01**
STEVE FORNEY

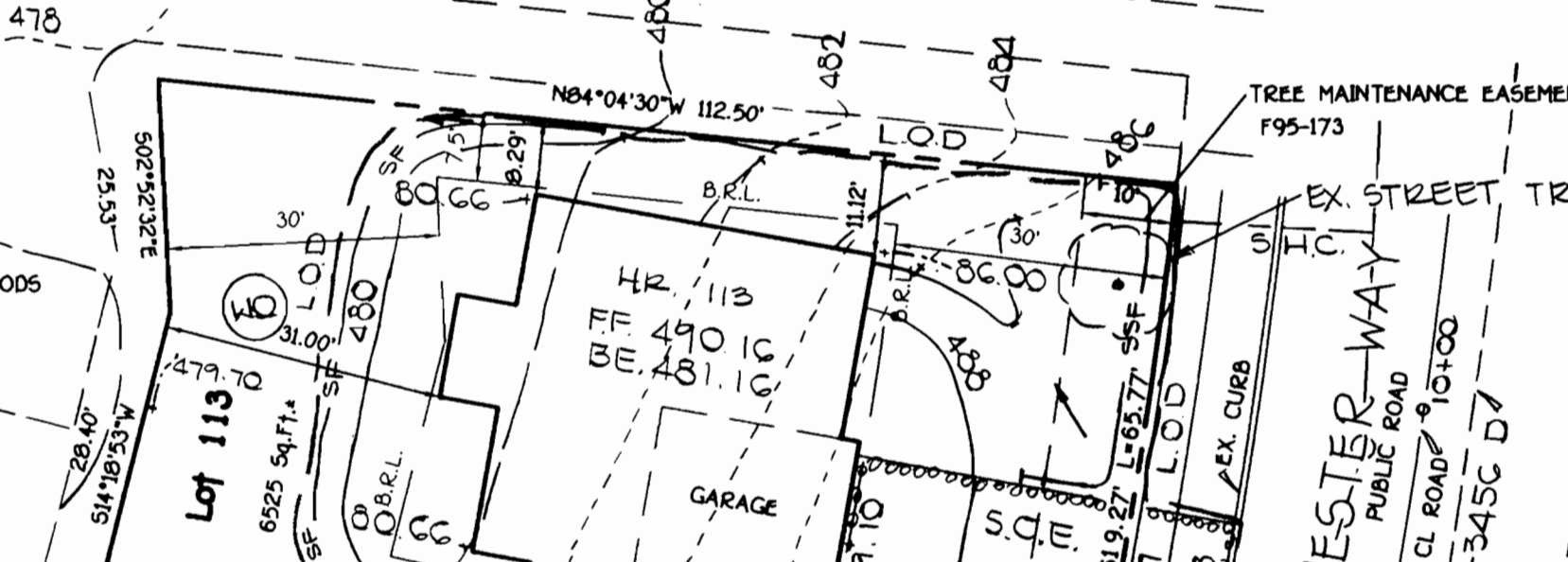
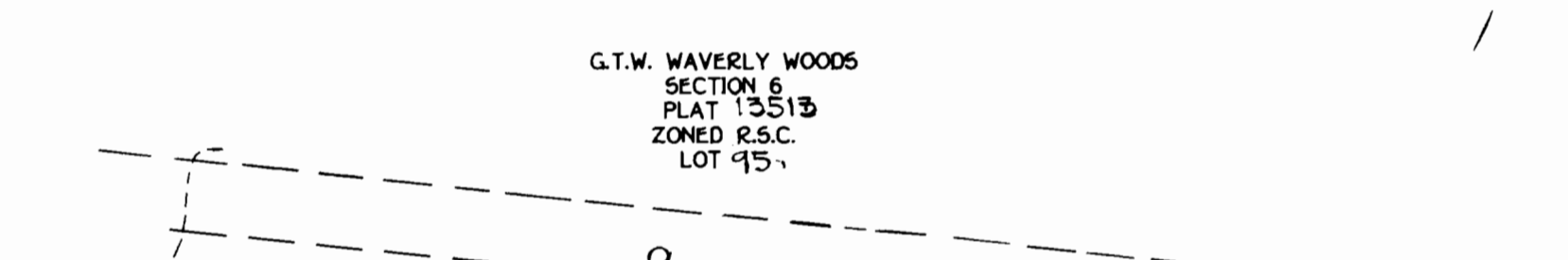
LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
• 624	SPOT ELEVATION
-SF-SF-	SILT FENCE
-SF-SF-	SUPER SILT FENCE
FF	FIRST FLOOR ELEVATION
BE	BASEMENT ELEVATION
⊕	PROPOSED WALKOUT
-X-X-	TREE PROTECTION
---	EXISTING TREE LINE
L.O.D.	LIMIT OF DISTURBANCE
---	EXISTING STREET TREE



STABILIZED CONSTRUCTION ENTRANCE - 2
 NOT TO SCALE

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 500 LBS. PER ACRE 10-10-10 FERTILIZER 04 LBS./1000 SQ.FT. AND 600 LBS. PER ACRE 0-20-20 FERTILIZER 04 LBS./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./1000 SQ.FT.) AND 500 LBS. PER ACRE (115 LBS./1000 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./1000 SQ.FT.) OF KENTUCKY 3 TALL FESCUE. FOR THE PERIOD MARCH 1 THROUGH JULY 31, SEED WITH 80 LBS./ACRE (4 LBS./1000 SQ.FT.) FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1000 SQ.FT.) OF WHEATING LONGLEAVES. DURING THE PERIOD OF OCTOBER 15 THROUGH FEBRUARY 28, PROTECT SITE BY OPTION D - USE 500. OPTION D - SEED WITH 100 LBS./ACRE OF KENTUCKY 3 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEEDED.
 MULCHING
 APPLY 1 TO 2 TONS PER ACRE (20 TO 90 LBS./1000 SQ.FT.) OF UNMOTTLED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GALLONS SQ.FT.) OF SPREADER ASPHALT ON FLAT AREAS ON SLOPES 6 FEET OR HIGHER, USE 3/4 GALLONS PER ACRE (5 GALLONS SQ.FT.) FOR ANCHORING.
 MAINTENANCE
 INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.
 * FOR PUBLIC PONDS SUBSTITUTE CHIPPING CROWNWET AT 15 LBS./ACRE AND KENTUCKY 3 TALL FESCUE AT 40 LBS./ACRE AS THE SEEDING EQUIPMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.



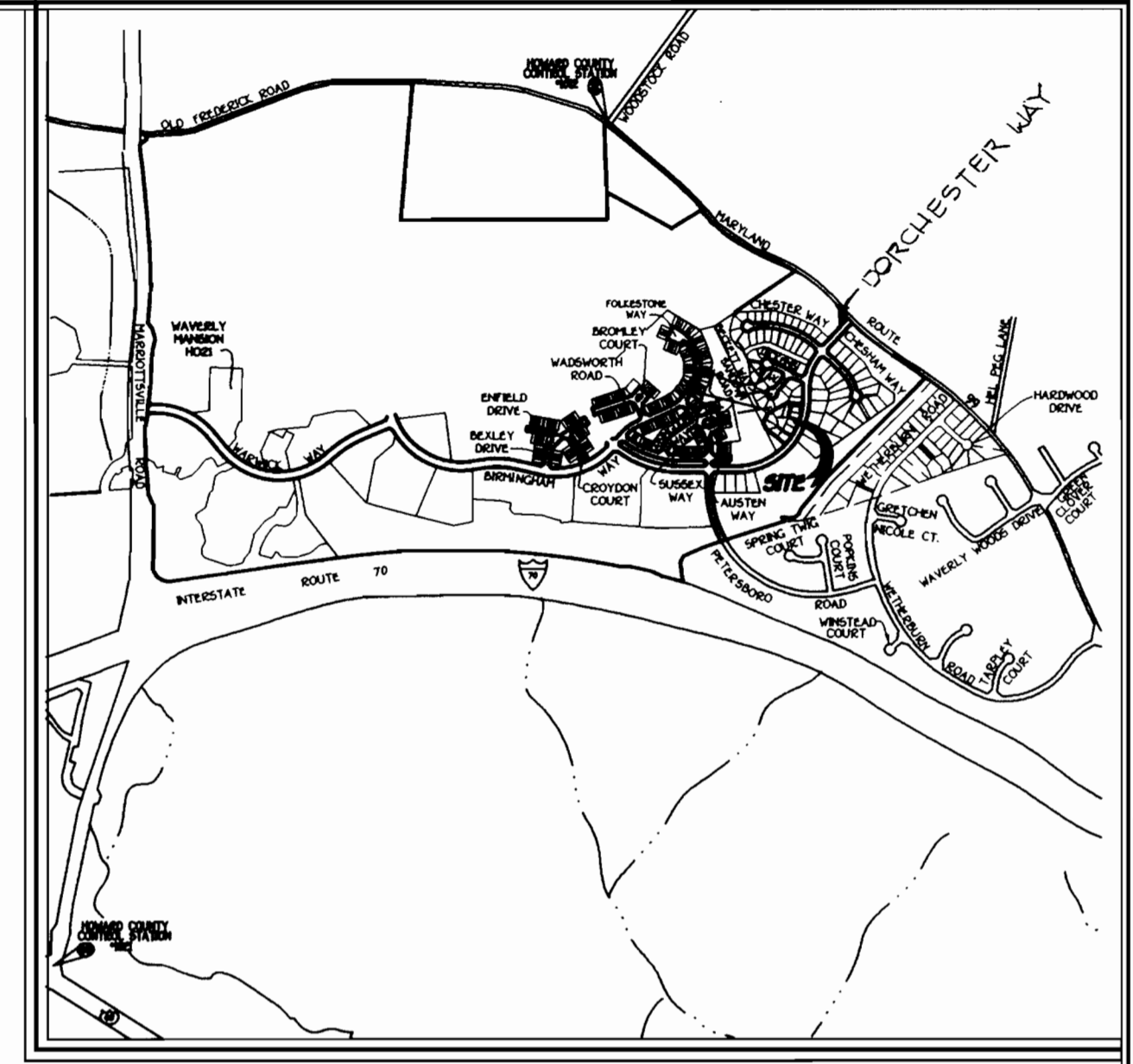
GENERAL NOTES
 1. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST 5 FIVE WORKING DAYS PRIOR TO THE START OF WORK.
 2. THE CONTRACTOR SHALL NOTIFY 'MISY UTILITY' AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
 3. THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: F 90-80 P-9024, 5-94-07 and F01-49.
 4. BOUNDARY SURVEY PERFORMED BY FISHER COLLINS AND CARTER INC. ON OR ABOUT AUGUST, 1990.
 5. TOPOGRAPHY TAKEN FROM ROAD DRAWINGS F 90-80.
 6. HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS.
 HOWARD COUNTY MONUMENT 1012 N 60106/1777
 HOWARD COUNTY MONUMENT 1768 E 1345336/7580
 N 533250/3922
 E 134092/1000
 7. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
 8. THIS PLAN IS FOR HOUSE SITING AND LOT GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHTS-OF-WAYS OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION. FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F 90-80 AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 20-3676-D AND 24-3636-D.
 9. CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
 10. STORM WATER MANAGEMENT OBLIGATIONS ARE FULFILLED UNDER SDP 90-35
 11. SITE ANALYSIS DATA:
 A. TOTAL PROJECT AREA: 0.149 AC.
 B. AREA OF PLAN SUBMISSION: 0.149 AC.
 C. LIMIT OF DISTURBED AREA: 0.149 AC.
 D. PRESENT ZONING: RSC PER THE 10/18/93 COMPREHENSIVE ZONING PLAN.
 E. PROPOSED USE FOR SITE AND STRUCTURES: SINGLE FAMILY DETACHED D.U.
 F. TOTAL NUMBER OF UNITS ALLOWED: 1
 G. TOTAL NUMBER OF UNITS PROPOSED: 1
 H. NUMBER OF PARKING SPACES REQUIRED: 2
 I. (2 SPACES PER DWELLING UNIT)
 J. NUMBER OF PARKING SPACES PROVIDED: 2
 K. OPEN SPACE REQUIREMENTS ARE PROVIDED SEE F 90-80
 13. Forest conservation obligation has been met under F90-80 Section 6, GTW's Waverly Woods
 14. Landscaping for lots 103 through 113 is provided in accordance with Section 6.12.4 of the Howard County Code and the Landscape Manual. Landscape surety in the amount of \$16,500 has been posted with the developer agreement (LANDSCAPING OBLIGATION WAS FULFILLED WITH \$16,500).
 15. Contractor to use Howard County standard Detail R6.01 Residential Driveway Entrance.

ADDRESS CHART

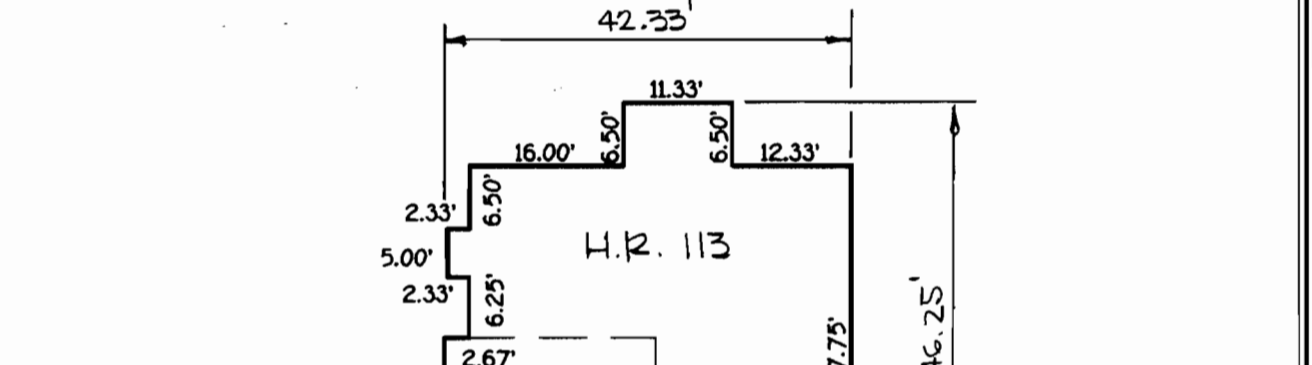
LOT NUMBER	STREET ADDRESS	SHEET NO.	DESCRIPTION
113	10524 DORCHESTER WAY	1 OF 1	SITE DEVELOPMENT PLAN, DETAIL SHEET AND SEDIMENT AND EROSION CONTROL PLAN

IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 10 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS PORCHES OR DECKS, OPEN OR ENCLOSED, MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR SETBACK.

DEVELOPER/OWNER
 HAMILTON-ZEED
 8000 MAIN STREET
 ELLICOTT CITY, MARYLAND
 21043
 410-460-9146



VICINITY MAP
 SCALE: 1" = 100'



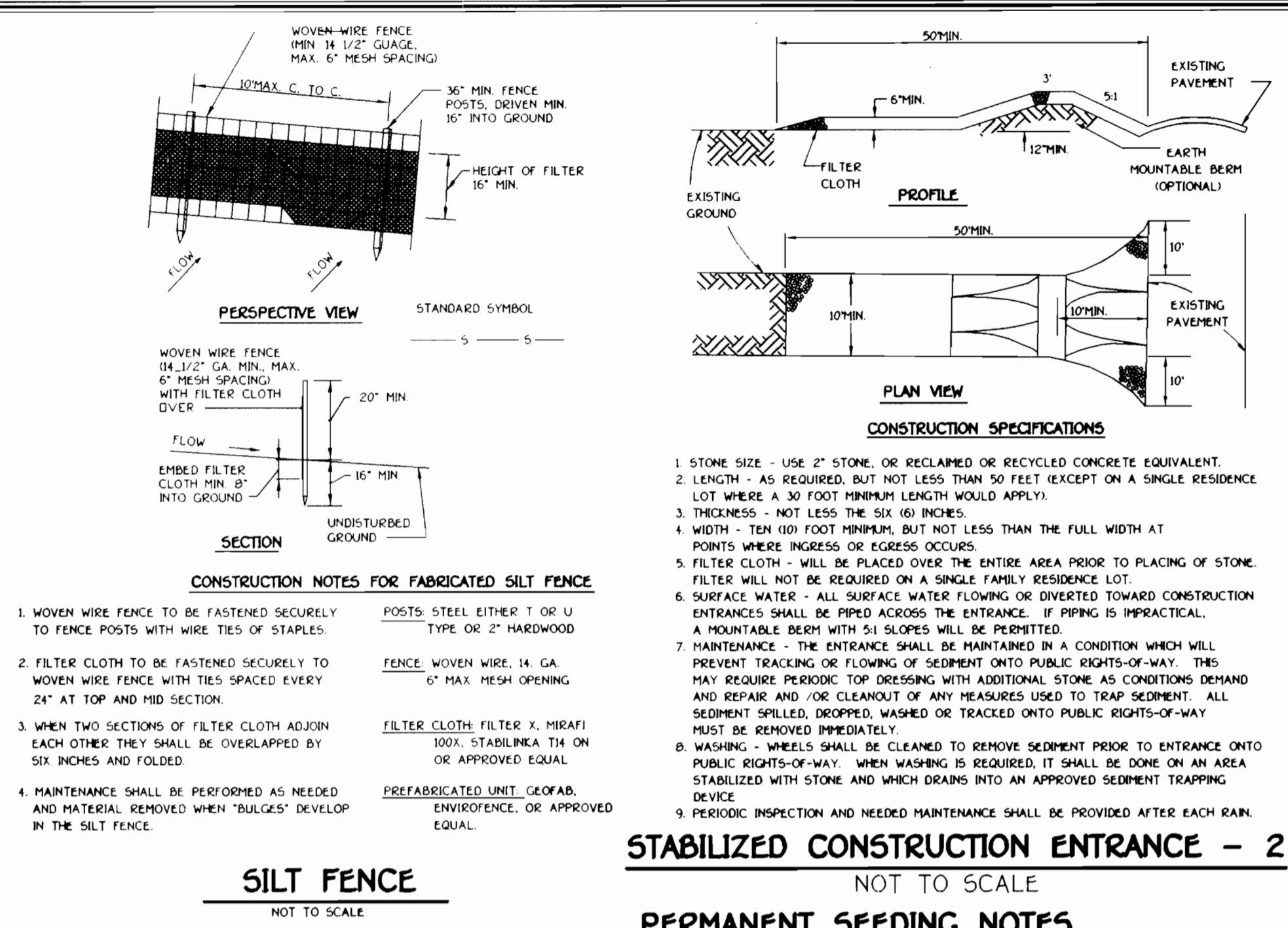
PLAN & PROFILE
 SCALE 1" = 20'

GENERAL NOTES
 1. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST 5 FIVE WORKING DAYS PRIOR TO THE START OF WORK.
 2. THE CONTRACTOR SHALL NOTIFY 'MISY UTILITY' AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
 3. THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: F 90-80 P-9024, 5-94-07 and F01-49.
 4. BOUNDARY SURVEY PERFORMED BY FISHER COLLINS AND CARTER INC. ON OR ABOUT AUGUST, 1990.
 5. TOPOGRAPHY TAKEN FROM ROAD DRAWINGS F 90-80.
 6. HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS.
 HOWARD COUNTY MONUMENT 1012 N 60106/1777
 HOWARD COUNTY MONUMENT 1768 E 1345336/7580
 N 533250/3922
 E 134092/1000
 7. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
 8. THIS PLAN IS FOR HOUSE SITING AND LOT GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHTS-OF-WAYS OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION. FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F 90-80 AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 20-3676-D AND 24-3636-D.
 9. CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
 10. STORM WATER MANAGEMENT OBLIGATIONS ARE FULFILLED UNDER SDP 90-35
 11. SITE ANALYSIS DATA:
 A. TOTAL PROJECT AREA: 0.149 AC.
 B. AREA OF PLAN SUBMISSION: 0.149 AC.
 C. LIMIT OF DISTURBED AREA: 0.149 AC.
 D. PRESENT ZONING: RSC PER THE 10/18/93 COMPREHENSIVE ZONING PLAN.
 E. PROPOSED USE FOR SITE AND STRUCTURES: SINGLE FAMILY DETACHED D.U.
 F. TOTAL NUMBER OF UNITS ALLOWED: 1
 G. TOTAL NUMBER OF UNITS PROPOSED: 1
 H. NUMBER OF PARKING SPACES REQUIRED: 2
 I. (2 SPACES PER DWELLING UNIT)
 J. NUMBER OF PARKING SPACES PROVIDED: 2
 K. OPEN SPACE REQUIREMENTS ARE PROVIDED SEE F 90-80
 13. Forest conservation obligation has been met under F90-80 Section 6, GTW's Waverly Woods
 14. Landscaping for lots 103 through 113 is provided in accordance with Section 6.12.4 of the Howard County Code and the Landscape Manual. Landscape surety in the amount of \$16,500 has been posted with the developer agreement (LANDSCAPING OBLIGATION WAS FULFILLED WITH \$16,500).
 15. Contractor to use Howard County standard Detail R6.01 Residential Driveway Entrance.

DEVELOPER/OWNER
 HAMILTON-ZEED
 8000 MAIN STREET
 ELLICOTT CITY, MARYLAND
 21043
 410-460-9146

DEVELOPER/OWNER
 HAMILTON-ZEED
 8000 MAIN STREET
 ELLICOTT CITY, MARYLAND
 21043
 410-460-9146

SITE DEVELOPMENT PLAN NOTES AND DETAILS
SEDIMENT AND EROSION CONTROL PLAN
GTW'S WAVERLY WOODS
 SECTION 6
 LOT 113
 TAX MAP No.: 16 PART OF PARCEL No.: 20
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: FEBRUARY 9, 2001
 SHEET 1 OF 1



SILT FENCE
 NOT TO SCALE

SEDIMENT CONTROL NOTES

1. 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 (133-1855).
 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 Provisions Of The Plan And Are To Be In Conformance With The Most Current Maryland Standards And Specifications For Soil Erosion And Sediment Control And Revisions Thereto.
 3. 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, Or As To All Other Disturbed Or Graded Areas On The Project Site.
 4. 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, 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. 50), Sed. (Sec. 54), Temporary Seeding (Sec. 50), And Mulching (Sec. 52). Temporary Stabilization With Much Alone Can Only Be Done When Recommended Seeding Dates Do Not Allow For Proper Germination And Establishment Of Grasses.
 6. 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.
 7. Site Analysis:
 Total Area Of Site: 0.149 Acres
 Area Disturbed: 0.149 Acres
 Area To Be Roofed Or Paved: 0.062 Acres
 Area To Be Vegetatively Stabilized: 0.087 Acres
 Total Cut: 400 Cu.Yds.
 Total Fill: 400 Cu.Yds.
 Off-Site Waste/Borrow Area Location: Cu.Yds.
 8. Any Sediment Control Practice Which Is Disturbed By Grading Activity For Placement Of Utilities Must Be Repaired On The 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 Control, But Before Proceeding With Any Other Earth Operations May Not Be Authorized Until This Initial Approval By The Inspection Agency Is Made.
 11. 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 RECONSTRUCTED 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 500 LBS. PER ACRE 10-10-10 FERTILIZER 04 LBS./1000 SQ.FT.
 SEEDING
 FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 17 BUSHEL PER ACRE OF ANNUAL RYE (132 LBS./ACRE) OR WHEATING LONGLEAVES (107 LBS./1000 SQ.FT.) FOR THE PERIOD NOVEMBER 15 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 500.
 MULCHING
 APPLY 1 TO 2 TONS PER ACRE (20 TO 90 LBS./1000 SQ.FT.) OF UNMOTTLED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 2 1/2 GALLONS PER ACRE (5 GALLONS SQ.FT.) OF SPREADER MULCH ON FLAT AREAS ON SLOPES 6 FEET OR HIGHER, USE 3/4 GALLONS PER ACRE (5 GALLONS SQ.FT.) FOR ANCHORING.
 REFERS TO THE 1986 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEQUENCE OF CONSTRUCTION
 1. OBTAIN GRADING PERMIT.
 2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN.
 3. CLEAR AND GRUB TO LIMITS OF DISTURBANCE AND PAAS GRADE TO SUB-BASE.
 4. INSTALL TEMPORARY SEEDING.
 5. CONSTRUCT UTILITIES (M&E AND SH&I).
 6. CONSTRUCT DWELLING.
 7. FINE GRADE SITE AND INSTALL PERMANENT SEEDING. LANDSCAPE, SIDEWALKS AND DRIVEWAY.
 8. REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERMISSION IS GRANTED BY E/S CONTROL INSPECTOR.

ENGINEER'S CERTIFICATE
 I certify that this plan for sediment and erosion control represents a practical and workable plan based on the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 Signature of Engineer (print name below signature) **Earl D. Collins** Date **4.9.01**
EARL D. COLLINS
 PROFESSIONAL ENGINEER
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 also authorize persons on-site inspection by the Howard Soil Conservation District.
 Signature of Developer (print name below signature) **Steve Forney** Date **4.9.01**
STEVE FORNEY

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 410-461-2999
 G:\LIBRARY\SDP\SINGLE LOT SDP BASE

DATE DESCRIPTION REVISION BLOCK