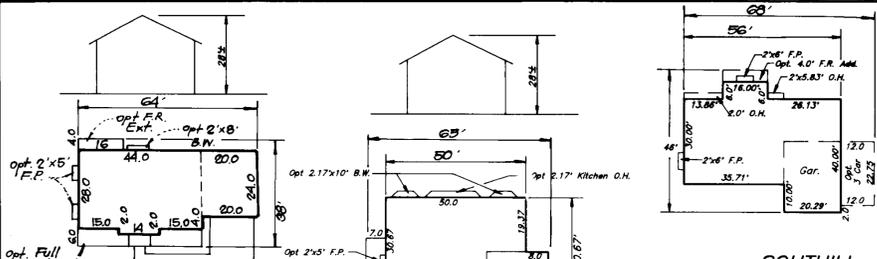
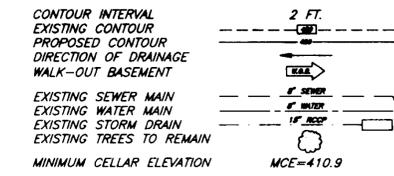
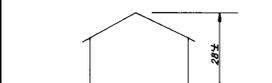


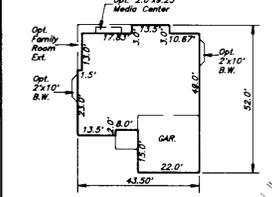
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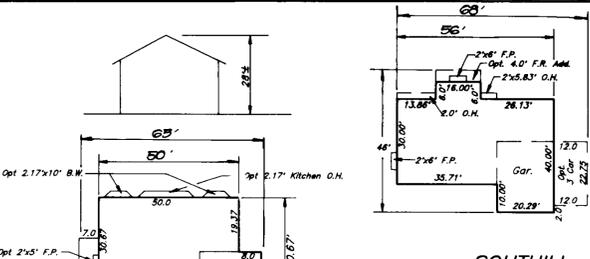
HAMILTON II
2268.12 = 7207 sq. ft. Min. Lot Size w/all options



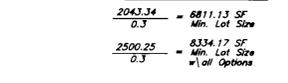
HAMPTON
1866.75 = 6222.5 SF Min. Lot Size w/all options



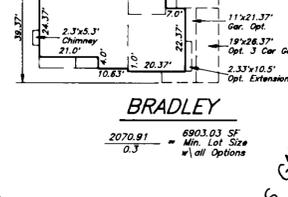
BRADLEY
2070.91 = 6903.03 SF Min. Lot Size w/all options



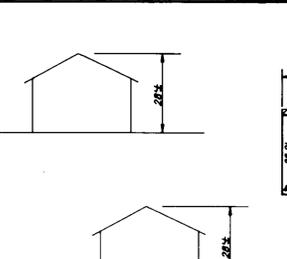
SOUTHILL
2366.04 = 7886.8 SF Min. Lot Size w/all options



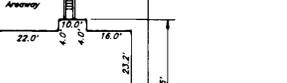
CHARLESTON
2043.34 = 6811.13 SF Min. Lot Size w/all options



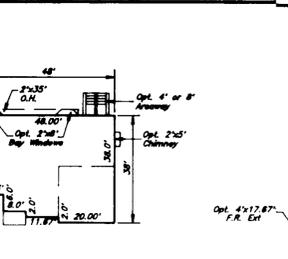
AVONDALE
2341.30 SF = 7804.33 SF Min. Lot Size w/all options



HAWTHORNE II
1780 = 5833 SF Min. Lot Size w/all options



AVONDALE
2341.30 SF = 7804.33 SF Min. Lot Size w/all options



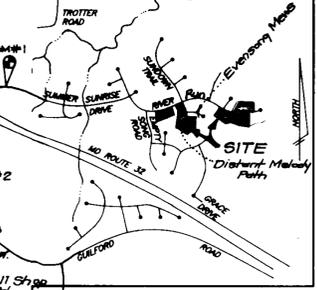
ASHLEY
1863.20 = 5344.0 SF Min. Lot Size w/all options



ASHLEY
1754.46 = 5848.2 SF Min. Lot Size w/all options

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
139	6553 RIVER RUN
140	6557 RIVER RUN
141	6561 RIVER RUN
142	6565 RIVER RUN
151	6566 RIVER RUN
152	6562 RIVER RUN
153	6558 RIVER RUN
154	6554 RIVER RUN
155	6550 RIVER RUN
156	6546 RIVER RUN
157	6542 RIVER RUN
158	6538 RIVER RUN
180	6413 DISTANT MELODY PLACE
181	6417 DISTANT MELODY PLACE
182	6421 DISTANT MELODY PLACE
183	6425 DISTANT MELODY PLACE
184	6416 DISTANT MELODY PLACE
185	6412 DISTANT MELODY PLACE
186	6408 DISTANT MELODY PLACE
187	6404 DISTANT MELODY PLACE
188	6400 DISTANT MELODY PLACE
189	6404 RIVER RUN
190	6400 RIVER RUN
191	6406 RIVER RUN
192	6402 RIVER RUN
193	6478 RIVER RUN
194	6474 RIVER RUN



VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS

BM#1 Railroad Spike in Pole #52580 Trotter Road Elevation 393.27 N496697.02 E820727.80
BM#2 Railroad Spike in Poplar Elevation 438.92 N495551.90 E820727.80

SHEET INDEX

DESCRIPTION	SHEET No.
SITE DEVELOPMENT PLAN	1 of 5
SEDIMENT AND EROSION CONTROL PLAN	3-5 of 5

GENERAL NOTES:

- Subject property is zoned: N.T.S.F.M.D. per 10-18-93 Comprehensive Zoning Plan.
- The total area included in this submission is : 7.75 Acres
- The total number of lots included in this submission is : 27
- Improvement to property : Single Family Detached
- The maximum lot coverage permitted is: 30%
- Department of Planning and Zoning reference file numbers are: S-91-03, P-94-01, F-96-98, F-96-138
- Utilities shown as existing are taken from approved Water and Sewer plans Contract # 34-3561-D, approved Road Construction plans F-96-138, and actual field survey.
- Any damage to county owned rights-of-way shall be corrected at the developer's expense.
- All roadways are public and existing.
- The existing topography was taken from Road Construction Plans F-96-138 prepared by Riemer, Muegge & Associates, Inc., in August 1995.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System - Howard County Monument Nos.: 2337001 and 2437003
- The contractor shall notify the Department of Public Works/Division of Construction Inspection at (410) 313-1880 at least twenty-four (24) hours prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- For driveway entrance details, refer to Ho. Co. Design Manual Volume IV details R-6.03 and R-6.05.
- Stormwater Management is provided per: F-96-138
- In accordance with FDP-Phase 209 Part VI, bay windows or chimneys not more than 10 feet in width may project not more than 4 feet into any setbacks; porches and decks may project not more than 3 feet into the front or rear setbacks.
- No clearing, grading or construction is permitted within Wetlands and Stream Buffers or Forest Conservation Easements.
- SHC elevations shown are located at the property line.
- Stormwater Management Quantity Control is provided by The Md. Route 32 Stream Crossings Water Quality is provided by Publicly Owned Bio-Retention Areas.

SPECIAL NOTES:

This plan is for house siting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction, see approved Road Construction Plans F-96-138 and/or approved Water and Sewer Plans Contract #34-3561-D.

OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 LITTLE PATUENT PARKWAY
COLUMBIA, MARYLAND 21044

SUBMISSION NAME	SECTION/AREA	LOTS/PARCELS
COLUMBIA VILLAGE OF RIVER HILL	TWO/SIX	139-142, 151-158 & 180-194
PLAT NO. 12415-12419	BLOCK NO. 15#21	ZONE SFMD
TAX MAP NO. 37	ELECTION DIST. 6TH	CENSUS TRACT 6055
WATER CODE I-12	SEWER CODE 6652500	

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 BALTO • (301) 621-8100 WASH

DESIGNED JME	SITE DEVELOPMENT PLAN LOTS 139-142, 151, 158 & 180-194 COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 SIXTH (6TH) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1" = 30'
DRAWN BAL		DRAWING 1 OF 5
CHECKED jme		JOB NO. 97-047
DATE 3-25-97		FILE NO. 97-047X
FOR: THE RYLAND GROUP 1447 YORK ROAD, #705 LUTHERVILLE, MARYLAND 21083		

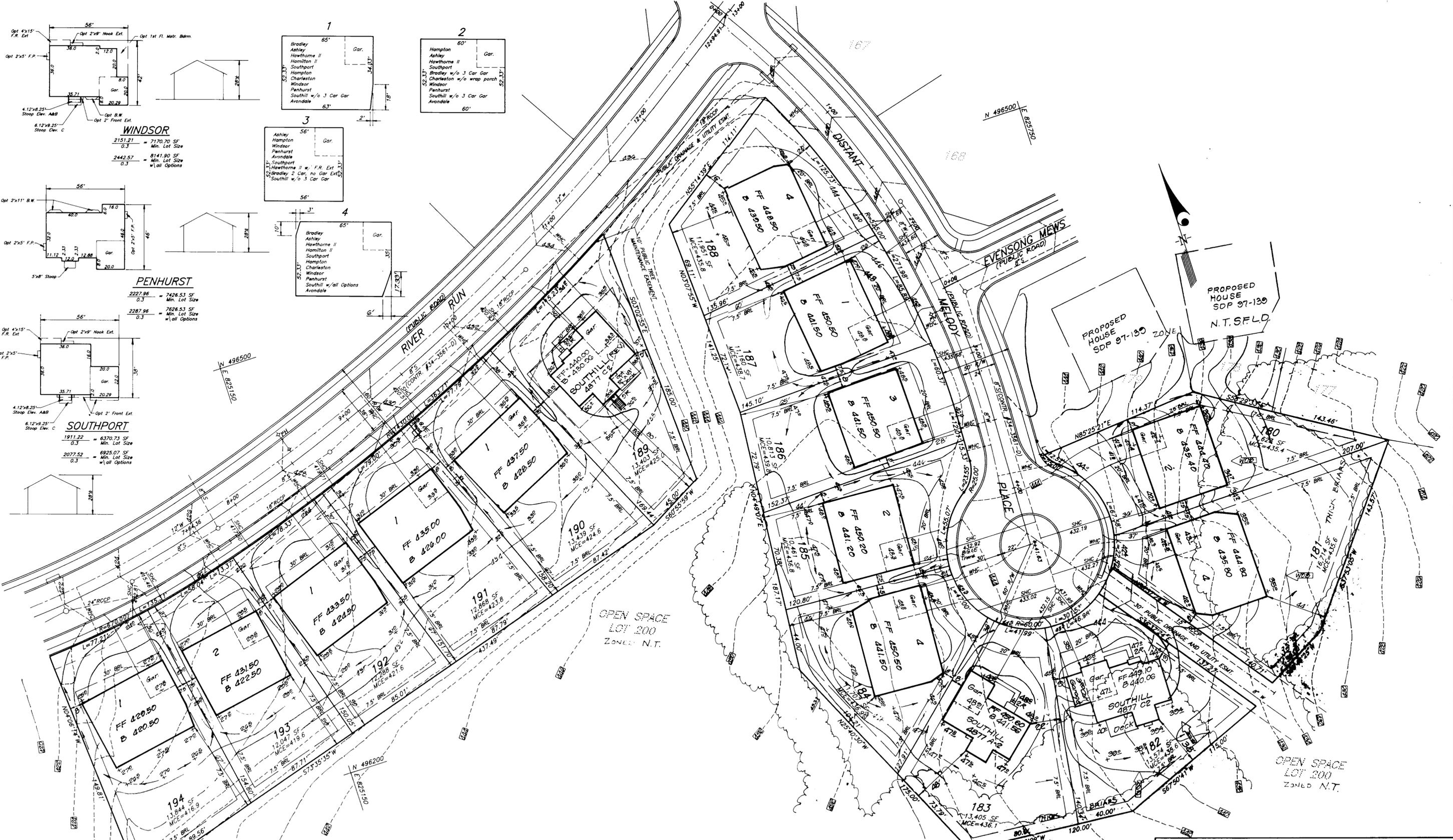
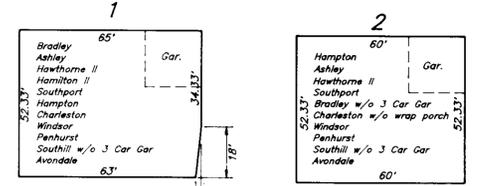
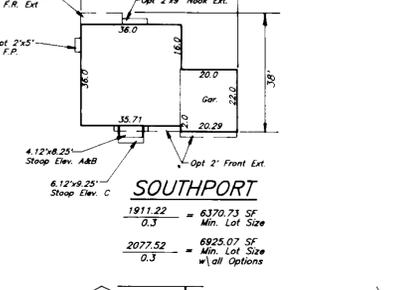
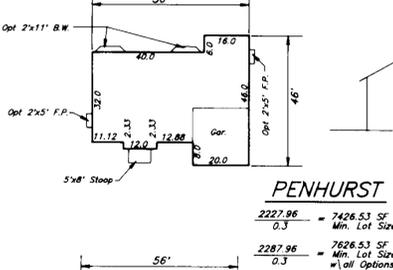
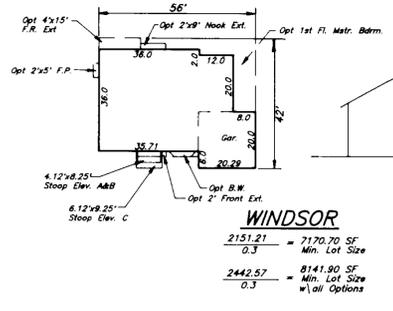
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: *[Signature]* 4/20/97 Date

Chief, Division of Land Development: *[Signature]* 4/24/97 Date

Director: *[Signature]* 7/1/97 Date





APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

No	REVISION	DATE
2	Rev. hse. 4 grad. lots 182 and 183	8-26-97
1	Rev. hse. 4 grad. lot 182 from 4' Box to Southill, lot 183 from 4' Box to Bradley & lot 180 from 4' Box to Southill (Rev)	6-3-97

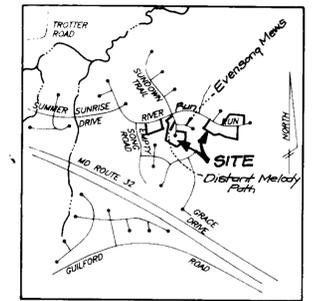
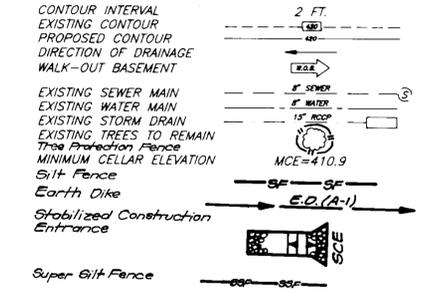
CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 - BALTO • (301) 621-8100 - WASH

DESIGNED BAL	SITE DEVELOPMENT PLAN LOTS 139-142, 151-158 & 180-194 COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 SIXTH (6th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1"=30'
DRAWN ZAH/PS		DRAWING 2 of 5
CHECKED J.M.E		JOB NO. 97-047
DATE 3-25-97		FILE NO. 97-047x
FOR: THE RYLAND GROUP 1447 YORK ROAD, #705 LUTHERVILLE, MARYLAND 21093		

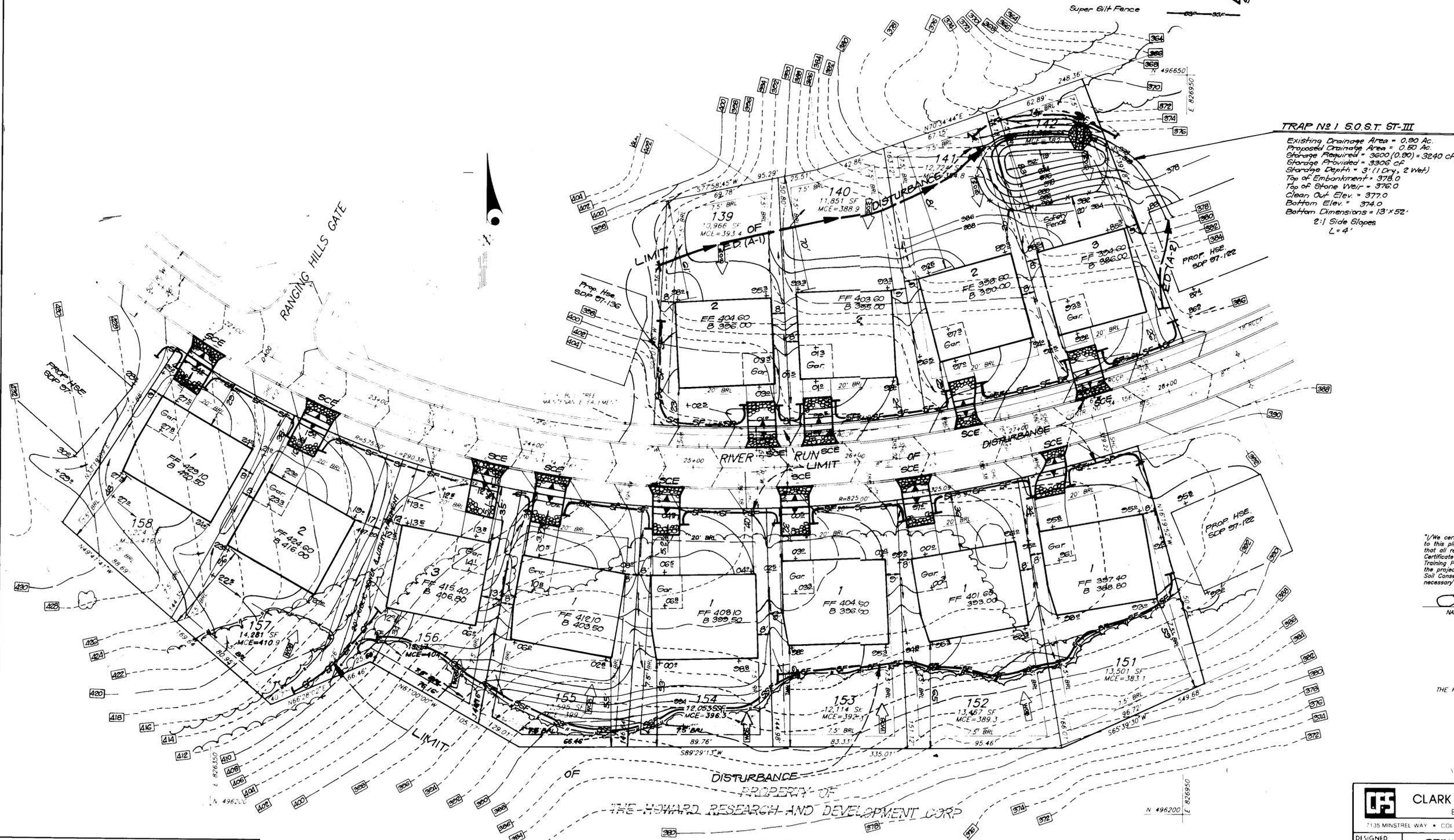
Reviewed for HOWARD S.C.D.
and meets Technical Requirements
Signature *Simon* 6/23/97
Date
U.S. Natural Resources Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED
FOR SOIL EROSION AND SEDIMENT
CONTROL BY THE HOWARD SOIL
CONSERVATION DISTRICT.
J.R. Robinson 6/23/97
Approved

LEGEND



VICINITY MAP
SCALE: 1"=2000'



TRAP NO 1 S.O.S.T. ST-III
Existing Drainage Area = 0.90 Ac.
Proposed Drainage Area = 2.93 Ac.
Storage Required = 3600 (0.90) + 3240 of
Storage Provided = 3306 of
Storage Depth = 3' (1 Dry, 2 Wet)
Top of Embankment = 378.0
Clean Out Elev. = 377.0
Bottom Elev. = 374.0
Bottom Dimensions = 13' x 52'
2:1 Side Slopes
L=4'

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] 3-25-97
NAME DATE

OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 6/23/97
Chief Development Engineering Division Date
[Signature] 6/23/97
Chief Division of Land Development Date
[Signature] 7/1/97
Director 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.
[Signature] 3-25-97
DATE



CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINISTREL WAY • COLUMBIA, MD 21045 • 410.387.7500 • BAL. MD • 1.800.674.7464		SCALE 1"=30'
DESIGNED KIWM	SEDIMENT & EROSION CONTROL PLAN LOTS 139-142, 151-158 & 180-194 COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 SIXTH (6th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING 3 OF 5
DRAWN BAL		JOB NO 97-047
CHECKED K.M.	DATE 3-25-97	FILE NO 97-047BE

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

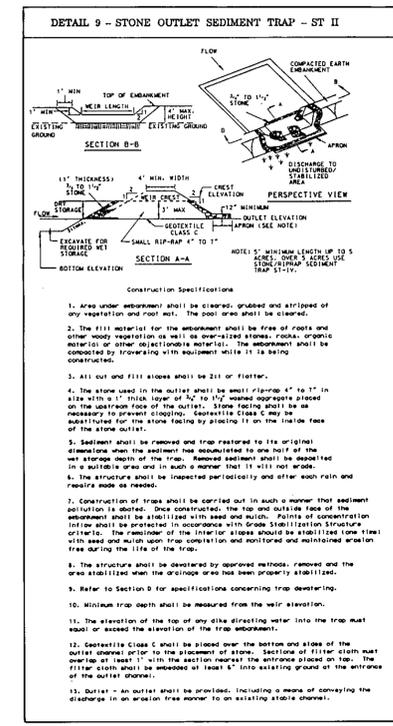
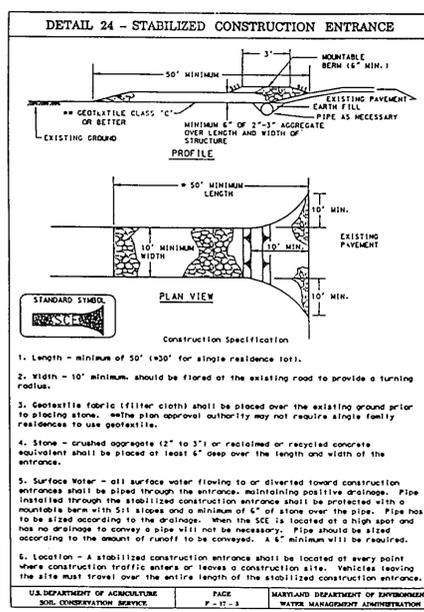
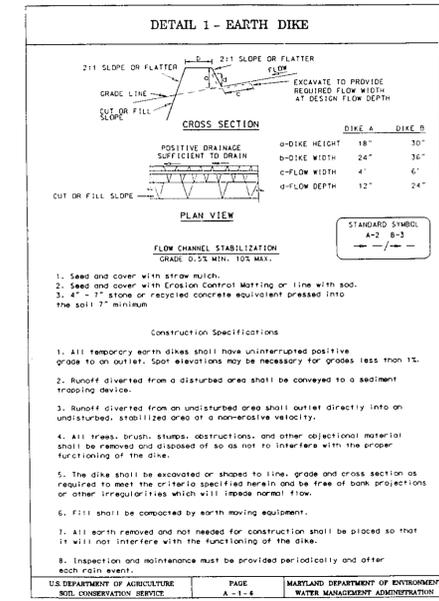
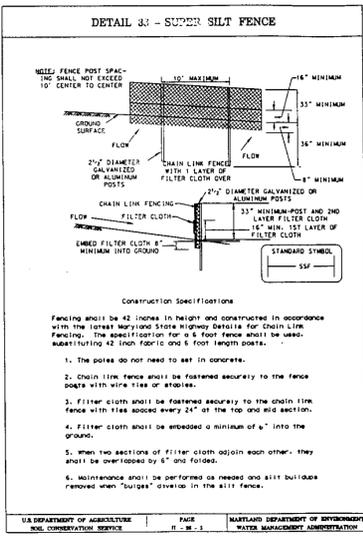
- 1. This practice is limited to areas having 2:1 or flatter slopes where:
a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
c. The original soil to be vegetated contains material toxic to plant growth.
d. The soil is so acidic that treatment with limestone is not feasible.
ii. 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

- i. Topsoil salvaged from the existing site may be used provided that it meets the standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experiment Station.
ii. Topsoil Specifications - Soil to be used as topsoil must meet the following:
1. Topsoil shall be a loam, sandy loam, clay loam, silty loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 and 1/2" in diameter.
2. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutgrass, poison ivy, thistle, or others as specified.
3. 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. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
4. For sites having disturbed areas under 5 acres:
i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
ii. Topsoil Application
a. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
b. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, about 4" - 8" higher in elevation.
c. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that settling or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pools.
d. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

SEDIMENT AND EROSION 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 (313-1855).
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 1994 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
3. Following initial soil disturbance or disturbance, permanent or temporary stabilization shall be completed within:
a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter silt fences and all slopes greater than 3:1;
b) 14 days for 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 perimeters in accordance with Vol. I, Chapter 7, 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 seedings, sod, temporary seeding and mulching (Sec. O).
Temporary stabilization with mulch 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: 775 Ac
Area Disturbed: 645 Ac
Area to be graded or paved: 180 Ac
Area to be vegetatively stabilized: 180 Ac
Total Cut: 1735 cu yd
Total Fill: 1735 cu yd
Offsite Waste/Borrow Area Location:
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 control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any additional disturbance grading. Other building or grading inspection approvals 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.
12. The total amount of silt fence = 1950 LF
Total amount of Super Silt Fence = 370 LF
Total amount of Earth Dike = 1385 LF
It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and its grading permit number of the site of construction.



PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./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 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq.ft.).
2) 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 the periods March 1 thru April 30, and August 1 thru October 15, seed with 80 lbs. per acre (14 lbs./1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 80 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.5 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 80 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 small grain 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 (8 gal/1000 sq.ft.) for anchoring.

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

TEMPORARY SEEDING NOTES

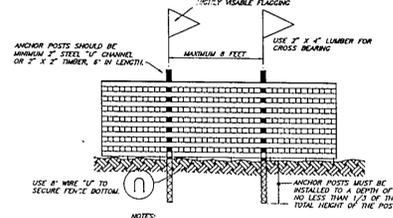
SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./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 annual ryegrass (32 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.7 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 sod.

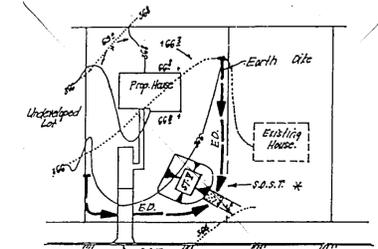
MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (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.



BLAZE ORANGE PLASTIC MESH TYPICAL TREE PROTECTION FENCE DETAIL. NO SCALE.

CONSTRUCTION SEQUENCE table with columns for activity and number of days. Activities include obtaining permits, installing protection fences, installing sediment control devices, excavating foundations, constructing structures, final grading, and approval of sediment control.



APPROVED: DEPARTMENT OF PLANNING AND ZONING. Signatures and dates of approval from Department of Planning and Zoning.

Reviewed for HOWARD S.C.D. and meets Technical Requirements. Signature and date of review.

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. Signature and date of approval.

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 and 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. Signature and date.



CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS. 7135 MINSTREL WAY • COLUMBIA MD 21045 • (410) 381-7500. SEDIMENT & EROSION CONTROL DETAILS. VILLAGE OF RIVER HILL. SECTION 2 AREA 6 PHASE 2. SIXTH (6th) ELECTION DISTRICT. HOWARD COUNTY, MARYLAND. SCALE 1"=30'. DRAWING 5 OF 5. JOB NO 97-047. FILE NO 97-04786. DATE 3-25-97.