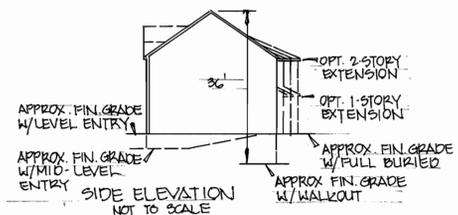


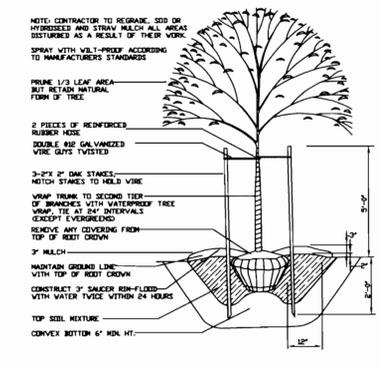
TYPICAL FOOTPRINT
SCALE 1" = 30'



PLANTING SPECIFICATIONS

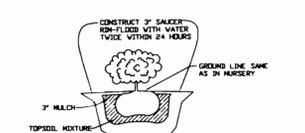
Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein. All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, free of a significant pest system, and shall conform to the species, size, root and shape shown on the plans and the American Association of Plant Growers Standards. Plant material shall be healthy, vigorous, free from artificial, decay, damaging root, stem, leaf, or branch damage, and shall be free of insect infestations or other plant damage. Plant material shall be well established and shall be free of insect infestations or other plant damage. Plants shall be freshly dug and shall be protected from cold storage until they are accepted. Plants with forked leaders will not be accepted. All plants shall be freshly dug and shall be protected from cold storage until they are accepted. Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 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 site. Contractor is 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 based 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. Positive drainage shall be maintained in planting beds (2 percent slope). Planting shall be as follows: Deciduous Plants - Two parts topsoil, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - Two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Subspecification. Weed Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its suitability to the specific ground cover to be treated. All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded. This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.

TREE PLANTING DETAIL



TREE PLANTING DETAIL

EVERGREEN PLANTING DETAIL



SHRUB PLANTING DETAIL

LANDSCAPE DEVELOPER'S CERTIFICATE
I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a certification of landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.
Wayne Flack 4/17/01
Name Date

This plan has been prepared in accordance with the provision of Section 16.124 of the Howard County Code and Landscape Manual. Financial surety for the required landscaping will be posted as part of the builder's grading permit application for 41 shade trees, 14 ornamental and 9 evergreen trees in the amount of \$15,750.00.

PLANT LIST

NUMBER	KEY	NAME
13	⊙	SHADE TREE - ACER RUBRUM OCTOBER GLORY / OCTOBER GLORY RED MAPLE 2 1/2" - 3" CAL.
14	⊙	FRAXINUS AMERICANA, AUTUMN PURPLE (AUTUMN PURPLE WHITE ASH) 2 1/2" - 3" CAL.
14	⊙	LIQUIDAMBAR STYRACIFLUA (AMERICAN SWEET GUM) 2 1/2" - 3" CAL.
14	⊙	ORNAMENTAL TREE - UNDERSTORY TREE PRUNUS SEROTINATA KWANZAN (KWANZAN CHERRY) 1 1/2" - 2"
9	⊙	EVERGREEN - PINUS STROBUS - EASTERN WHITE PINE 6'-8' HT.

SCHEDULE B

NUMBER OF PARKING SPACES = 14
NUMBER OF TREES REQUIRED = 2
NUMBER OF TREES PROVIDED = 2
SHADE TREES = 2
OTHER TREES = -

SCHEDULE C

NUMBER OF DWELLING UNITS = 41
NUMBER OF TREES REQUIRED = 41
NUMBER OF TREES PROVIDED = 2
SHADE TREES = 34
OTHER TREES = 14
(2) SUBSTITUTION

SCHEDULE A

LANDSCAPE TYPE
ADJACENT TO ROADWAYS TYPE C
LINEAR FEET OF ROADWAY 184.26'
NUMBER OF PLANTS REQUIRED
SHADE TREES 5
EVERGREEN TREES 9
NUMBER OF PLANTS PROVIDED
SHADE TREES 5
EVERGREEN TREES 9

LEGEND

Symbol	Description
⊙	Existing Contour 2' Interval
⊙	Existing Contour 10' Interval
⊙	Proposed Contour 2' Interval
⊙	Proposed Contour 10' Interval
+	Spot Elevation
-SF-SF-	Silt Fence
FF	First Floor Elevation
BE	Basement Elevation
⊙	Proposed Walkout
⊙	Earth Dike
-X-X-	Tree Protection
⊙	Existing Tree Line
L.O.D.	Limit Of Disturbance
⊙	Existing Street Tree

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE, P.O. BOX 10772 BALTIMORE NATIONAL FIRE
ELICOTT CITY, MARYLAND 21042
410.581.2895



ENGINEER'S CERTIFICATE
"I certify that this plan for erosion and sediment 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."
Wayne Flack 4/17/01
Signature of Engineer (Print name below signature) Date

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 any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
Wayne Flack 4/17/01
Signature of Developer (Print name below signature) Date

Reviewed for HOWARD SCD and meets Technical Requirements.
Jim Mayers 4/25/01
U.S.A.-Natural Resources Conservation Service Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
Jim R. Robinson 4/25/01
Howard SCD Date

OWNER
GTW JOINT VENTURE
LAND DESIGN
AND DEVELOPMENT, LLC
8000 MAIN STREET
ELICOTT CITY, MARYLAND 21042

DEVELOPER
N. V. HOMES
2200 DEFENSE HIGHWAY
SUITE 301
CROFTON, MARYLAND
21114

APPROVED DEPARTMENT OF PLANNING AND ZONING
Conchita Hamilton 5/23/01
Chief, Division of Land Development Date

Robert Carmona 4/20/01
Chief, Development Engineering Division Date

John P. Davis 5/23/01
Director, Department of Planning and Zoning Date

PROJECT: GTW'S WAVERLY WOODS SECTION: 12 LOT NO.: 1-7, 9-37, AND 78-82

PLAT: 14789-14797 BLOCK NO.: 5 ZONE: R-SA-B TAX/ZONE: 16 ELEC. DIST.: THRD CENSUS TR.: 6030

WATER CODE: H-05 SEWER CODE: 5993000

SITE DEVELOPMENT PLAN
SOIL EROSION AND SEDIMENT CONTROL AND LANDSCAPE PLAN

GTW'S WAVERLY WOODS
SECTION 12
SINGLE FAMILY ATTACHED DWELLINGS
LOTS 1 -7, 9-37, AND 78-82
ZONED: R-SA-B

TAX MAP No: 16 PART OF PARCEL: 20
THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: FEBRUARY, 2001
SHEET 2 OF 3

S.D.P. 01-96

STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

DEFINITION: Using vegetation as cover for barren soil to protect it from forces that cause erosion. 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 runoff to downstream. And, erosion will be reduced and improved wildlife habitat and visual resources will be maintained.

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. The specification is divided into Temporary Seeding to stabilize vegetation 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 construction phases, earth ditches, etc. and for Permanent Seeding are lawns, dunes, 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. It will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seeding preparation, seeding, mulching and vegetative establishment to prevent large volumes of sediment and associated chemicals and nutrients from washing into surface waters.

- SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS**
- Site Preparation**
 - Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
 - Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
 - Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas 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 Cooperative Extension Laboratory. Soil samples taken for engineering purposes may also be used for chemical analysis.
 - Fertilizers shall be used in composition, free flowing and suitable for accurate application by approved equipment. Phosphate 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 must bear the name, trade name or manufacturer and weight of the product.
 - Lime materials shall be ground limestone (dusted) or burnt lime may be substituted which contains at least 50% total oxide (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.
 - Incorporate lime and fertilizer into the top 3-5" of soil by discing or other suitable means.**
 - Temporary Seeding**
 - 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 plow or ripper mounted on construction equipment. After the soil is loosened it should not be rolled or disced smooth, 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.
 - Apply fertilizer and lime as prescribed on the plans.
 - Incorporate lime and fertilizer into the top 3-5" of soil by discing or other suitable means.
 - Permanent Seeding**
 - Minimum soil conditions required for permanent vegetative establishment:
 - Soil shall contain less than 500 parts per million (ppm) of lead.
 - The soil shall contain less than 400 ppm of cadmium.
 - The soil shall contain less than 100 ppm of copper.
 - The soil shall contain less than 100 ppm of zinc.
 - The soil shall contain less than 100 ppm of nickel.
 - The soil shall contain less than 100 ppm of manganese.
 - The soil shall contain less than 100 ppm of iron.
 - The soil shall contain less than 100 ppm of aluminum.
 - The soil shall contain less than 100 ppm of boron.
 - The soil shall contain less than 100 ppm of sodium.
 - The soil shall contain less than 100 ppm of potassium.
 - The soil shall contain less than 100 ppm of phosphorus.
 - The soil shall contain less than 100 ppm of chlorine.
 - The soil shall contain less than 100 ppm of sulfur.
 - The soil shall contain less than 100 ppm of magnesium.
 - The soil shall contain less than 100 ppm of calcium.
 - The soil shall contain less than 100 ppm of silicon.
 - The soil shall contain less than 100 ppm of oxygen.
 - The soil shall contain less than 100 ppm of hydrogen.
 - The soil shall contain less than 100 ppm of carbon.
 - The soil shall contain less than 100 ppm of nitrogen.
 - The soil shall contain less than 100 ppm of phosphorus.
 - The soil shall contain less than 100 ppm of potassium.
 - The soil shall contain less than 100 ppm of calcium.
 - The soil shall contain less than 100 ppm of magnesium.
 - The soil shall contain less than 100 ppm of silicon.
 - The soil shall contain less than 100 ppm of oxygen.
 - The soil shall contain less than 100 ppm of hydrogen.
 - The soil shall contain less than 100 ppm of carbon.
 - The soil shall contain less than 100 ppm of nitrogen.
 - Soil shall contain sufficient pore space to permit adequate root penetration.
 - If these conditions cannot be met by soil as existing 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 topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
 - Apply soil amendments to per soil test or as included on the plans.
 - 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. For other areas, the soil should be smoothed and applications will not permit normal seeded 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 a rut 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. Seeded loosening may not be necessary on newly disturbed areas.

SEED SPECIFICATIONS

- All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to thorough inspection by a seed inspector. All seed must be tested for purity and germination immediately preceding the date of sowing such material on the job.
- Note: Seed test shall be made available to the inspector to verify type and rate of seed used.
- Inoculant - The inoculant for treating legume seeds in the seed mixture shall be a pure culture of the rhizobium species for the legume to be sown. The inoculant shall be applied to the seed in a ratio of 1:1 (inoculant to seed) and shall be applied to the seed in a ratio of 1:1 (inoculant to seed) and shall be applied to the seed in a ratio of 1:1 (inoculant to seed).
- Methods of Seeding
 - 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 exceed the following: nitrogen maximum of 100 lbs. per acre total of soluble nitrogen; P2O5 maximum of 50 lbs. per acre; K2O maximum of 50 lbs. per acre.
 - Lime - use only ground agricultural limestone, up to 3 tons per acre may be applied by hydroseeder, broadcast, or more than 2 tons may be 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 without interruption.
 - Dry Seeding - This includes use of conventional drip or broadcast spreaders.
 - Seed spreader shall be described on the subsoil at the rates prescribed on the Temporary or Permanent Seeding Specifications or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact.
 - Where particular seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
 - Drill or Cultipacker Seeding - Mechanized seeders that apply and cover seed with soil. Cultipacker seeders are required to be used in such a fashion as to provide at least 1/2" of soil covering. Seeding must be firm after planting.
 - Where particular seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

MULCHING

- Straw shall consist of thoroughly treated wheat, rye or oat straw, reasonable bright in color and shall not be musty, moldy, rotten, decayed or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
- Wood Cellulose Fiber Mulch (WCFF)
 - WCFF shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFF shall be dry green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the WCFF application.
 - WCFF including dye shall contain no germination or growth inhibiting factors.
 - WCFF materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a better-like ground cover, on application, having moisture absorption and retention properties and shall cover and hold the seed in contact with the soil without inhibiting the growth of the grass species.
 - The mulch material shall contain no cement or compounds at concentrations levels that will be phytotoxic.
 - WCFF must conform to the following physical requirements: fiber length to approximately 10 mm; diameter substantially uniform; 10 to 15% of 1.0 to 0.5, ash content of 10% maximum and water holding capacity of 30% minimum.
- WCFF shall be used in areas where one species of grass is desired.

TEMPORARY SEEDING NOTES

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

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

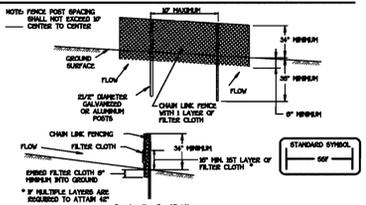
SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER OR 1500 LBS. (1000 SOFT) FERTILIZER.

SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 1 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./ACRE) OF WEEPING LOVEGRASS (27 LBS./1000 SOFT) FOR THE PERIOD NOVEMBER 15 THROUGH FEBRUARY 28. PROJECT 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 (70 TO 90 LBS./1000 SOFT) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 250 GALLONS PER ACRE (3 GALLONS/1000 SOFT) OF EMULSIFIED ASPHALT ON FLAT ACRES ON SLOPES 6 FEET OR HIGHER. USE 340 GALLONS PER ACRE (3 GALLONS/1000 SOFT) FOR ANCHORING.

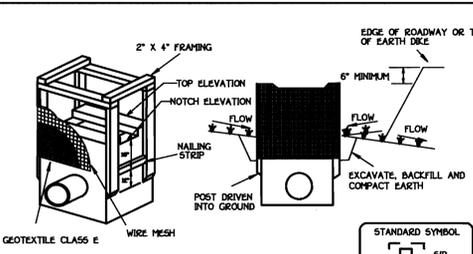
REFER TO THE 1986 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SUPER SILT FENCE



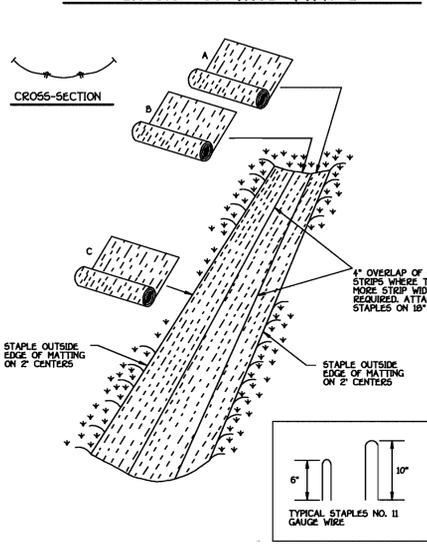
- CONSTRUCTION SPECIFICATIONS**
- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Design for Chain Link Fencing. The specification for a 6" mesh shall be used, adapting 42" mesh and 6" mesh posts.
 - Chain link fence shall be fastened securely to the frame posts with wire ties. The lower tension wire, lattice and trim rods, drive anchors and post caps are not required at the ends of the fence.
 - Fence shall be installed in accordance with the chain link fence with the second wire 50" to the top and mid section.
 - Fence shall be installed in accordance with the chain link fence with the second wire 50" to the top and mid section.
 - When two sections of fence are joined, they shall be overlapped by 6" and fastened.
 - Fastenings shall be performed to meet and all include, removed when "edge" digging in the fill area, or when it reaches 50% of fence height.
 - Fence shall be installed in accordance with the chain link fence with the second wire 50" to the top and mid section.
 - When two sections of fence are joined, they shall be overlapped by 6" and fastened.

STANDARD INLET PROTECTION



- CONSTRUCTION SPECIFICATIONS**
- Excavate completely around the inlet to a depth of 18" below the notch elevation.
 - Drive the 2" x 4" construction grade lumber posts 1' into the ground at each corner of the inlet. Place nail strips between the posts on the ends of the inlet. Assemble the top portion of the 2" x 4" frame using the overlap joint shown on Detail 23A. The top of the frame (weir) must be 6" below adjacent roadway where flooding and safety issues may arise.
 - Stretch the 1/2" x 1/2" wire mesh tightly around the frame and fasten securely. The ends must meet and overlap at a post.
 - Stretch the Geotextile Class E fabric over the wire mesh with the geotextile extending from the top of the frame to 18" below the inlet notch elevation. Fasten the geotextile firmly to the frame. The ends of the geotextile must meet at a post, be overlapped and folded then fastened down.
 - Backfill around the inlet in compacted 6" layers until the layer of earth is level with the notch elevation on the ends and top elevation on the sides.
 - If the inlet is not in a sump, construct a compacted earth dike across the ditch line directly below it. The top of the earth dike should be at least 6" higher than the top of the frame.
 - The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clogged.

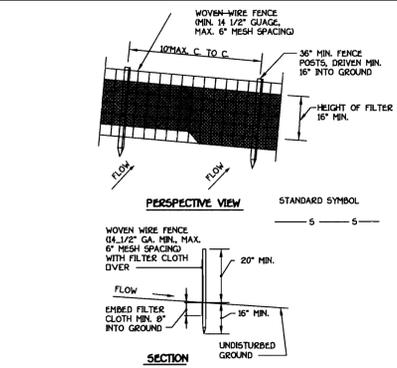
EROSION CONTROL MATTING



- CONSTRUCTION SPECIFICATIONS**
- Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6".
 - Staple the 4" overlap in the channel center using an 18" spacing between staples.
 - Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
 - Staples shall be placed 2" apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.
 - Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", overlap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.
 - The discharge end of the matting liner should be similarly secured with 2 double rows of staples.
- Note: If flow enters from the edge of the matting then the area effected by the flow must be key-in.

EROSION CONTROL MATTING

- CONSTRUCTION SPECIFICATIONS**
- Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6".
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 - The discharge end of the matting liner should be similarly secured with 2 double rows of staples.
- Note: If flow enters from the edge of the matting then the area effected by the flow must be key-in.



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- Woven wire fence to be fastened securely to fence posts with wire ties of staples.
 - Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
 - When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
 - Maintenance shall be performed as needed and material removed when "baldges" develop in the silt fence.

SILT FENCE

NOT TO SCALE

SEDIMENT CONTROL NOTES

- A Minimum of 40 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 (C315-1055).
- All Vegetative and Structural Practices Are to be Installed According to the Provisions of This Plan and Are to be in Conformance with the Most Current Maryland Standards and Specifications for Soil Erosion and Sediment Control and Revisions Thereto.
- Following Initial Soil Disturbance or Re-Disturbance, Permanent or Temporary Stabilization Shall be Completed Within: A) 7 Calendar Days for All Permanent Sediment Control Structures, Dikes, Perimeter Slopes and All Slopes Steeper Than 3:1, B) 14 Days for All Other Disturbed or Graded Areas on the Project Site. As to All Other Disturbed or Graded Areas On the Project Site.
- All Sediment Traps/Basins Shown Must be Fenced and Warning Signs Posted Around Their Perimeter in Accordance with Vol. 1, Chapter 12, Of the Howard County Design Manual, Storm Drainage, Chapter 12, Of the Howard County Design Manual, Storm Drainage.
- 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, Permanent Seeding (Sec. 50, Sed. Sec. 54), Temporary Seeding (Sec. 50, and Mulching (Sec. 52). Sediment Stabilization with Much Alone Can Only 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 to be Maintained in Operative Condition Until Permission for Their Removal Has been Obtained from the Howard County Sediment Control Inspector.
- Site Analysis:

Total Area of Site	2.04 Acres
Area Disturbed	0.96 Acres
Area to be Roofed or Paved	1.06 Acres
Area to be Vegetatively Stabilized	9000 Cu.Yds.
Total Fill	9000 Cu.Yds.
Off-Site Waste/Borrow Area Location	Cu.Yds.
- Any Sediment Control Practice Which is Disturbed by Grading Activity for Placement of Utilities Must be Replaced On the Same Day of Disturbance.
- Additional Sediment Controls Must be Provided, if Deemed Necessary by the Howard County Sediment Control Inspector.
- On All Sites with Disturbed Areas In Excess of 2 Acres, Approval of the Inspector Agency Shall be Requested Upon Completion of Installation of Perimeter Erosion and Sediment Controls, But Before Proceeding With Any Other Earthwork Activity Not Authorized Until This Initial Approval by the Inspector Agency is Made.
- 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.

DATE _____ **DESCRIPTION** _____

REVISION BLOCK

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK 10771 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21142
 (410) 461-2995
 G:\LIBRARY\SDP\SDP_SINGLE_LOT_SDP_BASE

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 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SOFT) AND 600 LBS. PER ACRE 10-20-20 FERTILIZER (15 LBS./1000 SOFT) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREA/FORM FERTILIZER (9 LBS./1000 SOFT) AND 500 LBS. PER ACRE 0-15 LBS./1000 SOFT) OF 10-20-20 FERTILIZER.
- SEEDING:** FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH OCTOBER 15, SEED WITH 100 LBS. PER ACRE 0-15 LBS./1000 SOFT) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS./ACRE (1.4 LBS./1000 SOFT) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1000 SOFT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 15 THROUGH FEBRUARY 28, PROJECT SITE BY OPTION D - 2 TONS PER ACRE OF ORNAMENTAL STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OPTION E - USE 500 OPTION C.
- MULCHING:** APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SOFT) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (3 GALLONS/1000 SOFT) OF EMULSIFIED ASPHALT ON FLAT ACRES ON SLOPES 6 FEET OR HIGHER USE 340 GALLONS PER ACRE (3 GALLONS/1000 SOFT) FOR ANCHORING.
- MANTENANCE:** INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.
- * FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWN/VETCH AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS./ACRE AT THE SEEDING REQUIREMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.

TEMPORARY SEEDING NOTES

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

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

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER OR 1500 LBS. (1000 SOFT) FERTILIZER.

SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 1 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./ACRE) OF WEEPING LOVEGRASS (27 LBS./1000 SOFT) FOR THE PERIOD NOVEMBER 15 THROUGH FEBRUARY 28. PROJECT 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 (70 TO 90 LBS./1000 SOFT) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 250 GALLONS PER ACRE (3 GALLONS/1000 SOFT) OF EMULSIFIED ASPHALT ON FLAT ACRES ON SLOPES 6 FEET OR HIGHER. USE 340 GALLONS PER ACRE (3 GALLONS/1000 SOFT) FOR ANCHORING.

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

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.

Paul Call 4/17/01
 Signature of Engineer (print name below signature) DATE

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 periodic on-site inspection by the Howard Soil Conservation District.

Wayne Black 04/17/01
 Signature of Developer (print name below signature) DATE

Reviewed for HOWARD SCD and meets Technical Requirements.

Jim Myers 4/25/01
 U.S.D.A.-Natural Resource Conservation Service DATE

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

John R. Robertson 4/25/01
 Howard SCD DATE

OWNER WAWERLY WOODS DEVELOPMENT CORPORATION
 c/o LAND DESIGN & DEVELOPMENT, LLC
 ELLICOTT CITY, MARYLAND 21143

BUILDER N.V. HOMES
 2200 DEFENSE HIGHWAY,
 SUITE 301
 CROFTON MARYLAND 21114

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Leah Smith 5/22/01
 Director - Department of Planning and Zoning DATE

Chris Hamilton 5/23/01
 Chief, Development Engineering Division DATE

Chad Decker 4/22/01
 Chief, Development Engineering Division DATE

SUBDIVISION	GTW'S WAVERLY WOODS	SECTION/AREA	12	LOT NO.	1-7, 9-37, AND 78-82
PLAT NO.	14789	BLOCK NO.	5	TAX/ZONE	16
WATER CODE	HO-5	SEWER CODE		ELEC. DIST.	THRD.
				CENSUS TR.	6030

TAX MAP No.: 16 PARCEL No.: 21
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: FEBRUARY 2001
 SHEET 3 OF 3

SITE DEVELOPMENT PLAN NOTES AND DETAILS

GTW'S WAVERLY WOODS
 SECTION 12
 LOTS 1-7, 9-37, AND 78-82

TAX MAP No.: 16 PARCEL No.: 21
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: FEBRUARY 2001
 SHEET 3 OF 3

S.O.P. 01.96