

BARRINGTON
BRADFORD
CHARTWELL /NO WRAP PORCH
CHARTWELL 2
CHATEAUX
NEWPORT
PENHURST /NO SUNROOM
SHENANDOAH

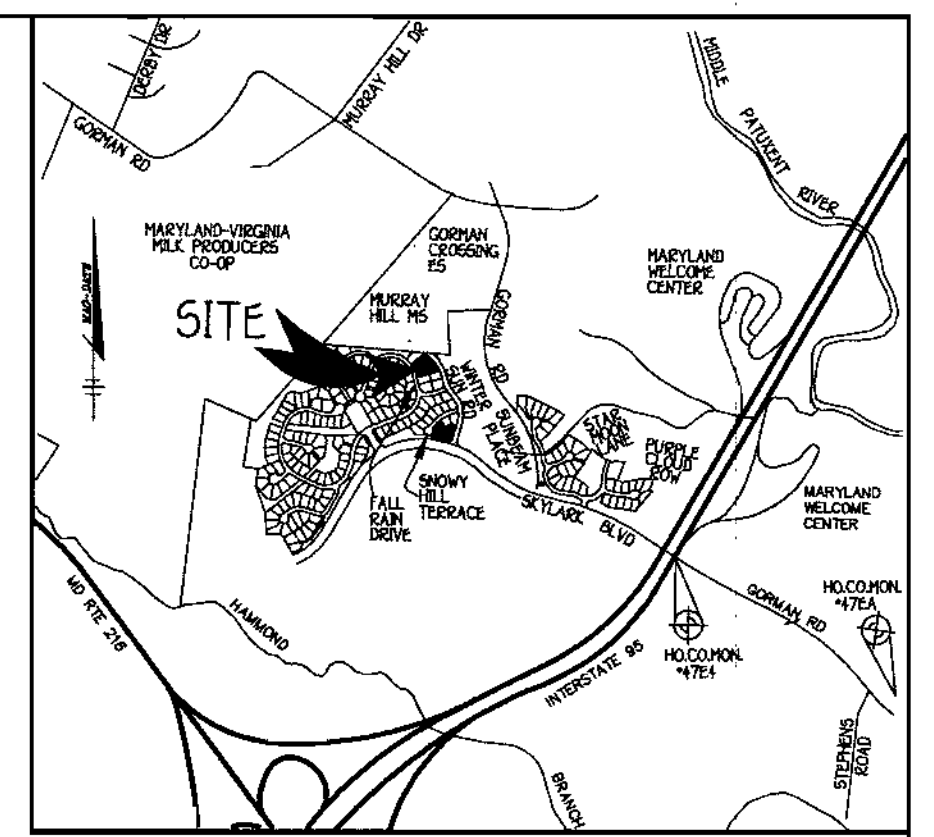
SHEET	DESCRIPTION
SHEET 1	TITLE SHEET, HOUSE TYPES, TEMPLATES
SHEET 2	SITE DEVELOPMENT PLAN, LANDSCAPE NOTES & DETAILS
SHEET 3	SEDIMENT AND EROSION CONTROL PLAN
SHEET 4	DETAIL SHEET

LOT NUMBER	STREET ADDRESS
19	9913 SNOWY HILL TERRACE
20	9930 WINTER SUN ROAD
21	9934 WINTER SUN ROAD
22	9909 SNOWY HILL TERRACE
27	9978 WINTER SUN ROAD
28	9982 WINTER SUN ROAD
30	10044 FALL RAIN DRIVE
31	10040 FALL RAIN DRIVE

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
+	SPOT ELEVATION
-SF-SF	SILT FENCE
-SSF-SSF	SUPER SILT FENCE
---	PROPOSED WALKOUT
ECH	EROSION CONTROL MATTING
L.O.D.	LIMIT OF DISTURBANCE
○	EXISTING STREET TREE TAKEN FROM F-01-137

BENCH MARKS
T.P. 47EA ELEV 315.39
N. 535,063.639
E. 1,357,284.010
LOC. NEAR THE INTERSECTION OF GORMAN RD. & STEVENS ROAD.

T.P. 47EA ELEV. 339.00
N. 535,046.149
E. 1,355,431.223
LOC. NEAR I-95 BRIDGE ALONG GORMAN ROAD



GENERAL NOTES

- SUBJECT PROPERTY ZONED PEC-MXD-3 AS GRANTED BY THE ZONING BOARD ON 9/3/98 AS CASE NO. ZB 979M.
- TOTAL AREA OF SITE: 1.866 ACRES
- TOTAL NUMBER OF LOTS SUBMITTED: 8
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410)313-1080 AT LEAST (5) FIVE WORKING DAYS 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.
- THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: ZB-979M, PB-339, PB-359, 5-99-12, P-00-15, WP-01-22, F-01-137, W&S CONT. #24-3986-D.
- THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT JUNE, 1999 BY DAFT McCUNE WALKER, INC.
- HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.
- HOWARD COUNTY MONUMENT 47EA - N 535046.153 E 1355431.224
HOWARD COUNTY MONUMENT 47EA - N 535063.639 E 1357284.010
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- THIS PLAN IS FOR HOUSE SITING AND GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHTS-OF-WAY OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION. FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F-01-137, AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-3966-D.
- CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
- STORMWATER MANAGEMENT WILL BE PROVIDED AS APPROVED ON THE ROAD CONSTRUCTION DRAWINGS FILED UNDER F-01-137.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISION OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$12,300.00 FOR LOTS 19-22,27,28,30 & 31.
- PERIMETER LANDSCAPING AND STREET TREES SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL AND DEVELOPMENT CRITERIA APPROVED BY THE PLANNING BOARD 7-1-99 PER CASE NO. PB-339 AS SHOWN ON THE APPROVED ROAD CONSTRUCTION DRAWINGS FILED UNDER F-01-137.
- LANDSCAPING FOR LOTS 19-22,27,28,30 & 31 SHOWN HEREIN IS PROVIDED IN ACCORDANCE WITH A CERTIFIED LANDSCAPE PLAN, ON FILE WITH THIS PLAN IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- THE FOREST CONSERVATION ISSUES WERE ADDRESSED UNDER F-01-137.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO HO. CODES MANUAL VOL. IV DETAILS R.6.03 & R.6.05.
- OPEN SPACE REQUIREMENTS FOR THESE LOTS HAVE BEEN PROVIDED UNDER F-01-137.
- MINIMUM BUILDING RESTRICTION SETBACKS FROM PROPERTY LINES AND PUBLIC ROAD RIGHTS-OF-WAY ARE TO BE IN ACCORDANCE WITH THE DEVELOPMENT CRITERIA APPROVED WITH THE COMPREHENSIVE SKETCH PLAN 5-99-12 AND THE DECISION AND ORDER FOR PB-339 APPROVED ON JULY 1, 1999.
- THE MINIMUM SETBACKS FOR STRUCTURES SHALL BE AS FOLLOWS:
FRONT SETBACK 15' FROM THE RIGHT-OF-WAY TO THE HOUSE OR GARAGE.
SIDE SETBACK 5' TO THE PROPERTY LINE WITH A MINIMUM OF 15' BETWEEN STRUCTURES.
REAR SETBACK 10' FROM THE PROPERTY LINE TO AN OPEN DECK
20' FROM THE PROPERTY LINE TO THE HOUSE.
ANY DEVIATION FROM THESE SETBACK REQUIREMENTS WILL REQUIRE A SITE DEVELOPMENT PLAN APPROVED BY THE HOWARD COUNTY PLANNING BOARD.
- LOT COVERAGE BY BUILDINGS WITHIN SINGLE FAMILY DETACHED LAND USE AREAS SHALL NOT EXCEED 40%. NO LIMITATION IS IMPOSED UPON THE AREA USED FOR SIDEWALKS, PAVED PARKING AREAS, PATIOS, DECKS, LANDSCAPING AND SIMILAR MINOR STRUCTURES.
- AS A CONSEQUENCE OF THIS SUBMISSION, ON JUNE 7, 2002, THIS SDP IS SUBJECT TO THE 5TH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
A. WIDTH-12' (14' SERVING MORE THAN ONE RESIDENCE).
B. SURFACE-6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN).
C. GEOMETRY-MAX. 15% GRADE, MAX. 10% GRADE CHANGE, AND MIN. 45' TURNING RADIUS.
D. STRUCTURES (CULVERTS/BRIDGES)-CAPABLE OF SUPPORTING 25 GREEN TONS @25% LOADING.
E. DRAINAGE ELEMENTS-CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
F. MAINTENANCE-SUFFICIENT TO INSURE ALL WEATHER USE.
- IN ACCORDANCE WITH SECTION 12B OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALTOURKE NATIONAL FEE
ELLSWORTH CITY, MARYLAND 21042
410-461-2995

NO.	REVISION	DATE
1	Rev. Chartwell hse. typical	11-15-02



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."
Earl D. Collins
Signature of Engineer EARL D. COLLINS P-20-02 Date
BUILDER/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."
Robert Parrett
Signature of Developer ROBERT PARRETT B-20-05R Date

Approved for HOWARD SCD and meets Technical Requirements.
John R. Roberts
Signature of Engineer JOHN R. ROBERTS 8/29/02 Date
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
John R. Roberts
Signature of Engineer JOHN R. ROBERTS 8/29/02 Date
OWNER
THE HOWARD RESEARCH & DEVELOPMENT CORP.
10275 LITTLE PATUENT PARKWAY
COLUMBIA, MARYLAND 21044
410-992-6000
BUILDER/DEVELOPER
RYLAND GROUP
7250 PARKWAY DRIVE, SUITE 520
HANOVER, MARYLAND 21076
410-712-7012

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Cindy Harms
Chief, Division of Land Development 9/17/02 Date
John R. Roberts
Chief, Development Engineering Division MK 9/4/02 Date
John R. Roberts
Director, Department of Planning and Zoning 9/24/02 Date

PROJECT	SECTION	LOTS NO.
EMERSON	2/18	19-22,27,28,30 & 31

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
15205	8 & 9	PEC-MXD-3	47	6	6068.02

WATER CODE	SEWER CODE
E-15	7640000

TITLE SHEET
SINGLE FAMILY DETACHED
EMERSON
SECTION 2 PHASE 1B
LOTS 19-22,27,28,30 & 31
TAX MAP No: 47 PARCEL: 3 & 837 GRID B
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: JUNE, 2002
SHEET 1 OF 4

SDP 02-146

MODIFIED SCHEDULE C LANDSCAPE CHART

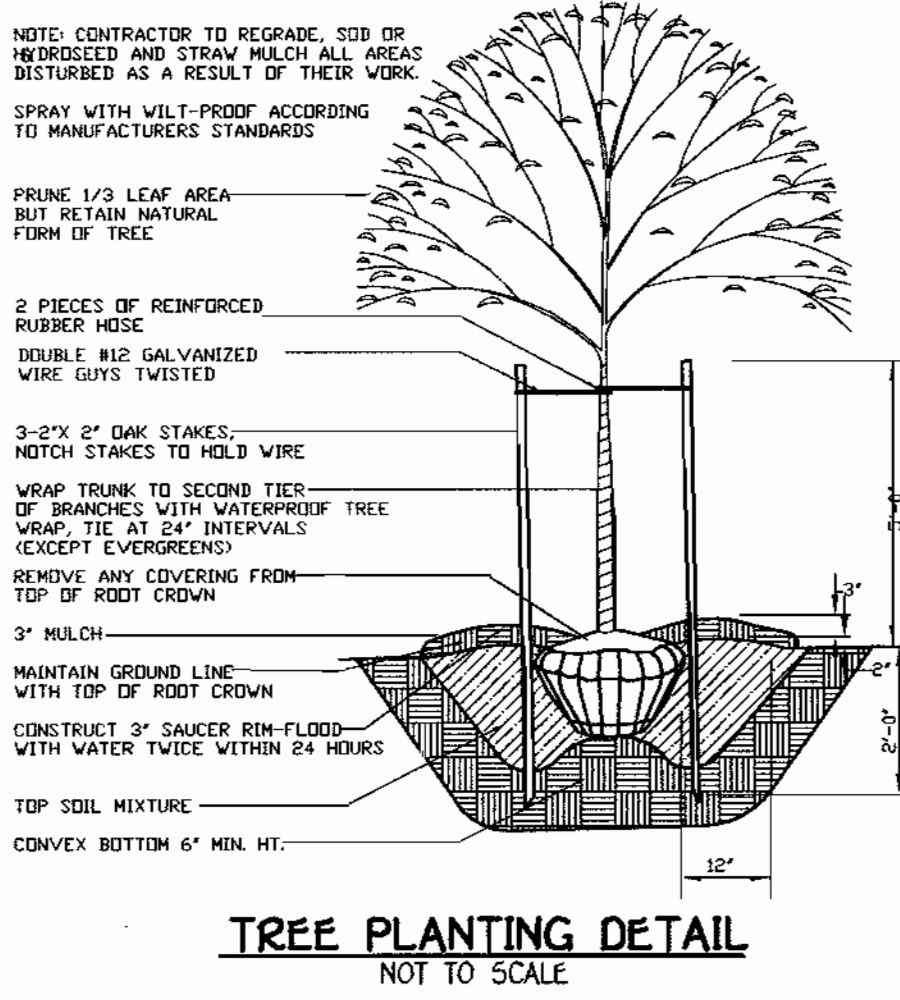
LOT NO.	LOT CLASSIFICATION	INTERNAL LANDSCAPING REQUIRED (# OF SHADE TREES)	TYPE B REQUIRED		SHADE TREE CREDIT*	REMAINING SHADE TREE OBLIGATION		TOTAL TREES REQUIRED	
			SHADE	EVERGREEN		SHADE	EVERGREEN	SHADE	EVERGREEN
LOTS 21,22,27,28,30 & 31	NON-WOODED	5 TREES PER LOT	N/A	N/A	0	0	0	30	0
LOT 19 CORNER	NON-WOODED	5 TREES	2	3	3	2	4	4	3
LOT 20 CORNER	NON-WOODED	5 TREES	2	3	3	2	4	4	3
TOTAL TREES								30	6

* THIS NUMBER REFLECTS THE MATHEMATICAL CONVERSION OF EVERGREEN TREES TO SHADE TREES (2:1) FOR THE PURPOSE OF MEETING THE INTERNAL PER LOT SHADE TREE OBLIGATION.

SCHEDULE A PERIMETER LANDSCAPE EDGE

LOT NO.	PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	NUMBER OF PLANTS REQUIRED		
					SHADE TREES	EVERGREEN TREES	TOTAL TREES
19	P-1	ADJACENT TO ROADWAY	B	111.4'	2	3	5
20	P-1	ADJACENT TO ROADWAY	B	102.25'	2	3	5

1. THE TOTAL SURETY AMOUNT FOR THIS PLAN IS IN THE AMOUNT OF \$12,300.00.
2. LANDSCAPING SURETY FOR LOTS 19, 20, 21, 22, 27, 28, 30 AND 31 IS \$1,500.00 PER LOT. THE LANDSCAPING SURETY FOR LOTS 19 AND 20 IS \$1,500.00 PER LOT. FIGURES ON A PER LOT BASIS. CREDIT GIVEN FOR LANDSCAPE BUFFER WERE APPLICABLE. STREET TREES ARE NOT INCLUDED IN MODIFIED SCHEDULE C LANDSCAPE CALCULATIONS.
3. TYPE 'D' BUFFER OR PERIMETER LANDSCAPE BUFFER WILL BE CREDITED TOWARDS THE LANDSCAPE REQUIREMENTS.
4. LANDSCAPE CAN NOT BE PLANTED IN ANY PUBLIC EASEMENTS.
5. FINAL PLANTING TYPE AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTURAL COMMITTEE.
6. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTING HERewith LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH HOWARD COUNTY LANDSCAPE MANUAL.
7. THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERRIES FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED.
8. SIZES OF PLANT MATERIALS MUST CONFORM TO THE REQUIREMENTS OF THE LANDSCAPE MANUAL, CHAPTER IV AND APPENDIX C.



KEY PROPERTY DEVELOPMENT CRITERIA, APPROVED 7/1/99 SECTION VII RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING

THE QUANTITY AND GENERAL LOCATION OF TREES REQUIRED FOR INTERNAL LANDSCAPING ARE DETERMINED BY CRITERIA APPLIED BY THE ARCHITECTURAL COMMITTEE. THE COMMITTEE WILL CLASSIFY, DURING ARCHITECTURAL REVIEW, ALL LOTS AND PARCELS AS D: NON-WOODED; DSEMI-WOODED; D3 WOODED. SUCH CLASSIFICATION SHALL TAKE INTO ACCOUNT THE EXISTING TREE COVER AND THE POTENTIAL FOR SAVING TREES IN CONNECTION WITH GRADING AND SITING. THIS CRITERIA ALSO CONSIDER THE SIZE OF THE LOT, AMOUNT OF EXISTING VEGETATION AND THE TYPE AND SETTING OF RESIDENTIAL UNITS. IF DURING OR AFTER CONSTRUCTION, THE COMMITTEE DETERMINES THAT A BUILDER HAS VIOLATED ANY PROVISION OF TREE PRESERVATION, THE BUILDER WILL BE REQUIRED TO ADD NEW PLANT MATERIAL. SHADE TREE REQUIREMENTS ARE SPECIFIED BY THE FOLLOWING TABLE. DENSITIES REFER TO THE DENSITY OF THE INDIVIDUAL PARCEL.

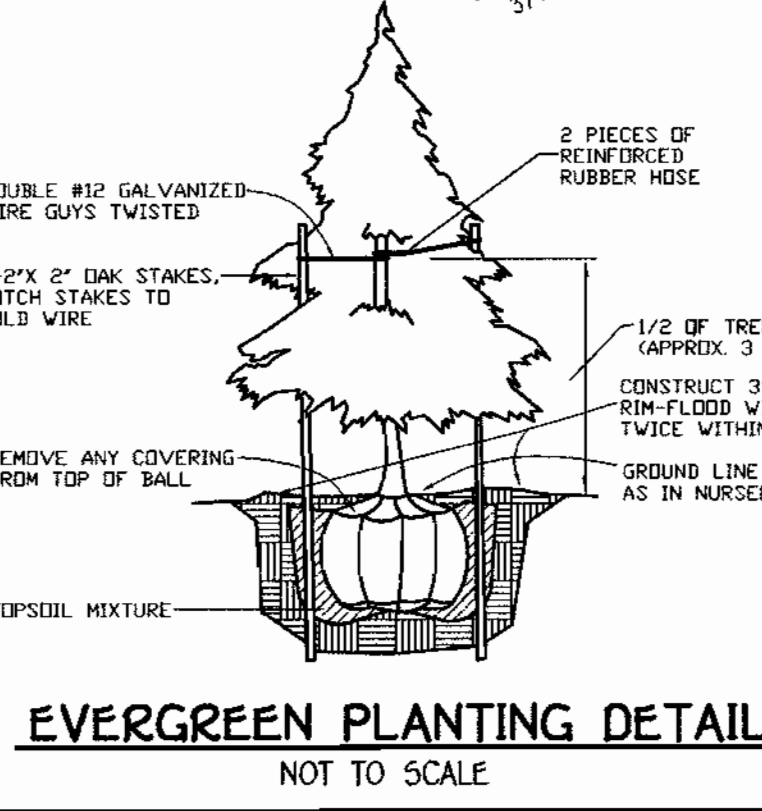
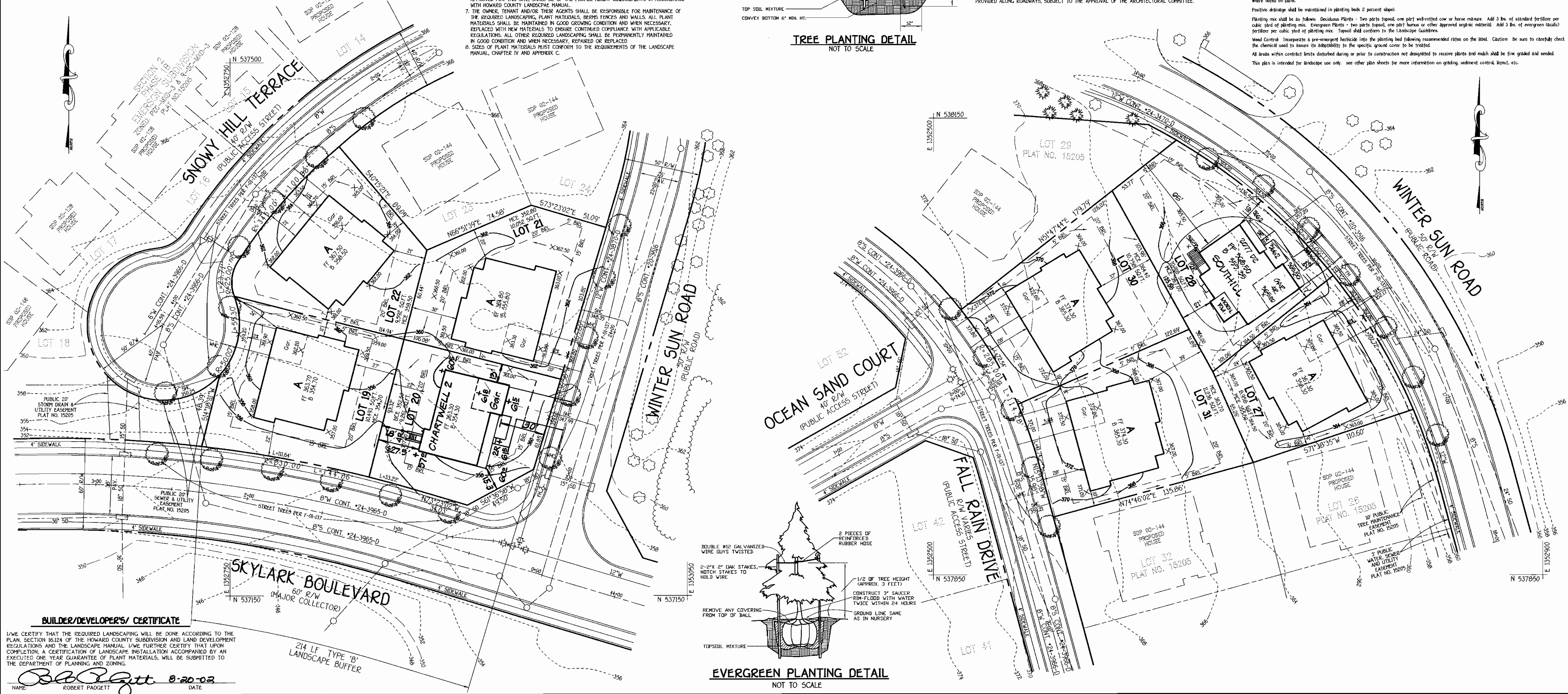
SHADE TREE REQUIREMENTS

TYPE OF UNIT AND LOT SIZE	MINIMUM NUMBER OF SHADE TREES REQUIRED		
	NON WOODED	SEMI WOODED	WOODED
MEDIUM RESIDENTIAL LOT (7,000-13,000 SQUARE FEET) 2.4 DU./ACRE	5.0/LOT	3.0/LOT	2.0/LOT

SUBSTITUTION OF TWO FLOWERING TREES OR TWO EVERGREEN TREES FOR EACH SHADE TREE MAY BE FRONTIERED UP TO 50% OF THE REQUIRED NUMBER OF SHADE TREES SHOWN IN THE TABLE SUBJECT TO THE APPROVAL OF THE ARCHITECTURAL COMMITTEE. CREDIT MAY ALSO BE GIVEN FOR ANY AREAS REQUIRED TO BE PROVIDED ALONG ROADWAYS, SUBJECT TO THE APPROVAL OF THE ARCHITECTURAL COMMITTEE.

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, have a vigorous root system, and shall conform to the species, size, root and edge shown on the plant list and the American Association of Nurserymen (AAN) Standards. Plant material shall be healthy, vigorous, free from defects, decay, disfiguring roots, sun scald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak or which has been cut back from higher grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be freshly dug, no heading plants from coal storage will be accepted. Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area", (hereinafter "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, latest edition including all agenda. Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material. Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 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 drip line. 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 plant list 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 mix 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 Guidelines. 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 adaptability 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.



BUILDER/DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT THE REQUIRED LANDSCAPING WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.
Robert Padgett 8-20-02
NAME: ROBERT PADGETT DATE:

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.
Earl D. Collins 8-20-02
Signature of Engineer: EARL D. COLLINS 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.
Robert Padgett 8-20-02
Signature of Developer: ROBERT PADGETT Date:

Approved for HOWARD SCD and meets Technical Requirements.
Jim Myers 8/29/02
U.S. Natural Resources Conservation Service
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
John R. Robertson 8/29/02
Howard SCD

OWNER
THE HOWARD RESEARCH & DEVELOPMENT CORP.
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
410-992-6000

BUILDER/DEVELOPER
RYLAND GROUP
7250 PARKWAY DRIVE, SUITE 520
HANOVER, MARYLAND 21076
410-712-7012

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Cynthia Horne 9/17/02
Chief, Department of Planning and Zoning
John R. Robertson 9/4/02
Chief, Development Engineering Division
John R. Robertson 9/24/02
Director, Department of Planning and Zoning

PROJECT: EMERSON SECTION: 2/1B LOTS NO.: 19-22,27,28,30 & 31

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
15205	8 & 9	PEC-MXD-3	47	6	6068.02

WATER CODE: E-15 SEWER CODE: 7640000

SITE DEVELOPMENT PLAN, LANDSCAPE NOTES & DETAILS

SINGLE FAMILY DETACHED EMERSON

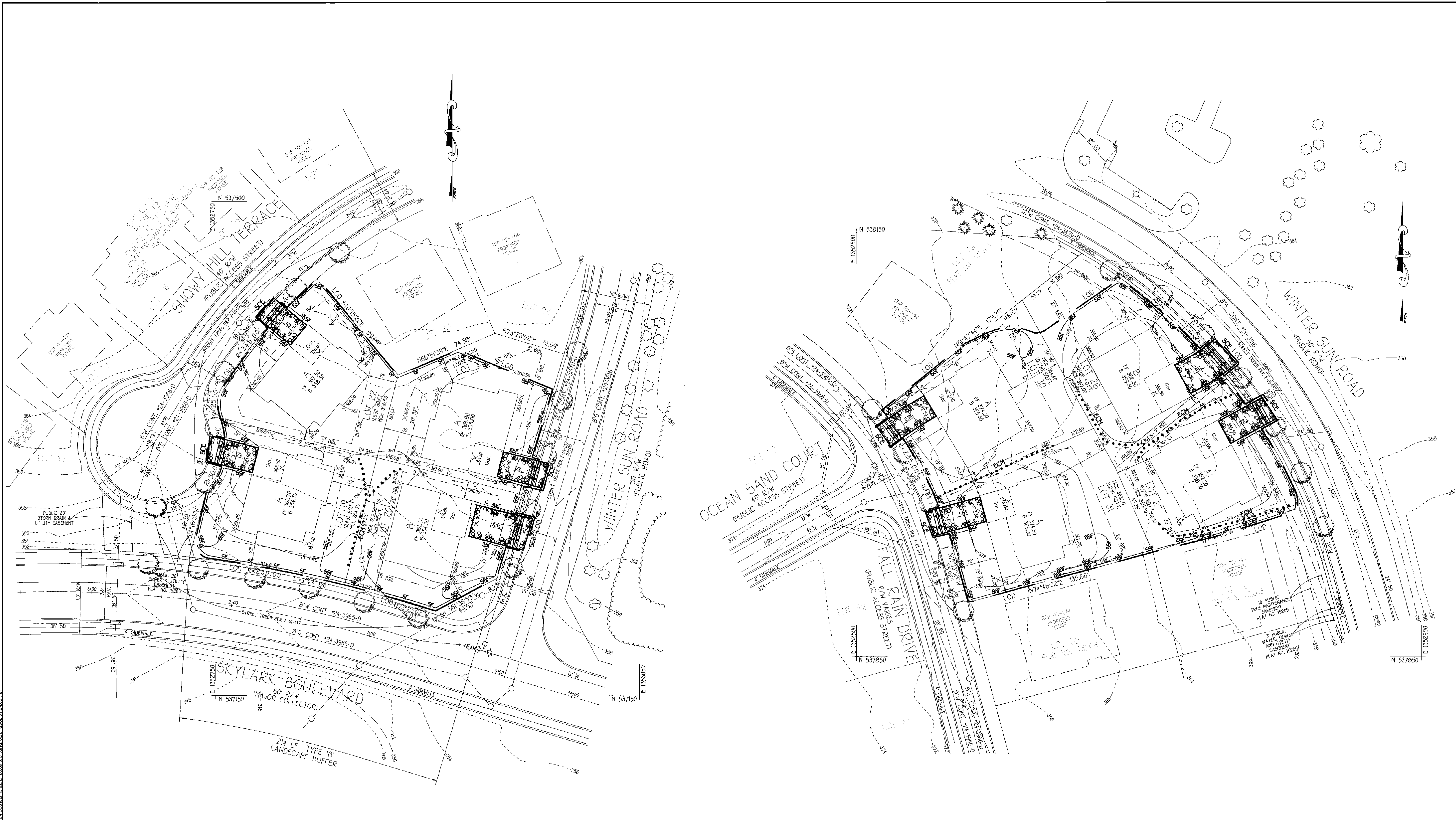
SECTION 2 PHASE 1B LOTS 19-22,27,28,30 & 31

TAX MAP No: 47 PARCEL: 3 & 837 GRID B
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: JUNE, 2002
SHEET 2 OF 4

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
410-406-3000



NO.	REVISION	DATE
2	REV. HSE. & GRD. LOT 22 FROM REINHOLD TO SOUTH HILL	2/5/03
2	Rev. hse. & grd. lot 20	1-6-02
1	Rev. hse. & grd. lot 20	11-15-02



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELKOTT CITY, MARYLAND 21042
 410-461-2995

NO.	REVISION	DATE

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.
 Signature of Engineer: *Earl D. Collins* Date: 8-20-02
 EARL D. COLLINS
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.
 Signature of Developer: *Robert Padgett* Date: 8-20-02
 ROBERT PADGETT

Reviewed for HOWARD SCD and meets Technical Requirements.
 U.S.D.A. - Natural Resources Conservation Service
 This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
 Signature: *John R. Robertson* Date: 8/29/02
 JOHN R. ROBERTSON
 HOWARD SCD
OWNER
 THE HOWARD RESEARCH & DEVELOPMENT CORP.
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 410-992-6000
BUILDER/DEVELOPER
 RYLAND GROUP
 7250 PARKWAY DRIVE, SUITE 520
 HANOVER, MARYLAND 21076
 410-712-7012

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Signature: *Cindy Hamilton* Date: 9/17/02
 Chief, Division of Land Development
 Signature: *William J. ...* Date: 9/4/02
 Chief, Development Engineering Division
 Signature: *...* Date: 8/24/02
 Director, Department of Planning and Zoning

PROJECT	SECTION	LOTS NO.			
EMERSON	2/18	19-22,27,28,30 & 31			
PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
15205	8 & 9	PEC-MXD-3	47	6	6068.02
WATER CODE	SEWER CODE				
E-15	7640000				

SEDIMENT/EROSION CONTROL PLAN
SINGLE FAMILY DETACHED
EMERSON
SECTION 2 PHASE 1B
LOTS 19-22,27,28,30 & 31
 TAX MAP No: 47 PARCEL: 3 & B37 GRID B
 SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 SCALE: 1" = 30' DATE: JUNE, 2002
 SHEET 3 OF 4

20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

DEFINITION

Using vegetation as cover for barren soil to protect 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 will resist the effects of rainfall, thereby reducing sediment loads and runoff to downstream areas, and improving wildlife habitat and visual resources.

PURPOSE

This practice shall be used on disturbed areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into temporary seeding, to quickly establish vegetative cover for short duration (up to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary soil stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, ditches, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc.

EFFECTS ON WATER QUALITY AND QUANTITY

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seeded preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- 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 soils to determine soil amendment composition and application rates for sites having disturbed areas.
 - Soil Tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
 - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Fertilizers may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
 - Lime materials shall be ground limestone hydrated or burnt lime may be substituted which contains at least 50% wet pass through a #20 mesh sieve and 90-100% will pass through a #20 sieve.
 - Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.
- Seeded Preparation
 - Seeded preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable mechanical or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Limestone shall be applied (more than 3") should be tracked leaving the surface in an irregular condition with ridges 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 disking or other suitable means.
 - Minimum soil conditions required for permanent vegetative establishment:
 - Soil pH shall be between 6.0 and 7.0.
 - Soluble salts shall be less than 500 parts per million (ppm).
 - The soil shall contain less than 40% clay but enough fine grained material (CO2 silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is in loesslike or sericeal loesslike soils to be planted then a sandy soil (CO2 silt plus clay) will be acceptable.
 - Soil shall contain 1.5% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - Where these conditions cannot be met by soils on site, adding topsoil is required.
 - Areas previously graded in conformance with the drawings shall be maintained in a true and even grade. The area shall be prepared to receive topsoil to a depth of 3" to 5" to 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 roller leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 3-5" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.

PERMANENT SEEDING NOTES

- ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:**
- SEEDING PREPARATION:**
 LOOSEN UPPER THREE INCHES OF SOIL BY RAINING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
- SOIL AMENDMENTS:**
 APPLY TWO TONS PER ACRE DOLOMITE LIMESTONE (82 LBS./1,000 SFT.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER (14 LBS./1,000 SFT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 FERTILIZER (14 LBS./1,000 SFT.) AND 500 LBS. PER ACRE 0-15 LBS./1,000 SFT.) OF 10-20-20 FERTILIZER.
- SEEDING:**
 FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 300 LBS. PER ACRE (2.3 LBS./1,000 SFT.) OF KENTUCKY 31 TALL FESCUE, FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 50 LBS./ACRE (14 LBS./1,000 SFT.) OF KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1,000 SFT.) OF WHEAT. LOWGROWING SUBGRASS THE PERIOD OF OCTOBER 15 THROUGH FEBRUARY 28, PROJECT SITE BY OPTION (D) - TWO TONS PER ACRE OF WELL ANDROUSED STRAW (200 LBS./1,000 SFT.) AS POSSIBLE IN THE SPRING, OPTION (E) - USE 500 LBS. PER ACRE WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND WHICH WITH TWO TONS/ACRE WELL ANDROUSED STRAW. ALL SLOPES SHOULD BE HYDROSEEDED.
- MULCHING:**
 APPLY 1 TO 2 TONS PER ACRE (10 TO 90 LBS./1,000 SFT.) OF UNLIMITED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANDROUSE MUCH IMMEDIATELY WITH APPLICATION OF 200 GALLONS PER ACRE OF CAL/ALUM/SFT.) OF PHOSPHORUS. ANDROUSE MUCH IMMEDIATELY WITH APPLICATION OF 200 GALLONS PER ACRE OF CAL/ALUM/SFT.) FOR ANCHORING.
- MAINTENANCE:**
 INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.
- * FOR PUBLIC GOODS SUBSTITUTE CHEUNG CROWMETHAT AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 4 LBS./ACRE AT THE SEEDING REQUIREMENT. OPTION SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.

TEMPORARY SEEDING NOTES

- SEEDING PREPARATION:**
 LOOSEN UPPER THREE INCHES OF SOIL BY RAINING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.
- SOIL AMENDMENTS:**
 APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (4 LBS./1,000 SFT.)
- SEEDING:**
 FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH NOVEMBER 15, SEED WITH 100 LBS. PER ACRE OF ANNUAL EYE 132 LBS./ACRE BY SEEDING LOWGROW SUBGRASS. FOR THE PERIOD NOVEMBER 15 THROUGH FEBRUARY 28, PROJECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANDROUSED STRAW WHICH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE 500 LBS. PER ACRE.
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- MAINTENANCE:**
 INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT	7 DAYS
2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN	7 DAYS
3. CLEAR AND GRUB TO LIMITS OF DISTURBANCE	4 DAYS
4. INSTALL TEMPORARY SEEDING	2 DAYS
5. CONSTRUCT BUILDINGS	60 DAYS
6. FINE GRADE, SITE AND INSTALL PERMANENT SEEDING AND LANDSCAPE	14 DAYS
7. REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERMISSION IS GRANTED BY E/S CONTROL INSPECTOR.	7 DAYS

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 1077 BALTIMORE NATIONAL PIKE
 ELLENDALE, MARYLAND 20624
 (301) 661-2955

NO.	REVISION	DATE

SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSING AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (MS-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 THEREOF.
- TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 31 TO 14 DAYS AS TO ALL OTHERS DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND MARKED SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 50, SO2 (SEC. 34), TEMPORARY SEEDING (SEC. 50, AND MULCHING (SEC. 50). TEMPORARY SEEDING WITH MULCH 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:
 - AREA TO BE GRADED: 0.975 ACRES
 - AREA TO BE ROOFED OR PAVED: 0.336 ACRES
 - AREA TO BE VEGETATIVELY STABILIZED: 0.644 ACRES
 - TOTAL CUT: 4.920 CUBIC YARDS
 - TOTAL FILL: 68 CUBIC YARDS
- OFFSITE WASTE/SPILLAGE AREA LOCATION: EMBANKMENT SECT. 2, PH 1B
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED 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 INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER FENCING AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER PULLING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION 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.

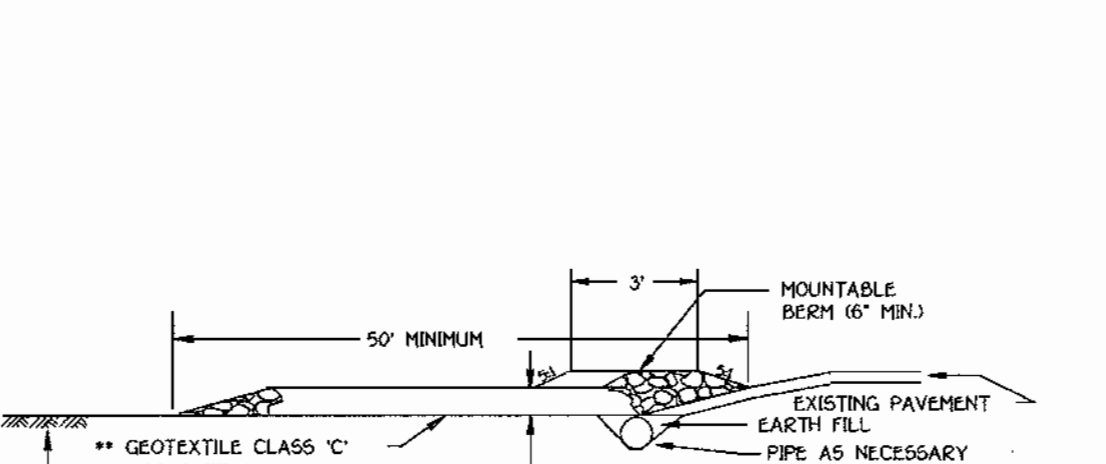
Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil if required and permanent seed and mulch. Any interruptions in the operation of completing the operation will be substituted for temporary stabilization.

Incremental Stabilization of Embankments - Fill Slopes
 In Phase 5, unless other methods shown on the plans address the site:
 i. Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 4 feet, or when the grading operation ceases as prescribed on the plans.
 ii. At all other times, the grading operation shall be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-erosive manner to existing drainage.
 iii. Construction sequencing: Refer to Figure 4 (below).
 a. Excavate and stabilize all temporary ditches, side ditches, or berms that will divert runoff around the fill. Construct slope side fence on low side of fill as shown in Phase 5, unless other methods shown on the plans address the site.
 b. Place Phase 1 embankment, dress and stabilize.
 c. Excavate and stabilize all temporary ditches, side ditches, or berms that will divert runoff around the fill. Construct slope side fence on low side of fill as shown in Phase 5, unless other methods shown on the plans address the site.
 d. Place final phase embankment, dress and stabilize. Overseed previously seeded areas as needed.

Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of and placement of topsoil if required and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

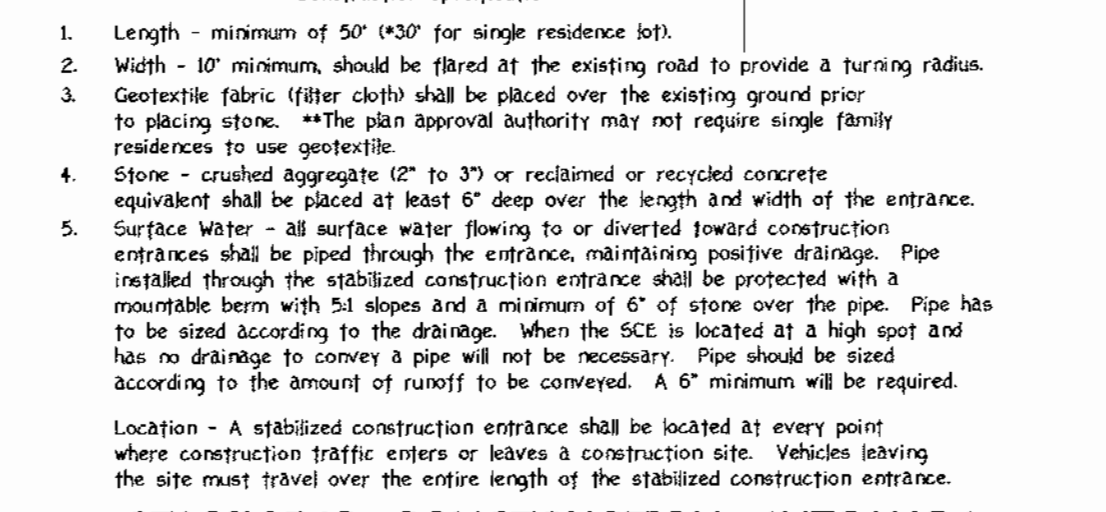
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STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

SUPER SILT FENCE

NOT TO SCALE

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 vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials, textures, and/or unacceptable soil gradation.

Conditions Where Practice Applies

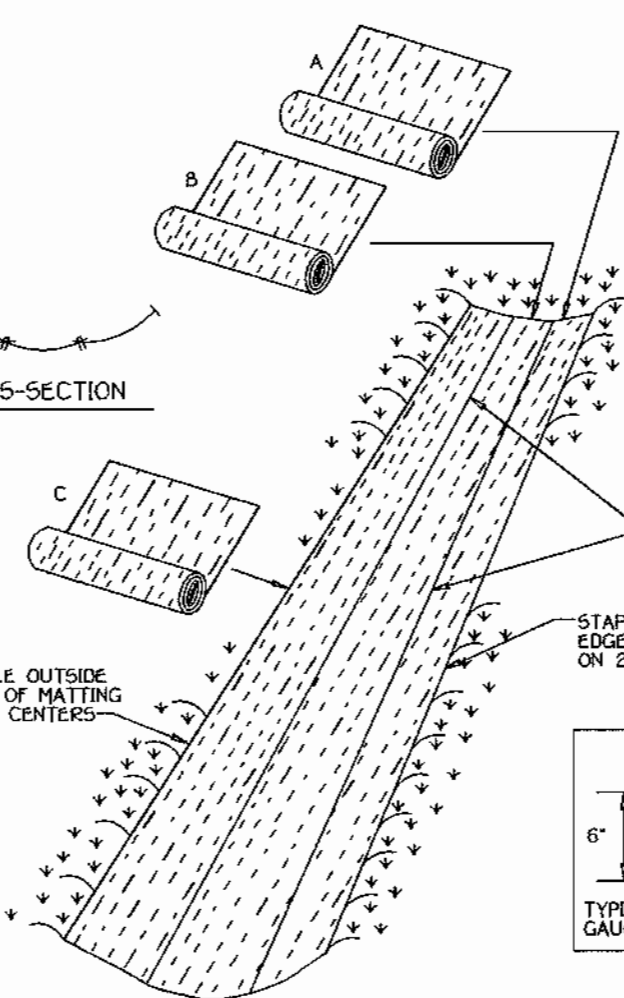
- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture 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 that it meets the standards as 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.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsols and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnson grass, nutcase, poison ivy, etc. as specified.
 - Where the subsoil is highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per acre) before 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.
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - section 1 - Vegetative Stabilization Methods and Materials.

For sites having disturbed areas under 5 acres:

- Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - section 1 - Vegetative Stabilization Methods and Materials.



EROSION CONTROL MATTING

NOT TO SCALE

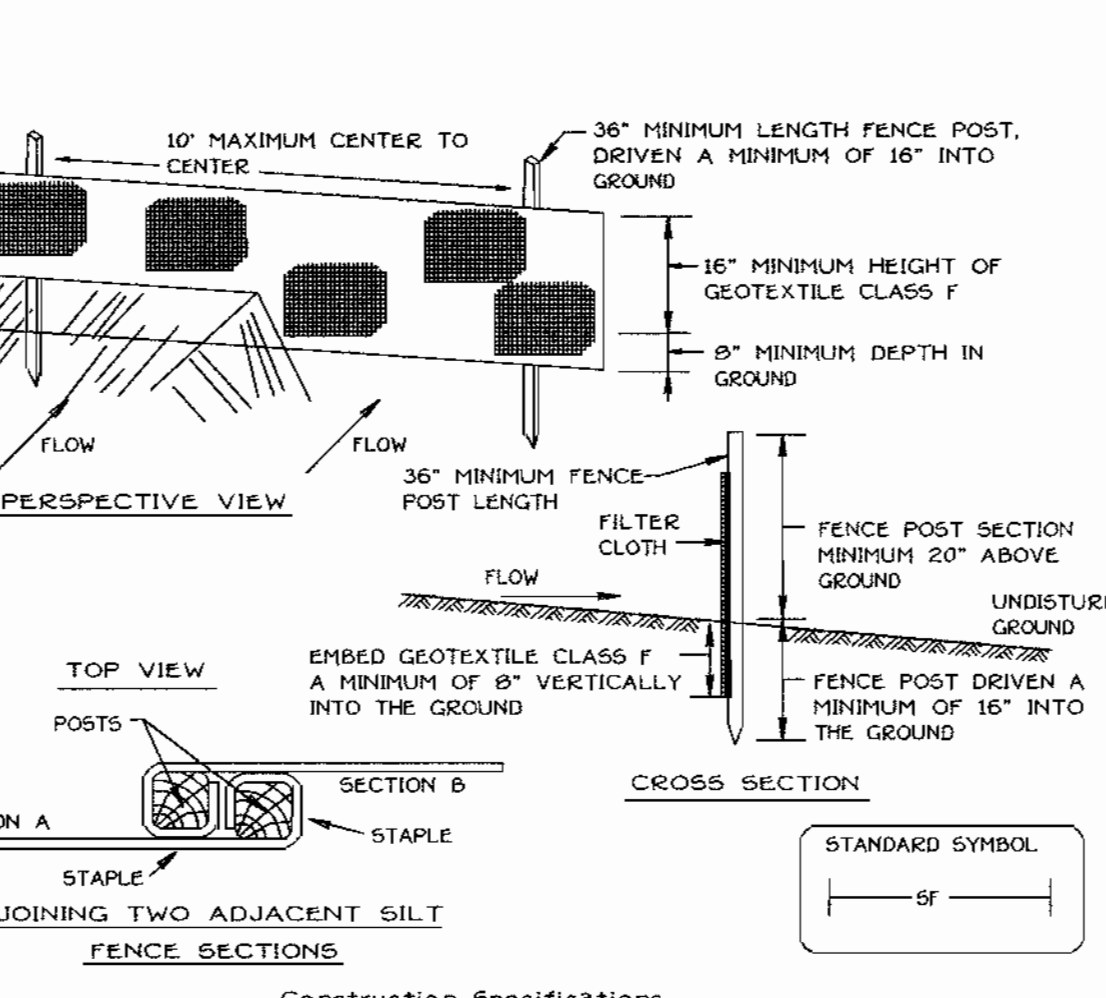
- For sites having disturbed areas over 5 acres:
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No soil or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days minimum) to permit dissipation of phytotoxic materials.
 - Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - section 1 - Vegetative Stabilization Methods and Materials.

V. Topsoil Application

- 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.
- Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 6" higher in elevation.
- Topsoil shall be uniformly distributed in a 4" - 6" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding 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 pockets.
- 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 seeded preparation.

VI. Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:

- Composted Sludge Material for use as a soil conditioner for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted by the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet and 1/3 the normal lime application rate.
- References: Guideline Specifications, Soil Preparation and Seeding, MD-VA, Pub. at Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institute, Revised 1973.



SILT FENCE

NOT TO SCALE

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."

Signature of Engineer: *Earl D. Collins* Date: 8-20-02

BUILDER/DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan, and that all erosion and sediment control practices shown on this plan will be installed and maintained in accordance with the requirements of the Howard Soil Conservation District. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer: *Robert Pargett* Date: 8-20-02

Approved for HOWARD SCD and meets Technical Requirements.

Signature: *Jim Mays* Date: 8/29/02

Signature: *John K. Kolesnik* Date: 8/29/02

OWNER

THE HOWARD RESEARCH & DEVELOPMENT CORP.
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 410-992-6000

BUILDER/DEVELOPER

RYLAND GROUP
 7250 PARKWAY DRIVE, SUITE 520
 HANOVER, MARYLAND 21076
 410-712-7012

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Signature: *Chris Gorman* Date: 9/17/02

Signature: *John K. Kolesnik* Date: 9/4/02

Signature: *John K. Kolesnik* Date: 9/24/02

PROJECT	SECTION	LOTS NO.			
EMERSON	2/16	9,10,14,24 & 34			
PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
15205	8 & 9	PEC-MXD-3	47	6	6068.02
WATER CODE	SEWER CODE				
E-15	7640000				

SEDIMENT/EROSION CONTROL NOTES & DETAILS

SINGLE FAMILY DETACHED EMERSON

SECTION 2 PHASE 1B

LOTS 19-22,27,28,30 & 31

TAX MAP NO: 47 PARCEL: 3 & 837 GRID: B
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JUNE, 2002
 SHEET 4 OF 4

SDP 02-146