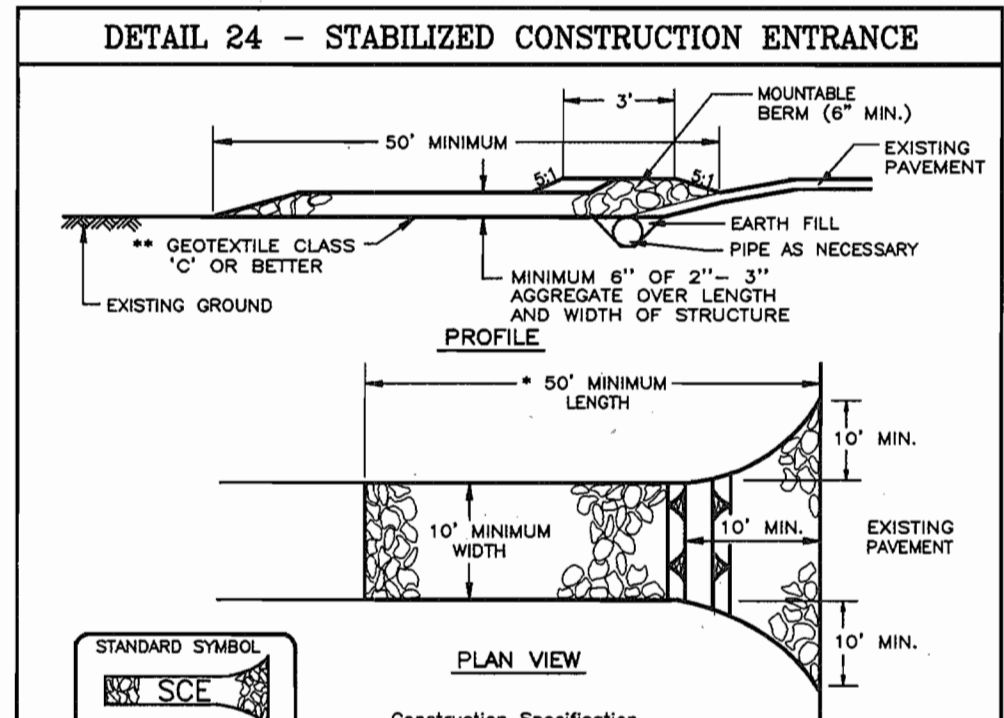


- Construction Specifications
- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
  - Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
  - Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
  - Filter cloth shall be embedded a minimum of 8" into the ground.
  - When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
  - Maintenance shall be performed as needed and all bulges removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
  - Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:
 

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lb/in (min.)	Test: MSMT 509
Flow Rate	2.5 gal/ft <sup>2</sup> /minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

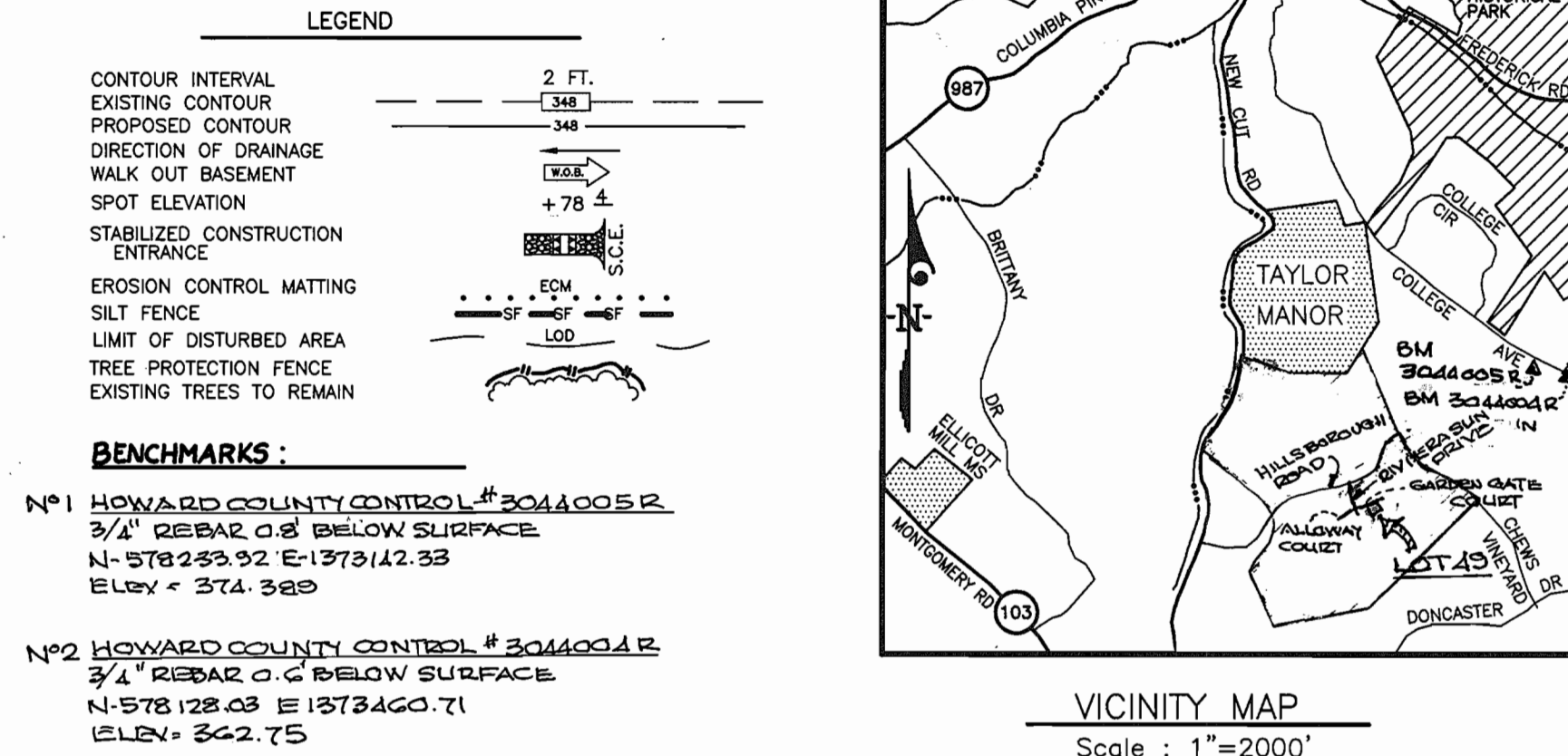
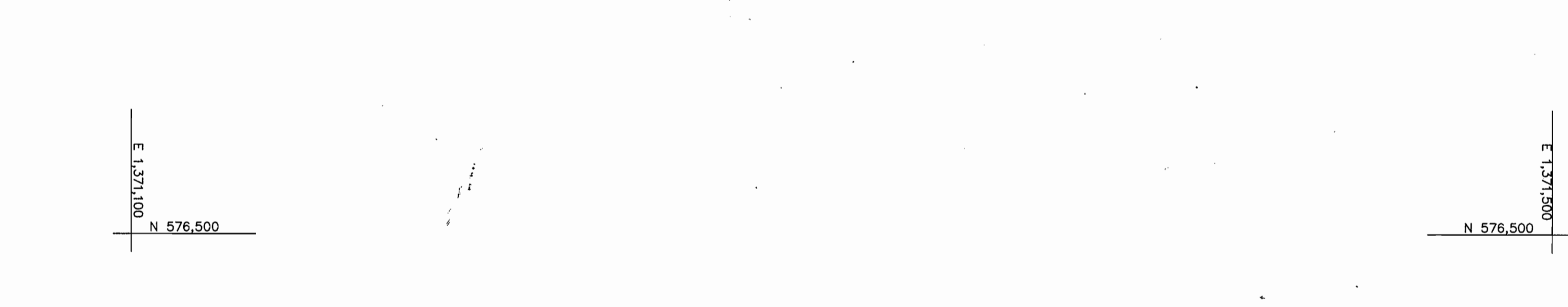
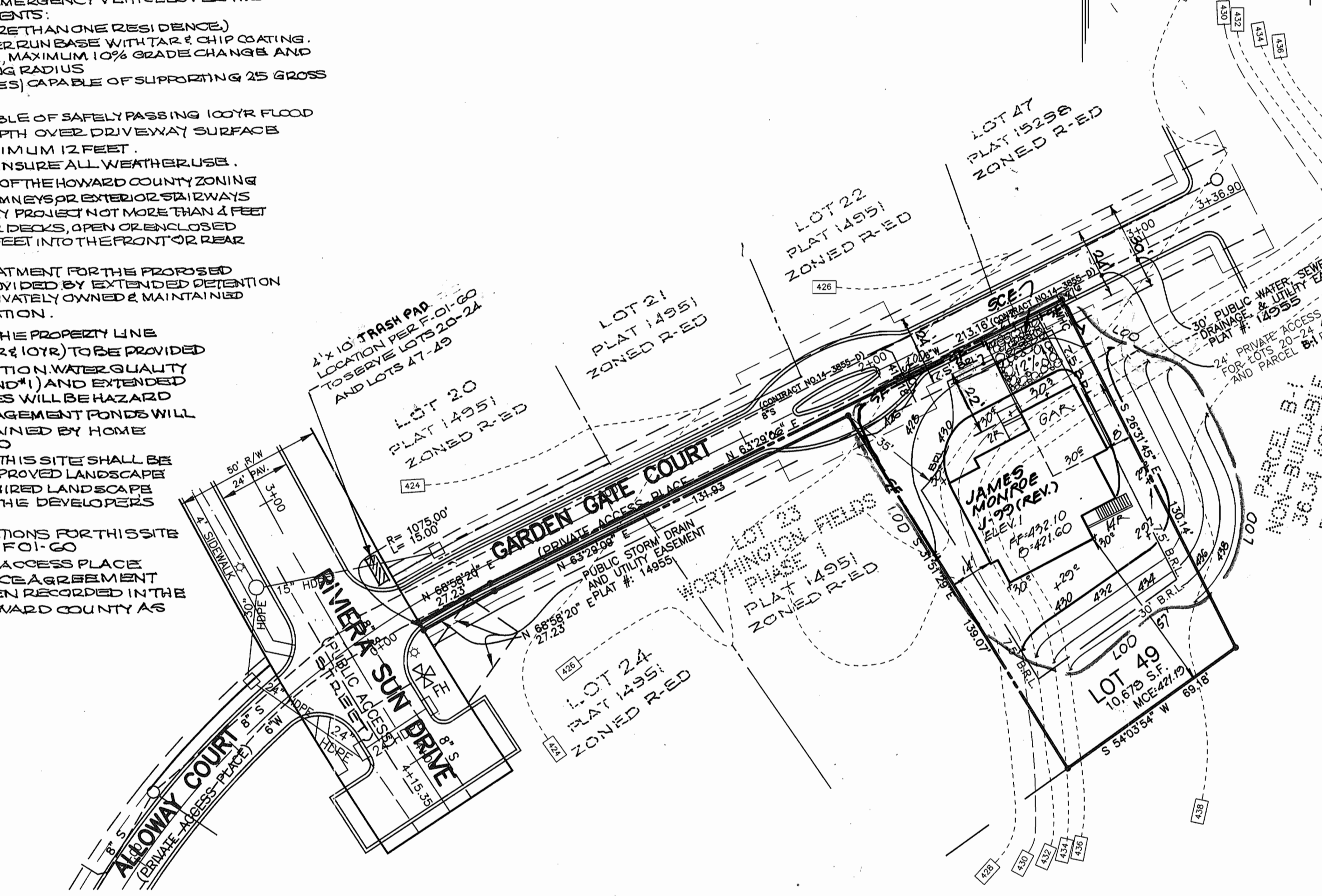
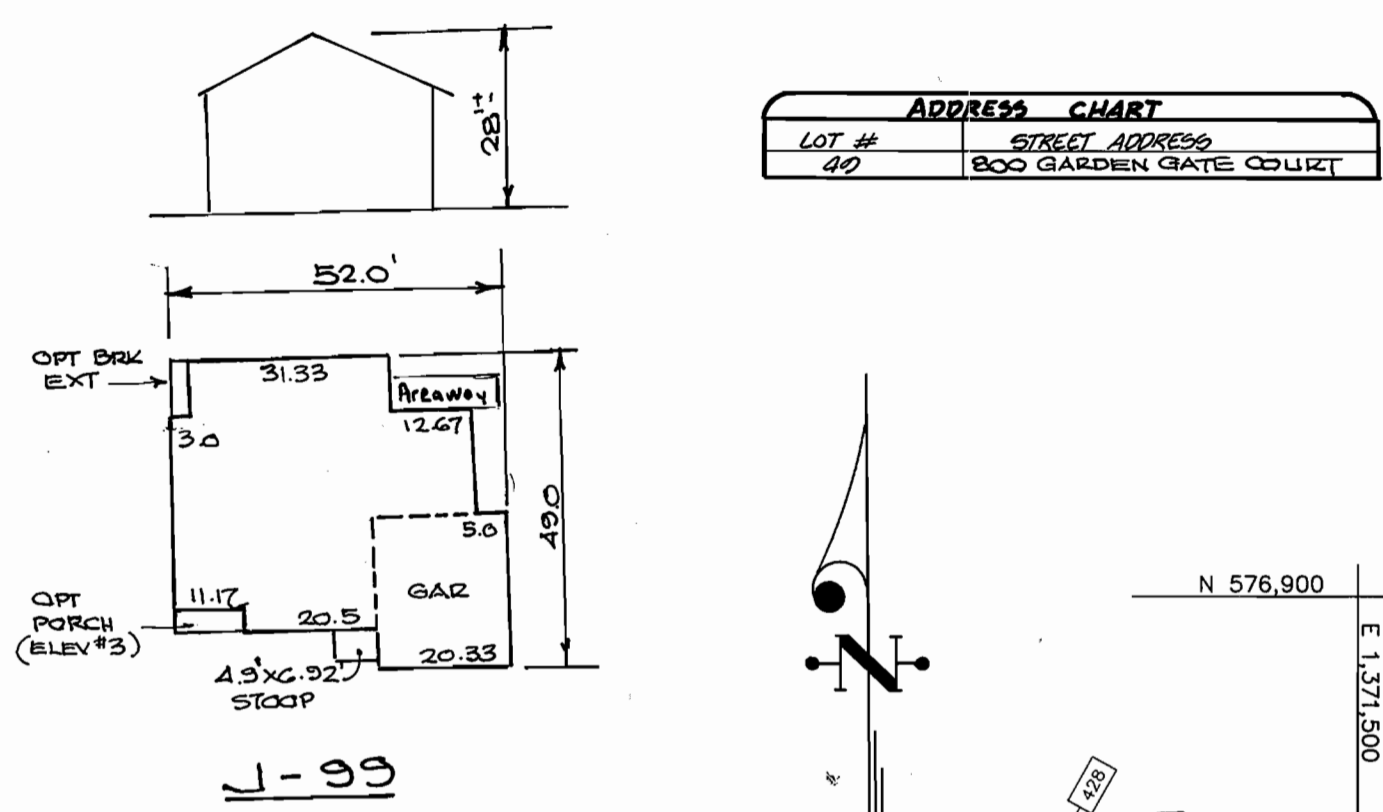


- Construction Specifications
- Length - minimum of 50' (+ 30' for a single residence lot).
  - Width - 10' minimum, should be flared at the existing road to provide a turning radius.
  - Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The plan approval authority may not require single family residences to use geotextile.
  - 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.
  - 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 mounded 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.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 7-13 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**GENERAL NOTES**

- SUBJECT PROPERTY IS ZONED R-60 PER 10-18-93 COMPREHENSIVE ZONING PLAN.
- THE TOTAL AREA INCLUDED IN THIS SUBMISSION IS 12,659 SF.
- THE TOTAL NUMBER OF LOTS INCLUDED IN THIS SUBMISSION = 1.
- IMPROVEMENT TO THE PROPERTY: SINGLE FAMILY DETACHED.
- DEPARTMENT OF PLANNING & ZONING REFERENCE FILE NUMBERS: F-01-60, P-01-07S-98-12, PB 332, P-01-01, F-01-206.
- UTILITIES SHOWN AS EXISTING ARE TAKEN FROM APPROVED WATER AND SEWER PLANS CONTRACT # 14-3855 D AND APPROVED ROAD CONSTRUCTION PLANS F-01-60.
- ANY DAMAGE TO COUNTY OWNED RIGHTS OF WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- THIS EXISTING TOPOGRAPHY WAS TAKEN FROM ROAD CONSTRUCTION PLANS PREPARED BY FREDERICK WARD ASSOC. DATED MARCH 1995.
- THE COORDINATES SHOWN HEREON ARE BASED ON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM - HOWARD COUNTY MONUMENT NUMBERS 3044005R AND 3044004R.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS DIVISION OF CONSTRUCTION INSPECTION AT (410) 315-1880 AT LEAST 48 HOURS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY MISSISSIPPI AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- FOR DRIVEWAY ENTRANCE DETAILS, REFER TO HOWARD COUNTY DESIGN MANUAL VOLUME IV DETAILS R-6.03 & R-6.05.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
  - WIDTH - 12 FT (4 FT SEVERING MORE THAN ONE RESIDENCE).
  - SURFACE - 6" COMPACTED COLLESE LIMEBASE WITH TAR & CHIP COATING.
  - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND A MINIMUM OF 45-FOOT TURNING RADIUS.
  - STRUCTURES (CULVERTS/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (H-20 LOADING).
  - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
  - STRUCTURE CLEARANCES - MINIMUM 12 FEET.
- MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FT 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 SETBACKS.
- WATER QUALITY AND QUANTITY TREATMENT FOR THE PROPOSED ROADWAYS AND LOT IS BEING PROVIDED BY EXTENDED DETENTION FACILITY. THIS FACILITY WILL BE PRIVATELY OWNED & MAINTAINED BY THE HOME OWNERS ASSOCIATION.
- SIC ELEVATIONS SHOWN ARE AT THE PROPERTY LINE.
- STORMWATER MANAGEMENT (2 YR & 10 YR) TO BE PROVIDED FOR ULTIMATE DEVELOPED CONDITION. WATER QUALITY TO BE PROVIDED BY WET POND (POND 1) AND EXTENDED DETENTION (POND 2). THE FACILITIES WILL BE HAZARD CLASS 'A'. ALL STORMWATER MANAGEMENT PONDS WILL BE PRIVATELY OWNED AND MAINTAINED BY HOME OWNERS ASSOCIATION. F-01-60.
- PERIMETER LANDSCAPING FOR THIS SITE SHALL BE PROVIDED AS SHOWN ON THE APPROVED LANDSCAPE PLAN FILED UNDER F-01-60. REQUIRED LANDSCAPE SURETY HAS BEEN POSTED WITH THE DEVELOPER'S AGREEMENT FOR F-01-60.
- FOREST CONSERVATION OBLIGATIONS FOR THIS SITE HAVE BEEN FULFILLED UNDER F-01-60.
- GARDEN GATE COURT PRIVATE ACCESS PLACE USE-IN-COMMON MAINTENANCE AGREEMENT FOR LOTS 20-24 & 27-45 HAS BEEN RECORDED IN THE LAND RECORDS OFFICE OF HOWARD COUNTY AS LIBER 6214 FOLIO 0365.



- BENCHMARKS:**
- #1 HOWARD COUNTY CONTROL # 3044005R  
3/4" REBAR @ 6" BELOW SURFACE  
N-578253.92 E-137340.71  
ELEV. 324.389
- #2 HOWARD COUNTY CONTROL # 3044004R  
3/4" REBAR @ 6" BELOW SURFACE  
N-578128.03 E-137340.71  
ELEV. 322.75
- 21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL**
- Definition:** Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.
- Purpose:** To provide a suitable soil medium for vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
- Conditions Where Practice Applies:**
- This practice is limited to areas having 2:1 or flatter slopes where:
    - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
    - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
    - The original soil to be vegetated contains material toxic to plant growth.
    - The soil is so acidic that treatment with lime is not feasible.
  - For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.
- Construction and Material Specifications:**
- Topsoil salvaged from the existing site may be used provided it meets the standards and specifications. Typically, the depth of topsoil to be salvaged for a given soil shall be found in the representative soil profile section in the Soil Survey published by the United States Department of Agriculture, Agricultural Experiment Station.
  - Topsoil Specifications - Soil to be used as topsoil must meet the following:
    - Topsoil shall be a loam, sandy loam, clay loam, silt loam, or silty clay loam. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate authority. Regardless, topsoil shall not be a mixture of contrasting textures and substances shall contain less than 5% by volume of diatoms, stone, coarse fragments, gravel, sticks, roots, or other materials larger than 1 1/2" in diameter.
    - Topsoil must be free of plants or plant parts such as weeds, grasses, forbs, mosses, lichens, and other plants, or other materials as specified.
    - When the subsoil is either highly acidic or composed of heavy clay-grade materials, the topsoil must be amended with 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over the entire area and worked into the soil in conjunction with tillage operations as described in the following procedures.

- SEEDING AND EROSION CONTROL NOTES**
- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
  - All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the 1984 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
  - Following initial soil disturbance, permanent or temporary stabilization shall be completed within:
    - 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1.
    - 14 days for 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 7, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
  - All disturbed areas must be stabilized within the time period specified above in accordance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and temporary seeding and soil stabilization (See G).
  - Temporary stabilization with mulch alone can only be done when recommended seeding rates do not allow for proper germination and establishment of grass.
  - 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.
  - SOIL ANALYSIS:
 

Total Area of Site:	12,659 sq. ft.
Area to be seeded:	12,659 sq. ft.
Total Area to be stabilized:	12,659 sq. ft.
Total Area:	12,659 sq. ft.
Offsite Waste/Borrow Area Location:	-

- PERMANENT SEEDING NOTES**
- APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS DESIRED.
- SEEDING PREPARATION:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.
- SOIL AMENDMENTS:** In lieu of soil test recommendations, use one of the following schedules:
- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 600 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq. ft.).
  - Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and apply 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil.
- SEEDING:** For periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (14 lbs./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 of urea. For the period August 1 thru October 15, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre of urea. For the period November 1 thru February 28, protect site by applying (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.
- MULCHING:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of untreated straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (9 gal/1000 sq. ft.) for anchoring.
- MAINTENANCE:** Inspect all seeded areas and make needed repairs, replacements and replantings.
- TEMPORARY SEEDING NOTES**
- 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 (14 lbs./1000 sq. ft.).
- SEEDING:** For periods March 1 thru April 30 and from August 1 thru November 15, seed with 2 1/2 bushels per acre of annual ryegrass (52 lbs./1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (37 lbs./1000 sq. ft.). For the period November 1 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 seed.
- MULCHING:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of untreated straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (9 gal/1000 sq. ft.) for anchoring.
- REF: TO THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

APPROVED: DEPARTMENT OF PLANNING & ZONING  
 [Signature] 5/6/03  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 5/7/03  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 5/8/03  
 DIRECTOR

Reviewed for HOWARD S.C.D. and meets Technical Requirements  
 [Signature] 5/1/03  
 Signature Date  
 U.S. Natural Resources Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 [Signature] 5/1/03  
 Howard S.C.D. Date

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan of development and 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 or their authorized agents, as are deemed necessary."

[Signature] 12/13/02  
 NAME JOHN R. WHITE  
 (V.P. SALES & MARKETING)

ENGINEER'S CERTIFICATE

I hereby 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.

[Signature] 12-13-02  
 G. NELSON CLARK DATE

DEVELOPER/OWNER  
 PATRIOT HOMES  
 P.O. BOX 1018  
 COLUMBIA, MARYLAND 21044



SUBDIVISION NAME	SECTION/AREA	LOTS/PARCELS
WORTHINGTON FIELDS	PHASE 2	40
PLAT NO. 15228	TAX MAP NO. 20	ELECTION DIST. 2A
WORK CODE G-01	SEWER CODE 125300	CENSUS TRACT 002

**CLARK · FINEFROCK & SACKETT, INC.**  
 ENGINEERS · PLANNERS · SURVEYORS

7135 MINSTREL WAY · COLUMBIA, MD 21045 · (410) 381-7500 BALT. · (301) 621-8100 WASH.

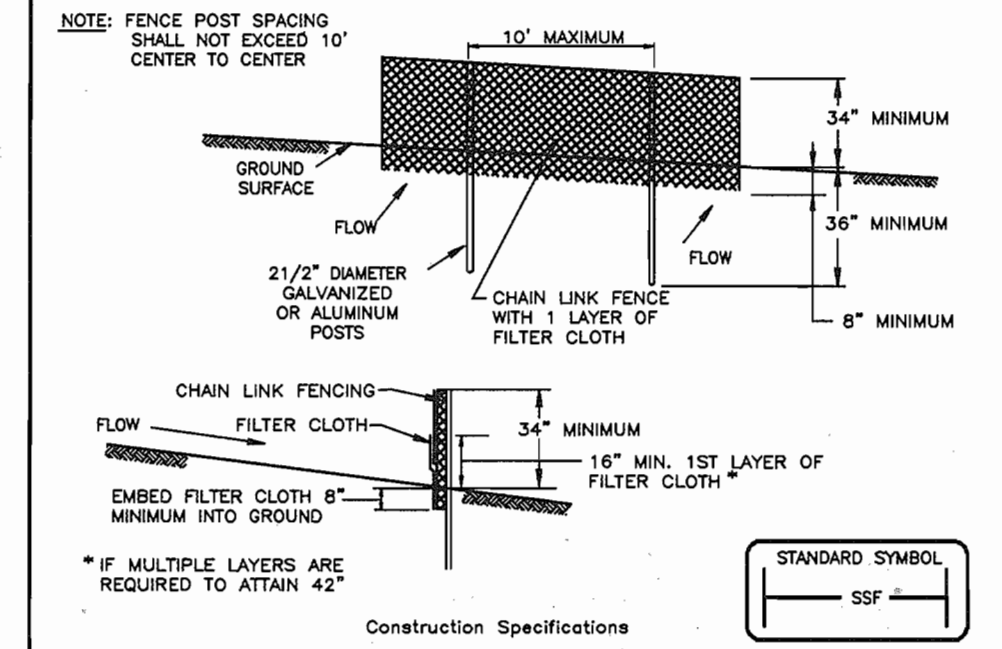
DESIGNED RQL SITE DEVELOPMENT, EROSION, AND SEDIMENT CONTROL PLAN SCALE 1" = 30'

DRAWN JPH DRAWING 1 of 1

CHECKED DAR PHASE 2 JOB NO. 02-113

DATE 12-12-02 FOR: PATRIOT HOMES FILE NO. 02-113-X  
 P.O. BOX 1018 COLUMBIA, MARYLAND 21044

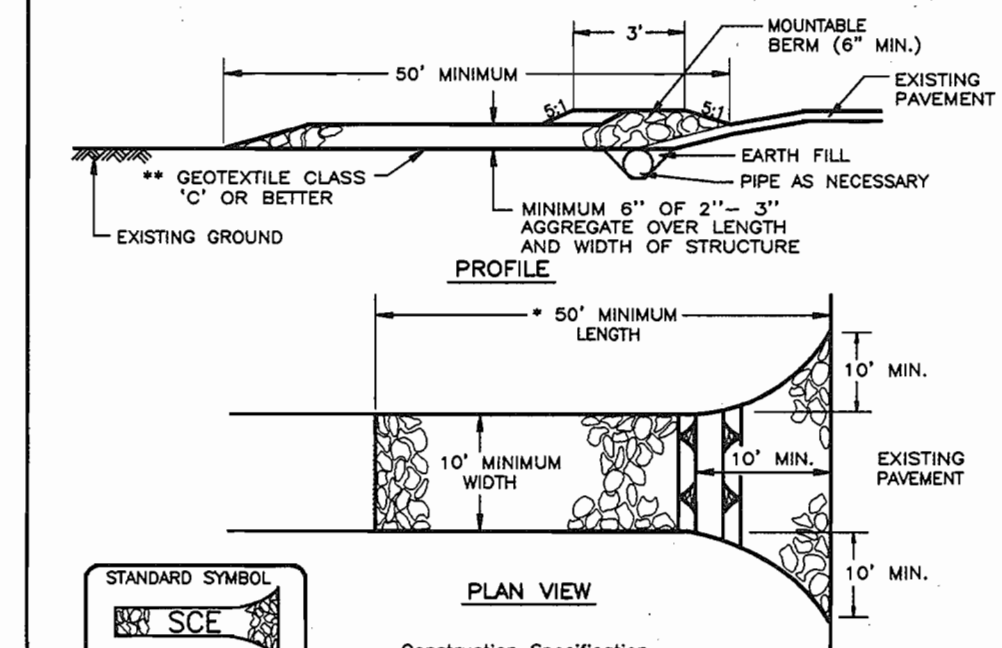
DETAIL 33 - SUPER SILT FENCE



- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6" fence shall be used, substituting 42" fabric and 6" length posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 6" into the ground.
- When two sections of filter cloth abut each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and all bulges removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:
 

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft <sup>2</sup> /minute (max.)	Test: MSMT 322
Filtration Efficiency	75% (min.)	Test: MSMT 322

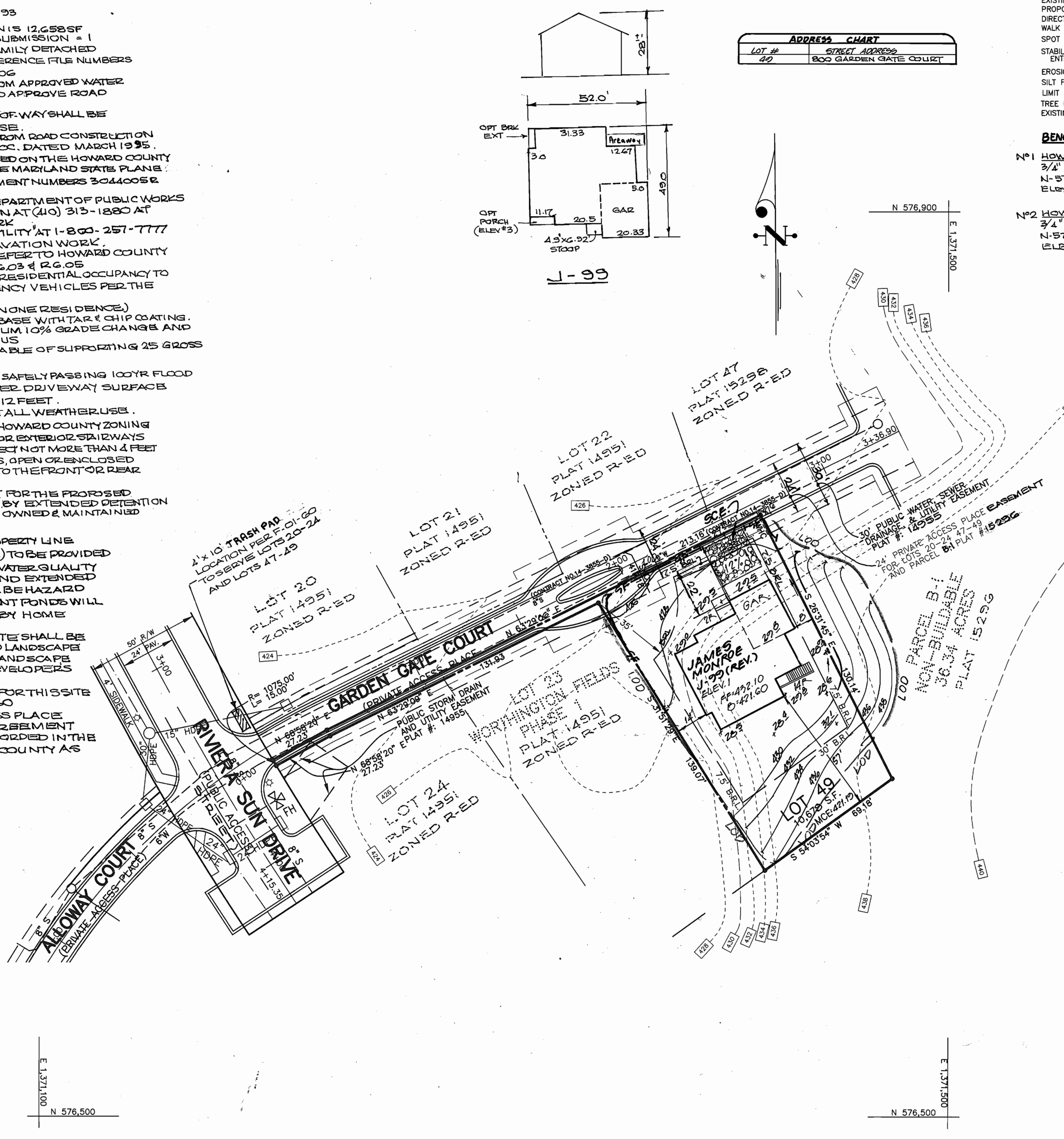
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



- Length - minimum of 50' (+ 30' for a single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. \*\* The plan approval authority may not require single family residences to use geotextile.
- 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.
- 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 mounded berm with 8:1 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.

GENERAL NOTES

- SUBJECT PROPERTY IS ZONED R-60 PER 10-18-93 COMPREHENSIVE ZONING PLAN.
- THE TOTAL AREA INCLUDED IN THIS SUBMISSION IS 12,628 SF.
- THE TOTAL NUMBER OF LOTS INCLUDED IN THIS SUBMISSION IS 1.
- IMPROVEMENT TO THIS PROPERTY: SINGLE FAMILY DETACHED.
- DEPARTMENT OF PLANNING & ZONING REFERENCE FILE NUMBERS: F-01-00, F-01-07-93-18, PB 393, P-01-01, F-01-206.
- UTILITIES SHOWN AS EXISTING ARE TAKEN FROM APPROVED WATER AND SEWER PLANS CONTRACT # 14-3855 D AND APPROVED ROAD CONSTRUCTION PLANS F-01-00.
- ANY DAMAGE TO COUNTY OWNED RIGHTS-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- THE EXISTING TOPOGRAPHY WAS TAKEN FROM ROAD CONSTRUCTION PLANS PREPARED BY FREDERICK WARD ASSOC. DATED MARCH 1995.
- THE COORDINATES SHOWN HEREON ARE BASED ON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM - HOWARD COUNTY MONUMENT NUMBERS 3044005 & 3044004.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS DIVISION OF CONSTRUCTION INSPECTION AT (410) 313-1880 AT LEAST 48 HOURS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISSISSIPPI" AT (1-800-251-7777) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- FOR DRIVEWAY ENTRANCE DETAILS, REFER TO HOWARD COUNTY DESIGN MANUAL VOLUME 1, DETAILS R-03 & R-05.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
  - WIDTH - 12 FT (14 FT SERVING MORE THAN ONE RESIDENCE).
  - SURFACE - 6" COMPACTED CRUSHED RUN BASE WITH TAR & CHIP COATING.
  - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND A MINIMUM OF 45-FOOT TURNING RADIUS.
  - STRUCTURES (CULVERTS, BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (H-20 LOADING).
  - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100YR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
  - STRUCTURE CLEARANCES - MINIMUM 12 FEET.
- MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- IN ACCORDANCE WITH SECTION 122 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTENDED SIDEWAYS NOT MORE THAN 16 FT IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR CLOSED, MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR SETBACKS.
- WATER QUALITY AND QUANTITY TREATMENT FOR THE PROPOSED ROADWAY AND LOT IS BEING PROVIDED BY EXTENDED DETENTION FACILITY, THIS FACILITY WILL BE PRIVATELY OWNED & MAINTAINED BY THE HOME OWNERS ASSOCIATION.
- SIC ELEVATION IS SHOWN ABOVE THE PROPERTY LINE.
- STORMWATER MANAGEMENT (2YR & 10YR) TO BE PROVIDED FOR ULTIMATE DEVELOPED CONDITION. WATER QUALITY TO BE PROVIDED BY WET POND (POND #1) AND EXTENDED DETENTION (POND #2). THE FACILITIES WILL BE HAZARDOUS CLAS A ALL STORMWATER MANAGEMENT PONDS WILL BE PRIVATELY OWNED AND MAINTAINED BY HOME OWNERS ASSOCIATION F-01-00.
- PERIMETER LANDSCAPING FOR THIS SITE SHALL BE PROVIDED AS SHOWN ON THE APPROVED LANDSCAPE PLAN FILED UNDER FOI-00. REQUIRED LANDSCAPE SURETY HAS BEEN POSTED WITH THE DEVELOPER'S AGREEMENT FOR FOI-00.
- FOREST CONSERVATION OBLIGATIONS FOR THIS SITE HAVE BEEN FULFILLED UNDER FOI-00.
- GARDEN GATE COURT PRIVATE ACCESS PLACE USE - IN COMMON MAINTENANCE AGREEMENT FOR LOTS 20-24 & 47-49 HAS BEEN RECORDED IN THE LAND RECORDS OFFICE OF HOWARD COUNTY AS LIBER 6214 FOLIO 0365.



CONSTRUCTION SEQUENCE:

NO.	DESCRIPTION	NO. OF DAYS
1.	Obtain grading permit.	7
2.	Install tree protection fence.	7
3.	Install sediment and erosion control devices and stabilize.	14
4.	Excavate for foundations, rough grade and temporary stabilize.	30
5.	Construct structures, sidewalks and driveways.	30
6.	Final grade, install erosion control matting and stabilize in accordance with standards and specifications.	14
7.	Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize.	7
	Delay construction of houses on lots:	N/A

DEVELOPER/OWNER  
PATRIOT HOMES  
P.O. BOX 1018  
COLUMBIA, MARYLAND 21044

DEVELOPER'S/BUILDER'S CERTIFICATE

I/We certify that all development and construction will be done according to this plan of development and 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 or their authorized agents, as are deemed necessary.

John R. White  
NAME JOHN R. WHITE  
(V.P. SALES & MARKETING)

12/13/02  
DATE

ENGINEER'S CERTIFICATE

I hereby 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.

G. Nelson Clark  
DATE 12-13-02



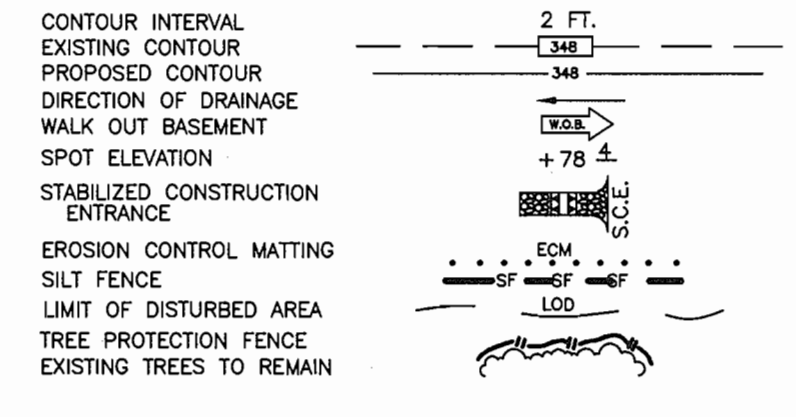
APPROVED: DEPARTMENT OF PLANNING & ZONING  
5/6/03  
DATE  
5/7/03  
DATE  
5/8/03  
DATE

Reviewed for HOWARD S.C.D.  
and meets Technical Requirements  
5/11/03  
DATE  
5/11/03  
DATE

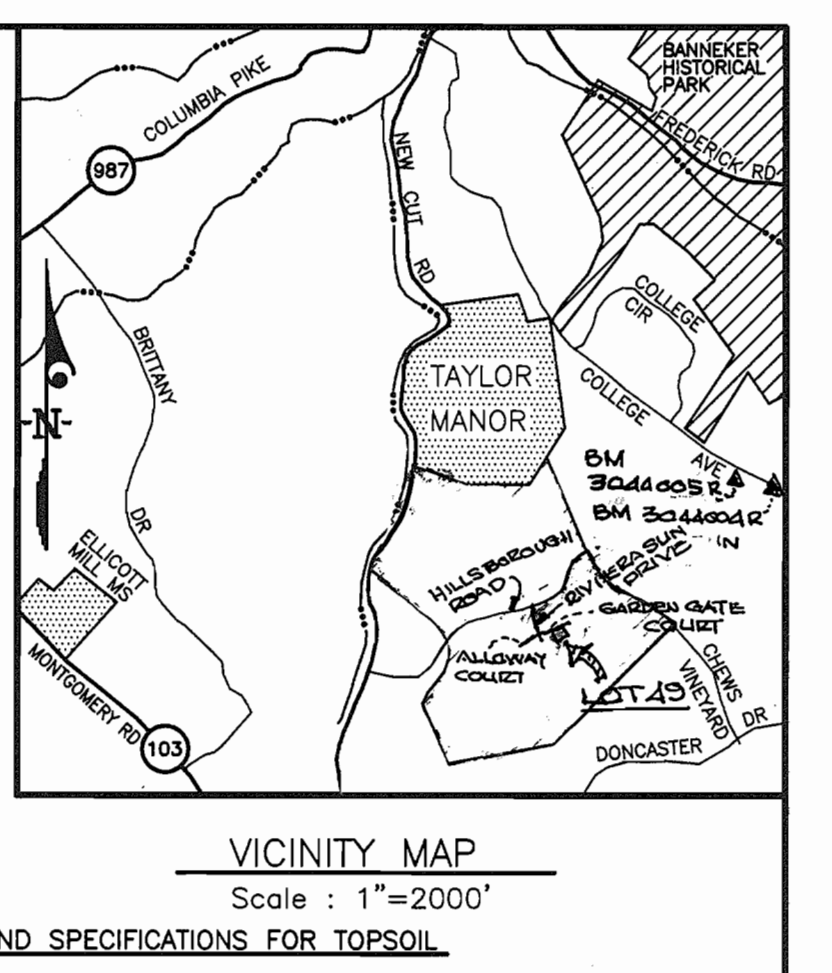
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John R. White  
Howard S.C.D.  
DATE 5/11/03

LEGEND



BENCHMARKS:  
#1 HOWARD COUNTY CONTROL # 3044005  
3 1/4" REBAR O.C. BELOW SURFACE  
N-578128.32 E-1379142.95  
ELEV = 374.989  
#2 HOWARD COUNTY CONTROL # 3044004  
3 1/4" REBAR O.C. BELOW SURFACE  
N-578128.03 E-1378450.71  
ELEV = 262.75



21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

- Definition:**  
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.
- PURPOSE:**  
To provide a suitable soil medium for vegetation growth. Soils of concern have low moisture content, low nutrient levels and are toxic to plants, and/or unacceptable soil gradation.
- Conditions Where Practice Applies:**
- This practice is limited to areas having 2:1 or flatter slopes where:
    - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
    - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
    - The original soil to be vegetated contains material toxic to plant growth.
    - The soil is so acidic that treatment with limestone is not feasible.
  - For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.
- Construction and Material Specifications:**
- Topsoil salvaged from the existing site may be used provided it meets the standards on test form in these specifications. Typically, the depth of topsoil to be salvaged from the existing site can be found in the representative soil profile section in the Soil Survey Report. Topsoil salvaged from the existing site shall be less than 5% by volume of cinders, stones, slag, coarse fragments, organic debris, roots, trash, or other materials larger than 1 1/2" in diameter.
  - Topsoil must be free of plants or plant parts such as stems, leaves, twigs, grass, weeds, nuts, pine needles, poison ivy, thistle, or others as specified.
  - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Limestone shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following paragraphs.
  - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Limestone shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following paragraphs.
- PERMANENT SEEDING NOTES**
- APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE UNDER A PERMANENT LONG-LEVED VEGETATIVE COVER IS NEEDED.
- SEEDING PREPARATION: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.
- SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:
- Preferred - Apply 2 tons per acre dolomitic limestone (82 lbs./100 sq. ft.) and 500 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil. All the time of seeding, apply 400 lbs. per acre 30-0-0 urea-formaldehyde fertilizer (3 lbs./1000 sq. ft.).
  - Acceptable - Apply 2 tons per acre dolomitic limestone (82 lbs./1000 sq. ft.) and apply 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil.
- SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs./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 of urea-formaldehyde fertilizer (2 lbs./1000 sq. ft.). For the period November 1 thru February 28, protect site by applying 2 tons per acre of well conditioned straw mulch and seed as soon as possible in the spring. Option (2) Use seed, Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well conditioned straw.
- MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of untreated straw mulch immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal/acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 3 feet or higher, use 348 gal/acre (8 gal/1000 sq. ft.) for anchoring.
- MAINTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseedings.
- TEMPORARY SEEDING NOTES**
- SEEDING PREPARATION: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.
- SOIL AMENDMENTS: Apply 800 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.).
- SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of clover (3.5 lbs./1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of seeding mixture (0.7 lbs./1000 sq. ft.). For the period November 1 thru February 28, protect site by applying 2 tons per acre of well conditioned straw mulch and seed as soon as possible in the spring, or use seed.
- MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of untreated straw mulch immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal/acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 3 feet or higher, use 348 gal/acre (8 gal/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.

SECTION NAME	SECTION AREA	LOTS/PARCELS
WORTHINGTON FIELDS	PHASE 2	40
PLAT NO. 10028	TAX MAP NO. 20	ELECTION DIST. 2nd
WATER CODE G-01	REVENUE CODE 128300	CENSUS TRACT G01

DESIGNED: RQL  
DRAWN: JPH  
CHECKED: DAE  
DATE: 12-12-02

SITE DEVELOPMENT, EROSION, AND SEDIMENT CONTROL PLAN  
SCALE: 1" = 30'  
DRAWING: 1 of 1  
JOB NO.: 02-113  
FILE NO.: 02-113-X

FOR: PATRIOT HOMES  
P.O. BOX 1018  
COLUMBIA, MARYLAND 21044

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